



3rd Asian Lepidoptera Conservation Symposium and Training (3ALCS-2010)

Coimbatore, Tamil Nadu, India

25-29 October, 2010

Agenda

Theme: Local community conservation meeting Asian Lepidoptera conservation needs

| Time | Particulars |
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| | Sunday 24 October Arrival - Evening registration at hotel |
| 16:00 | Key speakers meeting |
| Day - 1 | Monday 25 October |
| 8:45 | Symposium Registration - Thanthai Periyar (TP) auditorium, University Campus (BU Team/ ZOO) |
| 9:30 | Opening Ceremony – TP Auditorium |
| 10:30 | Tea Break |
| 11:00 - 13:00 | Session 1: Investigate the use of Iconic / endemic flagship Lepidoptera species to promote habitat conservation through community Involvement (Chair: Roger Kendrick, Rapporteur: M. Ramesh) TP Auditorium |
| 11:00 | Key (plenary) speaker: T.R. New (Presented by Paul Waring) Launching and steering flagship Lepidoptera for conservation benefit (001) |
| 12:00 | Butterflies as indicators of sustainability in the natural ecosystem with special reference to high altitude (Himachal Pradesh and Jammu & Kashmir) – Avtar Kaur Sidhu (017) |
| 12:15 | Birdwing butterflies as flagship species for invertebrate conservation - Mary Anto (032) |
| 12:30 | Prioritization of the regions for conservation of butterflies of Western Ghats – Anand Padhye, Neelesh Dahanukar and Sheetal Shelke (030) |
| 12:45-14:00 | Lunch Break (Multi purpose hall) |
| 14:00-17:30 | Session 2: Explore aspects of moth and butterfly diversity, conservation ecology, management and needs (Chair: Sanjay Molur, Rapporteur: V. Shubhalaxmi) |
| 14:00 | Key (plenary) speaker: Houhun Li (004) Diversity and fauna of butterflies in Mt. Baxian State Nature Reserves |
| 14:30 | Diversity, endemism and conservation of Indian butterflies - Krushnamegh Kunte (056) |
| 14:45 | Host plant diversity of butterflies and moths and their conservation strategies in Western Ghats, Southern India - Murugan K. (051) |
| 15:15 | An assessment of butterfly diversity in the impact zone of winter SAF games area in Auli Bugyal, Joshimath, Uttarakhand - Shubhi Malik , V.P. Uniyal and Smita Chaudhry (016) |
| 15:30 | Butterfly diversity in fragmented forests of Western Ghats, India: The role of sacred groves and coffee agro-ecosystems– Shivani (018) |
| 15:45 | Tea Break |
| 16:00-18:00 | Session 3: Explore aspects of moth and butterfly diversity, conservation ecology, management and needs (continued) (Chair: Laurence G. Kirton, Rapporteur: K. Murugan) TP Auditorium |
| 16:00 | Study on seasonal abundance and species diversity of butterflies among selected four trails in Kiralakelle wetland in Matara District - W. M. C. D. Wijekoon , C. N. L. Bogahawatte and H. C. E. Wegiriya (052) |
| 16:15 | Study on the biodiversity of butterflies and their current status in Central Nepal - B. Khanal, M. K. Chalise and G. S. Solanki (021) |
| 16:30 | Diversity, distribution pattern and seasonal variation in moth assemblages along altitudinal gradient in Gangotri Landscape Area, Western Himalaya, Uttarakhand - Abesh Kumar Sanyal , V. P. Uniyal, Kailash Chandra and Manish Bhardwaj (027) |
| 16:45 | Diversity of butterflies in great Nicobar biosphere reserve (gnbr), A & N Islands - C. Sivaperuman , Suresh Kumar Shah and C. Raghunathan (034) |
| 17:00 | A study of butterfly species diversity in and around hot spring of Garampani Wildlife Sanctuary, Karbianglong, Assam in context to ecotourism - Nabanita Das , Ridip Choudhury, Prarthana Mudai, JitenMech, Sangita Borthakur, Pallabi Bordoloi, M. Bhuyan and P. R. Bhattacharyya (036) |
| 17:15 | Diversity of Swallowtail (Lepidoptera: Papilionidae) butterflies in Gautala Wildlife Sanctuary of Maharashtra - R. K. Nimbalkar , S. S. Shinde, D. S. Tawar and S. P. Muley (040) |
| 17:30 | Butterfly diversity in the ecoforest and adjoining areas of Assam University campus, Silchar, Assam - P. Choudhury and S. Changmai (048) |
| 17:45 | Documentation, monitoring and conservation of butterfly fauna in Coastal Karnataka - Chakravarthy, A. K. , Shashank, P. R., and Doddabasappa, B. (045) |
| 18:00 | Session closing for the day (announcements) and break |

