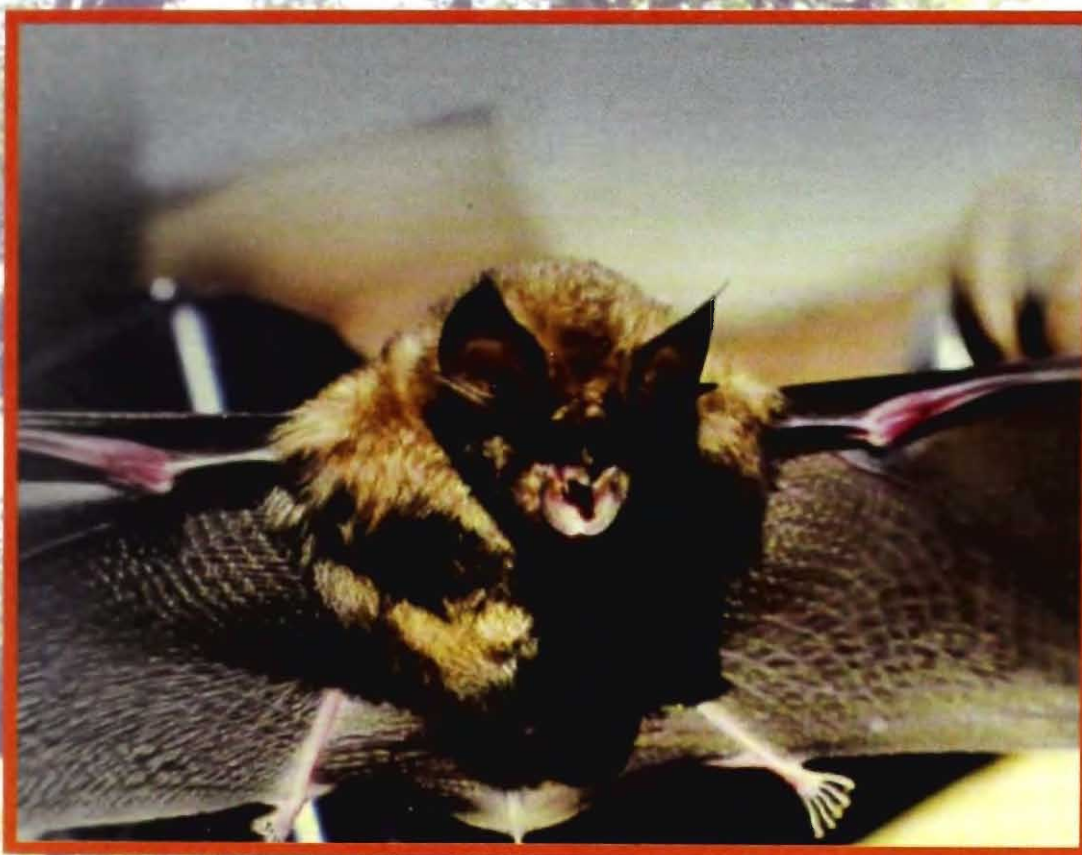


Catalogue of Chiroptera in the collection of Zoological Survey of India

(Part-II : Microchiroptera)

MRINAL KANTI GHOSH



ZOOLOGICAL SURVEY OF INDIA

OCCASIONAL PAPER No. 281

**RECORDS OF THE
ZOOLOGICAL SURVEY OF INDIA**

**Catalogue of Chiroptera in the
collection of Zoological Survey of India
(Part-II : Microchiroptera)**

MRINAL KANTI GHOSH

Edited by the Director, Zoological Survey of India, Kolkata



**Zoological Survey of India
Kolkata**

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2008

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INTRODUCTION

The Catalogue of Chiroptera in the collection of the Zoological Survey of India published by the author in two phases viz. Part-I : Megachiroptera (already published by the Director, Zoological Survey of India) and Part-II : Microchiroptera, the present volume is expected to be a work of great utility to the zoologists, especially those taxonomists working on bats. In view of making the catalogue a worthwhile the author had to render utmost effort to check each of the specimens (both dry and wet excluding the Type specimens) belonging to the sub-order : Microchiroptera present in the National zoological collection. All the specimens however, were incorporated to the catalogue providing taxonomic remarks wherever it was necessary.

With a view to updating the specimens (both dry and wet) of chiroptera the author desired to undertake this programme alongwith necessary curatorial jobs pertaining to the specimens. Some species of bats not found in India were also added to this catalogue.

The order Chiroptera comprises of only volant mammals and have evolved the true flight powers and being capable of sustained motion through the air as a result of flapping motions of their arms. The bats are most unique among the living vertebrates. Their peculiar feature sets them apart from other groups of mammal. Next to the order Rodentia the order Chiroptera comprise the second largest order of mammals in number of species and subspecies and possibly exceed the other group of mammals in overall abundance.

The bats have a tremendous role they are playing in the ecosystem. The frugivorous bats role as flower pollinators and in seed dispersal causing natural growth of floral plantation everywhere and the insectivorous bats are controlling much of the insect pest population. Although fruit bats damage small percentage of agricultural crops, their role in forest regeneration more than compensates this loss in the long term.

The specimens belonging to both the sub-orders are readily distinguished by their different unique morphological characteristics and behavioral peculiarities-exhibiting a dietary diversity which is not found among the other living mammals. The order Chiroptera comprises of two sub-orders, Megachiroptera comprising of the frugivorous bats and Microchiroptera comprising of the insectivorous bats. The present assignment includes the bats belonging to the sub-order Microchiroptera as available in the National Zoological Collection present in the Zoological Survey of India, in the Headquarters only consisting of altogether 129 species and subspecies belonging to 7 families and 27 genera from India and outside.

The Part-I : Megachiroptera worked out by the present author has already been published *vide*. Ghosh, Mrinal Kanti. 2005. Catalogue of Chiroptera in the collection of the Zoological

Survey of India, Part-I : Megachiroptera. *Rec. zool. Surv. India., Occasional Paper No., 232* : 1-143. (Published by the Director, Zoological Survey, of India).

Out of approximately thousand species of bats found all over the world except the Arctic, the Antarctic and some Islands, more than three-fourths of them are belonging to Microchiroptera or insectivorous bats. There are approximately 834 species of insectivorous bats in the world. Being insectivorous they are having sharply cusped teeth being highly efficient tools in grinding up even the hard chitin exoskeleton of insects. Even in flight these bats can grind up the shells of quite large insects into finest particles.

These bats usually consume various types of insects comprising of crop pests like, corn borers, June bugs, Cucumber bugs, Beetles, Moths and Mosquitoes. So, bringing awareness among the common people if proper conservation of these small creatures can be made, in return they may provide most beneficial services to reduce crop pests and also resulting to decline the population of mosquitoes leading to the ultimate eradication of those infective diseases caused by them.

Recent researches reveal that each such specimen of bat normally can consume insects nearly equal to its weight per night, and the same was established by finding remnants of mosquitoes in their feces. Some insectivorous bats also consume small mammals as recorded. Y P. Sinha, Retired Taxonomist on bats, described that the Indian False Vampire, *Megaderma lyra* Geoffroy are very much usefull to the farmers in the state of Bihar. Large colonies of this species of bats consume rats and mice, those are destroying different food grains kept in bags (Sinha, 1986, 1994). The species of bats are being protected by the farmers in the state and they call the species as "Goddess of Laxmi" According to Sinha, this species of bats usually selects small vertebrates like fishes, amphibians, lizards, small mammals and birds also and large insects like locusts, grass hoppers and beetles etc. for their consumption. This species of Microchiropteran bats this way play an important role in the agricultural economics and ecosystems.

It is our responsibility to provide necessary measures for proper conservation of the Microchiropteran bats for the sake of our betterment, as population of these bats is being declined gradually due to destruction of their habitats and non-availability of primary requirements for their well existence.

In India, on 30 September 2002, the species of bat, *otomops wroughtonii*, Wroughton's Free-tailed Bat was included to Schedule I of the wildlife (protection) Act, 1972, along with the other Mega-Chiropteran species of bat, *Latidens salimalii*, Salim Ali's Fruit Bat, according to the highest degree of protection to these threatened species. (South Asian Chiroptera C. A. M. P. Report, 2002).

**ABBREVIATIONS USED IN EXTERNAL MEASUREMENTS
OF THE SPECIMENS**

Fa	=	Length of the forearm
Tl	=	Length of the tail
E	=	Length of the ear
Tr	=	Length of the tragus
Tb	=	Length of the tibia
F & Cl	=	Length of the foot and claw

**ABBREVIATIONS USED IN CRANIAL MEASUREMENTS
OF THE SPECIMENS**

l	=	Greatest length of the skull
cb	=	Condylobasal length
cc1	=	Condyl canine length
mtr	=	Length of maxillary tooth-row
c'-c'	=	Greatest canine width
m-m	=	Molar width
rw	=	Rostrum width
iw	=	Least interorbital width
zw	=	Zygomatic width
cw	=	Cranial width
ml	=	Mandibular length
ltr	=	Length of the lower tooth-row

Suborder MICROCHIROPTERA

Family RHINOPOMATIDAE

Genus *Rhinopoma* Geoffroy, 1818

1. *Rhinopoma hardwickei hardwickei* Gray

1831. *Rhinopoma hardwickei* Gray, *Zool. Misc.*, 1 : 37.

Common name : Lesser Rat-tailed Bat (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17304	M	Skin and Skull,	Palkonda Hills, Cuddapah, Andhra Pradesh.	N. A. Baptista 18 June, 1930.
17305	F	Skin and Skull,	Palkonda Hills, Cuddapah, Andhra Pradesh.	N. A. Baptista 18 June, 1930.
17303	M	Skin and Skull,	Palkonda Hills, Cuddapah, Andhra Pradesh.	N. A. Baptista 18 June, 1930.
17302	F	Skin and Skull,	Balapalli Range, Cuddapah, Andhra Pradesh.	N. A. Baptista 28 Aug., 1929.
10867	F	Skin and Skull,	Balapalli Range, Cuddapah, Andhra Pradesh.	N. A. Baptista 28 Aug., 1929
10366	F	Skin and Skull,	Koduru, Balapalli Range, Cuddapah, Andhra Pradesh.	N. A. Baptista 30 Aug., 1929.
10359	F	Skin and Skull,	Koduru, Balapalli Range, Cuddapah, Andhra Pradesh.	N. A. Baptista 29 Aug., 1929.
17296	M	Skin and Skull,	Khandi, Karachi, W. Pakistan.	S. H. Prater 18 May, 1915.
17295	F	Skin and Skull,	Gambat, Khairpur, Sind, W. Pakistan.	E. W. Nayar 11 April, 1915.
17298	M	Skin and Skull,	Ara Salt Range, Punjab, W. Pakistan.	C. H. Stocklay 25 Jul., 1921.
17301	M	Skin and Skull,	Ara Salt Range, Punjab, W. Pakistan.	H. W. Wells 17 May, 1923.
17300	F	Skin and Skull,	Ara Salt Range, Punjab, W. Pakistan.	H. W. Wells 24 Mar., 1923.
17292	M	Skin and Skull,	Singar, Gaya, Bihar.	C. A. Crump 22 May, 1914.
17293	F	Skin and Skull,	Singar, Gaya, Bihar.	C. A. Crump 27 May, 1914.
17290	F	Skin and Skull,	Vankanur, Kathiawar, Gujarat.	C. A. Crump 04 Jan., 1913
17291	F	Skin and Skull,	Vankanur, Kathiawar, Gujarat.	C. A. Crump 05 Jan., 1913
17289	M	Skin and Skull,	Junagadh, Kathiawar, Gujarat.	C. A. Crump 28 Sep., 1912

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
9973	F	Skin and Skull,	Vankanur, Kathiawar, Gujarat.	C. A. Crump 06 Jan., 1913.
767	M	Skin and Skull,	Eastern Ghats, Andhra Pradesh.	N. A. Baptista ...
17288	F	Skin and Skull,	Vijayanagar, Bellary, Karnataka.	G. C. Shortridge 23 Jul., 1912
17287	M	Skin and Skull,	Vijayanagar, Bellary, Karnataka.	G. C. Shortridge 20 Jul., 1912.
17299	F	Skin and Skull,	Morar, Gwalior, Madhya Pradesh.	C. Primrose 08 Jul., 1922.
17294	M	Skin and Skull,	Ghatigan, Gwalior, Madhya Pradesh.	Maj. E. W. Mayor 28 Jul., 1914
17286	F	Skin and Skull,	Gadag, S. Mahratha, Gujarat.	G. C. Shortridge 22 Dec., 1911.
17297	F	Skin and Skull,	Marungooz, Travancore, Kerala.	R. S. Pillay 08 Nov., 1915.
9894	F	Skin and Skull,	Narsinggarh, Damoh, Madhya Pradesh.	C. A. Crump 10 May, 1912.
9897	F	Damaged specimen	Vijaynagar, Bellary, Karnataka.	G. C. Shortridge 31 Jul., 1912
10521	M	Skin and Skull,	Shujabad, Multan, Punjab.	G. M. Allen ...
10522	M	Skin and Skull,	Shujabad, Multan, Punjab.	G. M. Allen ...
25518	M	Skin and Skull,	Sasaram, Rohtak, Bihar.	V C. Agrawal 29 Sep., 1977
25519	M	Skin and Skull,	Sasaram, Rohtak, Bihar.	V C. Agrawal 29 Sep., 1977
25520	F	Skin and Skull,	Medikonda, Warangal, Andhra Pradesh.	D : N. Chari ... Sep., 1977
25521	F	Skin and Skull,	Medikonda, Warangal, Andhra Pradesh.	D : N. Chari ... Sep., 1977
25522	F	Skin and Skull,	Medikonda, Warangal, Andhra Pradesh.	D : N. Chari ... Sep., 1977

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25523	F	Skin and Skull,	Medikonda, Warangal, Andhra Pradesh.	D : N. Chari ... Sep., 1977
11389	M	Skin and Skull,	Bhadri-Bainti, Partabgarh, Uttar Pradesh.	Entomologist, U. P. Govt., ... June, 1949
11388	M	Skin and Skull,	Bhadri-Bainti, Partabgarh, Uttar Pradesh.	Entomologist, U. P. Govt., ... June, 1949.
25492	F	Skin and Skull,	Udaigiri, Bhubaneswar, Orissa.	V C. Agrawal 11 Feb., 1967
25493	F	Skin and Skull,	Udaigiri, Bhubaneswar, Orissa.	V C. Agrawal 11 Feb., 1967.
25494	M	Skin and Skull,	Udaigiri, Bhubaneswar, Orissa.	V C. Agrawal 11 Feb 1967.
25495	M	Skin and Skull,	Bhubaneswar, Puri, Orissa.	V C. Agrawal 07 Feb., 1974
25496	F	Skin and Skull,	Udaigiri, Puri, Orissa.	V C. Agrawal 08 Feb., 1974
25497	F	Skin and Skull,	Udaigiri, Puri, Orissa.	V C. Agrawal 08 Feb., 1974
18307	M	Skin and Skull,	Kutab Minar, Delhi.	H. Khajuria 13 Aug., 1956.
18304	M	Skin and Skull,	Kutab Minar, Delhi.	H. Khajuria 13 Aug., 1956.
18306	F	Skin and Skull,	Kutab Minar, Delhi.	H. Khajuria 13 Aug., 1956.
18302	F	Skin and Skull,	Kutab Minar, Delhi.	H. Khajuria 13 Aug., 1956.
18301	F	Skin and Skull,	Kutab Minar, Delhi.	H. Khajuria 13 Aug., 1956.
18305	M	Skin and Skull,	Kutab Minar, Delhi.	H. Khajuria 13 Aug., 1956.
18308	M	Skin and Skull,	Kutab Minar, Delhi.	H. Khajuria 13 Aug., 1956.
18310	M	Skin and Skull,	Kutab Minar, Delhi.	H. Khajuria 13 Aug., 1956.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
18300	F	Skin and Skull,	Kutab Minar, Delhi.	H. Khajuria 13 Aug., 1956.
18303	F	Skin and Skull,	Kutab Minar, Delhi.	H. Khajuria 13 Aug., 1956.
18309	F	Skin and Skull,	Kutab Minar, Delhi.	H. Khajuria 13 Aug., 1956.
18316	F	Skin and Skull,	Tuglaquabad Fort, Near Delhi.	H. Khajuria 17 Aug., 1956.
25487	M	Skin and Skull,	Vellamatum, Kerala.	R. S. N. Pillay 21 Nov., 1915.
25491	F	Skin and Skull,	Rajasthan,	...
16234	F	Skin and Skull,	Mohomgarh, Rajasthan.	K. K. Tiwari 16 Jan., 1958.
16240	F	Skin and Skull,	Mohomgarh, Rajasthan.	K. K. Tiwari 16 Jan., 1958.
16233	F	Skin and Skull,	Mohomgarh, Rajasthan.	K. K. Tiwari 16 Jan., 1958.
16239	F	Skin and Skull,	Mohomgarh, Rajasthan.	K. K. Tiwari 16 Jan., 1958.
16248	M	Skin and Skull,	Mohomgarh, Rajasthan.	K. K. Tiwari 16 Jan., 1958.
16243	M	Skin and Skull,	Mohomgarh, Rajasthan.	K. K. Tiwari 16 Jan., 1958.
16238	F	Skin and Skull,	Mohomgarh, Rajasthan.	K. K. Tiwari 16 Jan., 1958.
16244	M	Skin and Skull,	Mohomgarh, Rajasthan.	K. K. Tiwari 16 Jan., 1958.
16247	M	Skin and Skull,	Mohomgarh, Rajasthan.	K. K. Tiwari 16 Jan., 1958.
15141	M	Skin and Skull,	Alwar, Rajasthan.	S. K. Kulshrestha 10 Apr., 1961.
15142	F	Skin and Skull,	Alwar, Rajasthan.	S. K. Kulshrestha 10 Apr., 1961.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
16251	M	Skin and Skull,	Mohangarh, Rajasthan.	K. K. Tiwari 16 Jan., 1958.
16235	F	Skin and Skull,	Mohangarh, Rajasthan.	K. K. Tiwari 16 Jan., 1958.
16246	M	Skin and Skull,	Mohangarh, Rajasthan.	K. K. Tiwari 16 Jan., 1958.
16241	M	Skin and Skull,	Mohangarh, Rajasthan.	K. K. Tiwari 16 Jan., 1958.
16236	F	Skin and Skull,	Mohangarh, Rajasthan.	K. K. Tiwari 16 Jan., 1958.
16237	F	Skin and Skull,	Mohangarh, Rajasthan.	K. K. Tiwari 16 Jan., 1958.
16245	M	Skin and Skull,	Mohangarh, Rajasthan.	K. K. Tiwari 16 Jan., 1958.
16232	F	Skin and Skull,	Mohangarh, Rajasthan.	K. K. Tiwari 16 Jan., 1958.
16252	M	Skin and Skull,	Mohangarh, Rajasthan.	K. K. Tiwari 16 Jan., 1958.
16250	M	Skin and Skull,	Mohangarh, Rajasthan.	K. K. Tiwari 16 Jan., 1958.
16249	M	Skin and Skull,	Mohangarh, Rajasthan.	K. K. Tiwari 16 Jan., 1958.
21238	F	Skin and Skull,	Chitorgarh, Rajasthan.	P. D. Gupta 04 Oct., 1964.
21244	F	Skin and Skull,	Chitorgarh, Rajasthan.	P. D. Gupta 06 Oct., 1964.
21237	F	Skin and Skull,	Chitorgarh, Rajasthan.	P. D. Gupta 04 Oct., 1964.
16198	M	Skin and Skull,	Bikaneer, Rajasthan.	B. Biswas 05 Jan., 1957.
16199	M	Skin and Skull,	Bikaneer, Rajasthan.	B. Biswas 05 Jan., 1957.
16206	F	Skin and Skull,	Nakh, Jaisalmer, Rajasthan.	B. Biswas 21 Aug., 1960.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
16195	F	Skin and Skull,	Bikaneer, Rajasthan.	B. Biswas 05 Jan., 1957.
16207	F	Skin and Skull,	Nakh, Jaisalmer, Rajasthan.	B. Biswas 21 Aug., 1960.
16191	F	Skin and Skull,	Bikaneer, Rajasthan.	B. Biswas 05 Jan., 1957.
16194	M	Skin and Skull,	Bikaneer, Rajasthan.	B. Biswas 05 Jan., 1957.
16196	M	Skin and Skull,	Bikaneer, Rajasthan.	B. Biswas 05 Jan., 1957.
16192	M	Skin and Skull,	Bikaneer, Rajasthan.	B. Biswas 05 Jan., 1957.
16200	F	Skin and Skull,	Nakh, Jaisalmer, Rajasthan.	B. Biswas 21 Aug., 1960.
16193	M	Skin and Skull,	Bikaneer, Rajasthan.	B. Biswas 05 Jan., 1957.
16190	F	Skin and Skull,	Bikaneer, Rajasthan.	B. Biswas 05 Jan., 1957.
16197	M	Skin and Skull,	Bikaneer, Rajasthan.	B. Biswas 05 Jan., 1957.
16204	F	Skin and Skull,	Nakh, Jaisalmer, Rajasthan.	B. Biswas 21 Aug., 1960.
16202	Juv.	Skin and Skull,	Nakh, Jaisalmer, Rajasthan.	B. Biswas 21 Aug., 1960.
16203	F	Skin and Skull,	Nakh, Jaisalmer, Rajasthan.	B. Biswas 21 Aug., 1960.
16205	F	Skin and Skull,	Nakh, Jaisalmer, Rajasthan.	B. Biswas 21 Aug., 1960.
16201	F	Skin and Skull,	Nakh, Jaisalmer, Rajasthan.	B. Biswas 21 Aug., 1960.
16253	M	Skin and Skull,	Mohangarh, Rajasthan.	K. K. Tiwari 16 Jan., 1958.
16242	M	Skin and Skull,	Mohangarh, Rajasthan.	K. K. Tiwari 16 Jan., 1958.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20814	F	Skin and Skull,	Nr. Kailana Dam, Jodhpur, Rajasthan.	S. S. Saha 20 Feb., 1982.
20815	F	Skin and Skull,	Nr. Kailana Dam, Jodhpur, Rajasthan.	S. S. Saha 20 Feb., 1982.
20816	M	Skin and Skull,	Nr. Kailana Dam, Jodhpur, Rajasthan.	S. S. Saha 20 Feb., 1982.
20818	M	Skin and Skull,	Nr. Kailana Dam, Jodhpur, Rajasthan.	S. S. Saha 20 Feb., 1982.
20817	M	Skin and Skull,	Nr. Kailana Dam, Jodhpur, Rajasthan.	S. S. Saha 20 Feb., 1982.
21245	F	Skin and Skull,	Chitorgarh, Rajasthan.	P. D. Gupta 06 Oct., 1964.
21240	F	Skin and Skull,	Chitorgarh, Rajasthan.	P. D. Gupta 06 Oct., 1964.
21242	F	Skin and Skull,	Chitorgarh, Rajasthan.	P. D. Gupta 06 Oct., 1964.
21241	F	Skin and Skull,	Chitorgarh, Rajasthan.	P. D. Gupta 06 Oct., 1964.
21243	F	Skin and Skull,	Chitorgarh, Rajasthan.	P. D. Gupta 06 Oct., 1964.
21239	F	Skin and Skull,	Chitorgarh, Rajasthan.	P. D. Gupta 06 Oct., 1964.
25498	M	Skin and Skull,	Sardarshohr, Churu, Rajasthan.	R. K. Ghose 05 Jan., 1981.
25499	F	Skin and Skull,	Sardarshohr, Churu, Rajasthan.	R. K. Ghose 05 Jan., 1981.
25500	F	Skin and Skull,	Sardarshohr, Churu, Rajasthan.	R. K. Ghose 05 Jan., 1981.
25501	F	Skin and Skull,	Sardarshohr, Churu, Rajasthan.	R. K. Ghose 05 Jan., 1981.
25502	F	Skin and Skull,	Sardarshohr, Churu, Rajasthan.	R. K. Ghose 05 Jan., 1981.
25503	F	Skin and Skull,	Sardarshohr, Churu, Rajasthan.	R. K. Ghose 05 Jan., 1981.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25504	M	Skin and Skull,	Sardarshohr, Churu, Rajasthan.	R. K. Ghose 05 Jan., 1981.
25505	F	Skin and Skull,	Sardarshohr, Churu, Rajasthan.	R. K. Ghose 05 Jan., 1981.
25506	M	Skin and Skull,	Sardarshohr, Churu, Rajasthan.	R. K. Ghose 05 Jan., 1981.
25507	F	Skin and Skull,	Sardarshohr, Churu, Rajasthan.	R. K. Ghose 05 Jan., 1981.
25508	M	Skin and Skull,	Sardarshohr, Churu, Rajasthan.	R. K. Ghose 05 Jan., 1981.
25509	M	Skin and Skull,	Sardarshohr, Churu, Rajasthan.	R. K. Ghose 05 Jan., 1981.
25510	M	Skin and Skull,	Sardarshohr, Churu, Rajasthan.	R. K. Ghose 05 Jan., 1981.
25511	F	Skin and Skull,	Sardarshohr, Churu, Rajasthan.	R. K. Ghose 06 Jan., 1981.
25512	F	Skin and Skull,	Nakh, Jaisalmer, Rajasthan.	R. K. Ghose 05 Dec., 1980.
25513	F	Skin and Skull,	Nakh, Jaisalmer, Rajasthan.	R. K. Ghose 25 Dec., 1980.
25514	M	Skin and Skull,	Nakh, Jaisalmer, Rajasthan.	R. K. Ghose 25 Dec., 1980.
25515	F	Skin and Skull,	Nakh, Jaisalmer, Rajasthan.	R. K. Ghose 25 Dec., 1980.
25516	F	Skin and Skull,	Nakh, Jaisalmer, Rajasthan.	R. K. Ghose 25 Dec., 1980.
25517	M	Skin and Skull,	Nakh, Jaisalmer, Rajasthan.	R. K. Ghose 25 Dec., 1980.
12347	-	Skin and Skull,	Ajmer, Rajasthan.	D : P. N. Mathur ... 1954.
12348	-	Skin and Skull,	Ajmer, Rajasthan.	D : P. N. Mathur ... 1954.
19093	M	Skin only,	Junagadh, Kathiawar, Gujarat.	C. A. Crump ...

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19091	F	Skin only,	Junagadh, Kathiawar, Gujarat.	C. A. Crump 29 Sep., 1912.
19087	F	Skin only,	Junagadh, Kathiawar, Gujarat.	C. A. Crump 29 Sep., 1912.
19090	F	Skin only,	Junagadh, Kathiawar, Gujarat.	C. A. Crump 29 Sep., 1912.
19084	F	Skin and Skull,	Junagadh, Kathiawar, Gujarat.	C. A. Crump 29 Sep., 1912.
19094	F	Skin only,	Junagadh, Kathiawar, Gujarat.	C. A. Crump 29 Sep., 1912.
19020	M	Skin and Skull,	Palanpur, Gujarat.	C. A. Crump 17 Apr., 1913.
19021	M	Skin and Skull,	Palanpur, Gujarat.	C. A. Crump 17 Dec., 1912.
19088	F	Skin and Skull,	Junagadh, Kathiawar, Gujarat.	C. A. Crump ...
19085	F	Skin and Skull,	Junagadh, Kathiawar, Gujarat.	C. A. Crump ...
19086	F	Skin only,	Junagadh, Kathiawar, Gujarat.	C. A. Crump ...
19083	M	Skin and Skull,	Junagadh, Kathiawar, Gujarat.	C. A. Crump ...
19082	F	Skin only,	Junagadh, Kathiawar, Gujarat.	C. A. Crump 26 Sep., 1912.
19081	F	Skin only,	Junagadh, Kathiawar, Gujarat.	C. A. Crump 26 Sep., 1912.
19080	F	Skin only,	Junagadh, Kathiawar, Gujarat.	C. A. Crump 26 Sep., 1912.
19079	F	Skin only,	Junagadh, Kathiawar, Gujarat.	C. A. Crump 26 Sep., 1912.
19089	F	Skin and Skull,	Junagadh, Kathiawar, Gujarat.	C. A. Crump 26 Sep., 1912.
19092	F	Skin only,	Junagadh, Kathiawar, Gujarat.	C. A. Crump 26 Sep., 1912.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
23826	M	Skin and Skull,	Khodiar Dam, Amreli, Gujarat.	S. Chakraborty 04 Nov., 1991.
23827	F	Skin and Skull,	Khodiar Dam, Amreli, Gujarat.	S. Chakraborty 04 Nov., 1991.
23828	F	Skin and Skull,	Khodiar Dam, Amreli, Gujarat.	S. Chakraborty 04 Nov., 1991.
23829	F	Skin and Skull,	Khodiar Dam, Amreli, Gujarat.	S. Chakraborty 04 Nov., 1991.
23830	F	Skin and Skull,	Khodiar Dam, Amreli, Gujarat.	S. Chakraborty 04 Nov., 1991.
23818	F	Skin and Skull,	Khodiar Dam, Amreli, Gujarat.	S. Chakraborty 04 Nov., 1991.
23819	M	Skin and Skull,	Khodiar Dam, Amreli, Gujarat.	S. Chakraborty 04 Nov., 1991.
23820	M	Skin and Skull,	Khodiar Dam, Amreli, Gujarat.	S. Chakraborty 04 Nov., 1991.
23821	F	Skin and Skull,	Khodiar Dam, Amreli, Gujarat.	S. Chakraborty 04 Nov., 1991.
23822	F	Skin and Skull,	Khodiar Dam, Amreli, Gujarat.	S. Chakraborty 04 Nov., 1991.
23823	M	Skin and Skull,	Khodiar Dam, Amreli, Gujarat.	S. Chakraborty 04 Nov., 1991.
23824	M	Skin and Skull,	Khodiar Dam, Amreli, Gujarat.	S. Chakraborty 04 Nov., 1991.
23825	F	Skin and Skull,	Khodiar Dam, Amreli, Gujarat.	S. Chakraborty 04 Nov., 1991.

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl	Tr
17304	59.1	70.0	20.0	29.1	15.0	—
17305	58.9	66.0	19.0	27.1	15.5	6.6
17303	56.0	67.0	19.0	29.0	15.1	5.0

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl	Tr
17302	59.3	75.0	19.0	28.2	15.0	5.3
10867	55.3	70.0	19.0	-	-	-
10366	56.4	65.0	19.0	27.9	-	-
10359		65.0	19.0	-	-	-
17296	62.0	72.0	20.0	29.0	14.5	6.6
17295	65.0	62.0	18.0	26.2	14.0	5.5
17298	59.4	71.0	21.0	28.1	17.0	5.8
17301	61.4	74.0	20.0	28.0	17.8	5.4
17300	58.7	73.0	18.0	28.0	15.4	
17292	64.4	81.0	-	32.6	14.0	-
17293	58.7	71.0	20.0	27.9	14.6	-
17290	59.7	62.0	20.0	31.5	14.9	5.5
17291	59.7	59.0	20.0	27.5	14.7	5.0
9973	57.9	56.0	19.0	25.8	16.0	-
17289	59.7	62.0	20.0	28.4	17.1	5.6
17287	61.7	71.5	19.5	5.7	30.8	15.0
17288	53.8	67.0	18.0	4.4	24.2	14.0
17299	59.3	65.0	19.0	5.8	31.0	15.7
17294	58.9	58.0	20.0	4.7	28.5	14.0
17286	59.0	63.0	19.0	5.7	27.4	15.3
17297	54.2	73.0	17.0	5.1	27.8	13.3
9894	57.5	63.0	18.0	-	27.0	12.1
9897	Specimen damaged					
10521	59.3	-	14.5	6.2	27.7	14.0
10522	60.7	-	16.7	6.4	26.5	12.7
25518	61.3	73.9	17.0	6.3	29.7	14.6
25519	59.8	68.4	19.3	6.4	28.9	15.2
25520	57.8	67.9	19.2	7.5	29.1	14.3
25521	56.0	67.2	12.8	5.7	25.9	12.5
25522	59.5	60.8	-	-	29.0	14.9
25523	54.9	60.5	17.1	5.6	26.5	12.8

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl	Tr
11389	63.4	47.9	—	—	29.2	17.6
11388	59.7	61.3	—	—	29.0	15.6
25492	59.0	75.0	18.5	4.1	28.8	14.7
25493	60.7	70.5	19.4	5.7	20.5	14.4
25494	59.5	72.2	20.0	5.8	20.0	15.2
25495	59.2	64.1	16.2	4.2	27.0	14.5
25496	58.0	55.7	14.0	5.0	27.5	14.1
25497	55.3	62.7	12.4	—	26.6	13.3
18307	57.2	52.4	11.1	4.6	26.6	15.6
18306	58.5	55.9	14.9	8.1	28.0	13.2
18305	60.4	52.0	—	—	32.5	16.0
18304	59.8	52.1	—	—	31.6	10.2
18303	57.3	56.0	11.1	4.9	28.4	14.3
18302	54.4	48.9	—	—	24.8	13.4
18301	58.3	51.4	13.1	5.8	26.8	14.5
18300	60.8	57.2	10.8	6.8	29.4	13.2
18308	62.3	56.9	12.5	7.3	29.6	16.2
18309	54.7	—	—	—	26.2	15.1
18310	59.4	53.4	12.0	5.7	28.4	14.5
18316	61.0	39.0	12.1	6.8	26.4	16.9
25487	57.9	58.3	11.5	—	27.0	12.0
25491	56.3	44.6 +	11.0	—	26.9	13.0
16198	61.2	67.2	18.4	6.0	29.5	15.8
16206	—	50.0	19.0	—	—	—
16207	—	58.0	18.0	—	—	—
16200	—	48.0	17.0	—	—	—
16204	—	59.0	16.0	—	—	—
16202	—	40.0	14.0	—	—	—
16203	—	52.0	19.0	—	—	—
16205	—	53.0	18.5	—	—	—
16201	—	54.0	18.0	—	—	—
16253	58.2	54.1	16.8	5.7	27.3	15.0

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl	Tr
20814	56.8	50.3 +	14.3	5.5	28.6	14.0
21245	61.0	—	17.6	6.7	31.0	15.0
25498	62.5	63.0	20.0	5.0	28.9	—
25499	61.0	66.0	—	—	—	—
25500	60.0	63.0	22.0	—	—	—
25501	60.0	67.5	20.0	—	—	—
25502	61.0	61.0	20.0	—	—	—
25503	58.0	66.0	18.0	—	—	—
25504	59.0	63.5	20.5	—	—	—
25505	61.0	61.0	20.0	—	—	—
25506	59.0	64.0	20.0	—	—	—
25507	63.3	59.0	19.0	—	—	—
25508	59.5	61.0	19.0	—	—	—
25509	61.0	64.0	21.0	—	—	—
25510	60.5	61.0	21.0	—	—	—
25511	59.0	60.0	18.5	—	—	—
25512	58.0	62.0	19.0	—	—	—
25513	58.0	65.0	17.0	—	—	—
25514	62.0	65.0	20.0	—	—	—
25515	63.0	65.0	18.0	—	—	—
25516	59.0	58.0	19.0	—	—	—
25517	63.1	64.0	20.0	—	—	—
19093	64.2	48.2 +	12.6	—	32.4	15.4
19091	62.3	24.1 +	14.2	—	29.5	16.2
19087	61.7	61.8	13.1	5.1	31.7	15.1
19090	62.5	44.6 +	15.8	5.1	30.2	15.6
19084	59.4	55.8	—	—	28.9	19.4
19094	56.7	47.0	13.8	4.5	26.5	15.0
19020	57.7	61.7	19.2	5.5	31.1	15.5
19021	61.2	61.5	17.8	7.4	28.3	14.7
19088	62.9	50.5	16.8	5.4	30.1	14.3
19085	62.2	59.9	16.7	5.7	30.2	16.4

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl	Tr
19086	58.2	54.2	14.8	5.5	28.8	15.6
19083	61.2	38.6 +	16.8	6.4	30.4	13.9
19092	58.9	48.5	17.4	6.4	27.4	16.0
19079	59.9	47.4	15.4	5.5	28.5	14.2
19080	59.5	42.2	16.7	5.5	29.6	15.1
19082	58.1	58.8	13.3	5.3	31.1	14.3
19081	59.5	46.1 +	15.0	5.0	29.0	16.0
19089	59.7	49.4 +	14.1	6.0	28.8	13.9
23826	63.5	53.0	17.4	6.9	31.2	16.3
23828	59.5	55.2	15.7	5.7	27.8	15.8
23829	57.6	51.0	16.7	6.4	28.7	14.7
23827	59.3	59.2	16.2	8.2	27.7	14.3
23825	59.0	64.6	15.6	7.8	27.8	14.5
23824	56.7	57.1	16.4	8.2	27.1	12.7
23823	57.1	62.5	17.6	7.2	25.5	13.7
23822	59.4	57.6	18.2	7.8	27.3	14.6
23821	58.0	67.3	17.7	8.3	27.3	13.2
23820	59.0	65.4	17.4	7.7	27.0	13.1
23819	59.1	69.7	17.5	7.1	28.3	12.8
23818	59.2	56.2	16.9	6.0	29.4	15.4
23830	55.5	53.7	19.3	6.7	27.9	14.1

*Mesurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
11389	19.3	17.0	6.8	4.7	9.1	3.1	9.2	11.5	8.6	—	7.6
11388	18.7	16.5	6.4	4.6	—	2.8	8.6	—	8.2	12.8	7.0
25492	19.9	17.5	6.8	4.7	—	2.9	8.3	11.4	8.6	—	6.8
25494	18.7	16.4	6.6	4.1	8.2	3.3	8.5	—	8.2	—	—
25495	18.9	16.6	6.4	4.6	8.4	3.1	8.2	11.3	8.3	—	7.0

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
25496	18.5	16.1	6.3	4.3	—	3.1	8.4	—	8.3	—	—
25497	18.2	16.3	6.3	4.1	8.2	3.2	8.0	—	8.1	—	—
16198	19.4	17.2	6.7	4.4	—	3.0	8.5	—	8.2	—	—
19084	18.8	16.6	6.4	4.4	—	3.0	8.2	10.9	7.9	—	6.9
19021	19.2	16.9	6.3	5.1	10.0	2.7	8.6	—	8.8	—	8.1
19088	20.2	17.8	6.9	4.9	8.8	2.9	8.7	12.1	8.1	—	7.9
19083	19.7	17.1	6.8	4.5	8.3	3.4	8.3	11.1	8.3	—	7.2
23818	19.4	16.5	6.5	4.2	8.3	3.0	8.4	11.4	8.4	—	7.2
23830	17.8	15.6	6.4	4.2	8.1	3.3	8.6	10.6	8.4	12.0	7.2
23819	19.7	17.5	7.1	4.6	8.6	3.0	8.5	11.3	8.4	13.1	7.6
23820	19.6	17.2	6.7	4.4	8.3	2.8	8.5	11.2	8.6	—	7.3

Remarks : The genus *Rhinopoma* occurs in India by two species, *Rhinopoma hardwickei* and *Rhinopoma microphyllum*. The former being similar to the species *microphyllum* but smaller in size (forearm 53.0–65.4). Tail usually longer than forearm.

Distribution : Andhra Pradesh, Bihar, Delhi, Gujarat, Karnataka, Madhya Pradesh, Orissa, Rajasthan, Tamil Nadu, Uttar Pradesh, Jammu & Kashmir, outside India : Afghanistan, Myanmar, Bangladesh, Pakistan, Thailand.

2. *Rhinopoma microphyllum kinneari* Wroughton

1912. *Rhinopoma kinneari* Wroughton, *J. Bombay nat. hist. soc.*, **21** : 767 (Bhuj, Cutch=Bhuj, Kachchh district, Gujarat, India).

Common name : Larger Rat-tailed Bat (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
16955	M	Skin and Skull,	Ara, N. W. Punjab, alt. 3500', Punjab.	C. H. Stockley 01 Aug., 1921.
16960	F	Skin and Skull,	Rohtas, Salt Range, Pakistan.	H. W. Wells 02 Jun., 1923.
16961	F	Skin and Skull,	Rohtas, Salt Range, Pakistan.	H. W. Wells 04 Jun., 1923.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
16958	F	Skin and Skull,	Rohtas, Salt Range, Pakistan.	H. W. Wells 02 Jun., 1923.
16959	F	Skin and Skull,	Rohtas, Salt Range, Pakistan.	H. W. Wells 02 Jun., 1923.
16956	F	Skin and Skull,	Morar, Gwalior, Madhya Pradesh.	C. Primrose 29 Jun., 1922.
16957	M	Skin and Skull,	Morar, Gwalior, Madhya Pradesh.	C. Primrose 30 Jun., 1922.
25524	M	Skin and Skull,	Chunar Fort, Mirzapur, Uttar Pradesh.	R. K. Ghose 26 Dec., 1978.
25525	M	Skin and Skull,	Chunar Fort, Mirzapur, Uttar Pradesh.	R. K. Ghose 26 Dec., 1978.
17732	-	Skin and Skull,	Humayun's Tomb, Delhi.	H. Khajuria 14 Aug., 1956.
17731	-	Skin and Skull,	Humayun's Tomb, Delhi.	H. Khajuria 14 Aug., 1956.
17734	-	Skin and Skull,	Humayun's Tomb, Delhi.	H. Khajuria 14 Aug., 1956.
17733	-	Skin and Skull,	Humayun's Tomb, Delhi.	H. Khajuria 14 Aug., 1956.
18295	F	Skin and Skull,	Kutab Minar, Delhi.	H. Khajuria 13 Aug., 1956.
18297	F	Skin and Skull,	Kutab Minar, Delhi.	H. Khajuria 13 Aug., 1956.
18298	M	Skin and Skull,	Kutab Minar, Delhi.	H. Khajuria 13 Aug., 1956.
18318	M	Skin and Skull,	Tuglaquabad Fort, Delhi.	H. Khajuria 17 Aug., 1956
18315	F	Skin and Skull,	Tuglaquabad Fort, Delhi.	H. Khajuria 17 Aug., 1956.
18296	F	Skin and Skull,	Tuglaquabad Fort, Delhi.	H. Khajuria 17 Aug., 1956.
18317	F	Skin and Skull,	Tuglaquabad Fort, Delhi.	H. Khajuria 17 Aug., 1956.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
15303	F	Skin and Skull,	Mondore Monumnets, Jodhpur, Rajasthan.	Reg. Station Party 30 Jan., 1961.
15304	F	Skin and Skull,	Mondore Monumnets, Jodhpur, Rajasthan.	Reg. Station Party 30 Jan., 1961.
12383	M	Skin and Skull,	Jodhpur, Rajasthan.	Iswar Prakash ... Aug., 1954.
12384	F	Skin and Skull,	Jodhpur, Rajasthan.	Iswar Prakash ... Aug., 1954.
12494	M	Skin and Skull,	Fort, Jodhpur City, Rajasthan.	Principal, Jaswant College. 16 Oct., 1955
12496	M	Skin and Skull,	Fort, Jodhpur City, Rajasthan.	Principal, Jaswant College. 16 Oct., 1955
12495	F	Skin and Skull,	Udiamandir, Jodhpur City, Rajasthan.	Principal, Jaswant College. 22 Oct., 1955
20501	F	Skin and Skull,	Baroda, Gujarat.	D : R. V Shah 01 Sep., 1970.
18294	M	Skin and Skull,	Kutch, Gujarat.	F. Stoliczka ... 1872.
18037	M	Skin and Skull,	Junagadh, Gujarat.	C. A. Crump 25 Sep., 1912.
18034	M	Skin and Skull,	Junagadh, Gujarat.	C. A. Crump 26 Sep., 1912.
18035	M	Skin and Skull,	Junagadh, Gujarat.	C. A. Crump 25 Sep., 1912.
18293	M	Skin and Skull,	Kutch, Gujarat.	F. Stoliczka ... 1872.
25488	F	Skin and Skull,	Baroda, Gujarat.	D : R. V Shah 01 Sep., 1970.
25489	M	Skin and Skull,	Baroda, Gujarat.	D : R. V Shah 01 Sep., 1970.
18038	M	Skin and Skull,	Junagadh, Kathiwar, Gujarat.	C. A. Crump 25 Sep., 1912.
18036	M	Skin and Skull,	Junagadh, Kathiwar, Gujarat.	C. A. Crump 25 Sep., 1912.

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl	Tr
18036	71.6	—	—	—	26.3	17.4
18038	69.3	52.2 +	13.3	—	27.3	18.4
25489	64.1	54.7	18.3	8.9	25.2	17.1
25488	62.5	51.0	16.1	8.4	23.4	15.8
18293	66.0	53.1	16.5	6.5	25.0	15.4
18035	71.9	61.3	15.9	7.2	27.0	16.2
18034	72.9	57.3	18.6	7.7	28.3	16.4
18037	72.5	57.2	18.3	8.0	28.7	15.0
18294	69.8	48.0	19.0	7.9	27.0	18.7
20501	64.2	48.0	16.5	5.8	25.5	16.2
12495	70.7	59.5	17.9	8.3	21.3	15.5
12496	72.1	59.6	20.0	9.0	27.5	16.9
12494	71.5	65.1	19.1	9.4	23.4	18.4
12384	68.5	59.8	17.6	7.0	23.6	15.4
12383	71.0	57.7	18.2	8.2	26.0	16.5
15304	67.7	57.6	16.2	8.7	26.0	14.7
15303	70.1	64.5	16.7	5.5	27.5	17.5
17732	69.2	—	16.8	—	26.7	16.5
17731	69.5	—	17.9	7.7	27.2	16.5
17734	61.3	46.5	12.5	8.4	23.4	16.8
17733	70.3	45.0	16.8	7.3	26.0	15.6
18295	69.3	51.0	16.0	7.0	25.5	16.1
18297	70.0	52.5	17.8	7.1	24.7	16.7
18298	72.3	52.5	15.8	7.5	28.5	16.8
18318	65.5	60.6	18.8	6.9	26.5	17.3
18315	68.6	62.0	16.1	6.9	26.6	17.5
18296	71.1	62.8	17.6	6.8	28.1	17.5
18317	71.4	63.6	—	—	26.6	17.9
25524	67.1	60.0	16.9	8.5	26.4	17.8
25525	66.9	54.4	17.5	7.8	25.8	18.2

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl	Tr
16955	67.9	58.0	22.0	—	26.0	18.3
16960	65.9	57.0	18.0	—	26.0	16.1
16961	67.3	57.0	19.5	—	24.0	19.2
16958	65.2	72.0	18.0	—	26.7	16.3
16959	64.7	69.0	18.0	—	26.7	16.9
16956	66.1	55.0	22.0	—	31.0	17.1
16957	66.9	54.0	21.0	—	26.2	16.5

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
15303	20.7	19.0	7.5	5.1	9.5	3.1	9.7	12.8	9.4	—	—
12384	21.2	18.9	7.7	4.8	9.3	3.0	9.3	12.6	9.6	—	8.2
12494	22.5	19.5	7.9	5.6	9.8	3.2	9.8	13.1	9.9	—	8.6
12496	21.5	19.5	8.0	5.4	9.6	2.7	9.6	12.7	9.1	—	9.0
12495	21.2	18.9	7.6	5.5	9.8	3.0	9.9	12.7	9.6	—	—
18294	22.1	19.5	8.2	5.6	10.0	3.2	9.8	14.2	9.6	15.2	8.6
18037	22.8	20.0	8.3	5.3	10.0	3.1	10.0	13.3	9.6	—	9.1
18034	22.3	19.8	7.9	5.3	9.6	2.9	9.5	12.7	10.0	—	8.7
18035	22.3	19.7	8.0	5.5	9.8	3.1	9.6	12.8	9.7	—	8.7
18038	21.4	18.7	7.7	4.8	9.5	3.3	9.4	12.0	9.5	—	8.5
18036	20.9	—	7.9	5.7	—	2.8	9.5	—	9.2	—	8.5

With a view to protect the facial characters of the specimens and as well as to protect them from further damage, the skulls of most of the specimens were not extracted and hence the cranial measurements of all the specimens are not available.

Remarks : The specimens are larger in size (Forearm 65.5–76.0 mm). Tail usually shorter than forearm.

Distribution : Bihar, Delhi (Brosset 1962 a), Gujarat (Khajuria 1953), Madhya Pradesh (Wroughton 1912 b), Maharashtra, Orissa (Kharparde 1980), Rajasthan, Uttar Pradesh (Brosset 1962 a), West Bengal.

Elsewhere : Afghanistan, Bangladesh (Khan 1982), Indonesia, Myanmar, Pakistan, Thailand.

Family EMBALLONURIDAE

Genus *Emballonura* Temminck, 18383. *Emballonura monticola* Temminck1838. *Emballonura monticola* Temminck, *Tijdschr. Natuur. Gesch.*, 5 : 25, pl. ii, figs. 1-2. Java.*Common name* : Sheath-tailed Bat (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19244	M	Skin and Skull,	Victoria Point, Tenasserim, Myanmar.	G. C. Shortridge 27 Nov., 1913.
19245	M	Skin and Skull,	Victoria Point, Tenasserim, Myanmar.	G. C. Shortridge 27 Nov., 1913.
19246	M	Skin and Skull,	Victoria Point, Tenasserim, Myanmar.	G. C. Shortridge 27 Nov., 1913.
19247	M	Skin and Skull,	Victoria Point, Tenasserim, Myanmar.	G. C. Shortridge 27 Nov., 1913.
19248	F	Skin and Skull,	Victoria Point, Tenasserim, Myanmar.	G. C. Shortridge 27 Nov., 1913.
19249	F	Skin and Skull,	Victoria Point, Tenasserim, Myanmar,	G. C. Shortridge 27 Nov., 1913.
19250	F	(Specimen damaged)		
19251	?	Skin and Skull,	Victoria Point, Tenasserim, Myanmar.	G. C. Shortridge 27 Nov., 1913.
19252	F	Skin and Skull,	Victoria Point, Tenasserim, Myanmar.	G. C. Shortridge 27 Nov., 1913.
19253	F	Skin and Skull,	Victoria Point, Tenasserim, Myanmar.	G. C. Shortridge 27 Nov., 1913.
19254	F	Skin and Skull,	Victoria Point, Tenasserim, Myanmar.	G. C. Shortridge 27 Nov., 1913.
19255	F	Skin and Skull,	Victoria Point, Tenasserim, Myanmar.	G. C. Shortridge 27 Nov., 1913.
5306	?	Specimen damaged.	Lampu, Mergui, S. Myanmar.	J. Andersen ...
5307	?	Specimen damaged	Lampu, Mergui, S. Myanmar.	J. Andersen ...

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
5308	?	Specimen damaged	Lampu, Mergui, S. Myanmar.	J. Andersen ...
5309	?	Specimen damaged	Lampu, Mergui, S. Myanmar.	J. Andersen ...
5310	?	Specimen damaged	Lampu, Mergui, S. Myanmar.	J. Andersen ...
5311	?	Specimen damaged	Lampu, Mergui, S. Myanmar.	J. Andersen ...
5312	?	Specimen damaged	Lampu, Mergui, S. Myanmar.	J. Andersen ...
5313	?	Specimen damaged	Lampu, Mergui, S. Myanmar.	J. Andersen ...
5314	?	Specimen damaged	Lampu, Mergui, S. Myanmar.	J. Andersen ...
5315	?	Specimen damaged	Lampu, Mergui, S. Myanmar.	J. Andersen ...
5316	?	Specimen damaged	Lampu, Mergui, S. Myanmar.	J. Andersen ...

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	E	Tb	F & Cl
19244	45.7	—	19.2	8.2
19245	45.2	12.7	17.6	8.5
19246	46.0	11.6	16.2	8.0
19248	44.5	11.5	17.5	8.2
19249	43.6	—	—	—
19251	46.1	11.5	16.6	7.5
19252	46.2	11.4	17.0	7.5
19253	45.0	—	17.0	7.2
19254	44.0	11.0	15.5	8.5
19255	45.3	—	17.2	9.5

Measurements :

Cranial : As the condition of the specimens were not permissible to extract their skulls, so the cranial measurements of the specimens are not available.

Remarks : The genus *Emballonura* does not occur in India. The species is extralimital. The specimens from Myanmar only available in the National Zoological Collection.

Distribution : Approximate distribution of the species : Tenasserim, Northern Siam (Bangkok; quoted by Chasen, 1940). Malay States, Java, Sumatra, Borneo and certain adjacent small islands. Philippine Islands, according to Dobson. (Moreover, two specimens of *Emballonura nigrescens*-damaged specimens, bearing Z. S. I. Reg. No. 7113 and 7114 are available in the National Zoological Collection. The specimens were received in exchange from British Museum and were collected from Molluccas.

Genus *Taphozous***4. *Taphozous perforatus perforatus* Geoffroy**

1818. *Taphozous perforatus* Geoffroy, *Descr. de L Egypte*, 2 : 126 (Egypt).

Common name : Egyptian Tomb Bat (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
15296	M	Skin and Skull,	Mandore Monuments, Jodhpur, Rajasthan.	Reg. Stn. Party 30 Jan., 1961.
15297	M	Skin and Skull,	Mandore Monuments, Jodhpur, Rajasthan.	Reg. Stn. Party 30 Jan., 1961.
15298	F	Skin and Skull,	Mandore Monuments, Jodhpur, Rajasthan.	Reg. Stn. Party 30 Jan., 1961.
15299	F	Skin and Skull,	Mandore Monuments, Jodhpur, Rajasthan.	Reg. Stn. Party 30 Jan., 1961.
4513	M	Skin and Skull,	Temple of Karnak, Upper Egypt.	J. Anderson ... 1881.
4514	M	Skin and Skull,	Temple of Karnak, Upper Egypt.	J. Anderson ... 1881
4515	M	Skin and Skull,	Temple of Karnak, Upper Egypt.	J. Anderson ... 1881
12488	M	Skin and Skull,	Jodhpur, Rajasthan.	D : I. Prakash 10 Oct., 1955.
12489	M	Skin and Skull,	Udiamandir, Jodhpur, Rajasthan.	D : I. Prakash 26 Jul., 1955.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
12490	M	Skin and Skull,	Bhimbarak, Jodhpur- City, Rajasthan.	D : I. Prakash 26 Aug., 1955.
17944	F	Skin and Skull,	Rajkot, Kathiawar, Gujarat.	C. A. Crump 20 Dec., 1912.
17945	F	Skin and Skull,	Rajkot, Kathiawar, Gujarat.	C. A. Crump 20 Dec., 1912.
17943	F	Skin and Skull,	Rajkot, Kathiawar, Gujarat.	C. A. Crump 20 Dec., 1912.
17946	F	Skin and Skull,	Rajkot, Kathiawar, Gujarat.	C. A. Crump 20 Dec., 1912.
17456	F	Skin and Skull,	Bhuj, Cutch, Gujarat.	C. A. Crump 24 Aug., 1911.
17457	M	Skin and Skull,	Bhuj, Cutch, Gujarat.	C. A. Crump 30 Sep., 1911.
17458	M	Skin and Skull,	Bhuj, Cutch, Gujarat.	C. A. Crump 04 Oct., 1911.
17459	F	Skin and Skull,	Rajkot, Kathiwar, Gujarat.	C. A. Crump 22 Dec., 1912.
9888	M	Skin and Skull,	Bhuj, Cutch, Gujarat.	C. A. Crump 05 Oct., 1911.
23782	M	Skin and Skull,	Bhuj, Cutch, Gujarat.	C. A. Crump 05 Oct., 1911.
2164	F	Skin and Skull,	Rajkot, Kathiwar, Gujarat.	C. A. Crump 15 Dec., 1912.

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
15296	64.4	27.8	16.4	23.8	12.7
15297	62.1	28.2	17.5	23.3	12.5
15298	61.2	28.0	16.6	23.2	12.6
15299	60.2	27.6	16.8	23.6	12.6
4513	62.3	26.1	17.1	23.8	12.1

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
4514	62.7	27.5	17.5	23.2	12.8
4515	62.9	29.0	18.2	23.3	12.6
12488	63.3	29.5	19.5	24.0	16.2
12489	63.7	30.7	18.2	24.7	12.3
12490	63.2	27.9	18.9	25.5	15.5
17943	63.9	27.5	15.4	24.7	12.2
17944	60.3	—	15.0	22.2	12.0
17945	60.5	31.2	16.3	24.8	12.4
17946	61.8	25.2	14.6	25.3	11.9
17456	59.7	23.0	19.0	21.5	13.4
17457	63.9	23.0	19.0	22.0	14.0
17458	61.5	24.0	17.0	22.4	12.5
17459	62.9	26.0	18.0	23.7	13.2
9888	63.5	23.0	—	—	—
2164	60.6	23.0	19.0	22.7	13.7
23782	62.9	29.0	18.0	23.3	12.7

*Mesurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
17457	21.6	18.8	8.0	3.5	5.1	5.0	8.4	11.8	9.6	14.7	9.7
17458	20.5	17.4	7.9	3.4	5.0	4.4	8.4	11.8	9.4	14.4	9.5
17459	20.8	17.2	8.1	3.6	5.3	4.8	8.5	11.8	9.6	14.8	9.2
17944	20.2	16.6	8.4	4.4	—	5.0	8.4	11.5	10.2	—	11.2
17943	20.7	18.3	8.6	3.5	—	5.2	8.3	11.9	10.0	—	9.3
17946	20.8	18.3	8.4	3.5	—	4.6	8.3	11.7	9.6	—	8.6
12489	20.0	17.5	8.2	3.5	6.2	5.1	8.2	12.0	10.3	—	—
4513	20.6	17.7	8.5	3.5	7.5	4.7	8.3	12.0	10.2	15.0	9.6
4515	20.5	17.5	8.2	3.6	6.5	4.9	8.8	12.0	10.5	14.2	10.1

Remarks : Distal half of the Tail emerges about midway from interfemoral membrane. Radio-metacarpal pouch small. Head with a central-depression. Anterior margin of ear papillate. Gular sac moderately developed in males, absent in females. Tail thin with pointed tip.

Distribution : Gujarat, Madhya Pradesh, Rajasthan.

Elsewhere : Egypt, Pakistan (Siddique, 1961).

5. *Taphozous longimanus longimanus* Hardwicke

1825. *Taphozous longimanus* Hardwicke, *Trans. Linn. Soc. Lond.*, 14 : 525 (Calcutta, Calcutta District, West Bengal, India).

Common name : Long-armed sheath-tailed Bat (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17929	F	Skin and Skull,	Pegu, Myanmar.	J. M. D. Mackenzie ... Dec., 1915.
17930	M	Skin and Skull,	Pegu, Myanmar.	J. M. D. Mackenzie ... Dec., 1915.
17931	F	Skin and Skull,	Pegu, Myanmar.	J. M. D. Mackenzie ... Dec., 1915.
17932	F	Skin and Skull,	Pegu, Myanmar.	J. M. D. Mackenzie ... Dec., 1915.
17933	F	Skin and Skull,	Pegu, Myanmar.	J. M. D. Mackenzie 01 Dec., 1915.
17934	F	Skin and Skull,	Pegu, Myanmar.	J. M. D. Mackenzie 08 Dec., 1915.
17935	M	Skin and Skull,	Pegu, Myanmar.	J. M. D. Mackenzie 27 Nov., 1915.
17936	M	Skin and Skull,	Pegu, Myanmar.	J. M. D. Mackenzie 27 Dec., 1915.
7043	M	Skin and Skull,	Domepara, Orissa.	V Ball ...
7045	F	Skin and Skull,	Domepara, Orissa.	V Ball ...
23810	F	Skin and Skull,	...	...
12631	M	Skin and Skull,	Nagpur,	... 1949

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
12632	M	Skin and Skull,	Nagpur, Maharashtra	 1949.
12710	F	Skin and Skull,	Nagpur, Maharashtra	College of Sc. Nagpur, 1951-54.
17937	F	Skin and Skull,	Palanpur, Gujarat.	C. A. Crump ...
17938	M	Skin and Skull,	Palanpur, Gujarat.	C. A. Crump ...
17939	F	Skin and Skull,	Palanpur, Gujarat,	C. A. Crump ...
17940	F	Skin and Skull, (Damaged)	Palanpur, Gujarat.	C. A. Crump ...
17941	M	Skin and Skull,	Palanpur, Gujarat	...
23813	F	Skin and Skull,	Vadodara, Gujarat	D : R. V Nene 24 Apr., 1979.
23814	M	Skin and Skull,	Vadodara, Gujarat	D : R. V Nene 24 Apr., 1979.
23811	F	Skin and Skull,	Kamban, Madurai, Tamil Nadu.	S. H. Prater ... May, 1917
23812	F	Skin and Skull,	Kamban, Madurai, Tamil Nadu.	S. H. Prater ... May, 1917.
11415	M	Skin and Skull, (Skull damaged)	Inanpur, Manbhum, Bihar	... 26 Nov., 1948
19427	M	Skin and Skull,	Agartala, Tripura	V C. Agrawal 09 Nov., 1969
19428	F	Skin and Skull, (Skull damaged)	Agartala, Tripura	V C. Agrawal 09 Nov., 1969
23777	M	Skin and Skull,	Jhagadiya, Broach, Gujarat	S. Chakraborty 03 Aug., 1990
23798	F	Skin and Skull,	Konarak, Puri, Orissa	V. C. Agrawal 05 Feb., 1974
23799	F	Skin and Skull,	Konarak, Puri Orissa	V C. Agrawal 05 Feb., 1974

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
16897	F	Skin and Skull,	Cherrapunji, Meghalaya,	H. W. Wells 17 Apr., 1920
16898	F	Skin and Skull,	Laitkynsew, Khasi Hills, Meghalaya	H. W. Wells 30 Apr., 1920
21504	F	Skin and Skull,	Sylhet, Assam,	E. B. Baker ... 1872
21505	F	Skin and Skull,	Gouri Sagar Temple, Assam	J. M. Foster ... 1875
21506	M	Skin and Skull,	Gouri Sagar Temple, Assam	J. M. Foster ... 1875
21507	F	Skin and Skull,	Sibsagar, Assam	S. E. Peal ... 1872
21508	F	Skin and Skull,	Cachar, Assam	Ind. Mus. Coll. ... 1868
21509	F	Skin and Skull,	Gouri Sagar Temple, Assam	J. M. Foster ... 1875
21510	M	Skin and Skull,	Nazira, Assam	J. M. Foster ... 1872
21511	M	Skin and Skull,	Sibsagar, Assam	S. E. Peal ... 1872
21503	F	Skin and Skull, (Damaged)	Cherrapunji, Meghalaya,	F. Stoliczka ... 1875

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
21504	40.0	—	18.7	19.8	09.2
21505	41.5	—	18.5	19.8	09.3
21506	39.8	—	17.6	19.5	08.6
21507	40.4	—	16.8	20.0	09.7
21508	42.2	—	16.2	19.5	09.0
21509	40.9	—	19.3	19.8	09.5
21510	41.2	—	16.7	—	09.5

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
21539	39.1	—	18.0	17.5	09.0
21497	42.8	28.9	17.1	19.8	10.0
21498	41.0	—	18.1	—	09.3
21499	39.8	28.5	18.4	18.8	09.2
21500	41.3	—	13.0	19.0	09.5
21528	40.4	—	15.7	18.1	09.0
21531	38.0	—	16.9	18.8	08.5
21520	39.6	—	18.2	17.7	08.6
9187	39.7	—	19.7	18.6	07.6
9188	40.8	—	17.2	21.2	08.5
9189	40.9	—	18.8	19.8	08.2
9190	39.5	—	18.7	20.4	08.0

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
21499	17.6	14.6	6.3	4.7	5.6	2.7	7.1	—	—	—	—
20813	18.0	14.7	6.4	4.2	6.0	2.6	6.2	9.1	8.2	10.7	6.8
17751	17.7	15.0	6.7	4.6	5.8	2.6	6.0	9.2	8.8	—	—
17763	18.6	14.2	6.3	3.8	5.3	3.0	6.5	9.7	8.2	11.3	7.0
17766	18.5	14.7	6.5	3.9	5.7	3.2	6.5	9.5	8.3	10.9	7.1
17777	18.1	14.2	6.5	4.0	5.1	2.8	6.6	9.3	8.6	11.1	6.7
21995	18.3	14.5	6.2	3.9	5.8	2.8	6.3	9.5	9.0	11.1	6.5
21501	16.9	14.8	6.0	3.7	6.3	2.9	6.1	8.8	8.0	—	—
21553	18.0	15.2	7.0	3.5	6.0	2.8	6.4	9.2	8.8	—	—

Remarks : Ellerman & Morrison-Scott (1951) considered *Hipposideros fulvus* Gray, 1838, as a subspecies of *Hipposideros bicolor* (Temminck, 1834). Hill (1963 a), in his review of the genus *Hipposideros*, has treated *fulvus* and *bicolor* as distinct species.

Distribution : Gujarat, Bihar, Karnataka, Maharashtra, Madhya Pradesh, Orissa, Tamil Nadu, Uttar Pradesh, Rajasthan, West Bengal.

Elsewhere : Pakistan (Wroughton, 1920), Afghanistan (Gaisler, 1970).

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
17929	62.4	28.7	16.0	26.6	13.4
17930	60.2	25.5	15.7	26.2	13.5
17931	60.7	30.2	15.7	25.7	13.8
17932	61.7	27.1	16.1	26.5	14.0
17933	62.5	29.7	16.0	26.3	14.1
17934	61.3	31.7	15.8	25.7	13.7
17935	62.2	29.1	16.5	25.8	14.3
17936	58.0	28.0	16.1	26.2	14.0
7043	59.2	26.9	17.0	25.7	13.8
7045	61.1	26.8	16.9	25.6	13.7
12631	62.5	25.3	14.8	25.5	15.0
12632	59.3	26.2	15.0	25.3	15.2
12710	58.1	23.0	16.1	23.9	12.2
17937	61.3	27.7	15.3	25.4	13.2
17938	59.5	—	16.1	25.3	13.5
17939	—	28.7	16.6	25.2	14.5
17940	60.0	27.6	17.0	25.6	14.8
17941	60.5	28.7	17.1	—	13.7
23813	60.0	25.2	15.2	26.2	14.5
23814	59.5	27.8	16.8	25.2	14.1
23811	56.9	26.0	13.3	22.5	12.8
23812	60.7	26.1	15.5	26.0	14.4
11415	59.3	26.2	17.3	23.5	14.3
19427	62.0	25.0	18.5	23.8	13.4
19428	63.0	26.0	18.0	24.8	13.7
23777	59.5	21.8	15.6	24.5	12.0
23798	60.8	25.0	—	26.0	12.7
23799	58.3	26.0	14.6	23.7	12.8
23801	61.4	22.0	12.0	24.7	14.0

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
23802	61.0	25.0	14.5	25.7	13.7
23803	60.0	27.0	—	25.2	13.0
23804	61.6	25.0	—	25.5	12.5
23806	59.2	22.0	—	23.0	12.3
23807	60.7	26.0	13.7	26.7	13.2
23808	59.2	27.0	13.7	27.5	14.1
23809	60.2	25.0	13.5	26.3	13.9
22236	62.7	29.7	13.3	26.5	15.2
22237	59.4	25.1	13.0	24.7	12.7
22238	58.0	23.2	13.3	24.0	12.2
23983	60.0	29.5	17.0	24.8	13.2
17441	62.3	—	17.5	24.5	14.3
17442	60.2	28.0	17.5	24.5	14.1
17443	56.9	24.5	17.0	22.5	13.6
17444	—	21.0	16.0	23.7	14.1
17196	—	25.0	17.0	24.8	13.8
17197	59.4	24.0	18.0	23.9	13.5
17198	61.6	27.0	17.0	24.8	14.4
17192	60.2	24.0	18.0	23.8	13.9
23783	60.0	26.0	18.0	23.8	13.0
17188	58.5	25.0	18.0	22.1	13.1
17189	61.3	27.0	18.0	27.6	16.1
17190	66.5	26.0	17.0	26.4	15.6
17191	65.0	24.0	17.0	25.2	14.7
17195	59.7	27.0	17.0	25.8	15.2
9902	62.4	25.0	17.0	25.1	—
17193	61.4	29.0	19.0	25.1	14.2
23794	60.6	20.0	18.8	24.8	13.5
17194	59.3	25.0	18.0	23.9	13.6
23795	61.5	25.8	18.5	25.2	13.8

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
20812	40.5	—	17.7	18.0	08.0
20813	40.2	—	17.8	18.7	08.7
21532	40.4	—	18.0	18.5	07.9
21536	39.3	—	17.2	17.7	09.6
21992	40.8	—	19.9	18.5	09.0
21993	40.5	—	18.7	19.3	08.3
21994	42.8	—	19.2	21.0	10.5
21995	42.0	—	21.2	20.3	09.0
17142	37.5	23.0	19.0	15.7	08.7
17134	42.3	31.0	24.0	20.3	10.0
17135	39.3	26.0	22.0	18.7	10.2
10654	38.5	29.0	22.0	19.4	09.4
17139	38.1	30.0	22.0	17.5	10.0
17140	40.2	27.0	20.0	18.5	10.1
17137	40.4	28.0	22.0	18.6	10.1
17136	38.7	22.0	22.0	17.2	10.2
17138	38.0	25.0	20.0	18.8	10.2
10652	42.7	27.0	22.0	18.7	10.0
10651	39.8	31.0	23.0	19.3	10.3
10650	30.7	25.0	21.0	17.5	11.4
16900	39.1	28.0	22.0	17.2	11.3
17280	40.0	25.0	22.0	17.2	11.5
10638	40.8	28.0	24.0	18.2	11.3
17141	42.3	39.0	24.0	18.3	09.1
10649	41.6	34.0	20.5	18.9	09.4
10648	40.6	33.0	21.5	18.7	10.5
10647	42.4	32.0	21.0	19.0	10.0
21552	42.7	—	24.6	20.0	09.5
21553	40.0	—	22.5	19.3	10.0
21530	40.0	—	19.3	19.3	09.5
21501	40.4	—	18.3	19.7	08.3
21534	40.5	—	19.0	19.7	09.7

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17136	F	Skin and Skull,	Sukkur, Sind, Pakistan	S. H. Prater 01 Apr., 1915
17138	F	Skin and Skull,	Chaklala, Punjab, Pakistan	Maj. C. H. Stokle 03 Jul., 1921.
10652	F	Skin and Skull,	Sukkur, Sind, Pakistan	S. H. Prater 02 Apr., 1915
10651	M	Skin and Skull,	Sukkur, Sind, Pakistan	S. H. Prater 01 Apr., 1915
10650	F	Skin and Skull,	Bhaklala, Rawalpindi, Pakistan	C. H. Stockley 03 Feb., 1921
16900	M	Skin and Skull,	Banhar, Darbhanga, Bihar	N. A. Baptista 05 Oct., 1922
17280	M	Skin and Skull,	Nimiaghat, Hazaribagh, Bihar	C. A. Crump 19 Jun., 1914
10638	M	Skin and Skull,	Nimiaghat, Hazaribagh, Bihar	C. A. Crump 02 Jun., 1914
17141	F	Skin and Skull,	Shrigaon, Ratnagiri, Maharashtra	S. H. Prater 21 Dec., 1914
10649	F	Skin and Skull,	Honawar, Konasa, Maharashtra	G. C. Shortridge 02 Jun., 1912
10648	F	Skin and Skull,	Godag, S. Mahratta, Karnataka.	G. C. Shortridge 29 Dec., 1911.
10647	F	Skin and Skull,	Godag, S. Mahratta, Karnataka.	G. C. Shortridge 28 Dec., 1911.
7196	M	Skin and Skull,	Shevaroy Hills, Chennai, Tamil Nadu	W. Daly ...
21497	F	Skin and Skull,	Shirgaon, Ratnagiri, Maharashtra	S. H. Prater ... 1914
21498	M	Skin and Skull,	Shirgaon, Ratnagiri, Maharashtra	S. H. Prater ... Dec., 1914
21499	M	Skin and Skull,	Shirgaon, Ratnagiri, Maharashtra	S. H. Prater ... Dec., 1914.
21500	F	Skin and Skull,	Nasik, Maharashtra	S. H. Prater Sep., 1899.
21528	F	Skin and Skull,	Belgaum, Maharashtra	R. C. Wroughton 01 Nov., 1899

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19267	M	Skin and Skull,	Trivandrum, Kerala.	R. Sn. Pillay 19 Nov., 1915
19268	M	Skin and Skull,	Trivandrum, Kerala.	R. Sn. Pillay 19 Nov., 1915
19269	M	Skin and Skull,	Trivandrum, Kerala.	R. Sn. Pillay 19 Nov., 1915
19270	M	Skin and Skull,	Trivandrum, Kerala.	R. Sn. Pillay 19 Nov., 1915
19271	F	Skin and Skull,	Trivandrum, Kerala.	R. Sn. Pillay 14 Oct., 1915
20596	F	Skin only,	Cochin, Ernakulam, Kerala.	D: A. Madhavan ... Sep., 1980
20597	M	Skin and Skull,	Cochin, Ernakulam, Kerala.	D: A. Madhavan ... Sep., 1980
7622	M	Skin and Skull, (Damaged)	Landfall Island, Andaman & Nicobar	A.R.S. Andersen —
7623	M	Skin and Skull, (Damaged)	Landfall Island, Andaman & Nicobar	A.R.S. Andersen —
7624	F	Skin and Skull,	Landfall Island, Andaman & Nicobar	A.R.S. Andersen —
7625	F	Skin and Skull,	Landfall Island, Andaman & Nicobar	A.R.S. Andersen —
19042	F	Skin only	Andaman & Nicobar	A.R.S. Andersen 04 Nov., 1931
19043	F	Skin only	Andaman & Nicobar	A.R.S. Andersen 04 Nov., 1931
19044	F	Skin only	Andaman & Nicobar	A.R.S. Andersen 04 Nov., 1931
19045	F	Skin only	Andaman & Nicobar	A.R.S. Andersen 04 Nov., 1931
21149	M	Skin and Skull,	Borra Guhalu, Vishakhapatnam, A.P.	P. K. Das 03 Mar 1983
21150	F	Skin and Skull,	Borra Guhalu, Vishakhapatnam, A.P.	P. K. Das 03 Mar 1983

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
21151	F	Skin and Skull,	Borra Guhalu, Vishakhapatnam, A.P.	P. K. Das 03 Mar., 1983
21152	F	Skin and Skull,	Borra Guhalu, Vishahapatnam, A. P.	P. K. Das 03 Mar., 1983
21153	M	Skin and Skull,	Borra Guhalu, Vishahapatnam, A. P.	P. K. Das 03 Mar 1983.
17473	M	Skin and Skull,	Pagan, Myanmar.	G. C. Shortridge 12 Oct., 1913
17474	M	Skin and Skull,	Tagoot, Mergui, Myanmar	G. C. Shortridge 19 Apr., 1914
19858	M	Skin and Skull, (Damaged)	Mingun, Sagaing, Myanmar	G. C. Shortridge 15 Jul., 1913
19859	M	Skin and Skull,	Tagoot, Mergui, Myanmar,	G. C. Shortridge 19 Apr., 1914
9893	M	Skin and Skull,	Jog, Gersoppa, North- Kanara, Karnataka	G. C. Shortridge 09 May, 1912
17472	M	Skin and Skull,	Jog Gersoppa, North- Kanara, Karnataka.	G. C. Shortridge 09 May, 1912
9886	M	Skin and Skull,	Bhuj, Gujarat	C. A. Crump 04 Oct., 1911
17475	F	Skin and Skull,	Nagercoil, Kanniya- Kumari, Tamil Nadu.	R. Sn. Pillay 26 Sep., 1915
10812	M	Skin and Skull,	Cuddapah, Andhra Pradesh	N. A. Baptista 27 Aug., 1929
10813	F	Skin and Skull,	Cuddapah, Andhra Pradesh	N. A. Baptista 31 Aug., 1929
17476	F	Skin and Skull,	Cuddapah, Andhra Pradesh	N. A. Baptista 21 Aug., 1929
17477	M	Skin and Skull,	Kondagorlapenta, Palkonda Range, Cuddapah, A. P.	N. A. Baptista 10 Jul., 1930
9887	M	Skin and Skull,	Narsingharh, Damoh, Madhya Pradesh	C. A. Crump 07 May, 1912
9889	M	Skin and Skull,	Mundra, Sagar, Madhya Pradesh	C.A. Crump 26 Apr., 1912

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
18500	89.6	54.0	32.0	39.4	18.0
16831	86.4	58.0	30.0	35.8	18.3
16832	89.5	55.0	30.0	35.6	18.4
16833	88.0	53.0	30.0	35.6	19.5
16834	88.8	60.0	30.0	38.7	17.5
16835	90.0	52.0	30.0	36.1	16.6
16836	77.6	52.0	30.0	31.8	18.6
16837	90.0	53.0	30.0	37.3	19.0
16838	91.0	59.0	30.0	38.2	19.0
16830	89.2	50.0	30.0	39.2	19.1
16911	86.5	50.0	30.0	30.2	16.2
16912	87.4	48.0	30.0	38.1	19.3
16839	88.0	56.0	28.0	36.6	18.3
16840	88.0	54.0	30.0	37.0	17.7
16910	87.0	60.0	31.0	34.8	18.1
16913	83.0	50.0	33.0	35.0	16.0
16848	91.1	66.0	34.0	39.6	20.0
16904	97.8	64.0	35.0	43.6	20.1
16906	89.5	59.0	31.0	38.3	18.3
18501	91.1	65.0	33.5	40.7	18.2
16914	94.4	60.0	33.0	40.6	20.5
16915	93.9	60.0	32.0	41.1	20.2
16916	90.0	55.0	33.0	39.3	19.2
16917	88.5	59.0	32.0	36.5	19.0
16918	94.3	57.0	33.0	32.5	22.0
16841	91.8	62.0	33.0	40.8	16.3
16842	92.2	60.0	32.0	39.0	18.0
16843	94.4	62.0	32.0	40.0	20.5
16844	90.1	60.0	30.0	37.1	19.0
16845	89.0	55.0	32.0	38.3	18.0
16846	89.7	52.0	31.0	36.7	19.4

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
16909	F	Skin and Skull,	Peshoke, Darjeeling, West Bengal	N. A. Baptista 07 Oct., 1915
16823	M	Skin and Skull,	Peshoke, Darjeeling, West Bengal	N. A. Baptista 24 Jul., 1915
16819	M	Skin and Skull,	Peshoke, Darjeeling, West Bengal	N. A. Baptista 08 Jul., 1915
16821	F	Skin and Skull,	Peshoke, Darjeeling, West Bengal	N. A. Baptista 24 Jul., 1915
16817	F	Skin and Skull,	Jongson, Darjeeling, West Bengal	N. A. Baptista 09 Jun., 1915
16914	M	Skin and Skull,	Bouziri, Nepal	N. A. Baptista 04 Jun., 1921
16915	M	Skin and Skull,	Bouziri, Nepal	N. A. Baptista 05 Jun., 1921
16842	F	Skin and Skull,	Bouziri, Nepal	N. A. Baptista 17 Jun., 1922.
16917	F	Skin and Skull,	Bouziri, Nepal	N. A. Baptista 17 Jun., 1922.
16843	M	Skin and Skull,	Bouziri, Nepal	N. A. Baptista 17 Jun., 1922.
18499	M	Skin and Skull,	Bachek Gorkha, Z.W.N.W. of Nepal	N. A. Baptista 16 May, 1915
16846	F	Skin and Skull,	Bachek Gorkha, Z.W.N.W. of Nepal	N. A. Baptista 14 May, 1915
16847	M	Skin and Skull,	Bachek Gorkha, Z.W.N.W. of Nepal	N. A. Baptista 15 May, 1923
16841	F	Skin and Skull,	Hathiban, Nepal	N. A. Baptista 26 May, 1922
16916	F	Skin and Skull,	Hathiban, Nepal	N. A. Baptista 26 May, 1922
16844	F	Skin and Skull,	Dare Kharka, Apoon, Gorkha, Nepal	N. A. Baptista 10 Apr., 1923
16845	F	Skin and Skull,	Dare Kharka, Apoon, Gorkha, Nepal	N. A. Baptista 10 Apr., 1923

Measurements :**Cranial :**

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml
19558	22.4	18.5	8.9	4.1	7.1	5.8	10.1	12.9	11.3	—
19559	22.4	18.4	8.7	4.0	7.4	5.9	10.0	13.0	11.4	—
19273	22.0	18.0	8.3	3.8	6.0	5.2	9.1	12.9	11.0	—
16868	21.2	18.7	8.9	3.7	6.5	5.2	8.5	12.9	9.8	—
16870	21.3	18.5	8.8	4.2	6.8	5.4	10.3	12.0	10.2	14.9
23877	21.4	18.1	9.0	4.9	7.6	4.8	8.7	11.8	10.5	—
19264	21.8	17.8	8.8	3.9	7.7	6.3	8.7	12.4	9.9	—
19265	21.5	18.3	8.5	3.7	7.7	5.6	8.7	12.3	10.7	—
20597	21.5	18.3	8.9	3.9	7.8	5.7	8.6	12.2	10.1	15.5
21149	22.3	20.1	8.8	4.2	6.5	5.4	8.9	12.6	10.8	16.0
21150	21.5	19.0	8.7	3.9	—	5.5	8.9	12.5	10.8	15.7
21152	23.1	20.5	9.2	4.0	—	5.2	9.3	12.7	11.2	16.0
17477	22.0	18.2	8.9	3.8	6.0	5.3	8.6	12.4	11.0	15.4

Remarks : Medium-sized bat having no Gular sac. Radio-metacarpal pouch are usually large. The adult males are usually having prominent black beard. Tails are laterally compressed towards the tip only.

