

### **SYMPOSIUM 3: SPECIES DIVERSIFICATION IN TROPICAL AND TEMPERATE MOUNTAINS**

**Bonito, 21<sup>st</sup> June 2012 (Thursday)**

**Richard H. Ree** (Field Museum of Natural History, USA)

**Suzana Alcantara** (Universidade de São Paulo, Brazil)

Mountain systems have long been recognized as having less species diversity per unit area (alpha-diversity) and higher species turnover (beta-diversity) compared to lowlands, and these patterns are even more pronounced in the tropics. Many ecological hypotheses involving changes in productivity and environmental conditions have been proposed to explain these gradients. However, another characteristic of mountains is the prevalence of evolutionary radiations, in which certain clades of organisms show increasing alpha-diversity with altitude. The ecological and evolutionary causes of this pattern are still poorly understood. In this symposium, we will highlight phylogenetic studies of species diversification in mountain systems around the world, across a range of taxonomic groups. We are motivated to promote the value of comparative approaches in understanding the origins and dynamics of mountain biodiversity, and to help bridge the gap between ecological and evolutionary perspectives in studying elevational and latitudinal gradients.

#### **TALKS (Room Terena, 16h30-18h00)**

16h30-16h45 (S02.OC.01) **One species is many: unrecognized levels of diversification of tropical macrolichens in neotropical paramos.** *Robert Luecking*

16h45-17h00 (S02.OC.02) **Genomic RAD data resolve phylogeny and reveal hybrid introgression in a recently diverged clade of *Pedicularis* (Orobanchaceae).** *Deren Eaton*

17h00-17h15 (S02.OC.04) **Understanding the diversification of microendemic montane species in the Brazilian atlantic rainforest by integrating environmental niche modeling and phylogeography of co-distributed taxa.** *Márcio Pie*

17h15-17h30 (S02.OC.05) **Plant diversification in Brazilian “campos rupestres”** *Suzana Alcantara*

17h30-17h45 (S02.OC.06) **Diversification rate and functional trait shifts: consequences of forest - Fynbos transitions in the Cape floristic region** *Renske Onstein*

17h45-18h00 (S03.P.01) **Insights into the historical construction of species-rich Mesoamerican seasonally dry tropical forests: the diversification of *Bursera* (Burseraceae, Sapindales).** *José Arturo de Nova Vasquez*

#### **POSTERS (Karuha Space, 15h30-16h30)**

S03.P.02. **Novel pollination syndromes and growth forms fostered major cactus diversification events in semiarid landscapes of North and South America.** *Tania Hernandez*

S03.P.03. **Evolution and diversification of the high altitude Liliputana Alliance species complex (Orchidaceae: Laeliinae), endemic to the Southern Espinhaço range, Brazil.** *Bruno Leles*

S03.P.05. **Exploring the floral evolution of Trimezieae (Iridaceae).** *Juliana Lovo*