VIII

ENCONTRO

SOBRE

ABELHAS

Biodiversidade
e Uso Sustentado
de Abelhas

23 a 26 de julho de 2008

Ribeirão Preto - SP - Brasil

Local: Hotel JP - Ribeirão Preto - SP

1 Marilda Cortopassi Laurenti
2 Giorgio Venturieri
3 Giorgio Venturieri
4 Giorgio Venturieri
5 Fernando Dias
6 Tom Wenseleers

NATIVE BEE'S ASSEMBLAGE AS POLLINATORS OF TIMBER TREES IN THE AMAZON FOREST CANOPY: SPECIALIZED AND GENERALIZED SYSTEMS

Márcia Motta Maués[1], Paulo Eugênio A. M. de Oliveira[2]*
[1]Embrapa Amazônia Oriental; [2]UFU
Embrapa Amazônia Oriental, Laboratório de Entomologia, Trav. Enéas Pinheiro s/nº, Belém, PA, 66.017-970
marcia@cpatu.embrapa.br

Bees are key pollinators at the canopy stratum of the Amazon forest. Canopy pollination studies at the Amazon biome are relatively scarce, due to the difficulties of surveying at the tree top. Here we present data of melittophilous plants at the Tapajós National Forest, Western Amazon, Brazil, with specialized and generalized pollination systems. The pollination processes of four climax woody species, e.g. *Jacaranda copaia* (Aubl.) D. Don (Bignoniaceae), *Dipteryx odorata* (Aubl.) Willd. (Leg. Papilionoidae), *Manilkara huberi* (Ducke) A. Chev. (Sapotaceae) and *Carapa guianensis* Aubl. (Meliaceae), was studied from 2002 to 2004. The flower visitors were assessed directly on opened flowers using woody towers up to 45 m, as well as single-rope climbing technique. Reproductive phenology was monitored weekly in 30-40 plants of each species. *J. copaia* was effectively pollinated by a restrict number of medium-bodied bees, namely *Euglossa* and *Centris*. Likewise, *C. guianensis*' pollinators were unspecific small-sized bees, mainly Meliponina and small riodinid butterflies. Thus, these two species showed higher specialization in comparison to *D. odorata*, which was pollinated by medium to large-bodied bees (*Eulaema*, *Eufriesea*, *Centris*, *Bombus*, *Epicharis*, *Xylocopa*, *Augochloropsis*, Meliponina) plus butterflies, moths, scarab beetles, wasps and hummingbirds. Equally, *M. huberi* showed a wide group of pollinators, represented by Meliponina, Anthophorina, hoverflies, butterflies, moths, wasps and perching birds. Flower morphology, pollen nectar accessibility and attractants were significant features on the floral visitor's preference. The dry season (September to November) concentrated the majority of flowering season. *J. copaia* flowered synchronously each year. *D. odorata* and *C. guianensis* showed an asynchronous pattern, with a few individuals flowering in the end of the rainy season (March to June), and a larger part from September to December. *M. huberi* presented a synchronous supra-annual flowering pattern, with gaps of 3-4 years, displayed on the transition from rainy to dry season (June to August).

Apoio: Embrapa, DFID (Department for International Development – UK)

Palavras-chaves: Pollination, phenology, melittophily, Euglossina, Meliponina