

Frontiers in Tropical Biology and Conservation

Uberlândia

24 -28 July

Brasil

The 2005 Meeting of



The Association
for Tropical
Biology and
Conservation

With the support of

Sociedade Brasileira de Etologia (SBEt)

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Programa de Pós-Graduação em Ecologia e Conservação de Recursos

Naturais

Instituto de Biologia, Universidade Federal de Uberlândia





Symposium 13 - Arthropods of Tropical Canopies: Current Themes of Research

(July 28 – Convention Center – Room B1)

Chairs: Evandro G. Oliveira, Sérgio P. Ribeiro & Yves Basset

13:00 – 13:10	<p>IBISCA: a large-scale study of arthropod mega-diversity in a Panamanian rainforest</p> <p>Bruno Corbara Université Blaise Pascal, Clermont-Ferrand, France.</p>
13:10 – 13:30	<p>Project IBISCA - one example: Stratification and beta-diversity of Auchenorrhyncha in a Panamanian rainforest.</p> <p>1Yves Basset & 2Maurice Leponce 1Smithsonian Tropical Research Institute, 2Royal Belgian Institute of Natural Sciences, Conservation Biology Section, Belgium.</p> <p>This contribution examines patterns of spatial distribution and vertical distribution for ca. 450 species of homopterans (Auchenorrhyncha and Psylloidea) in the San Lorenzo forest, Panama. Several thousands of specimens were collected by light, Malaise, sticky and flight-interception traps and canopy fogging. We discuss beta-diversity of rainforest homopterans at a local scale and their vertical stratification as observed in estimating faunal overlaps between the understorey, mid-canopy and upper canopy</p>
13:30 – 13:50	<p>Vertical stratification of termites in a Panamanian rainforest</p> <p>Yves Roisin(1), Alain Dejean(2), Bruno Corbara(3), Jérôme Orivel(2), Maurice Leponce(4)1 Behavioural and Evolutionary Ecology, CP 160/12, Université Libre de Bruxelles, Avenue F.D. Roosevelt 50, B-1050 Brussels, Belgium, e-mail: yroisin@ulb.ac.be, tel. +32-26504512, fax +32-26502445 2) Laboratoire d'Evolution et Diversité Biologique, UMR-CNRS 5174, Bât. 4R3, Université Toulouse III, 118 route de Narbonne, F-31062 Toulouse cedex 4, France 3) LAPSCO, UMR-CNRS 6024, Université Blaise Pascal, 34 avenue Carnot, F-63037 Clermont-Ferrand cedex, France 4) Section of Conservation Biology, Royal Belgian Institute of Natural Sciences, Rue Vautier 29, B-1000 Brussels, Belgium</p> <p>Termite diversity was investigated in the canopy of a Panamanian rainforest, and compared with the sympatric ground fauna. Ten species were found in the canopy and 29 at ground level. Five of these occurred at both levels. Several small-colony drywood termites (Kalotermitidae) and some large-colony Termitidae showed a clear, statistically significant preference for the canopy. This canopy fauna contributes substantially to the species richness of the local wood-feeding termite assemblage.</p>
13:50 – 14:10	<p>Project IBISCA: Distribution of ants in a Panamanian rainforest.</p> <p>Maurice Leponce1, Jacques Delabie2, Bruno Corbara3, Jérôme Orivel4, Yves Roisin5 & Alain Dejean6. 1Royal Belgian Institute of Natural Sciences, Conservation Biology Section, Belgium; 2Centro de Pesquisa do Cacau - CEPLAC, Itabuna, BA; 3 Université Blaise Pascal, Clermont-Ferrand, France; 4Université Toulouse; 5 Université Libre de Bruxelles, Brussels, Belgium; 6Université Toulouse III, France</p> <p>Preliminary results from hand collecting in the canopy and Winkler extracts at ground level suggest that the arboreal-dwelling ant community is at least as rich as the litter-dwelling ant community. Both communities shared few species (Jaccard similarity of 0.1). In total 209 species were collected but the true species richness of the whole ant community in San Lorenzo forest, Panama, might be over 330 species.</p>



