



ZSI enews



सत्यमेव जयते



Ministry of Environment,
Forest and Climate Change



From the Director's Desk

I am glad to present the July 2021 issue of E-News to the readers. During the month international webinar on “Unraveling the Moth Mysteries” was organized on 20th July 2021 towards the celebration of National Moth Week, 17th to 24th July 2021. Further, faunistic surveys were conducted to Jammu and Kashmir, Ladakh, Uttarakhand, Himachal Pradesh, North & Middle Andaman, Shoal Bay, Kalatang, Sippighat, Chidiyatappu, Nayashahar, Shaitan khadi, Ferrargunj, Botanical Garden, South Andaman, Murshidabad, Digha, West Bengal, Botanical Garden of India Republic, Noida, Odisha and Jharkhand (Chhotta-Nagpur Plateau Province), Chamba and Kangra, Dighalipukhuri Pond, Guwahati, Gulf of Mannar coast and Lothian Island for Yash cyclone impact assessment study. Bibhutibhushan Wildlife Sanctuary, Sunderban, West Bengal, Papikonda National Park, Andhra Pradesh Nauradehi WLS, Madhav NP and Orcha WLS, Madhya Pradesh and Kali Tiger Reserve, Karnataka were also surveyed. Some of the important services performed during the month are submission of 3 case reports of identifying confiscated materials to Divisional Forest Officer, Gorumara Wildlife Division, Jalpaiguri, West Bengal; submission of final report on Holistic Development of Great Nicobar Island to AECOM and Ministry of Home Affairs, Government of India; replies for Lok Sabha for answer on ‘Biodiversity Digital Sequence Information’, ‘Effects of Forest Fires on Flora and Fauna, and ‘Butterfly species’. Amidst the pandemic forced lockdown in most of the States of the country, ZSI could progress considerably well by identifying 11349 specimens comprising 1227 species. Furthermore, 13 new species of Hymenopterans, Lepidoptera, Arachnida, Reptilia, and Amphibian were described during the month along with the record of 5 species for the first time from India. In addition, 25 species have been newly augmented to the National Zoological Collections while 193 DNA barcodes have been generated. Altogether 44 publications including 1 book, 3 book chapters, and 40 papers have been made during the month. I congratulate all the officers and staff of ZSI for making immense progress during the month.

Jai Hind

Director

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HEADQUARTERS, KOLKATA

One survey was conducted to Odisha and Jharkhand (Chhotta-Nagpur Plateau Province) of Deccan Peninsula Biogeographic Zone from 7th to 27th July 2021 by two different teams. Another survey was conducted to Lothian Island for Yash cyclone impact assessment study during 5th to 9th July 2021. During the month, 3 new species viz. *Pieris tadokoro* Das, Eitschberger, Singh & Chandra, 2021, *Miltochrista berdepsebunda* Volynkin, Singh, Cerny & Joshi, 2021 and *Aberrasine tiani* Huang, Volynkin, Singh & Wang, 2021 and one new record to India, *Appias cardena* (Hewitson, 1861) of Lepidoptera were published. A new synonym is established for *Miltochrista pudibunda* = *M. irregularis* Rothschild, 1913 and a lectotype female was designated for *M. irregularis* [Lepidoptera]. Three case reports of identifying confiscated materials were submitted to Divisional Forest Officer, Gorumara Wildlife Division, Jalpaiguri, West Bengal: identified as Pig (*Sus scrofa domesticus*), Mithun (*Bos frontalis*) and Common leopard (*Panthera pardus*). DNA isolation was done for 12 species of Diptera. *Aponurus laguncula* Looss, 1907 (Platyhelminthes) and *Brachymeria aurea* (Girault, 1915) (Hymenoptera: Chalcididae) were augmented to the National Zoological Collections. Scientists reviewed 6 manuscripts for various journals. Identification and Advisory services rendered to Bharathiar University, Coimbatore, on Crustacea. Dr. Inderjeet Tyagi has been awarded by India Prime Quality Education Award 2021 by Foxclues, Dailyhunt and Chronicle Journal. Replies for Lok Sabha Unstarred Diary No. 8370 for answer on 06.08.2021 regarding 'Biodiversity Digital Sequence Information; Unstarred Diary No. 8370 regarding 'Effects of Forest Fires on Flora and Fauna; Starred/Unstarred Question Dy. No. 5140 regarding 'Effects of Forest Fires on Flora and Fauna and Unstarred question Dy. No. 4984 for 30.07.2021 regarding 'Butterfly Species' were submitted to the administrative Ministry. Reviewed the project proposal on 'Maintaining reproductive reserves of spiny lobster *Panulirus homarus* in sea cages as a conservatory measure and monitoring the impact of seed recruitment in the fishery' for Ministry of Earth Sciences, Government of India and report submitted. Evaluated 9 PBRs for Murshidabad and 4 PBRs for Jalpaiguri districts and submitted to West Bengal Biodiversity Board.