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| 18:15 | Cultural evening – Thanthai Periyar Auditorium |
| 19:30 | Dinner |
| Day - 2 | Tuesday 26 October - Kerthilal Auditorium / BU campus |
| | Workshop 1: Train participants in moth and butterfly identification skills and other field techniques (Trainers: Isaac Kehimkar, Krushnameesh Kuntae) Kerthilal Auditorium / BU campus |
| 9:00 | Key (plenary) speaker: – Isaac Kehimkar An introduction to Indian butterflies with specific reference to Himalayan and North eastern region; butterfly identification methods |
| 10:00 | Over view of field techniques for the study of butterflies - Krushnameesh Kuntae |
| 10:30 | Tea break |
| 10:45 | Bharathiar University campus orientation – K. Murugan (5 minutes) Butterfly ID workshop; Butterfly transect and ID field sessions – population biology (methods of marking, reproductive biology, methods to prepare museum specimens, methods to build modern research collection (traditional taxonomy and DNA sequencing technology) – issues relevant to conservation of butterflies - Krushnameesh Kuntae |
| 13:00-14:00 | Lunch Break |
| 14:00-17:30 | Session 4: Explore aspects of moth and butterfly diversity, conservation ecology, management and needs (continued) (Chair: Avtar Kaur Sidhu, Rapporteur: V. Ramasubramanian) Kerthilal Auditorium |
| 14:00 | The moths (Lepidoptera: Heterocera) of North Maharashtra: a preliminary checklist of moth fauna - Sachin A. Gurule, Santosh M. Nikam, Agnes J. Kharat and Arjun S. Gurule (054) |
| 14:15 | Butterfly faunal diversity patterns in urban habitats of Bangalore, Karnataka - Shashikumar, L. and M. G. Venkatesha (013) |
| 14:30 | A preliminary survey on the Constellation of semi aquatic lepidopterans of hill streams of southern Western Ghats - S. Dinakaran (055) |
| 14:45 | Seasonal dynamics of butterfly population in DAE campus, Kalpakkam – K. Jahir Hussain, T. Ramesh, M. Selvanayagam and K. K. Satpathy (025) |
| 15:00 | Diversity of Butterfly Species Abundance In Western Ghats, Kerala P.V. Vineetha and K. Revathi (047) |
| 15:15 | Butterfly fauna of the Mahatma Gandhi university campus, Kerala and the strategies adopted for its conservation - Toms Augustine, et al. (037) |
| 15:30 | Butterflies of Kerala University Campus, Thiruvananthapuram, Kerala – G. Prasad, Prathibhakumari P. V. and Lizby A. Mathews (033) |
| 15:45 | Butterflies Diversity of Tadoba-Andhari Tiger Reserve Forest in Chandrapur District of Maharashtra - D. D. Barsagade, A. M. Khurad, M. S. Munir, S. S. Khadakkar and S. K. Channe (041) |
| 16:00 | Poster presentation and Tea break Posters 201 – 232 (Please refer Abstract for details) |
| 17:30 | Closing and free evening |
| Day - 3 | Wednesday 27 October - TP Auditorium |
| 9:00 – 10:45 | Session 5: Assess priority areas / Communities for Lepidoptera conservation initiatives at the local level that has global conservation impact (Chair: Mark Sterling, Rapporteur: Juliet Vanitharani) TP Auditorium |
| 9:00 | Key (plenary) speaker: Roger C. Kendrick (003) Processes involved in assessing priorities for local level Lepidoptera conservation programmes that aim to achieve global conservation impact |
| 10:00 | Threats to the National butterfly <i>Triodius darsius</i> Gray (Lepidoptera: Papilionidae) of Sri Lanka and possibilities of community participation in its conservation - R. G. S. Tharanga Aluthwattha (022) |
| 10:15 | Evaluation of conservation status of butterfly communities in tropical lowland evergreen forest of upper Brahmaputra valley, with special reference to the Jokai Reserve Forest, Assam, North Eastern India – R. R. Tariang, D. S. Bora (023) |
| 10:30 | Monitoring of the Rajah Brooke’s Birdwing, <i>Trogonoptera brookiana albescens</i> (Papilionidae), using digital images of puddling butterflies - Chooi-Khim Phon and Laurence G. Kirton (024) |
| 10:45 | Tea Break |
| 11:00-12:30 | Session 6: Assess priority areas / Communities for Lepidoptera conservation initiatives at the local level that has global conservation impact (Chair: Laurence G. Kirton, Rapporteur: S. Kannan) TP Auditorium |
| 11:00 | Citizen science a conservation tool for Lepidopteran studies in Maharashtra - V. Shubhalaxmi (042) |
| 11:15 | Patterns in diversity and distribution of butterfly assemblages in Tons Valley, Uttarakhand, Western Himalaya - Manish Bhardwaj, V. P. Uniyal, Arun P. Singh and Abesh K. Sanyal (026) |
| 11:30 | Interaction of Lepidoptera with the Flora of Mandapam Group of Islands |