Distribution : Widely distributed in the Indian Peninsula, north to Rajasthan (Sinha 1981 a) on the west, and Bihar (Sinha 1981 b) on the east; also Andaman Islands (Khajuria 1953).

Elsewhere : Sri Lanka (Phillips 1935), Myanmar, Southern China.

7. *Taphozous theobaldi secatus* Thomas, 1915

1915. *Taphozous theobaldi secatus* Thomas, *J. Bombay nat. Hist. Soc.*, **24** : 60. Asirgarh, East Nimar, Madhya Pradesh.

Common name : Theobald's Tomb Bat. (E.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17470	M	Skin and Skull,	Asirgarh, East Nimar, M. P.	C.A. Crump 01 Nov., 1911

Measurements :**External :**

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
17470	63.2	27.0	21.0	23.7	13.4

Measurements :**Cranial :** Nil.

Remarks : The species is represented in the National Zoological Collection by a single specimen. As the specimen is very old, the skull of the specimen was not extracted and accordingly the cranial measurements of the specimen are not available.

Distribution : India : Madhya Pradesh, Gujarat and Maharashtra.

8. *Taphozous nudiventris kachhensis* Dobson

1872. *Taphozous kachhensis* Dobson, *J. Asiat. Soc. Beng.*, **41** : 221 (Kachchh, Gujarat, India).

Common name : Naked-bellied Tomb Bat (Eng.).

Material available in the National Zoological Collection:

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20581	F	Skin and Skull,	Keela Kuil Kudi, Madurai, Tamilnadu	G. Marimuthu 02 Aug., 1979
12493	F	Skin and Skull,	Bhimbharak, Jodhpur city Rajasthan.	Principal Jaswant College,
19095	F	Skin and Skull,	Jodhpur, Rajasthan.	Daya Krishna — 1956.
20578	F	Skin and Skull,	Delhi, India	H. Khajuria 17 Aug., 1956
15300	F	Skin and Skull,	Mondore Monuments, 10 Km. away from Patodi House, Jodhpur, Rajasthan.	?
15301	M	Skin and Skull,	Mondore Monuments, 10 km. away from Patodi House, Jodhpur, Rajasthan	Reg. Stn. Party. Jodhpur, Z.S.I.
9224	M	Skin and Skull	Karachi, Sind, Pakistan	Karachi Museum (In Exchange)

Remarks : Smallest of the genus *Hipposideros*. Externally resembles to *H. pomona gentilis* and *H. fulvus pallidus*, but smaller.

Distribution : Arunachal Pradesh, Assam, Haryana, Meghalaya, Uttar Pradesh, Mizoram, West Bengal. Nepal, Myanmar, Thailand, Pakistan.

56. *Hipposideros armiger armiger* (Hodgson)

1835. *Rhinolophus armiger* Hodgson, *J. Asiat. Soc. Bengal*, 4 : 699, Nepal.

Common name : Great Himalayan Leaf-nosed Bat (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
16907	F	Skin and Skull,	Gopaldhara, Darjeeling, West Bengal	N. A. Baptista 09 May, 1915
16908	M	Skin and Skull,	Gopaldhara, Darjeeling, West Bengal	N. A. Baptista 09 May, 1915
18497	M	Skin and Skull,	Jongsong, Darjeeling, West Bengal	N. A. Baptista 09 May, 1915
18498	F	Skin and Skull,	Jongsong, Darjeeling, West Bengal	N. A. Baptista 12 Jun., 1915
16818	M	Skin and Skull,	Jongsong, Darjeeling, West Bengal	N. A. Baptista 12 Jun., 1915
16828	F	Skin and Skull,	Nimbong, Darjeeling, West Bengal	N. A. Baptista 22 Jun., 1915
16826	F	Skin and Skull,	Peshoke, Darjeeling, West Bengal	N. A. Baptista 04 Aug., 1915
16824	M	Skin and Skull,	Peshoke, Darjeeling, West Bengal	N. A. Baptista 25 Jul., 1915
16822	F	Skin and Skull,	Peshoke, Darjeeling, West Bengal	N. A. Baptista 24 Jul., 1915
16827	F	Skin and Skull,	Peshoke, Darjeeling, West Bengal	N. A. Baptista 05 Sep., 1915
16825	M	Skin and Skull,	Peshoke, Darjeeling, West Bengal	N. A. Baptista 04 Aug., 1915
16820	M	Skin and Skull,	Peshoke, Darjeeling, West Bengal	N. A. Baptista 10 Jul., 1915

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
21511	40.1	—	16.5	18.7	08.8
20843	41.0	—	17.5	19.1	10.1
10657	40.0	28.0	22.0	17.7	9.9
16897	40.0	28.0	22.0	20.2	8.2
16898	43.0	34.0	24.0	20.4	8.2
16892	40.2	29.5	21.0	18.0	8.3
16893	40.2	30.0	21.5	19.4	9.2
16894	41.0	29.0	21.3	18.5	10.5
10637	39.0	25.0	16.0	17.7	9.7
10658	40.5	31.0	22.0	18.3	10.3
10659	40.5	—	—	17.7	9.7
17282	40.0	26.0	11.0	—	—
21545	41.4	29.2	18.7	19.3	8.9
21546	40.1	29.0	18.5	18.3	8.5
16895	41.0	37.0	25.0	19.4	8.8
16896	40.0	36.0	24.0	19.5	9.3
10656	41.6	32.0	23.0	19.3	10.5
18514	40.3	28.0	22.0	18.2	8.4
18519	40.0	39.4	24.0	18.7	10.6
22319	14.7	20.1	—	—	07.5
22320	41.5	20.4	—	—	08.2
22318	42.4	20.0	—	—	08.2
22317	40.0	—	—	—	—
22316	40.2	—	—	—	—
22314	40.2	20.0	—	—	07.7
22310	42.4	20.2	—	—	07.2
22329	41.0	19.7	—	—	08.1
22328	40.2	19.1	—	—	07.6
22327	41.0	19.5	—	—	07.3
22326	41.8	19.8	—	—	07.2
22325	40.2	20.7	—	—	08.1
22324	40.2	19.0	—	—	08.2

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20577	F	Skin and Skull, (Damaged)	Delhi, India	H. Khajuria 17 Aug., 1956
20580	F	Skin and Skull,	Keela Kuil Kudi, Madurai, Tamil Nadu	G. Marimuthu 02 Aug., 1979
20582	M	Skin and Skull,	Madurai, Tamil Nadu	G. Marimuthu 21 Oct., 1978
20583	F	Skin and Skull,	Madurai, Tamil Nadu	G. Marimuthu 21 Oct., 1978

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
20577	69.9	38.1	20.7	29.9	16.0
20579	69.1	-	20.2	28.1	16.5
20583	62.1	-	17.2	24.4	14.2
20582	74.1	-	18.5	30.5	14.3
20580	76.5	-	17.8	33.4	18.0
20578	70.2	34.1	21.3	30.5	18.3
12493	72.2	34.5	22.0	30.3	17.3
19095	72.2	34.9	21.4	31.5	17.8
20581	72.4	33.6	18.5	31.3	17.7
15300	78.5	38.5	22.7	33.1	17.7
15301	78.1	35.2	21.5	32.7	17.7
9224	76.8	30.3	19.4	32.5	16.1
9225	78.5	31.0	18.6	32.5	18.2
19275	75.8	36.4	20.0	33.0	18.2
19276	73.5	36.6	20.3	31.7	17.5
19277	69.2	32.7	18.0	27.1	17.6
19278	77.2	36.0	20.0	32.9	18.3
19279	80.8	42.2	20.6	35.6	17.8
19280	78.0	35.2	20.4	33.3	17.7

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
19281	73.0	34.8	17.5	32.5	16.8
19282	79.1	36.1	19.2	33.2	18.5
19283	65.8	31.4	15.2	27.6	15.3
23778	76.2	22.4	21.5	32.7	17.2
23779	79.8	15.4	21.7	33.4	17.0
23780	75.0	33.0	21.7	32.2	18.0
23781	73.6	31.9	21.3	29.5	17.6
15140	72.1	-	18.8	30.0	19.2
16546	71.2	-	19.6	30.0	19.1
17322	72.2	42.0	22.0	27.3	17.5
17323	75.2	36.0	20.0	28.3	18.0
17324	70.2	41.0	20.0	27.2	17.1
17325	72.0	34.0	20.0	27.1	17.2
17445	74.5	30.0	21.8	28.6	17.5
17447	77.2	36.0	24.0	31.7	18.5
17450	73.0	37.0	24.0	27.6	17.2
9978	72.1	27.0	23.0	30.7	17.5
9979	72.6	29.0	24.0	30.4	17.2
9883	72.5	28.0	22.0	30.2	17.5
17446	73.1	34.0	24.0	29.8	17.2
17454	75.8	35.0	23.0	33.2	19.7
17455	80.0	35.0	22.0	34.3	21.2
17448	68.6	30.0	22.0	26.7	15.7
17449	74.9	31.0	23.0	27.5	18.2
17321	72.9	40.0	20.0	29.4	17.2

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
12493	27.7	22.6	10.9	5.7	8.0	6.0	10.7	15.3	12.1	19.5	14.0
19095	26.7	22.2	10.7	5.7	7.7	5.8	11.0	15.9	11.9	-	-

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
20580	27.8	24.4	11.1	5.6	8.8	5.3	11.1	16.6	12.8	19.8	12.7
19275	29.9	24.3	11.5	6.0	7.9	5.6	11.3	17.0	12.0	20.7	12.7
19279	30.9	25.0	11.7	6.1	8.5	6.5	11.7	17.9	13.1	21.4	13.2
19281	29.5	23.6	11.2	6.1	8.5	6.3	11.8	16.7	12.0	20.5	12.3
19282	30.2	24.8	11.8	6.4	8.0	5.6	12.2	17.9	13.1	21.1	13.0
9978	28.2	23.0	11.0	5.7	8.1	5.3	11.1	17.2	12.8	19.8	12.5
17454	29.6	24.5	11.4	6.2	8.4	5.6	11.3	16.8	13.5	20.1	13.1
17448	—	23.0	10.9	5.0	7.9	6.4	10.5	—	12.6	19.9	11.9
17449	28.7	23.8	10.9	5.6	8.3	5.5	11.5	16.2	12.7	19.8	12.3
23778	30.2	24.0	11.2	5.9	7.6	5.2	11.2	17.2	12.8	20.7	12.5
23779	29.9	24.6	11.0	6.2	7.6	5.0	11.5	17.3	12.2	20.2	12.4
23780	29.2	24.4	11.5	5.9	7.2	5.2	11.4	16.7	12.2	20.6	12.1
16546	24.6	21.9	10.9	5.0	7.9	5.2	10.5	14.8	11.0	—	12.2

Remarks : Specimens are usually large. Furs not extending over interfemoral membrane. Well developed Radio-metacarpal pouch. Furs relatively thick and colour of back varies from mummy brown to mars brown in specimens of India (Chakraborty & Agrawal, 2000). In certain parts of Pakistan, these bats are killed for the collection of fat which is reported to have medicinal value (Roberts 1977).

Distribution : Bihar (Sinha 1981 b), Delhi (Brosset 1962 a), Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan (Prakash 1956), Tamil Nadu, Sikkim, Uttar Pradesh (Brosset 1962 a).

Elsewhere : Afghanistan (Gaisler 1970) and Pakistan (Siddiqui 1961).

9. *Taphozous nudiventris* Cretzschmar, 1830

1830. *Taphozous nudiventris* Cretzschmar in Ruppell, *Atlas Reise Nordl. Afrika, Säugeth.*, 70, fig. 27b. Giza, Egypt.

Common name : Naked-bellied Tomb Bat. (E.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
4508	F	Skin and Skull, (Skull damaged)	Ruins of Karnak, Upper Egypt.	J. Anderson 23 Mar., 1880

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
4509	F	Skin and Skull,	Ruins of Karnak, Upper Egypt.	J. Anderson 23 Mar., 1880
4510	F	Skin and Skull,	Ruins of Karnak, Upper Egypt.	J. Anderson 23 Mar., 1880
4511	F	Skin and Skull,	Ruins of Karnak, Upper Egypt.	J. Anderson 23 Mar., 1880
4512	F	Skin and Skull,	Ruins of Karnak, Upper Egypt.	J. Anderson 23 Mar., 1880
4497	M	Skin and Skull,	Ruins of Karnak, Upper Egypt	J. Anderson 23 Mar., 1880
4498	M	Skin and Skull,	Ruins of Karnak, Upper Egypt.	J. Anderson 23 Mar., 1880
4499	M	Skin and Skull,	Ruins of Karnak, Upper Egypt	J. Anderson 23 Mar., 1880
4500	M	Skin and Skull,	Ruins of Karnak, Upper Egypt.	J. Anderson 23 Mar., 1880
4501	M	Skin and Skull,	Ruins of Karnak, Upper Egypt	J. Anderson 23 Mar., 1880
4502	M	Skin and Skull,	Ruins of Karnak, Upper Egypt	J. Anderson 23 Mar., 1880
4503	M	Skin and Skull,	Ruins of Karnak, Upper Egypt	J. Anderson 23 Mar., 1880
4504	M	Skin and Skull,	Ruins of Karnak, Upper Egypt	J. Anderson 23 Mar., 1880
4505	F	Skin and Skull,	Ruins of Karnak, Upper Egypt	J. Anderson 23 Mar., 1880
4506	F	Skin and Skull,	Ruins of Karnak, Upper Egypt	J. Anderson 23 Mar., 1880
4507	F	Skin and Skull,	Ruins of Karnak, Upper Egypt	J. Anderson 23 Mar., 1880
19286	M	Skin and Skull,	Khairpur, Sind, Pakistan	S.H. Prater ... Apr., 1915
19288	F	Skin and Skull,	Khairpur, Sind, Pakistan	S.H. Prater ... Apr., 1915

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19289	F	Skin and Skull,	Khairpur, Sind, Pakistan	S.H. Prater ... Apr., 1915
19291	F	Skin and Skull,	Khairpur, Sind, Pakistan	S.H. Prater ... Apr., 1915
19284	M	Skin and Skull,	Khairpur, Sind, Pakistan	S.H. Prater ... Apr., 1915
19285	M	Skin and Skull,	Khairpur, Sind, Pakistan	S.H. Prater ... Apr., 1915
19287	F	Skin and Skull,	Khairpur, Sind, Pakistan	S.H. Prater ... Apr., 1915
19290	F	Skin and Skull,	Khairpur, Sind, Pakistan	S.H. Prater ... Apr., 1915
19292	F	Skin and Skull,	Khairpur, Sind, Pakistan	S.H. Prater ... Apr., 1915
19293	F	Skin and Skull,	Khairpur, Sind, Pakistan	S.H. Prater ... Apr., 1915
19294	F	Skin and Skull,	Khairpur, Sind, Pakistan	S.H. Prater ... Apr., 1915
19295	F	Skin and Skull,	Khairpur, Sind, Pakistan	S.H. Prater ... Apr., 1915
19296	F	Skin and Skull,	Khairpur, Sind, Pakistan	S.H. Prater ... Apr., 1915
19297	F	Skin and Skull,	Khairpur, Sind, Pakistan	S.H. Prater ... Apr., 1915

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
4508	72.4	34.8	21.5	29.3	16.3
4509	67.4	32.7	19.5	30.9	16.7
4510	70.5	32.7	21.2	28.9	16.2
4511	73.8	31.4	19.7	28.6	16.0
4512	66.0	32.6	20.2	27.2	15.7

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
4497	70.0	31.7	21.1	28.5	16.2
4498	70.7	32.7	21.2	29.2	16.3
4499	69.5	32.2	21.2	29.7	16.2
4500	73.1	33.1	20.1	31.5	17.3
4501	74.2	35.7	20.2	30.4	18.0
4502	70.2	30.7	19.1	28.4	16.1
4503	69.5	33.5	17.5	29.4	17.7
4504	73.2	34.7	18.1	20.7	17.6
4505	74.4	33.0	18.1	30.5	16.1
4506	74.0	32.5	20.1	31.4	15.3
4507	70.6	30.6	19.2	29.0	16.7
19286	70.8	29.6	18.2	30.2	15.2
19288	73.3	30.5	20.7	30.3	16.7
19289	70.6	37.2	21.8	29.5	16.0
19291	74.2	32.3	20.4	30.0	16.3
19284	75.9	—	20.4	32.2	17.2
19285	75.9	33.5	19.4	30.7	16.8
19287	68.3	29.7	18.9	27.2	15.5
19290	70.5	35.9	20.5	29.7	16.0
19292	70.6	29.3	20.6	27.2	16.6
19293	74.1	35.2	19.5	31.3	17.0
19294	72.0	36.1	20.2	28.7	15.9
19295	74.5	32.5	19.7	29.3	16.2
19296	76.8	35.0	20.0	30.1	17.0
19297	73.8	34.2	20.6	29.9	16.7

Measurements :**Cranial :**

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
19284	28.0	23.0	11.0	5.7	7.0	4.8	11.2	15.5	11.1	19.2	11.6
19285	26.5	22.7	11.0	5.4	7.1	5.8	10.5	15.9	11.3	—	—

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
19287	26.3	20.5	10.7	5.0	7.4	5.4	10.4	15.0	11.2	18.0	11.7
19290	26.5	21.7	10.2	5.3	7.6	5.1	10.7	15.4	12.2	-	-
19292	27.4	22.0	10.7	5.6	7.0	5.8	10.7	16.1	11.6	18.8	12.0
4498	26.7	22.3	10.8	5.7	7.2	5.9	10.7	15.9	12.0	19.0	12.2
4501	26.8	22.1	10.8	5.2	7.0	6.0	10.5	-	11.7	19.4	11.9
4505	27.2	22.6	10.8	5.5	7.0	6.1	10.9	15.1	11.7	-	-

Remarks : Nil.

Distribution : Approximate distribution of the species : Palestine, Arabia; Egypt, Sudan.

10. *Saccolaimus saccolaimus* (Temminck, 1838)

1838. *Taphozous saccolaimus* Temminck, *Tijdschr. Natuur. Gesch.*, 5 : 14. Java.

Common name : Pouch-bearing Bat (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20598	M	Skin and Skull,	Cochin, Ernakulam, Kerala	D : A. Madhavan ... Sep., 1980
21704	F	Skin and Skull,	Chandra, Medinipur, W.B.	P. K. Das 18 Sep., 1984
21705	F	Skin and Skull,	Chandra, Medinipur, W.B.	P. K. Das 18 Sep., 1984
21706	M	Skin and Skull,	Chandra, Medinipur, W.B.	P. K. Das 18 Sep., 1984
21707	M	Skin and Skull,	Chandra, Medinipur, W.B.	P. K. Das 18 Sep., 1984
21708	F	Skin and Skull,	Chandra, Medinipur, W.B.	P. K. Das 18 Sep., 1984

Measurements :**External :**

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
21708	67.6	21.5	18.7	25.9	14.5
21707	67.5	24.4	18.4	26.4	18.1
21706	73.0	27.0	19.5	29.6	18.4
21705	72.6	32.0	20.0	28.6	18.4
21704	67.7	25.2	20.4	26.7	15.5
20598	70.5	26.0	15.0	26.4	16.0

Measurements :**Cranial :**

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
20598	24.8	20.7	10.1	4.9	—	5.2	10.1	14.9	12.9	—	11.5
21704	22.8	19.6	9.6	4.8	7.8	5.2	10.3	15.7	12.2	17.0	10.4
21706	25.2	21.0	10.1	4.9	8.3	5.5	10.3	16.1	13.3	18.4	11.0

(One Dry specimen of *Saccolaimus saccolaimus* (Temminck) having Dobson's Cat. No. 333, Blyth's Cat. No. 84 A, and Anderson's Cat. No. 191 c, collected from Southern India, Sex-?, Date of Collection-1843, donated by W. Elliot, present in the Collection. The skull of the specimen was not found. Due to the very damaged condition of the specimen, measurements could not be taken.)

Remarks : A large, dark brown *Taphozous* with small, irregular white spots or blotches present on dorsal surface. Lower lip divided by a deep narrow groove. Radio-metacarpal pouch absent. Legs and Feet naked. Gular sac present, larger in males.

The Indian subspecies is *Crassus*.

Distribution : Gujarat (Brosset 1962 a), Karnataka (Wroughton 1913), Maharashtra, Orissa (Wroughton 1915), Tamil Nadu, Uttar Pradesh, West Bengal.

Elsewhere : Bangladesh, Sri Lanka, Thailand (Lekagul and Mc Neely 1977), Malaysia, Myanmar.

11. *Taphozous kachhensis nudaster* Thomas, 1915

1915. *Taphozous kachhensis nudaster* Thomas, *J. Bombay nat. Hist. Soc.*, **24** : 59. Pagan, near Mt. Popa, Myanmar.

Common name : Nil.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17451	F	Skin and Skull,	Pagan, Myanmar.	G. C. Shortridge 09 Oct., 1913
17452	M	Skin and Skull,	Pagan, Myanmar.	G. C. Shortridge 13 Oct., 1913
17453	M	Skin and Skull,	Pagan, Myanmar.	G. C. Shortridge 15 Oct., 1913
4088	M	Skin and Skull,	Pagan, Myanmar.	G. C. Shortridge 15 Oct., 1913
4089	M	Skin and Skull,	Pagan, Myanmar.	G. C. Shortridge 05 Oct., 1913

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
4088	73.3	37.0	22.5	29.7	17.5
4089	71.6	33.0	21.5	29.5	17.4
17451	72.9	—	—	31.9	17.2
17452	77.1	36.0	22.3	30.5	17.7
17453	77.0	35.0	22.0	30.4	18.1

Measurements :

Cranial : Nil.

Remarks : Nil.

Distribution : Myanmar.

Family MEGADERMATIDAE

Genus *Megaderma* E. Geoffroy, 1810

12. *Megaderma spasma horsfieldi* Blyth

1863. *Megaderma horsfieldi* Blyth, *Cat. Mamm. Mus. Asiat. Soc. Bengal*, 23. India.

Common name : Malay False Vampire.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20103	M	Skin and Skull,	Sampaje, Coorg, Karnataka	V. C. Agarwal 02 Feb., 1977
20104	F	Skin and Skull,	Sampaje, Coorg, Karnataka	V. C. Agrawal 02 Feb., 1977
20105	M	Skin and Skull,	Sampaje, Coorg, Karnataka	V. C. Agrawal 02 Feb., 1977
20106	F	Skin and Skull,	Sampaje, Coorg, Karnataka	V. C. Agrawal 02 Feb., 1977
20107	M	Skin and Skull,	Sampaje, Coorg, Karnataka	V. C. Agrawal 02 Feb., 1977
20108	F	Skin and Skull,	Sampaje, Coorg, Karnataka	V. C. Agrawal 02 Feb., 1977
20109	F	Skin and Skull,	Sampaje, Coorg, Karnataka	V. C. Agrawal 02 Feb., 1977
18818	M	Skin and Skull,	Valpoi, Goa	V. C. Agrawal 13 Jan., 1969
18819	F	Skin and Skull,	Valpoi, Goa	V. C. Agrawal 13 Jan., 1969
18820	F	Skin and Skull,	Valpoi, Goa	V. C. Agrawal 13 Jan., 1969

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
18820	58.0	36.5	19.0	32.0	16.0
18819	56.5	37.5	20.0	33.5	16.0
18818	61.0	37.5	20.0	33.5	16.4
20109	58.5	37.0	19.5	33.5	16.0
20108	59.0	37.0	17.0	34.0	16.5
20107	56.5	35.5	19.0	32.0	15.5
20106	60.5	36.5	20.0	36.0	17.0
20105	57.0	36.5	18.5	32.5	15.5
20104	52.5	38.0	18.5	31.0	14.5
20103	56.0	36.5	19.5	33.5	14.5

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
18818	26.0	22.5	9.8	5.0	8.3	4.3	8.3	14.4	11.3	12.0	10.9
18820	25.5	22.0	9.6	4.8	7.4	4.0	8.2	13.9	11.0	16.8	10.8

Remarks : The family Megadermatidae is represented by a single genus *Megaderma*. The genus *Megaderma* consists of two species, *Megaderma spasma horsfieldi* and *Megaderma lyra lyra*. The specimens of *Megaderma spasma* are medium sized bats with large ears jointed together. The specimens are without externally visible tail. Bifid tragus with posterior portion long, narrow and actually pointed. Posterior termination of noseleaf rounded. Sinha (1977) reviewed the species and considered only the two subspecies. The specimens are rare and restricted to forested tracts only.

Distribution : Andhra Pradesh, Assam, Goa (Agrawal; 1973), Gujarat (Specimen available in AMNH), Karnataka (Wroughton 1912c), Kerala (Blanford 1891), Tamil Nadu (Wroughton 1921b), West Bengal : Jalpaiguri district (Bhat 1974).

13. *Megaderma lyra lyra* E. Geoffroy

1810. *Megaderma lyra* E. Geoffroy. *Ann. Mus. H. N. Paris*, 15 : 190 (India, probably Madras, Madras district, Tamil Nadu).

Common name : Indian False Vampire (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25445	M	Skin and Skull,	Botanical Gardens, Howrah, W. Bengal	G. Topal 21 Jun., 1967
25446	M	Skin and Skull,	Barakalikapur, 24-Pgs. West Bengal	G. Topal 07 May, 1967
17105	M	Skin and Skull,	Salboni, Medinipur West Bengal	C. A. Crump 14 Sep., 1914
25447	M	Skin and Skull,	Birsibpur, Howrah, West Bengal	G. Topal 13 Jan., 1967
25448	F	Skin and Skull,	Botanical Gardens, Howrah, W. B.	G. Topal 21 Jun., 1967
25449	F	Skin and Skull,	Birshipur, Howrah, West Bengal	G. Topal 13 Jun., 1967

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17106	M	Skin and Skull,	Silliguri, Darjeeling West Bengal	C. A. Crump 30 Mar., 1915
25450	M	Skin and Skull,	Kamardingi, Hooghly West Bengal	S. Chakraborty 22 Feb., 1974
20046	F	Skin and Skull,	Jhapandanga, Burdwan, West Bengal	J. P. Lal 28 Nov., 1978
25430	F	Skin and Skull,	Jhapandanga, Burdwan, West Bengal	J. P. Lal 19 Jan., 1979
25431	F	Skin and Skull,	Jhapandanga, Burdwan, West Bengal	J. P. Lal 19 Jan., 1979
25432	M	Skin and Skull,	Palla Road, Burdwan, West Bengal	D. K. Biswas 07 Apr., 1980
18354	M	Skin and Skull,	Alipore, Kolkata, West Bengal	J. Cockburn ... 1877
25433	M	Skin and Skull,	Ajodhya Hills, Purulia, West Bengal	A. K. Mukherjee 25 Feb., 1982
25434	M	Skin and Skull,	Ajodhya Hills, Purulia, West Bengal	A. K. Mukherjee 26 Feb., 1982
25435	F	Skin and Skull,	Phulia, Nadia, West Bengal	D. K. Ghosal 04 Nov., 1964
25436	M	Skin and Skull,	Krishnanagar, Nadia West Bengal	P. K. Das 10 Apr., 1978
25437	F	Skin and Skull,	Kulik, Raigunj, W. Din. West Bengal	S. S. Saha 14 Jul 1975
17887	F	Skin and Skull,	Midnapore, West Bengal	C.A. Crump 17 Sep., 1914
17888	F	Skin and Skull,	Midnapore, West Bengal	C. A. Crump 17 Sep., 1914
17886	F	Skin and Skull,	Midnapore, West Bengal	C. A. Crump 17 Sep., 1914
25438	F	Skin and Skull,	Singur, Hooghly, West Bengal	A. K. Mandal 17 Oct., 1974
25439	F	Skin and Skull,	Singur, Hooghly, West Bengal	A. K. Mandal 17 Oct., 1974

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25440	F	Skin and Skull,	Singur, Hooghly, West Bengal	A. K. Mandal 07 Dec., 1974
25441	M	Skin and Skull,	Singur, Hooghly, West Bengal	A. K. Mandal 18 Oct., 1974
25442	M	Skin and Skull,	Singur, Hooghly, West Bengal	A. K. Mandal 17 Oct., 1974
25443	M	Skin and Skull,	Singur, Hooghly, West Bengal	P. K. Das 28 Sep., 1974
22023	F	Skin and Skull,	Chilapata, Jalpaiguri West Bengal	S. Chakraborty 20 Sep., 1983
22026	M	Skin and Skull,	Chilapata, Jalpaiguri, West Bengal	S. Chakraborty 20 Sep., 1983
22025	F	Skin and Skull,	Chilapta, Jalpaiguri, West Bengal	S. Chakraborty 19 Sep., 1983
22024	M	Skin and Skull,	Chilapta, Jalpaiguri, West Bengal	S. Chakraborty 20 Sep., 1983
21990	M	Skin and Skull,	Susunia, Bankura, West Bengal	V. C. Agrawal 07 Jan., 1985
21991	F	Skin and Skull,	Susunia, Bankura West Bengal	V. C. Agrawal 07 Jan., 1985
21989	M	Skin and Skull,	Susunia, Bankura West Bengal	V. C. Agrawal 07 Jan., 1985
22162	M	Skin and Skull,	Tumboni, Birbhum, West Bengal	A. K. Poddar 09 Dec., 1985
22159	F	Skin and Skull,	Tumboni, Birbhum, West Bengal	A. K. Poddar 09 Dec., 1985
22158	M	Skin and Skull,	Tumboni, Birbhum, West Bengal	A. K. Poddar 08 Dec., 1985
22161	F	Skin and Skull,	Chandrapur, Birbhum, West Bengal	A. K. Poddar 12 Dec., 1985
22160	F	Skin and Skull,	Chandrapur, Birbhum, West Bengal	A. K. Poddar 14 Dec., 1985
22170	M	Skin and Skull,	Gosaba, Sundarban T.R., 24-Pgs (S), W. B.	C. K. Misra 19 Sep., 1983

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
21171	M	Skin and Skull,	Gosaba, Sundarban T.R., 24-Pgs(S), W. B.	C. K. Misra 19 Sep., 1983
21172	F	Skin and Skull,	Gosaba, Sundarban T. R., 24-Pgs (S), West Bengal	C. K. Misra 19 Sep., 1983
21173	F	Skin and Skull,	Gosaba, Sundarban T.R., 24-Pgs(S), West Bengal	C. K. Misra 19 Sep., 1983
21174	M	Skin and Skull,	Gosaba, Sundarban T.R., 24-Pgs(S), West Bengal	C. K. Mishra 19 Sep., 1983
21175	F	Skin and Skull,	Gosaba, Sundarban T.R., 24-Pgs(S), West Bengal	C. K. Mishra 19 Sep., 1983
21169	F	Skin and Skull,	Gosaba, Sundarban T.R., 24-Pgs(S), West Bengal	C. K. Mishra 19 Sep., 1983
21168	F	Skin and Skull,	Gosaba, Sundarban T.R., 24-Pgs(S), West Bengal	S. S. Saha 12 Sep., 1983
21167	F	Skin and Skull,	Gosaba, Sundarban T.R., 24-Pgs(S), West Bengal	S. S. Saha 12 Sep., 1983
21166	M	Skin and Skull,	Gosaba, Sundarban T.R., 24-Pgs(S), West Bengal	A. K. Mandal 15 Sep., 1983
21165	F	Skin and Skull,	Gosaba, Sundarban T.R., 24-Pgs(S), West Bengal	Anil Kr. Mandal 15 Sep., 1983
21164	F	Skin and Skull,	Gosaba, Sundarban T.R., 24-Pgs(S), West Bengal	S. S. Saha 12 Sep., 1983
21572	F	Skin and Skull,	Mathabhanga, Cooch Behar, West Bengal	S. Chakraborty 17 Apr., 1986
21573	F	Skin and Skull,	Atiamochor, Cooch Behar, West Bengal	S. Chakraborty 02 Apr., 1986
21574	F	Skin and Skull,	Atiamochor, Cooch Behar, West Bengal	S. Chakraborty 02 Apr., 1986
21575	M	Skin and Skull,	Atiamochor, Cooch Behar, West Bengal	S. Chakraborty 02 Apr., 1986
21576	F	Skin and Skull,	Atiamochor, Cooch Behar, West Bengal	S. Chakraborty 02 Apr., 1986
21577	M	Skin and Skull,	Atiamochor, Cooch Behar, West Bengal	S. Chakraborty 03 Apr., 1986

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
21578	F	Skin and Skull,	Atiamochor, Cooch Behar, West Bengal	S. Chakraborty 02 Apr., 1986
21579	F	Skin and Skull,	Atiamochor, Cooch Behar, West Bengal	S. Chakraborty 03 Apr., 1986
21580	F	Skin and Skull,	Atiamochor, Cooch Behar, West Bengal	S. Chakraborty 03 Apr., 1986
21581	M	Skin and Skull,	Atiamochor, Cooch Behar, West Bengal	S. Chakraborty 03 Apr., 1986
20885	F	Skin and Skull,	Old Maldah, Maldah, West Bengal	V. C. Agarwal 02 Jan., 1983
20886	M	Skin and Skull,	Old Maldah, Maldah, West Bengal	V. C. Agrawal 02 Jan., 1983
20888	M	Skin and Skull,	Old Maldah, Maldah, West Bengal	V. C. Agrawal 02 Jan., 1983
20889	M	Skin and Skull,	Old Maldah, Maldah, West Bengal	V. C. Agrawal 02 Jan., 1983
20890	M	Skin and Skull,	Old Maldah, Maldah, West Bengal	V. C. Agrawal 02 Jan., 1983
20891	M	Skin and Skull,	Old Maldah, Maldah, West Bengal	V. C. Agrawal 02 Jan., 1983
20892	M	Skin and Skull,	Old Maldah, Maldah, West Bengal	V. C. Agrawal 02 Jan., 1983
21886	M	Skin and Skull,	Chandrapur, Siuri, Birbhum, West Bengal	A. K. Mukherjee 30 Dec., 1980
25428	M	Skin and Skull,	Katoya, Barddhaman, West Bengal	P. K. Das 02 May, 1988
25429	F	Skin and Skull,	Katoya, Barddhaman, West Bengal	P. K. Das 02 May, 1988
21675	F	Skin and Skull,	Kanaisole, Medinipur, West Bengal	P. K. Das 08 Sep., 1984
21676	F	Skin and Skull,	Balivasa, Medinipur, West Bengal	P. K. Das 13 Sep., 1984
21677	F	Skin and Skull,	Balivasa, Medinipur, West Bengal	P. K. Das 13 Sep., 1984

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
21678	M	Skin and Skull,	Mandalpushkarini, Medinipur, West Bengal	P. K. Das 20 Sep., 1984
25463	F	Skin and Skull,	Parmadon, 24-Pgs (N), West Bengal	... 27 Dec., 1969
25464	M	Skin and Skull,	Jhapandaga, Barddhaman, West Bengal	J. P. Lal 06 Apr., 1969
25465	M	Skin and Skull,	Falta, 24-Pgs(S), West Bengal	G. Topal 12 Jan., 1980
25466	M	Skin and Skull,	Botanical Gardens, Howrah, West Bengal,	
18346	Foetus		Raniganj, West Bengal	Purchased I. M. Cat. No. 1331.
25467	M	Skin and Skull,	Madanpur, Nadia, West Bengal	P. K. Das 17 Jul 1969
25468	F	Skin and Skull,	Birsibpur, Howrah, West Bengal	... 13 Jan., 1967
25469	F	Skin and Skull,	Basirhat, 24-Pgs (N), West Bengal	P. K. Das 14 Nov., 1972
25470	F	Skin and Skull,	Barkalikapur, 24-Pgs(S). West Bengal	G. Topal 07 May, 1967
25471	F	Skin and Skull,	Barkalikapur, 24-Pgs(S), West Bengal	G. Topal 07 May, 1967
25472	M	Skin and Skull,	Basirhat, 24-Pgs(N), West Bengal	P. K. Das 13 Nov., 1972
25473	F	Skin and Skull,	Birsibpur, Howrah, West Bengal	... 13 Jan., 1967
25474	M	Skin and Skull,	Birsibpur, Howrah, West Bengal	... 13 Jan., 1967
25475	F	Skin and Skull,	Dhalchita, Basirhat, 24-Pgs (N), West Bengal	P. K. Das 10 Nov., 1972
25476	M	Skin and Skull,	Susunia Hill, Bankura, West Bengal	J. M. Dasgupta 01 Feb., 1979
25477	M	Skin and Skull,	Barkalikapur, 24-Pgs(S), West Bengal	G. Topal 07 May, 1967

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25478	F	Skin and Skull,	Khuntimari (Moraghat-Range), Jalpaiguri, W.B.	P. K. Das 20 Feb., 1979
25479	F	Skin and Skull,	Khuntimari (Moraghat-Range), Jaldapara, W.B.	P. K. Das 20 Feb., 1979
25480	F	Skin and Skull,	Barakalikapur, 24-Pgs(S), West Bengal	G. Topal 07 May, 1967
25481	M	Skin and Skull,	Duttabad, Near Salt Lake City, West Bengal	B. Biswas 09 Jan., 1965
18345	M	Skin and Skull,	Raniganj, West Bengal	Purchased I. M. cat. 133k.
25482	M	Skin and Skull,	Barakalikapur, 24-Pgs(S), West Bengal	G. Topal 07 May, 1967
18344	F	Skin and Skull,	Raniganj, West Bengal	F. Stoliczka ... 1875
25483	F	Skin and Skull,	Kamardingi, Near Jhapandanga, Burdwan, W.B.	J. P. Lal 06 Apr., 1979
25484	F	Skin and Skull,	Khuntimari (Moraghat Range) Jalpaiguri, W.B.	P. K. Das 20 Feb., 1979
25485	M	Skin and Skull,	Basirhat, 24-Pgs(N), West Bengal	P. K. Das 14 Nov., 1972
25486	M	Skin and Skull,	Dhalchita, Basirhat, 24-Pgs(N), West Bengal,	P. K. Das 10 Nov., 1972
25423	M	Skin and Skull,	Kaikalur, 70 Km. E of Vijayawada, Krishna, Andhra Pradesh	T. P. Bhattacharya 19 Apr., 1996
25424	M	Skin and Skull,	Kaikalur, 70 Km.E of Vijaywada, Krishna, Andhra Pradesh	T. P. Bhattacharya 19 Apr., 1996
25425	M	Skin and Skull,	Koraturu, 75 km. nw of Rajamundry, W. Godavari Andhra Pradesh.	T. P. Bhattacharya 15 Apr., 1996
25426	M	Skin and Skull,	Kaikalur, Krishna, Andhra Pradesh	T. P. Bhattacharya 19 Apr., 1996
21148	M	Skin and Skull,	Boraguhalu, Vishakhapatnam, Andhra Pradesh	P. K. Das 07 Mar., 1983

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
21147	F	Skin and Skull,	Boraguhalu, Vishakha- patnam, Andhra Pradesh	P. K. Das 06 Mar., 1983
21371	F	Skin and Skull,	Lankapakalu, Vishakha- patnam, Andhra Pradesh	S. S. Saha 14 Mar., 1985
17130	F	Skin and Skull,	Balapalli Range, Cuddapah, Andhra Pradesh	N. A. Baptista 19 Aug 1929
17131	M	Skin and Skull,	Diguvametta, Kurnool, Andhra Pradesh	N. A. Baptista 26 Apr., 1930
17132	M	Skin and Skull,	Palkonda Hills, Cuddapah, Andhra Pradesh	N. A. Baptista 10 Jun., 1930
10838	F	Skin and Skull,	Balapalli, Cuddapah, Andhra Pradesh	N. A. Baptista 20 Aug 1929
17103	F	Skin and Skull,	Nimighat, Hazaribagh, Bihar	C. A. Crump 23 Jun., 1914
17104	F	Skin and Skull,	Sangajata, Chaibassa, Bihar	C. A. Crump 10 Jul 1914
19915	M	Skin and Skull,	Kerrara, Dwarbhanga, Bihar	N. A. Baptista 11 Oct., 1922
19916	M	Skin and Skull,	Sangajata, Singhbhum, Bihar	C. A. Crump 18 Jul 1914
11483	M	Skin and Skull,	Inanpur, Manbhum, Bihar	B. Nath 26 Nov., 1948
19914	F	Skin and Skull,	Kerrala, Dwarbhanga, Bihar,	N. A. Baptista 11 Oct., 1922
25455	—	Badly damaged,	Singbhum, Bihar,	Museum Collector ... 1869
24427	F	Skin and Skull,	Kutraha, NW of Bettiah, W. Champaran, Bihar.	S. Chakraborty 29 May, 1993
9233	M	Skin and Skull,	Bhogaon, Purnea, Bihar,	C. A. Crump 17 Oct., 1907
18341	F	Skin and Skull,	Purnea, Purnea dist., Bihar,	J. Anderson ... 1872
18336	F	Skin and Skull,	Purnea, Purnea, Bihar,	J. Anderson ... 1872

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
18333	F	Skin and Skull,	Purnea, Bihar,	J. Anderson ... 1872
18340	M	Skin and Skull,	Purnea, Bihar	J. Anderson ... 1872
18338	M	Skin and Skull,	Purnea, Bihar	J. Anderson ... 1872
18335	F	Skin and Skull,	Purnea, Bihar	J. Anderson ... 1872
18343	M	Skin and Skull,	Purnea, Bihar	J. Anderson ... 1872
18332	F	Skin and Skull,	Purnea, Bihar	J. Anderson ... 1872
18339	M	Skin and Skull,	Purnea, Bihar	J. Anderson ... 1872
18337	F	Skin and Skull,	Purnea, Bihar	J. Anderson ... 1872
18334	M	Skin and Skull,	Purnea, Bihar	J. Anderson ... 1872
18342	M	Skin and Skull, S. ad.	Purnea, Bihar	J. Anderson ... 1872
20684	M	Skin and Skull,	Harpurosti, Vaishali, Bihar	Y P. Sinha 24 Apr., 1967
20685	M	Skin and Skull,	Harpurosti, Vaishali, Bihar,	Y P. Sinha 24 Apr., 1967
20686	M	Skin and Skull,	Harpurosti, Vaishali, Bihar	Y P. Sinha 24 Apr., 1967
23738	M	Skin and Skull,	Jhagadoua, 20 Km.E of Broach, Gujarat	S. Chakraborty 04 Oct., 1990
17101	M	Skin and Skull,	Deesa, Palanpur, Gujarat	C. A. Crump 30 Apr., 1913
20667	M	Skin and Skull,	Sohagpur, Hoshangabad, Madhya Pradesh	C. A. Crump ...
20668	M	Skin and Skull,	Sohagpur, Hoshangabad, Madhya Pradesh	C. A. Crump ...

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20669	F	Skin and Skull,	Sohagpur, Hoshangabad, Madhya Pradesh	C. A. Crump ...
20670	F	Skin and Skull,	Sohagpur, Hoshangabad, Madhya Pradesh	C. A. Crump ...
17100	M	Skin and Skull,	Mundra, Saugar, Madhya Pradesh	C. A. Crump 24 Apr., 1912
17108	F	Skin and Skull,	Sheopore, Gwalior, Madhya Pradesh	C. Primrose 04 Sep., 1922
17109	F	Skin and Skull,	Chachora Fort, Gwalior, Madhya Pradesh	J. Riley-O. Brien 17 Nov., 1922
17110	M	Skin only.	Chachora Fort, Gwalior, Madhya Pradesh	J. Riley-O. Brien 27 Nov., 1922
17111	M	Skin and Skull,	Agar Malwa, Gwalior, Madhya Pradesh	J. Riley-O. Brien 21 Dec., 1922
17113	F	Skin and Skull,	Hoshangabad, Madhya Pradesh	C. A. Crump 09 Feb., 1912
17102	F	Skin only,	Paunggaung, N. Shan- States, Myanmar	G. C. Shortridge 02 May, 1913
17128	F	Skin and Skull,	36 Miles N of Toungoo, Myanmar	J. M. D. Mackenzie 25 Jan., 1928
25444	M	Skin and Skull,	Kherapara, East Garo Hills, Meghalaya	N. Majumdar 18 Nov., 1988
25454	M	Specimen badly Damaged	Nepal	D : British Museum 13 Apr., 1880
19837	F	Skin and Skull,	Mohana, Orissa	V. C. Agrawal 19 Dec., 1971
19838	M	Skin and Skull,	Mohana, Orissa	V C. Agrawal 19 Dec., 1971
19839	M	Skin and Skull,	Mohana, Orissa	V C. Agrawal 15 Dec., 1971
19840	F	Skin and Skull,	Mohana, Orissa	V C. Agrawal 16 Dec., 1971
19841	F	Skin and Skull,	Mohana, Orissa	V C. Agrawal 18 Dec., 1971

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19842	F	Skin and Skull,	Mohana, Orissa	V. C. Agrawal 19 Dec., 1971
19843	M	Skin and Skull,	Mohana, Orissa	V. C. Agrawal 18 Dec., 1971
20671	M	Skin and Skull,	Barbera, Puri, Orissa	V. C. Agrawal 22 Jan., 1974
20672	M	Skin and Skull,	Barbera, Puri, Orissa	V. C. Agrawal 22 Jan., 1974
20673	M	Skin and Skull,	Barbera, Puri, Orissa	V. C. Agrawal 23 Jan., 1974
20676	F	Skin and Skull,	Konarak, Puri, Orissa	A. K. Mondal 29 Jul 1973
20675	M	Skin and Skull,	Konarak, Puri, Orissa	V. C. Agrawal 02 Feb., 1974
20674	M	Skin and Skull,	Konarak, Puri, Orissa	V. C. Agrawal 02 Feb., 1974
20677	M	Skin and Skull,	Chilka Lake, Puri Orissa	N. Annandale ... Apr., 1920
19835	M	Skin and Skull,	Rice Research Inst., Cuttack, Orissa	A. K. Mukherjee 27 Oct., 1971
19836	F	Skin and Skull,	Tikarpara, Dhenkanal, Orissa	V. C. Agrawal 08 Jan., 1972
19844	M	Skin and Skull,	Mohana, Orissa	V. C. Agrawal 18 Dec., 1971
23984	F	Skin and Skull,	Satpura, Puri, Orissa	S. Chattopadhyay 11 Sep., 1987
17107	M	Skin and Skull,	Balugaon, Chilka Lake, Puri, Orissa	H. W. Wells 13 Oct., 1921
9184	F	Skin only	... Punjab	...
17129	M	Skin and Skull,	Tirthamalai Range, Salem, Tamil Nadu.	N. A. Baptista 20 Jun., 1929
17122	M	Skin and Skull,	Pundi, Coimbatore, Tamil Nadu	J. Riley-O. Brien 20 Sep., 1921

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17133	F	Skin only,	Dharampuri Range, Salem, Tamil Nadu,	N. A. Baptista 05 Oct., 1930
10839	F	Skin and Skull,	Tirthamalai Range, Salem, Tamil Nadu,	N. A. Baptista 29 Jun., 1929
10840	F	Skin and Skull,	Tirthamalai Range, Salem, Tamil Nadu,	N. A. Baptista 28 Jun., 1929
10841	M	Skin and Skull,	Tirthamalai Range, Salem, Tamil Nadu,	N. A. Baptista 27 Jun., 1929
17119	F	Skin and Skull,	Udugama, S. province, Sri Lanka	E. W. Mayor 26 Apr., 1913
25456	M	Specimen badly damaged	Sri Lanka	E. F. Kelaart ... 1852
25457	M	Specimen badly damaged,	Sri Lanka	E. F. Kelaart ... 1852
17123	M	Skin and Skull,	Dhamtal, Kangra, Himachal Pradesh	H. W. Wells 08 Nov., 1922
17124	F	Skin and Skull,	Lehtrar, Murie, Punjab	H. W. Wells 22 Jun., 1923
17125	M	Skin and Skull,	Lehtrar, Murie, Punjab	H. W. Wells 23 Jun., 1923
17126	F	Skin and Skull,	Lehtrar, Murie, Punjab	H. W. Wells 23 Jun., 1923
17127	M	Skin and Skull,	Lehtrar, Murie, Punjab	H. W. Wells 24 Jun., 1924
20665	F	Skin and Skull,	Guijar, 11km NE of Tin- sukia, Assam	D. K. Ghosal 14 Dec., 1977
18360	M	Skin and Skull, (S. ad.)	Trivandrum, Kerala	Lt. Col. Beddome ... 1878
18361	F	Skin and Skull,	Trivandrum, Kerala	Lt. Col. Beddome ... 1878
18362	F	Skin and Skull,	Trivandrum, Kerala	Lt.Col. Beddome 1878
20666	F	Skin and Skull, (S. ad.)	Jhalor, Karnataka	 1890

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20678	M	Skin and Skull,	Sagar, Shimoga, Karnataka	G. C. Shortridge 07 Jun., 1912
20679	F	Skin and Skull, (Damaged)	Sagar, Shimoga, Karnataka	G. C. Shortridge 07 Jun., 1912
20688	F	Skin and Skull,	Kadakola, Mysore, Karnataka	M. E. Gururaj 05 Dec., 1980
20689	M	Skin and Skull,	Kadakola, Mysore, Karnataka	M. E. Gururaj 05 Dec., 1980
17116	F	Skin and Skull,	Sagar, shimoga, Mysore, Karnataka	G. C. Shortridge 07 Jun., 1912
17117	M	Skin and Skull,	Shimoga, Mysore, Karnataka	G. C. Shortridge 04 Jul 1912
17115	M	Skin and Skull,	Jog, Gersoppa Falls, Karnataka	G. C. Shortridge 13 May, 1912
17114	F	Skin and Skull,	Hulikal, Kanara, Karnataka	G. C. Shortridge 19 Apr., 1912
17112	M	Skin and Skull,	Devikop, S. Mahratta, Karnataka	G. C. Shortridge 26 Nov., 1911
17118	M	Skin and Skull,	Vijaynagar, Bellary, Karnataka	G. C. Shortridge 31 Jul 1912
19911	F	Skin and Skull,	Seringapatam, Mandya, Karnataka	G. C. Shortridge 18 Oct., 1912
25458	F	Skin and Skull,	Vijaynagar, Bellary, Karnataka	G. C. Shortridge 01 Aug 1912
25427	F	Skin and Skull,	Mara S Tiger Reserve Karnataka	S. S. Saha 29 Mar., 1986
18355	M	Skin and Skull,	Sylhet, Bangladesh	H. H. Godwin-Austen ... 1870.
18356	M	Skin and Skull,	Sylhet, Bangladesh	H. H. Godwin-Austen ... 1870.
12701	M	Skin and Skull,	Nagpur, Maharashtra	College of Science Nagpur, 1951-54
12702	M	Skin and Skull,	Nagpur, Maharashtra	College of Science, Nagpur, 1951-54

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
12703	M	Skin and Skull,	Nagpur, Maharashtra	College of Science, Nagpur, 1951-54
12704	M	Skin and Skull,	Nagpur, Maharashtra	College of Science, Nagpur, 1951-54
20664	F	Skin and Skull,	Nagpur, Maharashtra	A. Gopalakrishna 08 Aug 1947
18357	F	Skin and Skull,	Nasik, Maharashtra	Lt. Col. Haughton ... 1872
18358	F	Skin and Skull,	Nasik, Maharashtra	Lt. Col. Haughton ... 1872
18359	F	Skin and Skull,	Nasik, Maharashtra	Lt. Col. Haughton ... 1872
17121	M	Skin and Skull,	Khed, Ratnagiri, Maharashtra	S. H. Prater 25 Dec., 1914
25459	M	Skin and Skull, (Damaged)	Chanda, Chandrapura, Maharashtra	D : Museum Coll. 31 Mar., 1867
25460	F	Skin and Skull, (Damaged)	Chanda, Chandrapura, Maharashtra	D : Museum Coll. 31 Mar., 1867
25461	M	Skin and Skull, (Damaged)	Chanda, Chandrapura, Maharashtra	D : Museum Coll. 31 Mar., 1867
18347	M	Foetus	Agra, Uttar Pradesh	Riddle Museum Agra, ... 1869
18349	M	Foetus	Agra, Uttar Pradesh	Riddle Museum Agra, ... 1869
18350	F	Foetus	Agra Uttar Pradesh	Riddle Museum Agra, ... 1869
18352	M	Foetus	Agra Uttar Pradesh	Riddle Museum Agra, ... 1869
18388	F	Skin and Skull,	Nishangara, Baharaich, Uttar Pradesh	... 01 Oct., 1956
18389	M	Skin and Skull,	Nishangara, Baharaich, Uttar Pradesh	... 01 Oct., 1956
18390	F	Skin and Skull,	Nishangara, Baharaich, Uttar Pradesh	... 01 Oct., 1956

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
18391	M	Skin and Skull,	Nishangara, Baharaich, Uttar Pradesh	... 01 Oct., 1956
18392	F	Skin and Skull,	Nishangara, Baharaich, Uttar Pradesh	... 01 Oct., 1956
18393	F	Skin and Skull,	Nishangara, Baharaich, Uttar Pradesh	... 01 Oct., 1956
18394	F	Skin and Skull,	Nishangara, Baharaich, Uttar Pradesh	... 01 Oct., 1956
11082	M	Skin and Skull,	Lucknow, Uttar Pradesh	M. L. Roonwal 21 Mar., 1945
11083	M	Skin and Skull,	Lucknow, Uttar Pradesh	M. L. Roonwal 21 Mar., 1945
11084	M	Skin and Skull,	Lucknow, Uttar Pradesh	M. L. Roonwal 21 Mar., 1945
11085	M	Skin and Skull,	Lucknow, Uttar Pradesh	M. L. Roonwal 21 Mar., 1945
11086	M	Skin and Skull,	Lucknow, Uttar Pradesh	M. L. Roonwal 21 Mar., 1945
11087	F	Skin and Skull,	Lucknow, Uttar Pradesh	M. L. Roonwal 21 Mar., 1945
11088	F	Skin and Skull,	Lucknow, Uttar Pradesh	M. L. Roonwal 21 Mar., 1945
11089	F	Skin and Skull,	Lucknow, Uttar Pradesh	M. L. Roonwal 21 Mar., 1945
18348	F Juv.	Skin and Skull,	Agra, Uttar Pradesh	Riddle Museum, Agra, ... 1869
18351	M Foetus	Skin and Skull,	Agra, Uttar Pradesh	Riddle Museum, Agra, ... 1869
18353	M	Skin and Skull,	Gazipur, Uttar Pradesh	W. Whitwell ... 1877
11090	F	Skin and Skull,	Lucknow, Uttar Pradesh	M. L. Roonwal 21 Mar., 1945
17260	F	Skin and Skull,	Nishangara Baharaich, Uttar Pradesh	... 06 Oct., 1956

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17261	M	Skin and Skull,	Nishangara, Baharaich, Uttar Pradesh	... 01 Oct., 1956
20905	M	Skin and Skull,	Ramnagar, Varanasi, Uttar Pradesh	D : A. Krishna 10 Mar., 1983
20906	F	Skin and Skull,	Ramnagar, Varanasi, Uttar Pradesh	D : A. Krishna 10 Mar., 1983
20907	F	Skin and Skull,	Ramnagar, Varanasi, Uttar Pradesh	D : A. Krishna 10 Mar., 1983
20908	F	Skin and Skull,	Ramnagar, Varanasi, Uttar Pradesh	D : A. Krishna 10 Mar., 1983
20909	F	Skin and Skull,	Ramnagar, Varanasi, Uttar Pradesh	D : A. Krishna 10 Mar., 1983
20910	F	Skin and Skull,	Ramnagar, Varanasi, Uttar Pradesh	D : A. Krishna 10 Mar., 1983
20911	F	Skin and Skull,	Ramnagar, Varanasi, Uttar Pradesh	D : A. Krishna 10 Mar., 1983
20912	F	Skin and Skull,	Ramnagar, Varanasi, Uttar Pradesh	D : A. Krishna 10 Mar., 1983
19910	F	Skin only	Ranibagh, Nainital, Uttaranchal	C. A. Crump 23 Dec., 1913
17120	F	Skin and Skull	Ranibagh, Nainital, Uttaranchal	C.A.Crump 23 Dec., 1913
25462	-	Skin and Skull	Agra, Uttar Pradesh	D : Riddle Museum ... 1869

There some more specimens available in the National Zoological Collection, belonging to the genus *Megaderma* having no history and completely damaged. Those specimens were not entered in the Catalogue.

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
25445	61.1	32.5	17.0	30.8	18.4
25446	67.2	38.5	17.4	35.6	18.9

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
17105	65.7	38.0	11.3	34.8	18.2
25447	67.5	38.3	17.5	35.5	18.4
25448	68.5	38.7	17.8	35.3	19.7
25449	67.5	32.8	20.0	35.0	17.2
17106	65.2	36.0	10.9	34.2	18.7
25450	70.0	33.0	16.1	—	18.8
20046	67.2	35.6	16.6	39.9	15.9
25430	67.6	35.7	16.9	34.4	19.3
25431	64.5	35.9	15.0	34.2	17.9
25432	62.8	35.2	12.2	32.0	14.2
25433	65.1	37.8	14.6	33.2	17.6
25434	67.2	36.6	13.8	36.2	13.2
25435	66.2	34.2	15.5	33.7	19.5
25436	66.3	33.0	15.9	32.4	18.8
25437	67.5	39.6	15.5	35.3	17.6
18354	63.9	35.4	12.7	34.9	16.9
17887	64.3	29.5	12.5	33.6	17.5
17888	61.9	37.5	11.5	31.2	16.6
17886	66.6	29.2	12.0	35.4	17.5
25438	67.3	39.5		35.2	14.3
25439	64.6	35.3	16.2	32.9	18.8
25440	68.6	37.7	17.4	35.3	17.4
25441	64.2	39.4	17.1	33.9	17.9
25442	66.9	39.4	17.1	33.8	18.1
25443	65.6	36.7	17.2	—	16.4
22023	68.1	34.2	14.7	34.8	17.6
22026	65.4	27.2	10.6	33.8	17.2
22025	68.0	38.0	17.0	35.0	19.3
22024	67.0	31.1	14.3	34.7	19.5
21990	63.7	28.9	10.1	36.7	12.6
21991	64.3	27.0	13.5	33.9	18.1

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
21989	63.5	26.7	12.5	31.6	17.8
25428	67.0	30.6	18.3	34.3	17.5
25429	67.0	31.7	13.6	34.8	18.2
21675	67.0	44.6	21.8	35.8	19.8
21676	66.5	40.3	22.9	35.8	19.5
21677	68.2	40.3	20.0	35.9	17.9
21678	67.0	41.4	19.4	35.6	20.3
25463	66.2	40.0	16.0	32.1	18.8
25464	64.9	27.3	19.9	33.6	18.8
25465	64.7	32.1	—	32.2	16.5
25466	63.6	31.1	16.0	31.2	16.9
25467	68.0	38.0	20.0	32.0	19.0
25468	67.2	37.4	18.7	35.2	18.8
25469	67.5	38.0	—	—	—
25470	67.3	37.4	16.0	34.5	17.8
25471	48.5	27.1	14.3	23.0	—
25472	65.2	33.4	10.7	34.7	19.7
25473	69.4	36.9	13.7	36.1	18.8
25474	67.0	37.3	19.6	35.0	18.3
25475	66.2	37.7	13.1	33.7	18.5
25476	66.6	32.1	13.0	35.8	16.7
25477	66.7	38.3	18.6	34.5	—
25478	69.5	38.9	18.8	36.2	21.0
25479	66.5	38.9	16.6	34.5	18.5
25480	47.5	24.0	—	22.9	—
25481	64.5	36.5	—	34.3	16.1
18345	66.4	35.0	16.8	34.5	15.7
25482	66.4	38.0	—	34.2	—
18344	65.5	36.3	16.8	34.3	18.0
25483	66.9	32.5	17.4	33.9	18.2
25484	66.7	41.9	19.2	35.8	19.3

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
25485	65.0	36.0	15.1	34.6	14.9
25486	66.3	39.0	13.3	34.2	17.5
25423	63.3	36.0	16.4	32.1	16.9
25424	64.2	36.2	17.6	33.7	17.1
25425	65.2	37.1	14.8	34.3	18.3
25426	65.3	36.2	17.1	34.5	18.4
21148	66.0	37.5	17.0	33.6	19.7
21147	66.0	37.5	17.0	33.6	19.7
21371	56.9	37.2	20.2	30.6	15.4
17130	68.4	38.0	13.1	39.2	14.5
17131	60.2	38.0	—	37.3	13.0
17132	63.6	36.0	11.0	36.0	14.0
10838	64.4	37.0	—	36.5	17.0
17103	66.7	39.0	12.7	35.8	20.3
17104	60.1	34.0	—	31.1	19.5
19915	—	38.0	—	—	—
19916	66.5	40.0	—	32.9	19.0
11483	66.7	29.3	14.3	32.7	18.1
19914	67.3	38.0	—	35.7	17.9
24427	63.0	35.0	—	34.0	20.0
23738	63.5	36.9	11.9	33.1	18.9
17101	64.9	36.0	12.0	36.2	14.8
20669	63.5	23.5	—	37.3	13.3
20670	66.0	22.6	08.0	35.1	17.5
20668	65.0	24.4	09.0	34.1	19.0
20667	66.3	24.2	09.3	33.3	17.3
17100	61.6	39.0	11.2	35.8	13.5
17108	67.2	38.0	12.2	37.4	16.5
17109	69.0	38.0	—	36.0	18.2
17110	70.0	41.0	12.3	35.4	14.5
17111	68.0	40.0	14.0	36.0	16.9

Z, S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
17113	67.2	37.0	09.5	39.0	14.3
17102	68.0	38.0	—	35.3	19.8
17128	68.2	36.0	—	36.0	20.3
25444	62.6	34.1	15.6	31.8	18.5
25454	(Specimen badly damaged)				
19837	66.7	35.5	—	34.9	19.3
19842	65.7	31.5	—	33.7	18.7
19843	65.7	33.3	—	34.5	19.6
19841	64.7	33.9	—	35.7	19.5
19840	66.4	31.3	—	35.9	19.8
19839	65.7	34.4	—	34.7	17.9
19838	65.5	32.7	—	34.8	19.0
20673	63.3	36.1	—	34.8	18.9
20672	64.5	34.5	—	34.2	17.3
20671	65.5	39.2	—	33.0	16.9
20676	68.3	37.1	—	35.0	18.2
20675	65.0	34.0	—	35.0	17.6
20674	64.3	32.8	—	33.4	16.6
19835	69.6	37.6	—	36.1	17.9
20677	66.9	—	—	34.8	18.3
19836	66.5	38.5	—	34.5	17.0
19844	65.8	32.8	—	33.9	17.2
23984	66.0	38.0	—	32.8	19.9
17107	64.9	39.0	—	32.8	19.1
17129	68.5	38.0	12.5	35.5	17.9
17133	66.8	36.0	—	32.5	19.2
10840	64.0	38.0	—	35.6	13.9
10841	65.8	38.0	14.0	35.1	13.1
10839	67.0	38.0	13.0	36.7	16.7
17122	65.0	—	—	—	16.9

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
17119	55.2	30.0	—	35.6	13.2
25458	62.5	37.0	12.0	34.2	17.0
17125	63.6	32.0	—	32.2	17.9
17124	67.3	40.0	—	38.0	15.4
17126	63.5	39.0	—	37.1	18.5
17127	57.5	31.0	—	29.0	17.4
17123	65.6	36.0	—	37.0	15.6
20665	68.0	33.7	15.7	32.9	19.6
20689	68.6	22.8	15.0	34.4	18.8
18362	66.4	27.5	12.3	33.3	18.5
20688	67.3	30.5	7.4	34.1	17.8
20777	62.6	28.3	9.4	32.8	15.7
18361	66.9	34.0	10.7	35.0	18.0
20678	(Specimen badly damaged)				
17116	66.4	38.0	13.0	32.3	20.5
17117	65.9	38.0	11.0	36.7	12.6
17115	65.2	28.5	13.6	35.6	15.1
17114	64.0	38.0	12.7	35.9	14.4
17112	62.5	37.0	12.3	35.0	11.6
17118	65.4	37.5	12.1	35.0	14.5
19911	64.0	36.0	—	32.2	17.6
25427	67.0	33.4	13.3	35.5	16.9
18356	63.2	30.8	13.0	—	18.8
18355	66.0	29.6	11.3	36.1	17.0
12702	65.0	32.4	13.0	33.0	18.0
12704	64.6	34.2	14.1	32.5	14.6
12701	62.5	28.6	14.0	33.5	16.9
12703	65.4	29.4	10.4	32.5	15.5
20664	67.5	32.5	15.9	34.9	19.3
18359	63.9	33.0	16.7	30.4	17.7

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
18358	63.2	35.6	18.3	31.6	18.0
18357	61.6	30.7	11.9	31.9	16.3
17121	64.8	39.0	12.0	35.0	14.8
25459	(Specimen badly damaged)				
19910	67.5	40.0	—	37.4	16.3
17120	67.3	38.0	11.7	35.5	15.6
25462	65.6	—	—	33.9	15.0

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
25446	28.9	25.0	10.9	5.3	10.0	4.7	10.0	16.7	12.2	19.1	12.1
17105	28.2	24.7	10.7	5.4	9.4	4.9	9.4	16.4	12.1	—	—
25449	28.7	25.3	11.0	5.5	9.8	5.0	9.8	16.8	12.3	19.1	12.0
17106	28.0	24.4	10.8	5.6	9.6	4.8	9.6	16.1	12.2	18.6	11.8
25450	28.2	24.6	10.8	5.4	9.6	5.0	9.5	16.3	12.1	18.8	11.9
18354	—	—	11.3	5.3	9.3	5.1	9.8	16.7	12.3	—	12.2
17887	27.5	24.8	—	—	9.6	4.9	9.1	16.2	12.3	—	—
17886	27.6	24.8	—	—	9.7	4.8	9.2	16.5	12.2	—	11.4
25438	27.8	25.3	11.3	—	10.1	4.8	10.2	17.2	12.6	19.5	11.1
21989	27.8	23.9	11.0	5.3	9.9	4.6	10.0	—	11.8	18.3	11.8
25463	28.2	24.8	10.8	5.3	9.7	5.1	9.7	16.2	12.4	18.5	11.9
25464	28.6	24.8	11.1	5.4	9.8	5.1	9.7	16.7	12.3	—	12.0
25466	27.0	23.4	10.5	—	9.2	5.0	9.2	—	12.1	—	—
25467	28.9	25.1	11.2	5.5	9.9	5.0	9.9	16.4	12.0	19.2	12.4
25468	28.8	25.2	11.1	5.4	9.9	4.9	9.9	—	12.3	19.4	11.9
25469	28.3	24.5	11.2	5.8	10.2	5.0	10.1	17.1	12.1	18.6	12.1
25470	28.5	24.6	11.3	5.4	9.8	4.6	9.9	16.6	12.3	18.8	12.2
25472	27.8	24.4	10.9	5.5	9.7	5.1	9.7	16.9	12.3	18.6	11.8
25473	28.8	25.0	10.8	5.4	9.7	5.0	9.9	16.7	11.8	18.9	11.9

Z. S. I. Reg. No.	l	ob	mtr	c'-c'	rw	iw'	m-m	zw	cw	ml	lir
25474	28.7	25.1	11.1	5.4	9.7	5.0	9.8	16.6	12.4	19.1	12.0
25475	28.1	24.6	10.9	5.3	10.2	4.8	10.2	16.8	12.3	18.8	11.6
25476	28.0	24.7	11.1	5.0	9.6	4.8	9.7	16.4	12.3	18.5	11.8
25477	28.3	24.6	10.9	5.2	9.8	4.8	9.9	16.7	12.4	18.8	12.2
25481	28.0	24.4	11.0	5.3	9.6	4.8	9.8	16.4	12.4	18.7	11.8
25482	28.8	24.7	11.0	5.3	9.5	4.8	9.5	16.6	12.2	18.9	11.0
25485	28.2	24.8	11.0	5.5	9.7	4.8	9.7	16.6	12.3	18.8	11.6
25486	28.0	24.6	11.1	5.4	9.5	4.9	9.5	16.8	12.1	19.1	12.2
21371	25.9	22.1	9.4	4.8	8.3	4.1	8.3	14.2	11.0	16.7	10.3
17130	28.0	24.9	11.1	5.1	10.4	4.3	10.1	—	12.4	19.5	12.3
17131	28.5	24.7	11.1	5.7	10.1	4.8	10.1	—	12.4	19.1	12.1
17132	27.2	23.2	10.7	4.5	9.2	4.4	9.3	—	11.6	18.6	11.5
17103	28.2	—	11.0	5.4	9.6	4.7	9.7	—	—	19.2	12.0
17104	26.7	23.6	10.6	4.5	9.5	4.4	9.6	—	12.1	—	11.7
11483	28.6	25.1	11.2	5.4	9.4	4.9	9.6	—	12.4	19.3	12.0
23738	27.6	23.9	10.4	5.3	9.7	4.7	9.8	16.4	12.3	18.3	11.5
17101	27.7	24.0	10.7	5.2	9.7	4.7	9.7	—	12.1	18.5	11.7
17100	27.9	24.7	10.8	5.0	9.6	5.0	9.8	16.6	12.1	18.7	11.8
17109	27.6	24.6	10.6	5.4	9.7	4.8	9.6	—	11.8	18.3	11.5
17111	28.2	24.7	11.0	5.0	9.8	4.7	9.7	16.1	12.1	18.6	12.1
17113	—	—	11.0	5.1	9.3	—	9.4	—	—	18.8	12.0
17128	30.6	27.1	11.7	6.1	10.5	5.5	10.4	16.8	12.7	21.2	12.9
25444	28.5	25.1	10.9	5.6	8.1	5.0	9.9	—	12.4	19.0	12.1
19837	29.2	25.5	11.3	5.6	10.0	5.0	10.1	17.0	12.3	19.6	12.1
19842	28.8	25.0	11.1	5.5	10.0	4.8	10.2	16.6	12.1	19.2	10.9
19843	29.0	25.3	11.3	5.5	10.0	4.9	10.2	16.7	12.0	19.3	12.3
19841	28.5	24.7	11.0	5.0	9.8	5.0	10.0	16.5	12.3	19.1	12.0
19840	28.9	25.3	11.0	5.5	9.9	5.0	10.0	16.7	12.5	19.5	12.2
19839	28.9	25.3	11.2	5.4	9.4	5.0	10.2	—	12.4	—	12.1
19838	29.0	24.5	11.1	5.4	9.8	4.8	9.8	—	12.3	19.4	12.3
20673	28.9	25.0	11.5	5.5	10.3	5.1	10.3	—	12.3	—	12.7

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
20672	28.5	—	11.2	5.5	9.8	4.7	9.8	16.2	12.2	19.0	11.9
20671	28.8	25.0	11.1	5.4	9.7	5.0	9.7	16.0	12.3	—	11.0
20676	29.0	25.0	11.4	5.5	10.2	5.0	10.3	16.7	12.3	—	12.3
20675	28.6	25.5	11.0	5.4	9.8	4.9	9.8	—	12.1	19.5	12.0
20674	28.0	24.7	11.4	5.5	9.9	4.8	9.9	—	12.0	18.9	12.0
19835	28.5	25.1	11.4	5.2	9.7	5.1	9.9	—	12.4	19.3	11.4
20677	28.4	24.9	11.1	5.6	9.8	5.2	9.9	—	12.2	18.7	12.1
19836	28.6	25.8	11.3	5.6	10.3	5.2	10.3	17.1	12.6	19.3	12.2
19844	28.4	24.5	11.3	5.2	9.6	4.8	9.7	—	12.1	—	11.2
17107	28.2	25.7	10.7	5.6	9.4	4.7	9.4	16.0	12.4	—	—
17129	28.5	24.8	11.5	5.3	10.0	5.0	10.0	11.8	12.4	18.8	12.3
17119	25.3	—	9.8	—	—	—	—	—	—	—	—
17125	26.7	23.5	10.7	5.0	9.8	5.0	9.8	—	12.3	—	11.6
17124	29.8	25.7	11.6	5.8	10.3	5.1	10.6	—	12.8	19.8	12.7
17123	28.8	25.2	11.1	5.5	10.2	5.0	10.3	17.1	12.5	19.3	12.3
17116	28.9	25.1	10.9	5.2	9.8	5.1	9.9	16.7	12.6	19.4	12.0
17117	—	—	11.2	5.6	10.0	—	—	—	—	—	12.3
17115	27.6	24.2	10.9	4.4	9.5	5.1	9.6	—	12.0	19.2	12.1
17114	28.3	24.9	11.0	5.3	10.0	5.1	10.1	16.9	12.5	—	11.9
17112	28.2	24.9	11.5	5.0	9.8	4.5	9.9	—	12.2	19.1	12.5
17118	27.1	24.2	10.7	5.2	9.1	4.7	9.8	10.9	12.1	18.5	12.0
19911	28.2	24.6	10.0	5.0	9.6	4.6	9.7	16.3	11.8	18.8	11.9
25458	27.9	24.7	11.0	5.5	10.2	5.1	10.3	11.5	12.2	18.5	12.0
12702	28.4	24.2	10.9	5.0	10.1	5.0	10.0	12.1	12.3	18.7	12.0
12704	28.3	24.4	11.2	5.4	10.0	4.8	10.0	16.4	12.5	18.9	12.0
12703	28.3	24.4	10.9	5.1	9.7	4.9	9.8	—	12.2	18.8	12.0
18358	28.7	24.9	12.2	5.6	10.0	4.6	10.0	16.4	12.4	18.7	12.3
18357	27.4	24.0	10.9	5.1	9.9	4.5	9.6	—	11.8	18.7	11.9
17121	28.8	25.0	11.2	5.2	10.0	5.0	10.0	—	12.4	19.1	12.0
17120	28.9	25.0	11.2	5.3	10.2	4.7	10.2	16.5	12.4	18.8	12.3

Remarks : *Megaderma lyra* is one of the common bats of Indian mainland. Ellerman & Morrison-Scott (1966) recognised two subspecies of *Megaderma lyra* for the Indian mainland population, viz., *Megaderma lyra lyra* E. Geoffroy and *Megaderma lyra caurina* Andersen & Wroughton, 1907 (considered for the western Indian population). Sinha (1977) reviewed the species in details and concluded that the entire Indian population belongs to the nominate subspecies. Specimens are more or less similar to *Megaderma spasma* but slightly larger. Readily distinguished with the posterior termination of noseleaf truncated.

