

ON A COLLECTION OF AQUATIC COLEOPTERA FROM THE METTUR DAM, SALEM DISTRICT, MADRAS, WITH THE DESCRIPTION OF A NEW SPECIES.

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INTRODUCTION.

A small party of the Zoological Survey of India, with the author as one of the members, spent about three weeks, during February-March 1952, making collections and field studies at and around Mettur Dam on the Cauvery river, in Salem Dist., Madras State. The present report is based on the material of aquatic beetles collected by the party.

Most of the collections were made below the Dam up to 8 miles down the course of the river and at Hoganical Falls, which are situated just above the Dam. The river bed was rocky and very slippery. The water level of the river had gone down very considerably, owing to protracted drought for three years.

The Gyrinidae were collected around aquatic plants and shaded portions between stones in the main channel of the river. Dytiscid and Hydrophilid beetles were mostly netted from the pools in the river bed which were generally covered with aquatic vegetation. At Hoganical Falls collections were made in almost similar ecological conditions.

The collection comprises 16 species, including a new species of *Neptosternus*, spread over 13 genera. Two species, viz., *Coelostoma stultum* and *Hydrous (Hydrous) indicus*, are being recorded from South India for the first time.

I am grateful to Dr. S. L. Hora, Director, Zoological Survey of India, for allowing me to work out this collection. I wish to express my indebtedness to Mr. J. Balfour Browne of the British Museum, London, for kindly confirming my identification of the new species.

SYSTEMATIC ACCOUNT.

Family DYTISCIDAE

Canthydrus laetabilis (Walk).

<i>Reg. No.</i>	<i>Loc.</i>	<i>Dt. of coll.</i>	<i>No. of expts.</i>
8521/H4	Hoganical falls	27.II.1952	1

Remarks.—It has been previously recorded from Ceylon, Madras and Konbir.

Canthyrus luctuosus (Aube).

<i>Reg. No.</i>	<i>Loc.</i>	<i>Dt. of coll.</i>	<i>No. of ex.</i>
8522/H4	Cauvery river, Mettur Dam.	15.II.1952	1

Remarks.—It was described from Bombay and has since been recorded from various places in S. India and Bengal. Outside India it has been recorded from Arabia, Persia, Syria and Mesopotamia.

Laccophilus sharpi Reg.

<i>Reg. No.</i>	<i>Loc.</i>	<i>Dt. of coll.</i>	<i>No. of ex.</i>
8523/H4	Cauvery river, Mettur Dam.	25.II.1952	1
8524/H4	Do.	26.II.1952	1
8525/H4	Do.	3.III.1952	1

Remarks.—This species has a distribution extending from Mesopotamia to Japan and in the Southern Hemisphere up to Australia. Its recorded distribution in India is from Sind, Konbir (Chota Nagpur), Mandar (Chota Nagpur) and Mahe.

Neptosternus circumductus Reg.

<i>Reg. No.</i>	<i>Loc.</i>	<i>Dt. of coll.</i>	<i>No. of ex.</i>
8526/H4	Cauvery river, Mettur Dam.	25.II.1952	1

Remarks.—This species was described from Genji in S. Arkot district of the State of Madras. The present record is not far from the type locality. I have however examined 9 examples from Mandla, Madhya Pradesh (23. V. 1927; H. S. Pruthi coll.) and determined by Gschwendter, in which case the median yellow markings of the elytra are more elongate than described and figured by Regimbert (1899 p. 268, fig. 33). In some cases the anterior quadrate spot and the posterior triangular projection of the lateral yellow line are joined by this marking. However the present specimen conforms more or less to the figure given by Regimbert.

Neptosternus horai, sp. nov.