Gastropacha pardale
Walker, the brown
lapped moth

NORTH EASTERN REGIONAL CENTRE, SHILLONG, MEGHALAYA

Miostrellus joffrei
(Thomas, 1915)



Sus scrofa
Linnaeus,
1758

Altogether 34 species pertaining to Reptilia (6 spp.), Amphibia (6 spp.), Pisces (17 spp.), Mammalia (1 sp.) and Crustacea (1 sp.) were identified. One survey was undertaken to Dighalipukhuri Pond, Guwahati in connection with mass mortality of fishes and 36 samples of five species of fishes were collected.

WESTERN REGIONAL CENTRE, PUNE, MAHARASHTRA



Barytelphusa
cunicularis
(Westwood, 1836)



Golden Emperor
Moth *Loepa*
schinlmeisteri
Brechlin, 2000

A total 471 examples were identified into 57 species comprising Coleoptera (18 spp.), Lepidoptera (19 spp.), Decapoda (5 spp.), Pisces (5 spp.), and Amphibia (10 spp.) were identified. Three DNA sequences were submitted to the GenBank: one sequence for *Sphaerotheca masekyi* (MT795794); two sequences for *Euphylyctis* sp. (MW872363; MW872364). A survey was conducted in Kali Tiger Reserve, Karnataka, from 3rd to 12th July, 2021.

CENTRAL ZONE REGIONAL CENTRE, JABALPUR, MADHYA PRADESH



Eryx conicus
(Schneider, 1801)



Boiga flaviviridis
Vogel & Ganesh,
2013

Scientists of the Centre identified and registered 213 specimens into 50 species comprising Lepidoptera (14); Reptilia (17), Amphibia (2) and Orthoptera (11). Local surveys were conducted to Dumna Nature Reserve, Jabalpur Katangi, Bijadandi, Panda Baba of districts Jabalpur and Damoh during the month.

DESERT REGIONAL CENTRE, JODHPUR, RAJASTHAN



Rasbora daniconius
(Hamilton, 1822)



Pycnonotus leucotis
(Gould, 1836)

A total of 253 specimens comprising 39 species and 26 genera belonging to 14 families and 3 orders have been identified. The identified species belong to Mollusca (2 species), Hemiptera (4), Hymenoptera (10), Lepidoptera (13) and Pisces (10). Identification services were rendered to Government P.G. College, Jhalawar (Rajasthan). Two manuscripts were reviewed for the Records of the Zoological Survey of India and Uttar Pradesh Journal of Zoology.

NORTHERN REGIONAL CENTRE, DEHRADUN, UTTARAKHAND

Grey-breasted Prinia
Prinia hodgsonii
(Blyth, 1844)



Seventy-two species have been identified from 247 specimens belonging to different faunal groups (5 species of Protozoa, 6 of Nematoda, 27 of Lepidoptera, 4 of Phthiraptera, 8 of Annelida, 10 of Pisces, 2 of Amphibia and 10 of Aves). Three identification and advisory services were provided on identification of annelids and butterflies. One manuscript was reviewed for International Journal of Tropical Insect Science.

