

Symposium 24: Ecological and evolutionary studies on *Piper* a key group for neotropical bats and insects

Bonito, 19th June 2012 (Tuesday)

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Piper, is one of the largest genera of flowering plants and a prominent element in tropical forests. Piper is unique presenting high species richness at a global, regional and local level. Piper species have been largely studied by ecologists that take advantage of their conspicuity in the understory providing: large numbers for statistical analysis and ease of collection and experimentation. More recently phylogenetic analyses of the whole genus have provided an important evolutionary framework to study the evolution of species. Following the initiative taken by Lee Dyer in 2004 with the book: Piper. A model genus for studies of evolution, chemical ecology, and trophic interactions. We would like to offer an update on the topics covered in the book, provided a recent growth in studies in the group. New studies continue focusing in the importance of chemistry in the ecology of *Piper* but extend in their geographic coverage, and focus on the importance of chemistry for fruit dispersal as well as herbivore defense. Besides those we have a set of emerging evolutionary studies using phylogenetics and population genetics approaches. During the symposium we will highlight the importance of *Piper* for understanding ecological and evolutionary processes in the tropics. Furthermore this symposium will provide the opportunity for many researchers working on the group to plan joint and more comprehensive studies as well inspire others, especially students.

TALKS (Room Terena, 16h30-18h00)

- 16h30-16h45 (S24.OC.01) Molecular phylogenetics and the role of ecology and geography in species diversification of Neotropical *Piper* subgenus *Ottonia*. *M. Alejandra Jaramillo*
- 16h45-17h00 (S24.OC.02) Chemical ecology of seed dispersal and fruit defense in *Piper*. Susan Whitehead
- 17h00-17h15 (S24.OC.03) Evaluating pollen flow in *Piper*; are their pollinators lazy or is clonality interfering with mating success? *Eloisa Lasso*
- 17h15-17h30 (S24.OC.04) Linking community phylogenetic and functional diversity with herbivory in a tropical ecosystem. *Diego Salazar Amoretti*
- 17h30-17h45 (S24.OC.05) Complex relationships between host use and diversification across three trophic levels in two Neotropical forests. *Andrea Glassmire*
- 17h45-18h00 (S24.OC.06) Metabolic puzzles in Piper species. Massuo J. Kato