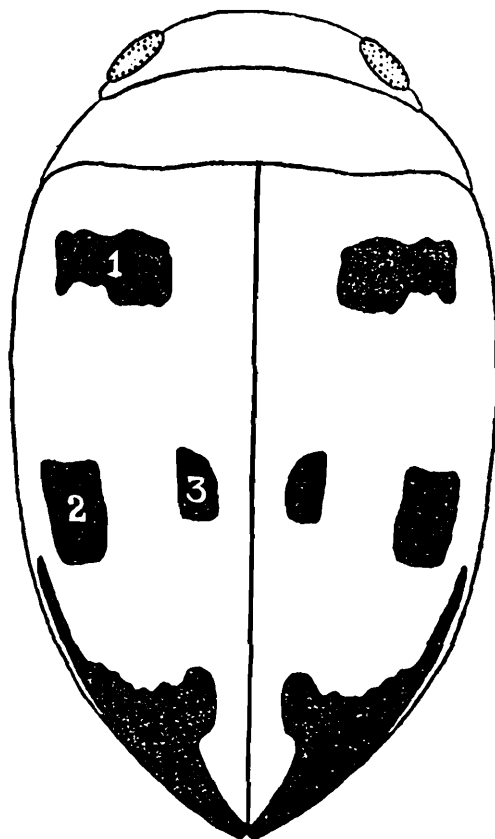
Diagnosis.—Body 2.6 mm., oblong, oval, obliquely attenuated at the apex, slightly convex. Head and pronotum yellow, elytron black with three yellow spots besides the yellow lateral marginal line, starting from the middle of the elytron and posteriorly dilating into a somewhat triangular spot near the apex. Numbering the spots from top to bottom and left to right; No. 1 equidistant from the base and the lateral margin, roughly twice as wide as long; Nos. 2 and 3 situated about the transverse median line of the elytron. No. 2 situated towards the lateral margin and about one and half times longer than broad, almost equidistant from the spot No. 1 and the apical yellow triangle.

No. 3 situated near the suture and separated from No. 2 by about twice the distance between it and the suture, more than twice as long as wide, attenuated on the inner side towards the base of the elytron.

Ventral side testaceous, antennae and legs also testaceous, epipleurae darker in colour and slightly reddish brown.

Holotype :—Probably a Female Reg. No. 8527/H4, Hoganical Falls, Madras state; 27.II. 1952, Coll. T. G. Vazirani; Zoological Survey of India.

Remarks.—This species resembles *N. circumductus* Reg. but can be easily separated from it by the typical arrangement of the elytral spots and also by its smaller size. The lateral yellow marginal line runs from the base to the apex where it dilates into the triangular spot in case of *N. circumductus* while it starts from the middle of the elytron in the present species.



TEXT FIG. 1 :—*Neptosternus horai* sp. nov. \times ca. 34 (The black spots in the figure indicate yellow coloration, on the elytra).

***Hydrovatus confertus*, var. *subtilis* Sharp.**

<i>Reg. No.</i>	<i>Loc.</i>	<i>Dt. of coll.</i>	<i>No. of ex.</i>
8528-30/H4	Cauvery river, Mettur Dam.	25.II.1952	3
8531-34/H4	Hoganical falls	27.II.1952	4

Remarks.—Originally described from Siam, the species has been reported in India from Konbir (Chota Nopgur) and Pondicherry. Outside India it has been recorded from Ceylon, Burma, Cochin China, Java, Sumatra, Borneo.

Hydaticus vittatus Fabr.

<i>Reg. No.</i>	<i>Loc.</i>	<i>Dt. of coll.</i>	<i>No. of ex.</i>
8535-49/H4	Cauvery river, Mettur Dam.	25.II.1952	15
8550/H4	Do.	3.III.1952	9 (in spirit)

Remarks.—In India it has been recorded from Pedong (E. Himalayas) and Mahe. It has a wide distribution in South East Asia. It occurs in Japan, Formosa, China, Malacca, Siam, Java, Sumatra, Borneo, Celebes, Philippine Islands and Ceylon.

Cybister tripunctatus asiaticus Reg.

<i>Reg. No.</i>	<i>Loc.</i>	<i>Dt. of coll.</i>	<i>No. of ex.</i>
8551-54/H4	Cauvery river	21.II.1952	4
8555-56/H4	Do.	25.II.1952	2

Remarks.—The fresh specimens have metallic dark green colour which gradually turns to black in the cabinet drawers. This is one of the commonest of the Indian species and is very widely distributed in the Indo-Malayan region.

Family GYRINIDAE.

Orectochilus (Patrus) haemorrhous Reg.