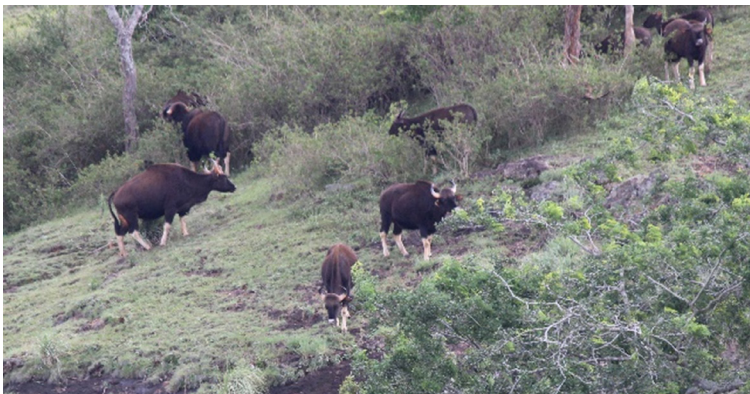
Brahminy starling,
Sturnia pagodarum
(Gmelin, 1789)



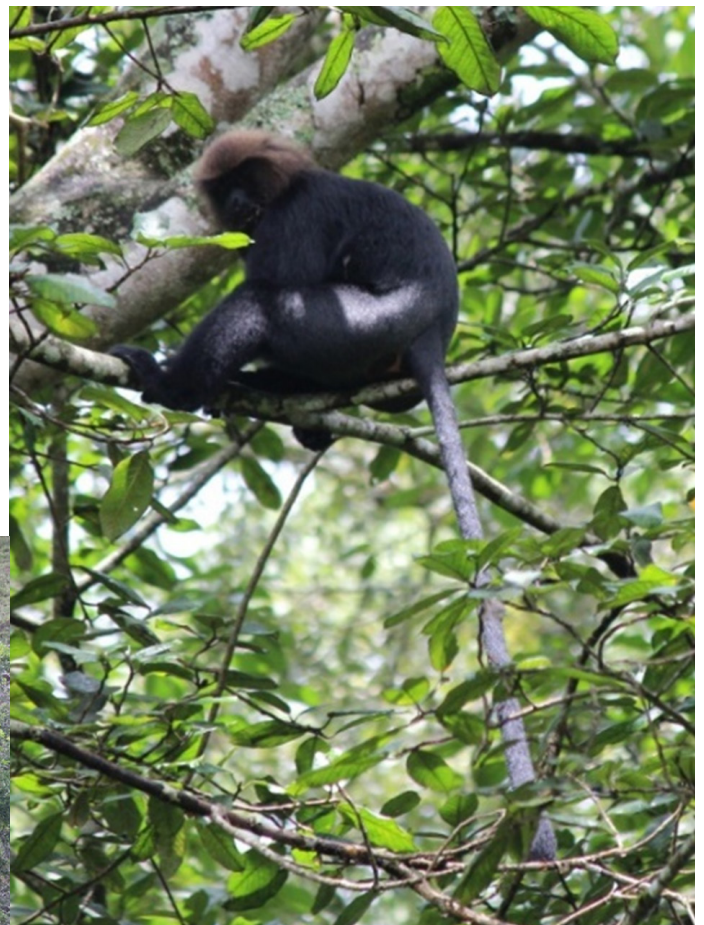
SOUTHERN REGIONAL CENTRE, CHENNAI, TAMIL NADU

Scientists of the centre identified and registered 898 specimens into 85 species of various faunal groups viz. Ephemeroptera, Odonata, Coleoptera, Hemiptera, Blattodea, Psocoptera, Fishes, Aves and Reptiles. One survey tour was undertaken in Meghamalai Wildlife Sanctuary from 8th-30th July, 2021. *Ectopsocus himalayanus* New, 1971 of Psocoptera and *Choroterpes (Monochoroterpes) nandini* Selvakumar and Sivaramakrishnan, 2015 of Ephemeroptera were augmented to the National Zoological Collections. Identification service was rendered to Bharathiar University, Coimbatore.

Gaur, *Bos gaurus* (Smith, 1827)



Nilgiri Langur, *Semnopithecus johnii* (J. Fischer, 1829)



GANGETIC PLAINS REGIONAL CENTRE, PATNA, BIHAR



Identified and registered 532 examples representing 132 species (18 of Mollusca, 22 of Lepidoptera and 92 of fishes). Identification and advisory services were rendered to Kota university, Rajasthan and identified 20 species of Lepidoptera.

Intermediate Egret
Ardea intermedia Wagler, 1827



Gharial
Gavialis gangeticus Gmelin, 1789

HIGH ALTITUDE REGIONAL CENTRE, SOLAN, HIMACHAL PRADESH



Eurasian Collared
Dove, *Streptopelia*
decaocto (Frivaldszky,
1838)



Plain Tiger, *Danaus*
chrysippus (Linnaeus, 1758)

During the month scientists of the Centre identified 198 examples referable to 44 species (40 of insects and 4 of Pisces). One extensive survey was undertaken in districts of Chamba and Kangra from 20th to 31st July 2021.