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| | Juliet Vanitharani, C. Shanmugapriya , B. Kavitha Bharathi, and I. Viji Margaret (050) | |
| 11:45 | Diversity and Conservation status of Butterflies in 'Reverston' Knuckles Massif of Sri Lanka – P. Indika Peabotuwege , D.P.K. Siriwardena, Mahesh Suraweera, Sol Mogollones Barrera (053) | |
| 12:00 | Moth diversity of Tawang District, Arunachal Pradesh, India – Kailash Chandra and S. Sambath (020) | |
| 12:15 | An additional checklist of butterflies in the campus of Jahangirnagar University Bangladesh - Md. Monwar Hossain (015) | |
| 12:30 -13:30 | Lunch Break | |
| 13:30- 23:30 | Workshop 2 – Curatorial TP Auditorium / BU campus | |
| 14:00 | Introduction to moths – RK | |
| 14:30 | Recording methods | |
| 15:00 | Field Identification Skills | |
| 15:30 | Tea Break | |
| 15:50 | Classification (Overview) RK/ LHH/ PW /MS | |
| 16:50 | Q & A Panel: RK/ MS / LHH/ MS mod. TN | |
| 17:00 | Concluding session | |
| 17:30 | Preparations for field work – (stadium) | |
| 18:00 | Field sessions PW/ MS/ RK / LHH | |
| 19:00 | Setting up equipment (Tea) | |
| 19:30 | Dinner | |
| 20:30 | Moth recording | |
| Day - 4 | Thursday 28 October TP Auditorium | |
| 9:00- 10:30 | Specimen preparation PW/ MS/ RK /LHH (90 min) | |
| 10:30 | Tea Break | |
| 11:00-13:00 | Session : 7 Explore aspects of moth and butterfly conservation ecology, management needs / Education (Chair: Paul Waring, Rapporteur: Isaac Kehimkar) | |
| | Key (plenary) speaker: | |
| 12:15 | <i>Wendlandia tinctoria</i> (Roxb.) DC. (Rubiaceae), a key nectar source for adult butterflies during summer season in the Southern Eastern Ghats, Andhra Pradesh- A. J. Solomon Raju , K. Venkata Ramana and P. Vara Lakshmi (011) | |
| 12:30 | Ecological impact on butterfly fauna in urban habitats of Bangalore, Karnataka - Venkatesha, M. G. and Shashikumar, L. (012) | |
| 12:45 | Butterfly Diversity in Relation to Nectar Food Plants from Bhor Tahsil, Pune District, Maharashtra - Nimbalkar, R. K., Chandekar, S. K. & Khunte, S. P. (043) | |
| 13:00 | Introduction to Lepidoptera conservation education - Dr. Bhanumathi (Signing up conservation education workshop) | |
| 13:15-14:15 | Lunch Break | |
| 14:00 -15:30 | Parallel sessions: Session 8: Explore aspects of moth and butterfly conservation ecology, management needs (Oral presentation - T.P. Auditorium) (Chair: Krushnamegh Kuntae ; Rapporteur: G.S. Solanki) Workshop 3: Education workshop (Seminar Hall, Department of Zoology) | |
| 14:00 | Infection status of <i>Wolbachia</i> super group in some commonly available butterflies of India and female biased sex ratio observed in Red Pierrot (<i>Talica nalyseus</i>) which harbors the infection – Kunal Ankola and Puttaraju H.P. (046) | Workshop 3: 14:00 – 15:30 (Seminar Hall, Department of Zoology) Lepidoptera Conservation Education workshop – Dr. R. Bhanumathi Understanding Winged friends through Puppets Learning and understanding about the life of our winged friends– the butterflies and moths with puppets is exciting as it brings an inanimate character to life. If we look around nature, we may come across colourful and beautiful butterflies, moths and their caterpillars. They all have different shapes, sizes, colours, and food plants. Each one has a story of happiness, friendship, bravery, wisdom, honesty, sorrow etc. to tell. Share what they have to say through their images in the form of puppets. Create and have a total puppet experience by making these puppets. Dr. R. Bhanumathi, Managing Trustee Pavai Centre |
| 14:15 | Invasion of tropical butterflies into the subtropics in response to climate change: a case study in Taiwan - Yu-Feng Frank Hsu (019) | |
| 14:30 | Studies on lifecycle of <i>Papilio demoleus</i> (Linnaeus) on <i>Citrus medica</i> . Nabanita Das , Prarthana Mudai, M. Bhuyan, P. R. Bhattacharya (035) | |
| 14:45 | DNA barcoding of genus <i>Eurema</i> (Family: Pieridae) from Western Ghats. Gaikwad S. S., Ghate H. V., Ghaskadbi S. S., Shouche Y. S. (039) | |
| 15:00 | Male mate location behaviour and encounter sites of | |

