

**SYMPOSIUM 12: UNDERSTANDING THE INCREASE IN LIANAS
IN NEOTROPICAL FORESTS**

Bonito, 21st June 2012 (Thursday)

Stefan Schnitzer (University of Wisconsin-Milwaukee, USA)

Frans Bongers (Wageningen University, The Netherlands)

Jennifer Powers (University of Minnesota, USA)

One of the most notable changes in neotropical forests is the increase in liana abundance and biomass (Schnitzer & Bongers 2011). This increase may be based on the unique architecture and physiology of lianas, which allows them to respond rapidly to climatic and local environmental changes. In this symposium, we will focus on the latest research on liana biology within the framework of understanding the drivers of increasing liana abundance and biomass, the potential ramifications of liana increases, and the factors that control liana distribution across broad environmental gradients. By assembling a diverse group of researchers we hope to develop informed and testable hypotheses for liana increases and liana distribution based on first principles that are founded in liana anatomy, biomechanics, physiology, functional traits, and phylogeny.

TALKS (Room Kadiwéu, 14h00-18h00)

14h00-14h15 (S12.OC.01) **Increasing liana abundance and biomass: potential ramifications for tropical forests.** *Stefan Schnitzer*

14h15-14h30 (S12.OC.02) **Liana abundance and tree crown re-infestation 10-years after liana cutting in the semideciduous Atlantic Forest: was there opportunity for tree regeneration?** *Paula Inés Campanello*

14h30-14h45 (S12.OC.03) **Tropical lianas and trees under elevated CO₂: Seasonal drought results in differing growth and physiological responses.** *Dave Marvin*

14h45-15h00 (S12.OC.04) **Liana competition effects on tropical tree species.** *Leonor Alvarez*

15h00-15h15 (S12.OC.05) **Effects of liana removal on soil water content in a Panamanian moist forest.** *Jennifer Powers*

15h15-15h30 (S12.OC.06) **The role of abundance in liana-tree nested networks.** *Julia Sfair*

Coffee Break

16h30-16h45 (S12.OC.07) **The regeneration of lianas and vines from seed on Barro Colorado Island, Panama.** *Stuart Wright*

16h45-17h00 (S12.OC.08) **Contrasting chemical traits in tropical lianas and trees: implications for future forest composition.** *Roberta Martin*

17h00-17h15 (S12.OC.09) **The geographic distribution of locally dominant liana species in Amazonian forests.** *Robyn Burnham*

17h15-17h30 (S12.OC.10) **Biomechanics and developmental diversity: two keys to climbing plant success.** *Nick Rowe*

17h30-17h45 (S12.OC.11) **Seasonality of secondary growth of tropical lianas.**

André Carvalho Lima

17h45-18h00 (S12.OC.12) **Dendrochronology of lianas of the Leguminosae family from the Atlantic Forest, Brazil.** *Arno Fritz Neves Brandes*

POSTERS (Karuha Space, 15h30-16h30)

S12.P.01. **Climber diversity and the forest expansion over *campos* grasslands: a nestedness analysis.** *Laura Cappelatti*

S12.P.02. **Multiple evolutions of the furrowed xylem cambial variant in the Angiosperms.** *Marcelo Pace*

S12.P.03. **A census of climbers in Atlantic Forest of southeastern Brazil.** *Berta Lucia Villagra*

S12.P.04. **The effect of wound on the stem and cambial variant of *Mascagnia sepium* (Malpighiaceae).** *Alessandra Cavalcanti Duarte Lupi*

S12.P.05. **Cambial variations in the roots of Sapindaceae: a case study in *Serjania caracasana*.** *Carolina Lopes Bastos*

S12.P.06. **Comparison of the anatomical pattern of the stem in the lianescent, arboreal and shrubby habits in the Bignoniaceae.** *Veronica Angyalossy*

S12.P.07. **Mapping oligarchic lianas in Amazonia (MOLA): geographically significant biodiversity.** *Robyn Burnham*

S12.P.08. **Quantifying lianas contribution and coverage to the canopy of a seasonal tropical forest in Panamá.** *Maria Elizabeth Rodriguez-Ronderos*

S12.P.09. **Effect of measurement location on lianas abundance and biomass in a Neotropical savanna.** *Paula Guimarães Carvalho*

S12.P.10. **Evolution and development of tendrils: key insights for liana diversification.** *Mariane Silveira de Sousa Baena*

S12.P.11. **Pervasive effects of the native collared peccary (*Pecari tajacu*) on lianas, understory vegetation, leaf litter, and leaf litter arthropods in lowland Central American rain forest.** *Nicole Michel*