

RESPONSES TO FOOD RESOURCES ON AN ANT COMMUNITY IN AN AMAZONIAN PRIMARY FOREST

What can salt and ants tell us about differences in habitats?

Mendoza-Penagos, Cristian^{1,3} and Hessen, Knut O. V.^{2,4}

¹Postgraduate Program in Zoology, Universidad Federal do Pará / Ecology and Conservation Laboratory, Av. Perimetral, No. 2-224 neighborhood Guamá 66075-110, Belém - PA, Brazil

²Postgraduate program in ecology, Centre for Ecological and Evolutionary Synthesis (CEES), Department of Biosciences, University of Oslo. The Kristine Bonnevie Building, room 3511, UiO campus, Blindern. Blindernveien 31. Entr. Moltke Moes vei NO-0731, Oslo, Norway

CORRESPONDENCE

³*cris_kmlo@hotmail.com*

⁴*kohessen@student.matnat.uio.no*

Abstract: The forest of Caxiuanã in the Amazon basin has great ecological and taxonomic variability of soil living ants. Their distribution is amongst other things affected by the variation of food availability within and between habitats. In this study, our objective was to evaluate if there were differences in the abundance, richness and composition of ant species between an annually dry forest and an annually flooded floodplain by comparing the attractiveness of salt and sugar. This was done by placing Eppendorf tubes as fall traps, filled with sugar and salt solutions of two different concentrations as attractants along linear transects on the ground of each area. A total of 870 individuals of 13 genera and 4 subfamilies were collected. No significant differences in abundance or species richness were found between the two sites. Sugar was significantly more attractive bait than salt in both areas, suggesting resource similarity between the dry forest and the floodplain. However, the composition of species varied between both sites and baits, confirming the importance of these variables as structuring parameters of ant assemblies. The first record of the genus *Megalomyrmex* sp. for Caxiunã was made, making a contribution to the taxonomy and distribution of the ants in the area.

Keywords: *Ants; Baits; Caxiunã; Resources; Salt; Sugar.*