Distribution : Widely distributed throughout the Indian mainland from Jammu & Kashmir to Cape Camorin (Dobson, 1876), from Gujarat to Assam (Hinton & Lindsay, 1926).

Elsewhere : Afghanistan (Aellen, 1959), Pakistan, Nepal (Anderson, 1881), Sri Lanka, Bangladesh (Dobson, 1876) and Myanmar.

Family RHINOLOPHIDAE

Sub-family RHINOLOPHINAE

Genus *Rhinolophus* Lacepede, 1799

14. *Rhinolophus ferrumequinum tragatus* Hodgson, 1835

1835. *Rhinolophus tragatus* Hodgson, J. Asiat. Soc. Bengal, 4 : 699. Nepal.

Common name : Greater Horseshoe Bat.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25543	F	Skin and Skull,	Lachen, Sikkim	S. S. Saha 02 Aug., 1989
25544	F	Skin and Skull,	Lachen, Sikkim	S. S. Saha 03 Aug., 1989
24254	F	Skin and Skull,	Lachen, Sikkim	S. Chattopadhyya 03 Aug., 1989
16792	F	Skin and Skull,	Mandi, Kullu Valley, Himachal Pradesh	S. W. Wells 12 June, 1922
16793	M	Skin and Skull,	Mandi, Kullu Valley, Himachal Pradesh	S. W. Wells 17 July, 1922
16794	F	Skin and Skull,	Mandi, Kullu Valley, Himachal Pradesh	S. W. Wells 17 Jul., 1922
10694	F	Skin and Skull,	Mandi, Kullu Valley, Himachal Pradesh	B.N.H.S. Colln. ...

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
10695	F	Skin and Skull,	Mandi, Kullu Valley, Himachal Pradesh	B.N.H.S. Colln. ...
24898	F	Skin and Skull,	Ghanatti, Shimla, Himachal Pradesh	J. K. De & Party 08 Apr., 1997
24899	F	Skin and Skull,	Ghanatti, Shimla, Himachal Pradesh	J. K. De & Party 11 Apr., 1997
24900	F	Skin and Skull,	Ghanatti, Shimla, Himachal Pradesh	J. K. De & Party 10 Apr., 1997
24901	F	Skin and Skull,	Ghanatti, Shimla, Himachal Pradesh	J. K. De & Party 08 Apr., 1997
24902	F	Skin and Skull,	Ghanatti, Shimla, Himachal Pradesh	J. K. De & Party 11 Apr., 1997
24903	F	Skin and Skull,	Ghanatti, Shimla, Himachal Pradesh	J. K. De & Party 08 Apr., 1997
24904	F	Skin and Skull,	Totu, 7Km. from Shimla, Himachal Pradesh	J. K. De & Party 09 Apr., 1997
24905	F	Skin and Skull,	Totu, 7Km. from Shimla, Himachal Pradesh	J. K. De & Party 09 Apr., 1997
24906	F	Skin and Skull,	Totu, 7Km. from Shimla, Himachal Pradesh	J. K. De & Party 09 Apr., 1997
24907	M	Skin and Skull,	Chakmoh, 760m., Hamirpur, Himachal Pradesh	T. P. Bhattacharya 03 Sept., 1998
24834	F	Skin and Skull, (Damaged)	Shimla, Himachal Pradesh	Presented by B.N.H.S.

Measurements :**External :**

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
16722	62.0	33.0	24.0	—	—
16793	58.0	35.0	25.0	—	—
16794	57.5	36.0	24.0	—	—
24898	60.4	32.6	20.7	26.1	12.2
24907	58.6	38.9	24.0	26.0	14.0

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
25543	60.7	30.6	22.8	23.1	12.8
25544	62.2	30.6	23.7	25.8	10.5
24254	58.0	30.0	24.0	—	—

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
25543	25.5	22.6	9.5	7.0	8.0	3.0	9.2	13.3	9.8	11.2	
25544	25.0	22.5	9.4	7.0	7.7	2.8	9.4	12.9	9.7	—	
24834	22.7	20.0	9.0	5.7	7.4	3.4	8.1	11.8	10.4	10.5	

Most of the specimens are preserved in alcohol and the skulls of them were not extracted and hence the cranial measurements of all the specimens are not available.

Remarks : The specimens are usually larger in size and easily can be differentiated from the other specimens of the species by its size, skulls are longer, noseleaf usually larger, with longer forearm. Blanford (1891) and Hodgson (1835) regarded the subspecies *tragatus* as a distinct species. Andersen (1905) opined that *tragatus* should be considered to be the subspecies of *Rhinolophus ferrumequinum* as the number of mental grooves-3 varies in number among the specimens of *R. ferrumequinum* on the basis of what Blanford separated *R. tragatus* from *Rhinolophus ferrumequinum*.

Distribution : Nepal, Sikkim and Assam (Kurup, 1968) to Yunan (China) and from Himachal Pradesh east through Uttar Pradesh.

15. *Rhinolophus ferrumequinum proximus* Andersen

1905. *Rhinolophus ferrumequinum proximus* Andersen, *Proc. zool. Soc. Lond.*, P.Z.S. 1905, 2 : 112. Gilgit, Kashmir.

Common name : Greater Horseshoe Bat.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20424	M	Skin and Skull,	Shar, Islamabad, Jammu & Kashmir	S. Chakraborty 04 Sept., 1974

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20425	F	Skin and Skull,	Shikargarh, Islamabad, Jammu & Kashmir	S. Chakraborty 26 Aug., 1974
6970	M	Skin and Skull,	Gilgit, Jammu & Kashmir	J. Scully Aug., 1943
6971	F	Skin and Skull,	Gilgit, Jammu & Kashmir	J. Scully Aug., 1943
6972	M	Skin and Skull,	Gilgit, Jammu & Kashmir	J. Scully Aug., 1943
6973	F	Skin and Skull,	Gilgit, Jammu & Kashmir	J. Scully Aug., 1943

Measurements :**External :**

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
20424	58.0	37.0	23.0	21.0	13.7
20425	59.0	39.3	19.7	24.0	12.1
6970	55.5	—	19.8	—	—
6971	51.5	34.7+	18.1	21.5	10.5
6972	53.8	36.0	18.5	24.6	13.1
6973	55.7	29.1	19.9	25.0	12.5

Measurements :**Cranial :**

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
20424	23.4	18.3	9.1	6.0	7.6	3.3	9.0	12.1	9.9	15.6	9.5
6973	21.5	16.0	8.4	6.8	7.9	3.2	8.6	11.5	10.0	—	—

The skull of the specimen, Z.S.I. 6971 is damaged and the skulls of the other three specimens were not extracted to keep the external characters unchanged and hence the cranial measurements of all the specimens were not available.

Remarks : The specimens are easily distinguished by their smaller ears and the length of forearm and size of the skulls of the specimens are usually lesser than the specimens of *R. ferrumequinum tragatus*.

Distribution : Jammu & Kashmir.

16. *Rhinolophus ferrumequinum regulus* Andersen

1905. *Rhinolophus ferrum-equinum regulus* Andersen, *Proc. zool. Soc. Lond.*, (2) : 112 (Mussoorie, Uttar Pradesh).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25573	F	Skin and Skull,	Chauri (c. 3000 ft.), Chamba, Himachal Pradesh	Capt. W. G. Murray

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
25573	56.8	39.4	20.7	-	13.2

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw
25573	23.6	21.2	9.4	6.2	7.5	2.7	9.2	12.3	9.7

The species is represented by a single specimen in the National zoological collection and preserved in alcohol.

Remarks : Andersen (1905) recognised the population of uttar Pradesh as *Rhinolophus ferrumequinum regulus* on the Basis of slightly smaller noseleaf and width of horseshoe which is very much overlapping with the specimens of *R. f. Tragatus*.

Distribution : Himachal Pradesh, east through Uttar Pradesh.

(Only one specimen of *Rhinolophus ferrumequinum ferrumequinum* from Europe, D : Malherbe, 1856, partly damaged, vide. Dobson's Cat. 196, Blyth's Cat. 72-A, And. Cat. 116-d, as DRY available in N.Z.C.).

17. *Rhinolophus affinis himalayanus* Andersen

1905. *Rhinolophus affinis himalayanus* Andersen, *Proc. zool. Soc. Lond.*, 1905, 2 : 103. pl. 3 (Masuri = Mussoorie, Dehra Dun distinct, Uttar Pradesh, India).

Common name : Intermediate Horseshoe Bat or Allied Horseshoe Bat (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
15511	?	Badly damaged,	Barrackpore, West Bengal	R. C. Tytler ... 1852
10690	M	Skin and Skull, (Badly damaged)	Bouzini, Nepal	N. A. Baptista 16 May, 1922
17308	F	Skin and Skull,	Shangpung, Jaintia Hills, Meghalaya	H.W. Wells 08 Aug., 1920
17309	F	Skin and Skull,	Shangpung, Jaintia Hills, Meghalaya	H. W. Wells 08 Aug., 1920
17307	M	Skin and Skull,	Khonshong, Jaintia Hills, Meghalaya,	H.W.Wells 30 Jul., 1920
17306	F	Skin and Skull,	Cherrapunji, Meghalaya,	H.W.Wells 17 Apr., 1920
17310	M	Skin and Skull,	Shangpung, Jaintia Hills, Meghalaya	H.W.Wells 11 Aug., 1920
10689	M	Skin and Skull,	Shangpung, Jaintia Hills, Meghalaya,	H.W.Wells 08 Aug., 1920
10691	F	Skin and Skull,	Shangpung, Jaintia Hills, Meghalaya,	H.W.Wells 08 Aug., 1920
25551	M	Skin and Skull,	Gandhigram, Tirap, Arunachal Pradesh	S. S. Saha 05 Mar., 1988
25552	F	Skin and Skull,	Gandhigram, Tirap, Arunachal Pradesh	S. S. Saha 28 Feb., 1988
25562	M	Skin and Skull,	Gandhigram, Tirap, Arunachal Pradesh	S. S. Saha 10 Feb., 1987
25563	M	Skin and Skull,	Gandhigram, Tirap, Arunachal Pradesh	S. S. Saha 04 Feb., 1987
25550	F	Skin and Skull,	Mailur, Agasthiya- Malai Tiger Reserve, Tamil Nadu.	S. S. Saha 16 Sep., 1992
22296	M	Skin and Skull,	Peshok, Darjeeling, West Bengal	N. A. Baptista Jun.,-Aug., 1915
22297	F	Skin and Skull,	Peshok, Darjeeling, West Bengal	N. A. Baptista Jun.,-Aug., 1915

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
17308	51.7	24.0	17.0	—	—
17309	51.6	24.0	17.0	—	—
17310	51.6	29.0	19.0	—	—
17306	50.5	30.0	18.0	—	—
17307	44.1	25.0	21.0	—	—
10689	51.8	32.0	19.0	—	—
10691	52.7	24.0	17.0	—	—
25551	46.2	23.5	17.0	19.9	9.6
25552	46.3	23.3	13.1	19.4	8.6
25562	51.0	24.3	16.6	22.9	11.0
25563	51.8	24.4	17.2	23.2	10.1
25550	49.9	24.7	17.2	22.1	11.8
22296	50.3	26.0	18.7	24.3	11.6
22297	49.2	—	—	20.7	11.7

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
22297	21.5	19.0	8.6	5.7	8.0	2.3	8.2	11.0	9.1	14.4	9.0
25551	20.8	18.4	7.7	4.8	7.1	3.0	7.5	10.2	9.5	13.3	10.8
25562	22.8	18.3	8.7	5.2	8.1	2.1	8.4	10.7	9.2	14.8	9.2

There are some more specimens in damaged condition from Assam, Bangladesh, China and Sri Lanka, kept in alcohol without any further details. In addition, more 4 damaged specimens (Dry) from Sri Lanka donated by kelaart, 1852 and 21 Jan., 1879 vide. Dobson's Cat. 156, Blyth' Cat. 67-D, And. Cat. 135 'a' are available in the National Zoological Collection. Data of the specimens could not be recorded due to their damaged condition.

Remarks : The specimens are distinguished from the others of the species by their smaller ears, noseleaf and width of horseshoe. The specimens are medium sized horseshoe bats. Frontal sac absent. Lower lips usually having three prominent mental grooves.

Distribution : Meghalaya (Hinton & Lindsay 1926); Uttar Pradesh; Tamil Nadu (Specimen present in Z.S.I.); West Bengal.

Elsewhere : Sri Lanka (Blyth 1863a and Sinha 1973), Nepal, Bangladesh (Dobson 1876), Bhutan (Saha 1980), Myanmar, Southern China.

18. *Rhinolophus affinis andamanensis* Dobson

1872. *Rhinolophus andamanensis* Dobson, *J. Asiat. Soc. Bengal*, 41, 2 : 337. South Andaman Islands.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
16865	M	Skin and Skull,	Interview Island, North Andaman	B. Roy 11 Feb., 1959
16864	M	Skin and Skull,	Interview Island, North Andaman	B. Roy 11 Feb., 1959
25549	F	Skin and Skull,	Diglipur, North Andaman	K. K. Tiwari 02 Mar., 1980
24777	M	Skin and Skull,	Andaman & Nicobar- Islands.	D: Indranil Das ...
24776	F	Skin and Skull,	Andaman & Nicobar- Islands.	D : Indranil Das ...
24778	F	Skin and Skull,	Andaman & Nicobar- Islands.	D : Indranil Das ...
24779	F	Skin and Skull,	Andaman & Nicobar- Islands.	D : Indranil Das ...

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
24776	50.0	17.7	20.4	24.9	13.5
24777	52.5	22.4	21.4	24.9	14.0
24778	51.4	23.7	20.1	24.6	13.7
24779	51.6	21.0	20.0	26.7	10.1
25549	54.0	25.4	21.0	27.5	13.6
16864	52.3	22.8	22.0	25.7	12.8
16865	53.8	24.5	23.0	26.9	12.7

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
16864	24.6	20.0	10.0	6.3	7.0	2.0	9.1	12.0	11.2	-	9.5
16865	24.7	-	9.7	6.6	7.0	2.1	-	-	-	-	-
24778	24.3	19.9	9.8	6.7	9.0	2.2	9.5	12.6	10.2	16.0	11.0

Remarks : After detailed study of the specimens it appears that the specimens resembles much with *Rhinolophus affinis superans* but only difference in having longer ears, upper and lower tooth rows and comparatively longer mandible.

Distribution : North and South Andaman Islands.

19. *Rhinolophus affinis macrurus* Andersen

1905. *Rhinolophus affinis macrurus* Andersen, *Proc. zool. Soc. Lond.* 1905, 2 : 103. Taho, Karennee, South-Eastern Burma.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25564	F	Skin and Skull,	Bang Nara Patani, Penninsular Siam, Thailand.	C. B. K. 23 Jul., 1917
25565	F	Skin and Skull,	Bang Nara Patani, Penninsular Siam, Thailand.	C. B. K. 05 Jul., 1917
25566	F	Skin and Skull,	Bang Nara Patani, Penninsular Siam, Thailand.	C. B. K. 23 Jul., 1917
25567	F	Skin and Skull,	Bang Nara Patani, Penninsular Siam, Thailand.	C. B. K. 13 Jul., 1917
25568	F	Skin and Skull,	Bang Nara Patani, Penninsular Siam, Thailand.	C. B. K. 23 Jul., 1917
25569	F	Skin and Skull,	Bang Nara Patani, Penninsular Siam, Thailand.	C. B. K. 05 Jul., 1917
25570	F	Skin and Skull,	Bang Nara Patani, Penninsular Siam, Thailand.	C. B. K. 03 Jul., 1917
25571	M	Skin and Skull,	Bang Nara Patani, Penninsular Siam, Thailand.	C. B. K. 05 Jul., 1917

Measurements :**External :**

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
25564	44.3	—	12.8	20.6	11.0
25565	44.2	20.0	13.4	19.9	10.5
25566	46.9	—	11.0	19.0	9.6
25567	45.7	—	13.9	21.2	11.6
25568	45.6	19.1	12.8	20.7	9.8
25569	46.4	—	13.2	20.0	10.0
25570	45.5	19.5	12.7	20.0	9.6
25571	47.5	20.4	14.5	20.6	11.7

Measurements :**Cranial :**

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
25564	20.6	16.4	7.8	4.4	7.7	2.6	8.1	—	8.7	13.5	8.3
25566	20.9	17.4	8.2	4.9	7.8	2.9	8.2	10.8	8.9	13.9	8.4
25567	22.0	18.6	8.9	4.4	8.0	2.6	8.3	11.8	9.6	14.7	9.0
25568	—	—	7.8	4.8	8.0	—	—	—	—	13.8	7.9
25569	20.9	17.5	8.2	4.9	8.1	2.7	8.6	10.8	8.6	—	8.6
25570	20.7	17.7	8.2	4.9	8.0	2.7	8.3	10.7	8.7	—	8.9
25571	22.6	19.0	8.8	5.7	8.1	2.0	8.4	11.0	8.7	15.0	9.0

Remarks : The specimens can be differentiated from *Rhinolophus affinis himalayanus* by their comparatively larger noseleaf and longer ears.

Distribution : Myanmar (Andersen, 1905) and Thailand (Specimen in Z. S. I.).

20. *Rhinolophus rouxi rouxi* Temminck

1835. *Rhinolophus rouxi* Temminck, *Mon. Mamm.*, 2 : 30 b. Pondicherry and Calcutta, India.

Common Name : Rufous Horse Shoe Bat (Eng.)

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
16785	M	Skin and Skull,	Nimbong, Darjeeling, West Bengal	N. A. Baptista 12 Jun., 1916
10709	M	Skin and Skull,	Nimbong, Darjeeling, West Bengal	N. A. Baptista 10 Jul., 1919
16777	M	Skin and Skull,	Patoli, N. Kanara, Karnataka	G. C. Shortridge 18 Jan., 1912
16778	M	Skin and Skull,	Patoli, N. Kanara, Karnataka	G. C. Shortridge 18 Jan., 1912
16779	F	Skin and Skull,	Patoli, N. Kanara, Karnataka	G. C. Shortridge 18 Jan., 1912
16780	F	Skin and Skull,	Patoli, N. Kanara, Karnataka	G. C. Shortridge 18 Jan., 1912
16776	M	Skin and Skull,	Devikop, S. Mahratha, Karnataka	G. C. Shortridge 25 Nov., 1911
16775	F	Skin and Skull,	Devikop, S. Mahratha, Karnataka	G. C. Shortridge 21 Nov., 1911
10704	F	Skin and Skull,	Devikop, S. Mahratha, Karnataka	G. C. Shortridge 25 Nov., 1911
16781	M	Skin and Skull,	Gersoppa, Kanara (N), Karnataka	G. C. Shortridge 19 May, 1912
10706	M	Skin and Skull,	Suri, Kanara, Karnataka	B. N. H.S. Coll. 08 Apr., 1912
10705	M	Skin and Skull,	Suri, Kanara, Karnataka	B. N. H. S. Coll. 08 Apr., 1912
10708	M	Skin and Skull,	Devikop, S. Mahratha, Karnataka	G. C. Shortridge 21 Nov., 1911
20097	M	Skin and Skull,	Jog Falls, Shimoga, Karnataka	V. C. Agrawal 21 Jan., 1977
20098	M	Skin and Skull,	Jog Falls, Shrimoga, Karnataka	V. C. Agrawal 21 Jan., 1977
20099	F	Skin and Skull,	Jog Falls, Shrimoga, Karnataka	V. C. Agrawal 21 Jan., 1977
16783	F	Skin and Skull,	Seringapatam, S. Mysore, Karnataka	G. C. Shortridge 18 Oct., 1912

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
10707	F	Skin and Skull,	Seringaptam, S. Mysore, Karnataka	G. C. Shortridge 19 Oct., 1912
16782	F	Skin and Skull,	Seringaptam, S. Mysore, Karnataka	G. C. Shortridge 18 Oct., 1912
16786	M	Skin and Skull,	Benhope, Nilgiri, Karnataka	J.R.O.Brien 02 Jul., 1921
16787	F	Skin and Skull,	Benhope, Nilgiri, Karnataka	J.R.O.Brien 03 Jul., 1921
16788	F	Skin and Skull,	Perumal, Patam Hills, Karnataka	C. Mccann 27 Mar., 1922
20214	F	Skin and Skull,	Ponda city, Ponda, Goa	A. K. Mukherjee 22 Mar., 1973
16791	F	Skin and Skull,	Koduru, Balapalli Range, Cuddappa, A. P.	N.A. Baptista 26 Jul., 1929
16798	M	Skin and Skull,	Shevaroy Hill, E. Ghats, Andhra Pradesh	N.A. Baptista 12 May, 1929
16790	M	Skin and Skull,	Shevaroy Hill, E. Ghats, Andhra Pradesh	N.A. Baptista 12 May, 1929
16784	M	Skin and Skull,	Maha Oya, E. Province, Sri Lanka	E. W. May,or 07 Aug., 1913
12726	M	Skin and Skull,	Toungoo, Myanmar	 12 Jan., 1927
25559	?	Skin and Skull, (Damaged)	124 Km. on Mv Road, Namdapha, Arunachal Pr.	S. Biswas 14 Jan., 1985
25546	F	Skin and Skull,	High Wavy Mountains, Madurai, Tamil Nadu	S. S. Saha 09 Feb., 1986
25547	M	Skin and Skull,	Upper Manalaar, Madurai, Tamil Nadu	S. S. Saha 14 Feb., 1986
20418	M	Skin and Skull,	Sri Lanka	E. F. Kelaart 1852
20419	F	Skin and Skull,	Sri Lanka	E. F. Kelaart 1852
25531	M	Skin and Skull,	Southern Sri Lanka	E. W. May,ar Aug., 1913

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25532	F	Skin and Skull, (Damaged)	Southern Sri Lanka	E. W. May,ar ... Aug., 1913
25533	M	Skin and Skull,	Southern Sri Lanka	E. W. May,ar Aug., 1913
25534	F	Skin and Skull, (Damaged)	Southern Sri Lanka	E. W. May,ar ... Aug., 1913
25535	F	Skin and Skull, (Damaged)	Southern Sri Lanka	E. W. May,ar ... Aug., 1913
25536	M	Skin and Skull, (Damaged)	Southern Sri Lanka	E. W. May,ar ... Aug., 1913
25537	F	Skin and Skull, (Damaged)	Southern Sri Lanka	E. W. May,ar ... Aug., 1913
25538	F	Skin and Skull, (Damaged)	Southern Sri Lanka	E. W. May,ar ... Aug., 1913
25539	M	Skin and Skull, (Damaged)	Southern Sri Lanka	E. W. May,ar ... Aug., 1913
20495	F	Skin and Skull,	Pune, Maharashtra	M. M. Chatterjee ... Jun., 1972
20496	F	Skin and Skull,	Pune, Maharashtra	M. M. Chatterjee ... Jun., 1972
21356	F	Skin and Skull,	Jyothimamidi, Visakha- patnam, Andhra Pradesh	S. S. Saha 21 Feb., 1985
21352	M	Skin and Skull,	Jyothimamidi, Visakha- patnam, Andhra Pradesh	S. S. Saha 21 Feb., 1985
21344	M	Skin and Skull,	Anantagiri, Visakha- patnam, Andhra Pradesh	S. S. Saha 21 Feb., 1985
21345	F	Skin and Skull,	Anantagiri, Visakha- patnam, Andhra Pradesh	S. S. Saha 21 Feb., 1985
21346	M	Skin and Skull,	Anantagiri, Visakha- patnam, Andhra Pradesh	S. S. Saha 21 Feb., 1985
21343	F	Skin and Skull,	Anantagiri, Visakha- patnam, Andhra Pradesh	S. S. Saha 21 Feb., 1985
21347	M	Skin and Skull,	Anantagiri, Visakha- patnam, Andhra Pradesh	S. S. Saha 21 Feb., 1985

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
21362	F	Skin and Skull,	Lankapakalu, Visakha- patnam, Andhra Pradesh	S. S. Saha 17 Mar., 1985
21363	F	Skin and Skull,	Lankapakalu, Visakha- patnam, Andhra Pradesh	S. S. Saha 16 Mar., 1985
21361	F	Skin and Skull,	Lankapakalu, Visakha- patnam, Andhra Pradesh	S. S. Saha 17 Mar., 1985
21364	F	Skin and Skull,	Lankapakalu, Visakha- patnam, Andhra Pradesh	S. S. Saha 16 Mar., 1985
21349	F	Skin and Skull,	Jyothimamidi, Visakha- patnam, Andhra Pradesh	S. S. Saha 21 Feb., 1985
21357	F	Skin and Skull,	Jyothimamidi, Visakha- patnam, Andhra Pradesh	S. S. Saha 21 Feb., 1985
21350	F	Skin and Skull,	Jyothimamidi, Visakha- patnam, Andhra Pradesh	S. S. Saha 21 Feb., 1985
21358	F	Skin and Skull,	Jyothimamidi, Visakha- patnam, Andhra Pradesh	S. S. Saha 21 Feb., 1985
21348	M	Skin and Skull,	Jyothimamidi, Visakha- patnam, Andhra Pradesh	S. S. Saha 21 Feb., 1985
21355	F	Skin and Skull,	Jyothimamidi, Visakha- patnam, Andhra Pradesh	S. S. Saha 21 Feb., 1985
21359	F	Skin and Skull,	Jyothimamidi, Visakha- patnam, Andhra Pradesh	S. S. Saha 21 Feb., 1985
21351	M	Skin and Skull,	Jyothimamidi, Visakha- patnam, Andhra Pradesh	S. S. Saha 21 Feb., 1985
21354	F	Skin and Skull,	Jyothimamidi, Visakha- patnam, Andhra Pradesh	S. S. Saha 21 Feb., 1985
21353	M	Skin and Skull,	Jyothimamidi, Visakha- patnam, Andhra Pradesh	S. S. Saha 21 Feb., 1985
21360	F	Skin and Skull,	Jyothimamidi, Visakha- patnam, Andhra Pradesh	S. S. Saha 21 Feb., 1985
24948	F	Skin and Skull,	Teirei, Dampa Sanctuary, Aizawl, Mizoram	A. K. Mandal 27 Dec., 1993
24946	M	Skin and Skull,	Teirei, Dampa Sanctuary, Aizawl, Mizoram	A. K. Mandal 27 Dec., 1993

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
24952	M	Skin and Skull,	Teirei, Dampa Sanctuary, Aizawl, Mizoram	A. K. Mandal 27 Dec., 1993
24951	F	Skin and Skull,	Teirei, Dampa Sanctuary, Aizawl, Mizoram	A. K. Mandal 27 Dec., 1993
24950	F	Skin and Skull,	Teirei, Dampa Sanctuary, Aizawl, Mizoram	A. K. Mandal 27 Dec., 1993
24949	F	Skin and Skull,	Teirei, Dampa Sanctuary, Aizawl, Mizoram	A. K. Mandal 27 Dec., 1993
24953	M	Skin and Skull,	Teirei, Dampa Sanctuary, Aizawl, Mizoram	A. K. Mandal 27 Dec., 1993
24941	F	Skin and Skull,	Teirei, Dampa Sanctuary, Aizawl, Mizoram	A. K. Mandal 27 Dec., 1993
24943	M	Skin and Skull,	Teirei, Dampa Sanctuary, Aizawl, Mizoram	A. K. Mandal 27 Dec., 1993
24945	M	Skin and Skull,	Teirei, Dampa Sanctuary, Aizawl, Mizoram	A. K. Mandal 27 Dec., 1993
24942	F	Skin and Skull,	Teirei, Dampa Sanctuary, Aizawl, Mizoram	A. K. Mandal 27 Dec., 1993
24944	F	Skin and Skull,	Teirei, Dampa Sanctuary, Aizawl, Mizoram	A. K. Mandal 27 Dec., 1993
24947	F	Skin and Skull,	Teirei, Dampa Sanctuary, Aizawl, Mizoram	A. K. Mandal 27 Dec., 1993
24957	M	Skin and Skull,	Lungsen, Lunglei, Mizoram	T. P. Bhattacharya 26 Jan., 1997
24954	F	Skin and Skull,	Lungsen, Lunglei, Mizoram	T. P. Bhattacharya 27 Jan., 1997
24953	M	Skin and Skull,	Lungsen, Lunglei, Mizoram	T. P. Bhattacharya 27 Jan., 1997
24956	M	Skin and Skull,	Lungsen, Lunglei, Mizoram	T. P. Bhattacharya 26 Jan., 1997
24958	M	Skin and Skull,	Lungsen, Lunglei, Mizoram	T. P. Bhattacharya 26 Jan., 1997
25064	M	Skin and Skull,	Lungsen, Lunglei, Mizoram	T. P. Bhattacharya 26 Jan., 1997
25065	F	Skin and Skull,	Sairep, Lunglei, Mizoram	T. P. Bhattacharya 19 Jan., 1997

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
24205	F	Skin and Skull,	Tumin (1880m.), East district, Sikkim	V. C. Agrawal 24 Sep., 1998
21112	M	Skin and Skull,	Ajodhya Hills, Purulia, West Bengal	A. K. Mukherjee 23 Feb., 1982
18816	F	Skin and Skull,	1 Km. South of Poingu- inim, Canacona, Goa	V. C. Agrawal 23 Dec., 1968
18817	F	Skin and Skull,	1 Km. South of Poingu- inim, Canacona, Goa	V. C. Agrawal 23 Dec., 1968
18815	M	Skin and Skull,	Poinguinim Rest House, Canacona, Goa	V. C. Agrawal 29 Dec., 1968
20414	M	Skin and Skull,	Poinguinim, Canacona, Goa	B. C. Saha 16 Dec., 1978
20415	F	Skin and Skull,	Molem, Goa	B. C. Saha 20 Feb., 1978
20416	M	Skin and Skull,	Bondla, Goa	A. K. Mandal 08 Oct., 1977
18436	F	Skin and Skull,	Potoli, North Kanara, Karnataka	G. C. Shortridge 18 Jan., 1912
18438	F	Skin and Skull,	Potoli, North Kanara, Karnataka	G. C. Shortridge 18 Jan., 1912
18439	F	Skin and Skull,	Potoli, North Kanara, Karnataka	G. C. Shortridge 18 Jan., 1912
18440	F	Skin and Skull,	Potoli, North Kanara, Karnataka	G. C. Shortridge 18 Jan., 1912
18441	F	Skin and Skull,	Potoli, North Kanara, Karnataka	G. C. Shortridge 18 Jan., 1912
18442	F	Skin and Skull,	Potoli, North Kanara, Karnataka	G. C. Shortridge 18 Jan., 1912
17880	F	Skin and Skull,	Tringapaham, S. Mysore, Karnataka	G. C. Shortridge 19 Oct., 1912
17881	F	Skin and Skull,	Tringapaham, S. Mysore, Karnataka	G. C. Shortridge 19 Oct., 1912
17882	F	Skin and Skull,	Tringapaham, S. Mysore, Karnataka	G. C. Shortridge 19 Oct., 1912

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17883	F	Skin and Skull,	Tringapaham, S. Mysore, Karnataka	G. C. Shortridge 19 Oct., 1912
17884	F	Skin and Skull,	Tringapaham, S. Mysore, Karnataka	G. C. Shortridge 19 Oct., 1912
17885	F	Skin and Skull,	Tringapaham, S. Mysore, Karnataka	G. C. Shortridge 19 Oct., 1912
20100	F	Skin and Skull,	Jog Falls, Shimoga, Karnataka	V. C. Agrawal 21 Jan., 1977
20101	F	Skin and Skull,	Jog Falls, Shimoga, Karnataka	V. C. Agrawal 21 Jan., 1977
20102	F	Skin and Skull,	Jog Falls, Shimoga, Karnataka	V. C. Agrawal 21 Jan., 1977
18444	—	Skin and Skull,	Sirsi, North Kanara, Karnataka	G. C. Shortridge
18445	—	Skin and Skull,	Sirsi, North Kanara, Karnataka	G. C. Shortridge
18446	—	Skin and Skull,	Jog, North Kanara, Karnataka	G. C. Shortridge ...
18447	—	Skin and Skull,	Jog, North Kanara, Karnataka	G. C. Shortridge
20694	M	Skin and Skull,	Kadakola, Mysore, Karnataka	M. E. Gururaj 18 Feb., 1981
20695	F	Skin and Skull,	Kadakola, Mysore, Karnataka	M. E. Gururaj 18 Feb., 1981
10289	M	Skin and Skull,	Castle Rock, North Kanara, Karnataka	S. Kemp ... Oct., 1916
20445	F	Skin and Skull,	Silent Valley, Palghat, Kerala	S. S. Saha 17 Jan., 1980
20446	F	Skin and Skull,	Silent Valley, Palghat, Kerala	S. S. Saha 17 Jan., 1980
20447	F	Skin and Skull,	Silent Valley, Palghat, Kerala	S. S. Saha 17 Jan., 1980
20448	F	Skin and Skull,	Silent Valley, Palghat, Kerala	S. S. Saha 17 Jan., 1980

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19539	M	Skin and Skull,	Jharsiguda, Sambalpur, Orissa	P. K. Maiti 06 Jan., 1972
19540	F	Skin and Skull,	Udaygiri, Puri, Orissa	D. K. Ghosal 11 Feb., 1967
19541	F	Skin and Skull,	Udaygiri, Puri, Orissa	D. K. Ghosal 11 Feb., 1967
19542	F	Skin and Skull,	Udaygiri, Puri, Orissa	D. K. Ghosal 11 Feb., 1967
19548	F	Skin and Skull,	Udaygiri, Puri, Orissa	D. K. Ghosal 11 Feb., 1967
19543	F	Skin and Skull,	Kotagarh, Boudhkhanmals, Orissa	P. K. Das 23 May, 1972
19544	F	Skin and Skull,	Udaygiri, Puri, Orissa	D. K. Ghosal 11 Feb., 1967
19545	F	Skin and Skull,	Udaygiri, Puri, Orissa	D. K. Ghosal 11 Feb., 1967
19546	M	Skin and Skull,	Udaygiri, Puri, Orissa	D. K. Ghosal 11 Feb., 1967
19547	F	Skin and Skull,	Udaygiri, Puri, Orissa	D. K. Ghosal 11 Feb., 1967
20426	F	Skin and Skull,	Berbera, Puri Orissa	N. Majumdar 1978
25527	F	Skin and Skull,	Harisankar, Bolangir, Orissa	P. K. Das 04 Aug., 1973
25528	F	Skin and Skull,	Josipur, May,urbhanj, Orissa	A. K. Mondal 30 Jan., 1971

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
16785	—	28.0	20.0	—	—
10709	—	27.0	19.0	—	—
16777	—	26.0	19.0	—	—

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
16778	—	26.0	21.0	—	—
16776	—	27.0	20.0	—	—
16779	—	30.0	20.0	—	—
16780	—	28.0	19.0	—	—
16775	—	26.0	21.0	—	—
10704	—	31.0	20.0	—	—
10705	—	29.0	21.0	—	—
10706	—	23.0	19.0	—	—
20097	48.5	—	21.0	24.0	—
20098	50.0	—	20.5	23.5	—
20099	49.0	—	22.0	22.5	—
16783	—	24.5	20.0	—	—
16782	—	25.0	19.0	—	—
16788	—	30.0	17.0	—	—
16791	—	26.0	19.0	—	—
16789	—	33.0	20.0	—	—
16790	—	30.0	20.0	—	—
16784	45.8	25.0	18.0	—	—
12726	45.6	24.1	27.3	21.9	11.1
25546	50.3	22.9	15.9	22.2	11.4
25547	52.3	24.3	17.3	23.6	12.5
20419	46.8	19.7	15.2	20.3	9.6
20418	50.2	27.0	17.2	21.8	10.2
25531	48.1		(Specimen damaged)		
25532	47.8		(Specimen damaged)		
25533	47.7			„	
25534	48.6			„	
25535	45.4			„	
25536	46.8			„	
25537	47.3	—	14.2	22.9	7.8

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
25538	48.3	—	—	21.3	10.6
25539	47.6		(Specimen damaged)		
20495	47.0	23.0	16.8	20.7	10.5
20496	49.3	24.7	18.0	21.6	11.2
21356	50.3	26.8	17.6	22.2	11.0
21352	51.1	25.3	16.6	23.7	12.3
21344	50.2	22.7	16.0	22.6	11.2
21345	49.4	26.4	16.1	22.8	10.0
21346	48.6	—	17.0	21.4	10.4
21343	49.2	25.0	16.6	23.1	11.6
21347	50.8	24.7	16.5	24.2	10.5
21362	48.8	—	16.2	23.6	11.1
21363	50.5	—	15.7	23.2	12.2
21361	50.5	—	16.4	23.2	11.0
21364	48.2	24.4	16.3	22.4	12.5
21349	48.8	25.2	16.1	22.5	12.8
21357	49.2	24.0	16.8	22.5	11.6
21350	49.7	26.6	17.6	23.0	10.4
21358	50.9	28.0	17.2	23.0	11.5
21348	49.5	23.5	17.1	23.4	12.0
21355	49.7	25.3	16.6	22.8	11.6
21359	51.8	—	18.2	24.4	12.0
21351	49.8	22.8	15.8	22.7	12.1
21354	52.0	23.7	17.5	24.2	11.0
21353	50.6	—	18.3	23.6	10.5
21360	50.2	23.9	17.4	23.4	10.4
24948	48.1	27.0	18.2	24.3	10.5
24946	48.1	27.0	19.3	23.5	10.3
24952	47.8	24.0	17.5	23.0	11.0
24951	46.7	25.0	16.9	22.8	10.3

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
24950	48.0	29.0	17.0	23.5	10.6
24949	49.3	25.0	18.7	24.4	11.0
24941	41.0	22.0	19.5	17.0	08.3
24943	48.0	26.0	21.0	24.0	12.0
24945	52.0	30.0	20.0	26.3	09.0
24942	51.0	17.0	24.0	25.0	11.5
24944	48.5	25.0	21.0	24.0	11.0
24947	46.0	26.0	17.2	22.6	10.6
24957	49.5	20.5	18.0	24.0	11.0
24954	49.0	26.0	18.9	23.8	11.2
24953	47.0	23.5	18.6	23.3	11.6
24956	48.0	22.9	18.5	24.2	11.7
24958	48.4	27.0	18.4	23.7	10.9
25064	45.5	25.5	17.8	22.5	10.9
25065	50.6	35.1	19.0	24.5	11.7
24205	47.8	27.0	18.0	16.0	10.5
21112	38.2	12.5	14.4	16.0	07.2
18816	48.0	24.5	20.0	22.0	11.2
18817	48.0	24.5	20.0	22.0	09.9
18815	48.0	—	20.0	22.0	11.6
20414	50.0	22.6	19.7	22.2	11.0
20416	50.0	29.2	17.8	22.5	10.6
20415	48.1	23.2	16.7	22.6	11.8
18441	48.5	18.3	14.3	22.2	11.0
18442	49.2	22.6	17.1	20.7	10.5
18439	50.2	21.6	15.1	21.5	10.5
18440	49.6	20.7	16.4	21.6	11.0
18436	48.7	23.3	18.2	22.0	11.0
18438	49.9	21.3	15.4	22.0	11.0
17880	49.0	—	14.0	21.2	10.0
17882	48.6	—	14.8	20.0	10.0

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
17885	49.2	—	13.8	22.0	10.7
17884	49.4	—	15.1	22.5	11.4
17883	49.3	—	15.7	22.7	09.9
17881	48.7	—	16.5	22.8	10.0
20101	48.0	20.1	20.0	22.5	10.0
20102	48.5	25.6	21.0	22.5	11.3
20100	49.5	23.2	21.0	23.0	10.5
18447	46.5	—	—	21.1	10.8
18446	48.6	—	13.2	22.0	10.1
18445	50.4	—	16.0	23.5	11.4
18444	48.5	—	—	22.6	10.1
20694	49.7	23.6	20.1	24.0	11.0
20695	49.5	—	16.0	21.4	11.0
10289	49.5	—	17.8	22.5	11.5
20445	50.5	21.7	17.0	22.0	10.0
20447	50.0	23.3	16.6	21.5	11.0
20448	49.2	26.8	17.7	22.5	10.6
20446	51.7	26.1	15.7	23.0	10.5
19548	49.8	26.5	19.4	23.2	10.5
19542	50.0	25.7	18.0	23.6	11.3
19545	50.4	23.2	17.5	23.0	11.3
19544	47.0	22.0	16.0	22.0	10.8
19540	48.0	24.0	16.0	21.0	10.1
19547	51.4	25.9	20.8	23.6	10.8
19541	48.4	27.8	19.2	22.9	10.8
19546	49.0	23.8	19.9	23.5	10.1
19543	50.0	26.6	18.0	22.7	09.9
20426	49.8	—	14.8	23.5	12.8
19539	47.9	—	14.6	22.2	11.7
25527	50.6	28.8	20.2	23.2	11.5
25528	50.6	—	17.4	22.6	12.5

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
12726	21.9	18.4	8.7	6.1	8.7	2.7	8.6	11.8	10.4	—	—
21356	21.4	19.0	8.4	5.6	8.0	2.9	8.1	11.0	9.8	14.1	10.4
21352	23.0	20.0	9.3	5.9	8.0	2.6	8.6	11.6	9.7	—	9.8
21344	23.6	19.5	9.0	6.2	7.5	2.7	8.7	11.8	9.7	15.0	9.0
21343	22.1	19.4	8.8	5.5	8.1	2.7	8.7	11.3	10.2	14.8	10.8
21347	23.3	20.2	9.3	6.3	8.0	2.5	8.1	11.5	9.3	15.6	9.5
21361	21.9	19.5	8.8	5.5	8.0	2.7	8.1	11.2	9.6	15.1	9.1
21351	22.4	18.8	9.1	5.9	8.4	3.2	8.5	11.6	9.5	14.7	11.8
21354	21.8	18.6	8.7	5.3	7.4	2.8	8.3	11.0	9.3	14.8	9.4
21353	22.5	20.0	9.0	5.6	6.6	2.6	7.8	11.2	10.1	14.7	9.2
21360	21.8	19.0	8.9	5.5	8.5	2.6	8.2	—	9.5	14.6	10.7
24952	21.5	18.0	8.5	5.6	7.8	2.6	7.8	10.8	10.1	13.8	9.6
24953	23.1	17.1	6.0	6.0	7.7	2.4	8.3	11.2	9.6	14.5	9.9
24942	23.2	15.7	8.6	6.4	7.9	2.7	8.2	11.0	10.1	14.9	8.9
18817	21.1	15.2	8.5	6.0	6.4	3.5	7.9	10.9	9.6	14.1	9.0
18815	21.7	15.5	8.7	5.5	5.9	3.0	8.0	11.2	9.8	—	—
20416	22.9	18.4	9.4	6.0	7.7	2.6	8.3	11.5	9.6	15.5	10.5
18442	21.6	18.3	8.6	5.6	7.4	3.0	7.9	10.9	10.1	19.7	10.0
18440	21.2	18.3	8.4	5.5	7.5	3.3	7.9	—	9.7	—	—
18436	21.9	18.2	8.4	4.5	7.1	2.9	7.5	11.3	9.7	—	—
17880	21.1	17.7	8.3	5.5	6.9	2.7	7.9	11.0	10.0	—	—
17881	21.3	17.0	8.4	6.2	6.4	2.7	8.0	11.4	9.0	14.2	8.4
18447	22.0	18.8	9.0	5.2	6.9	3.2	8.2	11.4	10.4	14.8	8.5
18446	20.7	17.5	8.1	5.4	7.4	2.5	7.7	10.8	19.3	—	—
18445	23.4	19.5	9.1	5.8	8.0	2.8	8.1	11.5	10.5	14.1	9.0
20445	21.2	16.6	8.0	5.2	7.5	3.3	8.1	10.9	9.0	—	—
19548	21.4	18.1	8.8	5.0	7.9	2.5	8.2	11.1	9.1	—	9.2
19542	20.9	17.8	8.5	—	8.0	2.3	8.3	10.9	9.2	—	—
19545	20.6	17.6	8.2	—	7.8	2.6	8.0	11.1	9.5	—	9.0

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
19544	21.2	18.1	8.4	4.8	7.7	2.4	7.9	10.9	9.1	—	8.8
19547	21.3	18.1	8.6	5.2	7.8	2.6	8.2	11.1	8.8	14.9	8.9
19541	21.1	18.0	8.3	5.0	7.8	2.3	7.8	11.2	9.6	14.5	8.8
19543	21.2	17.8	8.5	4.9	7.8	2.7	8.1	10.7	9.0	—	—

Remarks : The specimens are usually smaller than the specimens of *Rhinolophus affinis* in external measurements. There is a great deal of colour variation among the specimens belonging to this subspecies. Usually colour of the specimens varies from brown to orange-yellow.

Distribution : Arunachal Pradesh (Specimen in Z.S.I.), Andhra Pradesh (Sinha 1973), Himachal Pradesh (Das 1986 b), Goa (Agrawal 1973) Karnataka, Kerala, Madhya Pradesh, Mizoram (Specimen in Z.S.I.), Orissa, Maharashtra, Uttar Pradesh, Sikkim, Tamil Nadu, West Bengal.

Elsewhere : Myanmar, Nepal, Sri Lanka.

21. *Rhinolophus rouxi sinicus* Andersen, 1905

1905. *Rhinolophus rouxi sinicus* Andersen, *Proc. zool. Soc. Lond.*, 2 : 98. Chinteh, Anhwei, southern China.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19780	M	Skin and Skull, (Skull damaged)	Siki, about 15 km from Talipha, Arunachal Pradesh	J. M. Jul.,ka 24 Nov., 1974
25529	F	Skin and Skull, (Skull damaged)	Sawarghat, Kumaon, Uttar Pradesh	C. A. Crump 23 Sep., 1913

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
19780	46.0	22.0	15.6	20.0	8.9
25529	42.0	23.3	13.4	18.6	10.5

The skulls of both the specimens are damaged and hence the cranial measurements of them are not available.

Remarks : Lal (1983) reported a specimen of *Rhinolophus rouxi sinicus* Andersen, 1905 from Arunachal Pradesh (Specimen in Z.S.I.) which one as per Das (2003) is, actually an immature one of *Rhinolophus rouxi rouxi*. Other than this, there is another specimen of this taxon in Z.S.I. Details of both the specimens are given here.

Distribution : In India : Arunachal Pradesh, Uttar Pradesh.

22. *Rhinolophus lepidus lepidus* Blyth

1844. *Rhinolophus lepidus* Blyth, *J. Asiat. Soc. Beng.*, 13 : 486 (Vicinity of Calcutta, West Bengal, India, according to Das 1986 b),

Common name : Little Indian Horse shoe Bat. (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
10699	M	Skin and Skull,	Salboni, Medinipur, West Bengal	B. N. H. S. 17 Sep., 1914
16767	M	Skin and Skull,	Singpur, Gaya, Bihar	C. A. Crump 27 May, 1914
10698	M	Skin and Skull,	Singur, Gaya, Bihar	B.N.H.S. 20 May, 1914
16768	M	Skin only (Damaged)	Syndai, Jaintia- Hills, Meghalaya	H. W. Wells 25 Jun., 1920
16764	F	Skin and Skull	Sohagpur, Hoshangabad, Madhya Pradesh	C. A. Crump 03 Apr., 1912
16765	F	Skin and Skull	Sohagpur, Hoshangabad, Madhya Pradesh	C. A. Crump 03 Apr., 1912
16766	M	Skin and Skull	Narsinggarh, Damoh, Madhya Pradesh	C. A. Crump 09 May, 1912
24881	M	Skin and Skull	Drang, Salt Mines Tunnel, Mandi, Himachal Pradesh	S. Chakraborty 09 Jun., 1992
24882	F	Skin and Skull	Kullu, Himachal Pradesh	S. Chakraborty 12 Jun., 1992
9186		(Specimens are totally damaged)		

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19557		(Specimens are totally damaged)		
21366	F	Skin and Skull,	Jyothimamidi, Vishakhapatnam, Andhra Pradesh	S. S. Saha 21 Feb., 1985
21367	M	Skin and Skull,	Wangasara, Vishakhapatnam, Andhra Pradesh	S. S. Saha 11 Mar., 1985
21368	M	Skin and Skull,	Wangasara, Vishakhapatnam, Andhra Pradesh	S. S. Saha 06 Mar., 1985
25561	F	Skin and Skull,	Upper Manalar, Madurai, Tamil Nadu	S. S. Saha 14 Feb., 1986
24780	M	Skin and Skull,	Andaman & Nicobar Islands.	D : Indranil Das
16183	F	Skin and Skull,	Bikaner, Rajasthan	B. Biswas 05 Jan., 1957
16184	F	Skin and Skull,	Bikaner, Rajasthan	B. Biswas 05 Jan., 1957
16185	M	Skin and Skull,	Bikaner, Rajasthan	B. Biswas 05 Jan., 1957
16186	F	Skin and Skull, (Skull damaged)	Bikaner, Rajasthan	B. Biswas 05 Jan., 1957
16187	F	Skin and Skull, (Skull damaged)	Bikaner, Rajasthan	B. Biswas 05 Jan., 1957
16188	F	Skin and Skull, (Skull damaged)	Bikaner, Rajasthan	B. Biswas 05 Jan., 1957
19922	F	Skin and Skull,	Jodhpur, Rajasthan	Daya krishna 1956
20622	F	Skin and Skull,	Khopoli, Pune, Maharashtra	K. K. Tiwari 28 Sep., 1964
21137	F	Skin and Skull,	Borruguhalu, Vishakhapatnam, Andhra Pradesh	P. K. Das 04 Mar., 1983
21138	F	Skin and Skull,	Borruguhalu, Vishakhapatnam, Andhra Pradesh	P. K. Das 04 Mar., 1983
21139	M	Skin and Skull,	Borruguhalu, Vishakhapatnam, Andhra Pradesh	P. K. Das 05 Mar., 1983

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
21140	F	Skin and Skull,	Borragehalu, Vishakhapatnam, Andhra Pradesh	P. K. Das 05 Mar., 1983
21141	F	Skin and Skull,	Borragehalu, Vishakhapatnam, Andhra Pradesh	P. K. Das 07 Mar., 1983
21142	F	Skin and Skull,	Borragehalu, Vishakhapatnam, Andhra Pradesh	P. K. Das 07 Mar., 1983
21143	F	Skin and Skull,	Borragehalu, Vishakhapatnam, Andhra Pradesh	P. K. Das 07 Mar., 1983
21144	M	Skin and Skull,	Borragehalu, Vishakhapatnam, Andhra Pradesh	P. K. Das 09 Mar., 1983
21145	M	Skin and Skull,	Borragehalu, Vishakhapatnam, Andhra Pradesh	P. K. Das 09 Mar., 1983
20087	M	Skin and Skull,	Jog Falls, Shimoga, Karnataka	V. C. Agrawal 21 Jan., 1977
20088	M	Skin and Skull,	Jog Falls, Shimoga, Karnataka	V. C. Agrawal 21 Jan., 1977
20089	M	Skin and Skull,	Jog Falls, Shimoga, Karnataka	V. C. Agrawal 21 Jan., 1977
20090	M	Skin and Skull,	Jog Falls, Shimoga, Karnataka	V. C. Agrawal 21 Jan., 1977
20091	F	Skin and Skull,	Jog Falls, Shimoga, Karnataka	V. C. Agrawal 21 Jan., 1977
20092	F	Skin and Skull,	Jog Falls, Shimoga, Karnataka	V. C. Agrawal 21 Jan., 1977
20093	F	Skin and Skull,	Jog Falls, Shimoga, Karnataka	V. C. Agrawal 21 Jan., 1977
20094	F	Skin and Skull,	Jog Falls, Shimoga, Karnataka	V. C. Agrawal 21 Jan., 1977
20095	F	Skin and Skull,	Jog Falls, Shimoga, Karnataka	V. C. Agrawal 21 Jan., 1977
20096	M	Skin and Skull,	Jog Falls, Shimoga, Karnataka	V. C. Agrawal 20 Jan., 1977
19350	M	Skin and Skull,	Sohagpur, Hoshangabad, Madhya Pradesh	C. A. Camp ...

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19351	M	Skin and Skull,	Sohagpur, Hoshangabad, Madhya Pradesh	C. A. Camp ...
19352	M	Skin only,	Sohagpur, Hoshangabad, Madhya Pradesh	C. A. Camp —
19353	F	Skin and Skull,	Sohagpur, Hoshangabad, Madhya Pradesh	C. A. Camp ...
19354	F	Skin and Skull,	Sohagpur, Hoshangabad, Madhya Pradesh	C. A. Camp ...
19355	F	Skin and Skull, (Skull damaged)	Sohagpur, Hoshangabad, Madhya Pradesh	C. A. Camp ...
19356	F	Skin and Skull,	Sohagpur, Hoshangabad, Madhya Pradesh	C. A. Camp ...
21114	M	Skin and Skull, (Skull damaged)	Baliaparathodu, Palghat, Kerala	S. S. Saha 23 Jan., 1980
21115	F	Skin and Skull,	Baliaparathodu, Palghat, Kerala	S. S. Saha 23 Jan., 1980
21116	F	Skin and Skull, (Skull damaged)	Baliaparathodu, Palghat, Kerala	S. S. Saha 23 Jan., 1980
21117	F	Skin and Skull, (Skull damaged)	Trithamalai, Salem, Tamil Nadu,	N. A. Baptista 29 Jun., 1929
24434	M	Skin and Skull,	Teirei (Dampa), Aizawl, Mizoram	A. K. Mandal 27 Dec., 1993
24435	M	Skin and Skull,	Teirei (Dampa), Aizawl, Mizoram	A. K. Mandal 27 Dec., 1993
24436	M	Skin and Skull,	Teirei (Dampa), Aizawl, Mizoram	A. K. Mandal 27 Dec., 1993
25046	F	Skin and Skull,	Longsen, Lunglei, Mizoram	T. B. Bhattacharya 26 Jan., 1997
24141	M	Skin and Skull,	AHWA, The Dangs, Gujarat	S. Chakraborty 19 Oct., 1991
24142	M	Skin and Skull,	AHWA, The Dangs, Gujarat	S. Chakraborty 19 Oct., 1991
23343	M	Skin and Skull,	Kumdi, Saranda- Forest, Singbhum, Bihar	S. S. Saha 25 May, 1990

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
23344	M	Skin and Skull,	Kundi, Saranda Forest, Singbhum, Bihar	S. S. Saha 25 May, 1990
18413	M	Skin and Skull,	Singur, Gaya, Bihar	C. A. Crump 22 May, 1915
18414	M	Skin and Skull,	Singur, Gaya, Bihar	C. A. Crump 22 May, 1915
18415	M	Skin and Skull,	Singur, Gaya, Bihar	C. A. Crump 22 May, 1915
18416	M	Skin and Skull,	Singur, Gaya, Bihar	C. A. Crump 22 May, 1915
18417	?	Skin and Skull,	Singur, Gaya, Bihar	C. A. Crump 22 May, 1915
18418	M	Skin and Skull,	Singur, Gaya, Bihar	C. A. Crump 22 May, 1915
18419	M	Skin and Skull,	Singur, Gaya, Bihar	C. A. Crump 22 May, 1915
18321	M	Skin and Skull,	Tunnel in an haematite Mine, Near Manharpur, Singbhum, Bihar	S. W. Kemp. —
18322	M	Skin and Skull,	Tunnel in an haematite Mine, Near Manharpur, Singbhum, Bihar	S. W. Kemp. —
18323	M	Skin and Skull,	Tunnel in an haematite Mine, Near Manharput, Singbhum, Bihar	S. W. Kemp. —
18324	F	Skin and Skull,	Tunnel in an haematite Mine, Near Manharpur, Singbhum, Bihar	S. W. Kemp. —
10471	M	Skin and Skull,	Tunnel in an haematite Mine, Near Manharpur, Singbhum, Bihar	S. W. Kemp. —
10473	M	Skin and Skull,	Tunnel in an haematite Mine, Near Manharpur, Singbhum, Bihar	S. W. Kemp. —

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
10473	F	Skin and Skull,	Tunnel in an haematite Mine, Near Manharpur, Singbhum, Bihar	S. W. Kemp. —
11416	M	Skin and Skull,	Inanpur, Manbhum, Bihar	— 27 Nov., 1948
18412	F	Skin and Skull,	Salboni, Medinipur, W. B.	C. A. Crump —

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
10699	—	20.0	17.0	—	—
16767	—	28.0	17.0	—	—
10698	—	24.0	17.0	—	—
16768	36.0	18.0	16.0	—	—
16764	—	22.0	18.0	—	—
16765	—	23.0	17.0	—	—
16766	—	20.0	16.0	—	—
24881	39.0	22.0	16.0	16.0	08.0
24882	37.2	19.1	15.0	14.0	08.2
21366	41.0	—	12.0	—	—
21367	40.9	—	12.2	17.3	08.6
21368	42.0	—	14.1	15.8	08.6
25561	41.9	—	11.4	14.4	07.9
24780	38.0	18.7	16.3	16.3	08.8
16186	38.1	14.0	11.4	15.0	08.9
16188	34.9	20.1	11.8	14.4	09.8
16187	38.2	20.4	13.2	14.0	08.4
16184	38.2	21.6	12.6	11.6	08.0
16183	37.7	21.0	13.0	15.8	07.5
16185	—	18.7	14.2	15.7	06.6

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
19922	39.9	20.7	13.6	14.5	07.4
20622	39.4	22.0	15.0	16.0	07.0
21137	40.0	21.5	18.2	16.3	07.5
21138	42.0	21.2	19.2	17.5	07.0
21140	42.4	24.7	18.1	17.3	08.3
21139	40.7	22.5	18.8	16.6	07.8
21142	41.3	20.8	16.8	17.2	07.0
21146	40.4	19.8	16.7	16.0	07.4
21141	43.6	22.3	18.5	16.5	07.9
21143	41.2	20.0	16.2	16.0	07.8
21144	42.0	20.5	16.5	17.4	08.3
21145	41.5	25.0	18.0	16.9	07.5
20096	40.5	—	14.5	15.2	09.1
20090	41.5	—	16.5	16.5	07.2
20095	41.0	—	16.0	15.5	09.1
20094	41.5	—	16.0	15.5	08.2
20087	40.5	—	15.5	15.5	07.5
20091	43.5	—	16.0	16.0	07.6
20088	40.5	—	13.5	16.8	08.3
20089	40.5	—	16.0	16.0	06.4
20093	40.0	—	15.5	15.5	07.5
20092	41.5	—	15.5	16.5	08.5
19356	39.7	—	12.0	—	09.2
19350	39.8	—	—	17.2	07.4
19354	40.4	—	13.0	16.9	07.0
19353	40.5	—	11.4	16.5	07.3
19355	40.4	—	—	16.1	07.0
19352	43.1	—	—	21.0	08.6
19351	38.6	—	10.9	17.4	06.5
21114	40.2	21.6	11.9	15.5	08.3
21115	41.5	25.0	13.1	15.5	08.5

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
21116	40.0	18.0	15.5	—	07.4
21117		(Specimen damaged)			
24435	38.7	22.0	13.7	16.4	07.5
24434	37.7	22.0	13.5	15.5	07.3
24436	38.7	21.0	13.4	15.7	07.7
25046	38.7	23.4	14.9	15.7	06.8
24141	40.0	21.6	17.0	15.9	05.4
24142	37.9	18.0	14.2	12.5	07.0
23343	40.8	18.9	14.2	16.5	07.6
23344	41.7	20.2	15.7	15.4	06.4
18412	39.6	15.9	12.4	17.5	09.4

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
24881	16.2	13.5	5.9	3.6	5.8	2.0	6.0	8.0	6.8	9.9	6.7
21366	17.5	14.1	6.0	3.7	5.8	2.3	5.9	7.8	6.8	10.3	7.0
21368	17.1	14.1	6.3	3.7	5.8	2.0	6.1	7.8	6.7	10.4	6.5
16184	17.3	—	6.2	3.7	6.0	2.4	6.1	7.8	7.1	—	—
16183	17.2	13.4	6.3	3.8	6.0	2.6	6.2	8.3	7.2	10.7	6.6
16185	16.8	14.3	6.5	3.8	6.1	2.7	6.2	—	6.8	—	6.6
19922	17.1	14.2	6.2	4.0	6.0	2.0	6.2	7.7	7.0	—	—
21138	16.8	14.7	6.1	4.6	5.7	2.2	6.1	7.9	7.7	—	—
21140	17.3	14.6	6.5	4.0	6.0	2.4	6.0	8.2	7.8	—	—
21146	16.9	14.4	6.2	3.9	6.0	2.6	6.0	8.2	7.8	11.0	7.3
21143	17.7	14.0	6.3	4.3	5.6	2.1	6.1	8.3	7.7	10.4	7.3
19350	17.2	14.2	6.3	5.0	5.6	2.4	6.3	8.2	7.8	—	—
19353	17.0	14.6	5.6	3.2	5.8	2.6	6.1	8.4	7.6	—	—
21115	16.4	14.2	5.9	4.3	6.0	2.5	6.0	8.1	7.7	—	—
24141	18.4	15.2	6.3	4.4	6.2	2.7	6.2	8.6	7.4	11.0	6.9

Remarks : Ellaborate discussion on different subspecies of *Rhinolophus lepidus* has already been done by taxonomists of recent times. Das (1986 b) summarised relevant details on these aspects and agreed with Hill & Yoshiyuki's (1980) view and opined that *Rhinolophus monticola* Andersen, 1905 should be considered as a subspecies of *Rhinolophus lepidus*. The specimens are usually similar to *Rhinolophus pasillus blythi*, but slightly larger with comparatively larger ears and noseleaf.

Distribution : Andhra Pradesh (Das, 1986 b), Bihar (Blyth 1863 a, Wroughton, 1915), Delhi (Brossset 1962), Gujarat (Specimen in Z.S.I.), Himachal Pradesh (Specimen in Z.S.I.), Karnataka (Wroughton, 1913), Kerala (Blanford 1891), Madhya Pradesh (Specimen in Z. S.I), Maharashtra (Wroughton, 1916), Orissa (Das & Agrawal 1973), Meghalaya (Specimen in Z.S.I, Hinton & Lindsay 1926), Mizoram (Specimen in Z. S.I.), Rajasthan (Prakash 1956), Tamil Nadu (Das 1986 b), Uttar Pradesh, West Bengal.

Elsewhere : Nepal (Mitchell 1980), possibly Bangladesh (Siddiqi 1961 a).

23. *Rhinolophus lepidus shortridgei* Andersen, 1918

1918. *Rhinolophus lepidus shortridgei* Andersen, *Ann. Mag. N. H.* 2 : 376, 377. Pagan, Burma.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
10848	M	Skin and Skull,	Rajampet Range, S. Cuddapah, Andhra Pradesh	N. A. Baptista 05 Sep., 1929
16770	F	Skin and Skull,	Pagan, Irrawaddy River, Myanmar	G. C. Shortridge, 11 Oct., 1913
16771	F	Skin and Skull,	Pagan, Irrawaddy River, Myanmar	G. C. Shortridge, 11 Oct., 1913
16772	M	Skin and Skull,	Pagan, Irrawaddy River, Myanmar	G. C. Shortridge, 13 Oct., 1913
10701	F	Skin and Skull,	Pagan, Irrawaddy River, Myanmar	G. C. Shortridge, 11 Oct., 1913
10703	F	Skin and Skull,	Pagan, Irrawaddy River, Myanmar	G. C. Shortridge, 11 Oct., 1913

[Some more damaged specimens belonging to the species from Myanmar without any further details are available in the National Zoological Collection.]

Measurements :**External :**

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
10848	—	23.0	16.0	—	—
16770	—	20.5	19.0	—	—
16771	—	21.5	18.0	—	—
16772	—	25.0	17.8	—	—
10701	—	23.0	18.0	—	—
10703	—	23.5	18.0	—	—

Measurements :**Cranial :** Nil.**Remarks :** The specimens very much resembles to *Rhinolophus lepidus lepidus*.**Distribution :** In India : Andhra Pradesh (One specimen in Z. S. I.).**Elsewhere :** Myanmar.**24. *Rhinolophus cognatus famulus* Andersen, 1918**1918. *Rhinolophus famulus* Andersen, *Ann. Mag. N. H.* **2** : 377. North Central Island. Andaman Islands, Bay of Bengal.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
8948	M	Skin and Skull,	Narcondam Islands, Andamans	—
8949	M	Skin and Skull,	North Central Islands, Andamans	—
8950	F	Skin and Skull,	North Central Islands, Andamans	—

Measurements :**External :**

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
8948	37.7	—	12.8	15.8	8.0
8949	38.9	—	12.0	17.9	7.1
8950	40.4	—	11.7	—	6.4

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
8948	16.5	13.8	6.2	3.5	5.6	2.2	5.6	8.1	6.8	—	6.5
8949	17.1	14.5	6.5	4.2	6.0	2.4	6.1	8.6	7.2	—	7.0
8950	16.7	14.5	6.6	3.8	6.1	2.3	6.3	8.6	6.9	—	7.1

Remarks : The specimens are slightly smaller than *Rhinolophus cognatus cognatus*. The specimens of *Rhinolophus cognatus cognatus* are not available in the collection but after comparative study of the measurements as shown in Andersen (1906), the specimens appears smaller.

Distribution : North and Central Andamans.

25. *Rhinolophus subbadius* Blyth, 1844

1844. *Rhinolophus subbadius* Blyth, *J. Asiat. Soc. Bengal*, 13 : 486. Nepal.

Common name : Nepal Horseshoe Bat (Eng).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
10487	F	Skin and Skull,	Sijiu Cave, Garo Hills, Meghalaya	S. W. Kemp & B. N. Chopra, 1921-22
25530	M	Skin and Skull,	Kim, Burma, (Myanmar)	C. Primrose 14 Sep., 1921

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
10487	37.1	—	14.0	—	—
25530	36.9	—	—	14.6	7.2

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
10487	15.8	13.9	5.6	3.6	5.8	2.2	5.5	7.5	7.4	—	—

Remarks : Smallest *Rhinolophus* and appears to be a montane species.

Distribution : Uttar Pradesh, Meghalaya (Kemp 1924 and Dobson 1872).

Elsewhere : Nepal, Myanmar (specimen in Z. S. I.). Vietnam.

26. *Rhinolophus euryale euryale* Blasius, 1853

1853. *Rhinolophus euryale* Blasius, Arch. Naturgesch 19, 1 : 49. Milan, Italy.

Common name : Mediterranean Horseshoe Bat.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20143	M	Skin and Skull,	Department Pyrenees orientales, France	P. J. H. Vanbree 23 Jun., 1959
20144	F	Skin and Skull,	Department, Pyreness, Orientales, France	P. J. H. Vanbree 23 Jun., 1959
25553	F	Skin and Skull,	Pisa, Italy	Exchange, Berlin Museum, 1872

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
20143	48.9	20.5	16.7	20.5	9.4
20144	48.2	24.1	15.0	20.3	10.0
25553	45.7	22.8	17.2	20.3	10.4

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
20143	18.7	14.7	6.3	4.4	6.2	2.4	6.7	9.7	8.4	11.8	7.2

Remarks : Specimens are usually comparatively larger.

Distribution : Approximately : Portugal, Spain, France, Italy, Australia, Yugoslavia, Greece, Sardinia; South-east coast of Black sea, Caucasus, and south-west Russian Turkestan; Syria, Palestine; Morocco, Algeria, Egypt.

27. *Rhinolophus euryale judaicus* Andersen & Matschie, 1904

1904. *Euryalus judaicus* Andersen & Matschie, S. B. Ges. Naturf. Fr. Berlin, 80. Cave of Adullam, Jerusalem, Palestine.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25554	M	Skin and Skull,	Jerusalem, Palestine	J. Anderson — 1880
25555	M	Skin and Skull,	Jerusalem, Palestine	J. Anderson — 1880
25556	F	Skin and Skull,	Jerusalem, Palestine	J. Anderson — 1880
25557	F	Skin and Skull,	Jerusalem, Palestine	J. Anderson — 1880
25558	M	Skin and Skull,	Jerusalem, Palestine	J. Anderson — 1880

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
25554	45.1	24.0	15.5	20.5	8.7
25555	47.0	23.2	16.6	20.6	8.7
25556	46.0	23.6	16.7	17.6	8.4
25557	43.7	19.7	17.1	19.7	8.0
25558	45.2	21.2	14.3	19.4	7.6

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
25554	19.7	15.5	7.0	3.7	6.4	2.4	6.5	9.2	8.3	—	—
25558	19.7	15.9	6.7	3.8	6.4	2.6	6.3	9.1	7.9	—	6.8

Distribution : Palestine.

28. *Rhinolophus trifolius trifolius* Temminck, 18341834. *Rhinolophus trifolius* Temminck, Tijdschr. Natuur. Gesch., 1 : 24, pl. 1, fig. 6. Java.*Common name* : Trefoil Horseshoe Bat.*Material available in the National Zoological Collection.*

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25540	M	Skin and Skull	Nakawn, Sri-Tamarat, penninsular Siam.	 Oct., 1915
25541	F	Skin and Skull,	Nakawn, Sri-Tamarat, Penninsular Siam.	 Oct., 1915
25542	M	Skin and Skull, (Damaged)	Sibsagar, Assam.	S. E. Peal ...

Measurements :*External* :

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
25540	...		(Specimen damaged)		...
25541	50.8	32.2	—	27.8	11.2
25542	...	...	(Specimen damaged)		...

Measurements :*Cranial* :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
25540	23.2	19.0	8.5	4.8	7.9	2.0	8.0	11.1	10.0	—	—
25541	24.0	20.4	8.9	5.4	7.1	2.4	7.9	12.0	10.6	—	—

Remarks : Medium sized horseshoe bat with broad horse-shoe and trifoliate sella; lower lip with one mental groove, frontal sac absent; tip of tail free from inter-femoral membrane.

Distribution : Assam (Anderson 1881) West Bengal (Darjeeling district).

Elsewhere : Myanmar, Thailand, Malay peninsula, sumatra, Java, Borneo and adjacent island.

29. *Rhinolophus luctus perniger* Hodgson

1843. *Rhinolophus perniger* Hodgson, *J. Asiat. Soc. Beng.*, 12 : 414 (Nepal).

Common name : Great Eastern Horseshoe Bat (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
16756	M	Skin and Skull,	Banss Bahari, Nepal	N. A. Baptista 23 May, 1922
18404	F	Skin and Skull,	Darjeeling West Bengal	J. Gammie ... 1872
21365	M	Skin and Skull,	Lankapakalu, Vishakh- apatnam, Andhra Pradesh	S. S. Saha 14 Mar., 1985

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
21365	65.9	39.2	33.5	36.2	17.0
18404	71.8	—	34.2	37.6	15.8
16756	70.1	55.0	41.0	—	—

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
18404	30.5	—	11.8	8.1	—	3.2	10.6	14.7	12.5	22.0	—
21365	29.6	20.9	11.5	7.0	8.5	3.2	10.7	14.9	12.2	20.4	13.9

Remarks : Largest Horseshoe Bat. In respect of nose-leaf, mental groove, etc., the specimens resembles to *Rhinolophus trifolius trifolius*. Frontal sac present, smaller in females usually. Fur dense and woolly and normally blackish.

Distribution : Assam (Sinha 1973), Andhra Pradesh (Specimen in Z. S. I.), Madhya Pradesh, Meghalaya, Nagaland, West Bengal, Sikkim, Uttar Pradesh.

Elsewhere : Nepal, Myanmar, possibly Thailand (Lekagul & McNeely 1977).

30. *Rhinolophus luctus beddomei* Andersen, 19051905. *Rhinolophus beddomei* Andersen, *Ann. Mag. N. H.* 16 : 253. Wynaad, Madras, India.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
18407	F	Skin only	Haleri, Coorg, Karnataka.	G. C. Shortridge 07 Feb., 1913
18406	M	Skin only	Haleri, Coorg, Karnataka	G. C. Shortridge 07 Feb., 1913
25548	F	Skin and Skull,	Banatirtham, Tirunelveli, Tamil Nadu	S. S. Saha 15 Sep., 1997
16815	M	Skin and Skull,	Shernelly, Cochin, Kerala	J. R. O' Brien 03 Jun., 1921

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
16815	61.0		(Specimen damaged)		
18406	59.6	—	17.7	29.9	14.3
18407	62.7	—	—	29.7	16.1
25548	58.1	40.2	29.3	30.3	15.1

(The skulls of the specimens are partly damaged and not extracted and so the Cranial measurements are not available).

Remarks : The specimens belonging to this subspecies differs from the subspecies *Rhinolophus luctus perniger* in having comparatively smaller ears, smaller forearm.

Distributuion : Chennai, Kerala, Karnataka, Tamil Nadu.

31. *Rhinolophus luctus sobrinus* Andersen1918. *Rhinolophus beddomei sobrinus* Andersen, *Ann. Mag. nat. Hist.*, (9) 2 : 378. (Kala Oya, North Central Province, Sri Lanka)

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
18519	F (Juv.)	Skin and Skull, (Skull damaged)	Kala-Oya Sri Lanka	E. W. Maoyr ...

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
18519	54.3	—	—	25.2	14.5

(This subspecies is represented in the collection by a single specimen lying as partially damaged. The skull was extracted but damaged and so the cranial measurements are not available).

Distribution : Sri Lanka.

32. *Rhinolophus pearsoni pearsoni* Horsfield

1851. *Rhinolophus pearsonii* Horsfield., *Cat. Mammalia Mus. Hon. East India Co.*, : 33 (Darjeeling, Darjeeling district, West Bengal, India).

Common name : Pearson's Horseshoe Bat (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
16762	F	Skin and Skull,	Khonshong, Jaintia Meghalaya	H. W. Wells 22 Jul, 1920
16761	M	Skin and Skull,	Khonshong, Jaintia Meghalaya	H. W. Wells 22 Jul, 1920
16763	M	Skin and Skull,	Khonshong, Jaintia, Meghalaya	H. W. Wells 26 Aug., 1920
18696	M	Skin and Skull,	Khonshong, Jaintia, Meghalaya	H. W. Wells 28 Jul., 1920
716 (B.N.H.S.)	M	Skin and Skull,	Pashok, Darjeeling, West Bengal	N. A. Baptista 07 Sep., 1912
24464	F	Skin and Skull,	Sairep, Lunglei, Mizoram.	T P. Bhattacharya 17 Apr., 1995
24465	M	Skin and Skull,	Sairep, Lunglei, Mizoram	T P. Bhattacharya 26 Apr., 1995
15566	F	Skin and Skull,	Darjeeling, West Bengal	G. King 06 Mar., 1878
25572	M	Skin and Skull,	Mahanadi, Darjeeling, West Bengal	P. K. Das 25 May, 1980

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
18521	F	Skin only,	Nepal	 1912
18522	F	Skin only,	Nepal	 1912
18523	F	Skin only,	Nepal	 1912
18524	F	Skin only,	Nepal	 1912
18525	F	Skin and Skull,	Nepal	 1912
10309	M	Skin and Skull,	Mamosmai Cave, Cherrapunji, Meghalaya,	R. Freel 31 Oct., 1914

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
16762	52.0	24.0	14.0	—	—
16761	52.0	24.7	14.2	—	—
16763	54.0	24.0	24.0	—	—
18696	53.0	23.0	25.0	—	—
24464	50.4	23.6	19.2	21.1	8.4
24465	52.7	31.7	20.8	26.6	10.0
15566	52.8	22.9	19.2	26.6	13.2
25572	54.6	22.5	25.5	28.0	12.2
18521	53.1	—	19.3	25.1	11.5
18522	51.8	—	21.0	23.8	11.6
18523	53.3	—	22.9	27.0	13.0
18524	54.2	—	20.1	27.0	12.3
18525	52.7	—	22.7	26.7	11.1
10309	52.0	—	—	—	—

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
24464	20.8	17.7	7.9	5.0	7.9	2.7	8.0	11.0	9.2	13.8	8.2
24465	23.8	19.0	8.9	5.3	7.9	2.2	8.1	10.8	9.1	15.2	8.0
10309	24.3	20.8	9.8	6.2	7.9	2.5	9.0	11.8	10.7	—	10.6

(Most of the skulls were not extracted and some skulls found to be damaged and hence the cranial measurements of all the specimens are not available).

Remarks : These are medium sized horseshoe bats, horseshoe completely covering muzzle. Lower lip with single mental groove. Hill (1987) considers the validity of *chinensis* Andersen, 1905 as a subspecies of *Rhinolophus pearsoni* doubtful due to overlapping measurements of *pearsoni* and *chinensis*.

Distribution : The range of distribution of this subspecies (Ellerman and Morrison-Scott 1951) is kumaon, Meghalaya, West Bengal, Mizoram.

Elsewhere : Nepal, Szechwan and Yunnan.

33. *Rhinolophus cornutus blythi* Andersen, 1918

1918. *Rhinolophus blythi* Andersen, *Ann. Mag. nat. Hist.*, 2 : 376, 377. Almora, 5,500ft., Kumaon, Northern India.

Common name : Little Japanese Horseshoe Bat.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
16757	F	Skin and Skull,	Nimbong, Darjeeling, West Bengal	N. A. Baptista 01 Jul., 1916
16758	M	Skin and Skull,	Nimbong, Darjeeling, West Bengal	N. A. Baptista 13 Jul., 1916
16759	F	Skin and Skull,	Nimbong, Darjeeling, West Bengal	N. A. Baptista 14 Jul., 1916
16760	M	Skin and Skull,	Sangser, Darjeeling, West Bengal	N. A. Baptista 31 Aug., 1916
10693	F	Skin and Skull,	Nimbong, Darjeeling, West Bengal	N. A. Baptista 03 Jul., 1916

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25545	F	Skin and Skull,	Manga (5000ft.), Sikkim	A.G.K. Menon 11 May, 1959
1120	M	(Specimen damaged),	Sibsagar, Assam	D: S. E. Peal ... 1875
8396	M	Skin and Skull, (Damaged)	Soondrijal, Nepal	R. Hodgart (Ind. Mus Coll.)...
6977	M	(Specimen damaged)	Nepal	J. Scully Sep., 1876

Measurements :**External :**

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
25545	38.4	—	13.1	14.9	6.8
16757	—	22.0	17.0	—	—
16758	—	19.0	17.0	—	—
16759	—	19.0	17.0	—	—
16760	—	23.0	16.0	—	—
10693	—	20.0	17.0	—	—

Measurements :**Cranial :**

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
25545	15.8	12.6	5.9	4.7	5.7	2.4	5.6	7.7	7.5	—	—
8396	15.6	14.5	6.0	4.3	5.2	2.2	5.7	7.4	7.2	—	—

Remarks : Andersen (1918) separated *szechwanus* from *blythi* considering its paler colour. Sinha (1973) has synonymised *szechwanus* with *blythi*.