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| | Central Indian butterflies: Influence of taxonomy, biotopes, landscape structures, resources, morphology, and population variables - Ashish D Tiple , Sonali V Padwad and Roger LH Dennis (049) | for Puppetry, Chennai will conduct a workshop to create butterflies, moths and caterpillar puppets and understand their life history, problems and conservation efforts through stories and presentations at the end of the session. |
| 15:30 | Tea Break | |
| 16:00 - 18:30 | Workshop 4 – Curatorial (TP Auditorium) | |
| 16:00 | Data handling (database demonstration) RK | |
| 16:45 | Collection and maintenance RK | |
| 17:00-18:30 | Genitalia Dissection. Prof Li (Hands on tuition – interested delegates please sign up upon registration stating needs; Max 12 delegates) | |
| 17:00-18:30 | Specimen setting; larger moths – RK and PW. (Hands on tuition – interested delegates please sign up upon registration stating needs; Max 25 delegates) | |
| 17:00-18:30 | Specimen setting; smaller moths – MJS. (Hands on tuition – interested delegates please sign up upon registration stating needs; Max 12 delegates) | |
| 18:30 | Closing | |
| Day - 5 | Friday 29 October | |
| 9:00 - 13:00 | Session 9 : Provide tools for species status assessment / Conservation Education (Chair: Roger Kendrick; Rapporteur: Yu-Feng Frank Hsu) | |
| 9:00 – 10:00 | Key (plenary) speaker : Dr. Paul Waring (002) Monitoring, conserving and managing moth populations: a variety of techniques and case histories | |
| 10:00 | Species Information Service (SIS): Web based species management tool - B. A. Daniel and Sanjay Molur (058) | |
| 10:30 | Tea Break | |
| 10:45 | Lepidoptera Research to Promote a Community Ecotourism Initiative in Eagle nest Sanctuary, Arunachal Pradesh - Sanjay Sondhi , Ramana Athreya (038) | |
| 12:00 | Road Active Environmental Education for Butterfly conservation for middle school students in Puducherry Schools, India - R. Alexandar and G. Poyyamoli (029) | |
| 12:15 | Role of butterfly gardens in environmental education and conservation – George Mathew and Mary Anto (031) | |
| 12:30 | Predatory capacity of homopterophagous butterfly, <i>Spalgis epius</i> (Westwood) (Lepidoptera: Lycaenidae) on mealybugs, <i>Planococcus citri</i> (Risso) (Homoptera: Pseudococcidae) - Dinesh, A. S. and M. G. Venkatesha (014) | |
| 12:45 -13:45 | Lunch break | |
| 13:45 | Group discussion: concept - split delegates into 6 groups, each dealing with one of the sessions (sessions 2 & 4 considered as one session); key speakers exempted, act as group advisors and can drift between groups – Roger Kendrick and Sanjay Molur | |
| 14:45 | Group presentations: nominated rep gives main findings | |
| 15:00 | Valedictory | |
| 16:00 | Closing | |