MARINE BIOLOGY REGIONAL CENTRE, CHENNAI, TAMIL NADU

Identified and registered 54 species, from 158 examples, which include: moss inhabiting testate amoebae 21 species, 53 examples; marine sponges 15 species, 30 examples; Crustacea 10 species, 14 examples; Mollusca 4 species, 57 examples; Echinodermata 4 species, 4 examples.

Macrophiothrix propinqua
(Lyman, 1862)
(Juvenile)



ANDAMAN AND NICOBAR REGIONAL CENTRE, PORT BLAIR

Ten days long term surveys were conducted during 21st to 31st July 2021 to North & Middle Andaman. A total of 331 species were identified comprised of Coral (66 species), Sea Anemone (7), Crustacea (17), Hydrozoa (11), Bryozoa (10), Mollusca (31), Octocoral (5), Porifera (5) from marine environment. Amphibia (9 species) Coleoptera (4), Birds (40), Hemiptera (10), Hymenoptera (3), Lepidoptera (80), Odonata (3), Orthoptera (1), Reptiles (7), and Arachnida (22) were identified from terrestrial environment.

Andaman Painted Bronzeback Tree
Snake *Dendrelaphis andamanensis*
Anderson, 1871



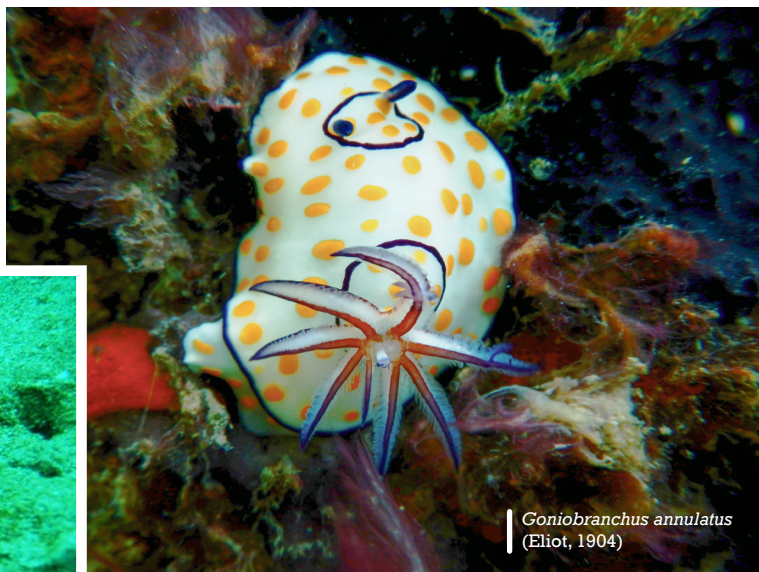
Short-tailed Bay Island
forest Lizard *Coryphophylax brevicaudus* Harikrishnan et
al., 2012



SUNDERBAN REGIONAL CENTRE, CANNING, WEST BENGAL



Phyllidia multituberculata
Boettger, 1918



Goniobranchus annulatus
(Eliot, 1904)

Scientific staff of the centre identified 340 examples into 48 species, including Arthropoda 2, Mollusca 31, Fishes 10, Cnidaria 2, and Echinodermata 3. Two survey tours were conducted, one survey in Gulf of Mannar coast under the project entitled “Coral reef associated faunal diversity along east coast of India” on 1st to 12th July 2021 and second survey tour to Lothian Island for Yash cyclone impact assessment study during 5th to 9th July 2021.

The scientific staff of the centre examined 605 specimens and identified into 15 species of aquatic Coleoptera, 10 of aquatic Hemiptera, 2 of Decapoda, 3 of Ostracoda, 4 of Branchiopoda, 11 of Mollusca, 7 of fishes. One field survey to Smart Cities of Andhra Pradesh (Amravati & Visakhapatnam) was conducted from 2nd to 16th July 2021. Another field survey to Papikonda National Park, Andhra Pradesh was also conducted from 17th to 26th July 2021 as a part of externally funded project from Andhra Pradesh Biodiversity Board. Scientist of the Centre also participated in field survey to Chhota Nagpur plateau from 7th to 27th July 2021. Two identification and advisory services rendered to Gulbarga University, Karnataka.