Distribution : Assam, Sikkim, West Bengal.

Elsewhere : Nepal.

34. *Rhinolophus macrotis macrotis* Blyth

1844. *Rhinolophus macrotisi* Blyth J. Asiat. Soc. Bengal, 13 : 485. Nepal.

Common name : Large-eared Horseshoe Bat.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
18520	M	Skin and Skull,	Mussorie, Kumaon, Uttar Pradesh	Captain T. Hutton ... 1852

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
18520	41.2	—	18.6	18.3	9.0

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
18520	17.2	14.8	6.2	3.7	5.3	2.5	5.6	—	7.6	—	—

(The subspecies is represented in the collection by a single specimen).

Remarks : Lower lip with three mental grooves. Wing membrane originates from the ankle. Extreme tip of tail is free from interfemoral membrane.

Distribution : Uttar Pradesh.

Elsewhere : Nepal.

35. *Rhinolophus hipposideros hipposideros* (Bechstein)

1800. *Vespertilio hipposideros* Bechstein, in pennant, *Uebers. Vierf. Thiere*, 2 : 629. France.

Common name : Lesser Horseshoe Bat.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20190	M	Skin and Skull,	Europe	D : Hungarian Museum Apr., 1863

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20191	M	Skin and Skull,	Europe (Damaged)	D : Hungarian Museum
20192	F	Skin and Skull,	Europe	D : Hungarian Museum Apr., 1863

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
20190	35.2	—	—	—	—

(Due to the damaged condition, the external measurements of the other two specimens are not available.)

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
20190	16.5	14.1	5.6	4.4	5.4	2.3	5.3	8.0	7.0	—	—
20192	15.8	13.9	5.3	4.0	5.2	2.0	5.5	7.7	7.1	—	—

(Lower jaw of both the specimens are damaged and hence the measurements of **m1** and **ltr** are not available.)

Remarks : Nil.

Distribution : Europe.

36. *Rhinolophus hipposideros midas* Andersen

1905. *Rhinolophus midas* Andersen, *Proc. Zool. Soc. Lond.*, (2) : 138 (Jask, Persian Gulf.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
6974	F	Skin and Skull, (Damaged)	Gilgit, Jammu & Kashmir	J. Scully ...
6975	F	Skin and Skull, (Damaged)	Gilgit, Jammu & Kashmir	J. Scully ...

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
6976	F	Skin and Skull, (Damaged)	Gilgit, Jammu & Kashmir	J. Scully ...

(Due to the damaged condition of the specimens the external measurements of them could not be taken.)

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
6976	14.7	11.5	5.1	4.8	4.7	2.1	5.0	7.0	6.6	-	-

Remarks : Apparently there is no difference in external and cranial characters in between the two subspecies like, *Rh hipposideros hipposide* Nov., and *Rh hipposideros midas*. This subspecies obly has been recorded from Gilgit, Jammu & Kashmir in India.

Distribution : India : Jammu & Kashmir.

37. *Rhinolophus capensis* Lichtenstein, 1823

1823. *Rhinolophus capensis* Lichtenstein, *Verz. Doblet. Mus. Univ. Berlin*, p. 4. South Africa, Cape Prov. Cape of Good Hope.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25560	M	Skin and Skull,	Cape of Good Hope, South Africa	British Museum (By Exchange). ... 1877

(The species is represented by a single specimen in the National Zoological Collection.)

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
25560	-	23.0	22.3	20.5	10.0

Measurements :**Cranial :**

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw
25560	20.7	18.0	7.5	5.1	6.4	3.1	7.5	10.5	9.1

(Lower jaw is damaged and hence the measurements of lower jaw is not available.)

Remarks : Nil.

Distribution : Cape prov., Natal (South Africa); Zimbabwe; Mozambique. Occurrence outside Cape prov. is doubtful; records from Zambia and Malawi are definitely erroneous.

38. *Rhinolophus euryotis euryotis* Temminck, 1835

1835. *Rhinolophus euryotis* Temminck, *Monogr. Mamm.*, 2 : 26. Indonesia, Molucca Isls, Amboina Isl.

MaNov.,ial available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
15564	F	Skin and Skull,	Amboina Island. (Moluccas, Dutch- East Indies).	 1872
15565	M	Skin and Skull,	Amboina Island. (Moluccas, Dutch- East Indies).	 1872

(The species is represented by a single specimen in the National Zoological Collection.)

Measurements :**External :**

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
15564	56.8	24.0	21.5	25.6	13.3
15565	55.4	27.6	22.1	24.7	13.9

(The skulls of both the specimens were not extracted to keep them undisturbed.)

Remarks : Nil.

Distribution : Aru Isls, Buru, Amboina, Seram and Timor Laut Isls, Kei Isls, Halmahera, and Sulawesi (Indoseia); New Guinea; Adjacent small Islands.

39. *Rhinolophus pusillus* Temminck, 1834

1834. *Tijdschr. Nat. Gesch. phyNov.,l.*, 1 : 29. Indonesia, Java.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25490	F	Skin endy (Damaged)	Near Dihing River, 73 Km. SE. of Miao, Gandhigram, Arunachal Pradesh	D. E. Willson 01 March 1988

(The species is represented by a single specimen in the National Zoological Collection and was received from the Biological Surveys, U. S. Dept. of the Interior. The specimen is badly damaged and hence all the external measurements are not available. The skull of the specimen was not found.)

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
25490	35.2	10.7+	—	15.2	7.3

Measurements :

Cranial : Nil.

Remarks : The smallest-sized Horseshoe Bat. The specimen was collected by D. E. Wilson on 01 March 1988 from near Dihing River, 73 km. SE. of Miao, Gandhigram, Arunachal Pradesh. The same was received from Biological Surveys undertaken by U. S. Department of the Interior. At the time of detailed study of the specimens of *Rhinolophus*, this Dry specimen was found out in the National Zoological Collection as partly damaged condition. The skull of the specimen was extracted but not found. The specimen being the only specimen of *Rhinolophus* from Arunachal Pradesh, it May, be treated as the first record of its existence in the state.

Distribution : India : Arunachal Pradesh (recorded for the first time); Assam (Hinton & Lindsay 1926, Sinha 1973); Meghalaya (Sinha 1973); Sikkim; Uttar Pradesh; West Bengal (Sinha 1973).

Elsewhere : Nepal (Sinha 1973).

40. *Rhinolophus mitratus* Blyth, 1844

1844. *Rhinolophus mitratus* Blyth, *J. Asiat. Soc. Bengal*, 13 : 483. Chaibassa, Orissa, India.

Common name : Trefoil Horseshoe Bat.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25640	?	Skin and Skull, (Badly damaged)	Chaibassa, (West Singbhum, Bihar (Jharkhand))	S. R. Tickell, ... 1843

The species is represented by a single specimen in the National Zoological Collection. The specimen is Dry and now in fragile condition. Accordingly the external measurements are not available. The skull of the specimen was not extracted and kept as it is and so the cranial measurements are also not available.

Remarks : Sinha (1973) has studied the specimen in details. He has given description of the specimen which is in fragile and damaged condition. Tate (1943) and Ellerman and Morrison-Scott (1951) considered the specimen nearer to *R. trifolius*. In fact, it is much resembling to *R. pearsoni* as per measurements given by Sinha (1973). Sinha (1973) studied the material, unsexed, and from chaibassa, Bihar. He mentioned the specimen as Holotype. In fact, as per his description it reveals that the specimen which he studied was Holotype. Moreover, Khajuria, H. *et al.* (1977) in his catalogue Mammaliana also did not incorporate the specimen. Possibly he considered the type specimens only for his catalogue. Now at the time of preparing this catalogue when the specimens of *Rhinolophus* were studied in details, this specimen was found out lying alongwith general specimens in N.Z.C. so considering the facts above, the specimen is established as the Holotype and is kept separately alongwith the other dry specimens of types in a separate box.

Distribution : The species is still known from the type locality only.

Sub-family HIPPOSIDERINAE

Genus *Hipposideros* Gray, 1831

41. *Hipposideros speoris speoris* (Schneider)

1800. *Vespertilio speoris* Schneider, in *Schreber's Säugeth.*, pl. 59b. Tranguabar, India. (Tate, 1941, *Bull. Amer. Mus. N. H.* 78 : 377.)

Common name : Schneider's Leaf-nosed Bat.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17187	M	Skin and Skull,	Nagercoil, Travancore, Kerala	R.S. Pillay 27 Sep., 1915

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17178	M	Skin and Skull,	Gadag, S. Mahratha, Karnataka	G. C. Shortridge 21 Dec., 1911
18512	F	Skin and Skull,	Gersoppa, Kanara, Mysore, Karnataka	G. C. Shortridge 22 May, 1912
17179	M	Skin and Skull,	Gersoppa, Kanara, Mysore, Karnataka	G. C. Shortridge 22 May, 1912
18513	F	Skin and Skull,	Gersoppa, Kanara, Mysore, Karnataka	G. C. Shortridge 22 May, 1912
17180	M	Skin and Skull,	Seringapatam, S. Mysore, Karnataka	G. C. Shortridge 27 Oct., 1912
17186	M	Skin and Skull,	Tammannewa, N. C. Prov., Sri Lanka,	E. W. Mayor 07 May, 1914
17183	F	Skin and Skull,	Samarakallu, E. Prov., Sri Lanka	E. W. Mayor 25 Sep., 1913
17184	M	Skin and Skull,	Mannar, N. Prov., Sri Lanka	E. W. Mayor 03 Nov., 1913
17185	F	Skin and Skull,	Mannar, N. Prov., Sri Lanka	E. W. Mayor 04 Nov., 1913
17181	M	Skin and Skull,	Nakaiadenrya, S. Prov, Sri Lanka	E. W. May, or 03 May, 1913
17182	F	Skin and Skull,	Hambantota, S. Prov., Sri Lanka	E. W. May, or 25 May, 1913
18509	M	Skin and Skull,	Nakaiadenrya, S. Prov, Sri Lanka	E. W. May, or 03 May, 1913
18510	M	Skin and Skull,	Hambantota, S. Prov, Sri Lanka	E. W. May, or 26 May, 1913
18512	F	Skin and Skull,	Gersoppa, Kanara, Mysore, Karnataka,	G. C. Shortridge 22 May, 1912
18513	F	Skin and Skull,	Gersoppa, Kanara, Mysore, Karnataka	G. C. Shortridge 22 May, 1912
17184	M	Skin and Skull,	Mannar, N. Prov., Sri Lanka	E. W. Mayor 03 May, 1913
17185	F	Skin and Skull,	Mannar, N. Prov., Sri Lanka	E. W. Mayor 04 Nov., 1913

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
18560	F	Skin and Skull,	Chandrapura, Maharashtra	Ind. Mus. ... 1869
25636	F	Skin and Skull,	Ponda city, Ponda, Goa	A. K. Mukherjee 22 Mar., 1973
25637	F	Skin and Skull,	Baroda, M. S. Univ., Gujarat	D : R. V Shah ...
20492	M	Skin and Skull,	Pune, Maharashtra	A. K. Mandal 27 Nov., 1979
20493	F	Skin and Skull,	Pune, Maharashtra,	A. K. Mandal 27 Nov., 1979
20494	F	Skin and Skull,	Pune, Maharashtra,	M. M. Chatterjee ... Jun., 1972
25631	F	Skin and Skull,	Madurai, Tamil Nadu,	P. K. Das 09 Mar., 1978
25620	F	Skin and Skull,	Tirthamalai, Salem, Tamil Nadu.	N. A. Baptista 29 Jun., 1929
25621	M	Skin and Skull,	Tirthamalai, Salem, Tamil Nadu	N. A. Baptista ... Jul., 1929
25622	F	Skin and Skull,	Tirthamalai, Salem, Tamil Nadu	N. A. Baptista ... Jul., 1929
25623	M	Skin and Skull,	Tirthamalai, Salem, Tamil Nadu	N. A. Baptista ... Jul., 1929
25624	F	Skin and Skull,	Tirthamalai, Salem, Tamil Nadu	N. A. Baptista ... Jul., 1929
25625	F	Skin and Skull,	Tirthamalai, Salem, Tamil Nadu	N. A. Baptista ... Jul., 1929
25626	M	Skin and Skull,	Tirthamalai, Salem, Tamil Nadu	N. A. Baptista ... Jul., 1929.
25627	M	Skin and Skull,	Tirthamalai, Salem, Tamil Nadu	N. A. Baptista ... Jul., 1929
25628	F	Skin and Skull,	Tirthamalai, Salem, Tamil Nadu	N. A. Baptista ... Jul., 1929
25629	M	Skin and Skull,	Madurai, Tamil Nadu	P. K. Das 08 Mar., 1978

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25630	M	Skin and Skull,	Madurai, Tamil Nadu	P. K. Das 09 Mar., 1978
25632	F	Skin and Skull,	Pakal, Warangal, Andhra Pradesh	D : N. Chari ... Dec., 1977
25633	M	Skin and Skull,	Pakal, Warangal, Andhra Pradesh	D : N. Chari ... Dec., 1977
25634	F	Skin and Skull,	Pakal, Warangal, Andhra Pradesh	D : N. Chari ... Dec., 1977
25635	M	Skin and Skull,	Pakal, Warangal, Andhra Pradesh	D : N. Chari ... Dec., 1977
20720	M	Skin and Skull,	Danishpet, Salem, Tamil Nadu.	S. Chakraborty 17 Jan., 1980
20721	M	Skin and Skull,	Danishpet, Salem, Tamil Nadu.	S. Chakraborty 17 Jan., 1980
18556	M	Skin and Skull,	... Tamil Nadu.	W. Elliot ... 1842
18557	F	Skin and Skull,	... Tamil Nadu.	W. Elliot ... 1842
19447	M	Skin and Skull,	Macherla, Andhra Pradesh	B. Nath 17 Nov., 1963
19448	M	Skin and Skull,	Macherla, Andhra Pradesh	B. Nath 17 Nov., 1963
19449	M	Skin and Skull,	Ethipotta Falls, Vijay Point, Nagarjun Sagar, Andhra Pradesh	B. Nath 25 Aug., 1962
19357	M	Skin and Skull,	Trivandrum, Kerala	R. Sn. Pillay 08 Oct., 1915
19358	M	Skin and Skull,	Trivandrum, Kerala	R. Sn. Pillay 20 Nov., 1915
19359	M	Skin and Skull,	Trivandrum, Kerala	R. Sn. Pillay 07 Nov., 1915
19360	M	Skin and Skull,	Trivandrum, Kerala	R. Sn. Pillay 25 Oct., 1915

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19361	M	Skin and Skull,	Trivandrum, Kerala	R. Sn. Pillay 25 Oct., 1915
19362	M	Skin and Skull,	Trivandrum, Kerala	R. Sn. Pillay 10 Nov., 1915
19363	F	Skin and Skull,	Trivandrum, Kerala	R. Sn. Pillay 20 Nov., 1915
19364	F	Skin and Skull,	Trivandrum, Kerala	R. Sn. Pillay 21 Nov., 1915
18564	F	Skin and Skull,	Trichinopoly, Kerala	Lt. Col. Beddome ... 1877.
18565	F	Skin and Skull,	Travancore, Kerala	Lt. Col. Beddome ... 1878
8500	F	Skin and Skull,	Varkalay Tunnel, Travancore, Kerala	N. Annandale ...

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
18512	51.1	25.0	17.0	21.7	11.2
18513	51.5	25.0	17.0	20.7	11.0
17184	51.8	21.0	16.0	21.5	12.7
17185	52.6	23.0	17.0	21.1	12.2
18510	51.6	23.0	16.0	21.7	12.7
17182	51.1	24.0	16.5	22.0	12.3
17183	50.1	24.5	16.0	20.6	11.1
17181	52.4	23.0	16.0	22.7	12.3
17186	53.1	23.0	17.5	22.7	12.9
18509	53.1	19.0	16.5	22.1	11.0
25636	48.3	22.0	14.8	19.6	08.2
25637	49.7	—	14.7	20.5	10.1
18563	51.1	25.5	17.0	22.0	10.4
20492	52.3	—	15.9	23.4	08.5

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
20493	52.8	—	16.7	23.5	09.0
20494	52.5	—	17.6	23.0	10.2
25631	52.0	22.8	14.5	22.5	09.8
25620	44.0	—	11.9	19.2	08.3
25621	46.3	—	12.2	20.5	08.5
25622	50.4	—	12.8	22.0	09.5
25623	50.3	—	12.7	22.1	08.7
25624	50.1	—	11.5	21.5	08.9
25625	51.0	—	12.5	22.5	08.8
25627	51.8	—	13.0	22.5	08.7
25628	48.5	—	13.2	21.7	08.2
25629	52.8	22.0	16.4	23.0	10.0
25630	58.2	—	14.6	23.1	10.0
25632	51.4	—	15.0	21.2	08.8
25633	50.8	—	15.2	22.2	08.9
25634	50.2	—	15.3	22.2	09.4
25635	49.6	—	14.8	21.5	08.8
20720	50.6	—	13.0	23.4	08.8
20721	51.5	—	13.2	23.7	10.4
18556	50.8	—	14.2	22.9	09.1
18557	50.9	—	14.5	23.4	08.7
19447	49.5	—	15.2	21.2	08.2
19448	50.2	—	15.0	22.5	08.5
19449	52.0	—	14.8	23.3	10.7
19357	53.2	25.6	15.3	24.0	11.3
19358	51.6	25.7	15.1	21.8	10.6
19359	51.8	25.1	14.7	22.7	10.7
19360	53.5	26.5	15.3	25.1	10.3
19361	52.3	25.5	14.4	24.7	10.6
19362	53.1	24.8	15.2	24.3	10.0
19363	54.3	25.5	16.0	23.4	11.09

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
19364	54.5	25.2	16.2	22.3	10.7
18564	53.6	28.2	15.0	25.1	10.5
18565	52.0		14.1	22.8	10.1
8500	52.7	26.6	16.5	22.4	11.0

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
11389	19.3	17.0	6.8	4.7	9.1	3.1	9.2	11.5	8.6	—	7.6
25636	18.6	15.2	6.7	4.3	5.7	3.2	7.1	10.4	8.8	—	—
25637	19.5	15.7	7.0	4.7	6.5	3.3	7.5	10.6	9.3	12.3	7.7
25622	19.2	15.7	7.1	4.1	7.1	3.0	7.2	10.4	9.5	12.0	8.0
25623	18.8	15.3	6.9	3.7	6.5	3.1	7.0	10.3	9.5	—	—
25625	19.2	16.0	7.0	4.5	6.8	3.0	7.3	10.5	9.5	12.0	9.0
25627	19.5	15.9	6.6	4.4	7.0	3.1	7.7	11.4	9.2	12.5	8.3
25628	18.8	15.6	6.8	4.5	6.3	3.0	7.2	10.2	9.1	12.0	7.5
19447	19.2	15.6	6.7	4.7	6.5	3.0	7.4	10.9	8.7	12.0	9.8

(The skulls of most of the specimens were not extracted and accordingly the cranial measurements of all the specimens are not available).

Remarks : Medium-sized Leaf-nosed bats. Ears of the specimens pointed and broad and below the tip it is concave then convex and having a spine-like projection at a distance from base to tip. Dorsum varies from brown to bright golden brown or slightly blackish but having the basal part of hairs white. Venter paler than dorsum slightly.

Distribution : India : Andhra Pradesh, Goa, Gujarat, Maharashtra, Karnataka, Kerala, Tamil Nadu.

Elsewhere : Sri Lanka.

42. *Hipposideros speoris pulchellus* Andersen, 1918

1918. *Hipposideros speoris pulchellus* Andersen, *Ann. Mag. nat. Hist.*, 2 : 383. Vijayanagar, Bellary, India.

Common name : Nil.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
18502	M	Skin and Skull,	Tirthamalai, Salem, Tamil Nadu	N. A. Baptista 25 Jun., 1929
18503	F	Skin and Skull,	Tirthamalai, Salem, Tamil Nadu	N. A. Baptista 25 Jun., 1929
18504	F	Skin and Skull,	Kurumbapatti, Salem, Tamil Nadu	N. A. Baptista 02 May, 1929
18508	F	Skin and Skull,	Argmboli, Temple foot of Mahendra Giri- Range, Tamil Nadu.	R. Sn. Pillay 06 Oct., 1915
18511	F	Skin and Skull,	Nagercoil, Temple- Tunnel, Tamil Nadu	R. Sn. Pillay 27 Sep., 1915
17172	F	Skin and Skull,	Kurumbapatti, Salem, Tamil Nadu	N. A. Baptista 02 May, 1929
17175	M	Skin and Skull,	Palkonda Hills, Salem, Tamil Nadu	N. A. Baptista 03 Jun., 1930
17177	F	Skin and Skull,	Zakampatt, Dharmapuri- Range, Salem, Tamil Nadu.	N. A. Baptista 13 Sep., 1930
17170	M	Skin and Skull,	Vijayanagar, Bellary, Karnataka	G. C. Shortridge 20 Jul., 1912
17171	F	Skin and Skull,	Vijayanagar, Bellary, Karnataka.	G. C. Shortridge 22 Jul., 1912
18506	M	Skin and Skull,	Vijayanagar, Bellary, Karnataka.	G. C. Shortridge 20 Jun., 1912
18507	M	Skin and Skull,	Vijayanagar, Bellary, Karnataka.	G. C. Shortridge 24 Jul., 1912
17187	M	Skin and Skull,	Nagercoil, Temple- Tunnel, Tamil Nadu.	R. Sn. Pillay 27 Sep., 1915.
17173	F	Skin and Skull,	Balapalli Range, Cuddapah, Andhra Pradesh	N. A. Baptista 18 Jul., 1929
17175	M	Skin and Skull,	Palkonda Hills, Andhra Pradesh	N. A. Baptista 03 Jun., 1930
18505	M	Skin and Skull,	Balapalli Range, Cuddapah, Andhra Pradesh	N. A. Baptista 19 Aug., 1929
18506	M	Skin and Skull,	Vijayanagar, Bellary, Karnataka,	G. C. Shortridge 20 Jun., 1912

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
18507	M	Skin and Skull,	Vijayanagar, Bellary, Karnataka,	G. C. Shortridge 24 Jul., 1912
17170	M	Skin and Skull,	Vijayanagar, Bellary, Karnataka	G. C. Shortridge 20 Jul., 1912
17171	F	Skin and Skull,	Vijayanagarm Bellery, Karnataka	G. C. Shortridge 22 Jul., 1912
17174	M	Skin and Skull,	Rajampetta Range, Cuddapah, Andhra Pradesh	N. A. Baptista 04 Sep., 1929

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
17171	40.1	17.5	15.5	18.4	09.6
17170	49.3	25.0	17.0	20.1	10.3
18507	50.3	—	—	20.2	10.7
18506	49.2	23.0	16.5	20.7	10.0
17173	51.6	27.0	16.8	21.3	10.7
17175	51.7	21.0	16.0	21.8	11.2
18505	—	25.0	17.0	—	—
18504	51.0	26.0	18.0	20.7	—
17172	51.5	25.0	18.0	22.0	11.0
18502	—	23.0	18.0	—	—
18503	—	23.0	17.0	—	—
17177	48.7	25.0	17.0	22.2	10.0
18511	52.0	30.0	17.0	21.1	11.0
17187	51.0	25.0	17.0	22.2	11.0
18508	53.0	25.0	17.0	23.5	12.0

*Measurements :**Cranial :*

The skulls of the specimens were not extracted and so the cranial measurements of the specimens are not available.

Remarks : Nil.

Distribution : Andhra Pradesh, Karnataka and Tamil Nadu.

43. *Hipposiderous larvatus leptophyllus* (Dobson)

1874. *Phyllorhina leptophylla* Dobson. *J. Asiat. Soc. Beng.*, **43** (pt. 2) : 234 (Khasia Hills = Khasi Hills, Meghalaya, India).

Common name : Khasi Leaf-nosed Bat (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
16901	M	Skin and Skull,	Laitkysnao, Khasi- Hills, Meghalaya,	H. W. Wells 02 May, 1920
16902	M	Skin and Skull,	Laitkyusao, khasi Hills, Meghalaya	H. W. Wells 02 May, 1920
10667	M	Skin and Skull,	Laitkyusao, khasi Hills, Meghalaya	H. W. Wells 01 May, 1920
10668	M	Skin and Skull,	Laitkynsao, Khasi Hills, Meghalaya	H. W. Wells 02 May, 1920
16901	M	Skin and Skull,	Laitkynsao, Khasi Hills, Meghalaya	H. W. Wells 02 May, 1920
16902	M	Skin and Skull,	Laitkynsao, Khasi Hills, Meghalaya	H. W. Wells 02 May, 1920
10667	M	Skin and Skull,	Laitkynsao, Khasi Hills, Meghalaya	H. W. Wells 02 May, 1920
10668	M	Skin and Skull,	Laitkynsao, Khasi Hills, Meghalaya	H. W. Wells 02 May, 1920
18586	M	Skin and Skull,	Laitkynsao, Khasi Hills, Meghalaya	H. W. Wells 02 May, 1920
18587	M	Skin and Skull,	Laitkynsao, Khasi Hills, Meghalaya	H. W. Wells 02 May, 1920
18588	F	Skin and Skull,	Laitkynsao, Khasi Hills, Meghalaya	H. W. Wells 02 May, 1920
18552	M	Skin and Skull,	Khasi Hills, Meghalaya	J. H. Bourne 1872
18553	F	Skin and Skull,	Khasi Hills, Meghalaya	J. H. Bourne 1872

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
18554	F	Skin and Skull,	Khasi Hills, Meghalaya	J. H. Bourne 1872
10290	F	Skin and Skull,	Above Tura, Garo Hills, Meghalaya,	S. W. Kump July-Aug., 1917
10291	M	Skin and Skull,	Above Tura, Garo Hills, Meghalaya,	S. W. Kump July-Aug., 1917
24773	M	Skin and Skull,	Andaman and Nicobar Islands	D : Indranil Das
24774	M	Skin and Skull,	Andaman and Nicobar Islands	D: Indranil Das
24775	M	Skin and Skull,	Andaman and Nicobar Islands	D: Indranil Das
18555	F	Skin and Skull,	Sylhet, Bangladesh	E. B. Baker 1872

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
24775	40.7	30.5	20.2	19.1	08.5
24774	41.7	30.7	19.8	19.0	08.7
24773	42.0	31.5	20.2	19.2	08.8
18552	62.8	39.4	24.5	25.1	13.0
18553	62.6	38.0	23.7	24.1	13.1
18554	63.5	41.0	23.6	26.5	12.7
10290	61.8	43.7	24.6	26.1	12.7
10291	62.0	40.1	24.5	26.2	13.0
18586	61.4	37.1	20.5	23.7	14.5
18587	62.2	36.5	21.5	25.1	12.5
18588	62.8	—	21.0	25.8	13.1
16901	62.0	44.0	23.0	26.8	13.9
16902	62.0	44.0	23.0	25.7	13.4
10667	62.0	44.0	23.0	26.3	13.2
10668	62.0	44.0	23.0	26.1	14.2
18555	61.2	37.5	—	—	—

Measurements :**Cranial :**

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
18552	24.8	21.0	09.3	5.6	8.7	3.8	9.4	13.9	11.7	16.0	10.0

(The skulls of most of the specimens were not extracted and cleaned. So, the cranial measurements of all the specimens are not available.)

Remarks : Median portion of noseleaf expanded slightly. Upper edge of posterior noseleaf is semicircular more or less. In both sexes frontal sac is present, but in females it is slightly reduced. Ears large and triangular, posterior margins concave behind tip. Narial lappets well developed and anterior noseleaf with median emargination. [Three more specimens (Dry and Old) partly damaged are available, collected by F. Skipisth in the year 1853 from Sylhet, Bangladesh lying unregistered.]

[Three more specimens (Dry and Old) partly damaged are available, collected by F. Skipwith in the year 1853 from Sythet Bangladesh lying unregistered.]

[Three more specimens (very old and Dry) partly damaged are also available in the collection, collected by Coln. Phayre in the year 1842 from Arakan, Myanmar lying as unregistered.]

Distribution : Andaman and Nicobar Islands. Assam, Meghalaya.

Elsewhere : Bangladesh (Blyth, 1863 'a'), Myanmar.

44. *Hipposideros larvatus grandis* G. Allen, 1936

1936. *Hipposideros larvatus grandis* G. Allen, *Rec. Ind. Mus.*, 38, 3 : 345. Akanti, Upper Chindwin, 500 ft., Burma (= Myanmar).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17148	M	Skin and Skull,	H. Kampti, Chindwin, Upper Myanmar	G. C. Shortridge 24 Jul., 1914
17272	F	Skin and Skull,	Paungaung, N. Shan- states, Upper Myanmar	G. C. Shortridge 01 May, 1913
17273	M	Skin and Skull,	Paungaung, N. Shan- states, Upper Myanmar	G. C. Shortridge 01 May, 1913
17163	F	Skin and Skull,	H. Kampti, Chinwin, Upper Myanmar	G. C. Shortridge 24 Jul., 1914

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17164	F	Skin and Skull,	Kyauk, Myaung, Irrawaddy, W. Myanmar	G. C. Shortridge 28 Jul., 1913
17274	F	Skin and Skull,	Maliwun, Victoria Point. S. Tenasserim, Myanmar	G. C. Shortridge 10 Feb., 1914
17275	M	Skin and Skull,	Maliwun, Victoria Point. S. Tenasserim, Myanmar	G. C. Shortridge 10 Feb., 1914
17165	M	Skin and Skull,	Mt. Poppa, Upper Myanmar	G. C. Shortridge 31 Aug., 1913
10660	M	Skin and Skull,	Paungaung, N. Shan- states, U. Myanmar.	G. C. Shortridge 01 May, 1913
17271	M	Skin and Skull,	Paungaung, N. Shan- states, U. Myanmar	G. C. Shortridge 01 May, 1913
17277	F	Skin and Skull,	Maliwun, Victoria Point. S. Tenasserim, Myanmar	G. C. Shortridge 10 Feb., 1914
17162	M	Skin and Skull,	Mingun, W. Sagaing, Upper Myanmar	G. C. Shortridge 08 Jul., 1913
17276	M	Skin and Skull,	Maliwun, Victoria Point. S. Tenasserim, Myanmar	G. C. Shortridge 10 Feb., 1914
10664	F	Skin and Skull,	Mingum, Upper Myanmar	G. C. Shortridge 08 Jul., 1913
10663	M	Skin and Skull,	Maliwun, Victoria Point. S. Tenasserim, Myanmar	G. C. Shortridge 10 Feb., 1914
10662	M	Skin and Skull,	Maliwun, Victoria Point. S. Tenasserim, Myanmar	G. C. Shortridge 10 Feb., 1914
10661	M	Skin and Skull,	Mamsem Falls, M. Shan- tates, Myanmar	G. C. Shortridge 08 Jun., 1913
10665	F	Skin and Skull,	Mingun, W. Ssagaing, Upper Myanmar	G. C. Shortridge 08 Jul., 1913.
18547	M	Skin and Skull,	Ashoun, Tenasserium, Myanmar	W. T. Blanford 1877
18548	M	Skin and Skull,	Ashoun, Tenasserium, Myanmar	W. T. Blandord 1877
18549	M	Skin and Skull,	Moulmein, Myanmar	W. T. Blanford 1878

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
18550	M	Skin and Skull,	Moulmein, Myanmar	W. T. Blanford 1878
18537	F	Skin and Skull,	Opposite Prone, Myanmar	J. Anderson 1868
18538	F	Skin and Skull, (Damaged)	Opposite Prone, Myanmar	J. Anderson 1868
18539	F	Skin and Skull,	Opposite Prone, Myanmar	J. Anderson 1868
18540	F	Skin and Skull,	Opposite Prone, Myanmar	J. Anderson 1868
18541	F	Skin and Skull,	Opposite Prone, Myanmar	J. Anderson 1868
18551	F	Skin and Skull,	Opposite Prone, Myanmar	F. Stoticzka 1875
18542	M	Skin and Skull,	Pegu (17.20N, 96.29E), Myanmar	W. Theobald 1872
18543	F	Skin and Skull,	Pegu (17.20N, 96.29E), Myanmar	W. Theobald 1872
18544	M	Skin and Skull,	Pegu (17.20N, 96.29E), Myanmar	W. Theobald 1872
18545	M	Skin and Skull,	Pegu (17.20N, 96.29E), Myanmar	W. Theobald 1872
18546	F	Skin and Skull,	Pegu (17.20N, 96.29E), Myanmar	W. Theobald 1872
18526	F	Skin and Skull,	Opposite Prone, Myanmar	J. Anderson 1868
18527	M	Skin and Skull,	Opposite Prone, Myanmar	J. Anderson 1868
18528	M	Skin and Skull,	Opposite Prone, Myanmar	J. Anderson 1868
18529	M	Skin and Skull,	Opposite Prone, Myanmar	J. Anderson 1868
18530	M	Skin and Skull,	Opposite Prone, Myanmar	J. Anderson 1868

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
18531	F	Skin and Skull, (Damaged)	Opposite Prone, Myanmar	J. Anderson 1868
18532	M	Skin and Skull,	Opposite Prone, Myanmar	J. Anderson 1868
18533	F	Skin and Skull,	Opposite Prone, Myanmar	J. Anderson 1868
18534	F	Skin and Skull,	Opposite Prone, Myanmar	J. Anderson 1868
18535	F	Skin and Skull, (Damaged)	Opposite Prone, Myanmar	J. Anderson 1868
18536	F	Skin and Skull,	Opposite Prone, Myanmar	J. Anderson 1868

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
18536	62.7	—	21.2	26.4	12.6
18534	62.1	—	19.2	25.8	14.2
18533	65.0	—	18.5	25.2	12.2
18532	59.5	—	20.5	25.2	12.5
18530	61.0	—	18.3	22.2	12.2
18529	64.2	—	20.7	26.2	11.2
18528	58.0	—	17.9	22.9	12.7
18527	61.8	—	21.7	25.2	12.7
18526	64.6	—	16.7	25.5	14.3
18537	62.3	—	19.6	25.4	13.0
18539	59.2	—	20.2	25.6	12.0
18540	62.4	—	18.5	24.8	12.7
18541	58.7	—	20.7	26.0	13.3
18551	62.0	—	22.2	24.8	13.4
18542	61.5	—	19.2	23.0	12.6
18543	61.3	—	18.5	23.9	12.5

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
18544	60.0	—	17.7	23.3	13.1
18545	59.0	—	18.4	23.6	12.7
18546	61.0	—	17.8	23.4	13.2
18547	61.7	—	18.3	23.9	12.2
18548	60.5	—	18.2	23.5	11.9
18549	61.9	—	18.4	24.3	12.7
18550	61.0	—	18.3	23.5	12.5
10663	57.8	—	—	23.0	13.2
17162	65.2	37.0	22.5	27.0	13.5
10665	62.1	40.0	23.0	25.5	14.0
10661	57.5	38.0	23.0	25.3	13.1
10664	62.4	37.0	23.0	26.8	12.2
17164	59.0	—	—	25.5	14.2
17165	62.1	30.0	24.0	26.1	14.8
17148	62.0	37.0	23.5	26.0	13.0
17272	58.0	37.0	22.5	24.0	11.0
17271	57.5	39.0	23.0	23.9	12.3
17273	57.6	37.0	21.5	14.7	12.5
10660	56.2	-	-	22.9	12.3
17277	60.4	36.0	24.0	23.5	13.0
17276	59.9	34.0	23.0	22.6	13.2
17275	60.9	38.0	23.0	24.2	13.4
17274	61.9	35.0	23.5	24.4	12.7
10662	59.2	37.0	22.0	23.7	12.7

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
18550	23.7	19.7	9.0	5.2	8.0	3.5	9.2	13.2	11.2	15.1	9.4
18543	23.3	19.7	8.8	5.4	8.0	3.6	9.1	13.0	10.7	-	-
18544	23.4	19.4	9.1	5.3	7.9	3.3	9.0	12.8	11.0	-	-

[The skulls of most of the specimens were extracted but not cleaned and so, the cranial measurements of all the specimens are not available.]

Remarks : Nil.

Distribution : Myanmar.

45. *Hipposideros larvatus larvatus* (Horsfield, 1823)

1823. *Rhinolophus larvatus* Horsfield, *Zool. Res. Java*, No. 6, pl. 9. Java.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
21754	M	Skin and Skull,	Huaikha khang W. L. Sanctuary, Uthai Thani Province, Thailand	D. A. Schlitter 26 Jul., 1983

The species is represented by a single specimen in the collection as above, preserved in alcohol.

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
21754	61.0	35.7	22.7	23.7	11.6

Measurements :

Cranial : Nil.

Remarks : Nil.

Distribution : Approximately, Assam.

Elsewhere : Myanmar, Hainan, Indo-China, Malay States, Sumatra, Java, Borneo, Thailand.

46. *Hipposideros diadema masoni* (Dobson, 1872)

1872. *Phyllorhina masoni* Dobson, *J. Asiat. Soc. Bengal*, 41, 2 : 338. Moulmein, Burma (= Myanmar).

Common name : Large Malay Leaf-nosed Bat. Material available in the National Zoological Collection. [The species is represented in the collection by a single specimen.]

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19747	M	Skin and Skull,	HBangnara, Patani, Peninsular Thailand	C. B. Kloss 10 Aug., 1917

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
19747	64.4	—	22.7	31.9	16.5

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
19747	31.8	26.3	12.7	7.7	10.7	3.3	12.1	18.1	14.0	22.2	13.9

Remarks : Nil.

Distribution : Myanmar, Thailand.

47. *Hipposideros lankadiva lankadiva* Kelaart, 1850

1850. *Hipposideros lankadiva* Kelaart, *J. Ceylon Br. Asiat. Soc.*, 2 : 216. Kandy, Sri Lanka.

Common name : Sri Lanka Gigantic Leaf-nosed Bat or Kelaart's Leaf-nosed Bat (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20033	M	Skin and Skull,	Khuntimari, Moraghat- Range, Jalpaiguri, West Bengal	S. S. Saha 19 Jul., 1975
20203	M	Skin and Skull,	Muroor, Kumta Taluk, N. Kanara, Karnataka	H. R. Bhat 20 Aug., 1979
20204	F	Skin and Skull,	Muroor, Kumta Taluk, N. Kanara, Karnataka	H. R. Bhat 20 Aug., 1979
20205	M	Skin and Skull,	Muroor, Kumta Taluk, N. Kanara, Karnataka	H. R. Bhat 20 Aug., 1979

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20206	F	Skin and Skull,	Muroor, Kumta Taluk, N. Kanara, Karnataka	H. R. Bhat 20 Aug., 1979
20207	M	Skin and Skull,	Muroor, Kumta Taluk, N. Kanara, Karnataka	H. R. Bhat 20 Aug., 1979
20208	F	Skin and Skull,	Muroor, Kumta Taluk, N. Kanara, Karnataka	H. R. Bhat 20 Aug., 1979
20209	M	Skin and Skull,	Muroor, Kumta Taluk, N. Kanara, Karnataka	H. R. Bhat 20 Aug., 1979
20210	M	Skin and Skull,	Muroor, Kumta Taluk, N. Kanara, Karnataka	H. R. Bhat 20 Aug., 1979
20211	F	Skin and Skull,	Muroor, Kumta Taluk, N. Kanara, Karnataka	H. R. Bhat 20 Aug., 1979
18039	M	Skin and Skull,	Gersoppa, North Kanara, Karnataka	G. C. Shortridge May, 1912
18040	M	Skin and Skull,	Gersoppa, North Kanara, Karnataka	G. C. Shortridge May, 1912
18041	M	Skin and Skull,	Gersoppa, North Kanara, Karnataka	G. C. Shortridge May, 1912
18042	M	Skin and Skull,	Gersoppa, North Kanara, Karnataka	G. C. Shortridge May, 1912
20122	M	Skin and Skull,	Gersoppa, North Kanara, Karnataka	H. R. Bhat 15 Mar., 1971
20123	F	Skin and Skull,	Gersoppa, North Kanara, Karnataka	G. C. Shortridge 15 Mar., 1971
20196	M	Skin and Skull,	Muroor, Kumta Taluk, N. Kanara, Karnataka	G. C. Shortridge 20 Aug., 1979
20197	F	Skin and Skull,	Muroor, Kumta Taluk, N. Kanara, Karnataka	G. C. Shortridge 20 Aug., 1979
20199	F	Skin and Skull,	Muroor, Kumta Taluk, N. Kanara, Karnataka	G. C. Shortridge 20 Aug., 1979
20201	M	Skin and Skull,	Muroor, Kumta Taluk, N. Kanara, Karnataka	G. C. Shortridge 20 Aug., 1979
20202	M	Skin and Skull,	Muroor, Kumta Taluk, N. Kanara, Karnataka	G. C. Shortridge 20 Aug., 1979
15302	F	Skin and Skull,	Bhopal, Madhya Pradesh	A. P. Gupta

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20036	M	Skin and Skull,	Pullandur, Madhya Pradesh	D: W. T. Blanford 1871
4932	F	Skin and Skull,	Satpura Hills, Maharashtra	D: V. Ball
4933	F	Skin and Skull,	Satpura Hills, Maharashtra	D: V. Ball
4934	F	Skin and Skull,	Satpura Hills, Maharashtra	D: V. Ball
7116	F (Young)	Skin and Skull,	Travancore, Kerala	Mus. Coll. Jaffer.
20030	F	Skin and Skull, (Damaged)	Darjeeling, West Bengal	D: J. Anderson 1867
20031	M	Skin and Skull,	Khuntimari, Moraghat Range, Jalpaiguri, W. B.	S. S. Saha 19 Jul., 1975
20032	M	Skin and Skull,	Khuntimari, Moraghat Range, Jalpaiguri, W. B.	S. S. Saha 19 Jul., 1975
10493	M	Skin and Skull,	Siju Cave, Garo Hills, Meghalaya	S. W. Kemp & B. N. Chopra. Feb., 1922
10494	M	Skin and Skull,	Siju Cave, Garo Hills, Meghalaya	S. W. Kemp & B. N. Chopra. Feb., 1922
10495	M	Skin and Skull,	Siju Cave, Garo Hills, Meghalaya	S. W. Kemp & B. N. Chopra. Feb., 1922
10496	M	Skin and Skull,	Siju Cave, Garo Hills, Meghalaya	S. W. Kemp & B. N. Chopra. Feb., 1922
10497	F	Skin and Skull,	Siju Cave, Garo Hills, Meghalaya	S. W. Kemp & B. N. Chopra. Feb., 1922
10498	F	Skin and Skull,	Siju Cave, Garo Hills, Meghalaya	S. W. Kemp & B. N. Chopra. Feb., 1922
22047	M	Skin and Skull,	Khuntimari, Jalpaiguri, West Bengal	S. Chakraborty 08 Sep., 1983

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
22048	M	Skin and Skull,	Khuntimari, Jalpaiguri, West Bengal	S. Chakraborty 08 Sep., 1983
22049	F	Skin and Skull,	Khuntimari, Jalpaiguri, West Bengal	S. Chakraborty 09 Sep., 1983
21369	M	Skin and Skull,	Lankapakalu, Vishakha- patnam, Andhra Pradesh	S. S. Saha 12 Mar., 1985
21370	F	Skin and Skull,	Lankapakalu, Vishakha- patnam, Andhra Pradesh	S. S. Saha 12 Mar., 1985
21129	M	Skin and Skull,	Borruguhalu, Vishakha- patnam, Andhra Pradesh	P. K. Das 09 Mar., 1983
21130	M	Skin and Skull,	Borruguhalu, Vishakha- patnam, Andhra Pradesh	P. K. Das 09 Mar., 1983
21131	M	Skin and Skull,	Borruguhalu, Vishakha- patnam, Andhra Pradesh	P. K. Das 09 Mar., 1983
21118	M	Skin and Skull,	Borruguhalu, Vishakha- patnam, Andhra Pradesh	P. K. Das 07 Mar., 1983
21119	M	Skin and Skull,	Borruguhalu, Vishakha- patnam, Andhra Pradesh	P. K. Das 07 Mar., 1983
21120	M	Skin and Skull,	Borruguhalu, Vishakha- patnam, Andhra Pradesh	P. K. Das 07 Mar., 1983
21121	M	Skin and Skull,	Borruguhalu, Vishakha- patnam, Andhra Pradesh	P. K. Das 07 Mar., 1983
21122	F	Skin and Skull,	Borruguhalu, Vishakha- patnam, Andhra Pradesh	P. K. Das 07 Mar., 1983
21123	M	Skin and Skull,	Borruguhalu, Vishakha- patnam, Andhra Pradesh	P. K. Das 06 Mar., 1983
21124	M	Skin and Skull,	Borruguhalu, Vishakha- patnam, Andhra Pradesh	P. K. Das 08 Mar., 1983
21125	M	Skin and Skull,	Borruguhalu, Vishakha- patnam, Andhra Pradesh	P. K. Das 09 Mar., 1983
21126	M	Skin and Skull,	Borruguhalu, Vishakha- patnam, Andhra Pradesh	P. K. Das 09 Mar., 1983
21127	M	Skin and Skull,	Borruguhalu, Vishakha- patnam, Andhra Pradesh	P. K. Das 09 Mar., 1983
21128	M	Skin and Skull,	Borruguhalu, Vishakha- patnam, Andhra Pradesh	P. K. Das 09 Mar., 1983

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
20033	92.5	56.5	26.7	37.8	20.6
20203	78.5	—	25.2	28.8	15.1
20204	80.4	—	22.6	29.4	15.4
20205	79.9	40.1	24.0	29.7	17.2
20206	78.5	—	23.4	29.8	14.5
20207	84.5	—	23.3	31.5	14.8
20208	81.4	40.5	24.4	28.4	15.5
20209	82.5	—	24.8	30.7	16.1
20210	82.0	41.4	25.0	30.5	15.0
20211	81.9	—	25.0	29.8	15.2
18039	80.5	36.7	23.6	32.0	11.9
18040	82.0	37.5	23.6	—	17.0
18041	79.5	35.0	22.2	31.5	15.4
18042	81.9	37.5	20.5	—	15.2
20122	79.0	—	22.2	29.3	16.5
20123	80.0	38.0	23.7	22.1	14.6
20196	80.6	37.5	23.5	28.0	16.4
20197	80.5	41.3	23.6	28.9	17.0
20199	77.5	—	22.6	28.6	15.5
20201	80.6	—	23.7	29.2	16.5
20202	77.6	—	23.0	28.4	16.7
15302	82.5	—	22.7	32.0	15.5
20036	87.7	—	22.7	34.2	15.8
4932	83.0	—	19.0	32.1	15.0
4933	86.6	—	21.7	31.7	15.7
4934	82.5	—	19.0	31.2	15.6
7116	35.7 (young)	15.7	12.0	16.8	8.0

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
20030	88.7	58.2	28.7	35.0	16.7
20031	91.0	59.5	29.0	35.7	16.8
20032	89.5	51.8	24.5	34.9	17.7
10493	86.6	—	25.2	33.2	16.8
10494	92.8	—	25.2	36.7	18.4
10495	88.3	—	25.7	33.8	16.6
10496	88.5	—	25.4	35.8	18.4
10497	86.5	—	24.2	31.7	18.6
10498	93.2	—	24.5	35.6	16.9
22047	94.3	—	21.3	36.6	18.1
22048	88.0	—	22.7	34.7	18.6
22049	88.5	—	22.2	34.7	16.9
21369	88.9	50.9	25.5	35.7	14.9
21370	88.4	43.3	26.2	34.5	14.1
21129	88.5	43.3	28.1	33.5	16.4
21130	86.6	46.2	24.2	34.1	16.5
21131	88.1	43.0	25.4	34.9	17.0
21118	87.5	46.0	28.7	34.1	16.6
21119	88.0	47.4	25.0	35.1	17.2
21120	86.7	42.5	28.4	34.3	17.7
21121	86.8	47.4	28.5	33.5	17.4
21122	87.7	47.6	28.5	33.7	17.8
21123	91.0	49.0	27.4	36.1	16.9
21124	86.4	38.4	23.5	33.8	16.5
21125	90.0	44.3	26.5	34.9	17.7
21126	88.3	50.8	26.7	35.0	15.7
21127	87.5	42.2	26.8	34.4	17.0
21128	86.2	48.0	25.5	32.4	17.0

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
20204	30.8	25.5	12.2	7.3	10.1	4.0	11.6	17.6	13.5	21.1	13.5
20211	30.4	24.5	12.5	6.9	9.7	3.8	11.5	17.6	13.7	—	—
18042	31.9	27.2	13.0	—	10.2	3.8	12.5	18.2	13.1	22.2	14.3
20199	30.5	25.7	12.4	7.0	9.9	3.7	12.0	17.0	13.6	20.9	13.8
20036	32.2	25.8	13.5	8.5	10.7	4.0	13.1	18.7	14.3	22.9	15.2
4934	29.4	24.9	12.5	7.5	9.6	3.9	12.5	17.7	14.0	—	—
20031	34.9	29.4	14.7	8.3	11.8	3.9	13.4	20.8	12.7	25.3	16.2
20032	32.5	27.4	13.7	7.2	10.5	3.9	12.5	17.8	12.5	23.0	14.5
22047	35.0	28.4	14.1	8.4	10.4	4.0	12.7	20.3	15.7	24.3	15.4
21369	32.5	27.0	13.7	8.8	12.1	4.2	13.1	19.0	14.5	22.3	15.0
21370	31.0	25.7	13.3	8.0	12.1	4.7	12.7	17.5	13.7	21.6	14.8
21118	32.7	24.0	13.8	8.6	10.1	4.5	13.3	18.8	12.9	22.3	15.5

Remarks : Ellerman & Morrison Scott (1951) have recognised three subspecies of *Hipposideros lankadiva* from the Indian Mainland. viz. *H. l. indus*, *H. l. mixtus* and *H. l. unitus* and *H. schistaceus* as a separate species. Brossit (1962) has studied *H. lankadiva* from several localities of western and central India and he did not consider the variation in colour in the present species as Zoogeographically related. According to this author this species is monotypic. Hill (1963), in his review of the genus *Hipposideros*, has maintained all these subspecies (and *schistaceus* as a separate species), but at the same time also stated that *indus* and *mixtus* are likely to prove synonymous.

Specimens are larger, ears large, and acutely pointed, noseleaf with four supplementary leaflets, posterior portion of noseleaf high and broad. Upper margin of same is semicircular and supported by three septa.

Distribution : Andhra Pradesh (Specimen in Z. S. I.), Karnataka, Madhya Pradesh, Maharashtra, Meghalaya, Manipur (Speciment in Z. S. I.), Orissa (Das et. al. 1993), Tripura, West Bengal.

Elsewhere : Sri Lanka, northern Myanmar (Andersen, 1907).

48. *Hipposideros lankadiva indus* Andersen, 1918

1918. *Hipposideros indus* Andersen, *Ann. Mag. N. H.*, 2 : 382. Gersoppa, kanara, Peninsular India.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17156	M	Skin and Skull,	Gersoppa, Kanara, Karnataka	G. C. Shortridge 19 May, 1912
17157	M	Skin and Skull,	Gersoppa, Kanara, Karnataka	G. C. Shortridge 19 May, 1912
17158	M	Skin and Skull,	Gersoppa, Kanara, Karnataka	G. C. Shortridge 19 May, 1912

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
17156	80.5	44.0	25.0	30.0	17.1
17157	81.0	41.0	24.5	32.2	17.3
17158	80.2	40.0	25.0	30.1	17.2

*Measurements :**Cranial :*

[Skulls of none of the specimens were extracted and hence, cranial measurements of the specimens are not available.]

Distribution : Karnataka.

49. *Hipposideros lankadiva mixtus* Andersen, 1918

1918. *Hipposideros indus mixtus* Andersen, *Ann. Mag. nat. Hist.*, 2 : 382. Kolar, Eastern Mysore, India.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17159	F	Skin and Skull,	Diguvametta, Kurnool, Andhra Pradesh	N. A. Baptista 26 Apr., 1930
17160	M	Skin and Skull,	Palkonda Hills, Kurnool, Andhra Pradesh	N. A. Baptista 09 Jun., 1930
17161	M	Skin and Skull,	Palkonda Hills, Kurnool, Andhra Pradesh	N. A. Baptista 09 Jun., 1930

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
17159	81.5	44.0	24.0	32.9	18.0
17160	87.2	43.0	25.0	33.5	18.3
17161	87.5	46.0	26.0	37.0	18.0

*Measurements :**Cranial :*

[Skulls of the specimens were not cleaned and hence, the cranial measurements of them are not available.]

Distribution : Karnataka, Andhra Pradesh.

50. *Hipposideros lankadiva unius* Andersen, 1918

1918. *Hipposideros indus unius* Andersen, *Ann. Mag. nat. Hist.*, **2** : 382. Mandra. Saugar. Central Provinces, 1,600 ft. India.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17147	F	Skin and Skull	Mundra, Saugar, Madhya Pradesh	C. A. Crump 24 Apr., 1912
9193	M	Skin and Skull,	Khandagiri, Puri, Orissa	F. H. Gravely 08 Nov., 1912
9194	M	Skin and Skull,	Khandagiri, Puri Orissa	F. H. Gravely 08 Nov., 1912
9195	M	Skin and Skull,	Khandagiri, Puri, Orissa	F. H. Gravely 08 Nov., 1912

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
17147	88.2	44.0	27.0	35.2	16.4
9193	87.0	41.8	23.5	33.9	17.0
9194	87.5	41.9	23.8	33.7	17.1
9195	87.3	41.5	23.9	34.4	17.0

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
9194	31.8	26.3	13.3	8.1	9.9	4.0	12.8	18.2	12.7	22.2	14.6
9193	32.0	26.0	13.4	8.5	10.7	3.8	13.1	18.3	12.7	22.5	14.8
9195	31.9	26.1	13.3	8.3	9.9	4.0	12.7	18.3	12.7	22.5	14.7

Distribution : Madhya Pradesh, Orissa.

51. *Hipposideros nicobarensis* (Dobson, 1871)

1871. *Phyllorhina nicobarensis* Dobson, *J. Asiat. Soc. Bengal*, 40, 2 : 262. Nicobar Islands, Bay of Bengal.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
10308	?	Skin and Skull,	Great Nicobar Islands.	C. C. Boning Jan., 1916

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
10308	66.2	—	—	27.7	14.5

Measurements :

Cranial : The skull of the specimen found in a glass tube in damaged condition and measurements could not be taken. Hence, the cranial measurements of the specimen are not available.

Distribution : Nicobar Islands.

52. *Hipposideros schistaceus* Andersen, 1918

1918. *Hipposideros schistaceus* Andersen, *Ann. Mag. nat. Hist.*, 2 : 382. Vijayanagar, Bellary, India.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
16903	M	Skin and Skull,	Vijayanagar, Bellary, Karnataka	G. C. Shortridge 20 Jul., 1912

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
16903	78.7	39.0	25.0	28.8	17.0

*Measurements :**Cranial* : Nil.*Distributuion* : Karnataka.**53. *Hipposideros fulvus pallidus* Andersen**1918. *Hipposideros fulvus pallidus* Andersen, *Ann. Mag. nat. Hist.*, (9) 2 : 381 (Junagadh, Gujarat, India).*Common name* : Bicoloured Leaf-nosed Bat (E.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17771	M	Skin and Skull,	Junagadh, Kathiadar, Gujarat	C. A. Group —
17772	F	Skin and Skull,	Junagarh, Kathiwar, Gujarat	C. A. Group —
17773	M	Skin and Skull,	Junagarh, Kathiwar, Gujarat	C. A. Group —
17774	M	Skin and Skull,	Junagarh, Kathiwar, Gujarat	C. A. Group —
17775	M	Skin and Skull,	Rajkot, Kathiawar, Gujarat	C. A. Group 10 Dec., 1912
17776	F	Skin and Skull, (Damaged)	Rajkot, Kathiawar, Gujarat	C. A. Group 02 Jan., 1913
17777	M	Skin and Skull,	Rajkot, Kathiawar, Gujarat	C. A. Group 02 Jan., 1913
17760	F	Skin and Skull, (Damaged)	Junagadh, Kathiawar, Gujarat	C. A. Group 22 Sep., 1912
17761	M	Skin and Skull,	Junagadh, Kathiawar, Gujarat	C. A. Group 02 Oct., 1912
17762	M	Skin and Skull,	Junagadh, Kathiawar, Gujarat	C. A. Group 02 Oct., 1912

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17763	F	Skin and Skull,	Junagadh, Kathiawar, Gujarat	C. A. Group 02 Oct., 1912
17764	F	Skin and Skull,	Junagadh, Kathiawar, Gujarat	C. A. Group 05 Oct., 1912
17765	F	Skin and Skull,	Junagadh, Kathiawar, Gujarat	C. A. Group 01 Nov., 1912
17766	F	Skin and Skull,	Junagadh, Kathiawar, Gujarat	C. A. Group 02 Nov., 1912
17767	M	Skin and Skull,	Junagadh, Kathiawar, Gujarat	C. A. Group 02 Dec., 1912
17768	F	Skin and Skull,	Junagadh, Kathiawar, Gujarat	C. A. Group 06 Dec., 1912
17769	F	Skin and Skull,	Junagadh, Kathiawar, Gujarat	C. A. Group 02 Jan., 1913
17770	M	Skin and Skull,	Junagadh, Kathiawar, Gujarat	C. A. Group 16 Jan., 1913
17748	F	Skin and Skull,	Junagadh, Kathiawar, Gujarat	C. A. Group 09 Sep., 1912
17749	M	Skin and Skull,	Junagadh, Kathiawar, Gujarat	C. A. Group 19 Sep., 1912
21552	F	Skin and Skull,	Pind Dadun Khan, Salt Range, Pakistan	W. Theobald Jan., (1853-'54)
21553	F	Skin and Skull,	Pind Dadun Khan, Salt Range, Pakistan	W. Theobald Jan., (1853-'54)
21530	F	Skin and Skull,	Luia, Hazaribagh, Bihar	C.A.Crump ...
21501	M	Skin and Skull,	Varanasi, Uttar Pradesh	Shaukat Ali 12 Mar., 1945
21534	M	Skin and Skull,	Allahabad, Uttar Pradesh	John Cockburn ... 1877
21539	M	Skin and Skull,	Allahabad, Uttar Pradesh	John Cockburn ... 1877
21992	F	Skin and Skull,	Laljal, Medinipur, West Bengal	V. C. Agrawal 21 Jan., 1985

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
21993	M	Skin and Skull,	Laljal, Medinipur, West Bengal,	V. C. Agrawal 21 Jan., 1985
21994	F	Skin and Skull,	Laljal, Medinipur, West Bengal	V. C. Agrawal 21 Jan., 1985
21995	F	Skin and Skull,	Laljal, Medinipur, West Bengal	V. C. Agrawal 21 Jan., 1985
20812	M	Skin and Skull,	Mandoor Garden, Jodhpur, Rajasthan	S. S. Saha 20 Feb., 1982
20813	M	Skin and Skull,	Mandoor Garden, Jodhpur, Rajasthan	S. S. Saha 20 Feb., 1982
21532	M	Skin and Skull,	Kuchh, Gujarat	F. Stoliczka ... 1872
21533	M	Skin and Skull,	Kuchh, Gujarat	F. Stoliczka ... 1872
21536	F	Skin and Skull,	Kuchh, Gujarat	F. Stoliczka ... 1872
21538	M	Skin and Skull,	Kuchh, Gujarat	F. Stoliczka ... 1872
21535	?	Skin and Skull,	Travancore, Kerala.	Lt. Col. Beddom ... 1878
7193	F	Skin and Skull,	Shevaroy Hills, Chennai, Tamil Nadu	W. Daly ...
17142	M	Skin and Skull,	Vontimitta Range, Salem, Tamil Nadu	N. A. Baptista 14 Aug., 1930
17134	M	Skin and Skull,	Junagadh, Kathiawar, Gujarat	C. A. Crump 20 Sep., 1912
17135	F	Skin and Skull,	Rajkot, Kathiawar, Gujarat	C. A. Crump 02 Jan., 1913
10654	M	Skin and Skull,	Junagadh, Kathiawar, Gujarat	C. A. Crump 24 Sep., 1912
17139	F	Skin and Skull,	Ghara, Sind, Pakistan	C. Macann 08 Oct., 1922
17140	M	Skin and Skull,	Gholam, Sind, Pakistan	C. Macann 19 Oct., 1922
17137	M	Skin and Skull,	Sukkur, Sind, Pakistan	S. H. Prater 01 Apr., 1915

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17136	F	Skin and Skull,	Sukkur, Sind, Pakistan	S. H. Prater 01 Apr., 1915
17138	F	Skin and Skull,	Chaklala, Punjab, Pakistan	Maj. C. H. Stokle 03 Jul., 1921.
10652	F	Skin and Skull,	Sukkur, Sind, Pakistan	S. H. Prater 02 Apr., 1915
10651	M	Skin and Skull,	Sukkur, Sind, Pakistan	S. H. Prater 01 Apr., 1915
10650	F	Skin and Skull,	Bhaklala, Rawalpindi, Pakistan	C. H. Stockley 03 Feb., 1921
16900	M	Skin and Skull,	Banhar, Darbhanga, Bihar	N. A. Baptista 05 Oct., 1922
17280	M	Skin and Skull,	Nimiaghat, Hazaribagh, Bihar	C. A. Crump 19 Jun., 1914
10638	M	Skin and Skull,	Nimiaghat, Hazaribagh, Bihar	C. A. Crump 02 Jun., 1914
17141	F	Skin and Skull,	Shrigaon, Ratnagiri, Maharashtra	S. H. Prater 21 Dec., 1914
10649	F	Skin and Skull,	Honawar, Konasa, Maharashtra	G. C. Shortridge 02 Jun., 1912
10648	F	Skin and Skull,	Godag, S. Mahratta, Karnataka.	G. C. Shortridge 29 Dec., 1911.
10647	F	Skin and Skull,	Godag, S. Mahratta, Karnataka.	G. C. Shortridge 28 Dec., 1911.
7196	M	Skin and Skull,	Shevaroy Hills, Chennai, Tamil Nadu	W. Daly ...
21497	F	Skin and Skull,	Shirgaon, Ratnagiri, Maharashtra	S. H. Prater ... 1914
21498	M	Skin and Skull,	Shirgaon, Ratnagiri, Maharashtra	S. H. Prater ... Dec., 1914
21499	M	Skin and Skull,	Shirgaon, Ratnagiri, Maharashtra	S. H. Prater ... Dec., 1914.
21500	F	Skin and Skull,	Nasik, Maharashtra	S. H. Prater Sep., 1899.
21528	F	Skin and Skull,	Belgaum, Maharashtra	R. C. Wroughton 01 Nov., 1899

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
21531	M	Skin and Skull,	Belgaum, Maharashtra	R. C. Wroughton 01 Nov., 1899
21544	M	Skin and Skull, (Damaged)	Ratnagiri, Maharashtra	R. C. Wroughton 01 Nov., 1899
21520	M	Skin and Skull,	Punchgani, Satara, Maharashtra	E. Blotter ...
9187	M	Skin and Skull,	Dhauri, Puri, Orissa.	F. H. Gravely 06 Nov., 1912
9188	F	Skin and Skull,	Dhauri, Puri Orissa	F. H. Gravely 06 Nov., 1912
9189	M	Skin and Skull,	Dhauri, Puri, Orissa.	F. H. Gravely 06 Nov., 1912
9190	F	Skin and Skull,	Dhauri, Puri, Orissa	F. H. Gravely 06 Nov., 1912.
17750	M	Skin and Skull,	Jungadh, Kathiawar Gujarat	C. A. Crump 19 Sep., 1912
17751	F	Skin and Skull,	Jungadh, Kathiawar Gujarat	C. A. Crump 19 Sep., 1912
17752	M	Skin and Skull,	Jungadh, Kathiawar Gujarat	C. A. Crump 19 Sep., 1912
17753	F	Skin and Skull,	Jungadh, Kathiawar Gujarat	C. A. Crump 19 Sep., 1912
17754	F	Skin and Skull,	Jungadh, Kathiawar Gujarat	C. A. Crump 20 Sep., 1912
17755	M	Skin and Skull,	Jungadh, Kathiawar Gujarat	C. A. Crump 20 Sep., 1912
17756	F	Skin and Skull,	Jungadh, Kathiawar Gujarat	C. A. Crump 20 Sep., 1912
17757	F	Skin and Skull,	Jungadh, Kathiawar Gujarat	C. A. Crump 20 Sep., 1912
17758	M	Skin and Skull,	Jungadh, Kathiawar Gujarat	C. A. Crump 20 Sep., 1912
17759	M	Skin and Skull,	Jungadh, Kathiawar Gujarat	C. A. Crump 22 Sep., 1912

Measurements :**External :**

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
17771	41.5	—	17.0	18.5	08.5
17772	42.2	—	18.5	20.0	09.3
17773	39.3	—	17.0	18.1	08.2
17774	40.6	—	17.2	18.7	08.5
17775	40.2	—	17.1	18.5	08.5
17776	39.5	—	16.9	18.1	08.3
17777	38.8	—	16.5	17.9	08.1
17760	40.0	—	17.0	19.0	08.1
17761	39.6	—	16.5	18.0	08.5
17762	39.7	—	17.2	18.8	08.3
17763	40.5	—	17.5	19.0	08.8
17764	40.2	—	17.0	18.5	08.9
17765	41.1	—	17.7	19.1	09.0
17766	41.3	—	17.8	19.2	08.7
17767	40.7	—	17.5	18.7	08.5
17768	40.5	—	17.4	18.5	08.5
17769	40.1	—	17.2	18.5	08.3
17770	39.3	—	16.8	18.3	08.5
17748	41.2	—	17.2	19.7	09.1
17749	39.7	—	16.9	19.9	08.7
17750	40.0	—	16.5	19.8	08.6
17751	40.2	—	17.0	19.7	09.5
17752	39.1	—	16.4	19.0	09.3
17753	39.8	—	17.1	18.8	09.1
17754	41.0	—	17.2	20.1	09.3
17755	41.2	—	17.5	20.3	09.7
17756	40.7	—	17.1	19.5	09.1
17757	40.5	—	17.0	18.7	09.0
17758	42.0	—	17.7	20.1	09.5
17759	41.5	—	17.3	19.5	09.3

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
20812	40.5	—	17.7	18.0	08.0
20813	40.2	—	17.8	18.7	08.7
21532	40.4	—	18.0	18.5	07.9
21536	39.3	—	17.2	17.7	09.6
21992	40.8	—	19.9	18.5	09.0
21993	40.5	—	18.7	19.3	08.3
21994	42.8	—	19.2	21.0	10.5
21995	42.0	—	21.2	20.3	09.0
17142	37.5	23.0	19.0	15.7	08.7
17134	42.3	31.0	24.0	20.3	10.0
17135	39.3	26.0	22.0	18.7	10.2
10654	38.5	29.0	22.0	19.4	09.4
17139	38.1	30.0	22.0	17.5	10.0
17140	40.2	27.0	20.0	18.5	10.1
17137	40.4	28.0	22.0	18.6	10.1
17136	38.7	22.0	22.0	17.2	10.2
17138	38.0	25.0	20.0	18.8	10.2
10652	42.7	27.0	22.0	18.7	10.0
10651	39.8	31.0	23.0	19.3	10.3
10650	30.7	25.0	21.0	17.5	11.4
16900	39.1	28.0	22.0	17.2	11.3
17280	40.0	25.0	22.0	17.2	11.5
10638	40.8	28.0	24.0	18.2	11.3
17141	42.3	39.0	24.0	18.3	09.1
10649	41.6	34.0	20.5	18.9	09.4
10648	40.6	33.0	21.5	18.7	10.5
10647	42.4	32.0	21.0	19.0	10.0
21552	42.7	—	24.6	20.0	09.5
21553	40.0	—	22.5	19.3	10.0
21530	40.0	—	19.3	19.3	09.5
21501	40.4	—	18.3	19.7	08.3
21534	40.5	—	19.0	19.7	09.7

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
21539	39.1	—	18.0	17.5	09.0
21497	42.8	28.9	17.1	19.8	10.0
21498	41.0	—	18.1	—	09.3
21499	39.8	28.5	18.4	18.8	09.2
21500	41.3	—	13.0	19.0	09.5
21528	40.4	—	15.7	18.1	09.0
21531	38.0	—	16.9	18.8	08.5
21520	39.6	—	18.2	17.7	08.6
9187	39.7	—	19.7	18.6	07.6
9188	40.8	—	17.2	21.2	08.5
9189	40.9	—	18.8	19.8	08.2
9190	39.5	—	18.7	20.4	08.0

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
21499	17.6	14.6	6.3	4.7	5.6	2.7	7.1	—	—	—	—
20813	18.0	14.7	6.4	4.2	6.0	2.6	6.2	9.1	8.2	10.7	6.8
17751	17.7	15.0	6.7	4.6	5.8	2.6	6.0	9.2	8.8	—	—
17763	18.6	14.2	6.3	3.8	5.3	3.0	6.5	9.7	8.2	11.3	7.0
17766	18.5	14.7	6.5	3.9	5.7	3.2	6.5	9.5	8.3	10.9	7.1
17777	18.1	14.2	6.5	4.0	5.1	2.8	6.6	9.3	8.6	11.1	6.7
21995	18.3	14.5	6.2	3.9	5.8	2.8	6.3	9.5	9.0	11.1	6.5
21501	16.9	14.8	6.0	3.7	6.3	2.9	6.1	8.8	8.0	—	—
21553	18.0	15.2	7.0	3.5	6.0	2.8	6.4	9.2	8.8	—	—

Remarks : Ellerman & Morrison-Scott (1951) considered *Hipposideros fulvus* Gray, 1838, as a subspecies of *Hipposideros bicolor* (Temminck, 1834). Hill (1963 a), in his review of the genus *Hipposideros*, has treated *fulvus* and *bicolor* as distinct species.

Distribution : Gujarat, Bihar, Karnataka, Maharashtra, Madhya Pradesh, Orissa, Tamil Nadu, Uttar Pradesh, Rajasthan, West Bengal.

Elsewhere : Pakistan (Wroughton, 1920), Afghanistan (Gaisler, 1970).

54. *Hipposideros pomona gentilis* Andersen

1918. *Hipposideros gentilis* Andersen, *Ann. Mag. nat. Hist.*, (9) 2 : 380, 381 (Thayetmyo, Burma-Thayetmyo, east-central Myanmar).

Common name : Indian Bicoloured Leaf-nosed Bat (Eng.).

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
22323	F	Skin and Skull, (Damaged)	Peshok, Darjeeling, West Bengal	N. A. Baptista Jun.,-Aug., 1915
22324	F	Skin and Skull,	Peshok, Darjeeling, West Bengal	C. A. Crump Jun.,-Aug., 1915
22325	F	Skin and Skull,	Peshok, Darjeeling, West Bengal	C. A. Crump Jun.,-Aug., 1915
22326	F	Skin and Skull,	Peshok, Darjeeling, West Bengal	C. A. Crump Jun.,-Aug., 1915
22327	F	Skin and Skull,	Peshok, Darjeeling, West Bengal	C. A. Crump Jun.,-Aug., 1915
22328	F	Skin and Skull,	Peshok, Darjeeling, West Bengal	C. A. Crump Jun.,-Aug., 1915
22329	M	Skin and Skull,	Narbong, Darjeeling, West Bengal	C. A. Crump 06 Mar., 1915
22310	F	Skin and Skull,	Peshok, Darjeeling, West Bengal	N. A. Baptista Jun.,-Aug., 1915
22314	F	Skin and Skull,	Peshok, Darjeeling, West Bengal	N. A. Baptista Jun.,-Aug., 1915
22311	F	Skin and Skull,	Peshok, Darjeeling, West Bengal	N. A. Baptista Jun.,-Aug., 1915
22315	F	Skin and Skull,	Peshok, Darjeeling, West Bengal	N. A. Baptista Jun.,-Aug., 1915
22316	M	Skin and Skull,	Peshok, Darjeeling, West Bengal	N. A. Baptista Jun.,-Aug., 1915
22317	M	Skin and Skull,	Peshok, Darjeeling, West Bengal	N. A. Baptista Jun.,-Aug., 1915
22318	F	Skin and Skull,	Peshok, Darjeeling, West Bengal	N. A. Baptista Jun.,-Aug., 1915
22319	F	Skin and Skull,	Peshok, Darjeeling, West Bengal	N. A. Baptista Jun.,-Aug., 1915

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
22320	M	Skin and Skull,	Peshok, Darjeeling, West Bengal	N. A. Baptista Jun.,-Aug., 1915
22321	—	Skin and Skull, (Damaged)	Peshok, Darjeeling, West Bengal	N. A. Baptista Jun.,-Aug., 1915
22322	—	Skin and Skull, (Damaged)	Peshok, Darjeeling, West Bengal	N. A. Baptista Jun.,-Aug., 1915
16895	M	Skin and Skull,	Peshok, Darjeeling, West Bengal	N. A. Baptista 26 Jun., 1915
16896	F	Skin and Skull,	Peshok, Darjeeling, West Bengal	N. A. Baptista 29 Jun., 1915
10656	M	Skin and Skull,	Peshok, Darjeeling, West Bengal	N. A. Baptista 17 Jul., 1915
18514	M	Skin and Skull,	Peshok, Darjeeling, West Bengal	N. A. Baptista 24 Jul., 1915
18515	M	Skin and Skull,	Peshok, Darjeeling, West Bengal	N. A. Baptista 24 Jul., 1915
16892	M	Skin and Skull,	Mandalay, Myanmar	G.C Shorridge 02 Jul., 1913
16893	F	Skin and Skull,	Mandalay, Myanmar	G.C Shorridge 02 Jul., 1913
16894	M	Skin and Skull,	Mt. Poppa, Myanmar	G.C Shorridge 08 Sep., 1913
10637	M	Skin and Skull,	Tennasserim Town, Myanmar	G.C Shorridge 20 Mar., 1914
10658	F	Skin and Skull,	Mandalay Myanmar	G.C Shorridge 02 Jul., 1913
10659	M	Skin and Skull,	Mandalay Myanmar	G.C Shorridge 02 Jul., 1913
17282	M	Skin and Skull,	Mergui Tenasserim, Myanmar	C. Primrose 04 Sep., 1921
21545	M	Skin and Skull,	Tsagain, Upper Myanmar	J. Anderson ... 1875
21546	M	Skin and Skull,	Tsagain, Upper Myanmar	J. Anderson ... 1875
10657	M	Skin and Skull,	Cherrapunji, Meghalaya,	H. W. Wells 17 Apr., 1920

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
16897	F	Skin and Skull,	Cherrapunji, Meghalaya,	H. W. Wells 17 Apr., 1920
16898	F	Skin and Skull,	Laitkynsew, Khasi Hills, Meghalaya	H. W. Wells 30 Apr., 1920
21504	F	Skin and Skull,	Sylhet, Assam,	E. B. Baker ... 1872
21505	F	Skin and Skull,	Gouri Sagar Temple, Assam	J. M. Foster ... 1875
21506	M	Skin and Skull,	Gouri Sagar Temple, Assam	J. M. Foster ... 1875
21507	F	Skin and Skull,	Sibsagar, Assam	S. E. Peal ... 1872
21508	F	Skin and Skull,	Cachar, Assam	Ind. Mus. Coll. ... 1868
21509	F	Skin and Skull,	Gouri Sagar Temple, Assam	J. M. Foster ... 1875
21510	M	Skin and Skull,	Nazira, Assam	J. M. Foster ... 1872
21511	M	Skin and Skull,	Sibsagar, Assam	S. E. Peal ... 1872
21503	F	Skin and Skull, (Damaged)	Cherrapunji, Meghalaya,	F. Stoliczka ... 1875

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
21504	40.0	—	18.7	19.8	09.2
21505	41.5	—	18.5	19.8	09.3
21506	39.8	—	17.6	19.5	08.6
21507	40.4	—	16.8	20.0	09.7
21508	42.2	—	16.2	19.5	09.0
21509	40.9	—	19.3	19.8	09.5
21510	41.2	—	16.7	—	09.5

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
21511	40.1	—	16.5	18.7	08.8
20843	41.0	—	17.5	19.1	10.1
10657	40.0	28.0	22.0	17.7	9.9
16897	40.0	28.0	22.0	20.2	8.2
16898	43.0	34.0	24.0	20.4	8.2
16892	40.2	29.5	21.0	18.0	8.3
16893	40.2	30.0	21.5	19.4	9.2
16894	41.0	29.0	21.3	18.5	10.5
10637	39.0	25.0	16.0	17.7	9.7
10658	40.5	31.0	22.0	18.3	10.3
10659	40.5	—	—	17.7	9.7
17282	40.0	26.0	11.0	—	—
21545	41.4	29.2	18.7	19.3	8.9
21546	40.1	29.0	18.5	18.3	8.5
16895	41.0	37.0	25.0	19.4	8.8
16896	40.0	36.0	24.0	19.5	9.3
10656	41.6	32.0	23.0	19.3	10.5
18514	40.3	28.0	22.0	18.2	8.4
18519	40.0	39.4	24.0	18.7	10.6
22319	14.7	20.1	—	—	07.5
22320	41.5	20.4	—	—	08.2
22318	42.4	20.0	—	—	08.2
22317	40.0	—	—	—	—
22316	40.2	—	—	—	—
22314	40.2	20.0	—	—	07.7
22310	42.4	20.2	—	—	07.2
22329	41.0	19.7	—	—	08.1
22328	40.2	19.1	—	—	07.6
22327	41.0	19.5	—	—	07.3
22326	41.8	19.8	—	—	07.2
22325	40.2	20.7	—	—	08.1
22324	40.2	19.0	—	—	08.2

*Measurements :**Cranial :* Nil.