ABSTRACTS – POSTER PRESENTATION

26 October 2010; 16:00 – 17.30 hrs – TP auditorium

- 201 Effect of temperature on the developmental stages of the predatory butterfly *Spalgis epius* (Westwood) (Lepidoptera: Lycaenidae)**
Dinesh, A. S. and M. G. Venkatesha
- 202 Flight patterns and behaviour of various butterfly species in urban habitats of Bangalore, Karnataka**
Shashikumar, L. and M. G. Venkatesha
- 203 Biology, behaviour and conservation of predatory butterfly *Spalgis epius* (Westwood) (Lepidoptera: Lycaenidae)**
Venkatesha, M. G. and A. S. Dinesh
- 204 *Chromolaenaodorata* (L.) King & H.E. Robins (Asteraceae), an important nectar source for adult butterflies**
P. Vara Lakshmi and A. J. Solomon Raju
- 205 Population Variations Among Swallowtail Butterflies At Bishop Heber College, Tiruchirappalli, Tamil Nadu**
Carlton, R, A. Daisy Caroline, A. Relton, G. Glenny Jocelyn

- 206 **Study of Lepidoptera in Sri Lanka: Past present and future aspects**
R. G. S. Tharanga Aluthwattha
- 207 **Wild tasar silkworm, *A. mylitta* eco-race Bhandara (Lepidoptera: Saturniidae) an endemic species: Need of Conservation**
D. D. Barsagade, S. A. Gharade, H. M. Meshram, M. P. Thakre and G. B. Gathalkar
- 208 **Effects of environmental factors and diseases on biology of the wild tasar silkworm, *Antheraea mylitta* (D). Eco-race Bhandara (Lepidoptera: Saturniidae) in Vidarbha**
D. D. Barsagade, S. A. Gharade, H. M. Meshram, M. P. Thakre, M. P. Dhar and G. B. Gathalkar
- 209 **Surface ultra structural and EDAX studies on the egg shell of Eri Silkworm *Philosamia ricini* (Lepidoptera: Saturniidae)**
D. D. Barsagade, M. P. Thakre, H. M. Meshram and M. Madankar
- 210 **Silk gland development and silk protein synthesis in the tropical tasar silkworm *Antheraea mylitta* (D) (Lepidoptera: Saturniidae)**
D. D. Barsagade, S. A. Gharade and M. P. Dhar
- 211 **Biodiversity Of Butterflies In Selected Areas Of Virudhunagar District**
Bakavathiappan, Ga., Pavaraj, M. and S. Baskaran
- 212 **Seasonal and relative abundance of butterflies in a scrub jungle habitat of Peraiyur taluk, Madurai district, Tamil Nadu**
Alagumurugan C., Pavaraj M., and M. K. Rajan
- 213 **Butterfly Species Diversity Of Tropical Forest Research Institute, Jabalpur, Madhya Pradesh**
Ashish D. Tiple, K. C. Joshi, Sanjay Paunikar and Nitin Kulkarni
- 214 **Tools and teaching methods for educating target groups on butterflies in an urban wetland restoration site at Chennai**
K. Cyril Rufus, Preston Ahimaz
- 215 **Biosystematics of *Conogethes punctiferalis* (Guenee) infesting castor and cardamom**
Shashank P. R., B. Doddabasappa and A. K. Chakravarthy
- 216 **Biosystematics, Host range and Distribution of the Pod borer, *Adisura atkinsoni* Moore (Noctuidae: Lepidoptera)**
Doddabasappa B., Shashank P. R., Yathish K. R. and Chakravarthy A. K.
- 217 **Faunastic Studies On Smaller Moths (Insecta: Microlepidoptera) of Western Ghats, Kerala**
R.S.M. Shamsudeen
- 218 **Comparison between isolated DNA from fresh and oven dried preserved specimens of *Catopsilla pyranthe***
Kharwar. A.S., Magdum. S., Patil. R., Sandhan. A.
- 219 **Native Larval food Plants for Butterflies in Jamshedpur, Jharkhand**
S. K. Mahato, Seema Rani
- 220 **Does mimic evolve earlier than model? A case study based on a lepidopteran mimicry complex predominantly distributed in India and SE Asia**
Chia-Hsuan Wei, Li-Wei Wu, Frank Yu-Feng Hsu, Shen-Horn Yen
- 221 **Caterpillars out of water: the origin of “terrestrial” Acentropine moths**
Li-Cheng Shih, Shen-Horn Yen
- 222 **Species diversity of butterflies around Aurangabad, Maharashtra**
Saraf S. A. & Shinde S. S.
- 223 **Importance of Nectar Sources in Conserving Butterfly Diversity in Urban Landscapes**
Kruti Chhaya, Neha Mujumdar, Prachi Mhaske, Rishikesh Patil and Ankur Patwardhan