Raorchestes sanctisilvaticus
(Das & Chanda, 1997)



Scolopendra
hardwickei
Newport, 1844

FRESHWATER BIOLOGY REGIONAL CENTRE, HYDERABAD, TELANGANA

WESTERN GHATS REGIONAL CENTRE, KOZHIKODE, KERALA



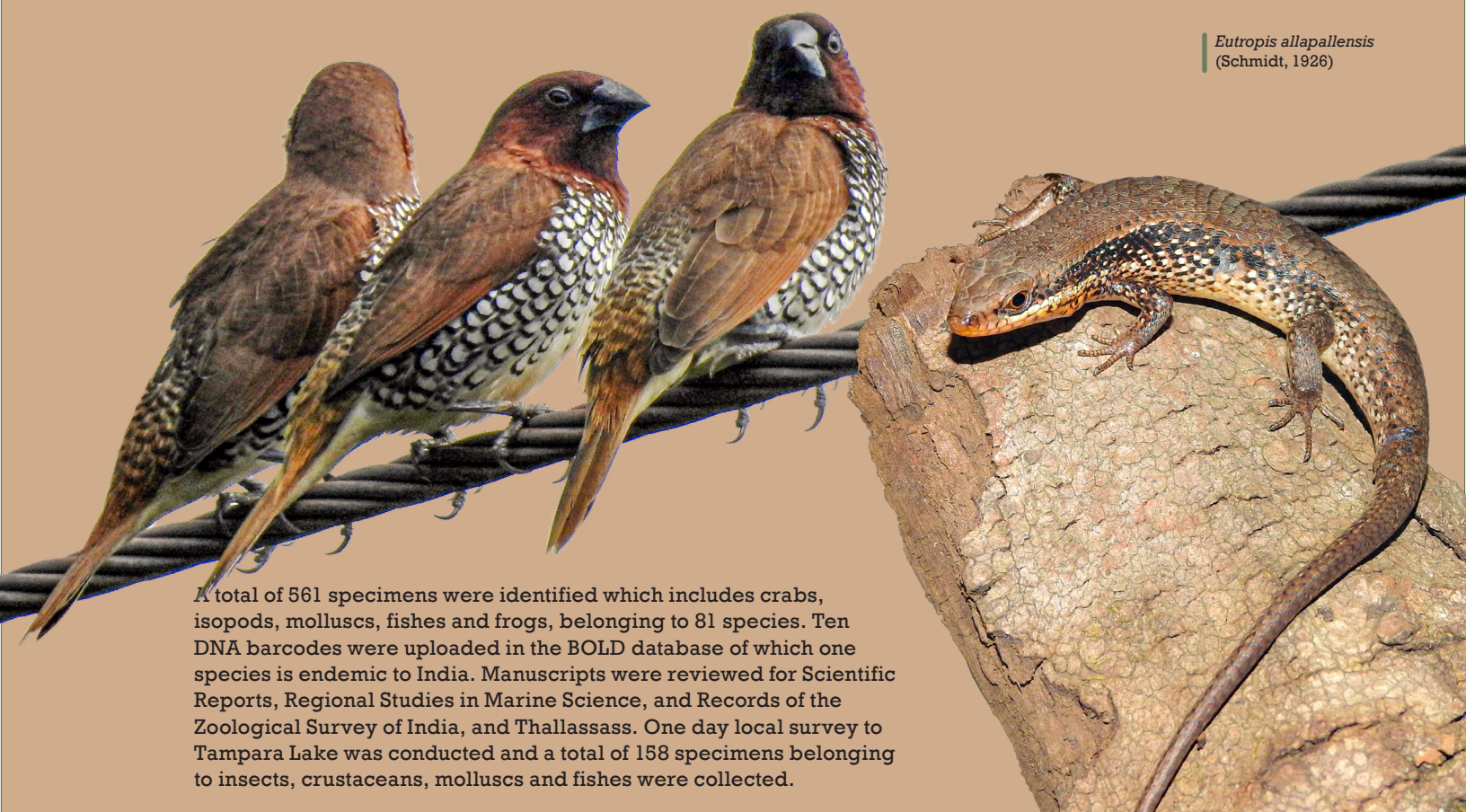
Indomenella indica (Ghate & Mukherjee, 2004)