Remarks : Medium sized leaf-nosed bats with large rounded ears. Noseleaf not having lateral supplementary leaflets. Posterior noseleaf supported by three septa.

The specimens from Darjeeling district were reported as *Hipposideros fulvus* (Wroughton, 1916). Following Hill et al. (1986), those were further identified as *Hipposideros pomona gentilis*.

Distribution : Arunachal Pradesh (Hinton & Lindsay 1926), Assam (Hinton & Lindsay 1926), Meghalaya (Hinton & Lindsay 1926), Mizoram, Sikkim (Hill et al. 1986), Uttar Pradesh (Andersen, 1918), West Bengal. Bangladesh, Nepal, Myanmar, Southern Thailand (Lekagul & McNeely 1977) and Northern Malay Peninsula (Hill et al. 1986).

55. *Hipposideros cineraceus cineraceus* Blyth, 1853

1853. *Hipposideros cineraceus* Blyth, *J. Asiat. Soc. Bengal*, 22 : 410. Near Pind Dadan Khan, Salt Range, Punjab.

Common name : Least Leaf-nosed Bat, Blyth's Leaf-nosed Bat (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17285	F	Skin and Skull,	Tirthamalai, Salem, Tamil Nadu	N. A. Baptista 21 Jun., 1929
10826	M	Skin and Skull,	Tirthamalai, Salem, Tamil Nadu	N. A. Baptista 25 Jun., 1929
10827	M	Skin and Skull,	Tirthamalai, Salem, Tamil Nadu	N. A. Baptista 25 Jun., 1929
16899	M	Skin and Skull,	Tiki, Mishmi Hills, Arunachal Pradesh	C. Primrose 14 Jun., 1921
17283	F	Skin and Skull,	Nimbong, Darjeeling, West Bengal	N. A. Baptista 01 Jul., 1916
17284	M	Skin and Skull,	Sangser, Darjeeling, West Bengal	N. A. Baptista 27 Aug., 1916
10645	M	Skin and Skull,	Nimbong, Darjeeling, West Bengal	N. A. Baptista 10 Jul., 1916
10646	F	Skin and Skull,	Sangser, Darjeeling, West Bengal	C. A. Crump 27 Aug., 1916

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
6932	F	Skin and Skull, (Damaged)	Nepal	J. Scully ...
6933	F	Skin and Skull, (Damaged)	Nepal	H. H. Godwin-Austen 22 Oct., 1876
19930	F	Skin and Skull, (Damaged)	Cherrapunji, United- J&K. Hills, Meghalaya	J. Scully 1870
18141	F	Skin and Skull,	Bangnara, Patani, Peni- nsular Siam, Thailand.	C. B. Kloss Oct., 1915
24438	M	Skin and Skull,	Teirei (Dampa), Aizawl, Mizoram,	A. K. Mandal 25 Dec., 1993

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
24438	34.3	27.0	14.5	16.5	5.5
18141	35.1	—	12.0	17.0	5.1
6932	35.1	—	14.7	—	—
10645	36.0	19.0	17.0	14.9	9.5
10646	36.0	30.0	16.0	16.6	8.3
17283	35.1	29.0	17.0	15.8	9.1
17284	34.6	25.0	16.0	16.0	7.4
16899	35.5	30.0	14.0	15.7	8.5
17285	38.2	28.0	19.0	19.0	7.4
10826	35.7	21.0	17.0	16.9	7.3
10827	35.5	22.0	17.0	15.8	7.2

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
18141	16.0	13.5	5.2	3.7	4.9	2.6	5.4	8.0	7.5	8.8	6.1
24438	15.6	12.7	5.2	2.8	4.5	2.5	5.0	7.8	7.4	8.8	7.6

Remarks : Smallest of the genus *Hipposideros*. Externally resembles to *H. pomona gentilis* and *H. fulvus pallidus*, but smaller.

Distribution : Arunachal Pradesh, Assam, Haryana, Meghalaya, Uttar Pradesh, Mizoram, West Bengal. Nepal, Myanmar, Thailand, Pakistan.

56. *Hipposideros armiger armiger* (Hodgson)

1835. *Rhinolophus armiger* Hodgson, *J. Asiat. Soc. Bengal*, 4 : 699, Nepal.

Common name : Great Himalayan Leaf-nosed Bat (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
16907	F	Skin and Skull,	Gopaldhara, Darjeeling, West Bengal	N. A. Baptista 09 May, 1915
16908	M	Skin and Skull,	Gopaldhara, Darjeeling, West Bengal	N. A. Baptista 09 May, 1915
18497	M	Skin and Skull,	Jongsong, Darjeeling, West Bengal	N. A. Baptista 09 May, 1915
18498	F	Skin and Skull,	Jongsong, Darjeeling, West Bengal	N. A. Baptista 12 Jun., 1915
16818	M	Skin and Skull,	Jongsong, Darjeeling, West Bengal	N. A. Baptista 12 Jun., 1915
16828	F	Skin and Skull,	Nimbong, Darjeeling, West Bengal	N. A. Baptista 22 Jun., 1915
16826	F	Skin and Skull,	Peshoke, Darjeeling, West Bengal	N. A. Baptista 04 Aug., 1915
16824	M	Skin and Skull,	Peshoke, Darjeeling, West Bengal	N. A. Baptista 25 Jul., 1915
16822	F	Skin and Skull,	Peshoke, Darjeeling, West Bengal	N. A. Baptista 24 Jul., 1915
16827	F	Skin and Skull,	Peshoke, Darjeeling, West Bengal	N. A. Baptista 05 Sep., 1915
16825	M	Skin and Skull,	Peshoke, Darjeeling, West Bengal	N. A. Baptista 04 Aug., 1915
16820	M	Skin and Skull,	Peshoke, Darjeeling, West Bengal	N. A. Baptista 10 Jul., 1915

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
16909	F	Skin and Skull,	Peshoke, Darjeeling, West Bengal	N. A. Baptista 07 Oct., 1915
16823	M	Skin and Skull,	Peshoke, Darjeeling, West Bengal	N. A. Baptista 24 Jul., 1915
16819	M	Skin and Skull,	Peshoke, Darjeeling, West Bengal	N. A. Baptista 08 Jul., 1915
16821	F	Skin and Skull,	Peshoke, Darjeeling, West Bengal	N. A. Baptista 24 Jul., 1915
16817	F	Skin and Skull,	Jongson, Darjeeling, West Bengal	N. A. Baptista 09 Jun., 1915
16914	M	Skin and Skull,	Bouziri, Nepal	N. A. Baptista 04 Jun., 1921
16915	M	Skin and Skull,	Bouziri, Nepal	N. A. Baptista 05 Jun., 1921
16842	F	Skin and Skull,	Bouziri, Nepal	N. A. Baptista 17 Jun., 1922.
16917	F	Skin and Skull,	Bouziri, Nepal	N. A. Baptista 17 Jun., 1922.
16843	M	Skin and Skull,	Bouziri, Nepal	N. A. Baptista 17 Jun., 1922.
18499	M	Skin and Skull,	Bachek Gorkha, Z.W.N.W. of Nepal	N. A. Baptista 16 May, 1915
16846	F	Skin and Skull,	Bachek Gorkha, Z.W.N.W. of Nepal	N. A. Baptista 14 May, 1915
16847	M	Skin and Skull,	Bachek Gorkha, Z.W.N.W. of Nepal	N. A. Baptista 15 May, 1923
16841	F	Skin and Skull,	Hathiban, Nepal	N. A. Baptista 26 May, 1922
16916	F	Skin and Skull,	Hathiban, Nepal	N. A. Baptista 26 May, 1922
16844	F	Skin and Skull,	Dare Kharka, Apoon, Gorkha, Nepal	N. A. Baptista 10 Apr., 1923
16845	F	Skin and Skull,	Dare Kharka, Apoon, Gorkha, Nepal	N. A. Baptista 10 Apr., 1923

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
16918	M	Skin and Skull,	Sipuri, Nepal	N. A. Baptista 29 Jun., 1922
16848	F	Skin and Skull,	Paunggaung, Northern- shan states, Myanmar.	G. C. Shortridge 02 May, 1913
16904	M	Skin and Skull,	Paunggaung, Northern- shan states, Myanmar.	G. C. Shortridge 02 May, 1913
16906	F	Skin and Skull,	Chin Hills, W. Kendat, Myanmar.	J. M. D. Mackenjee 28 Apr., 1915
18501	F	Skin and Skull,	Paunggaung, Northern- shan states, Myanmar.	G. C. Shortridge 02 May, 1913
16839	F	Skin and Skull,	Shangpung, Jaintia- Hills, Meghalaya	H. W. Wells 12 Aug., 1920
16840	M	Skin and Skull,	Rajaparak, Kumrup. S, Assam,	H. W. Wells 16 Nov., 1920
16913	F	Skin and Skull,	Rajaparak, Kumrup. S, Assam,	H. W. Wells 14 Nov., 1920
16910	M	Skin and Skull,	Durabanda, Garo Hills, Meghalaya,	H. W. Wells 13 Mar., 1920
16831	F	Skin and Skull,	Khonshnong, Jaintia- Hills, Meghalaya,	H. W. Wells 30 Jul., 1920
16832	M	Skin and Skull,	Khonshnong, Jaintia- Hills, Meghalaya,	H. W. Wells 30 Jul., 1920
16833	M	Skin and Skull,	Khonshnong, Jaintia- Hills, Meghalaya,	H. W. Wells 30 Jul., 1920
16834	M	Skin and Skull,	Khonshnong, Jaintia- Hills, Meghalaya,	H. W. Wells 30 Jul., 1920
16835	F	Skin and Skull,	Khonshnong, Jaintia- Hills, Meghalaya,	H. W. Wells 31 Jul., 1920
16836	F	Skin and Skull,	Khonshnong, Jaintia- Hills, Meghalaya,	H. W. Wells 03 Aug., 1920
16837	M	Skin and Skull,	Shangpung, Jaintia- Hills, Meghalaya,	H. W. Wells 08 Aug., 1920
16838	F	Skin and Skull,	Shangpung, Jaintia- Hills, Meghalaya,	H. W. Wells 11 Aug., 1920

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
16830	F	Skin and Skull,	Khonshnong, Jaintia- Hills, Meghalaya,	H. W. Wells 25 Jul., 1920
16911	M	Skin and Skull,	Khonshnong, Jaintia- Hills, Meghalaya,	H. W. Wells 22 Jul., 1920
16912	F	Skin and Skull,	Khonshnong, Jaintia- Hills, Meghalaya,	H. W. Wells 25 Jul., 1920
16905	M	Skin and Skull,	Bageswar, Kumaon, Uttar Pradesh,	C. A. Crump 02 Oct., 1913
16816	M	Skin and Skull,	Bageswar, Kumaon, Uttar Pradesh,	C. A. Crump 05 Oct., 1913
18500	M	Skin and Skull,	Bageswar, Kumaon, Uttar Pradesh,	C. A. Crump 07 Oct., 1913.
23339	M	Skin and Skull,	Nakuri, Uttar Kashi, Uttaranchal	S. Chakraborty 31 May, 1989
23340	M	Skin and Skull,	Nakuri, Uttar Kashi, Uttaranchal	S. Chakraborty 27 May, 1989
23341	M	Skin and Skull,	Nakuri, Uttar Kashi, Uttaranchal	S. Chakraborty 28 May, 1989
23342	F	Skin and Skull,	Nakuri, Uttar Kashi, Uttaranchal	S. Chakraborty 27 May, 1989
8403	M	Skin and Skull,	Soondrijal, Nepal	R. Hodgart Mus. Collector.

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
8403	92.1	58.1	31.1	37.8	18.6
23342	90.0	—	26.8	39.0	17.0
23341	92.0	—	27.5	38.2	17.3
23340	92.0	—	27.5	38.0	17.1
23339	91.0	—	26.0	39.0	16.5
16905	91.8	57.0	32.0	30.1	19.2
16816	67.2	62.0	34.0	39.7	18.0

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
18500	89.6	54.0	32.0	39.4	18.0
16831	86.4	58.0	30.0	35.8	18.3
16832	89.5	55.0	30.0	35.6	18.4
16833	88.0	53.0	30.0	35.6	19.5
16834	88.8	60.0	30.0	38.7	17.5
16835	90.0	52.0	30.0	36.1	16.6
16836	77.6	52.0	30.0	31.8	18.6
16837	90.0	53.0	30.0	37.3	19.0
16838	91.0	59.0	30.0	38.2	19.0
16830	89.2	50.0	30.0	39.2	19.1
16911	86.5	50.0	30.0	30.2	16.2
16912	87.4	48.0	30.0	38.1	19.3
16839	88.0	56.0	28.0	36.6	18.3
16840	88.0	54.0	30.0	37.0	17.7
16910	87.0	60.0	31.0	34.8	18.1
16913	83.0	50.0	33.0	35.0	16.0
16848	91.1	66.0	34.0	39.6	20.0
16904	97.8	64.0	35.0	43.6	20.1
16906	89.5	59.0	31.0	38.3	18.3
18501	91.1	65.0	33.5	40.7	18.2
16914	94.4	60.0	33.0	40.6	20.5
16915	93.9	60.0	32.0	41.1	20.2
16916	90.0	55.0	33.0	39.3	19.2
16917	88.5	59.0	32.0	36.5	19.0
16918	94.3	57.0	33.0	32.5	22.0
16841	91.8	62.0	33.0	40.8	16.3
16842	92.2	60.0	32.0	39.0	18.0
16843	94.4	62.0	32.0	40.0	20.5
16844	90.1	60.0	30.0	37.1	19.0
16845	89.0	55.0	32.0	38.3	18.0
16846	89.7	52.0	31.0	36.7	19.4

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
16847	95.3	60.0	31.0	41.5	20.7
18499	92.1	62.0	31.0	40.5	18.8
16827	93.0	53.0	30.0	38.8	19.3
16826	92.2	58.0	31.0	38.5	18.0
16825	99.1	66.0	32.0	43.2	21.5
16824	92.8	55.0	32.0	39.7	21.2
16823	91.9	53.0	33.0	40.4	20.2
16820	92.4	56.0	33.0	38.4	19.0
16819	98.0	63.0	32.0	43.2	20.2
16822	91.8	51.0	32.0	39.9	20.7
16821	90.0	57.0	30.0	37.2	18.5
16817	91.6	60.0	32.0	39.7	19.5
16909	85.5	58.0	34.0	37.8	16.5
16907	91.2	57.0	33.0	40.8	17.7
16908	94.8	56.0	34.0	31.6	19.2
18497	95.3	57.0	33.0	42.0	18.1
18498	92.1	63.0	31.0	40.6	19.7
16818	93.0	61.0	32.0	42.0	18.6
16828	94.8	55.0	32.0	41.0	17.1

Measurements :**Cranial :**

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
8403	31.8	26.8	11.1	8.0	11.4	4.8	12.7	17.9	14.8	—	—

Remarks : Largest Leaf-nosed bat with large ears, broad and acutely pointed, posterior margins concave behind tip. Noseleaf with four supplementary leaflets. Upper edge of posterior noseleaf flattened, thickened and trilobate. Frontal sac prominent in males and small in females.

Distribution : Assam, Uttar Pradesh, Sikkim, Meghalaya, Uttaranchal, Manipur, West Bengal.

Elsewhere : Nepal, Myanmar, Thailand (Lekagul & McNeely 1977).

57. *Hipposideros lylei* Thomas, 1913

1913. *Hipposideros lylei* Thomas, Ann. Mag. Nat. Hist., Ser. 8, 12 : 88. Thailand, 50 mi. (80km) N Chiangmai, Chiangdao Cave.

Common Name : Nil.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
16889	M	Skin and Skull,	Pauguang, N. Shan States, Myanmar	G. C. Shortridge 02 May, 1913
16890	F	Skin and Skull,	Pauguang, N. Shan States, Myanmar	G. C. Shortridge 02 May, 1913
16891	M	Skin and Skull,	Pauguang, N. Shan States, Myanmar	G. C. Shortridge 02 May, 1913
10669	F	Skin and Skull,	Pauguang, N. Shan States, Myanmar	G. C. Shortridge 02 May, 1913
10670	F	Skin and Skull,	Pauguang, N. Shan States, Myanmar	G. C. Shortridge 02 May, 1913
10671	F	Skin and Skull,	Pauguang, N. Shan States, Myanmar	G. C. Shortridge 02 May, 1913

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
16889	76.4	50.0	28.0	35.4	19.5
16890	78.5	52.0	28.0	34.5	19.2
16891	75.3	52.0	29.0	35.0	19.0
10669	75.9	49.0	29.0	36.2	18.4
10670	76.7	55.0	28.0	33.3	18.3
10671	76.8	50.5	28.0	32.7	19.8

Measurements :

Cranial : Nil.

Remarks : Nil.

Distribution : Myanmar, Thailand, W. Malaysia.

58. *Hipposideros ater* Templeton, 18481848. *Hipposideros ater* Templeton, *J. Asiat. Soc. Bengal*, 17 : 252. Western Prov., Colombo, Sri Lanka.*Common name* : Dusky Leaf-nosed Bat (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17281	F	Skin and Skull,	Cumbum, Madura, Tamil Nadu	S. H. Prater 31 May, 1917
17278	F	Skin and Skull,	Valaichenai, E. Province, Sri Lanka	E. W. Mayor 03 Oct., 1913
17279	M	Skin and Skull,	Trincomalee, E. Province, Sri Lanka	E. W. Mayor 28 May, 1914
21547	F	Skin and Skull, (Damaged)	Konark Temple, Puri, Orissa,	S. S Saha 03 Oct., 1965
21548	F	Skin and Skull, (Damaged)	Konark Temple, Puri, Orissa,	S. S Saha 03 Oct., 1965.
21549	F	Skin and Skull, (Damaged)	Konark Temple, Puri, Orissa,	S. S Saha 03 Oct., 1965
21550	F	Skin and Skull, (Damaged)	Konark Temple, Puri, Orissa,	S. S Saha 03 Oct., 1965
21551	F	Skin and Skull, (Damaged)	Konark Temple, Puri, Orissa,	S. S Saha 03 Oct., 1965
20507	F(S.ad)	Skin and Skull,	Trincomalle, E.Province, Sri Lanka	E. W. Mayor 28 May, 1914
20508	F(S.ad)	Skin and Skull,	Trincomalle, E. Province, Sri Lanka	E. W. Mayor 28 May, 1914
20509	F	Skin and Skull,	Trincomalle, E. Prov., Sri Lanka	E. W. Mayor 28 May, 1914
20510	F	Skin and Skull,	Trincomalle, E. Prov., Sri Lanka	E. W. Mayor 28 May, 1914
20511	F	Skin and Skull,	Trincomalle, E. Prov., Sri Lanka	E. W. Mayor 28 May, 1914
20512	M	Skin and Skull,	Trincomalle, E. Prov., Sri Lanka	E. W. Mayor 28 May, 1914
20521	M	Skin and Skull,	Anuradhapura, North- Cent.Prov., Sri Lanka	E. W. Mayor 02 Jun., 1914

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20520	F	Skin and Skull,	Ratnagiri, Maharashtra.	S. H. Prater ... Dec., 1914
20513	F	Skin and Skull,	Kambam, Madurai, Tamil Nadu	S. H. Prater ... Dec., 1914
20514	F	Skin and Skull,	Kambam, Madurai, Tamil Nadu	S. H. Prater ... May, 1917
20515	M (S.ad.)	Skin and Skull,	Kambam, Madurai, Tamil Nadu	S. H. Prater ... May, 1917
20516	F	Skin and Skull,	Kambam, Madurai, Tamil Nadu	S. H. Prater ... May, 1917
20517	M	Skin and Skull,	Kambam, Madurai, Tamil Nadu	S. H. Prater ... May, 1917
20518	M	Skin and Skull,	Kambam, Madurai, Tamil Nadu	S. H. Prater ... May, 1917
20519	M	Skin and Skull,	Kambam, Madurai, Tamil Nadu	S. H. Prater ... May, 1917
20522	M	Skin and Skull,	Cochin, Ernakulam, Kerala	D : A. Madhavan ... Sep., 1980
19931	M	Skin and Skull,	Cochin, Ernakulam, Kerala	Lt. Col. Beddom ... 1878

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
17281	35.5	26.0	19.0	15.1	9.2
17278	36.0	22.0	18.5	13.5	8.0
17279	34.9	21.0	18.5	15.4	8.3
20509	37.9	—	15.7	18.2	8.2
20510	37.3	—	15.2	17.2	7.2
20511	36.3	—	15.0	16.2	7.7
20512	35.8	—	15.5	16.5	7.3
20521	36.2	—	—	16.7	8.0

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
20520	36.7	—	—	16.2	7.7
20513	34.9	—	—	16.7	7.3
20514	36.0	—	15.4	16.4	8.0
20516	35.6	—	12.8	15.8	7.7
20517	36.3	—	15.7	16.3	7.5
20518	36.5	—	15.4	16.7	8.0
20519	36.2	—	15.0	15.8	7.5
20522	33.8	—	14.6	14.4	6.8
19931	35.0	—	13.1	15.8	5.4

Measurements :

Cranial : Nil.

Remarks : Nil.

Distribution : Karnataka, Maharashtra, Tamil Nadu, Orissa, Kerala, Andaman and Nicobar Islands.

Elsewhere : Sri Lanka, Vietnam, Malaysia, Indonesia.

59. *Hipposideros ater nicobarulae* Miller, 1902

1902. *Hipposideros nicobarulae* Miller, *Proc. U. S. Nat. Mus.*, **24** : 781. Little Nicobar Island, Bay of Bengal.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19005	F	Skin and Skull,	Nicobar Island	J. Weed-Mason ... 1873
19006	F (S.ad)	Skin and Skull,	Nicobar Island	J. Weed-Mason ... 1873
19008	F (S.ad)	Skin and Skull,	Nicobar Island	J. Weed-Mason ... 1873
19009	F (S.ad)	Skin and Skull,	Nicobar Island	J. Weed-Mason ... 1873
8951	F	Skin and Skull,	Nancowry, Harbur, Nicobars	C. B. Rogers ...

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
8952	F	Skin and Skull,	Nancowry, Harbur, Nicobars	C. B. Rogers ...
8953	M	Skin and Skull,	Nancowry, Harbur, Nicobars	C. B. Rogers ...
20545	F	Skin and Skull,	Teetop, Car Nicobar, Nicobar Islands	A. K. Mukherjee 26 Feb., 1972
20546	M	Skin and Skull,	Teetop, Car Nicobar, Nicobar Islands	A. K. Mukherjee 26 Feb., 1972
20547	M	Skin and Skull,	Teetop, Car Nicobar, Nicobar Islands	A. K. Mukherjee 26 Feb., 1972
20548	M	Skin and Skull,	Teetop, Car Nicobar, Nicobar Islands	A. K. Mukherjee 26 Feb., 1972
20549	F	Skin and Skull,	Teetop, Car Nicobar, Nicobar Islands	A. K. Mukherjee 26 Feb., 1972
20550	M	Skin and Skull,	Kamorta Island, Nicobar Islands	K. K. Tiwari 24 Mar., 1977
19000	F	Skin and Skull,	Nicobar Island	J. Weed-Mason ... 1873
19001	F	Skin and Skull,	Nicobar Island	J. Weed-Mason ... 1873
19002	F	Skin and Skull,	Nicobar Island	J. Weed-Mason ... 1873
19003	F	Skin and Skull,	Nicobar Island	J. Weed-Mason ... 1873
19004	F	Skin and Skull,	Nicobar Island	J. Weed-Mason ... 1873
20534	M	Skin and Skull,	Teetop, Car Nicobar, Nicobar Islands.	A. K. Mukherjee 26 Feb., 1972
20535	M	Skin and Skull,	Teetop, Car Nicobar, Nicobar Islands.	A. K. Mukherjee 26 Feb., 1972
20536	M	Skin and Skull,	Teetop, Car Nicobar, Nicobar Islands.	A. K. Mukherjee 26 Feb., 1972
20537	F	Skin and Skull,	Teetop, Car Nicobar, Nicobar Islands.	A. K. Mukherjee 26 Feb., 1972

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20538	F	Skin and Skull,	Teetop, Car Nicobar, Nicobar Islands.	A. K. Mukherjee 26 Feb., 1972
20539	M	Skin and Skull,	Teetop, Car Nicobar, Nicobar Islands.	A. K. Mukherjee 26 Feb., 1972
20540	F	Skin and Skull,	Teetop, Car Nicobar, Nicobar Islands.	A. K. Mukherjee 26 Feb., 1972
20541	F	Skin and Skull,	Teetop, Car Nicobar, Nicobar Islands.	A. K. Mukherjee 26 Feb., 1972
20542	F	Skin and Skull,	Teetop, Car Nicobar, Nicobar Islands.	A. K. Mukherjee 26 Feb., 1972
20543	M	Skin and Skull,	Teetop, Car Nicobar, Nicobar Islands.	A. K. Mukherjee 26 Feb., 1972
20544	M	Skin and Skull,	Teetop, Car Nicobar, Nicobar Islands.	A. K. Mukherjee 26 Feb., 1972
20523	F	Skin and Skull,	Teetop, Car Nicobar, Nicobar Islands.	A. K. Mukherjee 26 Feb., 1972
20524	F	Skin and Skull,	Teetop, Car Nicobar, Nicobar Islands.	A. K. Mukherjee 26 Feb., 1972
20525	M	Skin and Skull,	Teetop, Car Nicobar, Nicobar Islands.,	A. K. Mukherjee 26 Feb., 1972
20526	F	Skin and Skull,	Teetop, Car Nicobar, Nicobar Islands.	A. K. Mukherjee 26 Feb., 1972
20527	M	Skin and Skull,	Teetop, Car Nicobar, Nicobar Islands.	A. K. Mukherjee 26 Feb., 1972
20528	M	Skin and Skull,	Teetop, Car Nicobar, Nicobar Islands.	A. K. Mukherjee 26 Feb., 1972
20529	F	Skin and Skull,	Teetop, Car Nicobar, Nicobar Islands.	A. K. Mukherjee 26 Feb., 1972
20530	F	Skin and Skull,	Teetop, Car Nicobar, Nicobar Islands.	A. K. Mukherjee 26 Feb., 1972
20531	M	Skin and Skull,	Teetop, Car Nicobar, Nicobar Islands.	A. K. Mukherjee 26 Feb., 1972
20532	F	Skin and Skull,	Teetop, Car Nicobar, Nicobar Islands.	A. K. Mukherjee 26 Feb., 1972
20533	M	Skin and Skull,	Teetop, Car Nicobar, Nicobar Islands.	A. K. Mukherjee 26 Feb., 1972

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
20533	39.1	27.0	17.8	16.9	7.5
20532	39.0	28.1	18.6	16.8	7.7
20531	40.0	25.2	17.0	17.7	7.6
20530	39.8	26.2	18.0	16.8	7.6
20529	40.8	26.7	18.0	17.8	8.2
20528	38.4	24.0	17.5	17.2	6.8
20527	39.5	28.3	17.2	17.8	7.7
20526					
20525	39.7	28.2	16.4	17.7	7.4
20524	39.5	27.5	17.5	18.0	7.9
20523	41.4	30.0	17.4	18.2	7.1
20544	39.2	27.9	18.0	17.1	6.8
20543	39.5	27.8	18.0	17.1	7.2
20542	39.3	26.5	17.1	16.7	7.2
20541	41.1	30.3	17.2	19.1	7.7
20540	39.8	26.0	17.0	17.4	7.3
20539	39.6	25.5	18.0	17.2	6.7
20538	39.1	28.4	18.5	17.8	6.7
20537	40.7	28.7	19.0	18.0	7.2
20536	39.9	27.5	19.6	18.0	7.3
20535	39.2	27.8	17.5	17.4	7.8
20534	38.8	27.1	17.2	16.8	6.7
19004	42.4	—	—	18.5	7.2
19003	41.4	—	16.9	14.0	7.5
19002	42.1	—	16.1	19.0	8.3
19001	42.2	—	15.2	20.5	8.1
19000	41.0	—	15.5	—	7.8
20550	39.0	26.8	15.7	16.2	7.8
20549	40.7	28.5	17.6	17.7	8.2
20548	39.6	25.9	17.9	17.4	6.9
20547	39.5	27.8	17.0	17.0	7.7

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
20546	39.5	—	—	17.2	7.7
20545	40.2	—	18.5	17.0	7.7
8953	34.3	—	—	13.3	7.1
8952	41.2	—	14.7	—	—
8951	40.5	—	13.0	17.6	7.4
19005	41.5	—	15.5	19.5	8.0

Measurements :

Cranial : Not available.

Remarks : Nil.

Distribution : Karnataka, Maharashtra, Tamil Nadu, Andaman and Nicobar Island.

Elsewhere : Indonesia, Malaysia, Phillipines, Sri Lanka, New Guinea, Vietnam.

60. *Hipposideros galeritus brachyotus* (Dobson)

1874. *Phyllorhina brachyota* Dobson, *J. Asiat. Soc. Bengal*, 43, 2 : 237. Central India.

Common name : Cantor's Leaf-nosed Bat (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20551	F	Skin and Skull,	Lingsugur, Raichur, Mysore, Karnataka	D : G. E. Dobson ... 1876
20552	—	Skin and Skull,	Not known	G. C. Shortridge 19 Dec., 1911
20553	F	Skin and Skull,	Kala Oya, N. W. Province, Sri Lanka,	E. W. Mayor 14 May, 1914
20554	F	Skin and Skull, (Damaged)	Kala Oya, N. W. Province, Sri Lanka,	E. W. Mayor 07 Apr., 1914
20555	M	Skin and Skull, (Damaged)	Kala Oya, N. W. Province, Sri Lanka,	E. W. Mayor 07 Apr., 1914
20556	—	Skin and Skull, (Damaged)	Kala Oya, N. W. Province, Sri Lanka,	E. W. Mayor 27 Apr., 1914
20557	M	Skin and Skull,	Kala Oya, N. W. Province, Sri Lanka,	E. W. Mayor 07 Apr., 1914

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
20551	47.0	—	—	20.9	9.8
20553	46.0	—	—	19.1	8.9

*Measurements :**Cranial* : Not available.

Remarks : Medium sized bats having Forearm length about 45 to 48 mm. Ears usually broad with blunt tip. Outer margin of the ear below the tip is concave and inner margin is very convex. Dorsum dark brown. Second upper premolar is distinct from canine.

Distribution : Karnataka, Gujarat (Ryley 1914 c), Bengal (Wroughton 1918 a).

Elsewhere : Sri Lanka.

61. *Hipposideros caffer* (Sundevall, 1846)

1846. *Rhinolophus caffer* Sundevall. *Ofvers. vetensk. Akad. Forh. Stockholm*, 3, 4 : 118. Near Durban, Natal, South Africa.

Common name : South African Lesser Leaf-nosed Bat. (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20145	M	Skin and Skull,	Belinga, North East-Gaban, Netherlands.	P. J. H. Vanbree 07 Jan., 1964
20146	F	Skin and Skull, ~	Belinga, North East-Gaban, Netherlands. (Amsterdam Museum (in exchange)	P. J. H. Van Bree 07 Jan., 1964

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
20145	49.3	—	14.5	20.6	9.0
20146	50.2	—	15.0	20.7	9.5

Measurements :**Cranial :** Not available.**Remarks :** Extra limital.

Distribution : Approximately Morocco and South of the Sahara, from Eritrea and Kenya, and from Gabon district, at least, southwards to South-West Africa, Natal, the Transvaal, and pondoland in Eastern Cape province.

Genus Asellia**62. Asellia tridens (E. Geoffroy, 1813)**

1813. *Rhinolophus tridens* Geoffroy, *Ann. Mus. H. N. paris*, **20** : 265. Egypt.

Common name : Trident Leaf-nosed Bat (E.).**Material available in the National Zoological Collection.**

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
12721	M	Skin and Skull,	Baghdad	Capt. R. Putnum 24 Mar., 1917 Capt. R. Putnum 16 Aug., 1917
12722	M	Skin and Skull,	Baghdad	

Measurements :**External :**

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
12721	54.6	24.3	16.5	19.8	10.2
12722	54.1	—	15.9	20.1	9.9

Measurements :**Cranial :**

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
12721	19.1	16.1	7.1	4.7	6.7	2.6	7.7	10.5	8.2	—	—
12722	18.5	15.5	7.0	4.8	6.7	2.5	7.9	10.5	7.9	12.3	8.7

Remarks : Nil.

Distribution : Approximate distribution of the species : Sind, Arabia, Iraq, palestine, Egypt, Algeria, Morocco, Southern persia.

63. *Aselliscus tricuspidatus* (Temminck)

1941. *Aselliscus* Tate, Amer. Mus. Nov., No. 1140 : 2. *Rhinolophus tricuspidatus* Temminck, from Amboina (Moluccas).

Common name : Nil.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
7112	M	Skin and Skull	Moluccas, Indonesia	By Exch. from Brit. Mus. 28 Nov., 1889
19929	F	Skin and Skull,	Batchain Island, Indonesia	By Exch. from Brit. Mus. ... 1872

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
7112	39.6	21.4	12.3	15.4	7.0
19929	37.2	—	12.5	—	—

Measurements :

Cranial : The species is represented by only two specimens. The specimens are very old and so the skulls were not extracted and the Cranial measurements are not available accordingly.

Remarks : Nil.

Distribution : Indonesia.

64. *Asellia tridens murraiana* (J. Anderson, 1881)

1881. *Phyllorhina tridens* var. *murraiana* Anderson, Cat. Mamm. Ind. Mus., 113. Karachi, Sind, Western India. (Pakistan).

Common name : Nil.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17328	F	Skin and Skull,	Shastun, Dizak, Baluchistan, W. Pak.	J. E. B. Hotson 28 Jul., 1916

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17329	F	Skin and Skull,	Panjgun, Baluchistan, W. Pakistan	J. E. B. Hotson 08 Jun., 1918
17330	M	Skin and Skull,	Panjgun, Baluchistan, W. Pakistan	J. E. B. Hotson 14 Jun., 1918

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
17328	51.9	27.2	12.2	17.8	10.2
17329	53.8	28.0	19.0	19.7	11.2
17330	52.0	27.0	20.0	17.9	10.5

Measurements :

Cranial : Nil.

Remarks : Nil.

Distribution : West Pakistan.

Family MOLOSSIDAE

Genus *Tadarida* Rafinesque, 1814

65. *Tadarida aegyptiaca* (E. Geoffroy, 1818)

1818. *Nyctinomus aegyptiacus* Geoffroy, *Description de l 'Egypte*, 2 : 128, pl. 2, No. 2. Egypt.

Common name : Egyptian Free-tailed Bat (E.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25648	F	Skin and Skull,	Madurai, Tamil Nadu	D : G. Marimuthu 21 Oct., 1978
25649	F	Skin and Skull,	Madurai, Tamil Nadu	D : G. Marimuthu 21 Oct., 1978

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
25648	49.2	45.8	18.2	15.2	11.5
25649	47.7	42.2	18.8	14.5	10.7

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
25649	19.8	17.7	7.3	4.4	7.1	4.7	8.4	11.9	9.8	13.0	7.9

Remarks : The species is represented in the collection by two specimens only. The skull of one of the specimens was not extracted for keeping the external characters undisturbed. Accordingly the cranial measurements of one specimen is available only.

Distribution : Bihar, Gujarat, Maharashtra, Rajasthan, Tamil Nadu.

Elsewhere : Sri Lanka.

66. *Tadarida aegyptiaca thomasi* wroughton, 1919

1919. *Tadarida thomasi* Wroughton, *J. Bombay nat. Hist. Soc.*, **26** : 732 (Bhuj, Kachchh, Gujarat, India).

Common name : Egyptian free tailed Bat, Wrinkle-lipped Bat (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
14455	—	Skin and Skull,	Alwar, Rajasthan,	S. K. Kulshrestha 13 Mar., 1961
14456	F	Skin and Skull,	Alwar, Rajasthan,	S. K. Kulshrestha 13 Mar., 1961
14457	—	Skin and Skull,	Alwar, Rajasthan,	S. K. Kulshrestha 13 Mar., 1961
14458	F	Skin and Skull, (Damaged)	Alwar, Rajasthan,	S. K. Kulshrestha 13 Mar., 1961
15464	M	Skin and Skull,	Rajkot, Gujarat,	C. A. Crump,
15465	F	Skin only,	Mt. Abu, Rajasthan,	C. A. Crump, 06 Jun., 1913
19069	M	Skin and Skull,	Mt. Abu, Rajasthan,	C. A. Crump, 09 Jun., 1913

Measurements :**External :**

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
14455	46.0	40.0	19.5	15.3	9.5
14456	47.3	40.4	18.5	16.2	10.1
14457	47.1	41.5	19.1	14.5	9.7
14458	46.2	41.3	18.2	14.7	9.3
15464	48.0	45.0	19.0	15.8	9.8
15465	47.6	43.0	20.0	16.5	9.8
19069	46.8	39.0	20.0	16.2	10.3

Measurements :**Cranial :**

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
14454	19.0	17.1	7.2	4.7	6.2	4.7	8.5	11.9	10.0	13.0	7.7

Remarks : Ear large and forward projecting. Nostrils surrounded by fleshy ridges. Rear margin of hindfoot and distal portion of each digit fringed with short whitish hairs. Free part of tail fleshy and finely annulated. One specimen from Gujarat (Fauna of Gujarat by Chakraborty & Agrawal, 2000) also to be added which was not traceable in the collection.

Distribution : Bihar, Maharashtra, Gujarat, Rajasthan.

Elsewhere : Sri Lanka.

67. *Tadarida aegyptiaca gossei* Wroughton, 1919

1919. *Tadarida gossei* Wroughton, *J. Bombay nat. Hist. Soc.* **26** : 733. Sassoon Hospital. Pune, Maharashtra, India.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19214	F	Skin and Skull,	Pune, Maharashtra,	Dr. P.H.G. Gasse 13 Mar., 1918
19215	F	Skin and Skull,	Pune, Maharashtra,	Dr. P.H.G. Gasse 13 Mar., 1918

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
19214	46.5	—	—	13.9	9.0
19215	46.1	—	—	13.9	9.2

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
19215	19.4	17.5	7.2	4.3	5.9	4.6	8.0	12.0	9.9	13.2	9.2

Remarks : Nil.*Distribution :* Maharashtra.**68. *Tadarida aegyptiaca tragata* (Dobson)**1874. *Nyctinomus tragatus* Dobson, *J. Asiat. Soc. Bengal*, 43, 2 : 143. Calcutta, India.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
23405	M	Skin and Skull,	Anatpura, Ranthombhor Tiger Reserve, Rajasthan	R. P. Mukherjee 06 May 1991
15462	M	Skin and Skull,	Jaspur, West of Chutia, Nagpur, Maharashtra	W. T. Blanford ... 1871
15463	F	Skin and Skull,	Rajanpur, Punjab- Frontier, Pakistan	W.F.Murray ... 1872

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
15463	50.7	43.5	21.9	16.9	10.3
15462	46.8	43.7	19.9	14.5	10.3
23405	49.0	42.1	20.3	15.0	10.5

Measurements :**Cranial :**

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
23405	19.6	17.4	7.1	4.6	7.1	4.8	8.7	12.2	10.1	13.1	7.9
15462	20.1	18.2	7.3	4.6	6.3	4.7	8.4	12.0	10.1	13.6	10.2
15463	21.0	18.5	7.8	5.1	7.1	5.0	8.8	12.7	10.4	—	—

Remarks : Nil.**Distribution :** Maharashtra, Rajasthan.**Elsewhere :** Pakistan.**69. *Tadarida plicata plicata* (Buchanan, 1800)**1800. *Vespertilio plicatus* Buchanan, *Trans. Linn. Soc. London*, 5 : 261, pl. 13. Bengal, India.**Common name :** Wrinkle-lipped bat (Eng.).**Material available in the National Zoological Collection.**

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19233	F	Skin and Skull,	Tenasserim, Myanmar	G. C. Shortridge M.S.C.No. 10. (M.S.C. = Mammal Survey Collection)
19234	F	Skin and Skull,	Tenasserim, Myanmar.	G. C. Shortridge M.S.C.No. 24
19235	F	Skin and Skull,	Tenasserim, Myanmar.	G. C. Shortridge M.S.C.No. 23.
19236	F	Skin and Skull,	Tenasserim, Myanmar.	G. C. Shortridge M.S.C.No. 6
19237	F	Skin and Skull,	Tenasserim, Myanmar.	G. C. Shortridge M.S.C.No. 4
19238	F	Skin and Skull,	Tenasserim, Myanmar.	G. C. Shortridge M.S.C.No. 3
19239	F	Skin and Skull,	Tenasserim, Myanmar.	G. C. Shortridge M.S.C.No.25
19222	M	Skin and Skull,	Tenasserim, Myanmar.	G. C. Shortridge M.S.C.No.14

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19223	M	Skin and Skull,	Tenasserim, Myanmar.	G. C. Shortridge M.S.C.No. 19
19224	M	Skin and Skull,	Tenasserim, Myanmar.	G. C. Shortridge M.S.C.No. 15
19225	F	Skin and Skull,	Tenasserim, Myanmar.	G. C. Shortridge M.S.C.No. 21
19226	F	Skin and Skull,	Tenasserim, Myanmar.	G. C. Shortridge M.S.C.No. 18
19227	F	Skin and Skull,	Tenasserim, Myanmar.	G. C. Shortridge M.S.C.No. 17.
19228	F	Skin and Skull,	Tenasserim, Myanmar.	G. C. Shortridge M.S.C.No. 13
19229	F	Skin and Skull,	Tenasserim, Myanmar.	G. C. Shortridge M.S.C.No. 12
19230	F	Skin and Skull,	Tenasserim, Myanmar.	G. C. Shortridge M.S.C.No. 22
19231	F	Skin and Skull,	Tenasserim, Myanmar.	G. C. Shortridge M.S.C.No. 9
19232	F	Skin and Skull,	Tenasserim, Myanmar.	G. C. Shortridge M.S.C.No. 11
7597	F	Skin and Skull,	Hpagat, Tenasserim, Myanmar.	A.R.S. Anderson 01 Mar., 1898
7598	F	Skin and Skull,	Hpagat, Tenasserim, Myanmar.	A.R.S. Anderson 01 Mar., 1898
7599	F	Skin and Skull,	Hpagat, Tenasserim, Myanmar.	A.R.S. Anderson 01 Mar., 1898
7600	F	Skin and Skull,	Hpagat, Tenasserim, Myanmar.	A.R.S. Anderson 01 Mar., 1898
7601	F	Skin and Skull,	Hpagat, Tenasserim, Myanmar.	A.R.S. Anderson 01 Mar., 1898
7602	F	Skin and Skull,	Hpagat, Tenasserim, Myanmar.	A.R.S. Anderson 01 Mar., 1898
19216	M	Skin and Skull,	Tenasserim, Myanmar.	G.C. Shortridge M.S.C.No. 16.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19217	M	Skin and Skull,	Tenasserim, Myanmar.	G.C. Shortridge M.S.C.No. 20
19218	M	Skin and Skull,	Tenasserim, Myanmar.	G.C. Shortridge M.S.C.No. 13
19219	M	Skin and Skull,	Tenasserim, Myanmar.	G.C. Shortridge M.S.C.No. 25
19220	M	Skin and Skull,	Tenasserim, Myanmar.	G.C. Shortridge M.S.C.No. 7
19221	M	Skin and Skull,	Tenasserim, Myanmar.	G.C. Shortridge M.S.C.No. 5
25642	—	Skin and Skull,	Varanasi, Uttar Pradesh	S. Mukopati ... Feb., 1975
25643	M	Skin and Skull,	Varanasi, Uttar Pradesh	S. Mukopati ... Feb., 1975
25644	—	Skin and Skull,	Varanasi, Uttar Pradesh	S. Mukopati ... Feb., 1975
25645	—	Skin and Skull,	Varanasi, Uttar Pradesh	S. Mukopati ... Feb., 1975
25646	—	Skin and Skull,	Varanasi, Uttar Pradesh	S. Mukopati Feb., 1975
25647	F	Skin and Skull,	Allahabad, Uttar Pradesh	J. Cookburn ... 1977
22345	F	Skin and Skull,	Kolkata, West Bengal	H. Lal 06 Dec., 1966
25646	F	Skin and Skull,	Kolkata, West Bengal	H. Lal 06 Dec., 1966
22347	M	Skin and Skull,	Kolkata, West Bengal	J. Anderson ...
22348	M	Skin and Skull,	Kolkata, West Bengal,	J. Anderson ...
8997	F	Skin and Skull,	Kolkata, West Begngal,	J. Counter 28 Jul., 1909
9118	F	Skin and Skull,	Damathut, Amherst dist., Myanmar.	F. H. Gravely 02 Dec., 1911

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
9119	F	Skin and Skull,	Damathut, Amherst dist., Myanmar.	F. H. Gravely 02 Dec., 1911
9120	F	Skin and Skull,	Damathut, Amherst dist., Myanmar.	F. H. Gravely 02 Dec., 1911
9121	F	Skin and Skull,	Damathut, Amherst dist., Myanmar.	F. H. Gravely 02 Dec., 1911
9122	F	Skin and Skull,	Damathut, Amherst dist., Myanmar.	F. H. Gravely 02 Dec., 1911
9123	M	Skin and Skull,	Damathut, Amherst dist., Myanmar.	F. H. Gravely 02 Dec., 1911
9124	F	Skin and Skull,	Damathut, Amherst dist., Myanmar.	F. H. Gravely 02 Dec., 1911
19010	?	Skin and Skull,	Nagbt Cave, Yaungwe, Myanmar.	S. L. Hars ... Mar., 1922
19011	?	Skin and Skull,	Nagbt Cave, Yaungwe, S. S. States, Myanmar	S. L. Hars ... Mar., 1922
19012	?	Skin and Skull,	Nagbt Cave, Yaungwe, S. S. States, Myanmar	S. L. Hars ... Mar., 1922
19013	?	Skin and Skull,	Nagbt Cave, Yaungwe, S. S. States, Myanmar.	S. L. Hars ... Mar., 1922
19014	?	Skin and Skull,	Nagbt Cave, Yaungwe, S. S. States, Myanmar,	S. L. Hars ... Mar., 1922
10185	F	Skin and Skull,	Nagbt Cave, Yaungwe, S. S. States, Myanmar,	F. H. Gravely 02 Mar., 1917
10186	M	Skin and Skull,	Nagbt Cave, Yaungwe, S. S. States, Myanmar,	F. H. Gravely 02 Mar., 1917
10191	F	Skin and Skull,	Nagbt Cave, Yaungwe, S. S. States, Myanmar,	F. H. Gravely 02 Mar., 1917
11019	F	Skin and Skull,	Damathut, Amherst- dist., Myanmar,	F. H. Gravely 02 Dec., 1911
11020	F	Skin and Skull,	Damathut, Amherst- dist., Myanmar,	F. H. Gravely 02 Dec., 1911
11021	M	Skin and Skull,	Damathut, Amherst- dist., Myanmar,	F. H. Gravely 02 Dec., 1911

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
11022	F	Skin and Skull,	Damathut, Amherst- dist., Myanmar,	F. H. Gravely 02 Dec., 1911
11023	F	Skin and Skull,	Damathut, Amherst- dist., Myanmar,	F. H. Gravely 02 Dec., 1911
16965	M	Skin and Skull,	Tagoot, Tenasserim- river, L. Myanmar,	G. C. Shortridge 20 Apr., 1914
16966	M	Skin and Skull,	Tagoot, Tenasserim- river, L. Myanmar,	G. C. Shortridge 20 Apr., 1914
16967	M	Skin and Skull,	Tagoot, Tenasserim- river, L. Myanmar,	G. C. Shortridge 20 Apr., 1914
16968	F	Skin and Skull,	Tagoot, Tenasserim- river, L. Myanmar,	G. C. Shortridge 20 Apr., 1914
16969	F	Skin and Skull,	Tagoot, Tenasserim- river, L. Myanmar,	G. C. Shortridge 20 Apr., 1914
16970	F	Skin and Skull,	Tagoot, Tenasserim- river, L. Myanmar,	G. C. Shortridge 20 Apr., 1914
16971	M	Skin and Skull,	Tagoot, Tenasserim- river, L. Myanmar,	G. C. Shortridge 20 Apr., 1914
19070	F	Skin and Skull,	Tagoot, Tenasserim- river, L. Myanmar,	G. C. Shortridge 20 Apr., 1914
19071	M	Skin and Skull,	Tagoot, Tenasserim- river, L. Myanmar,	G. C. Shortridge 20 Apr., 1914
19072	M	Skin and Skull, (Damaged)	Tagoot, Tenasserim- river, L. Myanmar,	G. C. Shortridge 20 Apr., 1914

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
16965	48.9	44.0	21.0	16.5	12.0
16966	48.5	42.0	20.0	15.5	10.7
16967	49.0	42.0	21.0	17.0	11.5
16968	48.5	40.0	20.5	16.3	11.2
16969	47.4	36.0	20.0	14.5	11.3

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
16970	48.9	39.0	21.0	15.4	11.2
16971	48.5	40.0	21.0	16.8	11.7
19070	49.4	43.0	21.0	17.0	11.7
19071	47.9	38.0	20.0	—	—
19233	48.0	39.0	20.1	15.8	11.2
19234	46.8	42.7	18.7	15.9	9.7
19235	47.8	40.7	19.7	15.8	10.1
19236	46.3	38.3+	18.5	15.0	10.0
19237	45.9	38.7+	18.4	14.8	9.9
19238	46.7	38.3+	19.0	14.5	10.3
19239	47.2	39.2	18.7	15.5	10.5
19222	48.0	40.7	19.5	15.5	11.1
19223	47.7	41.7	19.7	15.7	10.8
19224	49.6	40.7	19.8	15.7	10.7
19225	47.2	39.7	18.7	15.9	10.3
19226	46.4	39.8	18.3	15.3	9.9
19227	48.1	40.7	18.5	15.5	10.1
19228	47.2	39.5	18.6	15.5	9.8
19229	46.6	39.2	18.5	15.7	9.7
19230	46.4	41.4	19.7	15.6	10.4
19231	46.5	39.7	18.8	15.6	10.6
19232	46.4	38.0+	18.2	16.1	9.9
7597	47.6	39.7	17.0	16.0	10.7
7598	45.7	38.5	18.0	15.0	9.3
7599	47.0	37.5	17.9	15.5	9.8
7600	47.2	35.2	18.1	16.0	9.6
7601	46.5	38.0	18.0	15.8	10.2
7602	46.5	33.4	18.1	15.6	10.1
19216	46.0	37.1	20.1	15.7	10.4
19217	48.2	42.2	19.4	15.7	9.5
19218	48.3	40.3	19.5	15.6	10.4
19219	48.1	43.5	20.0	16.1	9.7
19220	48.1	43.6	19.7	16.0	10.3

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
19221	48.5	42.7	19.9	16.1	10.0
25642	45.7	40.1	17.9	15.9	13.0
25643	49.3	41.5	18.3	16.6	12.5
25644	48.8	40.8	18.9	16.5	13.1
25645	47.4	40.6	18.2	17.9	11.6
25646	47.6	43.2	18.3	17.1	13.2
25647	47.2	42.2	19.4	16.1	11.2
22345	48.3	36.0+	19.2	16.4	9.1
22346	44.7	39.5	18.5	18.0	10.6
22347	47.5	40.0	19.0	16.5	9.5
22348	44.5	39.3	18.4	17.9	10.2
8997	46.8	36.2	18.7	16.5	10.1
9118	46.2	37.5	16.3	15.9	11.2
9119	48.5	39.1	17.5	16.3	11.5
9120	46.9	36.2+	16.5	16.1	10.7
9121	47.7	40.0	17.1	15.9	10.2
9122	47.7	38.2	17.8	16.4	10.5
9123	48.1	39.2	19.4	16.0	10.2
9124	46.3	38.2	17.2	16.3	11.0
19010	44.4	36.6	—	15.4	10.4
19011	46.3	36.5	—	16.0	10.8
19012	46.7	37.4	—	15.8	10.9
19013	47.7	39.6	—	16.2	10.9
19014	47.5	40.1	—	16.1	10.8
10185	46.0	40.0	16.7	15.7	10.5
10186	49.5	40.1	17.8	16.4	10.7
10191	47.3	39.7	16.5	15.9	10.5
11019	46.2	38.6	16.8	16.7	10.0
11020	47.5	38.5	16.9	16.8	10.5
11021	47.8	39.1	16.9	16.7	10.7
11022	47.3	39.2	17.0	15.9	10.5
11023	47.1	37.5	16.8	16.0	10.4

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
19227	19.0	16.3	6.7	4.4	6.9	4.2	8.0	10.9	9.0	11.3	7.9'
19230	18.5	15.7	6.6	4.4	6.6	4.4	8.1	10.3	9.0	11.6	7.5
19217	19.5	16.8	6.8	4.5	6.6	4.0	8.3	11.2	9.6	12.5	7.9
19218	19.7	16.5	6.9	4.5	6.7	4.1	8.5	11.1	9.5	12.4	7.5
19219	19.8	16.7	6.9	4.9	6.6	4.1	8.3	10.9	9.4	12.6	7.6
19220	19.8	16.8	7.0	5.0	7.0	4.0	8.5	—	9.3	12.5	8.0
25642	19.6	17.0	6.9	4.7	8.6	4.3	8.7	11.6	9.9	—	—
22345	19.5	17.0	6.8	3.9	6.3	4.6	8.8	11.5	9.8	—	—
22346	21.6	18.8	7.6	5.0	7.5	5.0	9.7	12.9	10.9	—	—
8997	20.0	17.5	7.4	4.4	7.0	4.7	9.3	12.0	10.5	—	—
9118	18.4	15.4	6.6	3.9	6.0	4.0	7.9	10.4	9.0	11.6	8.7

Remarks : Medium-sized Bats with broad and thick Muzzle. Upper lip overhanging the lower, marked by pronounced vertical wrinkles. Ears large, thick and rounded, joined in front of orbits by a band of skin. Antitragus well defined, lower part of legs free from wing which is connected with ankle by a raphae.

Distribution : Madhya Pradesh, Meghalaya (Blyth, 1852 a), Punjab (Blyth, 1863), Rajasthan, Tamil Nadu (Jerdon, 1867), Uttar Pradesh (Dobson, 1876).

Elsewhere : Southern China (Honacki et al. 1982), Hong Kong (Romer, 1960), Myanmar, Thailand (Hill & Thonglongya 1972), Vietnam (Honacki et al. 1982), Cambodia (Yoshiyuki 1966, Singapore (Dobson 1878), Sumatra and Borneo.

70. *Tadarida brasiliensis* (I. Geoffroy, 1824)

1824. *Ann. Sci. Nat. Zool.*, **1** : 343. Type locality : Brazil, Parana, Curitiba.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25650	F	Skin and Skull,	Mexico.	G. E. Dobson 1876

Measurements :**External :**

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
25650	42.4	29.0	11.2	14.1	8.0

Measurements :**Cranial :** Nil.

Remarks : The species is represented by a single specimen, the skull of which was not extracted.

Distribution : S. Brazil, Argentina, and Chile to Oregon, S. Nebraska and Ohio (USA); Greater and Lesser Antilles.

71. *Tadarida pumila pumila* Cretzschmar, 1830 vel 1831

1830 vel 1831. *Dysopes pumilus* Cretzschmar, in *Ruppell Atlas, Reise Nordl. Afrika, Saugheth.* 69, pl. 27. Massawa, Eritrea. Ranges to Arabia.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
7160	F	Skin and Skull,	Massawa, Afrika	G. E. Dobson 1876

Measurements :**External :**

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
7160	38.4	32.7	15.5	12.5	8.5

Measurements :

Cranial : The skull was not extracted since the species is represented by a single specimen and accordingly the cranial measurements are not available.

Remarks : Nil.**Distribution :** Africa.

Genus *Otomops* Thomas, 191372. *Otomops wroughtoni* (Thomas, 1913)

1913. *Nyctinomus wroughtoni* Thomas, *J. Bombay nat. Hist. Soc.*, 22 : 87. Barapede Cave, Talewadi, Belgaum dist., Karnataka, India.

Common name : Wroughton's Free-tailed Bat (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
10073 Topotype	M	Skin and Skull,	Talewadi, North-Kanara, Karnataka	S.W.Kemp ...
20497	F	Skin and Skull.	Barapede Cave, Belgaum, Karnataka	D : G. Topal 25 Feb., 1980

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
10073	66.6	42.6	34.0	19.0	14.0
20497	65.5	42.4	33.3	18.2	13.2

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
10073	24.8	22.1	8.9	5.2	8.2	5.3	9.2	13.3	11.3	15.8	9.3
20497	24.2	21.0	8.6	4.7	8.1	5.3	9.2	12.8	11.2	15.0	9.1

Remarks : At present the species, *Otomops wroughtoni* (Thomas) represented in the National Zoological Collection by two (Dry) specimens only and has been included in the schedules of Indian Wildlife protection Act (1972, as ammended up to 2002). As per the IUCN 2000 guidelines the species has been listed under the category of Critically Endangered at global level on the IUCN criteria basis (CAMP Workshop Report, Feb., 2002), vide, Ramakrishna et al. 2003, Status Survey of Endangered species. For the survival of the species full protection has been recommended to *Otomops wroughtoni* (Thomas) by including it in Schedule I (Part I) in the Indian Wildlife Protection Act. This will bring complete ban on collection of the species for any purpose including academic and research purposes.

Distribution : India : Karnataka.

Elsewhere : Malaya States, Sumatra, Java, Borneo, Philippine Islands.

Family VESPERTILIONIDAE

Genus *Myotis* kaup, 1829

73. *Myotis muricola muricola* (Gray)

1846. *Vespertilio muricola* Gray, cat. Hodgson Coll. B. M. 4. Nepal.

Common name : Hodgson's whiskered Bat (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
5347	F	Skin and Skull	Traing, Mergui, S. Myanmar,	J. Anderson 31 Jan., 1882
5348	F	Skin and Skull	Traing, Mergui, S. Myanmar,	J. Anderson 31 Jan., 1882
5350	F	Skin and Skull	Traing, Mergui, S. Myanmar,	J. Anderson 31 Jan., 1882
5351	F	Skin and Skull	Traing, Mergui, S. Myanmar,	J. Anderson 31 Jan., 1882
25641	M	Skin and Skull	Lokra, Batipara, Sonitpur, Assam	S. L. Hora 07 Nov., 1939
5330	M	Skin and Skull	Yumuku, Mergui, S. Myanmar	J. Anderson 24-25 Feb., 1882
5331	F	Skin and Skull	Yumuku, Mergui, S. Myanmar	J. Anderson 24-25 Feb., 1882
5332	F	Skin and Skull	Yumuku, Mergui, S. Myanmar	J. Anderson 24-25 Feb., 1882
5333	M	Skin and Skull	Yumuku, Mergui, S. Myanmar	J. Anderson 24-25 Feb., 1882
5334	M	Skin and Skull	Yumuku, Mergui, S. Myanmar	J. Anderson 24-25 Feb., 1882
5341	M Juv.	Skin and Skull	Traing, Mergui, S. Myanmar	J. Anderson 31 Jan., 1882
5342	F	Skin and Skull	Traing, Mergui, S. Myanmar	J. Anderson 31 Jan., 1882

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
5343	M	Skin and Skull	Traing, Mergui, S. Myanmar	J. Anderson 31 Jan., 1882
5344	F	Skin and Skull	Traing, Mergui, S. Myanmar	J. Anderson 31 Jan., 1882
5345	F	Skin and Skull	Traing, Mergui, S. Myanmar	J. Anderson 31 Jan., 1882
5346	M	Skin and Skull	Traing, Mergui, S. Myanmar	J. Anderson 31 Jan., 1882
5317	F	Skin and Skull	Yumuku, Mergui, S. Myanmar	J. Anderson 24-25 Feb., 1882
5318	F	Skin and Skull	Yumuku, Mergui, S. Myanmar	J. Anderson 24-25 Feb., 1882
5319	F	Skin and Skull	Yumuku, Mergui, S. Myanmar	J. Anderson 24-25 Feb., 1882
5320	F	Skin and Skull	Yumuku, Mergui, S. Myanmar	J. Anderson 24-25 Feb., 1882
5322	F	Skin and Skull	Yumuku, Mergui, S. Myanmar	J. Anderson 24-25 Feb., 1882
5323	F	Skin and Skull	Yumuku, Mergui, S. Myanmar	J. Anderson 24-25 Feb., 1882
5324	F	Skin and Skull	Yumuku, Mergui, S. Myanmar	J. Anderson 24-25 Feb., 1882
5325	M	Skin and Skull	Yumuku, Mergui, S. Myanmar	J. Anderson 24-25 Feb., 1882
5326	M	Skin and Skull	Yumuku, Mergui, S. Myanmar	J. Anderson 24-25 Feb., 1882
5327	F	Skin and Skull	Yumuku, Mergui, S. Myanmar	J. Anderson 24-25 Feb., 1882
5328	F	Skin and Skull	Yumuku, Mergui, S. Myanmar	J. Anderson 24-25 Feb., 1882
25045	F	Skin and Skull	Sairep, Lunglei, Mizoram	T. P. Bhattacharya 14 Jan., 1997
25047	F	Skin and Skull	Sairep, Lunglei, Mizoram	T. P. Bhattacharya 26 Jan., 1997

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25048	M	Skin and Skull	Sairep, Lunglei, Mizoram	T. P. Bhattacharya 16 Apr., 1995
25049	F	Skin and Skull	Sairep, Lunglei, Mizoram	T. P. Bhattacharya 26 Apr., 1995.
25050	F	Skin and Skull	Sairep, Lunglei, Mizoram	T. P. Bhattacharya 26 Apr., 1995
25051	M	Skin and Skull	Sairep, Lunglei, Mizoram	T. P. Bhattacharya 26 Apr., 1995
25052	M	Skin and Skull	Sairep, Lunglei, Mizoram	T. P. Bhattacharya 26 Apr., 1995
17427	M	Skin and Skull (Skull Damaged)	Ross Island, Mergui- Archipelago, Myanmar,	C. Primrose 14 Nov., 1921.

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
17427	34.7	40.0	14.0	16.1	8.4
25052	40.6	40.5	13.3	17.0	7.6
25051	41.7	40.7	13.5	17.1	8.5
25050	40.6	40.1	13.5	16.7	7.6
25049	40.7	39.0	13.2	16.9	7.3
25048	36.6	38.4	11.3	17.8	6.4
25047	37.8	46.7	14.8	17.8	6.0
25045	36.0	42.0	11.0	17.4	6.5
5328	36.7	—	10.2	16.4	8.2
5327	32.5	—	8.1	12.8	7.2
5326	34.5	36.0	9.4	15.8	7.9
5325	34.8	—	9.5	15.2	7.2
5324	36.0	37.1	10.1	16.0	8.5
5323	35.3	36.2	10.0	15.6	7.8
5322	34.7	—	9.7	14.7	7.6
5320	34.9	—	9.9	15.4	7.5

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
5319	33.0	—	9.8	15.7	7.9
5318	35.3	35.7	9.5	15.2	8.1
5317	33.7	—	9.4	15.0	8.4
5346	34.5	—	9.3	15.2	7.9
5345	34.6	—	8.3	15.7	7.7
5344	35.0	—	9.3	16.1	7.0
5343	34.5	—	8.2	15.1	7.0
5342	35.7	37.5	10.5	16.2	8.3
5341	Juv.19.6	—	5.7	8.0	7.0
5334	27.7	—	6.6	11.7	6.7
5333	28.8	—	7.7	12.2	7.2
5332	36.5	—	9.5	16.3	8.8
5331	34.4	33.0	9.1	15.1	8.0
5330	29.5	—	8.0	11.9	7.8
5351	36.1	38.0+	9.1	16.3	8.2
5350	24.0	—	7.1	10.7	7.4
5349	29.4	26.0+	6.4	12.0	7.8
5348	27.3	—	6.3	12.0	7.7
5347	36.2	38.2	8.2	14.6	7.7
25641	34.6	34.0	10.1	15.5	8.9

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
5343	13.4	11.9	5.2	3.7	5.2	3.4	5.9	—	7.0	—	—
5346	14.1	12.2	5.3	3.7	5.6	3.6	5.7	8.7	6.9	10.5	6.0
5318	14.1	12.4	5.2	3.1	5.4	3.7	5.9	—	7.0	—	—
25045	14.2	12.2	5.2	3.1	5.5	3.3	6.0	9.1	7.2	10.6	6.2
25047	14.0	12.3	5.4	3.6	5.5	3.4	6.0	8.7	6.6	—	—
25048	14.2	12.6	5.3	3.6	5.4	3.2	5.8	—	6.3	10.0	6.1
25049	15.8	13.8	6.2	4.5	6.3	4.0	6.9	10.7	7.3	11.0	7.1
25052	15.2	13.7	6.2	4.3	6.0	4.0	6.8	10.9	8.1	11.3	7.2

Remarks : The specimens are very much similar to the specimens belonging to *Myotis mystacinus nipalensis*, but dorsal pelage being darker and more black, ventral pelage being ochraceous brown rather than whitish.

Distribution : Jammu & Kashmir (Hill 1983), Himachal Pradesh, Uttar Pradesh (Hill 1983), Sikkim (Hill 1983).

Elsewhere : Afghanistan (Honaki *et al.* 1982), Pakistan, Nepal, Bhutan, Myanmar.

74. *Myotis mystacinus nipalensis* (Dobson, 1871))

1871. *Vespertilio nipalensis* Dobson, *Proc. Asiat. Soc. Beng.*, : 214 (Kathmandu, Nepal).

Common name : Nepal Bat (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17425	M	Skin and Skull,	Hasimara, Bhutan Duars, W. B.	N. A. Baptista 19 Mar., 1916
17426	F	Skin and Skull,	Hasimara, Bhutan Duars, W. B.	N. A. Baptista 19 Mar., 1916
21061	F	Skin and Skull,	Sikargarh, Tral, Islamabad, J & K	S. Chakraborty 30 Aug., 1974
21062	M	Skin and Skull,	Rambon, Doda, Jammu & Kashmir	S. Chakraborty 05 Nov., 1975
25677	M	Skin and Skull,	Museum Compound, Kolkata, W. B.	... 18 May 1967

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
17425	35.2	34.0	12.0	14.5	10.2
17426	34.7	34.0	12.0	13.7	9.5
21061	37.0	42.0	16.0	17.0	9.3
21062	33.0	34.0	11.0	—	—
25677	39.9	40.6	13.5	18.0	12.0

Measurements :**Cranial :**

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
25677	16.3	12.8	6.0	4.3	6.7	4.2	6.4	10.0	8.1	11.3	6.4

Remarks : Small-sized Bats with ears moderately long, narrow and pointed. Outer margin below tip deeply emerginated tragus long, narrow and pointed with a lobule at base. Individual hairs blackish at base and tipped with silvery white or creamy white. Wing from base of toes.

Ellerman & Morrison-Scott (1951) treated *muricola* (Gray and *nipalensis* (Dobson) as subspecies of *mystacinus*. Corbet (1980) has shown that *muricola* should not be treated as *mystacinus*. Hill (1983) has concluded that the specimens reported from Hasimara by Wroughton (1917a) and from Himachal Pradesh by Lindsay (1926c) as *muricola*, and some specimens from Jammu & Kashmir are also to be treated as *Myotis mystacinus nipalensis*.

Distribution : Himachal Pradesh, Jammu & Kashmir, West Bengal.

Elsewhere : Nepal.

75. *Myotis mystacinus caliginosus* (Tomes, 1859)

1859. *Vespertilio caliginosus* Tomes, P.Z. S. 73. India. (Known from Simla and Sikkim).

Common name : Nil.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17424	F	Skin and Skull,	Chatti, Chamba, Himachal Pradesh	H. W. Wells 04 Dec., 1922
20504	F	Skin and Skull,	Lachen (12080ft.) North Sikkim.	H. C. Ghosh 11 Oct., 1979
12519	F	Skin and Skull,	Chamba, Himachal Pradesh	D. Bagchi ... May 1927
4269	—	(One specimen without any history)		

Measurements :**External :**

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
17424	33.0	34.0	13.0	12.5	8.7
20504	(Damaged)				
12519	(Damaged)				
4269	(No history)				

Measurements :**Cranial :** Nil.**Remarks :** Nil.**Distribution :** Known from Himachal Pradesh and Sikkim.**76. *Myotis montivagus peytoni* Wroughton & Ryley, 1913**

1913. *Myotis peytoni* wroughton & Ryley. *J. Bombay nat. Hist. Soc.*, **22** : 13 (Gersoppa Falls, altitude 1, 300 ft., Kanara, S. India = Gersoppa Falls, 398 m., Uttara Kannada district, Karnataka, southwestern India).

Common name : Nil.**Material available in the National Zoological Collection.**

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17422	F	Skin and Skull,	Jog, Gersoppa, Kanara, Karnataka	G.C. Shortridge 06 May 1912
17423	M	Skin and Skull,	Jog, Gersoppa, Kanara, Karnataka	G.C. Shortridge 10 May 1912
21376	F	Skin and Skull,	Lankapakalu, Vishakhapatnam, Andhra Pradesh	S. S. Saha 14 Mar., 1985
21377	M	Skin and Skull,	Anantagiri, Vishakhapatnam, Andhra Pradesh	S. S. Saha 21 Mar., 1985

Measurements :**External :**

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
17422	45.5	46.0	15.0	16.9	11.5
17423	44.8	44.0	—	18.0	11.7

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
21376	41.9	41.1	15.5	17.6	9.1
21377	42.8	...	...	Damaged	...
25677	39.9	40.6	13.5	18.0	12.0

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
21376	16.9	14.2	6.6	4.8	7.0	4.0	7.4	—	7.5	12.1	7.9
21377	17.6	14.1	6.7	4.7	7.0	4.0	7.3	11.5	8.5	—	—

Remarks : Hill (1962) reported *Myotis montivagus* for the first time from Northern Myanmar, and considered *Myotis peytoni* Wroughton & Ryley, 1913 (from western India) and *Myotis peytoni federatus* Thomas, 1916 (from Malaya) as subspecies of *Myotis montivagus* (Dobson, 1874). The same author treats the population of Myanmar as belonging to the nominate subspecies and the western Indian population to *Myotis montivagus peytoni*. This latter subspecies is distinctly larger than the nominate one (vide measurements given by Hill 1962, Das 1987).

Distribution : Andhra Pradesh and Karnataka.

77. *Myotis siligorensis siligorensis* (Horsfield)

1855. *Vespertilio siligorensis* Horsfield, *Ann. Mag. nat. Hist.*, **16** : 102 (Siligori-Shiliguri, Darjeeling district, West Bengal, India).

Common name : Tarai Bat or Shiliguri Whiskered Bat (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
24256	F	Skin and Skull,	Bakhim, West Sikkim, Sikkim,	S. Chattopadhyay 15 Jun., 1990
21301	F	Skin and Skull,	Yaksam, West Sikkim,	R. K. Ghosh 24 Apr., 1982
21302	M	Skin and Skull,	Manga, Sikkim,	A.G.K. Menon 11 May 1959
6952	M	Skin and Skull,	Kathmandu Valley, Nepal,	J. Scully ... Oct., 1876

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
6953	M	Skin and Skull,	Kathmandu Valley, Nepal	A. G. K. Menon 12 Aug., 1877
6954	F	Skin and Skull,	Kathmandu Valley, Nepal	A. G. K. Menon 30 Jun., 1877
6955	F	Skin and Skull,	Kathmandu Valley, Nepal	A. G. K. Menon 05 Aug., 1876
6956	M	Skin and Skull,	Kathmandu Valley, Nepal	A. G. K. Menon 02 July 1877
6957	M	Skin and Skull,	Kathmandu Valley, Nepal	A. G. K. Menon 05 Sep., 1876
6958	M	Skin and Skull,	Kathmandu Valley, Nepal	A. G. K. Menon 03 Jul., 1877
6959	M	Skin and Skull,	Kathmandu Valley, Nepal	A. G. K. Menon 20 Sep., 1877
25665	F	Skin and Skull,	Bakhim, Sikkim	S. Chattopadhyay 15 Jun., 1990
25666	F	Skin and Skull,	Bakhim, Sikkim	S. Chattopadhyay 15 Jun., 1990
25667	—	Skin and Skull,	Bakhim, Sikkim	S. Chattopadhyay 15 Jun., 1990
25668	—	Skin and Skull,	Bakhim, Sikkim	S. Chattopadhyay 15 Jun., 1990
25654	F	Skin and Skull,	Bakhim, Sikkim	S. Chattopadhyay 15 Jun., 1990
25655	F	Skin and Skull,	Bakhim, Sikkim	S. Chattopadhyay 15 Jun., 1990
25656	—	Skin and Skull,	Bakhim, Sikkim	S. Chattopadhyay 15 Jun., 1990
25657	—	Skin and Skull,	Bakhim, Sikkim	S. Chattopadhyay 15 Jun., 1990
25658	M	Skin and Skull,	Bakhim, Sikkim	S. Chattopadhyay 15 Jun., 1990
25659	F	Skin and Skull,	Bakhim, Sikkim	S. Chattopadhyay 15 Jun., 1990

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25660	F	Skin and Skull,	Bakhim, Sikkim	S. Chattopadhyay 15 Jun., 1990
25661	—	Skin and Skull,	Bakhim, Sikkim	S. Chattopadhyay 15 Jun., 1990
25662	F	Skin and Skull,	Bakhim, Sikkim	S. Chattopadhyay 15 Jun., 1990
25663	—	Skin and Skull,	Bakhim, Sikkim	S. Chattopadhyay 15 Jun., 1990
25664	F	Skin and Skull,	Bakhim, Sikkim	S. Chattopadhyay 15 Jun., 1990

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
24256	37.0	33.0	12.0	—	—
21301	36.7	38.5	13.6	15.5	8.1
21302	35.4	37.9	13.6	15.1	8.4
6952	34.6	39.1	10.8	16.0	8.5
6953	34.0	37.6	11.9	16.5	8.5
6954	36.4	38.0	12.2	16.5	8.7
6955	35.6	38.1	12.3	15.5	8.1
6956	35.9	38.3	13.5	15.4	8.1

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
21301	13.0	11.0	5.1	3.2	4.5	3.1	5.0	7.7	6.4	8.8	6.3
6956	13.4	11.2	5.5	3.5	4.7	3.3	5.4	—	6.8	9.1	6.2

Remarks : The specimens resembles to the subspecies *nipalensis* and partly to *muricola* with slight difference in coloration. Antitragal lobe distinct, ears long, tragus nearly half the length of ear. Wing from base of toes. Tip of tail free.

Distribution : Meghalaya (Hinton & Lindsay 1926a), Sikkim (specimen in Z. S. I.), West Bengal.

Elsewhere : Nepal.

78. *Myotis blythi blythi* (Tomes, 1857)

1857. *Vesperilio blythii* Tomes, P. Z. S., 53. Nasirabad, Rajputana, India. Ranges to Simla, Northern India.

Common name : Lesser Mouse-eared Bat.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20784	—	Skin and Skull, (Damaged)	Mussoorie, Dehra Dun, Uttaranchal,	T. Hutton 1952
21058	M	Skin and Skull, (Skull damaged)	Shar, Khrew, Anantnag, Jammu & K.	S. Chakraborty 03 Sep., 1974
21059	M	Skin and Skull, (Skull damaged)	Shar, Khrew, Anantnag, Jammu & K.	S. Chakraborty 06 Sep., 1974
20216	F	Skin and Skull, (Damaged)	Shar, Khrew, Islamabad, Jammu & K.	S. Chakraborty 04 Sep., 1974
20215	F	Skin and Skull,	Shar, Khrew, Islamabad, Jammu & K.	S. Chakraborty 04 Sep., 1974
25651	F	Skin and Skull,	Baramulla, West of Srinagar, Jammu & K.	C. B. Srivastava 25 May 1979
25671	F	Skin and Skull,	Jammu & Kashmir	M. Prasad ...
17078	M	Skin and Skull,	Shiraz, Iran,	J. E. B. Horson 14 Jun., 1920
17079	F	Skin and Skull,	Shiraz, Iran,	J. E. B. Horson 16 Jun., 1920

Measurements :

External :

Z. S. I. Reg. No.	Fa	T1	E	Tr	Tb	F & Ç1
25671	47.5	—	15.6	7.6	22.5	11.4
25651	39.3	34.7	14.5	—	17.6	9.0
20215	63.0	60.0.	20.0	7.1	27.0	12.8

Z. S. I. Reg. No.	Fa	T1	E	Tr	Tb	F & C1
20216	60.4	...	 Specimen damaged	...	...	...
21059	59.0	53.0	23.0	—	25.0	14.8
21058	59.0	54.0	21.0	—	27.0	15.2
17078	60.3	54.0	20.0	—	26.0	15.2
17079	62.9	60.0	22.0	—	29.5	14.5

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
25671	18.2	15.3	6.5	4.8	7.3	5.0	7.6	—	8.4	—	—
25651	14.4	12.3	6.2	3.5	5.5	3.4	5.9	—	7.0	10.1	7.4
17078	22.5	19.3	9.1	5.8	9.7	5.3	9.5	—	10.0	—	—
17079	22.6	19.3	8.6	5.7	9.5	5.1	9.3	14.3	9.6	—	—

Remarks : The specimens are larger than either *M. mystacinus* or *M. emarginatus*. The Forearm length of the specimens from Indian Territory ranges from 58-63 mm. The muzzle being sharply pointed and the long narrow Tragus extending half the way up the ear.

