Tropical Biology:

Meeting the needs of changing tropical ecosystems

Program and Abstracts

The Annual Meeting of the Association for Tropical Biology and Conservation
18-21 July 2006 Kunming, Yunnan, China

Hosted by

Xishuangbanna Tropical Botanical Garden, Chinese Academy of Sciences

Sponsored by

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Xishuangbanna Tropical Botanical Garden, Chinese Academy of Sciences

15:30 **KOHLI, R. K.**
Serious ecological disruption by *Lantana camara* – an exotic invasive from tropical America, in Indian forest
15:50 **Lucero Sevillano**
Comparison of the size-structure of populations of *Melaleuca quinquenervia* in its native and parts of its introduced range with and without bio-control agents
16:10 Tea Break & Poster Session (Poster # 31-62)
16:40 **Marcel Rejmanek**
Invasions of Cactaceae species in the tropics: causes and management options
17:00 **Qinfeng GUO**
Are species-rich tropical communities less invasible?
17:20 **Yulong FENG**
More nitrogen allocated to photosynthesis in eight populations of *Buddleia davidii* than in five native species
17:40 **Serban Proches**
Plant invasions in South Africa – temperate and tropical

19:30 Special meeting: Conservation Committee

Meeting Room **B**, 2nd floor

10 - **Forest Canopies** - **Life, Atmosphere and People**: The Environmental, Social and Economic Values of Forest Canopy Biodiversity

Chaired by:
Dr. Andrew Mitchell & Dr. Katherine Secoy
Global Canopy Programme, Zoology Department, University of Oxford

10:30 **Overview** by Symposium Organizer

10:40 **Min CAO**
Some perspectives on the forest canopy study in China
11:00 **Roger. L. Kitching**
Biodiversity and pollination services in tropical forest canopies
11:20 **M. Soubadra Devy**
Do dominant tree species drive the pollinator /disperser dynamics: insights from long term phonology of forest canopies of India
11:40 **Bruno CORBARA**
The IBISCA Project: a new model for comprehensive assessments of tropical forest
12:00 **Nigel Stork**
Scaling from leaves to ecosystems and individual to communities
14:30 **Ganesh T.**
Effects of canopy disturbance on the avifaunal community in a rain forest of the Western Ghats, India: some preliminary findings.
14:50 **Yiping ZHANG**
Annual variation in carbon flux and relationships between carbon flux and impact factors in a tropical seasonal rain forest
15:10 **John Grace**
Carbon fluxes and the future functioning of forest canopies
15:30 **Markus Seibel**
An evaluation of canopy tourism in Costa Rica
15:50 **Jan H. D. Wolf**
Toward the sustainable use of canopy biodiversity for forest conservation and poverty reduction – lessons learned from Chiapas, Mexico
16:10 Tea Break & Poster Session (Poster # 31-62)
16:40 Discussion session (Symposium #4)

19-B-3 (11:20)

Do dominant tree species drive the pollinator / disperser dynamics?: Insights from long term phenology of forest canopies of India

M. Soubadra Devy and **T. Ganesh**
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In a world where biodiversity loss, degraded ecosystems and displaced communities are the norm, understanding how natural forests function devoid of human impact is important from an ecological as well as conservation point of view. The mid-elevation wet evergreen forests in the southern Western Ghats are probably the only forest type that still has some large contiguous forest. Here we present our work carried out for the 10 years in one such forest of Kalakad Mundanthurai Tiger Reserve in the Agasthyamalai Range of southern Western Ghats. In the early 1990 we initiated a series of studies on the ecology of the wet forests starting with monitoring of tree phenology, pollinators, frugivores and the vegetation. Tree phenology of over 80 species has been recorded once a month for the last 14 years. Flowering and fruiting had strong influence on pollinators and frugivores sometimes drastically varying between years. Here we examine how flowering and fruiting phenology of the dominant and the minor species govern the pollinator / disperser dynamics. Our initial results suggest that not all the dominant species influence the pollinator/dynamics. Supra-annual flowering nature of many species adds to the complexity to some of these processes.

Keywords: canopy, phenology, pollinators, dispersers, Western Ghats, India

19-B-4 (11:40)

The IBISCA Project: A new model for comprehensive assessments of tropical forest

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The IBISCA Project: A new model for comprehensive assessments of tropical forest

Keywords: canopy, integrated programs, megadiversity

19-B-5 (12:00)

Scaling from leaves to ecosystems and individuals to communities

Nigel E. Stork, Michael Liddell, Peter Franks and **Peter Grimbacher**
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One of the major challenges in ecology is to integrate data from different sources to scale up or down from leaves to ecosystems or from individuals to communities. This is particularly important in the context of climate change and as we try to down scale from global models of climate change to regional systems or scale from leaves or individuals upwards. In this talk we will describe some of the research that is being undertaken at the Australian canopy crane and elsewhere to provide data and models that can be used to understand how biodiversity and processes are related to abiotic factors such as climate and CO_2 levels, and how these can be scaled up.

Keywords: Forest canopies, biodiversity, climate