Fifty-seven species (Hymenoptera 37, Mantodea 5, Araneae 10, Lepidoptera 4 and Coleoptera 1) from 171 exs. were identified. Seven new species viz., *Methocha krombeini* Hanima Raveendran, Girish Kumar & Binoy, 2021, *M. paraceylonica* Hanima Raveendran, Girish Kumar & Binoy, 2021, *M. shyamagatra* Hanima Raveendran, Girish Kumar & Binoy, 2021, *Lyroda nuda* Mawadda and Girish Kumar, 2021, *Lyroda aurea* Mawadda and Girish Kumar, 2021, *Oxyopes scapeus* Sen & Sureshan, 2021 and *Oxyopes dinendrai* Sen & Sureshan, 2021 were described along with 3 new records to India: *Philanthus nepalensis* Bingham, 1908, *P. triangulum* (Fabricius, 1775), and *Lyroda binghami* Tsuneki, 1983.

ESTUARINE BIOLOGY REGIONAL CENTRE, GOPALPUR-ON-SEA, ODISHA

Lonchura punctulata
(Linnaeus, 1758)

Eutropis allapallensis
(Schmidt, 1926)



A total of 561 specimens were identified which includes crabs, isopods, molluscs, fishes and frogs, belonging to 81 species. Ten DNA barcodes were uploaded in the BOLD database of which one species is endemic to India. Manuscripts were reviewed for Scientific Reports, Regional Studies in Marine Science, and Records of the Zoological Survey of India, and Thallassass. One day local survey to Tampara Lake was conducted and a total of 158 specimens belonging to insects, crustaceans, molluscs and fishes were collected.

ARUNACHAL PRADESH REGIONAL CENTRE, ITANAGAR

A total of 177 examples were identified and registered comprising 3 species under 3 genera and 27 examples of Millipedes, 44 species under 34 genera and 80 examples of Lepidoptera, 10 species under 8 genera and 70 examples of Pisces.

Landscape view of Parang, Distt. Papum Pare, Arunachal Pradesh



MARINE AQUARIUM AND REGIONAL CENTRE, DIGHA, WEST BENGAL

Scolopsis vosmeri
Bloch, 1792



Scientist of the Centre identified 432 specimens in 95 species [82 species of fishes, 12 of Mollusca, and 1 Brachiopoda]. Of these 328 examples of fishes, 74 examples of Mollusca and 30 examples of Brachiopoda were digitized. Conducted four-day local survey at Digha Mohana, Udaiyapur & Talsari on 12th to 25th July 2021.