Distribution : Jammu & Kashmir, Uttaranchal (Specimen in Z. S. I.).

Elsewhere : Afghanistan (Harrison, 1964), Iran (Lay, 1967).

79. *Myotis horsfieldi* (Temminck, 1840)

1840. *Vespertilio horsfieldii* Temminck, *Monogr. Mammal.*, 2 : 226 (Mount Gede, Java).

Common name : Nil.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17428	F	Skin and Skull,	Khonshong, Jaintia- Hills, Meghalaya	H. W. Wells 29 Jul., 1920
25672	F	Skin and Skull,	Java, Berlin Museum	By exchange, Java, Berlin, Museum, 1872

Measurements :**External :**

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
17428	36.0	30.0	15.0	14.8	11.2	–
25672 (Topotype)	37.5	–	12.1	16.2	11.1	5.1

Measurements :**Cranial :**

Z. S. I. Reg. No.	l	cb	mtr	c'–c'	rw	iw	m–m	zw	cw	ml	ltr
25672	15.6	13.0	5.8	4.2	6.0	3.7	6.2	–	7.7	–	–

Remarks : Medium sized bats with long feet. Wing membranes dark-grey and from midway between ankle and outer toe. Hinton & Lindsay (1926) reported the specimen from Meghalaya as *Leuconoe* sp. The specimen is so young and its skull is also badly damaged. The cranial characters and the wing-attachment peculiar to the species is clearly discernible in the specimen.

Distribution : India : Meghalaya.

Elsewhere : Thailand, Malaya, Java, Bali, Borneo, Sulawesi.

80. *Myotis formosus formosus* (Hodgson)

1835. *Vespertilio formosa* Hodgson, *J. Asiat. Soc. Beng.*, 4 : 700. Nepal Range includes Kumaon and Punjab.

Common name : Hodgson's Bat.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
9208	–	Skin and Skull, (Damaged)	Siripur, Saran, Bihar	M. Mackenzie ...
25675	F	Skin and Skull, (Damaged)	Cherrapurji, Jaintia Hills, Meghalaya	H. H. Godwin-Austen ... 1871
25676	F	Skin and Skull,	Goalpara, Assam	H. L. Houghton ... 1870

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25669	F	Skin and Skull, (Damaged)	Poonch, Jammu & Kashmir	B. D. Sharma 01 Jun., 1974
25670	–	Skin and Skull,	Poonch, Jammu & Kashmir	B. D. Sharma 01 Jun., 1974
24467	M	Skin and Skull,	Sairep, Lunglei, Mizoram	T. P. Bhattacharya 17 Apr., 1995
25044	F	Skin and Skull,	Sairep, Lunglei, Mizoram	T. P. Bhattacharya 25 Apr., 1995
24880	F	Skin and Skull,	Drang, 17 Km. N. of Mandi, Himachal Pradesh	S. Chakraborty 01 Jun., 1992

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	T1	E	Tb	Tr	F & Cl
24467	45.8	45.1	14.3	20.7	6.7	9.7
25044	44.4	45.9	14.1	18.9	6.2	8.3
24880	47.9	48.6	15.3	20.9	5.6	11.5

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'–c'	rw	iw	m–m	zw	cw	ml	ltr
24880	18.9	16.5	7.2	5.1	8.0	4.7	7.9	12.1	9.0	13.3	8.1
24467	17.6	14.5	6.6	4.7	6.4	4.3	7.6	11.1	8.6	12.7	7.5
25044	18.0	14.8	7.0	4.9	6.4	3.9	7.3	11.5	8.9	13.1	8.0

Remarks : Larger specimens of the genus *Myotis* having forearm even upto 54.0 mm. Fur thick and woolly, dorsal colour fawn to golden brown. Ventral colour slightly paler. Wing from base of toes.

Distribution : Jammu & Kashmir (Specimen in Z. S. I.), Meghalaya (Dobson, 1879), Himachal Pradesh (Sinha, 1986), Punjab, Uttar Pradesh, Maharashtra (D. Abreu, 1925), Bihar, West Bengal (Jerdon, 1867), Sikkim (Jerdon, 1867), Assam (Blanford, 1891).

Elsewhere : Nepal, Bangladesh (Khan, 1982).

81. *Myotis sicarius* Thomas, 19151915. *Myotis sicarius* Thomas, *J. Bombay nat. Hist. Soc.*, 23 : 608.*Common name* : Nil.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17429	F	Skin and Skull,	Vanss, Pahari, Nepal	N. A. Baptista 20 May 1922

Measurements :*External* :

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
17429	48.5	47.0	19.0	19.0	10.2

Measurements :*Cranial* : Nil.*Distribution* : India : Sikkim, West Bengal.*Elsewhere* : Nepal (Specimen in Z. S. I.).82. *Myotis daubentoni* (Kuhl, 1917)1817. *Vespertilio daubentonii* kuhl, *Die Deutschen Fledermause*. Hanau. p. 14.*Common name* : Daubenton's Bat, water Bat.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
7131	M	Skin and Skull,	Calchester, England,	G. E. Dobson 1890
7219	M	Skin and Skull,	Bushire, Persian Gulf	W. D. Cumming 14 Jun., 1890

Measurements :*External* :

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
7131	34.9	33.1	11.9	4.5	17.1	11.2
7219	36.5	36.3	11.9	4.5	17.6	11.5

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
7131	14.1	12.0	5.0	3.5	5.7	3.9	5.8	-	7.4	10.3	6.0
7219	...		Skull damaged						...	...	...

Remarks : Nil.

Distribution : India : Assam (Corbet & Hill, 1992).

Elsewhere : China, Korea, Vietnam.

83. *Myotis myotis* (Borkhausen, 1797)

1797. *Vespertilio myotis* Borkhausen, *Deutsche Fauna*, 1 : 80. Thuringia, Germany.

Common name : Large Mouse-eared Bat.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20149	M	Skin and Skull, (Damaged)	Maastricht, The Netherlands	W. J. Maan 3-4 Apr., 1939
20150	F	Skin and Skull, (Damaged)	Maria Laach, Nieder- osterriech, Austria	F. Sillmann 25 Aug., 1924
20162	M	Skin and Skull, (Damaged)	Hungary, Europe	D: Hungarian- Museum, ... 1864
20163	F	Skin and Skull, (Damaged)	Hungary, Europe	D: Hungarian- Museum, ... 1864
20164	F	Skin and Skull, (Damaged)	Hungary, Europe	D: Hungarian- Museum,.. 1864

Measurements :

External : Nil.

Measurements :

Cranial : Nil.

Remarks : Nil.

Distribution : Europe.

84. *Myotis peshwa* (Thomas, 1915).

1915. *Leucone peshwa* Thomas, *J. Bombay nat. Hist. Soc.*, **23** : 610 (Poona, Bombay = Pune district, Maharashtra, India).

Common name : Peshwa's Bat.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20485	F	Skin and Skull,	Baliaparathodu, silent Valley, palghat, Kerala	S. S. Saha 28 Jan., 1980

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
20485	38.1	38.2	13.8	5.5	17.6	12.3

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
20485	16.2	13.1	5.9	4.0	5.9	3.9	6.2	—	7.7	11.0	6.4

Remarks : Brosset (1962b) considers *Myotis peshwa* (Thomas) as a distinct species. Hill (1977) has concluded that *Myotis peshwa* is a species more closely related to *Myotis horsfieldi* (Temminck, 1840) than to *Myotis hasseltii* (Temminck, 1840) or to *Myotis adversus*.

Myotis peshwa (Thomas), being one of the rarest Indian bats.

Distribution : Madhya Pradesh (Hill, 1977; Khajuria, 1979), Maharashtra (Brosset, 1962 b), Kerala (Das, P. K. 1986) extends the range of distribution of the species further southwards.

85. *Myotis dasycneme* (Boie, 1825)

1825. *Vespertilio dasycneme* Boie, *Isis, Jena*, 1200. Dagbieg, near wibrog. Jutland, Denmark. Renaming of *mystacinus* Boie, preoccupied.

Common name : Pond Bat.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25674	F	Skin and Skull,	Gallicia, Europe,	By exchange, Berlin Museum, ... 1872

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
25674	46.3	40.1	14.5	5.2	20.5	11.4

Measurements :

Cranial : The species is represented in the collection by a single specimen. The skull was not extracted. Accordingly the cranial measurements are not available.

Remarks : Nil.

Distribution : Approximate distribution of the species : Holland, Belgium, Northern France, Denmark, Sweden, Poland, Russia.

86. *Myotis deignani* Shamel, 1942

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25673	F	Skin and Skull,	Ashoun, Tenasserim, Myanmar	W. T. Blanford 1878.
7079	F	Skin and Skull,	—	?

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
25673	35.8	—	12.2	—	16.4	10.3

Remarks : Nil.

Distribution : Known from Myanmar.

87. *Myotis nattereri* (kuhl, 1818)1818. *Vespertilio nattereri* kuhl, *Ann. Wetterau Ges. Naturk.* 4, 1 : 33. Hanau, Hessen, Germany.

Common name : Natterer's Bat.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25652	M	Skin and Skull,	Mulhouse (France), Berlin Museum by exchange	G. M. Allen ... 1872.
25653	F	Skin and Skull,	Mulhouse (France), Berlin Museum by exchange.	G. M. Allen ... 1872

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
25652	40.0	45.2	17.0	9.3	17.0	12.0
25653	35.4	37.1	11.2	5.5	17.0	11.9

Measurements :

Cranial : Nil.

Distribution : Approximate distribution of the species : Britain, Ireland, France, Switzerland, Spain, Italy, Holland, Denmark, Sweden, Norway, Poland, Germany.

Genus *Vespertilio*88. *Vespertilio murinus murinus* Linnaeus, 17581758. *Vespertilio murinus* Linnaeus, *Syst. Nat.* 10th ed. 1 : 32. Sweden.

Common name : Particoloured Bat.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20188	M	Skin and Skull, (Damaged)	Berlin, Germany	By Exchange, ... 1872

Measurements :

External : Nil. (Specimen is badly damaged)

Remarks : Nil.

Distribution : Approximate distribution of species : Norway, Sweden, Denmark, France, Germany, Czechoslovakia, Poland, Switzerland, Austria, Japan, Mongolia, Kashmir (Gilgit).

Genus *Eptesicus*

89. *Eptesicus serotinus serotinus* (Schreber, 1774)

1774. *Vespertilio serotinus* Scherber, *Saugeth.* 1 : pl. 53 (text, p. 167). France.

Common name : Serotine Bat.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25678	—	Skin and Skull, (Damaged)	France	D : M. Malherbe ... 1852.

Measurements :

External : Nil. (Specimen is badly damaged)

Measurements :

Cranial : Nil. (Skull damaged)

Remarks : These are common serotine bats. The body fur is very long and silky. The dorsal fur is dark brown. The belly fur is shorter and more grey. The ears are naked and long and narrow. There is conspicuous lozenge shaped tragus. The forearm length varies from 49-57 mm. The common serotine as reported undergoes a prolonged period of hibernation in winter (Walker *et al.*, 1964).

Distribution : Himachal Pradesh, Jammu & Kashmir, Rajasthan.

Elsewhere : Eastern Afghanistan (Gaisler, 1970), China, Pakistan, Thailand.

90. *Eptesicus serotinus pachyomus* (Tomes, 1857)

1857. *Scotophilus pachyomus* Tomes, *P. Z. S.* 50. Rajputana, India. Ranges to Kashmir.

Common name : Nil.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
21060	M	Skin and Skull,	Shar, khrew, Anantanag, Jammu & Kashmir	S. Chakraborty 06 Sep., 1974
19326	F	Skin and Skull,	Jammu & Kashmir	F. Stoliczka ...

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19327	F	Skin and Skull,	Jammu & Kashmir	F. Stoliczka ...
19328	M	Skin and Skull,	Jammu & Kashmir	F. Stoliczka ...

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
19328	47.1	—	12.0	—	18.5	13.1
19327	49.2	—	—	—	18.7	13.2
19326	55.8	—	12.5	—	24.2	13.8
21060	58.0	47.0	21.0	5.3	28.0	14.0

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
21060	22.6	19.7	8.1	6.5	10.0	5.8	9.1	14.7	9.8	—	9.5
19326	22.4	20.2	8.3	7.3	9.7	4.8	9.4	15.7	10.1	16.7	9.3

Remarks : Nil.*Distribution :* Jammu & Kashmir, Rajasthan.91. *Eptesicus nilssoni kashgaricus* Bobrinskii, 1926

1926. *Eptesicus nilssoni kashgaricus* Bobrinskii, *C. R. Acad. Sci. U. R. S. S. A.*, 97. Khotan-Tagh, mountains of Russki, near Kashgar, Chinese Turkestan.

Common name : Northern Bat.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19329	?	Skin and Skull,	Kizil, E. Turkestan,	F. Stoliczka 19 Apr., 1874

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
6945	M	Skin and Skull,	Gilgit, (10,500ft.), Kashmir	J. Scully 05 Aug., 1879
6946	M	Skin and Skull,	Gilgit, (11,000 ft.), Kashmir,	J. Scully 07 Aug., 1879

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
19329	—	41.1	11.8	—	20.0	9.5
6945	41.5	42.5	14.0	—	20.2	10.1
6946	40.7	41.5	13.2	5.2	19.5	9.7

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
19329	16.3	14.0	5.5	4.7	7.2	4.5	7.1	—	7.8	—	—
6946	16.3	13.9	5.4	4.7	7.0	4.2	6.8	—	8.3	—	—

Remarks : After examination of specimens from Gilgit, Chakraborty (1983) treated Indian population as *Eptesicus nilssoni kashgaricus* Bobrinskii.

Distribution : Jammu & Kashmir.

Elsewhere : W. and E. Europe to E. Siberia.

92. *Eptesicus serotinus shiraziensis* (Dobson, 1871)

1871. *Vesperus shiraziensis* Dobson, *J. Asiat. Soc. Bengal*, 40, 2 : 459. Shiraz, 4,759 ft., South-western Peusia.

Common name : Common Serotine.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20189	F	Skin and Skull,	Shiraz, South Western Iran.	W. T Elanford ... 1872

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
20189	51.5	—	15.2	5.5	23.3	14.0

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
20189	22.1	19.1	8.2	5.5	9.4	5.2	8.7	13.7	10.1	—	9.0

Remarks : Nil.*Distribution :* Himachal Pradesh, Jammu & Kashmir, Rajasthan.*Elsewhere :* Iran (specimen in Z. S. I.).93. *Eptesicus caucasicus tamerlaini* Bobrinskii

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
6950	F	Skin and Skull, (Damaged)	Gilgit, Kashmir,	J. Scully ... 1879

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
6950	33.5	39.7	12.4	4.5	13.9	8.4

*Measurements :**Cranial :* Nil (Skull damaged).*Remarks :* Nil.*Distribution :* Gilgit (Kashmir).94. *Eptesicus tatei* Ellerman & Morrison-Scott1863. *Nycticejus atratus* Blyth, *Cat. Mammal. Mus. Asiat. Soc. Beng.*, 31 (Dorjilling=Darjiling, Darjiling district, West Bengal, India).

1951. *Eptesicus tatei* Ellerman & Morrison-Scott, new name, preoccupied by *atratus kolenati*, 1858 (= *E. nilssonii*).

Common name : None.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25679	?	Skin and Skull, (Damaged)	Darjiling, West Bengal	D : F. Stoliczka ... 1871

Measurements :

External : Nil. (Specimen damaged).

Measurements :

Cranial : Nil. (Skull damaged).

Remarks : So far, only three specimens of the species have been collected and they all are from Darjiling (Blyth, 1863). The specimen bearing Reg. No. 25679 is one of the three specimens. The other two specimens are syntypes of *Nycticejus atratus*, from Darjiling. Collector is W. S. Sherwill, 1853. They both are female. The external measurements of those two specimens and cranial measurements of one of those are given in the state *Fauna Series 3 : Fauna of West Bengal*, Mammalia : Agrawal, *et al.* 1992.

Distribution : West Bengal (Darjeeling).

Genus *Nyctalus*

95. *Nyctalus leisleri* (Kuhl, 1818)

1818. *Vespertilio leisleri* kuhl, *Ann. Wetterau ges. Naturk.* 4, 1: 16. Hanau, Hessen-Nassau. Germany.

Common name : Lesser Noctule, Hairy-armed bat.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25682	?	Skin and Skull, (Damaged)	England	D: H. E. Sterickland ... 1846.

Measurements :

External : Nil. (Specimen damaged).

Measurements :

Cranial : Nil.

Remarks : Nil.

Distribution : Jammu & Kashmir, Punjab.

Elsewhere : Pakistan, W. Europe, N. Africa, Madeira and Canory Island.

96. *Nyctalus noctula labiatus* (Hodgson, 1835)

1835. *Vespertilio labiata* Hodgson, *J. Asiat. Soc. Beng.*, 4 : 700 (Nepal).

Common name : Noctule (E.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25681	F	Skin and Skull,	Sangser, Darjeeling, West Bengal,	N. A. Baptista 23 Aug., 1916
25680	M	Skin and Skull,	Darjeeling, West Bengal,	F. Stoliczka ... 1871
6944 (Toptype)	F	Skin and Skull,	Nepal,	J. Scully ...
17780	M	Skin and Skull, (Damaged)	Myanmar,	?
17781	M	Skin and Skull, (Damaged)	Myanmar,	? ?

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
6944	53.5	42.8	14.3	5.1	19.9	11.2
25680	54.2	46.5	16.0	6.5	21.4	11.7
25681	52.0	49.0	16.0	—	21.0	11.5

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
25681	17.7	16.0	6.9	6.4	8.2	5.0	8.6	12.3	9.5	13.1	7.6

Remarks : Tip of ears broadly rounded. Outer margin in front of tragus forms thickened convex lobe. Tragus short and curved towards tip with a small triangular projection at the base. Wing from ankle. Dorsal fur bright yellowish brown, ventral fur slightly paler.

Distribution : Himachal Pradesh (Lindsay 1926 c), Jammu & Kashmir (Sharma & Sharma 1976), Nagaland (Mills 1923), Sikkim (Blanford 1881), West Bengal.

Elsewhere : Pakistan (Roberts 1977), Nepal, Myanmar, Singapore (Dobson 1878).

97. *Nyctalus noctula noctula* (Schreber, 1774)

1774. *Vespertilis noctula* Schreber, *Saugeth.*, I : pl. 52 (text, p. 166). France.

Common name : Common noctule (E.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25683	?	Skin and Skull, (Damaged)	England	D : A. D. Bartlett ... 1844
25684	?	Skin and Skull, (Damaged)	England	D : A. D. Bartlett ... 1842
25685	?	Skin and Skull, (Damaged)	England	D : H. E. Strickland ... 1845
20153	M	Skin and Skull,	Amsterdam, The Netherlands.	G. Kruseman 25 Jul., 1935
20154	F	Skin and Skull,	Amsterdam, The Netherlands.	G. Kruseman 25 Jul., 1935
20161	F	Skin and Skull,	Gallicia, Europe	D : Berlin Museum' ...

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
20513	50.4	47.2	18.0	5.7	17.5	11.4
20154	51.0	49.7	19.5	5.7	18.3	11.5
20161	56.2	50.1	19.7	5.9	19.6	13.4

Measurements :**Cranial :**

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
20154	19.2	17.5	7.1	6.6	8.6	5.5	8.7	—	10.1	13.9	8.1

Remarks : Nil.

Distribution : Himachal pradesh, Jammu & Kashmir (specimen in British Museum), Nagaland, Sikkim, Uttar Pradesh, West Bengal.

Elsewhere : China, Iran, Myanmar, Nepal, Pakistan, Thailand, Vietnam.

Genus *Pipistrellus* Kaup. 1829

98. *Pipistrellus mimus mimus* Wroughton, 1899

1899. *Pipistrellus minus* Wroughton, *J. Bombay nat. Hist. Soc.*, 12 : 722. Mheskatri. Dangs, (Surat district) = Dangs district, Gujarat, India.

Common name : Indian pigmy pipistrelle.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19434	F	Skin and Skull,	Forest Office, Kanchanpur, Tripura	V. C. Agrawal 16 Feb., 1971
19431	M	Skin and Skull,	F. R. H., Kanchanpur, Tripura	V. C. Agrawal 19 Feb., 1971
19433	M	Skin and Skull,	F. R. H., Kanchanpur, Tripura	V. C. Agarwal 19 Feb., 1971
19432	F	Skin and Skull,	F. R. H., Kanchanpur, Tripura	V. C. Agrawal 19 Feb., 1971
19430	F	Skin and Skull,	F. R. H., Kanchanpur, Tripura	V. C. Agrawal 18 Feb., 1971
19429	M	Skin and Skull,	F. R. H., Kanchanpur, Tripura	V. C. Agrawal 18 Feb., 1971
23881	M	Skin and Skull,	Rangjoli, 60 km.S. of Guahati, Goalpara,	M. Ghosh 15 Apr., 1992
9211	F	Skin and Skull,	Kawapli, Mangaldoi, Darrang, Assam.	S. W. Kemp ...

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
9169	F	Skin and Skull,	Kobo, alt. 400 ft., Assam,	S. W. Kemp 13 Nov., 1911
21690	F	Skin and Skull,	Chilkigarh, Medini- Pur, West Bengal,	P. K. Das 09 Sept 1984
21692	M	Skin and Skull,	Chilkigarh, Medini- Pur, West Bengal,	P. K. Das 09 Sept 1984
21693	F	Skin and Skull,	Chilkigarh, Medini- Pur, West Bengal,	P. K. Das 09 Sept 1984
21691	F	Skin and Skull,	Chilkigarh, Medini- Pur, West Bengal,	P. K. Das 09 Sept 1984
21694	F	Skin and Skull,	Chilkigarh, Medini- Pur, West Bengal,	P. K. Das 09 Sept 1984
21701	F	Skin and Skull,	Balivasa, Medinipur, West Bengal,	P. K. Das 10 Sept 1984
21702	M	Skin and Skull,	Balivasa. Medinipur, West Bengal,	P. K. Das 10 Sept 1984
21699	M	Skin and Skull,	Mangalpushkarini, Medinipur, West Bengal,	P. K. Das 22 Sept 1984
21698	F	Skin and Skull,	Mangalpushkarini, Medinipur, West Bengal,	P. K. Das 21 Sept 1984
21700	M	Skin and Skull,	Mangalpushkarini, Medinipur, West Bengal,	P. K. Das 22 Sept 1984
21703	F	Skin and Skull,	Chandra, Medinipur, West Bengal,	P. K. Das 16 Sept 1984
21985	M	Skin and Skull,	Ranibandh, Bankura, West Bengal,	V. C. Agrawal 13 Jan., 1985
21986	M	Skin and Skull,	Susunia, Bankura, West Bengal,	V. C. Agrawal 06 Jan., 1985
21972	M	Skin and Skull,	Kuilapal, Purulia, West Bengal,	V. C. Agrawal 19 Jan., 1985
21973	M	Skin and Skull,	Kuilapal, Purulia, West Bengal,	V. C. Agrawal 19 Jan., 1985
21974	M	Skin and Skull,	Kuilapal, Purulia, West Bengal,	V. C. Agrawal 19 Jan., 1985

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
21976	F	Skin and Skull,	Kuilapal, Purulia, West Bengal,	V C. Agrawal 19 Jan., 1985
21977	F	Skin and Skull,	Kuilapal, Purulia, West Bengal,	V C. Agrawal 19 Jan., 1985
21978	F	Skin and Skull,	Kuilapal, Purulia, West Bengal,	V. C. Agrawal 19 Jan., 1985
21979	F	Skin and Skull,	Kuilapal, Purulia, West Bengal,	V C. Agrawal 19 Jan., 1985
21980	F	Skin and Skull,	Kuilapal, Purulia, West Bengal,	V C. Agrawal 19 Jan., 1985
21981	F	Skin and Skull,	Kuilapal, Purulia, West Bengal,	V C. Agrawal 19 Jan., 1985
21982	F	Skin and Skull,	Kuilapal, Purulia, West Bengal,	V C. Agrawal 19 Jan., 1985
21983	F	Skin and Skull,	Kuilapal, Purulia, West Bengal,	V. C. Agrawal 19 Jan., 1985
21984	F	Skin and Skull,	Kuilapal, Purulia, West Bengal,	V C. Agrawal 19 Jan., 1985
21689	M	Skin and Skull,	Chandra, Medinipur, West Bengal,	P. K. Das 18 Sep., 1984
21695	F	Skin and Skull,	Dhadika, 4 km. N. of Garbeta, Medinipur. W. B.	P. K. Das 22 Sep., 1984
21696	F	Skin and Skull,	Dhadika, near Garbeta, Medinipur, West Bengal,	P. K. Das 22 Sep., 1984
21697	F	Skin and Skull,	Dhadika, Garbeta, Medinipur, West Bengal,	P. K. Das 22 Sep., 1984
19811	M	Skin and Skull,	Edlabad. Jalgaon, Maharashtra	R. K. Ghose 18 Mar., 1974
19812	M	Skin and Skull,	Edlabad, Jalgaon, Maharashtra	R. K. Ghose 20 Mar., 1974
19813	M	Skin and Skull,	Edlabad, Jalgaon. Maharashtra	R. K. Ghose 18 Mar., 1974
17864	F	Skin and Skull,	Koirā, Chaibasa, Orissa,	C. A. Crump 13 Aug., 1914

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17863	F	Skin and Skull,	Koira, Chaibasa, Orissa,	C. A. Crump 13 Aug., 1914
17851	F	Skin and Skull,	Koira, Chaibasa, Orissa,	C. A. Crump 10 Aug., 1914
17852	M	Skin and Skull,	Koira, Chaibasa, Orissa,	C. A. Crump 11 Aug., 1914
17865	F	Skin and Skull,	Koira, Chaibasa, Orissa,	C. A. Crump 13 Aug., 1914
17853	M	Skin and Skull,	Koira, Chaibasa, Orissa,	C. A. Crump 11 Aug., 1914
17856	M	Skin and Skull,	Koira, Chaibasa, Orissa,	C. A. Crump 12 Aug., 1914
17860	F	Skin and Skull,	Koira, Chaibasa, Orissa,	C. A. Crump 13 Aug., 1914
17855	F	Skin and Skull,	Koira, Chaibasa, Orissa,	C. A. Crump 12 Aug., 1914
17868	F	Skin and Skull,	Koira, Chaibasa, Orissa,	C. A. Crump 13 Aug., 1914
17849	M	Skin and Skull,	Koira, Chaibasa, Orissa,	C. A. Crump 09 Aug., 1914
17857	M	Skin and Skull,	Koira, Chaibasa, Orissa,	C. A. Crump 12 Aug., 1914
17862	F	Skin and Skull,	Koira, Chaibasa, Orissa,	C. A. Crump 13 Aug., 1914
17866	M	Skin and Skull,	Koira, Chaibasa, Orissa,	C. A. Crump 13 Aug., 1914
17854	F	Skin and Skull,	Koira, Chaibasa, Orissa,	C. A. Crump 11 Aug., 1914
17850	M	Skin and Skull,	Koira, Chaibasa, Orissa,	C. A. Crump 09 Aug., 1914
17861	M	Skin and Skull,	Koira, Chaibasa, Orissa,	C. A. Crump 13 Aug., 1914
17858	M	Skin and Skull,	Koira, Chaibasa, Orissa,	C. A. Crump 12 Aug., 1914

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17859	F	Skin and Skull,	Koira, Chaibasa, Orissa,	C. A. Crump 13 Aug., 1914
17867	M	Skin and Skull,	Koira, Chaibasa, Orissa,	C. A. Crump 13 Aug., 1914
17848	F	Skin and Skull,	Koira, Chaibasa, Orissa,	C. A. Crump 28 Jul., 1914
19583	M	Skin and Skull,	Tarasangi, Ganjam, Orissa,	V. C. Agrawal 28 Dec., 1971
16160	M	Skin and Skull,	Lihorang, Nagaur, Rajasthan,	T. G. Vazirani 19 Apr., 1958
16161	F	Skin and Skull,	Lihorang, Nagaur, Rajasthan,	T. G. Vazirani 19 Apr., 1958
16162	F	Skin and Skull,	Lihorang, Nagaur, Rajasthan,	T. G. Vazirani 19 Apr., 1958
16163	M	Skin and Skull,	Lihorang, Nagaur, Rajasthan,	T. G. Vazirani 19 Apr., 1958
16164	M	Skin and Skull,	Lihorang, Nagaur, Rajasthan,	T. G. Vazirani 19 Apr., 1958
16165	M	Skin and Skull,	Nawa, Nagaur, Rajasthan,	T. G. Vazirani 12 Apr., 1952
16166	M	Skin and Skull,	Nawa, Nagaur, Rajasthan,	T. G. Vazirani 12 Apr., 1952
16167	M	Skin and Skull,	Nawa, Nagaur, Rajasthan,	T. G. Vazirani 12 Apr., 1952
16168	M	Skin and Skull,	Nawa, Nagaur, Rajasthan,	T. G. Vazirani 12 Apr., 1952
16155	F	Skin and Skull,	Gudha, Nagpur, Rajasthan,	T. G. Vazirani 23 Apr., 1958
16159	F	Skin and Skull,	Lihorang, Nagpur, Rajasthan,	T. G. Vazirani 19 Apr., 1958
16156	F	Skin and Skull, (Skull damaged)	Gudha, Nagpur, Rajasthan,	T. G. Vazirani 23 Apr., 1958
16157	M	Skin and Skull,	Gudha, Nagpur, Rajasthan,	T. G. Vazirani 23 Apr., 1958

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
16158	F	Skin and Skull.	Sambar Lake, Gudha, Nagaur, Rajasthan,	A. K. Mookherjee 05 Aug., 1958
11386	?	Skin and Skull,	Bhadri-Bainti, Partabgarh, Uttar Pradesh,	Entomologist, U.P. Govt. Jun., 1949
11387	?	Skin only,	Bhadri-Bainti, Partabgarh, Uttar Pradesh,	Entomologist, U.P. Govt. Jun., 1949
18217	M	Skin and Skull,	Shiraz, Persia, Iran,	Museum Collector ... 1871
10294	F	Skin and Skull.	Kolkata, West Bengal,	F. H. Gravely 10 Aug., 1917
10302	F	Skin and Skull,	Kolkata, West Bengal,	F. H. Gravely ... 1916
10934	M	Skin and Skull,	Kolkata, West Bengal,	J. B. Richardson 14 Feb., 1927
10303	M	Skin and Skull.	Kolkata, West Bengal,	F. H. Gravely 04 Mar., 1916
25687	F	Skin and Skull,	Kolkata, West Bengal,	
25686	F	Skin and Skull,	Kolkata, West Bengal,	H. Phillip 24 Mar., 1875
20852	F	Skin and Skull, (Damaged)	Sajnakhali, Sundarbans, West Bengal,	Anil Kr. Mandal 02 Sep., 1982
20853	F	Skin and Skull, (Damaged)	Sajnakhali, Sundarbans, West Bengal,	Anil Kr. Mandal 02 Sep., 1982
20854	F	Skin and Skull, (Damaged)	Sajnakhali, Sundarbans, West Bengal,	Anil Kr. Mandal 02 Sep., 1982
20855	F	Skin and Skull, (Damaged)	Sajnakhali, Sundarbans, West Bengal,	Anil Kr. Mandal 02 Sep., 1982
20856	F	Skin and Skull, (Damaged)	Sajnakhali, Sundarbans, West Bengal,	Anil Kr. Mandal 02 Sep., 1982
20857	M	Skin and Skull, (Damaged)	Sajnakhali, Sundarbans, West Bengal,	Anil Kr. Mandal 02 Sep., 1982
20858	F	Skin and Skull, (Damaged)	Sajnakhali, Sundarbans, West Bengal,	Anil Kr. Mandal 02 Sep., 1982

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20859	M	Skin and Skull, (Damaged)	Sajnakhali, Sundarbans, West Bengal	Anil Kr. Mandal 02 Sep., 1982
20860	M	Skin and Skull, (Damaged)	Sajnakhali, Sundarbans, West Bengal,	Anil Kr. Mandal 02 Sep., 1982
20861	M	Skin and Skull, (Damaged)	Sajnakhali, Sundarbans, West Bengal,	Anil Kr. Mandal 02 Sep., 1982
20879	F	Skin and Skull, (Damaged)	Barisha, 24-Parganas (S), West Bengal,	Anil Kr. Mandal 10 Apr., 1980
23880	M	Skin and Skull,	Barisha, 24-Parganas (S). West Bengal,	Anil Kr. Mandal 05 Dec., 1976
22349	M	Skin and Skull,	Ayodhya Hills, Purulia, West Bengal,	A. K. Mukherjee 25 Feb., 1982
22350	M	Skin and Skull,	Tollygunj, Kolkata, West Bengal,	N. Prasad 20 Feb., 1982
24885	F	Skin and Skull,	Manikaran, N. of Bhuntar. Kullu, Himachal Pradesh,	S. Chakraborty 13 Jun., 1992
24886	M	Skin and Skull,	Bhuntar, Kullu, Himachal Pradesh,	S. Chakraborty 15 Jun., 1992
24721	M	Skin and Skull, (Skull damaged)	Ambasa, North Dist., Tripura,	N. Majumdar 28 Jul., 1991
23401	M	Skin and Skull,	Manikthalao, Ranthambhor Tiger Reserve, Rajasthan	R. P. Mukherjee 05 May 1991
23402	M	Skin and Skull,	Manikthalao, Ranthombhor Tiger Reserve, Rajasthan	R. P. Mukherjee 05 May 1991
23403	F	Skin and Skull,	Ranthombhor Tiger Reserve, Manikthalao, Rajasthan	R. P. Mukherjee 05 May 1991
23404	F	Skin and Skull,	Ranthombhor Tiger Reserve, Manikthalao, Rajasthan	R. P. Mukherjee 05 May 1991
25688	M	Skin only,	Rambha, Ganjam, III-Chilka Lagoon Expedition, Orissa,	S. S. Saha 26 Nov., 1986
25692	M	Skin and Skull, (Skull damaged)	Haldibari, Jalpaiguri, W. Bengal,	C. A. Crump 13 Apr., 1915
25693	F	Skin and Skull, (Skull damaged)	Haldibari, Jalpaiguri, W. Bengal,	C. A. Crump 13 Apr., 1915

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19188	F	Skin and Skull,	Koduru, Balapalli-Range, Cuddapah, Andhra Pradesh	N. A. Baptista 28 Jul., 1929
10828	F	Skin and Skull,	Koduru, Balapalli-Range, Cuddapah, Andhra Pradesh	N. A. Baptista 26 Jul., 1929
17043	F	Skin and Skull,	Koduru, Balapalli-Range, Cuddapah, Andhra Pradesh	N. A. Baptista 28 Jul., 1929
17044	F	Skin and Skull,	Koduru, Balapalli-Range, Cuddapah, Andhra Pradesh	N. A. Baptista 29 Jul., 1929
17046	M	Skin and Skull,	Palkonda Hills, Kurnool, Andhra Pradesh,	N. A. Baptista 22 Jul., 1930
17045	F	Skin and Skull,	Palkonda Hills, Kurnool, Andhra Pradesh,	N. A. Baptista 02 Jul., 1930
17047	F	Skin and Skull,	Palkonda Hills, Kurnool, Andhra Pradesh,	N. A. Baptista 29 Jul., 1930
10831	F	Skin and Skull,	Rajampeta, Cuddapah, Andhra Pradesh,	N. A. Baptista 02 Sep., 1929
17011	M	Skin and Skull,	Lunwa, Palanpur, Gujarat,	C. A. Crump 17 Nov., 1912
17009	F	Skin and Skull,	Bagdu, Junagadh, Kathiawar, Gujarat,	C. A. Crump 17 Nov., 1912
19177	M	Skin and Skull,	Sasan, Junagadh, Kathiawar, Gujarat,	C. A. Crump 04 Nov., 1912
17010	M	Skin and Skull,	Palanpur, Gujarat,	C. A. Crump 05 Apr., 1913
19880	F	Skin and Skull,	Bhattu, Hissar, Haryana,	C. H. Stockley 16 Nov., 1923
16973	M	Skin and Skull,	Ramnagar, Kumaon, Uttar Pradesh,	C. A. Crump 01 Dec., 1913
19877	M	Skin and Skull,	Bhattu, Hissar, Haryana,	C. H. Stockley 16 Nov., 1923
17037	F	Skin and Skull,	Bhattu, Hissar, Haryana,	C. H. Stockley 16 Nov., 1923
17013	M	Skin and Skull,	Jerna, Ramnagar, Kumaon, Uttar Pradesh,	C.A. Crump 19 Jan., 1914

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17038	F	Skin and Skull,	Bhattu, Hissar, Haryana,	C. H. Stockley 16 Nov., 1923
17012	F	Skin and Skull,	Ramnagar, Kumaon, Uttar Pradesh	C. A. Crump 01 Dec., 1913
17208	F	Skin and Skull,	Singar, Gaya, Bihar,	C. A. Crump 25 May 1914
17035	M	Skin and Skull,	Bahgownie, Darbhanga, Bihar,	N. A. Baptista 27 Aug., 1922
17020	M	Skin and Skull,	Koira, Chaibasa, Bihar & Orissa,	C. A. Crump 11 Aug., 1914
17021	F	Skin and Skull,	Koira, Chaibasa, Bihar & Orissa,	C. A. Crump 12 Aug., 1914
19180	M	Skin and Skull,	Luai, Chaibasa, Bihar	C. A. Crump 28 Jul., 1914
19878	F	Skin and Skull,	Koira, Chaibasa, Sundargarh, Orissa,	C. A. Crump 11 Aug., 1914
16975	F	Skin and Skull,	Singar, Gaya, Bihar,	C. A. Crump 21 May 1914
17018	F	Skin and Skull,	Koira, Chaibasa, Bihar & Orissa,	C. A. Crump 08 Aug., 1914
17017	F	Skin and Skull,	Luia, Chaibasa, Bihar	C. A. Crump 28 Jul., 1914
17533	F	Skin and Skull,	Koira, Chaibasa, Bihar	C. A. Crump 12 Aug., 1914
19181	F	Skin and Skull,	Koira, Chaibasa, Bihar	C. A. Crump 12 Aug., 1914
16974	M	Skin and Skull,	Gujhundi, Hazaribagh, Bihar & Orissa,	C. A. Crump 11 May 1914
17019	M	Skin and Skull,	Koira, Chaibasa, Bihar & Orissa,	C. A. Crump 08 Aug., 1914
16976	M	Skin and Skull,	Singar, Gaya, Bihar,	C. A. Crump 22 May 1914
17016	M	Skin and Skull,	Singar, Gaya, Bihar,	C. A. Crump 26 May 1914

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17039	M	Skin and Skull,	Mirpur, Sakro, Sind, Pakistan,	C. Mccann 13 Oct., 1927
17036	F	Skin and Skull,	Mirpur, Sakro, Sind, Pakistan,	C. Mccann 13 Oct., 1922
16991	F	Skin and Skull,	Kallar, Kahar, Salt- Range, Pakistan,	H. W. Wells 20 Apr., 1923
19179	M	Skin and Skull,	Hambantola, S. Province, Sri Lanka,	E. W. Mayor 20 Jun., 1913
16992	F	Skin and Skull,	Chakri, Salt-Range, Pakistan,	H. W. Wells 08 Mar., 1923
19178	F	Skin and Skull,	Ranna, S. Province, Sri Lanka,	E. W. Mayor 23 May 1913
16972	F	Skin and Skull,	Hambantola, S. Prov., Sri Lanka,	E. W. Mayor 11 Jun., 1913
16979	M	Skin and Skull,	Hasimara, Bhutan Duars, West Bengal,	N. A. Baptista 02 Nov., 1915
16982	M	Skin and Skull,	Hasimara, Bhutan Duars, West Bengal,	N. A. Baptista 03 Nov., 1915
16980	F	Skin and Skull,	Hasimara, Bhutan Duars, West Bengal,	N. A. Baptista 26 Oct., 1915
16977	M	Skin and Skull,	Salboni, Medinipur, West Bengal,	C. A. Crump 19 Oct., 1914
17028	F	Skin and Skull,	Hasimara, Bhutan Duars, West Bengal,	N. A. Baptista 10 Nov., 1915
16984	M	Skin and Skull,	Hasimara, Bhutan Duars, West Bengal,	N. A. Baptista 21 Mar., 1916
19182	F	Skin and Skull,	Hasimara, Bhutan Duars, West Bengal,	N. A. Baptista 18 Oct., 1915
16983	M	Skin and Skull,	Hasimara, Bhutan Duars, West Bengal,	N. A. Baptista 10 Nov., 1915
17023	M	Skin and Skull,	Salboni, Medinipur, West Bengal,	C. A. Crump 22 Sep., 1914
17235	M	Skin and Skull,	Hasimara, Bhutan Duars, West Bengal,	N. A. Baptista 15 Jan., 1916

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
16978	F	Skin and Skull,	Salboni, Medinipur West Bengal	C.A. Crump 20 Sep., 1914
10939	M	Skin and Skull,	Kolkata, West Bengal,	F. H. Gravely 20 Nov., 1915
10940	?	Skin and Skull,	Kolkata, West Bengal,	F. H. Gravely 01 Nov., 1915
20846	F	Skin and Skull,	Salt Lake City, Kolkata, West Bengal,	... 30 Mar., 1967
20847	F	Skin and Skull,	Nalbani, Salt Lake, Kolkata, West Bengal,	... 30 Mar., 1967
19881	F	Skin and Skull,	Salboni, Medinipur, West Bengal,	C. A. Crump 20 Sep., 1914
19890	F	Skin and Skull,	Singur, Hooghly, West Bengal,	Dr. Parrack 24 Aug., 1964
17022	M	Skin and Skull,	Salboni, Medinipur, West Bengal,	C. A. Crump 20 Sep., 1914
17024	F	Skin and Skull,	Salboni, Medinipur, West Bengal,	C. A. Crump 22 Sep., 1914
16986	F	Skin and Skull,	Hasimara, Bhutan Duars, West Bengal,	N. A. Baptista 07 Apr., 1916
19183	M	Skin and Skull,	Bharnabhari, Bhutan- Duars, West Bengal,	N. A. Baptista 13 Feb., 1916
17026	M	Skin and Skull,	Hasimara, Bhutan Duars, West Bengal,	N. A. Baptista 02 Nov., 1915
16985	M	Skin and Skull,	Hasimara, Bhutan Duars, West Bengal,	N. A. Baptista 28 Mar., 1916
17025	F	Skin and Skull,	Hasimara, Bhutan Duars, West Bengal,	N. A. Baptista 26 Oct., 1915
17027	F	Skin and Skull,	Hasimara, Bhutan Duars, West Bengal,	N. A. Baptista 10 Nov., 1915
17534	M	Skin and Skull,	Hasimara, Bhutan Duars, West Bengal,	N. A. Baptista 27 Mar., 1916
16981	F	Skin and Skull,	Hasimara, Bhutan Duars, West Bengal,	N. A. Baptista 27 Oct., 1915

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
10830	M	Skin and Skull,	Chettiri Range, Salem, Tamil Nadu,	N. A. Baptista 10 Jun., 1929
10829	F	Skin and Skull,	Chettiri Range, Salem, Tamil Nadu,	N. A. Baptista 10 Jun., 1929
17049	F	Skin and Skull,	Zakampatti, Dharmapuri- Range, N. Salem, T. Nadu,	N. A. Baptista 13 Sep., 1930
17535	M	Skin and Skull,	Zakampatti, Dharmapuri- Range, N. Salem, T. Nadu.	N. A. Baptista 16 Sep., 1930
17040	F	Skin and Skull,	Chettiri Range, Salem, Tamil Nadu,	N. A. Baptista 05 Jun., 1929
17041	M	Skin and Skull,	Chettiri Range, Salem, Tamil Nadu,	N. A. Baptista 05 Jun., 1929
17042	M	Skin and Skull,	Chettiri Range, Salem, Tamil Nadu,	N. A. Baptista 08 Jun., 1929
17029	F	Skin and Skull,	Bum Bum, Madura, Tamil Nadu,	S. H. Prater 30 May 1917
19184	M	Skin and Skull,	Bum Bum, Madura, Tamil Nadu,	S. H. Prater 29 May 1917
19189	M	Skin and Skull,	Derkanikata Range, N. Salem, Tamil Nadu,	N. A. Baptista 23 Oct., 1930
17050	F	Skin and Skull,	Zakampatti, Dharmapuri- Range, N. Salem, T.Nadu,	N. A. Baptista 17 Sep., 1930
17051	F	Skin and Skull,	Dharmapuri Range Salem, T. Nadu,	N. A. Baptista 17 Sep., 1930
19187	M	Skin and Skull,	Kurumbapatti, Salem, Tamil Nadu,	N. A. Baptista 07 May 1929
17048	F	Skin and Skull,	Biligundula, Anchetti- Range, Salem, T. Nadu,	N. A. Baptista 10 Sep., 1930
19879	F	Skin and Skull,	Golaghat, Sibsagar, Assam,	H. W. Wells 01 Jan., 1920
19904	M	Skin and Skull,	Bairia, Patherghatta, Nepal	N. A. Baptista 21 Jan., 1921.
19905	F	Skin and Skull,	Bairia, Patherghatta, Nepal,	N. A. Baptista 19 Jan., 1921

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17032	M	Skin and Skull,	Bairia, Patherghatta, Nepal,	N. A. Baptista 24 Jun., 1921
17052	M	Skin and Skull,	Angara Khota, Kamrup, Assam,	H. W. Wells 22 Dec., 1930
17030	F	Skin and Skull,	Golaghat, Assam,	H. W. Wells 31 Dec., 1919
17033	F	Skin and Skull,	Sadiya, N. E. Frontier, Assam,	H. W. Wells 30 Jun., 1921
17034	M	Skin and Skull,	Sadiya, N. E. Frontier, Assam,	H. W. Wells 30 Jun., 1921
19185	M	Skin and Skull,	Rajapara, S. Kamrup, Assam,	H. W. Wells 15 Nov., 1920
16987	F	Skin and Skull,	Golaghat, Assam,	H. W. Wells 31 Dec., 1919
16989	F	Skin and Skull,	Sadiya, N. E. Frontier, Assam,	H. W. Wells 30 Jun., 1921
16988	F	Skin and Skull,	Bairia, Patherghatta, Nepal,	N. A. Baptista, 20 Jun., 1921
16990	F	Skin and Skull,	Buhnar, Near Darbhanga, Nepal,	N. A. Baptista, 15 Aug., 1922
19186	M	Skin and Skull,	Bairia, Patherghatta, Nepal,	N. A. Baptista, 17 Jan., 1921
17031	M	Skin and Skull,	Bairia, Patherghatta, Nepal,	N. A. Baptista, 19 Jan., 1921
17205	M	Skin and Skull,	Srimangal, Coorg, Karnataka,	G. C. Shortridge 13 Feb., 1913
17202	F	Skin and Skull,	Srimangal, Coorg, Karnataka,	G. C. Shortridge 08 Feb., 1913
17204	F	Skin and Skull,	Srimangal, Coorg, Karnataka,	G. C. Shortridge 13 Feb., 1913
17008	M	Skin and Skull,	Hawbhavi, Dharwar, Karnataka,	G. C. Shortridge 16 Feb., 1912
17203	F	Skin and Skull,	Kitta, Coorg, Karnataka,	G. C. Shortridge 11 Feb., 1913

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17087	F	Skin and Skull,	Srivasa mudram, Karnataka,	G. C. Shortridge 27 Nov., 1912
17200	F	Skin and Skull,	Srimangal, Coorg, Karnataka,	G. C. Shortridge 08 Feb., 1913
17201	F	Skin and Skull,	Srimangal, Coorg, Karnataka,	G. C. Shortridge 08 Feb., 1913
17206	M	Skin and Skull,	Srimangal, Coorg, Karnataka,	G. C. Shortridge 14 Feb., 1913
17088	M	Skin and Skull,	Kitta, Coorg, Karnataka	G. C. Shortridge 11 Feb., 1913

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
25693	28.2	29.0	10.1	—	11.1	7.5
25692	27.9	28.6	9.2	—	11.0	6.8
23404	27.7	27.9	8.1	3.7	11.5	6.3
23403	26.5	27.0	7.5	—	10.7	6.0
23402	26.1	26.2	8.0	3.7	11.5	6.4
23401	29.1	29.4	7.6	4.0	12.2	5.7
24721	23.0	25.4	6.4	—	10.5	5.2
24886	27.8	30.0	7.2	3.5	11.2	6.2
24885	27.5	30.1	6.9	2.3	11.5	6.2
22350	23.0	20.2	7.0	2.5	10.7	5.9
22349	27.0	27.3	—	—	10.7	5.9
25686	27.7	—	8.5	3.6	10.4	4.8
25687	27.2	—	9.8	3.9	—	—
10303	25.2	21.4	9.9	3.7	11.2	5.2
10934	25.0	20.6	9.4	4.1	9.1	6.6
18217	30.2	—	6.2	—	9.2	5.7
11386	27.6	24.4	6.6	—	9.7	6.0
11387	28.0	—	—	—	9.8	6.4

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
16158	27.7	26.1	8.3	—	11.1	6.1
16157	27.5	26.0	8.9	—	10.5	6.0
16156	20.5	—	—	—	9.1	5.5
16155	26.6	27.5	8.1	—	10.6	6.0
16166	28.8	29.3	7.1	2.5	12.1	5.8
16168	24.6	22.4	8.0	2.2	10.5	6.3
16167	25.1	21.0	—	—	9.0	6.2
16165	27.0	26.2	7.2	—	11.4	6.8
16159	28.7	28.0	9.1	2.7	11.1	6.1
16162	27.6	24.3	8.3	2.9	10.9	6.2
16161	25.1	20.1	7.1	—	10.5	6.1
16164	26.8	21.7	8.9	—	10.2	5.5
16160	24.1	—	—	—	10.2	4.9
16163	25.3	21.0	9.1	—	11.0	4.9
19583	28.0	25.0	10.0	—	11.5	5.0
17853	23.6	17.9	—	—	9.9	6.0
17861	22.6	19.2	5.2	—	9.2	5.7
17850	29.3	23.7	7.6	—	11.2	5.9
17854	26.9	22.8	5.2	—	10.7	5.4
17866	26.1	25.0	7.5	—	10.6	5.0
17862	28.3	22.1	9.6	—	11.0	5.4
17857	26.9	22.2	6.1	—	10.5	4.9
17849	28.0	27.1	7.2	—	11.2	6.4
17868	23.2	18.2	6.9	—	8.4	4.9
17855	24.3	19.4	6.4	—	9.0	6.0
17860	26.6	20.7	6.6	—	9.6	4.9
17856	25.0	19.2	6.6	—	10.7	5.4
17853	27.2	—	6.7	—	11.1	5.4
17865	25.7	18.7	6.2	—	7.9	5.9
17852	26.2	24.1	7.0	—	10.5	4.9
17851	27.0	21.2	6.2	—	8.7	4.6

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
17863	24.1	20.5	5.9	—	9.5	5.2
17864	26.1	19.5	6.9	—	10.5	6.1
9169	26.9	—	6.5	—	10.8	5.7
9211	28.3	—	5.2	—	10.3	6.7
23881	29.2	29.8	5.3	—	10.3	5.9
19429	28.0	30.0	10.5	—	—	—
19430	29.0	30.0	10.5	—	12.0	5.7
19432	28.5	31.0	10.0	—	12.0	5.7
19433	28.5	31.0	10.0	—	11.0	6.4
19431	29.0	32.0	10.0	—	12.0	6.0
19434	28.5	30.0	9.0	—	12.0	6.9
21703	26.6	30.0	10.7	5.0	10.2	7.0
21700	26.1	31.1	8.9	4.5	11.8	4.5
21698	32.0	34.2	11.1	4.7	11.8	5.8
21699	30.2	30.5	11.0	3.9	11.5	6.8
21702	27.2	28.0	8.7	5.5	10.5	5.2
21701	28.0	30.0	10.5	5.0	12.0	6.7
21694	27.0	21.0	9.5	—	11.7	6.2
21691	27.7	30.4	11.0	4.5	11.0	6.3
21693	28.0	28.2	11.4	5.4	11.7	7.0
21692	25.8	16.8	8.0	—	9.9	5.7
21690	29.2	31.8	11.5	5.7	12.0	6.3
21981	27.3	25.5	8.2	—	—	—
21986	26.7	25.8	8.1	—	11.0	7.5
21985	27.5	27.0	8.0	—	11.2	7.7
19813	37.2	31.8	11.7	5.4	15.8	6.6
19812	26.6	29.4	11.1	4.1	12.5	5.0
19811	27.0	31.4	11.1	—	11.7	6.5
21697	28.9	32.0	8.7	4.5	11.7	6.0
21696	29.5	32.0	11.2	4.5	11.7	5.2
21695	30.7	35.0	10.5	5.1	12.4	6.7

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
21689	25.8	25.7	10.3	5.1	10.7	6.6
21984	28.2	27.5	8.5	—	11.5	6.5
21983	27.2	26.1	8.4	—	11.2	6.5
21982	27.0	26.2	8.3	—	11.1	6.4
25688	28.1	28.5	7.5	3.1	11.4	5.3
10830	27.6	32.0	11.0	—	10.7	6.3
10829	27.5	33.0	11.0	—	9.6	6.2
17049	28.2	29.0	10.0	—	10.1	6.3
17535	26.4	27.0	10.0	—	9.7	6.1
17040	26.2	26.0	10.0	—	9.9	6.0
17041	22.8	25.0	10.0	—	9.5	5.5
17042	23.5	25.0	11.0	—	9.0	5.7
17029	27.8	34.0	10.0	—	10.5	7.1
19184	27.5	30.0	10.0	—	10.7	6.5
19189	27.0	26.0	10.0	—	10.3	6.2
17050	26.5	27.0	10.0	—	10.0	6.2
17051	27.8	28.0	10.0	—	10.3	6.2
19187	25.9	27.0	11.0	—	9.6	5.9
17048	28.5	32.0	10.0	—	10.1	6.2
16979	29.0	29.0	10.0	—	10.0	6.9
16982	27.0	28.0	10.0	—	9.3	6.2
16980	28.7	28.0	10.0	—	10.2	8.4
16977	27.4	31.0	9.0	—	11.0	7.6
17028	28.4	28.0	10.0	—	11.2	7.7
16984	26.4	29.0	9.0	—	10.5	6.4
19182	28.3	28.0	10.0	—	11.0	7.0
16983	28.7	28.0	10.0	—	11.5	7.0
17023	26.7	27.0	9.5	—	10.0	6.6
17235	27.7	30.0	10.0	—	11.8	7.0
16978	28.2	32.0	10.5	—	10.2	6.9
20846	29.6	29.0	10.1	5.2	—	—

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
19890	27.7	30.0	11.0	—	10.9	7.2
17022	28.6	32.0	10.0	—	11.7	6.5
17024	31.7	29.0	9.0	—	11.7	7.7
16986	28.4	33.0	10.0	—	11.0	7.2
19183	29.3	29.0	10.0	—	11.5	7.2
17026	26.7	28.0	10.0	—	11.1	6.9
16985	28.2	30.0	9.0	—	11.3	6.9
17025	29.9	30.0	10.0	—	12.0	7.1
17027	29.0	34.0	10.0	—	11.7	6.9
17534	28.4	30.0	9.0	—	11.5	7.2
16981	27.5	28.0	10.0	—	11.0	7.2
19188	28.3	31.0	11.0	—	11.7	6.5
10828	29.1	32.0	11.0	—	11.2	6.2
17043	27.7	28.0	11.0	—	10.9	6.9
17045	28.1	31.1	11.0	—	10.5	6.5
10831	27.0	28.0	11.0	—	10.5	6.2
17046	26.0	27.0	11.0	—	10.7	7.0
17047	28.3	30.0	11.0	—	10.7	7.0
17044	26.0	28.0	11.0	—	10.3	6.1
17011	26.2	25.0	9.5	—	9.6	6.2
17009	29.7	35.0	10.0	—	10.8	6.5
19177	26.6	28.0	10.0	—	9.6	6.2
17010	26.2	27.0	10.0	—	8.7	6.1
19880	29.8	32.0	11.0	—	11.2	6.9
16973	31.7	28.0	10.0	—	11.0	7.0
19877	30.2	32.0	11.0	—	11.5	7.4
17037	29.9	32.0	11.0	—	11.6	6.7
17013	28.0	26.0	10.0	—	10.2	6.9
17038	29.1	32.0	11.0	—	11.3	8.4
17012	28.0	27.0	10.0	—	10.9	6.9
17208	28.5	33.0	10.0	—	11.2	6.5
17035	28.1	29.0	11.0	—	10.2	6.5

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
17020	27.9	30.0	10.0	—	10.3	6.7
17021	28.2	25.0	9.0	—	10.6	6.4
19180	27.7	26.0	9.0	—	9.1	5.9
19878	29.5	30.0	10.0	—	10.7	6.3
16975	28.4	28.0	10.0	—	9.1	6.0
17018	25.7	24.0	9.0	—	9.0	6.2
17017	27.7	30.0	10.0	—	8.7	6.0
17533	26.6	28.0	9.0	—	9.5	7.0
19181	27.1	29.0	11.0	—	10.1	6.2
16974	27.0	27.0	9.0	—	8.1	6.1
17019	24.5	21.9	9.0	—	8.4	5.8
16976	28.1	27.0	10.0	—	10.1	7.0
17016	27.3	27.0	10.0	—	9.5	6.0
17039	26.5	28.0	10.0	—	11.2	6.2
17036	30.1	35.0	10.0	—	12.7	5.8
16991	30.1	35.0	10.0	—	13.3	5.1
19179	24.1	19.0	8.5	—	9.6	6.0
16992	30.2	33.0	10.0	—	11.5	6.2
19178	26.2	25.0	9.5	—	12.0	5.4
16972	23.2	22.0	9.5	—	8.7	5.9
19879	30.0	27.0	8.0	—	10.3	7.2
19904	29.5	32.0	11.0	—	10.2	7.1
19905	28.9	33.0	11.0	—	10.7	6.7
17032	29.7	32.0	11.0	—	11.1	7.5
17052	28.5	27.0	9.5	—	10.5	6.4
17030	28.2	27.0	8.0	—	10.7	7.2
17033	33.0	36.0	14.0	—	11.8	7.0
17034	30.0	31.0	10.0	—	11.7	7.2
19185	28.0	25.0	10.0	—	10.5	6.5
16987	30.0	27.0	8.0	—	11.7	6.6
16989	29.0	31.0	10.0	—	11.2	6.9
16988	29.2	31.0	11.0	—	10.7	6.1

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
16990	29.7	31.0	11.0	—	10.8	7.1
19186	29.5	36.0	9.0	—	11.2	6.5
17031	27.5	32.0	11.0	—	10.6	6.1
17205	27.9	33.0	10.5	—	10.5	6.2
17204	28.5	32.0	10.5	—	10.7	6.1
17203	29.9	36.5	11.0	—	11.2	6.5
17202	29.6	32.0	11.0	—	11.2	6.5
17008	26.5	27.0	10.0	—	10.2	5.9
17087	28.5	34.0	10.0	—	11.0	6.4
17200	29.5	33.0	10.0	—	11.3	6.6
17201	28.5	34.0	10.5	—	10.7	6.2
17206	29.4	33.8	11.1	—	11.2	6.5
17088	20.9	21.2	9.0	—	8.2	5.0
17207	29.1	32.0	—	—	10.8	6.2
20847	26.1	26.6	10.2	5.0	9.9	5.0
19881	28.6	30.0	9.0	—	10.5	5.7

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
17025	12.3	11.0	3.7	3.7	5.2	3.8	5.4	8.0	6.5	7.9	4.8
23401	11.7	9.4	3.7	3.4	4.5	3.3	4.7	7.0	6.1	—	—
25686	11.0	9.7	3.7	3.4	4.9	3.6	4.8	6.1	—	7.0	3.9
19434	10.0	9.0	4.3	4.0	4.6	3.2	5.3	—	6.0	6.6	4.4
19432	11.0	9.9	3.7	3.0	4.7	3.8	4.4	—	5.5	6.5	4.6
19430	11.4	10.5	4.2	3.5	4.5	3.7	4.6	—	6.0	—	—
23881	11.2	10.2	3.6	3.5	4.7	3.7	4.5	—	6.2	7.1	4.5
21986	11.1	9.9	3.7	3.1	5.1	3.9	5.0	—	5.8	—	—
21983	11.7	10.3	4.3	4.0	5.2	4.2	5.2	—	6.6	—	—
19811	11.4	10.5	4.0	3.8	4.9	3.3	5.2	7.2	6.0	7.2	5.0
19812	11.0	9.9	4.0	3.7	4.5	3.2	5.0	7.4	6.4	7.2	4.8

Remarks : The species being one of the most abundant species of bats in India can be easily identified and distinguished from the other species of *pipistrellus* by its small size, very dark brown colour of its body. Their darting and erratic flight is very characteristic. Fur very dense and short with the base almost black. Ventral parts slightly lighter. Face, ears and wing membranes almost black. The base of the interfemoral membrane around the lower pelvic is thickly furred on its dorsal surface. Tragus short and curved forward. Post calcarical lobe present. Wings from base of toes. Sinha (1980) has synonymised *pipistrellus minus glaucillus* Wroughton, with *pipistrellus minus* wroughton.

Distribution : Widely distributed throughout the mainland of Indian Union.

Elsewhere : Afghanistan (Meyer-Oehme, 1965), Pakistan, Sri Lanka, Nepal (Mitchell, 1980), Myanmar, Thailand (Lekagul & McNeely, 1977) and Vietnam.

99. *Pipistrellus minus glaucillus* Wroughton, 1912

1912. *Pipistrellus minus glaucillus* Wroughton, *J. Bombay nat. Hist. Soc.*, **21** : 769. Multan, Punjab. India.

Common name : None.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
16169	F	Skin and Skull,	Guha, Nagaun, Rajasthan,	A. K. Mukherjee 05 Aug., 1958
16170	F	Skin and Skull,	Nawa, Nagaur, Rajasthan,	T. G. Vazirani 12 Apr., 1958
16171	M	Skin and Skull,	Nawa, Nagaur, Rajasthan,	T. G. Vazirani 12 Apr., 1958
16172	M	Skin and Skull,	Lihora, Nagaur, Rajasthan,	T. G. Vazirani 19 Apr., 1958
12515	F	Skin and Skull,	Drosh (Chitral), N.W.F.P. (Pakistan)	B. N. Chopra ...

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
16169	30.1	29.6	9.2	12.9	5.7
16170	29.0	32.5	10.2	12.7	6.2
16171	(S.Ad)15.9	15.4	5.1	6.7	4.3
16172	25.1	—	—	9.7	5.7

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw
16169	11.9	10.4	3.9	3.7	4.7	3.5	5.3	7.5	5.9
16170	11.9	10.5	4.0	3.7	4.8	3.6	5.4	—	6.1

Remarks : Sinha (1980) has synonymised *pipistrellus minus glaucilus* wroughton with *pipistrellus minus* wroughton.

100. *Pipistrellus coromandra coromandra* (Gray)

1838. *Scotophilus coromandra* Gray, Mag. zool. Bot., 2 : 498 (Pondicherry, Coromandel coast, India).

Common name : Indian Pipistrelle (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19581	F	Skin and Skull,	Mohana, Ganjam, Orissa,	V. C. Agrawal 16 Dec., 1971
19435	M	Skin and Skull,	Khowaipur, Ganganagar, Tripura	V. C. Agrawal 13 Dec., 1972
12626	M	Skin and Skull,	Chekrima, Naga Hills, Assam	... 17 Feb., 1935
10267	F	Skin and Skull,	Chekrima, Naga Hills, Assam	... 17 Feb., 1935
17096	M	Skin and Skull,	Khonshong, Jaintia- Hills, Meghalaya	H. W. Wells 26 Jul., 1920
17092	M	Skin and Skull,	Pedong, Gangtok, Sikkim,	C. A. Crump 29 Jan., 1915
17245	F	Skin and Skull,	Hazaria, Patherghatta, Nepal	N. A. Baptista 01 Feb., 1921
17098	F	Skin and Skull,	Mergui Town, Tenass- erim, Myanmar	C. Primrose 01 Sep., 1921
17246	M	Skin and Skull,	Mergui Town, Tena- sserim, Myanmar	C. Primrose 01 Sep., 1921
17244	F	Skin and Skull,	Khonshong, Jaintia Hills, Meghalaya,	H. W. Wells 29 Jul., 1920

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17097	M	Skin and Skull,	Bairia, Patherghatta Nepal	N. A. Baptista 18 Jan., 1921
17212	M	Skin and Skull,	Luia, Chaibasa, Bihar	C. A. Crump 22 Jul., 1914
19893	F	Skin and Skull,	Luia, Chaibasa, Bihar	C. A. Crump 28 Jul., 1914
17214	F	Skin and Skull,	Koira, Chaibasa, Bihar & Orissa,	C. A. Crump 11 Aug., 1914
17015	F	Skin and Skull,	Pilibhit, Rohilkund, Uttar Pradesh	C. A. Crump 08 Mar., 1914
17095	F	Skin and Skull,	Pedong, Darjeeling, West Bengal	N. A. Baptista, 13 Aug., 1916
19888	F	Skin and Skull,	Gopaldhara, Darjeeling, West Bengal	N. A. Baptista 05 Jun., 1915
17243	M	Skin and Skull,	Pedong, Darjeeling, West Bengal	N. A. Baptista 13 Sep., 1916
19892	F	Skin and Skull,	Salboni, Medinipur, West Bengal,	N. A. Baptista 18 Sep., 1914
19895	F	Skin and Skull,	Pedong, Darjeeling, West Bengal,	N. A. Baptista 09 Sep., 1916
17237	F	Skin and Skull,	Hasimara, Bhutan- Duars, West Bengal,	N. A. Baptista 13 Feb., 1916
17234	F	Skin and Skull,	Hasimara, Bhutan- Duars, West Bengal,	N. A. Baptista 12 Nov., 1915
17236	M	Skin and Skull,	Hasimara, Bhutan- Duars, West Bengal,	N. A. Baptista 14 Feb., 1916
17228	F	Skin and Skull,	Haldibari, Jalpaiguri, West Bengal,	C. A. Crump 13 Apr., 1915
17241	M	Skin and Skull,	Pedong, Darjeeling, West Bengal,	N. A. Baptista 16 Aug., 1916
17229	M	Skin and Skull,	Jalpaiguri, West Bengal,	C. A. Crump ...
17094	M	Skin and Skull,	Nimbong, Darjeeling, West Bengal,	N. A. Baptista 13 Jul., 1916

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17240	F	Skin and Skull,	Pedong, Darjeeling, West Bengal,	N. A. Baptista 16 Aug., 1916
19891	M	Skin and Skull,	Peshok, Darjeeling, West Bengal,	N. A. Baptista 13 Sep., 1915
17239	F	Skin and Skull,	Pedong, Darjeeling, West Bengal,	N. A. Baptista 14 Aug., 1916
17238	M	Skin and Skull,	Pedong, Darjeeling, West Bengal,	N. A. Baptista 14 Aug., 1916
17232	M	Skin and Skull,	Peshok, Darjeeling, West Bengal,	N. A. Baptista 14 Jul., 1915
17242	M	Skin and Skull,	Pedong, Darjeeling, West Bengal,	N. A. Baptista 12 Sep., 1916
17231	M	Skin and Skull,	Gopaldhara, Darjeeling, West Bengal,	N. A. Baptista 04 May 1915
17233	F	Skin and Skull,	Peshok, Darjeeling, West Bengal,	N. A. Baptista 15 Jul., 1915
17093	M	Skin and Skull,	Hasimara, Bhutan- Duars, West Bengal,	N. A. Baptista 08 Nov., 1915
17213	M	Skin and Skull,	Koira, Orissa,	C. A. Crump, 00 Aug., 1914
17090	M	Skin and Skull,	Samgaita, Chaibasa, Bihar,	C. A. Crump, 15 Jul., 1914
17014	M	Skin and Skull,	Pilibhit, Kumaon, Uttar Pradesh,	C. A. Crump, 07 Mar., 1914
17210	M	Skin and Skull,	Singa, Gaya, Bihar	C. A. Crump, 13 May 1914
19897	F	Skin and Skull,	Jerna, Ramnagar, Nainitala, Uttar Pradesh	C. A. Crump, 19 Jan., 1914
17215	F	Skin and Skull,	Koira, Orissa,	C. A. Crump, 11 Aug., 1914
19889	F	Skin and Skull,	Pedong, Kalimpong, Darjeeling, W. Bengal	N. A. Baptista 11 Sep., 1916
17209	F	Skin and Skull,	Singa, Gaya, Bihar	C. A. Crump, 30 May 1914

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17089	F	Skin and Skull,	Jagadil, Hazaribagh, Bihar	C. A. Crump, 21 Aug., 1914
17211	M	Skin and Skull,	Nimiaghat, Hazaribagh, Bihar (Jharkhand),	C. A. Crump, 24 Jun., 1914
10825	F	Skin and Skull,	Balapalli, Palkonda- Hills, Cuddapah, Andhra Pradesh,	N. A. Baptista 17 Aug., 1929
10822	F	Skin and Skull,	Balapalli, Palkonda- Hills, Cuddapah, Andhra Pradesh,	N. A. Baptista 18 Aug., 1929
17199	F	Skin and Skull,	Samasgi, Dharwar, Karnataka,	G. C. Shortridge 31 Mar., 1912
10824	M	Skin and Skull,	Ballapalli, Palkonda- Hills, Cuddapah, Andhra Pradesh,	N. A. Baptista, 01 Aug., 1929
10823	F	Skin and Skull,	Ballapalli, Palkonda- Hills, Cuddapah, Andhra Pradesh,	N. A. Baptista, 16 Aug., 1929
17086	M	Skin and Skull,	Samasgi, Dharwar, Karnataka,	G. C. Shortridge 20 Mar., 1912
17217	F	Skin and Skull,	Salboni, Medinipur, West Bengal,	C. A. Crump 18 Sep., 1914
17222	F	Skin and Skull,	Salboni, Medinipur, West Bengal,	C. A. Crump 20 Sep., 1914
17220	F	Skin and Skull,	Salboni, Medinipur, West Bengal,	C. A. Crump 19 Sep., 1914
17218	F	Skin and Skull,	Salboni, Medinipur, West Bengal,	C. A. Crump 19 Sep., 1914
17219	M	Skin and Skull,	Salboni, Medinipur, West Bengal,	C. A. Crump 19 Sep., 1914
19894	F	Skin and Skull,	Haldibari, Jalpaiguri, West Bengal,	C. A. Crump 13 Apr., 1915
17230	F	Skin and Skull,	Haldibari, Jalpaiguri, West Bengal,	C. A. Crump 18 Apr., 1915

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17091	M	Skin and Skull,	Salboni, Medinipur, West Bengal,	C. A. Crump 18 Sep., 1914
17221	M	Skin and Skull,	Salboni, Medinipur, West Bengal,	C. A. Crump 20 Sep., 1914
17224	M	Skin and Skull,	Salboni, Medinipur, West Bengal,	C. A. Crump 23 Sep., 1914
17216	F	Skin and Skull,	Salboni, Medinipur, West Bengal,	C. A. Crump 18 Sep., 1914
17223	M	Skin and Skull,	Salboni, Medinipur, West Bengal,	C. A. Crump 22 Sep., 1914
17226	F	Skin and Skull,	Haldibari, Jalpaiguri, West Bengal,	C. A. Crump 13 Apr., 1915
17225	F	Skin and Skull,	Salboni, Medinipur, West Bengal,	C. A. Crump 23 Sep., 1914
17227	F	Skin and Skull,	Haldibari, Jalpaiguri, West Bengal,	C. A. Crump 13 Apr., 1915
12626	M	Skin and Skull,	Chikrima, Naga Hills, Assam,	... 17 Feb., 1935
10267	F	Skin and Skull,	Chikrima, Naga Hills, Assam,	... 17 Feb., 1935
11531	F	Skin and Skull,	Muradih, Manbhum, Bihar,	B. Nath 05 Dec., 1948
18109	M	Skin and Skull,	Bhashna, 24-Parganas, West Bengal,	Y Chaturvedi 07 Jul., 1968
25032	F	Skin and Skull,	Mamul F.R.H., Bakloh, Chamba, H. P.	M. K. Ghosh 20 Jun., 1999
24887	M	Skin and Skull,	Narkanda, Shimla, Himachal Pradesh,	S. Chakraborty 29 May, 1992
20432	M	Skin and Skull,	Rambon, Doda, Jammu & Kashmir,	S. Chakraborty 03 Nov., 1975
20433	F	Skin and Skull,	Rambon, Doda, Jammu & Kashmir,	S. Chakraborty 05 Nov., 1975
20434	F	Skin and Skull,	Srinagar, Jammu & Kashmir,	S. Chakraborty 24 Aug., 1974

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20435	F	Skin and Skull,	Srinagar, Jammu & Kashmir,	S. Chakraborty 24 Aug., 1974
20436	F	Skin and Skull,	Srinagar, Jammu & Kashmir,	S. Chakraborty 24 Aug., 1974
20437	F	Skin and Skull,	Srinagar, Jammu & Kashmir,	S. Chakraborty 24 Aug., 1974
20438	F	Skin and Skull,	Srinagar, Jammu & Kashmir	S. Chakraborty 24 Aug., 1974

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
17219	28.2	31.0	10.0	4.4	10.7	7.0
19894	29.3	28.0	10.0	—	10.7	6.2
17230	30.3	33.0	10.0	4.3	12.1	6.6
17091	29.0	29.0	10.0	3.8	12.6	5.1
17221	28.0	28.0	10.0	3.1	11.9	5.3
17224	28.6	32.0	9.5	—	11.2	6.5
17216	30.0	30.0	10.0	—	11.4	7.3
17223	28.4	30.0	10.0	3.5	11.0	6.6
17226	29.1	35.0	10.0	3.2	12.8	5.7
17225	30.5	32.0	10.0	3.4	12.2	7.5
17227	28.1	28.0	10.0	3.0	11.5	7.3
10825	32.5	34.0	12.0	—	12.5	7.3
10822	34.5	34.0	12.0	—	12.7	7.2
17199	30.1	31.0	11.0	—	—	6.9
10824	28.5	29.0	11.0	—	10.9	6.7
10823	35.3	33.0	13.0	—	13.1	7.2
17086	28.1	29.0	10.5	—	10.8	6.1
17217	30.0	29.0	10.0	3.8	12.1	7.2
17222	29.3	27.0	10.0	—	11.7	7.0

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
17220	29.4	28.0	10.0	5.0	11.5	7.1
17218	31.0	34.0	10.0	3.9	11.7	6.8
17096	29.8	25.0	11.0	5.1	11.5	6.7
17092	30.4	31.1	11.0	4.9	11.8	7.1
17245	31.1	32.0	11.0	—	12.5	7.6
17098	31.4	35.0	12.0	—	11.9	7.1
17246	30.3	32.0	11.0	5.1	12.2	7.2
17244	32.9	30.0	15.0	5.0	12.6	6.7
17097	30.0	35.0	11.0	—	12.0	7.0
17212	31.0	34.0	11.0	4.5	11.7	7.7
19893	28.8	29.0	9.0	3.4	10.7	7.0
17214	30.0	29.0	10.0	—	12.3	8.0
17015	31.8	32.0	11.0	—	12.0	8.1
17095	34.2	35.0	11.0	—	12.9	9.3
19888	32.5	38.0	11.0	5.0	12.5	7.7
17243	30.7	32.0	11.0	3.3	12.2	8.1
19892	29.6	31.0	11.0	4.7	11.8	7.2
19895	32.2	35.0	11.0	5.2	12.0	8.0
17237	31.7	33.0	11.0	5.0	12.0	7.5
17234	30.9	32.0	11.0	—	11.8	6.7
17236	31.1	33.0	10.0	—	11.9	7.2
17228	30.6	33.0	10.0	4.0	11.8	6.9
17241	32.7	33.0	11.0	4.5	12.3	7.9
17229	28.8	30.0	10.0	3.7	10.8	5.9
17094	32.1	33.0	12.0	—	12.1	7.1
17240	31.0	35.0	11.0	—	11.7	7.5
19891	31.9	38.0	11.0	4.4	11.9	6.8
17239	32.2	35.0	11.0	4.9	12.2	7.3
17230	33.2	34.0	11.0	—	12.8	7.0
17232	36.4	35.0	13.0	5.3	13.0	7.5
17242	31.3	32.0	11.0	—	11.3	8.1

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
17231	30.2	34.0	7.0	—	12.5	8.0
17233	33.4	32.0	10.0	5.1	12.8	7.2
17093	28.1	30.0	10.0	4.5	11.7	6.7
17213	25.2	23.0	9.0	—	10.7	7.0
17090	29.1	25.0	10.0	—	10.5	6.9
17014	31.2	34.0	11.0	5.2	12.4	7.1
17210	29.5	31.0	10.0	—	11.2	7.0
19897	32.4	29.0	11.0	—	12.7	7.2
17215	29.0	35.0	10.0	—	12.0	6.8
19889	32.0	34.0	11.0	3.6	12.2	7.6
17209	31.3	33.0	11.0	—	11.8	7.2
17089	30.0	31.0	10.0	—	11.2	6.5
17211	29.0	32.0	10.0	—	11.2	6.5
10267	30.0	31.9	9.0	—	11.8	7.0
12626	31.0	33.5	8.0	—	12.2	8.7
11531	40.7	29.3	9.5	—	12.9	7.5
19435	33.0	35.0	10.0	—	15.5	7.0
24887	29.7	34.3	9.7	4.0	10.6	6.6
19581	29.5	29.0	12.0	3.0	13.5	6.4

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
17223	12.2	10.9	4.1	3.7	5.5	3.6	5.2	—	6.5	—	—
17217	12.3	10.9	4.4	4.2	5.5	3.6	5.5	—	6.3	—	—
17222	12.0	10.7	4.2	4.0	5.3	3.5	5.3	—	6.0	—	—
17092	12.5	11.2	4.7	4.3	5.2	3.7	5.3	—	6.2	8.6	4.6
17212	12.5	11.1	4.5	4.3	5.0	3.3	5.5	—	6.5	—	—
17095	12.6	11.2	4.3	3.9	5.2	3.4	5.2	—	6.8	—	—
17241	12.3	11.2	4.3	3.8	5.2	3.3	5.7	—	6.5	—	—
17626	12.5	11.2	4.2	3.4	4.7	3.6	5.5	—	6.8	—	—

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
17267	12.2	11.0	4.3	4.2	5.0	3.5	5.3	7.5	6.6	—	—
19435	12.7	11.2	5.1	4.1	5.3	3.6	5.8	—	6.5	8.3	4.9
25032	13.2	11.9	5.3	4.5	5.9	4.0	6.3	8.5	6.9	9.0	5.6
19581	12.8	11.8	4.6	3.9	5.7	3.6	9.8	13.0	6.3	—	4.6
20434	12.2	10.4	4.7	3.7	5.0	3.5	5.2	7.6	6.6	8.2	5.0
20437	12.0	10.5	4.6	3.5	5.0	3.6	5.2	—	6.5	—	—

Remarks : The specimens appears to be significantly bigger than *P. pipistrellus* having the dorsal fur blackish-brown and the tips of the hairs slightly rufescent. The fur of the belly is paler brown. One small lobe below the calcar is present and the tragus being curved forward and bluntly rounded.