- 224 **Habitat Preference and the effect of small scale disturbance on distribution of butterfly fauna in and around Gauhati University Campus, Guwahati, Assam**
Kuladip Sarma, Bidyut Bikash Sharma, Kripaljyoti Mazumdar, Bhriugu Prasad Saikia
- 225 **Evolutionary conservation of hemocytic immune responses in some sericigenous and non-sericigenous lepidopteron insects**
J.P. Pandey, R.K. Tiwari, Suyog Pandey, P.K. Mishra, Dinesh Kumar, B.M.K. Singh A.K. Sinha & B.C. Prasad
- 226 **Assessing current populations and conservation priorities for rare, endangered and legally protected butterfly species in Sikkim, eastern Himalaya, India**
Krushnamegh Kunte
- 227 **Butterfly diversity in agricultural landscapes of Shervarayan hills - Eastern Ghats, South India**
M. Lena, G. Shobana, A. Agnes Deepa, and C. Gunasekaran
- 228 **Diversity of butterflies in Siruvani hills, Western Ghats, South India**
G. Shobana, M. Lena, A. Agnes Deepa, and C. Gunasekaran
- 229 **Butterfly Diversity in Thoppayar Reservoir, Dharmapuri District(Eastern Ghat), Tamil Nadu, South India**
Elanchezhian. M, Gunasekaran C., Ezhili. N, and Thirumathal. K
- 230 **Fascinating world of butterfly diversity and eco-friendly commercialization**
Agnes Kharat, S.M.Nikam, Sachin Gurule, Jaising Darekar and S.P.Thorat
- 231 **Comparative studies on impact of urbanization and diversity and species abundance of butterflies in and around Coonoor City, The Nilgiris**
P. Mohana and C. Gunasekaran
- 232 **Road killed butterflies and highway monitoring – molecular identification danaus butterflies (Lepidoptera: Nymphalidae) based upon data form mitochondrial DNA**
Vadivalagan, C., Gunasekaran, C. and M. Salahudeen
- 057 **Phylogenetic inference of Lepidoptera for Conservation Biology**
M. Jeyam, P. Ravikumar, G. Shalini, M. Sharanya and P. Keerthipriya.

WORKSHOP

Understanding Winged friends through Puppets
Bhanumathi, R.