Chelonodon decussates
Cuvier, 1829



NEW DISCOVERIES AND NEW RECORDS

NEW SPECIES



Methocha paraceylonica Hanima, Girish Kumar & Binoy, 2021



Lyroda aurea Mawadda & Girish Kumar, 2021



Methocha shyamagatra Hanima, Girish Kumar & Sureshan, 2021



Lyroda nuda Mawadda & Girish Kumar, 2021



Oxyopes dinendrai Sen & Sureshan, 2021



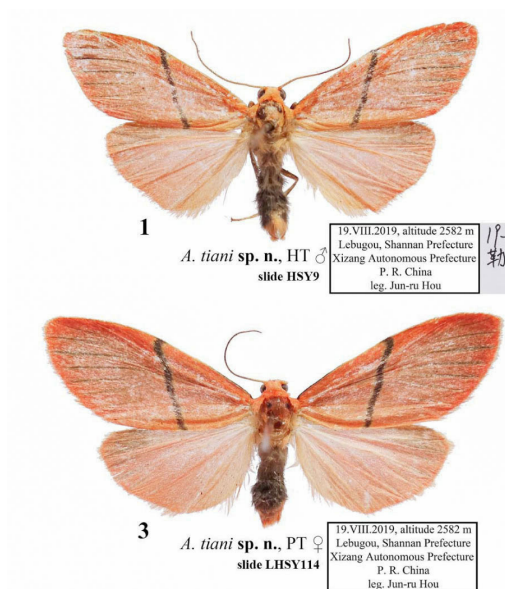
Oxyopes scapeus Sen & Sureshan, 2021



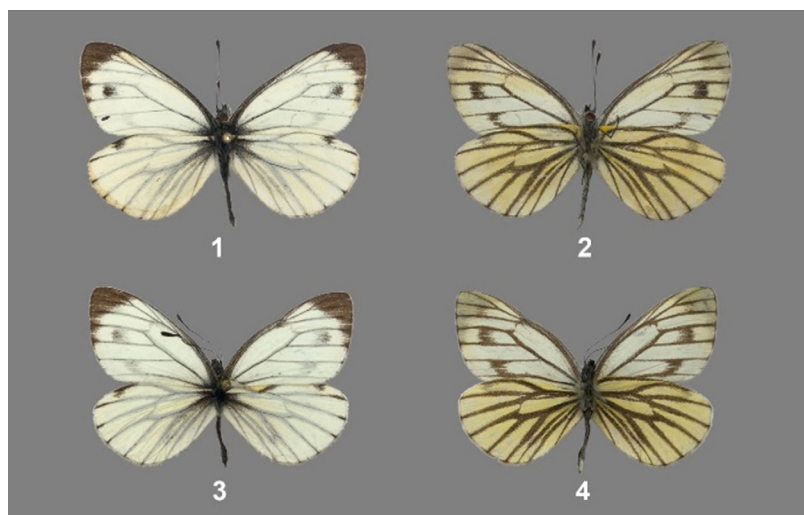
Methocha krombeini
Hanima, Girish
Kumar & Binoy, 2021



Miltochrista berdepsebunda
Volynkin, Singh, Cerny, &
Joshi, 2021



Aberrassine tiani Huang, Volynkin, Singh
& Wang, 2021



Pieris tadokoroi Das,
Eitschberger, Singh
& Chandra, 2021

NEW RECORDS



Lyroda binghami Tsuneki, 1983



Philanthus nepalensis Bingham, 1908



Philanthus triangulum (Fabricius, 1775)



Boiga cyanea (Duméril, Bibron
& Duméril, 1854)

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BOOK

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 3. Dr. Avtar Kaur Sidhu, Scientist-E attended IUCN Members virtual Conference on ‘The Road to Kunming: IUCN top priorities for the Post-2020 Global Biodiversity Framework’ on 29.07.2021.
 4. Dr. Gaurav Sharma, Scientist-E, NRC, ZSI, Dehradun attended meeting with Dr. Sandeep Kumar Chauhan, Scientist-E, Botanical Garden of Indian Republic, Noida for discussion on setting up of the Butterfly Garden in Botanical Garden of Indian Republic at Noida on 20 July, 2021.
 5. Dr. Indu Sharma, Scientist-E attended meeting of the *State Board for Wildlife of Rajasthan* chaired by Hon’ble Chief Minister of Rajasthan State on 15th July, 2021 through Webex.
 6. Dr. R. H. Raina, Scientist-D attended 3rd meeting of the *State Board for Wildlife of the Union Territory of Ladakh* under the Chairmanship of Sh. R.K. Mathur, Hon’ble Lt. Governor of the Union Territory of Ladakh held on 24th July, 2021 through video-conferencing.
 7. Dr. C. Sivaperuman, Scientist-E, ANRC, Port Blair attended meeting with Principal Chief Conservator of Forests (Wildlife) & Chief Wildlife Warden; Additional Principal Chief Conservator of Forests (Wildlife) on 2nd & 20th July 2021 in connection with the Annual Programme of Research on the Breeding ecology of Leatherback Turtle in Nicobar group of Islands; attended meeting with official of AECOM on 5th July 2021 in connection the REIA studies for the Holistic Development in Great Nicobar Island; attended meeting under the Chairmanship of PCCF (Wildlife) in connection with the finalization of the Zonal Management Plan for the Mount Harriet National Park on 14th July 2021.
 8. Dr. Basudev Tripathy, Scientist-E participated in National Coastal and Marine Spatial Planning Framework (CMSP) – Promotion of Blue Economy - virtual meeting of Sub -Group Committee -2 is to be held on 16th July 2021 at 3:00 P.M. under the Chairmanship of Dr. A Senthil Vel, Professor and Dean (Fisheries), Karnataka Veterinary, Animal and Fisheries Sciences University, College of Fisheries, Mangalore to finalize the draft chapter on CMSP Framework with respect to IOC UNESCO Document.