Distribution : Widely distributed in peninsular India, north to Jammu & Kashmir (Chakraborty, 1983), east to northeastern states including Tripura (Agrawal & Bhattacharyya 1977). The species was also reported from car Nicobar Island (Bhattacharyya 1977).

Elsewhere : Afghanistan (Meyer-Oehme 1965), Pakistan (Walton 1974), Nepal (Hinton & Fry 1923), Sri Lanka, Bangladesh (Khan 1982).

101. *Pipistrellus ceylonicus indicus* (Dobson)

1878. *Vesperugo indicus* Dobson, cat. chiroptera B. M. 222. Mangalore, Malabar coast, India.

Common name : Kelaart's pipistrelle.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
21154	M	Skin and Skull	Borra Guhalu, Visha- khatpatnam, A.P.	P. K. Das 09 Mar., 1983
21155	F	Skin and Skull	Borra Guhalu, Visha- khatpatnam, A.P.	P. K. Das 09 Mar., 1983
21156	F	Skin and Skull	Borra Guhalu, Visha- khatpatnam, A.P.	P. K. Das 09 Mar., 1983
21157	F	Skin and Skull	Borra Guhalu, Visha- khatpatnam, A.P.	P. K. Das 09 Mar., 1983
11792	M	Skin and Skull (Damaged)	Dhupdal, Belgaum, Karnataka	B. Prasad ... Nov., 1928

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
12636	M	Skin and Skull	Dhupdal, Belgaum, Karnataka,	B. Prasad ... Nov., 1928
12637	M	Skin and Skull	Dhupdal, Belgaum, Karnataka	B. Prasad ... Nov., 1928
12638	F	Skin and Skull	Dhupdal, Belgaum, Karnataka	B. Prasad ... Nov., 1928
20603	M	Skin and Skull	Mehboobnagar, Andhra Pradesh,	S. S. Saha 09 Apr., 1980
20604	M	Skin and Skull	Mehboobnagar, Andhra Pradesh,	S. S. Saha 09 Apr., 1980
20605	F	Skin and Skull	Jodmoha, Yavatmal, Andhra Pradesh,	S. S. Saha 09 Apr., 1980
20606	M	Skin and Skull	Jodmoha, Yavatmal, Andhra Pradesh,	S. S. Saha 22 Mar., 1980
20614	M	Skin and Skull	Warangal, Andhra Pradesh	D : N. Chari ...
20615	F	Skin and Skull	Mannanur, Mehboobnagar, Andhra Pradesh	Anil K. Mandal 14 Feb., 1979
20616	F	Skin and Skull	Mulug, Warangal, Andhra Pradesh	Anil K. Mandal 21 Feb., 1979
20607	F	Skin and Skull	Jodmoha, Yavatmal, Andhra Pradesh	S. S. Saha 22 Mar., 1980
7192	F	Skin and Skull	Shevaroy Hills, Salem, Tamil Nadu	W. Daly ...
10922	F	Skin and Skull	Coonoor, Ootacamund, Tamil Nadu	Maj. R.B.S. Sewell ...
24879	—	Skin and Skull	Chanahatti, Shimla, Himachal Pradesh,	J. K. De 10 Apr., 1997
21250	M	Skin and Skull	Mansar, Nagpur, Maharashtra,	K. K. Tiwari 02 Jun., 1969
21251	M	Skin and Skull	Mansar, Nagpur, Maharashtra,	K. K. Tiwari 03 Jun., 1969
21252	M	Skin and Skull	Khindsi, Nagpur, Maharashtra,	K. K. Tiwari 15 Jan., 1977

Z.S.I. / Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
21253	M	Skin and Skull	Khindsi, Nagpur, Maharashtra,	K. K. Tiwari 15 Jan., 1977
21254	M	Skin and Skull	Khindsi, Nagpur, Maharashtra,	K. K. Tiwari 15 Jan., 1977
21255	M	Skin and Skull	Khindsi, Nagpur, Maharashtra,	K. K. Tiwari 15 Jan., 1977
9981	F	Skin and Skull	Srimangala, Coorg, Karnataka	G. C. Shortridge 10 Feb., 1913
9980	F	Skin and Skull	Srimangala, Coorg, Karnataka	G. C. Shortridge 10 Feb., 1913
17154	F	Skin and Skull	Halery, Coorg, Karnataka	G. C. Shortridge 18 Dec., 1912
17155	M	Skin and Skull	Pune, Deccan, Maharashtra,	P. H. Cosse 12 Mar., 1918
20584	F	Skin and Skull	Rairakhol, Sambalpur, Orissa,	P. K. Das 26 Jul., 1973
20585	M	Skin and Skull	Rairakhol, Sambalpur, Orissa,	P. K. Das 26 Jul., 1973
20586	F	Skin and Skull	Rairakhol, Sambalpur, Orissa,	P. K. Das 26 Jul., 1973
20587	F	Skin and Skull	Rairakhol, Sambalpur, Orissa,	P. K. Das 26 Jul., 1973
20588	F	Skin and Skull	Rairakhol, Sambalpur, Orissa,	P. K. Das 26 Jul., 1973
20589	F	Skin and Skull	Rairakhol, Sambalpur, Orissa,	P. K. Das 27 Jul., 1973
20590	F	Skin and Skull	Dhuanali, Puri, Orissa,	N. Mazumdar 12 Mar., 1976
20591	F	Skin and Skull	Dhuanali, Puri, Orissa,	N. Mazumdar 12 Mar., 1976
20592	F	Skin and Skull	Dhuanali, Puri, Orissa,	N. Mazumdar 12 Mar., 1976
20593	M	Skin and Skull	Sambalpur, Orissa,	N. Mazumdar 05 Apr., 1976

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20594	F	Skin and Skull	Bonaigarh, Sundargarh, Orissa,	A. K. Mandal 08 Jan., 1973
20595	F	Skin and Skull	Bonaigarh, Sundargarh, Orissa,	A. K. Mandal 08 Jan., 1973
20824	—	Skin and Skull	Sivasamudram, Mandya, Karnataka,	G. C. Shortridge 20 Nov., 1912
12690	M	Skin and Skull	Panchgani, Satara, Maharashtra,	E. Blatter ...
12691	M	Skin and Skull	Panchgani, Satara, Maharashtra,	E. Blatter ...
12693	M	Skin and Skull	Panchgani, Satara, Maharashtra,	E. Blatter ...
12694	M	Skin and Skull	Panchgani, Satara, Maharashtra,	E. Blatter ...
20623	F	Skin and Skull	Panchgani, Satara, Maharashtra,	K. K. Tiwari 24 Aug., 1964
20820	M	Skin and Skull	Sivasamudram, Mandya, Karnataka,	G. C. Shortridge 20 Nov., 1912
20821	M	Skin and Skull	Sivasamudram, Mandya, Karnataka,	G. C. Shortridge 20 Nov., 1912
20822	M	Skin and Skull	Sivasamudram, Mandya, Karnataka,	G. C. Shortridge 20 Nov., 1912
20823	F	Skin and Skull	Sivasamudram, Mandya, Karnataka,	G. C. Shortridge 20 Nov., 1912
20831	F	Skin and Skull	Hazaribagh, Bihar,	W. T. Blanford ... 1872
20832	F	Skin and Skull	Chhotanagpur, Bihar,	W. T. Blanford ... 1872
10060	—	Skin and Skull	Goa,	A. De. Mello 23 Jun., 1915
19015	M	Skin and Skull	Pune, Maharashtra,	P. Cosse 19 Mar., 1918
19016	M	Skin and Skull	Pune, Maharashtra,	P. Cosse 19 Mar., 1918

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19017	M	Skin and Skull	Pune, Maharashtra,	P. Gusse 24 Aug., 1918
19018	F	Skin and Skull	Pune, Maharashtra,	P. Cosse 24 Aug., 1918
12689	F	Skin and Skull	Panchgani, Satara, Maharashtra,	E. Blatter ...
20613	M	Skin and Skull	Kolkata, West Bengal	G. Dobson ... 1978

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
24879	36.7	40.1	11.9	5.1	15.7	9.7
21250	37.4	41.0	12.0	—	14.1	9.2
21251	36.1	37.0	13.5	3.1	13.8	9.0
21252	35.9	36.5	12.6	4.1	14.7	8.3
21253	36.5	32.0	12.3	3.9	13.8	8.2
21254	37.5	35.0	11.7	5.0	15.0	8.5
21255	34.0	30.0	11.2	—	—	—
9981	—	40.0	12.5	—	—	—
9980	—	44.0	13.0	—	—	—
17154	—	40.0	12.5	—	—	—
17155	—	40.0	10.0	—	—	—
20584	37.7	41.5	13.4	6.4	14.2	7.7
20585	36.7	39.4	12.4	7.0	14.2	5.8
20586	38.8	41.5	14.0	6.5	14.8	7.9
20587	37.0	40.5	13.0	7.0	14.3	8.5
20588	37.3	41.0	11.6	6.0	14.1	8.9
20589	37.9	39.6	13.9	6.1	14.0	9.0
20590	36.0	35.0	14.0	6.0	15.0	8.5
20591	38.0	38.0	13.0	6.5	15.0	9.3
20592	37.0	37.5	13.0	6.8	14.0	9.1

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
20593	35.8	38.0	13.0	6.3	13.8	7.9
20594	35.8	38.0	13.0	6.5	13.9	7.5
20595	38.5	40.2	14.3	7.1	15.5	8.0
21154	33.9	33.8	12.2	5.3	14.8	7.6
21155	41.2	45.7	15.2	6.4	16.4	9.0
21156	38.6	39.5	13.6	4.8	14.6	8.8
21157	39.6	39.5	12.4	6.3	14.5	8.4
12690	35.3	39.5	10.5	—	13.2	9.4
12691	35.7	32.6	10.7	—	13.9	9.5
12692	35.3	33.5	10.3	—	13.4	9.0
12693	36.4	33.5	11.2	—	14.0	9.0
12694	35.1	32.1	11.0	—	13.9	9.2
20623	36.6	42.0	13.0	—	14.4	8.3
20820	37.0	—	10.5	—	14.4	7.5
20821	37.5	—	—	—	14.7	8.7
20822	36.7	—	11.5	—	14.0	9.3
20823	39.1	32.7	10.6	—	14.4	9.3
20831	35.6	37.3	10.7	—	13.3	5.7
20832	34.7	33.9	10.6	—	13.8	7.8
10060	37.6	—	11.5	—	13.8	7.8
19015	35.5	32.0	11.0	—	13.5	8.5
19016	36.7	—	10.0	—	14.0	9.3
19017	35.3	—	11.3	—	14.2	8.6
19018	31.0	23.2	8.0	—	11.3	7.5
12689	34.0	25.7	10.5	—	12.2	8.5
12636	36.2	35.1	12.2	—	13.9	8.7
12637	35.7	33.5	12.0	—	13.5	8.2
12638	37.8	35.9	12.5	—	14.1	9.3
20613	35.5	31.0	10.2	7.7	14.5	8.5
20603	37.7	34.7	12.2	4.6	15.0	9.6
20604	36.2	32.5	12.2	4.7	14.9	8.9

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
20605	37.7	33.7	12.3	4.7	14.7	9.9
20606	39.0	39.0	13.0	4.5	15.0	9.5
20614	35.0	34.5	11.9	4.1	14.0	8.7
20615	39.2	39.1	13.0	4.7	15.1	9.7
20616	39.1	38.7	13.1	4.8	15.0	9.5
20607	28.5	27.2	10.1	—	11.0	7.2
7192	38.0	37.5	12.5	—	14.7	9.1
10922	37.4	36.3	12.3	—	14.5	9.0

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
24879	14.2	11.9	5.7	3.5	6.0	3.5	5.8	8.3	7.1	—	—
20584	14.1	12.8	5.2	5.0	6.8	4.2	6.5	—	7.6	10.2	6.7
25085	14.4	13.2	5.5	4.7	7.2	4.1	7.1	10.8	8.2	10.6	6.9
20586	14.7	13.3	5.4	4.8	7.2	4.1	6.8	10.0	8.3	10.6	7.1
20587	15.2	13.5	5.4	4.9	6.9	4.2	7.1	—	7.2	—	—
20588	15.1	13.8	5.4	5.0	7.4	4.3	6.8	—	7.6	10.9	—
21154	15.3	13.8	5.7	5.0	6.6	5.7	6.8	—	7.6	10.9	6.9
21155	16.5	15.4	5.6	5.7	7.9	4.2	7.2	11.4	7.9	11.3	7.4
21156	15.3	13.8	5.6	5.0	6.9	4.3	7.0	—	8.0	10.9	6.5
21157	15.5	14.0	5.8	5.2	7.3	4.4	7.0	10.2	8.0	—	6.3
19015	14.2	13.6	5.5	5.0	6.8	4.1	6.7	—	7.2	—	—
20613	14.4	13.9	5.5	5.0	6.6	3.6	6.7	—	7.5	10.2	6.3
20605	15.2	13.7	5.4	4.9	6.5	3.9	6.8	—	8.1	10.2	6.8
7192	15.5	13.9	5.8	4.9	7.2	4.3	7.5	—	8.5	11.1	7.5

Remarks : These are one of the larger pipistrelle having short and triangular ears. Outer margin of ear straight, tragus with straight inner end, convex outer margin and a triangular lobe at the base. Wing from the base of toes, post-calcarial lobe semicircular, extreme tip of tail free from membrane, dorsal colour brown, ventral parts slightly paler. The muzzle often has glandular swellings between the eyes and the nostrills.

Ellerman & Morrison-Scott (1951) recognised three subspecies of *pipistrellus ceylonicus*, viz., *indicus* Dobson, *chrysothrix* wroughton and *Subcanus* Thomas, from the Indian mainland, However, Lal (1984) has synonymised both *Chrysothrix* and *subcanus* with *indicus*.

Distribution : Andhra Pradesh (Lal 1984), Bihar (Wroughton 1915), Gujarat, Karnataka, Kerala (Blanford 1891), Madhya Pradesh (Broosset 1962b), Maharashtra, Orissa (Das & Agrawal 1973), Rajasthan (Ryley 1914), Tamil Nadu (Dobson 1878), Uttar Pradesh (Lal 1984).

Elsewhere : Pakistan and Bangladesh (Siddiqui 1961 a, khan 1982).

102. *Pipistrellus javanicus* (Gray, 1838)

1838. *Scotophilus javanicus* Gray, Mag. zool. Bot., 2 : 498.

Common name : Javan's Pipistrelle.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25694	M	Skin and Skull,	Khasi Hills, United-khasi & Jaintia Hills	Lt. Bourne ... 1872
25695	M	Skin and Skull,	Khasi Hills, United-khasi & Jaintia Hills, Meghalaya	J. H. Rourne ... 1872
25696	F	Skin and Skull,	Khasi Hills, United-khasi & Jaintia Hills, Meghalaya	Lt. Bourne ... 1872
25697	F	Skin and Skull,	Khasi Hill,s United-khasi & Jaintia Hills Meghalaya	Lt. Bourne ... 1872
25698	F	Skin and Skull,	Khasi Hills, United-khasi & Jaintia Hills, Meghalaya	J. H. Bourne ... 1872
25699	F	Skin and Skull,	Khasi Hills, United-khasi & Jaintia Hills, Meghalaya,	J. H. Bourne ... 1872
10927	F	Skin and Skull,	Mam Kam, North Shan States, Myanmar,	R. B. S. Sewell 25 Nov., 1926
22373	F	Skin and Skull,	Allahabad, Uttar Pradesh,	J. Cockburn 19 Mar., 1877

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
8395	M	Skin and Skull,	Soondrijal, Nepal,	R. Hodgart ...
7953	F	Skin and Skull,	Andaman Islands	A. R. Anderson
22975	F	Skin and Skull,	Campbell Bay. Great- Nicobar, Andaman & Nicobar Islands.	K. K. Tiwari 02 Apr., 1977
22976	F	Skin and Skull,	Campbell Bay, Great- Nicobar, Andaman & Nicobar Islands.	K. K. Tiwari 02 Apr., 1977
9130	M	Skin and Skull,	Rotung, Arunachal- Pradesh. (Abor Expedn)	S. W. Kemp 10 Mar., 1912
9131	F	Skin and Skull,	Rotung, Arunachal- Pradesh. (Abor Expedn)	S. W. Kemp 10 Mar., 1912
25689	F	Skin and Skull,	Sibsagar, Assam,	S. E. Peal ... 1872
25690	F	Skin and Skull,	Sibsagar, Assam,	S. E. Peal ... 1872

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
22972	32.0	32.5	10.5	—	18.0	7.5
22976	31.0	33.5	10.0	5.7	12.5	7.8
7953	32.6	27.6	10.7	5.6	11.0	7.0
8395	35.1	36.7	12.1	4.6	13.0	7.6
22373	34.6	—	11.7	—	12.2	7.1
10927	33.2	37.1	12.0	3.7	11.4	7.4
22373	34.6	—	11.7	—	12.2	7.1
25694	33.6	36.7	11.5	4.0	13.0	6.9
25695	33.7	36.9	11.7	3.2	13.1	7.0
25696	33.7	36.7	10.6	3.0	—	5.2
25697	32.1	33.7	11.0	2.7	13.4	6.5

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
25698	35.5	35.1	10.5	—	14.7	7.2
25699	34.8	34.8	10.2	3.5	14.0	8.2
25700	34.5	34.2	10.3	3.7	13.9	6.7
25701	34.8	35.0	11.0	—	14.0	8.0
25702	32.7	33.1	10.8	4.0	13.7	7.2
25703	33.5	33.5	10.9	4.1	13.7	7.5
25689	33.2	29.3	12.8	4.2	12.8	5.8
25690	34.7	30.2	—	4.9	12.7	6.9

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	lw	m-m	zw	cw	ml	ltr
25694	13.0	11.4	4.7	4.2	5.6	3.5	5.6	—	6.5	8.7	5.7
25695	12.7	11.6	4.6	4.1	5.6	3.4	5.6	—	6.3	8.2	6.3
25696	12.7	11.6	4.5	4.2	6.0	3.1	6.1	8.1	6.5	—	—
25697	13.2	11.2	4.9	4.7	6.2	3.8	6.1	—	6.9	10.1	6.1
25698	13.1	11.4	4.7	4.1	5.7	3.9	5.6	—	7.1	9.8	5.9
10927	13.4	11.8	5.0	4.6	6.1	3.8	6.0	—	6.7	9.6	5.7
22373	13.8	12.1	4.7	4.5	6.0	3.9	6.3	9.0	7.5	—	—
7953	13.5	12.7	5.4	3.2	5.5	3.8	6.2	—	6.6	9.0	5.1
22975	12.0	10.9	4.5	4.0	5.0	3.4	5.8	8.0	6.2	8.5	5.2

Remarks : Nil.

Distribution : Andaman & Nicobar Islands, Meghalaya, Uttar Pradesh, Arunachal Pradesh, Assam.

Elsewhere : Myanmar, Nepal, China, Korea, Phillipines, Japan, Russia.

103. *Pipisterellus babu* Thomas, 1915

1915. *Pipistrellus babu* Thomas, *J. Bombay nat. Hist. Soc.*, **24** : 30.

Common name : Babu Pipistrelle (E.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
12513	M	Skin and Skull,	Eindawogyi Lake, Myitkyina, Myanmar,	B. N. Chopra 2-5 Nov., 1926
12514	M	Skin and Skull,	Eindawogyi Lake, Myitkyina, Myanmar,	B. N. Chopra 2-5 Nov., 1926
12517	M	Skin and Skull,	Lokra (Balipara Frontier Tract), Assam,	S. L. Hora 12 Nov., 1939
6937	M	Skin and Skull,	Nepal,	J. Scully 06 Nov., 1876
6940	M	Skin and Skull,	Nepal,	J. Scully 16 Jul., 1877
6943	F	Skin and Skull,	Nepal,	J. Scully .. May 1877
6942	F	Skin and Skull,	Nepal,	J. Scully .. May 1877
6938	F	Skin and Skull,	Nepal,	J. Scully .. May 1877
6939	M	Skin and Skull,	Nepal,	J. Scully 08 Nov., 1877
6941	M	Skin and Skull,	Nepal,	J. Scully .. May 1877
17247	M	Skin and Skull,	Usuri, Darbhanga, Bihar	N. A. Baptista 11 Aug., 1922
17150	F	Skin and Skull,	Rajapara, S. Kamrup, Assam,	H. W. Wells 20 Nov., 1920
19906	M	Skin and Skull,	Gopalpur, Kangra, Himachal Pradesh,	H. W. Wells 17 Feb., 1922
19884	M	Skin and Skull,	Rajapara, S. Kamrup, Assam,	H. W. Wells 23 Nov., 1920
23334	F	Skin and Skull,	Bhatwari, N. Uttar Kashi, Uttar Pradesh,	S. Chakraborty 11 Jun., 1989
23335	M	Skin and Skull,	Nagaur, Tehri Garhwal, Uttar Pradesh,	S. Chakraborty 11 Jun., 1989
23336	M	Skin and Skull,	Nagaur, Tehri Garhwal, Uttar Pradesh,	S. Chakraborty 11 Jun., 1989

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
23337	F	Skin and Skull,	Nagaur, Tehri Garhwal, Uttar Pradesh,	S. Chakraborty 11 Jun., 1989
23338	F	Skin and Skull,	Nagaur, Tehri Garhwal, Uttar Pradesh,	S. Chakraborty 11 Jun., 1989
23323	F	Skin and Skull,	Nakuri, S. Uttar Kashi, Uttar Pradesh,	S. Chakraborty 01 Jun., 1989
23324	F	Skin and Skull,	Nakuri, S. Uttar Kashi, Uttar Pradesh,	S. Chakraborty 31 May 1989
23325	F	Skin and Skull,	Nakuri, S. Uttar Kashi, Uttar Pradesh,	S. Chakraborty 30 May 1989
23326	M	Skin and Skull,	Syanshu, Tehri Garhwal, Uttar Pradesh,	S. Chakraborty 09 Jun., 1989
23327	F	Skin and Skull,	Syanshu, Tehri Garhwal, Uttar Pradesh,	S. Chakraborty 09 Jun., 1989
23328	F	Skin and Skull,	Syanshu, Tehri Garhwal, Uttar Pradesh,	S. Chakraborty 09 Jun., 1989
23329	M	Skin and Skull,	Syanshu, Tehri Garhwal, Uttar Pradesh,	S. Chakraborty 09 Jun., 1989
23330	F	Skin and Skull,	Bhatwari, N. Uttar Kashi, Uttar Pradesh,	S. Chakraborty 04 Jun., 1989
23331	F	Skin and Skull,	Bhatwari, N. Uttar Kashi, Uttar Pradesh,	S. Chakraborty 04 Jun., 1989.
23332	F	Skin and Skull,	Bhatwari, N. Uttar Kashi, Uttar Pradesh,	S. Chakraborty 04 Jun., 1989
23333	F	Skin and Skull,	Bhatwari, N. Uttar Kashi, Uttar Pradesh,	S. Chakraborty 04 Jun., 1989

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
23330	33.9	—	8.6	4.3	13.5	6.3
23329	33.0	—	9.5	4.4	12.6	6.3
23328	33.0	—	9.7	4.3	13.0	6.2

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
23327	33.2	—	9.5	4.4	12.7	6.0
23326	32.4	—	8.9	4.2	13.2	5.8
23325	34.8	—	9.6	4.4	13.5	6.3
23324	32.5	—	8.6	4.1	13.3	6.0
23323	33.0	—	8.5	4.0	13.2	6.0
23338	32.6	—	9.3	4.3	13.7	6.5
23337	33.6	—	9.6	4.2	13.8	6.7
23334	33.8	—	9.3	4.5	13.5	5.6
17247	33.4	38.0	12.0	—	11.5	7.2
17150	34.0	34.0	13.0	—	12.0	7.7
19906	29.8	30.0	11.0	—	11.4	7.0
19884	36.0	34.0	14.0	4.6	12.5	7.5
12513	33.6	29.6	11.7	6.4	11.0	7.2
12514	32.8	28.0	12.0	7.0	12.1	5.4
12517	32.7	25.2	10.4	—	10.4	7.7
6937	33.2	29.5	9.5	—	10.9	6.0
6940	33.7	29.6	9.4	5.2	11.1	7.2
6943	33.4	30.8	11.5	7.3	12.0	6.2
6942	32.7	27.6	10.4	5.0	12.6	5.4
6938	33.6	34.6	11.8	5.2	12.6	6.7
6939	34.1	33.4	11.0	6.0	11.9	8.2
6941	33.0	32.6	11.5	5.6	11.6	6.8

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
23330	13.8	11.0	4.9	4.2	5.7	4.2	6.0	8.8	6.8	—	—
23326	13.3	11.1	4.7	4.2	5.5	3.7	6.2	—	7.0	—	—
23323	14.0	12.3	5.7	4.9	6.0	4.2	6.3	—	6.9	—	—
12514	13.7	12.0	4.8	4.6	5.6	4.2	6.1	—	6.8	—	—
6943	13.2	12.2	4.6	4.1	5.4	3.7	5.8	—	6.4	8.9	5.7

Remarks : These are medium-sized pipistrelle having the dorsal hairs dark brown and the belly-furs being slightly paler brown. Having a prominent lobe below the calcar and the dorsal fur extends to the base of the interfemoral membrane around the base of the pelvis. The first pre-molar is clearly visible from outside the tooth-row.

Distribution : Assam, Bihar, Himachal Pradesh, Madhya Pradesh, Maharashtra, Sikkim, Uttar Pradesh, West Bengal.

Elsewhere : Afghanistan, Bangladesh, Bhutan, China, Myanmar, Nepal, Pakistan.

104. *Pipistrellus kuhli kuhli* (Kuhl, 1819)

1819. *Vespertilio kuhlii* kuhl, *Ann. Wetterau. Ges. Naturk.* 4, 2 : 199. Trieste (Italian-Yugoslavian border).

Common name : Kuhl's pipistrelle (E.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17922	M	Skin and Skull,	Kashmor, Sind, Pakistan,	S. H. Prater 01 May 1915
17923	F	Skin and Skull,	Kashmor, Sind, Pakistan,	S. H. Prater 07 Apr., 1915
17924	F	Skin and Skull,	Kashmor, Sind, Pakistan,	S. H. Prater 09 Apr., 1915
17925	F	Skin and Skull,	Kashmor, Sind, Pakistan,	S. H. Prater 09 Apr., 1915
17926	M	Skin and Skull,	Kashmor, Sind, Pakistan,	S. H. Prater 09 Apr., 1915
17927	M	Skin and Skull,	Kashmor, Sind, Pakistan,	S. H. Prater 09 Apr., 1915
17928	F	Skin and Skull,	Kashmor, Sind, Pakistan,	S. H. Prater 09 Apr., 1915
17929	M	Skin and Skull,	Kashmor, Sind, Pakistan,	S. H. Prater 02 May 1915
17910	F	Skin and Skull,	Kashmor, Sind, W. Pakistan,	S. H. Prater 11 Mar., 1915
17911	M	Skin and Skull,	Kashmor, Sind, W. Pakistan,	S. H. Prater 12 Mar., 1915

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17912	M	Skin and Skull,	Kashmor, Sind, W. Pakistan,	S. H. Prater 11 Mar., 1915
17913	F	Skin and Skull,	Kashmor, Sind, W. Pakistan,	S. H. Prater 12 Mar., 1915
17914	F	Skin and Skull,	Kashmor, Sind, W. Pakistan,	S. H. Prater 02 May 1915
17915	F	Skin and Skull,	Kashmor, Sind, W. Pakistan,	S. H. Prater 09 Apr., 1915
17916	F	Skin and Skull,	Kashmor, Sind, W. Pakistan,	S. H. Prater 12 Apr., 1915
17917	M	Skin and Skull,	Kashmor, Sind, W. Pakistan,	S. H. Prater 09 Apr., 1915
17918	F	Skin and Skull,	Kashmor, Sind, W. Pakistan,	S. H. Prater 22 Apr., 1915
17919	F	Skin and Skull,	Kashmor, Sind, W. Pakistan,	S. H. Prater 01 Apr., 1915
17920	—	Skin and Skull,	Kashmor, Sind, W. Pakistan,	S. H. Prater ...
17921	F	Skin and Skull,	Kashmor, Sind, W. Pakistan,	S. H. Prater 02 May 1915
17073	M	Skin and Skull,	Gambat, Khairpur, Sind, Pakistan,	S. H. Prater 16 Apr., 1915
17074	F	Skin and Skull,	Gambat, Khairpur, Sind, Pakistan,	S. H. Prater 22 Apr., 1915
19896	F	Skin and Skull,	Gambat, Khairpur, Sind, Pakistan,	S. H. Prater 22 Apr., 1915
19908	F	Skin and Skull,	Mirpur, Sind, Pakistan,	C. Mc Cann 16 Oct., 1922
19907	M	Skin and Skull,	Mirpur, Sind, Pakistan,	C. Mc Cann 16 Oct., 1922
25035	M	Skin and Skull,	Karanu, Debang Valley, Arunachal Pradesh,	B. B. Dutta 02 Apr., 1999.
18226	F	Skin and Skull, (damaged)	North Italy,	Berlin Museum by Exch./1872

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
19896	36.0	45.0	13.0	5.3	13.9	8.0
17074	35.8	42.0	12.0	5.0	13.7	7.8
17073	35.1	39.0	12.0	4.5	13.6	7.5
17912	35.4	38.7	10.3	5.1	13.2	8.5
17913	33.3	—	—	—	11.7	7.7
17917	35.3	—	9.5	—	12.9	7.8
17919	35.5	37.8	9.0	3.9	12.2	8.1
17921	32.7	35.6	8.5	3.4	12.5	8.0
17922	35.7	39.1	8.5	—	12.9	9.0
17923	36.5	40.0	11.0	5.5	14.0	8.3
17924	34.3	—	—	—	13.6	7.5
17926	34.0	—	10.2	—	14.0	7.5
17927	36.0	41.0	9.1	—	12.7	8.2
19907	36.6	43.0	13.0	—	13.5	8.5
17084	34.1	39.0	12.0	5.1	12.5	6.7
19908	35.1	41.0	13.0	6.1	14.4	7.9
17085	40.9	38.0	18.0	4.9	17.3	9.3

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
17923	13.9	12.3	4.7	4.4	6.0	4.1	6.0	8.5	6.7	9.3	6.1
17926	13.3	12.2	4.6	4.0	5.5	4.0	5.3	—	6.6	—	—
17927	13.7	12.1	4.6	4.2	5.7	4.0	5.8	—	6.7	—	—
17917	13.5	12.0	4.8	4.2	5.5	3.8	5.7	—	6.8	—	—
25035	13.2	11.5	4.7	4.1	5.8	4.0	5.9	8.8	7.2	8.7	5.6
19907	15.0	13.0	5.7	4.8	6.3	4.3	6.5	—	7.7	—	—

Remarks : Nil.*Distribution :* Jammu & Kashmir, Arunachal Pradesh (Specimen in Z. S. I.).*Elsewhere :* Italy, W. Pakistan, Baluchistan.

105. *Pipistrellus paterculus* Thomas, 19151915. *Pipistrellus paterculus* Thomas, *J. Bombay nat. Hist. Soc.*, **24** : 32.

Common name : Paternal pipistrelle (E.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19898	F	Skin and Skull,	Tamanthe, Upper- Chindwin, Myanmar,	G. C. Shortridge 20 Aug., 1914
19899	M	Skin and Skull,	Buchnar, Darbhanga, Bihar,	N. A. Baptista 15 Aug., 1922
17149	F	Skin and Skull,	Tatkon, Chindwin R., Myanmar,	G. C. Shortridge 27 Jun., 1914
12644	M	Skin and Skull,	Indawgyi Lake, Myitkyina, Upper Myanmar	B. Chopra 18-31 Dec., 1926

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
19898	31.5	34.5	11.0		11.0	6.9
19899	28.0	29.0	11.0	—	11.0	6.3
17149	30.9	32.0	11.5	3.7	11.3	7.1
12644	29.8	31.2	11.7	—	11.9	7.2

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
19898	12.3	11.0	4.2	4.0	5.2	3.3	5.2	—	5.8	8.5	4.7
19899	11.8	10.1	4.2	3.8	5.1	3.4	5.3	—	6.0	8.2	4.6

Remarks : Ellerman & Morrison-scott (1951) kept the species under *pipistrellus abramus*.

Distribution : Bihar.

Elsewhere : China, Myanmar, Thailand.

106. *Pipistrellus dormeri* (Dobson, 1875)1875. *Scotozous dormeri* Dobson. *Proc. zool. soc. Lond.*, 1875 : 373.*Common name* : Dormer's Bat (E.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17248	F	Skin and Skull,	Balapalli Range, Cuddapah, A. P.	N. A. Baptista 25 Jul., 1929
17249	F	Skin and Skull,	Diguvametta, Kurnool, Andhra Pradesh	N. A. Baptista 21 Apr., 1930
17250	M	Skin and Skull,	Diguvametta, Kurnool, Andhra Pradesh,	N. A. Baptista 22 Apr., 1930
17099	F	Skin and Skull,	Palkonda Hills, Cuddapah, Andhra- Pradesh	N. A. Baptista 08 Jun., 1930
17665	F	Skin and Skull,	Singar, Gaya, Bihar	C. A. Crump 20 May, 1914
17666	M	Skin and Skull,	Koira, Chaibasa, Bihar	C. A. Crump 10 Aug., 1940
19883	F	Skin and Skull,	Singar, Gaya, Bihar	C. A. Crump 26 May, 1914
17662	M	Skin and Skull,	Gadag, S. Mahratha, Karnataka,	G. C. Shortridge 24 Dec., 1911
17664	M	Skin and Skull,	Palanpur, Gujarat,	C. A. Crump 03 Apr., 1913
17663	F	Skin and Skull,	Junagarh, Gujarat,	C. A. Crump 24 Nov., 1912
9904	M	Skin and Skull,	Bhuj, kutch, Gujarat,	C. A. Crump 30 Sep., 1911
20460	M	Skin and Skull,	Shingharaya Konda, Prakasham, A. P.	S. S. Saha 06 May, 1980
20462	F	Skin and Skull,	Mehboobnagar, Andhra Pradesh,	S. S. Saha 09 Apr., 1980
20484	M	Skin and Skull,	Kotpally, Adilabad, Andhra Pradesh	N. Mazumdar 24 Feb., 1978

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20483	F	Skin and Skull,	Mulug, Warangal, Andhra Pradesh,	Anil K. Mandal 20 Feb., 1979
18237	M	Skin and Skull,	Sikarpur, Sind, Pakistan,	W. T. Blanford 09 Sep., 1978
18239	F	Skin and Skull,	Sikarpur, Sind, Pakistan,	W. T. Blanford 09 Sep., 1978
20601	F	Skin and Skull,	Cochin, Ernakulam, Kerala,	A. Madhavan ... Sep., 1980
18814	M	Skin and Skull,	Railway Station, Volpoi, Goa,	V. C. Agrawal 18 Dec., 1968
18238	M	Skin and Skull,	South-East Persia, Iran,	W. T. Blanford ... 1872
20482	—	Skin and Skull,	Dabarji, Amristar, Punjab,	R. K. Ghosh-II 13 Jun., 1979
20440	M	Skin and Skull,	Gujarat	C. A. Crump. ...
20470	M	Skin and Skull,	Koira, Sundargarh, Orissa,	P. K. Das 14 Jul., 1973
20471	F	Skin and Skull,	Koira, Sundargarh, Orissa,	P. K. Das 11 Jul., 1973
20472	F	Skin and Skull,	Koira, Sundargarh, Orissa,	P. K. Das 13 Jul., 1973
20473	M	Skin and Skull,	Koira, Sundargarh, Orissa,	P. K. Das 13 Jul., 1973
20474	M	Skin and Skull,	Koira, Sundargarh, Orissa,	P. K. Das 14 Jul., 1973
20475	M	Skin and Skull,	Koira, Sundargarh, Orissa,	P. K. Das 14 Jul., 1973
20476	M	Skin and Skull,	Koira, Sundargarh, Orissa,	P. K. Das 13 Jul., 1973
20477	F	Skin and Skull,	Koira, Sundargarh, Orissa,	P. K. Das 14 Jul., 1973
20479	F	Skin and Skull,	Badramaa, Sambalpur, Orissa,	P. K. Das 22 Jul., 1973

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20480	F	Skin and Skull,	Badrama, Sambalpur, Orissa,	P. K. Das 22 Jul., 1973
20481	F	Skin and Skull,	Harishankar, Bolangir, Orissa,	D. P. Sanyal 23 May, 1973
7040	F	Skin and Skull,	Domepara, Orissa,	V. Ball ...
23732	F	Skin and Skull,	Jhagadiya, Broach, Gujarat	S. Chakraborty, 06 Oct., 1990
23733	M	Skin and Skull,	Jhagadiya, Broach, Gujarat	S. Chakraborty, 06 Oct., 1990
23734	F	Skin and Skull,	Jhagadiya, Broach, Gujarat	S. Chakraborty, 06 Oct., 1990
23735	F	Skin and Skull,	Jhagadiya, Broach, Gujarat	S. Chakraborty, 06 Oct., 1990
23736	F	Skin and Skull,	Jhagadiya, Broach, Gujarat	S. Chakraborty, 03 Oct., 1990
23737	F	Skin and Skull,	Jhagadiya, Broach, Gujarat	S. Chakraborty, 03 Oct., 1990
23847	M	Skin and Skull,	Nandol Dahegam, Amdavad, Gujarat,	S. Chakraborty, 10 Apr., 1990
23858	M	Skin and Skull,	Nandol Dahegam, Amdavad, Gujarat,	S. Chakraborty, 09 Apr., 1990
21686	F	Skin and Skull,	Balivasa, Medinipur, West Bengal,	P. K. Das 12 Sep., 1984
21687	M	Skin and Skull,	Mandalpushkarini, Medinipur, West Bengal,	P. K. Das 20 Sep., 1984
21688	F	Skin and Skull,	Mandalpushkarini, Medinipur, West Bengal,	P. K. Das 21 Sep., 1984
25041	M	Skin and Skull,	Lungsen, Lunglei, Mizoram,	T. P. Bhattacharya 28 Jan., 1997
25042	F	Skin and Skull,	Lungsen, Lunglei, Mizoram,	T. P. Bhattacharya 28 Jan., 1997
20467	M	Skin and Skull,	Adina (near Pandua), Malda, West Bengal,	P. K. Das 26 Feb., 1979

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20468	F	Skin and Skull,	Mitpukur, 24-Parganas (N), West Bengal,	B. Biswas 22 May, 1971
20469	M	Skin and Skull,	Singur, Hugli, West Bengal,	A. K. Mandal 26 Sep., 1975
18242	F	Skin and Skull,	Dhapa, Kolkata, West Bengal,	G. E. Dobson ... 1876
19662	F	Skin and Skull,	Tarapur, Hugli, West Bengal,	S. Chakraborty 20 Feb., 1974
8448	M	Skin only,	Kolkata, West Bengal,	
19882	M	Skin and Skull,	Bharnabhari, Jalpaiguri, West Bengal,	N. A. Baptista 10 May, 1916
21063	F	Skin and Skull,	Jhajjarkotli, Udampur, Jammu & Kashmir,	S. Chakraborty 22 Oct., 1975

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
17248	32.7	31.0	11.0	11.5	7.7
17249	35.7	35.0	12.0	11.5	7.5
17250	35.7	37.0	12.0	11.3	7.7
17099	34.2	35.0	12.0	11.2	8.0
17665	35.0	32.0	11.0	11.8	8.2
17666	34.2	35.0	12.0	11.5	8.0
19883	35.5	39.0	11.0	11.7	8.3
17662	35.5	40.0	11.0	12.0	8.2
17664	38.5	34.0	10.0	12.9	8.4
17663	35.5	32.0	11.0	12.4	8.1
9904	33.5	30.0	10.0	11.2	7.7
19882	29.5	25.0	11.0	12.9	7.2
21063	35.0	37.0	10.0	13.0	7.7

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
8448	33.3	—	10.0	—	12.4	7.8
19662	32.1	—	9.2	—	11.5	7.4
18242	32.4	33.7	10.3	4.3	12.0	7.8
20469	35.0	—	11.0	4.0	14.0	6.0
20468	34.8	—	9.5	—	12.6	8.0
20467	34.5	34.8	11.4	6.0	12.5	7.5
25042	33.8	43.1	11.0	5.2	14.9	7.2
25041	34.0	39.1	10.3	4.6	15.5	7.5
21688	34.0	39.0	11.0	4.8	12.3	7.9
21687	32.7	37.0	11.9	5.5	11.0	6.8
21686	36.2	38.3	10.5	6.0	13.0	7.3
23858	25.4	—	10.5	—	12.4	7.2
23847	34.2	—	9.3	—	13.2	8.8
23737	34.6	—	10.1	—	11.4	8.0
23736	35.5	40.8	11.2	—	12.6	7.3
23775	33.5	—	—	—	10.4	6.9
23734	34.5	36.6	11.4	4.4	12.3	7.8
23733	34.2	38.4	11.2	4.5	12.7	8.0
23732	34.4	—	10.4	4.1	12.7	7.7
7040	32.3	35.5	8.7	—	11.2	7.4
20482	34.8	38.1	12.7	5.8	13.2	8.0
20481	34.0	36.1	12.5	5.7	12.9	7.8
20480	38.4	37.9	13.0	7.3	13.9	7.5
20479	35.9	40.6	11.4	6.5	14.2	7.0
20477	36.1	37.0	12.5	6.5	13.3	6.4
20476	33.6	34.0	11.2	6.5	13.0	6.3
20475	32.0	32.0	10.5	5.5	12.0	5.5
20474	34.3	38.6	12.7	5.8	13.2	8.0
20473	39.0	38.6	12.7	5.8	13.2	8.0
20472	39.5	40.4	13.4	6.5	13.6	7.3
20471	35.6	38.0	12.8	6.8	12.9	7.5

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F. & Cl
20470	36.2	38.8	12.0	6.3	13.3	7.7
20440	35.6	38.6	11.4	5.2	13.1	8.4
20482	35.7	38.5	10.4	5.2	12.8	8.6
18238	34.0	37.8	9.5	4.2	12.5	7.7
18814	38.0	41.0	12.5	6.0	14.2	8.5
20601	34.8	37.5	10.8	5.5	12.2	8.9
18239	34.7	36.2	9.7	—	12.5	8.8
18237	32.0	34.0	8.4	—	11.4	8.5
20483	35.1	37.7	9.9	5.3	12.2	7.5
20462	35.9	38.1	11.0	5.2	12.5	8.5
20461	34.0	36.7	10.6	4.7	12.2	7.2
20460	34.0	38.0	10.3	4.2	12.2	6.7

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
21063	14.9	13.5	5.5	4.7	7.0	4.5	6.6	10.1	7.3	—	6.4
20461	14.6	13.3	6.0	4.5	6.4	4.0	6.6	—	6.9	11.0	6.0
18239	14.6	13.1	5.9	4.7	6.5	4.2	6.5	—	7.0	—	—
20467	14.7	13.3	5.4	5.0	6.7	4.2	7.0	—	7.7	10.2	5.8
20469	14.3	11.9	5.7	4.7	6.5	4.0	6.4	—	6.8	10.4	6.1
25041	12.9	11.9	4.5	4.1	5.8	3.8	5.9	8.7	7.1	8.9	5.1
25042	13.0	11.6	4.7	4.1	5.7	3.7	6.0	8.7	7.1	9.2	5.2
23858	14.3	12.9	5.1	4.5	6.6	4.1	6.6	—	7.4	10.1	6.0
23847	14.4	12.9	5.3	4.8	6.6	4.0	6.7	—	7.3	10.4	6.3
23737	14.4	12.3	5.2	4.7	6.7	4.0	6.5	9.8	6.9	10.2	6.2
23736	14.5	13.1	5.5	4.5	6.7	4.0	6.4	—	7.2	10.3	6.1
23735	14.3	12.7	5.3	4.6	6.7	4.2	6.7	—	7.7	—	6.0
23734	14.4	13.1	5.5	4.8	6.9	4.2	6.7	—	7.3	10.4	6.3
23733	14.9	13.2	5.6	4.9	6.7	4.3	6.8	—	7.5	10.7	6.4
23732	14.9	13.7	5.3	4.5	6.9	4.1	6.5	9.6	7.0	10.5	6.2

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
20471	14.6	12.8	5.3	5.0	6.8	4.1	6.8	10.3	8.2	—	—
20472	15.0	13.5	6.0	5.1	7.3	4.1	7.2	—	7.6	11.3	7.1
20473	14.2	12.6	5.5	4.7	6.6	4.2	6.7	—	7.5	10.2	6.1
20475	—	12.0	5.4	4.4	6.2	4.3	6.6	—	7.2	9.2	6.0
20476	14.5	12.7	5.5	4.7	6.7	4.2	6.9	10.0	7.1	10.2	6.1
20479	14.2	12.5	5.5	4.9	6.8	4.2	6.9	10.2	7.4	10.5	6.8
20481	14.2	12.3	5.3	4.5	6.6	3.9	6.2	9.9	7.2	10.4	6.3

Remarks : The species was considered to be under the genus *Scotozous* Dobson by several authors. Here the species under the genus *scotozous* was considered to be under *pipistrellus* Dobson.

Medium-sized bats with subtriangular and rounded-tipped ears. Tragus straight and pointed with a small lobe at the base of outer margin. The second upper incisor very small and not extending beyond cingulum of inner incisor.

Distribution : Widely distributed in the Indian Mainland, from Jammu & Kashmir in the north to Karnataka in south, Punjab in the west to West Bengal, Mizoram, Nagaland in the east.

Elsewhere : China and Pakistan.

107. *Pipistrellus peguensis* Sinha, 1969

1969. *Pipistrellus peguensis* Sinha, *Proc. zool. Soc. Calcutta*, **22** : 83. (Pegu, Myanmar).

Common name : Pegu pipistrelle (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
22376	M	Skin and Skull,	Darjeeling, West Bengal,	W. S. Atkinson ... 1872
22377	M	Skin and Skull,	Darjeeling, West Bengal,	W. S. Atkinson ... 1872
22378	M	Skin and Skull,	Darjeeling, West Bengal,	W. S. Atkinson ... 1872
22379	M	Skin and Skull, (Damaged)	Darjeeling, West Bengal,	W. S. Atkinson ... 1872

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
22380	M	Skin and Skull, (Damaged)	Darjeeling, West Bengal,	W. S. Atkinson ... 1872
22381	M	Skin and Skull, (Damaged)	Darjeeling, West Bengal,	W. S. Atkinson ... 1872

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tb	F & Cl
22376	33.5	35.6	9.1	12.5	6.7
22377	32.6	—	8.5	12.6	6.2
22378	32.6	—	—	12.2	6.2
22380	33.3	35.0	9.0	12.5	6.4
22381	33.3	—	8.1	12.6	6.7

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
22380	13.6	12.7	4.9	4.4	5.8	3.6	5.8	—	6.3	9.5	5.7
22381	12.9	11.8	4.7	4.2	5.5	3.8	6.1	8.4	6.6	—	5.4

Remarks : Corbet and Hill (1992) considered *peguensis* as synonyms of *P. javanicus* (Gray).

Distribution : India : West Bengal.

Elsewhere : Myanmar.

108. *Pipistrellus circumdatus* (Temminck, 1840)

1840. *Vespertilio circumdatus* Temminck, *Monogr. Mamm.*, 2 : 214.

Common name : Large Black pipistrelle.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25080	F	Skin and Skull,	Sairep, Lunglei, Mizoram,	T. P. Bhattacharya 25 Apr., 1995

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
25080	40.6	41.4	13.5	5.4	17.1	5.4

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
25080	16.0	14.2	5.9	5.2	7.5	4.5	7.3	11.2	8.2	11.6	6.5

Remarks : The upper parts of the specimen is deep black. Underparts dull black. Having no post-calcarial lobe. Anterior upper premolar minute and displaced inwardly from the tooth-row. Posterior upper premolar and canine touch each other. The other specimen of the species from Meghalaya, India, is present in N.Z.C which is badly damaged, collected by R. Mathew, 26 May, 1998, from East Khasi Hills, Shillong, 1 Female.

Distribution : Inida : Meghalaya (Das *et al.* 1995), Mizoram (Mandal *et al.* 2000).

Elsewhere : China, Indonesia, Malaysia, Myanmar, Thailand.

109. *Pipistrellus savii* (Bonaparte, 1837)

1837. *Vespertilio savii* Bonaparte, *Faun. Ital.*, 1 : fasc. 20. pisa, Italy.

Common name : Savi's Pipistrelle

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20193	M	Skin and Skull, (Skull damaged)	Geneva, Switzerland,	Berlin Museum, by exchange, 1872

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
20193	31.9	34.1	11.9	3.5	12.5	7.4

Measurements :**Cranial :** Nil.

Remarks : Das *et al.* (1995) treated *austenianus* Dobson as a distinct species closely related to *P. savii*, (Alfred *et al.* 2002).

Distribution : Approximate distribution of the species : France, Switzerland, Italy, Spain, has been recorded from Germany (Breslau), Greece.

Genus *Hesperoptenus* Peters, 1868**110. *Hesperoptenus tickelli* (Blyth, 1851)**

1851. *Nycticejus tickelli* Blyth, *J. Asiat. Soc. Bengal*, **20** : 157. Chaibassa, Orissa, India (Wroughton, 1918).

Common name : Tickell's Bat.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19039	F	Skin and Skull	Andaman Island,	D : Lt. Col. R. C. Tytler/1864
19040	F	Skin and Skull	Andaman Island,	D : Lt. Col. R. C. Tytler/1864
19041	M	Skin and Skull (Skull damaged)	Andaman Island,	D : Lt. Col. R. C. Tytler/1864
19549	F	Skin and Skull	Kasipur, Koraput, Orissa	P. K. Das 09 Jan., 1972
19550	F	Skin and Skull	Kasipur, Koraput, Orissa	P. K. Das 09 Jan., 1972
19551	F	Skin and Skull	Kasipur, Koraput, Orissa	P. K. Das 09 Jan., 1972
19552	M	Skin and Skull	Kasipur, Koraput, Orissa	P. K. Das 10 Jun., 1972
19553	M	Skin and Skull	Kasipur, Koraput, Orissa	P. K. Das 09 Jun., 1972
25705	M	Skin and Skull	Sirguja, Tenasserim, Myanmar,	W. T. Blanford ... 1878
25706	M	Skin and Skull	Sirguja, Tenasserim, Myanmar,	W. T. Blanford ... 1871
16963	M	Skin and Skull	Koira, Chaibsa, Bihar & Orissa,	C.A Crump 08 Aug., 1914

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
16962	F	Skin and Skull	Potoli, N. Canara, Karnataka,	G. C. Shortridge 19 Jan., 1912
16964	F	Skin and Skull	Apura, N. C. P., Sri Lanka	Maj : E. W. Mayor 19 May, 1914
25704	F	Skin and Skull	Jashpurnagar, Raigarh, Madhya Pradesh	W. T. Blanford 05 May, 1870

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
25704	56.1	58.0	16.5	7.3	23.6	11.9
16964	52.8	48.0	16.0	7.4	23.4	10.5
16962	57.1	57.0	17.0	6.6	23.9	12.1
16963	23.2	23.0	16.0	6.7	24.1	12.8
25706	56.6	53.5	18.0	6.5	23.7	13.0
25705	54.4	50.0	16.2	5.4	22.6	11.2
19553	56.5	51.0	18.1	5.9	24.2	11.2
19552	55.0	54.0	14.0	6.2	23.4	12.0
19551	55.5	54.0	15.2	6.3	23.2	12.2
19550	55.2	52.8	16.6	5.7	24.0	11.7
19549	58.4	55.5	19.1	6.5	24.7	12.0
19041	49.8	40.2	14.3	4.9	18.7	11.3
19040	51.3	48.6	13.7	5.6	20.1	12.0
19039	51.1	43.6	14.5	5.3	20.3	11.6

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
19039	19.9	16.8	7.5	6.5	9.5	4.7	9.1	14.0	9.5	14.4	7.7
19040	20.0	17.0	7.6	6.8	9.8	4.9	9.1	14.4	9.8	15.0	8.6
19549	20.0	17.9	7.9	7.0	10.3	5.5	9.9	15.2	10.2	15.5	9.2

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
19550	19.2	17.6	7.5	6.7	10.0	5.4	9.4	—	9.5	14.6	9.3
19551	19.9	17.7	7.9	7.0	10.5	5.5	9.6	15.2	10.1	15.1	8.8
19552	20.3	18.4	8.0	6.5	10.0	5.2	9.8	14.4	9.9	15.2	9.1
19553	19.5	17.8	7.7	6.8	10.1	5.0	10.0	15.0	9.9	14.7	8.7
25706	20.0	18.2	8.2	7.2	10.7	5.5	9.9	14.7	10.2	15.0	9.6
16962	20.3	17.1	7.0	6.6	9.8	4.8	9.0	13.8	9.6	—	8.6
16964	19.6	15.8	7.1	6.1	9.7	4.7	9.1	13.7	9.6	13.8	8.2

Remarks : Nil.

Distribution : India : Andhra Pradesh, Bihar, Karnataka, Madhya Pradesh, Maharashtra, Orissa, Rajasthan, Tamil Nadu, Andaman Islands, West Bengal (Wroughton, 1917a).

Elsewhere : Sri Lanka, Nepal (Mitchell, 1980), Bangladesh (Khan, 1982), Myanmar (Anderson, 1881), Thailand (Hill & Thonglongya, 1972).

Genus *Tylonycteris* Peters, 1872

111. *Tylonycteris pachypus fulvida* (Blyth, 1859)

1859. *Scotophilus fulvidus* Blyth, *J. Asiat. Soc. Beng.*, 28 : 293. (Schwegyin, Sittang River, Southeastern Myanmar).

Common name : Club-footed Bat. (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
24440	F	Skin and Skull,	Teirei (Dampa), Aizawl, Mizoram,	A. K. Mandal 24 Dec., 1993
25033	F	Skin and Skull,	Karanu, Dibang Valley, Arunachal Pradesh,	B. B. Dutta 02 Apr., 1999
25034	F	Skin and Skull,	Karanu, Dibang Valley, Arunachal Pradesh,	B. B. Dutta 02 Apr., 1999
19046	F	Skin and Skull,	Darjeeling, West Bengal,	F. Stoliczka ... 1871
19047	F	Skin and Skull,	Darjeeling, West Bengal,	F. Stoliczka ... 1871

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
22298	F	Skin and Skull,	Sivok, Darjeeling, West Bengal,	C. A. Crump 29 Mar., 1915
19061	F	Skin and Skull, (skull damaged)	Andaman Island,	J. Wood Mason ... 1872
19062	F	Skin only,	Andaman Island,	J. Wood Mason ... 1872
19063	M	Skin and Skull,	Andaman Island,	J. Wood Mason ... 1872
19064	M	Skin and Skull,	Andaman Island,	J. Wood Mason 1872
19065	M	Skin and Skull,	Andaman Island,	J. Wood Mason ... 1872
19066	M	Skin and Skull,	Andaman Island,	J. Wood Mason ... 1872
19067	M	Skin and Skull,	Andaman Island,	J. Wood Mason ... 1872
19068	F	Skin and Skull,	Andaman Island,	F. Stoliczka ... 1875
5335	F	Skin and Skull,	Thaing, Mergui, Myanmar,	J. Anderson 05 Feb., 1882
5336	M	Skin and Skull,	Thaing, Mergui, Myanmar	J. Anderson 05 Feb., 1882
5337	M	Skin and Skull,	Thaing, Mergui, Myanmar,	J. Anderson 05 Feb., 1882
5338	F	Skin and Skull,	Thaing, Mergui, Myanmar,	J. Anderson 05 Feb., 1882
5339	M	Skin and Skull,	Thaing, Mergui, Myanmar,	J. Anderson 05 Feb., 1882
5340	F	Skin and Skull,	Thaing, Mergui, Myanmar,	J. Anderson 05 Feb., 1882
19048	F	Skin and Skull,	Andaman Island,	J. Homfray ... 1871
19049	F	Skin and Skull,	Andaman Island,	J. Homfray ... 1871

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19050	F	Skin and Skull,	Andaman Island,	J. Homfray ... 1871
19051	F	Skin and Skull,	Andaman Island,	J. Homfray ... 1871
19052	F	Skin and Skull,	Andaman Island,	J. Homfray ... 1871
19054	F	Skin and Skull,	Andaman Island,	J. Homfray ... 1871
19055	M	Skin and Skull,	Andaman Island,	J. Homfray ... 1871
19056	M	Skin and Skull,	Andaman Island,	J. Homfray ... 1871
19057	F	Skin and Skull,	Andaman Island,	J. Wood Mason ... 1872
19058	M	Skin and Skull,	Andaman Island,	J. Wood Mason ... 1872
19059	F	Skin and Skull,	Andaman Island,	J. Wood Mason ... 1872
19060	F	Skin and Skull,	Andaman Island,	J. Wood Mason ... 1872
25724	F	Skin and Skull,	Khasi Hills, Meghalaya,	D : J. H. Bourne ... 1872
25725	M	Skin and Skull,	Khasi Hills, Meghalaya,	D : J. H. Bourne ... 1872
25726	F	Skin and Skull,	Kherapara West, Garo Hills, Meghalaya,	R. K. Ghosh 21 Jul., 1988
17430	F	Skin and Skull,	Tavoy Island, Mergui- Archipelago, Myanmar,	C. Primrose 21 Oct., 1921
17431	M	Skin and Skull,	Tavoy Island, Mergui- Archipelago, Myanmar,	C. Primrose 21 Oct., 1921
17432	F	Skin and Skull,	Nathay Mine, Mergui- Archipelago, Myanmar,	C. Primrose 27 Apr., 1922
25718	?	Skin and Skull,	Kerala,	D : A. Madhavan 18 Feb., 1993

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25719	M	Skin and Skull,	Kerala,	D : A. Madhavan 18 Feb., 1993
25720	F	Skin and Skull,	Kerala,	D : A. Madhavan 18 Feb., 1993
25721	M	Skin and Skull,	Kerala,	D : A. Madhavan 18 Feb., 1993
25722	F	Skin and Skull,	Kerala,	D : A. Madhavan 18 Feb., 1993
25723	F	Skin and Skull,	Kerala,	D : A. Madhavan 18 Feb., 1993
25707	F	Skin and Skull,	Kerala,	D : A. Madhavan 18 Feb., 1993
25732	F	Skin and Skull,	Venginissery, Trichur, Kerala,	A. Madhavan 05 Jun., 1990
25733	F	Skin and Skull,	Thanniyam, Trichur, Kerala,	A. Madhavan 16 Jun., 1990
25734	F	Skin and Skull,	Thanniyam, Trichur, Kerala,	A. Madhavan 16 Jun., 1990
25735	M	Skin and Skull,	Panninjayam, Trichur, Kerala,	A. Madhavan 06 Aug., 1990
25736	M	Skin and Skull,	Panninjayam, Trichur, Kerala,	A. Madhavan 06 Aug., 1990
25737	M	Skin and Skull,	Panninjayam, Trichur, Kerala,	A. Madhavan 06 Aug., 1990
25738	M	Skin and Skull,	Padinjattimuri Trichur, Kerala,	A. Madhavan 23 Sep., 1990
25739	F	Skin and Skull,	Padinjattimuri, Trichur, Kerala,	A. Madhavan 23 Sep., 1990
25708	M	Skin and Skull,	Kerala,	D: A. Madhavan 18 Feb., 1993
25709	F	Skin and Skull,	Kerala,	D: A. Madhavan 18 Feb., 1993
25710	M	Skin and Skull,	Kerala,	D: A. Madhavan 18 Feb., 1993

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25711	F	Skin and Skull,	Kerala,	D: A. Madhavan 18 Feb., 1993
25712	F	Skin and Skull,	Kerala,	D: A. Madhavan 18 Feb., 1993
25713	M	Skin and Skull,	Kerala,	D: A. Madhavan 18 Feb., 1993
25714	M	Skin and Skull,	Kerala,	D: A. Madhavan 18 Feb., 1993
25715	F	Skin and Skull,	Kerala,	D: A. Madhavan 18 Feb., 1993
25716	M	Skin and Skull,	Kerala,	D: A. Madhavan 18 Feb., 1993
25717	F	Skin and Skull,	Kerala,	D : A. Madhavan 18 Feb., 1993
25727	F	Skin and Skull,	Trichur, Kerala,	D : A. Madhavan 25 Aug., 1990
25728	F	Skin and Skull,	Vallachira, Trichur, Kerala,	D : A. Madhavan 25 Aug., 1990
25729	F	Skin and Skull,	Vallachira, Trichur, Kerala,	D : A. Madhavan 25 Aug., 1990
25730	F	Skin and Skull,	Vallachira, Trichur, Kerala,	D : A. Madhavan 25 Aug., 1990
25731	M	Skin and Skull,	Vallachira, Trichur, Kerala,	D : A. Madhavan 25 Aug., 1990
17334	F	Skin and Skull,	Kalimpong, Darjeeling, West Bengal,	N. A. Baptista 22 Jul., 1916
17332	M	Skin and Skull,	Pashok, Darjeeling West Bengal,	N. A. Baptista 07 Sep., 1915
17336	M	Skin and Skull,	Kalimpong, Darjeeling, West Bengal,	N. A. Baptista 29 Oct., 1916
17335	F	Skin and Skull,	Kalimpong, Darjeeling, West Bengal,	N. A. Baptista 22 Jul., 1916
17333	M	Skin and Skull,	Peshok, Darjeeling, West Bengal,	N. A. Baptista 08 Sep., 1915

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17331	M	Skin and Skull,	Peshok, Darjeeling, West Bengal,	N. A. Baptista 24 Jun., 1915
17153	F	Skin only,	Samasgi, Kanara, Karnataka,	G. C. Shortridge 20 March 1912
9916	M	Skin only,	Sagar, Shimoga, Mysore, Karnataka	B. N. H. S. M. S. Coll 07 Jun., 1912

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
25731	26.6	28.7	7.1	—	11.4	6.1
25730	26.8	28.9	7.2	—	11.3	6.2
25729	26.6	29.0	7.2	—	11.1	5.7
25728	26.5	28.6	7.0	2.5	11.2	5.9
25727	26.6	28.8	7.0	2.6	11.3	6.0
25717	26.7	31.0	7.2	2.7	10.7	5.8
25716	25.2	—	7.1	2.9	10.8	6.1
25715	24.8	28.5	7.2	3.1	10.9	6.0
25714	24.4	—	7.7	—	10.4	6.7
25713	26.2	29.3	7.2	—	9.4	7.3
25712	24.6	30.1	7.4	2.9	10.0	5.5
25711	26.7	31.0	8.6	3.3	11.1	6.2
25710	25.7	30.1	7.7	—	9.6	6.6
25709	27.0	30.3	9.0	3.1	9.8	6.7
25708	26.2	28.0	9.4	3.3	9.9	6.0
25707	25.8	27.2	7.8	3.3	9.7	5.5
25723	25.6	27.7	7.2	—	11.0	6.0
25722	26.0	27.6	7.7	—	10.3	6.2
25721	25.3	29.0	6.7	—	10.4	5.5
25720	25.0	—	7.5	—	10.5	6.0
25719	29.0	—	8.7	4.4	10.5	5.3

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
25718	26.3	—	6.7	—	11.3	6.4
25726	23.3	24.5	7.0	—	9.3	5.5
25725	27.6	31.9	10.5	3.5	12.0	6.7
25724	27.1	31.5	10.2	3.5	12.4	6.5
17432	24.7	26.0	9.0	—	10.2	7.0
17153	26.9	32.0	10.0	—	11.3	6.3
9916	24.3	28.0	9.5	—	10.2	5.9
17431	25.0	27.0	13.0	—	11.1	7.5
17430	25.8	27.0	13.0	3.5	11.3	7.7
22298	25.9	—	6.9	—	11.0	5.0
19047	25.7	29.1	8.2	—	10.7	6.2
19046	27.4	30.2	8.2	—	10.2	6.5
25034	26.0	30.5	7.8	—	10.9	5.0
25033	27.6	—	7.7	—	10.7	6.4
24440	34.2	—	12.5	7.1	17.4	6.5
19068	24.3	—	9.5	—	9.6	5.6
19067	27.1	33.2	10.6	3.4	12.5	6.1
19066	24.4	—	9.0	2.8	9.6	6.0
19065	23.9	24.0	8.3	3.0	9.2	6.0
19064	23.1	—	9.2	2.7	9.9	6.5
19063	23.4	23.5	8.7	2.5	9.4	5.7
19062	24.9	29.6	9.4	—	10.2	7.0
19061	24.3	26.5	8.3	—	8.4	4.7
5340	25.4	31.0	10.5	—	10.6	6.4
5339	26.3	32.3	10.3	—	11.3	5.9
5338	25.1	30.0	9.9	—	10.2	6.5
5337	25.6	30.1	10.2	—	10.1	7.1
5336	25.0	30.2	10.1	3.2	10.5	7.2
5335	24.6	29.1	9.7	3.1	10.1	6.7
19060	23.0	25.5	8.5	2.8	8.9	6.7
19059	25.2	30.1	9.2	3.1	10.1	7.2

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
19058	23.8	27.5	8.7	2.6	8.2	6.1
19057	24.2	28.8	9.2	2.7	8.9	6.3
19056	24.0	28.7	9.3	2.9	9.6	6.7
19055	28.9	35.5	10.2	3.2	10.5	7.2
19054	24.6	28.5	9.1	3.0	10.0	6.7
19052	25.0	29.7	9.5	3.1	9.4	6.9
19051	25.4	29.5	9.2	3.9	10.4	6.5
19050	25.1	30.1	8.9	—	10.6	6.2
19049	24.7	28.5	9.0	2.7	8.7	7.1
19048	25.6	26.9	10.1	3.2	8.3	6.0
25732	26.3	28.5	6.9	2.9	11.3	6.0
25733	26.8	29.0	7.1	2.7	11.4	6.2
25734	26.2	28.4	7.0	2.7	11.2	6.3
25735	27.1	29.1	7.3	—	11.4	6.3
25636	27.0	29.0	7.3	2.8	11.5	6.4
25737	26.7	28.7	6.9	—	11.3	6.0
25738	26.2	28.3	6.8	—	10.9	6.0
25739	25.5	27.9	6.7	2.5	10.2	6.0

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
25727	12.0	10.8	4.0	3.8	5.4	3.6	5.3	8.9	7.5	8.2	4.4
25729	12.2	10.7	4.0	4.2	5.7	3.7	5.3	8.2	6.5	—	—
25727	10.5	9.5	4.0	3.8	4.8	3.7	5.0	7.7	6.7	7.2	4.1
17430	12.2	10.9	3.7	4.0	5.3	3.9	5.4	—	6.4	—	—
17431	12.5	10.7	3.8	4.1	5.2	4.1	5.5	—	6.9	7.9	4.7
17432	11.0	9.7	3.5	3.7	5.0	3.3	4.9	—	6.3	7.0	4.3
24440	14.4	12.7	5.4	3.7	5.3	3.4	5.7	8.5	7.4	9.5	6.3
25034	11.4	10.3	4.7	8.6	5.2	3.8	4.9	—	6.3	7.3	4.2

19046	11.6	10.4	3.7	4.0	5.5	3.8	5.3	8.3	6.7	—	—
19047	11.0	10.0	3.7	3.5	5.1	3.7	5.2	—	6.3	7.5	—
5336	11.8	10.3	3.7	3.8	5.9	4.1	5.4	8.8	6.9	—	—
5337	12.6	11.2	4.3	3.9	5.7	4.0	5.5	8.8	6.9	8.7	4.3
5338	12.2	11.0	4.0	4.0	6.0	4.0	5.5	—	—	—	—
19059	11.9	10.6	4.2	4.1	5.8	3.8	5.6	—	6.5	—	—

Remarks : One of the two smallest bats (the other is *pipistrellus minus*). Reddish brown above and below, ears shorter and rounded at tip. Tragus short and rounded at tip. Flethy pads present at junction of thumb and second finger and on soles. Skull dorso-ventrally flattened and Brain-case and rostrum at same level.

Distribution : Arunachal Pradesh (Specimen in Z. S. I.), Meghalaya (Specimen in Z. S. I.), Mizoram (Specimen in Z. S. I.), Kerala (Specimen in Z. S. I.), Sikkim, Tripura (Specimen in Z. S. I.), West Bengal and Andaman Islands (Specimen in Z. S. I.).

Elsewhere : Bangladesh, Myanmar (Specimen in Z. S. I.), Southern China, Vietnam, Laos, Thailand.

Genus *Barbastella* Gray, 1821

112. *Barbastella leucomelas Darjeelingensis* (Hodgson, 1855)

1855. *Plecotus darjeelingensis* Hodgson, in horsfield, *Ann. Mag. N. H.* **16** : 103. Darjeeling, North-eastern India. (Wroughton and Tate gave Nepal).

Common name : Eastern Barbastella (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17326	M	Skin and Skull,	Nimbong, Darjeeling, West Bengal,	N. A. Baptista 22 Jun., 1916
17327	F	Skin and Skull,	Nimbong, Darjeeling, West Bengal,	N. A. Baptista 04 Jul., 1916
19325	F	Skin and Skull,	Yangihssar, E. Turkestan,	F. Stoliczka ... 1874
19324	F	Skin and Skull,	Shimla, Himachal Pradesh,	Moulavi Ataur Rahman/... 1872

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19323	F	Skin and Skull,	Lachung, Sikkim	W.T. Blanford ... 1872
19321	F	Skin and Skull,	Musouri, Uttaranchal	Capt. F. Hutton ... 1844
19320	F	Skin and Skull,	Musouri, Uttaranchal	Capt. F. Hutton ... 1844
6968	M	Skin and Skull,	Gilgit, Kashmir,	J. Scully ...
6967	F	Skin and Skull,	Gilgit, Kashmir	J. Scully ...
6966	M	Skin and Skull,	Nepal,	J. Scully ...
7058	?	Skin and Skull,	Gilgit, Kashmir	J. Scully ...
7057	F	Skin and Skull,	Gilgit, Kashmir	J. Scully ...

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
6966	40.5	44.2	15.0	5.5	18.1	7.5
6967	43.4	48.7	16.3	—	20.2	9.0
6968	41.6	44.2	15.6	5.5	20.4	8.6
7057	40.4	45.1	15.2	7.5	17.3	7.5
7058	39.4	41.5	14.7	7.0	17.0	7.7
19320	38.4	45.0	17.6	6.2	18.3	7.7
19321	40.3	48.5	17.0	6.4	18.7	8.1
19323	40.5	46.7	16.8	6.0	18.0	8.3
19324	40.5	45.0	—	—	12.0	8.5
19325	44.9	—	14.3	—	21.2	8.4
17326	40.4	47.0	16.0	—	19.5	9.0
17327	41.1	45.0	17.0	—	20.3	9.7

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
7058	15.2	12.8	4.9	4.1	5.9	4.5	5.9	7.7	7.2	-	-
6966	14.6	12.2	4.7	3.7	5.7	4.0	5.8	7.0	7.1	-	-
6967	14.9	12.9	4.8	3.9	5.8	4.4	6.2	7.6	7.3	-	-
19323	15.2	13.0	4.9	3.7	5.9	4.1	5.7	-	7.7	-	-

Remarks : They are small and delicately built bats having striking body colour. Extreme tips of the hairs being pale golden brown to give hoary appearance. The ears are large and squarish in outline and forwrd slanting. Tragus being the half the length of the ear and in shape it is triangular. Two dark lines present on inter-femoral membrane from heel to base of pelvis.

Distribution : Himachal Pradesh (Dobson, 1876), Jammu & Kashmir (Sharma & Sharma, 1976, Scully, 1881), Meghalaya (Dobson, 1874), Rajasthan, Uttar Pradesh (Blyth, 1863 a), Sikkim, West Bengal, Assam, Mizoram.

Elsewhere : Afghanistan, Pakistan, Nepal, Western-China, Japan.

Genus *Scotomanes* Dobson, 1875113. *Scotomances ornatus* (Blyth, 1851)

1851. *Nycticejus ornatus* Blyth, *J. Asiat. Soc. Bengal*, 20 : 517. Cherrapunji, Khasi Hills, Meghalaya, India.

Common name : Harlequin Bat.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19397	?	Skin and Skull,	Darjeeling, West Bengal,	W. S. Atkinson ... 1872
7306	F	Skin and Skull,	Tindharia, Darjeeling, West Bengal,	W. Partridge ... May, 1892
20219	F	Skin and Skull,	Sivok, Darjeeling, West Bengal,	C. A. Crump 23 May, 1915
25740	M	Skin and Skull,	Peshok, Darjeeling, West Bengal,	N.A. Baptista Jun.,-Aug., 1915

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
18100	M	Skin and Skull,	Manwyne, Sanda Valley, Yunnan,	J. Anderson ... 1868
18101	M	Skin and Skull,	Ponsee, Kakhyen Hills, Myanmar,	J. Anderson ... 1868
11324	F	Skin and Skull,	Dimapur Road, Dimapur, Assam,	M. L. Roonwal 22 Jul., 1945
17667	M	Skin and Skull,	Peshok, Darjeeling, West Bengal,	N.A. Baptista 03 Sep., 1915
17668	F	Skin and Skull,	Sivok, Darjeeling, West Bengal,	C. A. Crump 19 Mar., 1915
17669	F	Skin and Skull,	Sivok, Darjeeling, West Bengal,	C. A. Crump 19 Mar., 1915
20219	F	Skin and Skull,	Sivok, Darjeeling, West Bengal,	C. A. Crump 23 Mar., 1915
9132	F	Skin and Skull, (Abor Expedition)	Balek, Arunachal Pradesh,	S. W. Kemp 25 Mar., 1912

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
19397	59.7	53.6	23.2	8.5	24.4	16.9
7306	60.8	—	20.8	8.0	24.2	16.0
20219	60.0	65.6	21.3	7.8	25.3	15.3
25740	55.7	—	17.3	—	23.2	13.7
18100	56.0	53.4	20.0	6.9	23.5	14.3
18101	55.8	—	18.4	7.5	23.7	15.3
11324	52.5	—	18.7	7.0	—	14.0
17669	58.6	58.0	20.0	6.7	22.5	15.3
17668	63.7	59.0	22.0	—	24.5	17.1
17667	59.5	58.0	22.0	—	23.7	16.2
9132	61.1	60.5	23.1	6.8	24.0	16.0

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
17667	22.3	20.0	8.0	7.1	10.5	4.8	9.9	16.9	10.9	16.5	9.5
17668	22.6	20.0	8.4	6.9	11.2	4.7	11.0	17.0	11.0	—	—
17669	21.7	18.9	8.0	6.4	10.2	4.6	9.7	16.3	11.0	15.9	9.2
20219	22.1	20.4	8.6	7.0	10.2	5.0	10.2	16.7	10.8	—	9.8
25740	21.0	18.4	7.6	6.6	9.9	4.7	9.9	15.7	10.3	—	8.3
18101	22.1	20.2	8.0	6.6	10.2	4.8	10.3	—	10.1	—	10.0

Remarks : Large Vespertilionine bats, orange-brown above having some white spots and streaks. Hairs are dark brown at base, then isabelline with tips brownish yellow. A broad white V-shaped band extends from shoulders to abdomen having a white collar commencing beneath each ear, rest of lower parts brown. Ears moderate and subtriangular with tips rounded, tragus bluntly pointed, tip of tail free.

Thomas (1921) described the population from Jaintia Hills, Meghalaya as distinct subspecies viz. *S. O. imbremsis* and the same was maintained by Ellerman and Morrison-Scott (1951). However, Das *et al.*, (1995) synonymised *imbremsis* with the nominate one (Alfred *et al.*, 2002).

Distribution : Arunachal Pradesh, Manipur, Meghalaya, Sikkim, West Bengal.

Elsewhere : China, Myanmar, Thailand, Vietnam and probably Bangladesh.

Genus *Scotophilus* Leach, 1821114. *Scotophilus kuhli kuhli* Leach

1821. *Scotophilus kuhli* Leach, *Trans. Linn. Soc. Lond.*, 13 : 72 (Type-locality not known, but India according to hill & Thonglongya 1972).

