

SYMPOSIUM 13: HOW TROPICAL PHENOLOGY CAN CONTRIBUTE TO IDENTIFY PLANT RESPONSES TO HUMAN DISTURBANCE (CLIMATE CHANGE AND FRAGMENTATION)?

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Phenology is the study of recurring cycles of plants and animals and its relation mainly to local meteorological data, as well as to biotic interactions and phylogeny. Recently, phenology has gain importance as the simplest and most reliable indicator of the effects of climate change on plants and animals. However, the strongest results connecting, for instance, changes on timing of first flowering and leafing and bird migration to recent global warming has come from historical phenological series from North Hemisphere. Long term data sets or monitoring systems, or papers addressing plant phenology and global warming are still scarce in the tropics, where we find most of world's biodiversity. In the present symposium we aim to address the applications and developments of phenology in the tropics, from the traditional "on-the-ground" observational phenological research to the recent near remote phenology using digital cameras. We want to go over the last developments relating plant timing, animal-plant interactions and evolutionary and ecological processes. The ultimate goal is to discuss whether and how tropical plant phenology can contribute to identify ecological and evolutionary responses to natural and man induced environmental disturbances (climate change and fragmentation).

TALKS (Kadiwéu 2, 09h00-12h30)

09h00-09h15 (S13.CO.01) **Phenology and ecological restoration: a review.** *Elise Buisson*

09h15-09h30 (S13.CO.02) **Phenology of herbaceous species in savanna and Tapia (*Uapaca bojeri*) woodland on Ibity Mountain (Madagascar).** *Swanni Alvarado*

09h30-09h45 (S13.CO.03) **Floral phenology of *Catopsis berteroniana* (Schult & Schult. F.) Mez (Bromeliaceae), a dioic epiphyte in an oak forest of Oaxaca México.**
Demetria Mondragón

09h45-10h00 (S13.CO.04) **The effects of urban heat islands in the phenology of tropical and temperate trees.** *Milene Amâncio Alves Eigenheer*

10h00-10h15 (S13.CO.05) **Phenological patterns of two contrasting altitudinal herbaceous communities.** *Soizig Anne Le Stradic*

10h15-10h30 (S13.CO.06) **The influence of climatic variability on tropical plant phenology: a comparison between Panama and French Guiana.** *Irene Mendoza Sagraera*

Coffee Break

11h00-11h15 (S13.CO.07) **Application of Fourier spectral analysis to study phenology: the case of *Cecropia* in the Neotropics.** *Paul-Camilo Zalamea*

11h15-11h30 (S13.CO.08) **Comparative phenology of two parasitic plants of the genus *Struthanthus* (Loranthaceae) infesting two different hosts.** *Luiza Teixeira-Costa*

11h30-11h45 (S13.CO.09) **Monitoring tree growth and phenology in restored forests.** *Fernanda Cristina Gil Cardoso*

11h45-12h00 (S13.CO.10) **Studying phenology through a morphological and anatomical retrospective analysis under tropical climate. An example on *Parkia velutina*.** *Hélène Morel*

12h00-12h15 (S13.CO.11) **Remote phenology: applying digital images to monitor leaf phenology in a Brazilian cerrado savana.** *Bruna Alberton*

12h15-12h30 (S13.CO.12) **Phenology, climate change and human-induced disturbances: a review.** *Leonor Patricia Cerdeira Morellato*

POSTERS (Karuha Space, 15h30-16h30)

S13.P.01. **Phenology and reproductive system of *Helicteres velutina* K. Schum. (Malvaceae): a species with “footmade” pollination by hummingbirds.** *Kelaine Demetrio*

S13.P.02. **Seed production differences of the Andean oak *Quercus humboldtii* Bonpl. in tow Andean forests of the Colombian Eastern Cordillera.** *Andres Gonzalez*

S13.P.03. **Flowering phenology and fruit set in *Anadenanthera falcata* (Fabaceae) a common tree of the Brazilian Cerrado savanna: comparison between pasture, edge and interior.** *Eduardo Athayde*

S13.P.04. **Vegetative phenology and colleters secretion in Rubiaceae species from Cerrado and semideciduous forest in São Paulo state.** *Fernanda Tresmondi*

S13.P.05. **Flower and fruit production in four species from Zingiberales order in central Amazonia: denso-dependence, edaphic condition or light variation are more important?** *Flávio Rodrigues*

S13.P.06. **Use of vegetation index in the analysis of fructification phenology in a Pantanal mesoregion of Brazil.** *Gabriela Atique Fernandes*

S13.P.08. **Natural edge influences the phenology and reproduction of *Gomidesia blanchetiana* (Myrtaceae), an understory Atlantic rainforest treelet.** *Leonor Patricia Cerdeira Morellato*

S13.P.09. **Reconstructing the past phenological history of tropical trees: the illustrative case of *Recordoxylon speciosum* (Benoist) Gazel ex Barneby.** *Thomas Mangenet*