MEETINGS ATTENDED

1. Dr. C. Raghunathan attended meeting with AECOM officials on 5th June 2021 and 22nd and 23rd July 2021 to discuss about the report on Holistic Development of Great Nicobar Island and the Final report submitted to AECOM and Ministry of Home Affairs, Government of India.
2. Dr. Avtar Kaur Sidhu, Scientist-E attended 2nd Wildlife Board meeting of Union Territory of Jammu & Kashmir as representative of Director, Zoological Survey of India through virtual mode on 10.07.2021, presided over by Honorable Governor of the Union Territory of Jammu & Kashmir.

LECTURES DELIVERED

1. Dr. C. Raghunathan delivered a lecture on the *Overview of Moths and its Diversity and Distribution* during the international webinar on Unravelling the Moth Mysteries organized by ZSI on 20th July 2021 towards the celebration of National Moth Week, 17th to 24th July 2021.
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2. Dr. Anil Mohapatra, Scientist-E, delivered an online lecture on “Underwater life also needs conservation efforts: Indian prospective” online presentation during the immersion course focusing on SDG – 14 (Life below Water) on 3rd July, 2021 organized by School of Sustainability, XIM University, Bhubaneswar.
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3. Dr. Kamalakannan M., Sr. Zoological Assistant delivered an invited lecture on “*Morphological identification of confiscated (mammals) materials*” at the Advanced Institute for Wildlife Conservation (Tamil Nadu Forest Department), Chennai on 3rd July 2021 via video conferencing.
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4. Dr. Avtar Kaur Sidhu, Scientist-E, delivered lecture on the topic “Different approaches in Taxonomy” on 7th July, 2021 to PG diploma course students under Module 5- principals and Procedures in Animal Taxonomy including concepts in Zoogeography, the training programme being organised by ZSI, Kolkata.
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5. Dr. P. Girish Kumar, Scientist-C, delivered a talk on Biodiversity of Vespidae (Insecta: Hymenoptera) of Western Ghats on 10th July, 2021 on the webinar conducted by Central Marine Fisheries Research Institute, Calicut.
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6. Dr. L. Kosygin Singh, delivered a lecture entitled “Collection, Curation and Preservation – Fishes (Vertebrates) for Taxonomic Studies” for the students of the PG Diploma course on Integrative Animal Taxonomy conducted by the Zoological Survey of India on 12th July, 2021
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7. Dr. C. Sivaperuman, Scientist-E delivered a talk on the Faunal diversity of Protected areas of Andaman and Nicobar Islands in the National Parks, Sanctuaries, Botanical & Zoological Garden organized by the Government Madhav Sadshivrao Golwalkar College, Rewa, Madhya Pradesh on 15th July 2021.
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8. Dr. K.A. Subramanian, Scientist-E, participated and given a talk on “Overview of Odonata of South Asia”. World Dragonfly Association biennial meeting. 15th July, 2021. Organized by American Museum of Natural History, New York.
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9. Dr. Muhamed Jafer Palot, Scientist-B delivered a lecture on ‘*Snakes of Kerala- An Introduction*’ at the webinar organised in connection with the observation of World Snake Day on 16th July, 2021 by SEED club of Govt. Higher Secondary School, Poonoor, Kozhikode district, Kerala.
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10. Dr. Mukesh Thakur, Scientist-C delivered a key note address in the outreach programme on Indian Pangolin- Azadi ka Amrit Mahotsav” at Nandankanan Biological Park, Odisha on Saturday, July 17 2021 on “Up scaling pangolin conservation with wildlife forensics”.
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11. Dr. P.C. Pathania, Scientist-D, delivered an invited talk e on the topic, “Smaller moths of India” in the webinar organized by Sir Syed College, Taliparamba, Kerala and Kerala State biodiversity, Board, Kerala on 23.07.2021.
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12. Dr. Pratyush P. Mohapatra, Scientist-D delivered an online lecture on “Taxonomic publications (Checklists and Catalogues)” for P.G. Diploma Certificate Course, ZSI, Kolkata on 30th July 2021.
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13. Dr. Ch. Satyanarayana chaired a PhD viva-voce for the Maharaja Sayajirao University of Baroda and delivered two invited lectures.
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