Common name : Lesser yellow Bat (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
21680	F	Skin and Skull,	Balivasa, Medinipur, West Bengal,	P. K. Das 12 Sep., 1984
21681	M	Skin and Skull,	Balivasa, Medinipur, West Bengal,	P. K. Das 13 Sep., 1984

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
21682	M	Skin and Skull,	Palivasa, Medinipur, West Bengal,	P. K. Das 13 Sep., 1984
21683	F	Skin and Skull,	Balivasa, Medinipur, West Bengal	P. K. Das 13 Sep., 1984
21684	M	Skin and Skull,	Amlagora (near Garhbeta) Medinipur, West Bengal;	P. K. Das 21 Sep., 1984
21685	F	Skin and Skull,	Amlagora, Medinipur, West Bengal,	P. K. Das 21 Sep., 1984
24719	F	Skin and Skull,	Ambasa, North Dist., Tripura,	N. Majumdar 28 Jul., 1991
20359	F	Skin and Skull, (Damaged)	Bhonzkea (near Joshipur) Mayurbhanj, Orissa,	A. K. Mandal 30 Jan., 1971
20361	F	Skin and Skull,	Bhonzkea, Mayurbhanj, Orissa,	A. K. Mandal 30 Jan., 1971
20362	M	Skin and Skull,	Bhonzkea, Mayurbhanj, Orissa,	A. K. Mandal 30 Jan., 1971
20374	F	Skin and Skull,	Bhonzkea, Mayurbhanj, Orissa,	A. K. Mandal 30 Jan., 1971
20378	F	Skin and Skull,	Bhonzkea, Mayurbhanj, Orissa,	A. K. Mandal 30 Jan., 1971
20379	M	Skin and Skull,	Bhonzkea, Mayurbhanj, Orissa,	A. K. Mandal 30 Jan., 1971
20380	M	Skin and Skull,	Bhonzkea, Mayurbhanj, Orissa,	A. K. Mandal 30 Jan., 1971
20381	M	Skin and Skull,	Bhonzkea, Mayurbhanj, Orissa,	A. K. Mandal 30 Jan., 1971
20229	M	Skin and Skull,	Rajmahal, Bhagalpur, Bihar,	V. Ball ... 1868
20232	F	Skin and Skull,	Manbhum, Singhbhum, Bihar,	Ind.Mus.Colln. ... 1866
20234	M	Skin and Skull,	Barhi, Hazaribagh, Bihar	R. K. Ghosh-II 01 Jul., 1979
20236	F	Skin and Skull,	Hazaribagh, Bihar,	C.A. Crump 04 Jun., 1914

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20235	M	Skin and Skull,	Hazaribagh, Bihar,	C.A. Crump 04 Jun., 1914
20237	F	Skin and Skull,	Hazaribagh, Bihar,	C.A. Crump 04 Jun., 1914
20238	F	Skin and Skull,	Hazaribagh, Bihar,	C.A. Crump 04 Jun., 1914
20239	F	Skin and Skull,	Hazaribagh, Bihar,	C.A. Crump 28 Dec., 1914
20240	F	Skin and Skull,	Hazaribagh, Bihar,	C.A. Crump 04 Jun., 1914
20338	M	Skin and Skull,	Daripokhari, Balasore, Orissa,	P. K. Das 11 Apr., 1976
9096	M	Skin and Skull,	Balaghi, Puri, Orissa,	N. Annandale ...
20255	F	Skin and Skull,	Mannanur, Mehaboob- nagar, Andhra Pradesh,	A. K. Mondal 10 Feb., 1979
20256	M	Skin and Skull,	Mulug, Warangal, Andhra Pradesh,	A. K. Mondal 17 Feb., 1979
10923	F	Skin and Skull,	Palkonda Hills, Srikaku- lam, Andhra Pradesh,	H. S. Prater ...
20491	M	Skin and Skull,	Mahboobnagar, Andhra Pradesh,	S. S. Saha 09 Apr., 1980
20690	M	Skin and Skull,	Mysore, Karnataka,	D : M.E. Gururaj 19 Sep., 1980
20691	F	Skin and Skull,	Mysore, Karnataka,	D : M.E. Gururaj 19 Sep., 1980
20254	F	Skin and Skull,	Lingsugur, Raichur, Karnataka,	G. E. Dobson ... 1878
20257	M	Skin and Skull,	Nilgiri, Ootocamund, Tamil Nadu,	W. Theobald ...
12660	M	Skin and Skull,	Panchgani, Western- Ghat, Maharashtra,	E. Blatter ...

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19569	F	Skin and Skull,	Kotagarh, Boudhkhand- mals, Orissa,	P. K. Das 23 May, 1972
19570	F	Skin and Skull,	Kotagarh, Boudhkhand- mals, Orissa,	P. K. Das 23 May, 1972
19571	F	Skin and Skull,	Kotagarh, Boudhkhand- mals, Orissa,	P. K. Das 21 May, 1972
19572	F	Skin and Skull,	Kotagarh, Boudhkhand- mals, Orissa,	P. K. Das 19 May, 1972
10027	?	Skin and Skull,	Barkuda Island, Chilka- Lake, Puri, Orissa,	 1914
10028	F	Skin and Skull,	Barkuda Island, Chilka- Lake, Puri, Orissa,	 1914
10298	F	Skin and Skull,	Angul, Puri, Orissa,	 1913
19564	M	Skin and Skull,	Tara Singi, Ganjam, Orissa,	V. C. Agrawal 25 Dec., 1971
19565	M	Skin and Skull,	Kotagarh, Boudhkhond- mals, Orissa,	P. K. Das 21 May, 1972
19566	F	Skin and Skull,	Kotagarh, Boudhkhond- mals, Orissa,	P. K. Das 20 May, 1972
19567	F	Skin and Skull,	Kotagarh, Boudhkhond- mals, Orissa,	P. K. Das 20 May, 1972
19568	F	Skin and Skull,	Kotagarh, Boudhkhond- mals, Orissa,	P. K. Das 20 May, 1972
12705	F	Skin and Skull,	Nagpur, Maharashtra,	College of Science, Nagpur, 1951
12706	F	Skin and Skull,	Nagpur, Maharashtra,	College of Science, Nagpur, 1951
12708	F	Skin and Skull,	Nagpur, Maharashtra,	College of Science, Nagpur, 1951
12709	M	Skin and Skull,	Nagpur, Maharashtra,	College of Science, Nagpur, 1951
12699	M	Skin and Skull,	Nagpur, Maharashtra,	College of Science, Nagpur, 1951

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
12700	M	Skin and Skull,	Nagpur, Maharashtra,	College of Science, Nagpur, 1951
12711	M	Skin and Skull,	Nagpur, Maharashtra,	College of Science, Nagpur, 1951
12712	F	Skin and Skull,	Nagpur, Maharashtra,	College of Science, Nagpur, 1951
12714	F	Skin and Skull,	Nagpur, Maharashtra,	College of Science, Nagpur, 1951
20230	M	Skin and Skull,	Bilashpur, Madhya Pradesh,	W. T. Blanford ... 1870
20226	F	Skin and Skull,	Allahabad, Uttar Pradesh,	J. Cockburn ...
20227	F	Skin and Skull,	Allahabad, Uttar Pradesh,	J. Cockburn ...
20228	M	Skin and Skull,	Allahabad, Uttar Pradesh,	J. Cockburn ...
20223	M	Skin and Skull,	Kolhapur, Maharashtra,	D: A. T Varute 02 Oct., 1979
20224	F	Skin and Skull,	Kolhapur, Maharashtra,	D: A. T Varute 02 Oct., 1979
20225	M	Skin and Skull,	Chanda, Chandrapura, Maharashtra,	W. T. Blanford ... 1870
12649	M	Skin and Skull, (Young)	Nagpur, Maharashtra,	B. S. Chauhan 06 Jul., 1949
12650	F	Skin and Skull, (Young)	Nagpur, Maharashtra,	B. S. Chauhan 06 Jul., 1949
12651	M	Skin and Skull, (Young)	Nagpur, Maharashtra,	B. S. Chauhan 06 Jul., 1949
12652	M	Skin and Skull, (Young)	Nagpur, Maharashtra,	B. S. Chauhan 06 Jul., 1949
12653	F	Skin and Skull,	Nagpur, Maharashtra,	B. S. Chauhan 06 Jul., 1949

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
12653	28.7	23.2	8.9	—	12.5	9.3
12652	38.0	33.5	11.0	4.7	14.3	11.2
12651	40.5	—	11.5	4.5	15.3	11.2
12650	34.0	—	9.1	—	12.8	10.8
12649	37.6	—	11.5	4.5	14.1	11.1
20225	49.4	—	13.2	5.8	19.5	11.3
20224	49.0	52.7	12.7	—	18.6	11.4
20223	48.0	52.0	14.2	6.1	19.4	11.3
20228	47.5	50.1	14.0	6.0	19.2	11.2
20227	59.6	50.0	13.7	5.8	19.5	12.0
20226	52.0	52.3	15.4	5.9	21.7	11.4
20230	47.0	46.7	13.0	5.0	18.3	11.2
12714	50.3	—	13.3	—	18.6	11.3
12712	49.8	50.0	12.6	—	18.5	11.5
12711	45.8	—	10.7	—	17.0	10.7
12700	45.3	—	10.5	—	16.7	10.7
12699	35.4	—	8.8	—	13.2	8.9
12709	49.6	—	12.2	—	18.2	11.5
12708	50.0	—	—	—	18.6	11.3
12706	50.6	—	13.5	—	18.7	10.8
12705	49.2	45.3	12.5	—	18.2	11.2
24179	60.9	63.0	—	—	24.7	13.5
21685	50.0	52.2	14.5	7.7	20.6	11.5
21684	48.0	49.7	14.1	7.6	20.3	11.3
21683	50.5	52.1	14.5	7.5	20.7	10.0
21682	48.5	49.7	14.2	6.8	20.0	11.2
21681	48.0	50.0	14.2	7.7	20.3	11.4
21680	51.0	52.2	15.4	6.8	20.7	11.0
20380	49.3	—	—	—	18.5	10.1

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
20381	48.3	—	—	—	18.5	10.3
20378	47.1	—	—	—	18.3	10.3
20379	49.6	—	—	—	18.5	10.3
20374	51.1	—	—	—	20.1	12.2
20362	47.7	—	—	—	19.4	11.5
20361	51.4	—	—	—	20.5	11.7
20360	52.0	—	—	—	20.2	11.2
20359	50.3	—	11.2	—	18.5	10.5
20240	49.8	49.8	14.2	7.2	19.2	12.2
20239	49.0	48.5	12.4	—	19.6	12.0
20238	50.9	46.9	16.1	—	19.8	11.2
20237	45.1	43.5	13.2	—	16.5	12.7
20235	38.9	—	10.5	—	16.2	11.1
20236	44.2	43.5	13.0	—	16.5	12.5
20234	53.4	51.5	15.2	7.7	20.3	12.7
20232	49.4	50.2	14.3	7.2	19.2	10.4
20229	47.0	46.5	10.3	6.4	18.3	9.9
12660	48.0	49.0	12.0	—	18.8	10.3
20257	47.1	48.3	15.0	6.6	19.2	11.8
20254	50.5	49.2	14.6	7.8	20.6	11.1
20691	50.8	—	12.5	6.9	19.8	11.0
20690	46.8	42.0	10.7	6.3	19.1	10.5
20491	49.5	—	12.5	7.3	19.2	10.5
10923	49.7	40.1	14.5	7.4	19.5	13.9
20256	49.2	49.8	11.8	6.5	19.0	11.8
20255	50.4	51.2	12.2	6.9	20.2	11.2
9096	44.0	—	11.7	6.0	18.7	10.4
20338	51.5	51.0	14.5	8.7	20.5	9.8
10298	49.2	50.0	13.0	5.2	19.2	10.9
10028	52.1	52.8	13.5	5.1	19.8	11.1
10027	50.4	51.0	11.6	5.4	18.9	11.2

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
19572	49.8	50.0	15.0	—	18.5	11.0
19571	49.8	50.8	11.2	—	19.7	13.0
19570	51.6	50.5	11.6	—	19.8	9.3
19569	49.7	49.7	13.6	—	19.7	10.5
19568	50.7	56.0	14.0	—	19.3	11.2
19567	49.0	51.6	14.6	—	17.7	9.4
19566	51.8	52.0	15.0	—	20.0	11.1
19565	47.3	43.7	14.1	—	19.7	11.2
19564	48.5	48.0	14.0	—	19.5	12.5

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
24719	24.7	20.5	7.7	7.6	10.2	6.0	9.7	16.0	11.0	15.6	8.7
21682	19.4	17.0	6.5	6.3	9.0	5.2	8.5	13.0	8.7	13.0	7.2
21681	20.0	17.0	6.7	6.2	8.8	5.2	8.5	13.0	8.7	13.6	7.4
21680	19.9	16.7	6.7	6.2	9.0	5.3	8.6	—	8.7	13.5	7.5
20380	19.7	16.7	6.5	6.0	8.5	5.0	8.7	—	8.7	13.0	7.9
20381	19.7	16.5	6.8	6.4	8.7	4.9	8.7	13.3	9.0	13.2	7.7
20378	19.0	16.2	6.3	6.1	8.5	5.0	8.6	12.9	8.6	12.8	7.3
20379	19.7	17.0	6.6	6.0	8.7	5.2	8.5	13.2	8.5	13.2	7.7
20374	20.0	17.1	6.9	6.0	9.0	4.9	8.9	13.0	9.0	13.2	7.7
20362	19.8	—	6.5	6.0	8.4	5.0	8.5	12.9	8.8	13.0	7.3
20361	19.4	17.1	7.3	5.8	8.5	5.2	8.5	—	8.7	13.0	7.3
20238	20.1	16.7	6.5	6.3	8.4	4.7	8.6	13.1	8.9	13.2	7.7
10298	19.5	16.7	6.5	6.0	8.7	4.8	8.4	13.0	9.0	13.0	7.7
19570	20.1	17.3	6.8	6.2	9.0	5.2	8.5	13.5	9.5	13.3	7.7
19569	19.4	16.5	6.3	6.3	8.7	5.1	8.2	12.9	8.9	12.8	7.0
19568	19.4	17.1	6.6	6.2	8.5	5.3	8.3	12.9	9.1	13.4	7.5
19567	19.4	16.4	6.4	6.1	8.6	5.2	8.5	12.6	9.2	12.5	7.2

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
19566	19.2	17.0	6.7	6.3	9.2	5.1	8.6	—	9.3	13.2	7.6
19565	19.2	16.3	6.2	5.8	8.9	5.3	8.3	13.0	9.0	—	7.1
19564	19.2	16.4	6.3	6.0	8.5	5.2	8.2	13.0	9.2	12.9	7.3
12706	19.6	16.5	6.6	6.0	8.8	4.6	8.4	—	8.8	13.3	7.7
12705	18.4	15.2	6.3	5.5	8.0	4.7	7.8	—	—	—	—
12652	16.3	14.4	5.4	5.0	7.1	5.2	7.5	11.0	9.0	—	—
12651	16.4	14.5	5.4	4.3	6.9	4.9	7.4	11.0	8.9	—	—
20223	18.5	16.7	6.6	6.1	8.8	4.7	8.7	13.5	9.3	13.0	7.4

Remarks : Smaller ears with tips rounded, tragus half-moon shaped and being markedly convex on its posterior border and anterior border being concave, tip slender and pointing forward. Wing originates from side of foot near base of toes. Tip of tail free. Body fur short dense and sleek. Dorsal colour olive brown and ventral colour being creamy white with a tinge of red.

Ellerman and Morrison-Scott (1951) used the name *Scotophilus temmincki wroughtoni* Thomas, 1897 for the present species in India. Hill and Thonglongya (1972), however, have shown that the name *Scotophilus kuhli kuhli* Leach should be the correct name for this species of bat.

Distribution : Widely distributed throughout the Indian Union including Andaman and Nicobar Islands (Hill, 1967).

Elsewhere : Pakistan (Walton, 1974), Sri Lanka, Bangladesh (Blyth 1963 a), Myanmar.

115. *Scotophilus heathi heathi* (Horsfield)

1831. *Nycticejus heathi* Horsfield, *Proc. Zool. Soc. Lond.*, : 113 (Madras = Chennai, Tamil Nadu, India).

Common name : Asiatic Greater Yellow Bat (E.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20382	F	Skin and Skull,	Kujang, Cuttack, Orissa,	V. C. Agrawal 12 Feb., 1974
20383	M	Skin and Skull,	Kujang, Cuttack, Orissa,	V. C. Agrawal 12 Feb., 1974
20384	F	Skin and Skull,	Kujang, Cuttack, Orissa,	V. C. Agrawal 12 Feb., 1974

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20385	M	Skin and Skull,	Kujang, Cuttack, Orissa,	V. C. Agrawal 12 Feb., 1974
20388	M	Skin and Skull,	Dhunali, Puri Orissa,	N. Majumdar 15 Mar., 1976
20389	F	Skin and Skull,	Dhunali, Puri Orissa,	N. Majumdar 15 Mar., 1976
20391	F	Skin and Skull,	Barbera, Puri, Orissa,	A. K. Mandal 22 Jul., 1973
20394	F	Skin and Skull,	Barbera, Puri, Orissa,	A. K. Mandal 22 Jul., 1973
20395	M	Skin and Skull,	Barbera, Puri, Orissa,	A. K. Mandal 22 Jul., 1973
20396	F	Skin and Skull,	Barbera, Puri, Orissa,	A. K. Mandal 22 Jul., 1973
20393	F	Skin and Skull,	Barbera, Puri, Orissa,	A. K. Mandal 22 Jul., 1973
20399	F	Skin and Skull,	Nayagarh, Puri, Orissa,	A. K. Mandal 22 Jul., 1973
20398	F	Skin and Skull,	Nayagarh, Puri, Orissa,	A. K. Mandal 20 Jul., 1973
20397	F	Skin and Skull,	Nayagarh, Puri, Orissa,	A. K. Mandal 20 Jul., 1973
20392	F	Skin and Skull,	Barbera, Puri, Orissa,	A. K. Mandal 22 Jul., 1973
20921	?	Skin and Skull,	Orissa	A. K. Mandal ... 1971
20390	F	Skin and Skull,	Barbera, Puri, Orissa,	A. K. Mandal 22 Jul., 1973
24926	F	Skin and Skull,	Rohtas, Kaimur W/L Sanctuary, Bihar,	A. K. Poddar 10 Nov., 1997
24927	F	Skin and Skull,	Rohtas, Kaimur W/L Sanctuary, Bihar,	A. K. Poddar 10 Nov., 1997
24928	M	Skin and Skull,	Rohtas, Kaimur W/L Sanctuary, Bihar,	A. K. Poddar 11 Nov., 1997

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20329	M	Skin and Skull,	Karachi Mus. in Exch. Karachi, Pakistan,	Karachi Mus 19 Sep., 1878
17788	F	Skin and Skull,	Sabhur, Sind, Pakistan,	S. H. Prater 21 Mar., 1915
17786	M	Skin and Skull,	Sabhur, Sind, Pakistan,	S. H. Prater 21 Mar., 1915
17787	M	Skin and Skull,	Sabhur, Sind, Pakistan,	S. H. Prater 21 Mar., 1915
20566	F	Skin and Skull,	Sukkur, Kashmir, Sind, Pakistan,	S. H. Prater 10 Mar., 1915
20564	M	Skin and Skull,	Sukkur, Kashmir, Sind, Pakistan,	S. H. Prater 21 Mar., 1915
20565	M	Skin and Skull,	Sukkur, Kashmir, Sind, Pakistan,	S. H. Prater 21 Mar., 1915
20561	F	Skin and Skull,	Sukkur, Kashmir, Sind, Pakistan,	S. H. Prater 21 Mar., 1915
20558	M	Skin and Skull,	Sukkur, Kashmir, Sind, Pakistan,	S. H. Prater 21 Mar., 1915
20562	M	Skin and Skull,	Sukkur, Kashmir, Sind, Pakistan,	S. H. Prater 21 Mar., 1915
20559	M	Skin and Skull,	Sukkur, Kashmir, Sind, Pakistan,	S. H. Prater 21 May, 1915
20569	F	Skin and Skull,	Sukkur, Kashmir, Sind, Pakistan,	S. H. Prater 21 Mar., 1915
20563	F	Skin and Skull,	Sukkur, Kashmir, Sind, Pakistan,	S. H. Prater 21 Mar., 1915
20568	M	Skin and Skull,	Sukkur, Kashmir, Sind, Pakistan,	S. H. Prater 21 Mar., 1915
20560	M	Skin and Skull,	Sukkur, Kashmir, Sind, Pakistan,	S. H. Prater 13 Mar., 1915
20567	F	Skin and Skull,	Sukkur, Kashmir, Sind, Pakistan,	S. H. Prater 13 Mar., 1915
20323	F	Skin and Skull,	Karachi, Sind, Pakistan,	Karachi Mus. 19 Sept 1878

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20321	F	Skin and Skull,	Karachi, Sind, Pakistan,	Karachi Mus. 19 Nov., 1878
20322	M	Skin and Skull,	Karachi, Sind, Pakistan,	Karachi Mus. 19 Nov., 1877
20324	F	Skin and Skull,	Karachi, Sind, Pakistan,	Karachi Mus. 19 Nov., 1877
20318	F	Skin and Skull,	Rajanpur, Punjab, Pakistan,	E. Sanders 28 Sep., 1977
20319	F	Skin and Skull,	Rajanpur, Punjab, Pakistan,	E. Sanders 28 Sep., 1977
20320	F	Skin and Skull,	Rajanpur, Punjab, Pakistan,	E. Sanders 28 Sep., 1977
10284	M	Skin and Skull,	Rawalpindi, Punjab, Pakistan,	K. Hodgart ...
10285	M	Skin and Skull,	Rawalpindi, Punjab, Pakistan,	K. Hodgart ...
17785	M	Skin and Skull,	Kashmir, Sind, Pakistan,	S. H. Prater 06 Mar., 1915
20317	F	Skin and Skull,	Sind, Pakistan,	W. T. Blanford 09 Sep., 1978
21598	F	Skin and Skull,	Sitalkuchi, Cooch- Behar, West Bengal,	S. Chakraborty 09 Apr., 1986
21599	F	Skin and Skull,	Sitalkuchi, Cooch- Behar, West Bengal,	S. Chakraborty 09 Apr., 1986
21604	M	Skin and Skull,	Sitalkuchi, Cooch- Behar, West Bengal,	S. Chakraborty 09 Apr., 1986
21602	F	Skin and Skull,	Sitalkuchi, Cooch- Behar, West Bengal,	S. Chakraborty 09 Apr., 1986
21601	F	Skin and Skull,	Sitalkuchi, Cooch- Behar, West Bengal,	S. Chakraborty 09 Apr., 1986
21603	F	Skin and Skull,	Sitalkuchi, Cooch- Behar, West Bengal,	S. Chakraborty 09 Apr., 1986
21600	F	Skin and Skull,	Sitalkuchi, Cooch- Behar, West Bengal,	S. Chakraborty 09 Apr., 1986

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
21596	M	Skin and Skull,	Mathabhanga, Cooch- Behar, West Bengal,	S. Chakraborty 17 Apr., 1986
21597	F	Skin and Skull,	Mathabhanga, Cooch- Behar, West Bengal	S. Chakraborty 17 Apr., 1986
21679	M	Skin and Skull,	Amlagora, Medinipur, West Bengal,	P. K. Das 21 Sep., 1984
20278	F	Skin and Skull,	Morihan, Mirzapur, Uttar Pradesh,	V. C. Agrawal 22 Sep., 1978
20286	M	Skin and Skull,	Morihan, Mirzapur, Uttar Pradesh,	V. C. Agrawal 23 Sep., 1978
20284	M	Skin and Skull,	Morihan, Mirzapur, Uttar Pradesh,	V. C. Agrawal 23 Sep., 1978
20276	F	Skin and Skull,	Morihan, Mirzapur, Uttar Pradesh,	V. C. Agrawal 23 Sep., 1978
20285	M	Skin and Skull,	Morihan, Mirzapur, Uttar Pradesh,	V. C. Agrawal 22 Sep., 1978
20280	M	Skin and Skull,	Morihan, Mirzapur, Uttar Pradesh,	V. C. Agrawal 23 Sep., 1978
20282	M	Skin and Skull,	Morihan, Mirzapur, Uttar Pradesh,	V. C. Agrawal 22 Sep., 1978
20283	M	Skin and Skull,	Morihan, Mirzapur, Uttar Pradesh,	V. C. Agrawal 22 Sep., 1978
20279	F	Skin and Skull,	Morihan, Mirzapur, Uttar Pradesh,	V. C. Agrawal 23 Sep., 1978
20277	F	Skin and Skull,	Morihan, Mirzapur, Uttar Pradesh,	V. C. Agrawal 23 Sep., 1978
20275	F	Skin and Skull,	Morihan, Mirzapur, Uttar Pradesh,	V. C. Agrawal 21 Sep., 1978
20281	M	Skin and Skull,	Morihan, Mirzapur, Uttar Pradesh,	V. C. Agrawal 21 Sep., 1978
20287	F	Skin and Skull,	Nishangarh, Bahraich, Uttar Pradesh,	H. Khajuria 18 Sep., 1956
20288	M	Skin and Skull,	Nishangarh, Bahraich, Uttar Pradesh,	H. Khajuria 16 Sep., 1956

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
20289	M	Skin and Skull,	Nishangarh, Bahraich, Uttar Pradesh,	H. Khajuria 13 Sep., 1956
20290	F	Skin and Skull,	Kaisar Castle, Kaisa- rganj, Bahraich, U. P.	B. Nath 06 Jun., 1945
20274	M	Skin and Skull,	Allahabad, Uttar Pradesh,	H. Whitewell ... 1870
11011	M	Skin and Skull,	Amritsar, Punjab,	
11012	F	Skin and Skull,	Amritsar, Punjab,	... 02 Mar., 1973
11013	M	Skin and Skull,	Amritsar, Punjab,	... 02 Mar., 1973
11014	M	Skin and Skull,	Amritsar, Punjab,	... 02 Mar., 1973
16936	M	Skin and Skull,	Kashmir, U. Sind, W. Pakistan,	S. H. Prater 09 Mar., 1915
16938	F	Skin and Skull,	Pegu, Myanmar,	J. M. D. Mackenzi 07 Apr., 1916
17661	F	Skin and Skull,	Pegu, Myanmar,	J. M. D. Mackenzi 30 May, 1916
25741	F	Skin and Skull,	Pegu, Myanmar,	D. Layard ... 1850
16932	M	Skin and Skull,	Mt. Popa, Upper Myanmar	G. C. Shortridge 12 Sep., 1913
17655	M	Skin and Skull,	Mt. Popa, Upper Myanmar	G. C. Shortridge 13 Sep., 1913
17657	M	Skin and Skull,	Kim, Lower Chindwin, Myanmar	G. C. Shortridge 17 Jun., 1914
17656	M	Skin and Skull,	Monywa, Lower- Chindwin, Myanmar,	G. C. Shortridge 01 Jun., 1914
16947	M	Skin and Skull,	Dharampuri Range, Salem, Tamil Nadu,	N. A. Baptista 12 Oct., 1930
16929	F	Skin and Skull,	Chanda, Madhya Pradesh,	C. A. Crump 04 Jun., 1912

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
16933	M	Skin and Skull,	Ramnagar, Kumaon, Uttar Pradesh,	C. A. Crump 07 Dec., 1913
17660	F	Skin and Skull,	Hasimara, Bhutan- Duars, West Bengal,	N. A. Baptista 18 Apr., 1916
16937	M	Skin and Skull,	Hasimara, Bhutan- Duars, West Bengal,	N. A. Baptista 21 Jan., 1916
17658	M	Skin and Skull,	Bharnabhari, Bhutan- Duars, West Bengal,	N. A. Baptista 06 Feb., 1916
16939	M	Skin and Skull,	Hasimara, Bhutan- Duars, West Bengal,	N. A. Baptista 01 May, 1916
17659	F	Skin and Skull,	Hasimara, Bhutan- Duars, West Bengal,	N. A. Baptista 04 Mar., 1916
16934	M	Skin and Skull,	Nimiaghat, Hazaribagh, Bihar,	C. A. Crump 06 Jun., 1914
16942	F	Skin and Skull,	Baghownie, Darbhanga, Bihar,	N. A. Baptista 26 Jul., 1922
16946	M	Skin and Skull,	Rajapara, S. Kamrup, Assam,	H. W. Wells 15 Nov., 1920
19463	M	Skin and Skull,	Bhojbhawanpur-Barke, Nepal,	R. M. Mitchell 14 Apr., 1968
16931	F	Skin and Skull,	Palanpur, Gujarat,	C. A. Crump 30 Mar., 1913
9919	F	Skin and Skull,	Samargi, S. W. Dharwar, Karnataka	G. C. Shortridge
16945	F	Skin and Skull,	Koduru, Balanpalli- Range, Tamil Nadu,	N. A. Baptista 25 Aug., 1929
9917	F	Skin and Skull,	Chanda, Madhya Pradesh,	C. A. Crump 28 Jun., 1912
16930	M	Skin and Skull,	Palanpur, Gujarat,	C. A. Crump 28 Mar., 1913
16943	M	Skin and Skull,	Goona, Gwalior, Madhya Pradesh,	J. Riley O. Brier 17 Oct., 1922.

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
20324	56.7	53.2	16.2	8.0	22.0	13.1
20318	62.4	67.2	19.1	7.7	25.2	13.8
20319	61.4	61.2	17.9	7.6	25.2	13.8
10284	50.4	45.4	13.3	5.5	19.3	9.8
10285	57.3	47.6	15.5	7.5	21.3	12.0
20559	59.6	—	—	—	25.7	13.5
20321	66.6	62.1	16.7	8.2	24.2	14.7
24926	63.1	63.0	18.2	9.0	27.8	13.4
24927	61.8	63.8	18.4	8.6	26.7	11.9
24928	60.4	61.4	17.4	7.5	26.2	11.1
20566	60.2	60.5	18.7	8.7	24.1	14.0
20399	62.7	—	15.0	7.8	27.2	13.4
20398	60.5	—	—	8.0	25.3	13.5
20397	61.3	—	14.6	7.1	24.2	12.9
20392	59.8	—	14.6	7.1	24.5	12.7
20390	62.5	—	15.3	5.9	26.6	12.0
20382	59.9	59.1	16.5	7.2	24.0	12.0
20383	56.2	58.9	15.0	7.2	22.7	12.9
20384	61.1	58.8	15.9	6.5	25.6	14.4
20385	59.3	59.0	13.0	7.9	26.3	13.3
20388	61.6	55.0	15.0	—	24.0	—
20389	63.0	57.0	17.0	—	24.0	—
20391	60.9	—	14.5	6.3	24.7	11.6
20394	60.3	—	16.0	6.6	25.5	12.5
20395	60.7	—	15.4	—	25.0	12.6
20396	59.5	—	15.0	7.5	25.2	12.2
20393	60.0	—	13.9	6.5	25.6	12.4
20287	62.6	—	16.6	7.7	25.2	13.7
20288	59.8	—	—	—	24.6	13.2
20289	61.4	—	16.6	7.2	24.7	13.6

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
11012	59.3	—	15.8	6.7	24.2	13.5
11013	59.4	55.2	16.8	7.1	23.7	13.3
11014	59.3	—	16.6	—	23.4	13.6
20278	59.8	58.0	16.8	8.0	23.6	14.3
20286	59.6	51.0	16.6	8.0	24.3	14.2
20284	58.4	50.0	17.6	8.7	23.0	13.3
20276	58.0	48.0	17.6	8.1	24.8	12.3
20285	59.0	—	16.9	7.7	23.8	12.9
20280	58.1	56.0	17.7	8.0	23.7	13.3
20282	57.4	4.7	17.0	7.7	23.3	13.2
20279	57.0	—	17.0	8.1	23.5	12.7
20277	57.4	28.5	17.6	8.0	23.6	13.2
20275	58.9	57.1	18.2	8.0	24.5	13.5
21598	56.2	—	15.5	7.5	22.2	12.6
21599	59.2	—	17.0	7.7	23.4	14.1
21604	59.0	—	—	—	23.6	14.1
21602	58.2	—	17.2	7.8	23.4	14.2
21601	59.6	—	17.0	7.5	23.7	12.8
21603	56.9	—	17.6	7.5	23.5	14.0
21600	59.5	—	16.9	7.9	24.0	14.0
21596	55.5	—	14.5	6.9	22.1	12.4
21597	57.9	—	17.5	—	24.2	13.7
21679	59.6	61.0	17.6	6.5	23.7	13.9
16947	62.9	62.0	16.0	9.7	23.6	14.3
16929	59.7	57.0	17.0	7.7	22.5	13.7
16933	59.0	57.0	16.0	7.5	22.8	14.0
17660	58.8	53.0	17.0	8.1	22.7	13.5
16937	56.1	50.0	16.0	7.8	22.1	13.7
17658	57.4	52.0	17.0	7.8	22.5	13.1
16939	57.8	54.0	16.0	8.5	22.3	13.3
17659	57.4	57.0	16.0	8.3	22.5	14.0

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
16934	59.0	63.0	16.0	8.3	22.2	14.0
16942	62.1	60.0	18.0	8.6	25.0	16.3
16946	59.6	58.0	18.0	8.4	22.6	14.7
19463	66.1	67.3	16.0	8.3	24.1	14.6
16931	59.7	62.0	17.0	7.8	22.1	14.1
9919	61.9	71.0	17.0	8.7	24.3	15.1
16945	63.8	61.0	17.0	8.3	23.5	15.0
9917	61.1	56.0	16.0	8.5	23.3	14.1
16930	56.0	54.0	17.0	6.7	21.0	13.2
16943	58.4	55.0	18.0	8.0	21.7	13.5
16936	59.6	56.0	15.0	9.3	23.1	13.5
16938	58.2	55.0	16.0	8.7	22.5	13.3
17661	56.8	52.0	17.0	8.0	22.3	12.9
16932	58.2	63.0	15.5	8.2	23.1	13.9
17655	58.5	60.0	15.5	7.8	23.3	14.0
17657	53.4	47.0	16.0	7.3	21.6	13.2
17656	53.7	43.5	15.0	7.3	19.8	12.8

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
10285	22.8	18.2	7.3	6.3	8.8	5.6	9.4	13.7	10.2	—	—
20398	23.0	19.6	7.5	7.3	10.6	5.6	9.9	15.4	10.5	—	9.3
20392	23.7	19.5	7.9	7.0	10.3	5.8	9.8	15.4	10.2	15.7	9.1
20390	23.2	19.8	7.5	7.6	10.3	5.5	10.0	—	10.5	15.9	9.0
20382	23.0	19.3	7.7	7.0	10.4	5.6	10.2	—	10.3	15.2	9.2
20383	23.2	19.5	7.6	7.3	10.5	5.4	10.2	15.5	10.6	15.2	9.1
20385	23.3	19.7	7.7	7.2	10.3	5.6	9.8	—	10.1	15.0	9.2
20394	23.4	20.0	7.7	7.3	10.2	5.8	10.2	15.3	10.2	15.5	9.2
20396	23.3	19.8	7.7	7.5	10.3	5.4	9.8	15.5	10.5	15.4	9.2

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
20393	22.9	19.0	7.6	6.9	10.2	5.5	10.2	—	9.9	15.8	9.3
20287	24.1	20.0	8.0	7.7	10.5	5.9	10.4	16.0	11.2	16.1	9.4
20288	24.7	20.6	8.1	7.5	10.0	5.7	10.7	16.7	10.4	16.1	9.5
20289	24.6	20.9	8.2	7.7	10.3	5.8	10.4	16.4	10.9	16.4	9.8
11012	22.2	18.4	7.4	6.9	9.1	5.6	9.5	15.2	10.3	15.1	8.8
11014	23.6	19.1	7.7	7.0	9.4	5.6	9.6	15.7	10.2	15.4	9.5
21604	23.9	20.0	7.7	7.5	9.8	5.7	10.1	15.9	10.5	15.4	9.2
21601	23.6	20.1	7.7	7.3	10.1	6.1	10.1	—	10.3	15.6	9.3
21597	23.7	20.0	7.6	7.2	10.1	5.8	10.1	15.7	10.4	15.4	9.0

Remarks : Ellerman & Morrison-Scott (1951) recognised two subspecies of the greater yellow Bat, viz., *Scotophilus h. heathi* and *Scotophilus h. belangeri*, for the Indian population. Siddiqi (1961 b) has however, synonymised with the nominate subspecies.

Distribution : Widely distributed throughout the country.

Elsewhere : Afghanistan, Bangladesh, China, Myanmar, Nepal, Pakistan, Sri Lanka, Thailand, Vietnam.

Genus *Otonycteris* Peters, 1859

116. *Otonycteris hemprichi hemprichi* Peters, 1859

1859. *Otonycteris hemprichi* Peters, *Mber. Preuss. Akad. Wiss.*, 233 No locality. (Hemprich & Ehrenberg's collection; probably from some part of North-Eastern Africa.)

Common name : Hemprich's long-eared bat or Hemprich's Arrow eared bat.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
6980	F	Skin and Skull,	Gilgit, Kashmir	J. Scully ... May, 1879

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
6980	63.5	—	34.2	14.4	29.3	13.7

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
6980	24.4	20.8	8.5	6.2	10.6	4.5	10.1	14.9	9.7	16.4	9.7

Remarks : This is a monotypic genus and is very poorly represented in the collection by a single specimen. It is a large vespertilionid bat having broad oval ears about nearly two-third the length of forearm. Only one incisor in the upper jaw having a prominent cingulum.

Distribution : Jammu & Kashmir.

Outside : Afghanistan, Iran, Pakistan, Israel, Algeria and Niger.

Genus *Plecotus* E. Geoffroy, 1818

117. *Plecotus auritus* (Linnaeus)

1758. *Vespertilio auritus* Linnaeus, *syst. Nat.*, 10th ed., 1 : 32.

Common name : Brown Big-eared Bat. (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
24250	F	Skin and Skull,	Yumthang, N. Sikkim,	S. Chattopadhyay 30 Jun., 1989
24251	F	Skin and Skull,	Yumthang, N. Sikkim,	S. Chattopadhyay 30 Jun., 1989
24252	M	Skin and Skull,	Thangoo, Sikkim,	S. Chattopadhyay 14 Jul., 1989
24253	F	Skin and Skull,	Thangoo, Sikkim,	S. Chattopadhyay 14 Jul., 1989
25742	F	Skin and Skull,	Yumthang, N. Sikkim,	S. M. Ali 02 May, 1980
25743	M	Skin and Skull,	Yumthang, N. Sikkim,	S. M. Ali 02 May, 1980
25744	F	Skin and Skull,	Yumthang, N. Sikkim,	S. M. Ali 26 Aug., 1978

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25745	F	Skin and Skull,	Yumthang, N. Sikkim,	S. M. Ali 26 Aug., 1978
25746	F	Skin and Skull,	Yumthang, N. Sikkim,	S. M. Ali 26 Aug., 1978
12400	M	Skin and Skull,	Pahelgam Forest Hut, Jammu & Kashmir,	H. Khajuria 12-14 Jun., 1955
12401	M	Skin and Skull,	Pahelgam Forest Hut, Jammu & Kashmir,	H. Khajuria 12-14 Jun., 1955
12402	F	Skin and Skull,	Pahelgam Forest Hut, Jammu & Kashmir,	H. Khajuria 12-14 Jun., 1955
12403	F	Skin and Skull,	Pahelgam Forest Hut, Jammu & Kashmir,	H. Khajuria 12-14 Jun., 1955
6963	M	Skin and Skull,	Gilgit, Kashmir,	J. Scully 16 Sep., 1879
6964	F	Skin and Skull,	Gilgit, Kashmir,	J. Scully 15 Sep., 1879

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
25742	46.5	64.0	40.0	18.0	18.8	11.2
25743	42.0	53.5	38.9	17.8	20.1	11.2
25744	45.1	51.2	36.2	16.2	20.5	10.9
25745	42.7	51.0	35.7	15.3	20.6	11.2
25746	43.7	54.2	38.0	16.5	20.0	10.8
12400	41.7	46.2+	35.2	15.5	18.5	11.1
24250	40.5	46.8	34.8	14.2	20.2	10.3
24251	43.0	47.7+	34.6	15.4	20.9	10.6
24252	40.2	46.7+	27.9	13.7	20.0	10.5
24253	41.1	48.1	33.5	14.4	19.8	11.2

Measurements :**Cranial :**

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
25744	17.4	14.4	5.7	3.8	5.7	3.7	6.5	9.0	8.4	10.5	6.5
25745	17.2	14.5	5.7	3.7	5.7	3.6	6.1	8.7	8.0	10.4	6.6
25746	17.4	14.6	5.6	3.6	6.0	3.6	6.1	8.7	8.1	10.6	6.7

Remarks : Nil.

Distribution : Himachal Pradesh, Jammu & Kashmir, Meghalaya, Sikkim, Uttar Pradesh, West Bengal.

Elsewhere : China, Ireland, Japan, Nepal, Norway, Pakistan.

118. *Plecotus austriacus* (Fischer, 1829)

1829. *Vespertilio auritus austriacus* Fischer, *Synopsis Mamm.*, p. 117.

Common name : Common Long-eared Bat (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
4534	M	Skin and Skull,	Upper Egypt, Left-Bank of River Nile.	J. Anderson 18 Jan., 1881
4535	M	Skin and Skull,	Upper Egypt, Left-Bank of River Nile.	J. Anderson 18 Jan., 1881
4536	F	Skin and Skull,	Upper Egypt, Left-Bank of River Nile.	J. Anderson 18 Jan., 1881
4537	F	Skin and Skull,	Upper Egypt, Left-Bank of River Nile.	J. Anderson 18 Jan., 1881
4538	F	Skin and Skull,	Upper Egypt, Left-Bank of River Nile.	J. Anderson 18 Jan., 1881
4539	F	Skin and Skull,	Upper Egypt, Left-Bank of River Nile.	J. Anderson 18 Jan., 1881
4540	F	Skin and Skull,	Upper Egypt, Left-Bank of River Nile.	J. Anderson 18 Jan., 1881
4541	F	Skin and Skull,	Upper Egypt, Left-Bank of River Nile.	J. Anderson 18 Jan., 1881

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector/ Date of Collection
4542	F	Skin and Skull,	Upper Egypt, Left- Bank of River Nile.	J. Anderson 18 Jan., 1881
20155	M	Skin and Skull,	Maastricht, The Netherlands.	P. J. Vanieuwenho -ven, 26 Sept 1964
20156	F	Skin and Skull,	Nieuw Namen, The Netherlands.	S. Braaksma 30 Aug., 1967

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
4534	35.0	41.7	32.5	15.6	17.0	8.7
4535	36.7	42.0	32.6	15.0	16.8	9.6
4536	37.4	48.3	39.1	18.7	19.3	9.0
4537	38.6	46.7	34.9	17.9	18.3	9.1
4538	37.7	42.0	33.7	15.7	18.5	9.2
4539	38.5	47.6	35.2	18.1	18.5	8.9
4540	39.9	49.3	31.6	14.1	18.9	8.4
4541	38.8	48.5	35.0	17.7	18.6	10.1
4542	38.0	48.8	35.0	18.5	18.8	8.7

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
4535	16.4	14.4	5.6	3.5	6.4	3.4	6.1	—	7.8	—	—
4537	16.8	14.4	5.7	3.6	6.3	3.6	5.9	8.8	7.5	10.3	6.7
4539	16.9	14.5	5.4	3.5	6.5	3.5	6.2	9.3	7.7	10.1	6.4

Remarks : These vespertilionid bats are having ears almost equal to the length of head and body. The tail is long and the interfemoral membrane encloses the whole tail. Ellerman and Morrison-Scott (1951) included the species as synonym of *P. auritus*.

Distribution : India : Jammu and Kashmir.

Elsewhere : China, also through much of the southern palaeartic from south west Europe to Mongolia and Pakistan.

Genus *Miniopterus* Bonaparte, 1837119. *Miniopterus schreibersi fuliginosus* Hodgson, 18351835. *Vespertilio fuliginosa* Hodgson, *J. Asiat. Soc. Bengal*, 4 : 700. Nepal.*Common name* : Schreiber's Bat, Long-winged Bat (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
18075	M	Skin and Skull,	Robber Cave, Mahabale- swar, Maharashtra,	S. H. Prater 04 Jan., 1915
18076	F	Skin and Skull,	Robber Cave, Mahabale- swar, Maharashtra,	S. H. Prater 04 Jan., 1915
18077	F	Skin and Skull,	Robber Cave, Mahabale- swar, Maharashtra,	S. H. Prater 04 Jan., 1915
18078	F	Skin and Skull,	Robber Cave, Mahabale- swar, Maharashtra,	S. H. Prater 04 Jan., 1915
18079	F	Skin and Skull,	Robber Cave, Mahabale- swar, Maharashtra,	S. H. Prater 04 Jan., 1915
18080	M	Skin and Skull,	Robber Cave, Mahabale- swar, Maharashtra,	S. H. Prater 04 Jan., 1915
18081	F	Skin and Skull,	Robber Cave, Mahabale- swar, Maharashtra,	S. H. Prater 04 Jan., 1915
18082	F	Skin and Skull,	Robber Cave, Mahabale- swar, Maharashtra,	S. H. Prater 04 Jan., 1915
18083	F	Skin and Skull,	Robber Cave, Mahabale- swar, Maharashtra,	S. H. Prater 04 Jan., 1915
18084	M	Skin and Skull,	Robber Cave, Mahabale- swar, Maharashtra,	S. H. Prater 04 Jan., 1915
18085	M	Skin and Skull,	Robber Cave, Mahabale- swar, Maharashtra,	S. H. Prater 04 Jan., 1915
18086	M	Skin and Skull,	Robber Cave, Mahabale- swar, Maharashtra,	S. H. Prater 04 Jan., 1915
18087	F	Skin and Skull,	Robber Cave, Mahabale- swar, Maharashtra,	S. H. Prater 04 Jan., 1915
18088	M	Skin and Skull,	Robber Cave, Mahabale- swar, Maharashtra,	S. H. Prater 04 Jan., 1915

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
18090	F	Skin and Skull,	Robber Cave, Mahabale- swar, Maharashtra,	S. H. Prater 04 Jan., 1915
18091	M	Skin and Skull,	Robber Cave, Mahabale- swar, Maharashtra,	S. H. Prater 04 Jan., 1915
18092	F	Skin and Skull,	Robber Cave, Mahabale- swar, Maharashtra,	S. H. Prater 04 Jan., 1915
18093	M	Skin and Skull,	Robber Cave, Mahabale- swar, Maharashtra,	S. H. Prater 04 Jan., 1915
18094	M	Skin and Skull,	Robber Cave, Mahabale- swar, Maharashtra,	S. H. Prater 04 Jan., 1915
18095	M	Skin and Skull,	Robber Cave, Mahabale- swar, Maharashtra,	S. H. Prater 04 Jan., 1915
18096	F	Skin and Skull,	Robber Cave, Mahabale- swar, Maharashtra,	S. H. Prater 04 Jan., 1915
18097	F	Skin and Skull,	Robber Cave, Mahabale- swar, Maharashtra,	S. H. Prater 04 Jan., 1915
18098	F	Skin and Skull,	Robber Cave, Mahabale- swar, Maharashtra,	S. H. Prater 04 Jan., 1915
18099	F	Skin and Skull,	Robber Cave, Mahabale- swar, Maharashtra,	S. H. Prater 04 Jan., 1915
23320	F	Skin and Skull,	Nakuri, S. or Uttarkashi, Uttaranchal,	S. Chakraborty 27 May, 1989
23321	F	Skin and Skull,	Nakuri, S. or Uttarkashi, Uttaranchal,	S. Chakraborty 28 May, 1989
6969	M	Skin and Skull,	Nepal,	J. Scully 08 Feb., 1878
7133	F	Skin and Skull,	Algeria, N. Africa,	G. E. Dobson ...
7132	F	Skin and Skull,	Algeria, Ireland,	G. E. Dobson ...
17075	M	Skin and Skull,	Lunugalla, Ova, Sri Lanka,	E. W. Mayor 10 Jul., 1913
17076	M	Skin and Skull,	Mahabaleswar. Maharashtra,	S. H. Prater 04 Jan., 1915
17077	M	Skin and Skull,	Mahabaleswar. Maharashtra,	S. H. Prater 04 Jan., 1915

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
17075	45.7	52.0	13.0	—	19.0	10.8
17076	45.7	59.0	12.0	—	19.0	10.5
17077	48.5	58.0	12.0	—	19.7	11.0
7133	46.5	52.0	10.4	—	20.4	10.5
7132	43.1	37.8	14.5	4.7	15.3	10.2
6969	49.1	53.1	12.5	4.9	20.5	10.6
18075	46.1	48.2	9.5	4.0	19.7	9.8
18076	47.0	45.7	11.7	4.1	19.8	10.3
18077	45.5	50.1	12.0	4.3	19.0	10.7
18078	41.5	—	11.3	3.6	18.7	9.7
18079	49.2	—	12.1	3.9	19.8	10.1
18080	46.9	48.9	12.0	—	20.1	9.9
18081	45.0	—	11.8	4.0	19.6	10.9
18082	46.0	52.1	12.3	—	19.7	11.2
18083	45.2	53.0	12.0	3.9	20.3	12.0
18084	47.0	—	11.7	4.0	20.0	10.2
18085	45.6	49.3	11.9	3.7	19.7	9.9
18086	48.0	—	12.1	4.1	20.0	11.0
18087	46.8	—	11.8	3.8	19.5	11.2
18088	47.0	—	12.0	4.0	20.1	11.3
18090	45.5	—	11.7	—	19.5	11.2
18091	47.2	—	12.0	—	19.7	12.0
18092	46.0	—	11.7	4.0	19.5	11.2
18093	47.1	—	11.9	—	20.0	11.5
18094	48.0	—	12.1	4.0	20.1	12.0
18095	46.5	—	11.8	3.8	19.5	11.3
18096	47.2	—	11.9	—	19.7	11.5
18097	45.9	—	11.7	—	19.5	11.7
18098	46.5	—	12.0	—	20.1	12.0
18099	47.4	—	11.7	—	19.5	11.8

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
17075	15.7	13.3	5.8	4.6	6.2	4.4	6.5	8.8	8.1	11.0	6.6
18076	15.7	13.4	6.2	4.7	6.3	4.2	6.8	9.0	7.8	11.4	7.0
7133	15.4	13.3	6.1	4.3	6.6	3.6	6.2	8.9	8.0	10.9	6.6
7132	15.4	13.3	5.5	5.1	7.4	4.9	7.2	—	8.4	—	—
18077	15.4	13.4	5.9	4.5	6.3	4.2	6.7	—	—	—	—
18080	15.7	13.5	5.8	4.7	6.2	4.1	6.7	8.9	8.0	—	—
18082	16.0	13.8	6.0	4.6	6.4	4.2	6.7	9.0	8.1	11.3	6.8
18087	15.8	13.5	6.0	4.6	6.3	4.2	6.6	—	8.0	11.2	6.9
18091	16.2	14.0	6.5	4.6	6.5	4.5	6.7	9.1	8.0	11.6	7.0
18096	15.9	13.3	5.9	4.6	6.1	4.2	6.5	8.9	7.9	11.3	7.0
18097	15.8	13.2	5.8	4.5	6.4	4.3	6.5	8.8	8.0	11.2	6.9

Remarks : Nil.

Distribution : Karnataka, Maharashtra, Meghalaya, Uttar Pradesh, West Bengal.

Elsewhere : Japan, Nepal, Sri Lanka, Indonesia, Malaysia, Myanmar, Thailand, Vietnam.

120. *Miniopterus pusillus* Dobson, 1876

1876. *Miniopterus pusillus* Dobson, *Mongr. Asiatic Chiroptera*, p. 162.

Common name : Nil.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19224	M	Skin and Skull,	Upper Myanmar,	J. Anderson ... 1875
19125	M	Skin and Skull,	Upper Myanmar,	J. Anderson ... 1875
19126	M	Skin and Skull,	Upper Myanmar,	J. Anderson ... 1875
19127	M	Skin and Skull,	Upper Myanmar,	J. Anderson ... 1875
19128	M	Skin and Skull,	Nicobar Island, A & N Islands.	V. Ball ... 1876

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19129	M	Skin and Skull,	Nicobar Island, A & N Islands.	V. Ball ... 1876
19130	F	Skin and Skull,	Nicobar Island, A & N Islands.	F. Stoliczka ... 1875
15625	M	Skin and Skull,	Kachal Island, A & N Islands.	F. Stoliczka ...
15626	F	Skin and Skull,	Kachal Island, A & N Islands.	F. Stoliczka ...

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
15626	39.0	—	8.9	2.9	16.5	9.0
15625	38.7	41.0	9.5	3.0	16.3	8.8
19124	40.3	42.5	10.6	2.7	16.7	8.8
19125	41.2	42.8	10.5	3.2	17.2	9.0
19126	41.1	44.1	10.7	3.1	17.2	8.9
19127	41.5	45.2	10.9	—	17.1	8.8
19128	40.0	43.8	10.4	—	16.9	8.5
19129	39.4	41.7	10.1	—	16.9	7.9
19130	40.4	—	10.2	—	17.2	8.9

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
19127	13.8	11.8	5.3	3.9	5.2	3.7	5.7	7.8	7.2	9.6	5.7
19128	13.5	11.6	5.0	3.8	5.2	3.5	5.6	7.6	7.1	—	—

Remarks : Ellerman and Morrison-Scott (1951) considered *pusillus* as a subspecies of *Miniopterus australis* Tomes. However, Hill (1983) has shown it as a distinct species.

Distribution : Andaman and Nicobar Islands, Tamil Nadu.

Elsewhere : China, Indonesia, Moluccas, Nepal, Philippines, Thailand.

Genus *Murina* Gray, 1842121. *Murina tubinaris* (Scully, 1881)1881. *Harpiocephalus tubinaris* scully, *Proc. zool. Soc. Lond.*, 1881 : 200.*Common name* : Scully's Tube-nosed Bat.

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25037	M	Skin and Skull,	Sairep, Lunglei, Mizoram,	T. P. Bhattacharya 25 Apr., 1995
25038	F	Skin and Skull,	Sairep, Lunglei, Mizoram,	T. P. Bhattacharya 25 Apr., 1995
25039	F	Skin and Skull,	Sairep, Lunglei, Mizoram,	T. P. Bhattacharya 26 Apr., 1995
24456	F	Skin and Skull,	Sairep, Lunglei, Mizoram,	T. P. Bhattacharya 25 Apr., 1995
25053	F	Skin and Skull,	Sairep, Lunglei, Mizoram,	T. P. Bhattacharya 17 Apr., 1995
25054	F	Skin and Skull,	Sairep, Lunglei, Mizoram,	T. P. Bhattacharya 17 Apr., 1995
25055	M	Skin and Skull,	Sairep, Lunglei, Mizoram,	T. P. Bhattacharya 18 Apr., 1995
25056	F	Skin and Skull,	Sairep, Lunglei, Mizoram,	T. P. Bhattacharya 18 Apr., 1995
25057	F	Skin and Skull,	Sairep, Lunglei, Mizoram,	T. P. Bhattacharya 19 Apr., 1995
25058	F	Skin and Skull,	Sairep, Lunglei, Mizoram,	T. P. Bhattacharya 19 Apr., 1995
25059	M	Skin and Skull,	Sairep, Lunglei, Mizoram,	T. P. Bhattacharya 19 Apr., 1995
17434	F	Skin and Skull,	Dening, Mishmi Hills, Arunachal Pradesh,	H. W. Wells 19 Apr., 1921
17435	M	Skin and Skull,	Dening, Mishmi Hills, Arunachal Pradesh,	H. W. Wells 19 Apr., 1921
17436	M	Skin and Skull,	Dening, Mishmi Hills, Arunachal Pradesh,	H. W. Wells 07 May, 1921

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25060	F	Skin and Skull,	Sairep, Lunglei, Mizoram,	T. P. Bhattacharya 25 Apr., 1995
25061	F	Skin and Skull,	Sairep, Lunglei, Mizoram,	T. P. Bhattacharya 25 Apr., 1995
25062	M	Skin and Skull,	Sairep, Lunglei, Mizoram,	T. P. Bhattacharya 25 Apr., 1995
25063	F	Skin and Skull,	Sairep, Lunglei, Mizoram,	T. P. Bhattacharya 26 Apr., 1995

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
25037	32.0	39.0	14.8	6.7	15.6	7.5
25038	35.8	39.2	15.5	8.3	17.1	8.5
25039	35.1	38.7	15.0	8.6	17.9	8.3
24456	35.8	40.0	16.9	8.4	16.7	8.3
25053	35.1	38.3	15.4	6.4	17.3	8.0
25054	34.8	38.5	14.8	6.5	17.3	8.0
25055	31.2	34.4	14.1	7.0	17.2	7.4
25056	35.2	36.6	16.0	7.2	17.1	8.3
25057	34.6	32.3	14.2	6.3	17.5	7.5
25058	35.0	36.2	14.7	7.1	17.9	8.3
25059	32.6	36.0	15.0	6.5	17.5	8.5
17434	33.0	35.5	14.0	—	16.8	8.2
17435	33.0	35.0	14.0	—	16.5	8.5
17436	30.0	38.0	14.5	—	16.3	8.5
25060	34.7	36.6	14.1	7.6	17.6	7.3
25061	34.1	38.4	15.0	7.4	17.1	7.8
25062	33.1	35.0	14.1	6.8	127.1	7.8
25063	33.8	36.3	15.5	8.1	17.6	8.2

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
25039	17.5	14.5	5.7	4.3	6.0	4.4	6.0	10.1	7.7	11.4	6.6
24456	16.1	13.4	5.1	4.0	5.5	4.3	5.7	8.9	7.4	10.1	6.0
25054	16.5	13.6	5.3	4.1	5.7	4.4	5.8	9.2	7.8	10.6	5.9
25056	16.2	13.4	5.2	4.0	5.6	4.3	5.7	8.9	7.4	10.1	6.0
25057	16.7	13.8	5.4	4.1	5.7	4.2	5.8	9.1	7.5	10.5	6.0
25059	15.6	13.2	5.2	3.9	5.5	4.1	5.3	8.5	7.1	9.9	5.8
17434	15.5	13.2	5.1	3.8	5.4	5.3	5.4	—	7.2	9.9	5.4
17435	15.0	13.0	5.2	3.7	5.4	5.5	5.3	—	—	9.7	5.4
17436	15.5	13.3	5.0	3.7	5.6	4.5	5.2	8.7	7.3	9.7	5.5
25061	16.0	13.3	5.2	4.0	5.7	4.3	5.8	8.9	7.3	10.5	6.1
25063	16.1	13.6	5.4	4.2	6.1	4.3	5.7	9.1	7.2	10.6	6.3

Remarks : Nil.

Distribution : Arunachal Pradesh, Himachal Pradesh, Jammu & Kashmir, Meghalaya, Mizoram, Sikkim, West Bengal.

Elsewhere : Laos, Myanmar, Pakistan, Thailand, Vietnam.

122. *Murina cyclotis cyclotis* Dobson, 1872

1872. *Murina cyclotis* Dobson, *Proc. Asiat. Soc. Bengal*, 210. Darjeeling, North-Eastern India (Tate).

Common name : Round-eared Tube-nosed Bat. (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17433	M	Skin and Skull,	Peshok, Darjeeling, West Bengal,	N. A. Baptista 03 Aug., 1915
6962	M	Skin and Skull,	Nepal,	J. Scully 02 Sep., 1876
25040	M	Skin and Skull,	Sairep, Lunglei, Mizoram,	T. P. Bhattacharya 19 Jan., 1997
25747	M	Skin and Skull,	Upper Manataar, Madurai, Tamil Nadu,	S. S. Saha 14 Feb., 1986

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
16000	M	Skin and Skull,	Takdah, Darjeeling, West Bengal,	Purchased 08 Aug., 1958
20503	F	Skin and Skull,	Yumthang, North Sikkim,	S. M. Ali 27 Aug., 1978
21372	M	Skin and Skull,	Wangasara, Vishakha- Patnam, Andhra Pradesh,	S. S. Saha 07 Mar., 1985
21373	F	Skin and Skull,	Wangasara, Vishakha- Patnam, Andhra Pradesh,	S. S. Saha 06 Mar., 1985

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
20503	33.9	—	13.3	5.8	15.7	9.2
16000	31.0	32.4	9.4	5.4	14.8	7.0
25747	32.7	36.9	15.1	7.3	17.6	8.2
25040	30.4	35.8	12.4	6.0	17.4	7.1
6962	31.7	36.4	15.0	5.2	15.8	8.9
17433	34.2	31.0	15.0	—	15.2	9.0
21372	31.6	37.0	14.6	6.3	16.6	8.4
21373	34.5	36.8	15.5	6.9	17.6	7.8

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
17433	16.1	13.5	5.1	3.8	5.3	4.2	5.2	9.0	7.2	—	5.7
6962	16.3	14.0	5.3	4.1	5.8	4.1	5.8	—	7.5	—	—
25040	15.4	13.1	5.1	3.7	5.6	4.3	5.3	8.8	7.3	9.6	5.9
25747	17.3	14.5	5.8	4.4	6.2	4.7	6.0	9.8	7.9	11.2	6.3
20503	17.2	14.4	5.9	4.5	6.2	4.4	5.8	9.8	7.9	—	6.7
21372	15.9	—	5.1	3.6	3.9	4.0	5.4	9.3	7.5	10.2	5.4
21373	16.6	—	5.6	4.3	4.4	4.1	5.5	—	7.5	10.7	6.0

Remarks : Smaller Bats. Very rare. Tubular nostrils opening laterally. Circular ears and long tragus. Wing originates from tip of outer toe. Dorsal colour warm rufous brown to ferrugineous, ventral colour greyish white with a brownish tinge.

Distribution : Andhra Pradesh, Mizora, Sikkim, West Bengal.

Elsewhere : China, Myanmar, Nepal, Philippines, Thailand, Vietnam.

123. *Murina suilla* (Temminck, 1840)

1840. *Monogr. Mamm.*, 2 : 224.

Common name : None.

Material available in the National Zoological Collection. The species is represented in the National zoological collection by a single specimen.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25754	?	Skin and Skull,	Java,	Received by Exchange with Berlin Museum, 1872

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
25754	34.5	32.9	14.0	7.5	16.6	7.4

Measurements :

Cranial : Not available.

Remarks : Nil.

Distribution : Java, Sumatra, Borneo, W. Malaysia, nearby small Islands.

Genus *Harpiocephalus* Gray, 1842

124. *Harpiocephalus harpia lasyurus* (Hodgson, 1847)

1847. *Noctulinia lasyura* Hodgson. *J. Asiat. Soc. Bengal*, 16 : 896. "Central Hills, sub-Himalayas." Darjeeling, according to Wroughton. Also occurs in Bhutan Duars.

Common name : Hairy-Winged Bat. (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
21102	M	Skin and Skull	Baliaparathodu, N. W. of Mukkali, Silent Valley, Kerala,	S. S. Saha 23 Jan., 1980
20218	F	Skin and Skull	River Takchom/Roro, Sikkim,	P. R. Mac laren 25 May, 1946
7512	M	Skin and Skull	Kurseong, Darjeeling, West Bengal,	Purchased E. Barlow.
7513	F	Skin and Skull	Kurseong, Darjeeling, West Bengal,	Purchased E. Barlow.
18107	M	Skin and Skull	Darjeeling, West Bengal,	W. S. Atkinson ... 1872
18106	F	Skin and Skull	Cherrapunji, Meghalaya,	H. H. Godwin Austen ... 1868

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
18106	50.2	53.7	15.5	7.6	23.3	12.5
18107	47.5	45.6	15.4	7.1	22.8	11.4
7513	51.2	50.1	17.1	8.5	23.4	12.7
7512	46.0	44.5	16.4	7.2	20.3	11.0
20128	47.5	—	13.0	6.0	22.3	11.7
21102	44.7	40.0	15.7	10.6	20.5	12.1

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
20218	22.6	19.1	6.9	6.7	7.8	5.6	7.6	14.5	9.9	14.6	8.1
21102	21.5	18.0	6.5	6.1	7.6	5.4	7.4	13.1	9.2	14.2	7.7
18106	22.9	19.3	7.0	6.8	9.2	6.1	8.0	14.6	10.3	15.3	8.4
18107	21.8	18.3	6.4	6.2	8.3	5.5	7.3	13.7	9.3	14.4	7.6
7513	22.5	18.9	6.9	6.6	8.4	5.6	7.9	14.4	9.5	15.2	8.4
7512	21.4	17.9	6.5	6.5	8.1	5.5	7.2	13.3	9.4	14.4	7.5

Remarks : Very much resembles to tube-nosed bats, but larger in size. Body fur thick and woolly, extending upto legs, feet, interfemoral membrane and tail. Wings haired on both surfaces. Cranial rostrum well developed, broad and heavy. Incisors, canines, and premolars are much enlarged.

Distribution : Assam, Kerala, Meghalaya, Mizora, Sikkim, Tamil Nadu.

Elsewhere : China, Indonesia, Malaysia, Myanmar, Vietnam.

Genus *Harpiola* Thomas, 1915

125. *Harpiola grisea* (Peters, 1872)

1872. *Murina grisea* Peters, *Monatsb. K. Preuss. Akad. Wiss. Berlin.*, 1872 : 258. Jeripanee, 1676 m., Mussoorie, Dehradun, Uttar Pradesh, India.

Common name : Peter's Tube-nosed Bat (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25081	M	Skin and Skull,	Sairep, Lunglei, Mizoram,	T. P. Bhattacharya 18 Apr., 1995

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
25081	32.4	27.5	12.1	6.0	14.8	8.2

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
25081	15.9	13.8	6.2	3.9	5.8	4.8	5.5	9.4	8.0	10.6	6.5

Remarks : Bhattacharya kept *grisea* under the genus *Harpiola*.

Distribution : India : Mizoram, Uttar Pradesh.

Genus *Scotoecus* Thomas, 1901

126. *Scotoecus pallidus* (Dobson, 1876)

1876. *Scotophilus pallidus* Dobson, *Monogr. Asiat. Chiroptera.*, App. D. 186.

Common name : Yellow Desert Bat. (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
11077	M	Skin and Skull,	Lucknow, Uttar Pradesh,	M. L. Roonwal 20 Mar., 1945
9215	F	Skin and Skull,	Tin pahar, near Rajmahal, Santalparganas, Bihar,	I. M. Coll. R. Hodgart. ...
20915	M	Skin and Skull,	Rajanpur, Deraghazikhan, Punjab, Pakistan,	E. Sanders ... 1877
20916	M	Skin and Skull,	Rajanpur, Deraghazikhan, Punjab, Pakistan,	E. Sanders ... 1877
20917	F	Skin and Skull,	Kolkata, West Bengal,	
20914	M	Skin and Skull,	Sultankot, near Shikarpur, Sind, Pakistan,	W. T. Blanford ... 1878

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
20914	36.4	—	10.3	3.7	13.6	9.8
20916	34.9	—	9.9	4.2	12.5	9.2
20915	34.2	28.0	9.8	4.3	11.9	8.4
20917	38.6	35.3	12.0	—	13.7	10.0
11077	36.3	34.2	11.9	5.3	13.5	7.7
9215	38.4	35.2	12.6	5.2	13.6	9.4

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
11077	14.5	13.2	5.2	5.0	6.7	4.2	6.5	—	7.5	11.0	6.0
9215	15.4	14.3	5.9	5.5	7.0	4.7	6.8	—	8.0	—	—
20917	15.8	14.4	5.9	5.2	8.9	4.7	6.8	—	7.9	—	—

Remarks : Nil.

Distribution : India : Bihar, Punjab, Uttar Pradesh, West Bengal.

Elsewhere : Pakistan.

Genus *Kerivoula* Gray, 1842

127. *Kerivoula picta picta* (Pallas, 1767)

1767. *Vespertilio pictus pallas*, *Spic. zool.*, 3 : 7. Most authors cite peninsular India as the type locality. Tate, however, thinks it came from Ternate, Moluccas (near Halmahera).

Common name : Painted Bat (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19330	F	Skin and Skull, (Damaged)	Kolkata, West Bengal,	J. Anderson ... 1869
19331	M	Skin and Skull,	Dhaka, Bangladesh,	T. Blisset ... 1875
19332	F	Skin and Skull,	Dhaka, Bangladesh,	T. Blisset ... 1875
19329	M	Skin and Skull,	Nova, Goa,	Lorets De Souza ... Apr., 1918
20451	F	Skin and Skull,	Molem, Goa,	A.K. Mandol 04 Oct 1977
14454	F	Skin and Skull,	Hapjan Tea-Estate, Assam,	Peter Styen 12 Oct 1960
25749	F	Skin and Skull,	Siva-Samudram, Mandya, Karnataka,	G. C. Shortridge 19 Nov 1912
9020	?	Skin and Skull, (Damaged)	Pegu, Myanmar,	C. R. Dun ...
9021	?	Skin and Skull, (Damaged)	Pegu, Myanmar,	C. R. Dun ...
25750	—	Skin and Skull, (Damaged)	...	D: Trustees I. M. (Through Brit. Mus.) 13 Apr., 1880
25751	?	Skin and Skull, (Damaged)	Sri Lanka,	D: Dr. Templeton ...

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
25752	?	Skin and Skull, (Damaged)	Java,	D: Batavian Inst. 1844
25753	?	Skin and Skull, (Damaged)	Sri Lanka,	D: Kelaart 1851

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
19331	33.7	41.2	13.6	—	15.7	6.7
19332	32.8	—	13.5	—	14.6	7.5
10329	31.6	—	—	—	13.1	6.5
20451	32.1	36.5	11.2	—	14.5	7.9
14454	34.1	38.2	13.7	5.5	15.0	7.2
25479	34.1	—	—	—	15.1	7.5

*Measurements :**Cranial :*

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
10329	14.5	12.1	5.7	3.0	5.5	3.3	5.3	8.3	6.6	9.8	6.2
14454	15.3	13.2	5.8	3.3	5.9	3.4	5.7	9.0	7.1	10.0	6.5

Remarks : Nil.

Distribution : India : Assam, Bihar, Goa, Karnataka, Maharashtra, Orissa, Rajasthan, Sikkim, Tamil Nadu.

Elsewhere : Bangladesh, China, Indonesia, Malaysia, Myanmar, Thailand, Vietnam.

128. *Kerivoula hardwickei* (Horsfield, 1824)

1824. *Vespertilio hardwickei* Horsfield, *Zool. Res. Java*. Part 8 : 28.

Common name : Lesser yellow Bat (Eng.).

Material available in the National Zoological Collection.

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
17437	F	Skin and Skull,	Khonshnong; Jaintia- Hills, Meghalaya,	H.W. Wells 25 Jul., 1920
17438	M	Skin and Skull,	Khonshnong; Jaintia- Hills, Meghalaya,	H.W. Wells 14 Aug., 1920
17439	F	Skin and Skull,	Rajapara, S. Kamrup, Assam,	H.W. Wells 24 Nov., 1920
17440	M	Skin and Skull,	Pashok, Darjeeling, West Bengal,	N. A. Baptista 19 Sep., 1915
12676	M	Skin and Skull,	Kekrima (= Chekrimi), SE of Kohima, Nagaland	Z.S. I. party 17 Feb., 1935
12677	M	Skin and Skull,	Kekrima. SE of Kohima, Nagaland	Z.S. I. party 17 Feb., 1935
12678	F	Skin and Skull,	Kekrima. SE of Kohima, Nagaland	Z.S. I. party 17 Feb., 1935
12679	M	Skin and Skull,	Kekrima. SE of Kohima, Nagaland	Z.S. I. party 17 Feb., 1935
17258	M	Skin and Skull,	Sibsagar, Assam,	S. E. Peal ... 1872
17259	F	Skin and Skull,	Sibsagar, Assam,	S. E. Peal ... 1872
20450	M	Skin and Skull,	Java	Berlin Museum by Exchange. ... 1872
20439	F	Skin and Skull,	Palni Top, Jammu, Jammu & Kashmir,	S. Chakraborty, 26 Oct 1975
25748	F	Skin and Skull,	Kishli, Mandla, Madhya Pradesh,	S. Bhuinya 14 Nov 1980
12665	F	Skin and Skull,	Kekrima, SE of Kohima, Nagaland,	Z. S. I. Party 17 Feb., 1935
12666	M	Skin and Skull,	Kekrima, SE of Kohima, Nagaland,	Z. S. I. Party 17 Feb., 1935
12667	M	Skin and Skull,	Kekrima, SE of Kohima, Nagaland,	Z. S. I. Party 17 Feb., 1935
12668	M	Skin and Skull,	Kekrima, SE of Kohima, Nagaland,	Z. S. I. Party 17 Feb., 1935

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
12669	F	Skin and Skull,	Kekrima, SE of Kohima, Nagaland,	Z. S. I. Party 17 Feb., 1935
12670	F	Skin and Skull,	Kekrima, SE of Kohima, Nagaland,	Z. S. I. Party 17 Feb., 1935
12671	M	Skin and Skull,	Kekrima, SE of Kohima, Nagaland,	Z. S. I. Party 17 Feb., 1935
12672	M	Skin and Skull,	Kekrima, SE of Kohima, Nagaland,	Z. S. I. Party 17 Feb., 1935
12673	M	Skin and Skull,	Kekrima, SE of Kohima, Nagaland,	Z. S. I. Party 17 Feb., 1935
12674	M	Skin and Skull,	Kekrima, SE of Kohima, Nagaland,	Z. S. I. Party 17 Feb., 1935
12675	M	Skin and Skull,	Kekrima, SE of Kohima, Nagaland,	Z. S. I. Party 17 Feb., 1935

*Measurements :**External :*

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
12665	32.6	39.6	11.7	6.7	15.9	8.2
12666	31.5	36.7	11.6	6.8	15.8	7.8
12667	33.6	—	11.5	7.0	16.5	7.5
12668	32.7	35.5+	11.4	6.9	16.2	8.7
12669	32.3	38.1	11.3	7.1	15.5	6.9
12670	33.0	—	12.0	6.9	17.0	7.9
12671	32.1	39.2	11.5	7.0	16.5	7.5
12672	32.3	40.5	11.4	6.7	16.3	7.7
12673	32.2	39.7	—	—	16.4	7.6
12674	33.7	—	11.7	7.1	16.7	8.0
12675	32.5	37.6	11.5	7.0	16.5	7.7
17437	34.0	37.0	14.0	—	16.6	10.1
17438	34.0	44.0	14.0	—	16.7	10.3

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
17439	35.0	42.0	12.0	—	16.5	9.0
17440	32.9	37.0	12.0	—	15.1	8.2
12676	33.0	39.5	11.6	7.0	16.5	7.5
12677	33.8	41.2	11.8	7.1	16.8	8.1
12678	33.2	42.3	11.5	7.0	16.5	7.7
12679	31.6	—	11.3	6.5	16.2	7.5
17258	30.0	—	10.7	5.5	15.8	7.2
17259	30.3	39.2	10.8	5.4	15.9	8.0
20450	30.8	34.5	13.7	5.6	15.2	8.9
20439	35.3	38.0	11.0	6.2	16.7	8.5
25748	33.4	—	11.5	7.0	16.5	7.5

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
12665	14.4	12.2	5.2	3.5	5.7	3.2	5.5	8.6	7.2	—	—
12670	14.5	12.3	5.2	3.6	5.6	3.3	5.3	8.4	7.3	—	—
12673	14.2	12.1	5.1	3.6	5.5	3.4	5.7	—	7.2	9.7	6.0
12675	14.4	12.2	5.3	3.7	5.7	3.3	5.8	8.3	7.2	8.8	6.1
17439	14.9	12.7	5.3	3.6	5.6	3.4	5.5	—	7.5	9.6	6.1
12676	14.4	12.2	5.4	3.7	5.3	3.5	5.6	8.3	7.2	9.6	6.0
12679	14.3	12.7	5.5	3.4	5.5	3.5	5.8	—	7.3	—	—
17258	13.6	11.3	5.2	3.3	5.2	3.5	5.2	8.2	7.0	—	—
20439	14.7	12.8	5.5	3.6	5.7	3.6	5.5	8.9	7.3	—	—
25748	15.4	13.0	5.5	3.7	5.8	3.3	5.6	9.4	7.3	10.3	7.2

Remarks : Nil.

Distribution : India : Assam, Jammu & Kashmir, Karnataka, Meghalaya, Nagaland, Orissa, West Bengal.

Elsewhere : Bangladesh, China, Indonesia, Malaysia, Myanmr, Pakistan, Sri Lanka, Thailand, Vietnam.

129. *Kerivoula lanosa* (A. Smith, 1847). *Illustr. zool. S. Afr. Mamm.*, pl. 50.

Type locality : South Africa, Cape Province, 200 mi. (322 km) E Capetown.

Common name : Nil.

Material available in the National Zoological Collection. (The species is represented in the collection by a single specimen)

Z.S.I. Reg. No.	Sex	Nature of Collection	Locality	Collector / Date of Collection
19333	F	Skin and Skull,	Zambesi. S. Africa,	D : British Museum by exchange, 06 Sep., 1877

Measurements :

External :

Z. S. I. Reg. No.	Fa	Tl	E	Tr	Tb	F & Cl
19333	36.4	44.5	11.9	6.7	16.5	9.2

Measurements :

Cranial :

Z. S. I. Reg. No.	l	cb	mtr	c'-c'	rw	iw	m-m	zw	cw	ml	ltr
19333	15.4	13.5	6.2	3.8	6.7	3.6	6.2	10.1	7.8	10.9	6.9

Remarks : Nil.

Distribution : Liberia to Ethiopia, South to South Africa.

SUMMARY

The present work (Part II-Microchiroptera) was done on the basis of the Registered specimens (both dry and wet) belonging to the sub-order : Microchiroptera excluding the type specimens as available in the National Zoological Collection present in the Headquarters, Zoological Survey of India, Kolkata till date. This present work deals with altogether 129 species and subspecies of Microchiropteran bats belonging to 7 families and 27 genera from India and outside. There are 112 species of Indian bats belonging to eight families and 35 genera.

Measurements : For external and cranial measurements of the specimens, standard methods were followed and were expressed in Milimeteres.

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