SYMPOSIUM 14: NEW APPROACHES FOR THE BIOTIC INVENTORY OF HYPERDIVERSE TROPICAL FORESTS

Bonito, 20th June 2012 (Wednesday)

Christopher W. Dick (University of Michigan, USA)
Alberto Vicentini (Instituto Nacional de Pesquisas da Amazonia, Brazil)

The Amazon basin is important to the world for climate, carbon and hydrological regulation, and recent studies have shown it is highly sensitive to natural and anthropogenic climate changes. While advances are being made in understanding linkages between Amazon biota and biogeochemical processes, less progress is being made in understanding the relationship between species-level biological diversity and large-scale environmental changes. It is clear that we cannot project changes in the taxonomic composition (and consequently function) of Amazon forests without understanding what the species are, where they occur, and what drives their distributions and dynamics. On the one hand, the centuries-old task of cataloging species diversity in biologically diverse regions seems far from reach because of reduced efforts at training taxonomic specialists. On the other hand, there are many new tools available for identifying and classifying organisms that may help to accelerate biological inventory. This symposium features a discussion of these new approaches, including Image Identification Systems (IIS), crowdsourcing, remote audio monitoring, DNA barcoding and biodiversity informatics and analysis. The symposium speakers will consist of plant and animal specialists, working in the Amazon basin and elsewhere, in order to foster reciprocal illumination.

TALKS (Room Kadiwéu 1, 14h00-15h30)

14h00-14h15 (S14.OC.01) **Separating facts from species - new data and new tools require a different approach for recording and storing information about plant species – The WikiFlora Initiative.** *Alberto Vicentini*

14h15-14h30 (S14.OC.02) **Using semantic web technology to build social networks for tropical plant identification.** *Campbell Webb*

14h30-14h45 (S14.OC.03) **Models and estimators linking individual-based and sample-based rarefaction, extrapolation, and comparison of assemblages.** *Robert K. Colwell*

14h45-15h00 (S14.OC.04) **An automated remote biodiversity monitoring network (ARBIMON)**. *Carlos Corrada Bravo*

15h00-15h15 (S14.OC.05) **New approaches to DNA barcoding of tree diversity in Amazon forests.** *Christopher Dick*

15h15-15h30 (S14.OC.06) **Leafsnap: a mobile application for plant identification using image recognition technology.** *John Kress*