<p>17:00 – 17:15</p> <p>AG Award</p>	<p>Explaining the commonness of rarity based on resource partitioning strategies and species' ranges: a case study of Peruvian dung beetles</p> <p>LARSEN, T. H. Dept. of Ecology & Evolutionary Biology, Princeton University, USA. tlarsen@princeton.edu</p> <p>I explain the excess of rare species often found in diverse communities by examining resource partitioning and species' distributions of over 200 dung beetle species across southeastern Peru. Communities were separated into four components: 1) core species sampled in an unbiased manner; 2) core species that were difficult to sample, primarily due to unusual resource use; 3) species preferring a nearby habitat type; 4) transient species encountered outside their range.</p>
<p>17:15 – 17:30</p> <p>AG Award</p>	<p>Why the stingless bee <i>Friesella schrottkyi</i> (Hymenoptera, Apidae, Meliponina) sometimes constructs involucrem?</p> <p>LIMA, M. A. P.; LIMA, E. R.; CAMPOS, L. A. O. guta@insecta.ufv.br</p> <p>Involucrem is an element of stingless bees nests that is supposed to help brood thermoregulation. We verified the effects of three constant temperatures (15, 20 and 25°C) on involucrem production and on worker activity of <i>Friesella schrottkyi</i>. Temperature did not interfere on involucrem production, but was positively correlated with worker activity (F=787.104; p=0.00). We concluded that, at 25°C, worker activity increases and this activity stimulates involucrem production</p>
<p>17:30 – 17:45</p> <p>AG Award</p>	<p>Diet of <i>Anoura fistulata</i> (Chiroptera: Phyllostomidae): extreme specialization within the chiropterophilous pollination syndrome</p> <p>MUCHHALA, N. University of Miami. n_muchhala@yahoo.com</p> <p>Flight cage experiments reveal that the new species of bat, <i>Anoura fistulata</i>, has a tongue length more than twice that of other <i>Anoura</i>, and longer than any known species of bat. Compared to sympatric <i>Anoura</i>, these bats visit flowers with long corollas more frequently, and are the sole pollinators of the 8-cm long flowers of <i>Centropogon nigricans</i>. This represents the first documented case of such extreme specialization within the chiropterophilous syndrome.</p>
<p>17:45 – 18:00</p>	<p>Frugivorous butterflies of the Caxiuanã National Forest: A preliminary evaluation of community structure and composition</p> <p>OVERAL, W. L.; SOUSA, A. C. P.; BARLOW, J. Museu Paraense Emilio Goeldi, Belém, Pará, Brazil. Overal@museu-goeldi.br</p> <p>Butterflies are often used indicators of richness and stability in tropical forests. Conservation International's TEAM Initiative uses baited fruit-traps to monitor the Caxiuanã National Forest, Pará, Brazil. 3500 individuals and 72 species of Nymphalidae were collected in the first 24 months of sampling. The five most common species accounted for >50% of total catch. Most species were found in the understorey, but canopy samples were different in composition and abundance.</p>
<p>18:00 – 18:15</p>	<p>Vertical stratification of termites in a Panamanian rainforest</p> <p>ROISIN, Y.; DEJEAN, A.; CORBARA, B.; ORIVEL, J.; LEPONCE, M.</p> <p>Termite diversity was investigated in the canopy of a Panamanian rainforest, and compared with the sympatric ground fauna. Ten species were found in the canopy and 29 at ground level. Five of these occurred at both levels. Several small-colony drywood termites (Kalotermitidae) and some large-colony Termitidae showed a clear, statistically significant preference for the canopy. This canopy fauna contributes substantially to the species richness of the local wood-feeding termite assemblage.</p>



Oral Session III

Biodiversity and Animal Ecology

(July 27 – Convention Center – Room B3)

Chairs: ROMANOWSKI, H. P. & CINTRA, R.

16:30 – 16:45	<p>Composition and structure of the lacustrine bird communities of seasonally flooded wetlands of western Brazilian Amazonia</p> <p>CINTRA, R.; SANTOS, P.; BANKS, C.</p> <p>We conducted standardized speedboat surveys of waterbird assemblages in 54 lacustrine waterbodies in the wetlands of Mamirauá and Amanã Reserves, Amazonas, Brazil. We recorded 2043 individuals of 34 species. Seven species accounted for 79.9% of the individuals. The most used microhabitats were the borders of surrounding forests and floating meadows. Using multivariate ordination techniques, we found that water body size is a determinant of waterbird assemblage composition in these wetlands.</p>
16:45 – 17:00	<p>Beta-diversity of ant assemblages in the Paraguayan dry Chaco and its implication for conservation.</p> <p>DELSINNE, T.; ROISIN, Y.; LEPONCE, M.</p> <p>Reserve area networks should maximize faunal complementarity between sites. Using ants as model organisms, we compared faunal communities in six localities spread along an aridity gradient in the Paraguayan Chaco. In total 91 species were collected with an average of 30 spp/locality. Factors affecting the ant distribution will be discussed.</p>
17:00 – 17:15	<p>Species diversity of bird assemblages in a Neotropical arid zone: natural vs. agricultural areas</p> <p>GONZÁLEZ-CARCACÍA, J.A.; NASSAR, J. M. Instituto Venezolano de Investigaciones Científicas, Venezuela. jagonzal@ivic.ve</p> <p>We compared species diversity of bird assemblages associated with natural and agricultural areas within an arid region in Venezuela. We captured birds bimonthly during one year, and collected fecal samples. Moderate levels of similarity (CCS = 0.6-0.7) were obtained along the year. The rarefaction method detected significant differences between both areas. Our results suggest that certain level of agricultural intervention may contribute to increase bird diversity in Neotropical arid zones.</p>
17:15 – 17:30	<p>Biodiversity of “cenotes” in Mexico’s Yucatan Peninsula</p> <p>HLEBAKOS, J.; RIVERA DEL RIO, V. I. hlebak01@student.ucr.edu</p> <p>The limestone platform of Mexico’s Yucatan Peninsula contains numerous sinkholes or “cenotes.” These form an archipelago of humid microhabitats within the seasonally dry tropical forest, and have been exploited by the local Maya to cultivate trees from rainforest environments. We examine the species and genetic diversity present within and amongst “cenotes”. The results suggest implications for the role of “cenotes” in the conservation of biodiversity in this rapidly developing region</p>