<i>Reg. No.</i>	<i>Loc.</i>	<i>Dt. of coll.</i>	<i>No. of ex.</i>
8557/H4	Cauvery river	25. II.1952	many ex. in spirit

Remarks.—Very common in S. India. Not known from outside Indian region so far.

Orectochilus (Patrus) limbatus Reg.

<i>Reg. No.</i>	<i>Loc.</i>	<i>Dt. of coll.</i>	<i>No. of ex.</i>
8558/H4	Cauvery river, Chinnapallam, Mettur Dam.	21.II.1952	many ex. in spirit
8559/H4	Do.	17.II.1952	many ex. in spirit

Remarks.—Very common in S. India.

Family HYDROPHILIDAE.

Coelostoma stultum Walk.

<i>Reg. No.</i>	<i>Loc.</i>	<i>Dt. of coll.</i>	<i>No. of ex.</i>
8560/H4	Cauvery river, Mettur Dam.	25.II.1952	1

Remarks.—This species is widely distributed in the Indo-Malayan region. It was described from specimens collected in Ceylon. In India, it has since been recorded from Assam. It is now being recorded from S. India for the first time.

Helochares (Helochares) pallens (Macleay).

<i>Reg. No.</i>	<i>Loc.</i>	<i>Dt. of coll.</i>	<i>No. of ex.</i>
8561/H4	Cauvery river, Mettur Dam.	21.II.1952	1
8562-64/H4	Do.	25.II.1952	3
8565/H4	Do.	3.II.1952	1

Remarks.—It is a widely distributed species, having been recorded from Java, Sumatra, N. Oceania, Philippine Islands, Federated Malay States, Tonkin, India, Syria, Sudan, Egypt and Madagascar. In India it has been recorded from Abor country Pondicherry, and Genji (Madras).

Sternolophus (Sternolophus) rufipes Fabr.

<i>Reg. No.</i>	<i>Loc.</i>	<i>Dt. of coll.</i>	<i>No. of ex.</i>
8566-81/H4	Cauvery river, Mettur Dam.	20.II.1952	16
8582-8620/H4	Do.	21.II.1952	39
8621-39/H4	Do.	25.II.1952	19
8643/H4	Do.	3.III.1952	17 ex. in spirit
8640/H4	Cauvery river, Chinnapallam, 8 miles from Mettur Dam.	17.II.1952	9 ex. in spirit
8641/H4	Hoganical falls	27.II.1952	5 ex. in spirit
8642/H4	Thoppiar river, a tributary of Cauvery river, Thoppiar Town.	1.III.1952	9 ex. in spirit

Remarks.—Very common in the Oriental region and is also the commonest species occurring in this area, during this period as is evident from the large number of specimens collected.

Hydrous (Hydrous) indicus (Bedel).

<i>Reg. No.</i>	<i>Loc.</i>	<i>Dt. of coll.</i>	<i>No. of ex.</i>
8644/H4	Cauvery river, Mettur Dam.	25.II.1952	1

Remarks.—Described and recorded from N. India, this species is now being reported from S. India.

Berosus (Enoplurus) indicus Mots.

<i>Reg. No.</i>	<i>Loc.</i>	<i>Dt. of coll.</i>	<i>No. of ex.</i>
8645-46/H4	Cauvery river, Mettur Dam.	25.II.1952	2
8647/H4	Do.	3.III.1952	1
8648/H4	Hoganical falls	27.II.1952	1

Remarks.—It has been recorded from Ceylon, India, Burma, China, Formosa, Siam, Cambodia, Sumatra, Java, Federated Malay States and Philippine Islands. In its record from India, no particular locality has been mentioned.

Regimbartia attenuata (Fabr).

<i>Reg. No.</i>	<i>Loc.</i>	<i>Dt. of coll.</i>	<i>No. of ex.</i>
8650-52/H4	Cauvery river	20.II.1952	3
8653/H4	Do.	21.II.1952	1
8654/H4	Do.	25.II.1952	1
8655-61/H4	Hoganical falls	27.II.1952	7
8649/H4	Do.	27.II.1952	1

Remarks.—A very common and widely distributed species in South East Asia and Australia.