



8th CEWM

Sept. 27 – 30, 2019

Regensburg

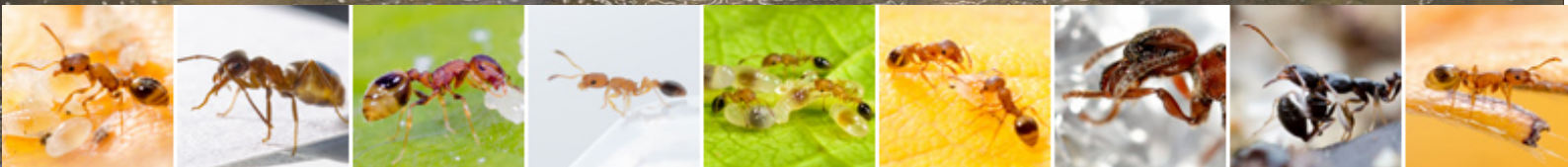
UR

Abstracts

Central European Workshop of Myrmecology
September 27 - 29, 2019
Regensburg, Germany
www.cewm2019.eu



Supported by Regensburger Universitätsstiftung



Diversity of the myrmecophilous communities associated with the ectatommine ant genus *Ectatomma*

Jean-Paul Lachaud^{1,2}, Gabriela Pérez-Lachaud¹

¹ *Departamento de Conservación de la Biodiversidad, El Colegio de la Frontera Sur, Chetumal 77014, Quintana Roo, Mexico*

² *Centre de Recherches sur la Cognition Animale, Centre de Biologie Intégrative, Université de Toulouse UPS, CNRS-UMR5169, UPS, 31062 Toulouse Cedex 09, France*

e-mail: jean-paul.lachaud@univ-tlse3.fr

Despite the diversity of ant-myrmecophile associations, few ant genera have been thoroughly checked for an inventory of the myrmecophilous communities they host. Here we report on the myrmecophiles associated with *Ectatomma*, a neotropical genus that contains only 15 valid species along with 3 undescribed cryptic species of the complex *E. ruidum*, and which has been, for a long time, considered unlikely to exhibit associations with other organisms. We also provide a brief review of the interactions of these organisms with their hosts. We evaluated the organisms present within ant nests or attended by foragers through exhaustive colony sampling and observations of two species of *Ectatomma* (*E. tuberculatum* and *E. brunneum*) and one species complex (*E. ruidum*) over more than thirty years of colony sampling and revised as much literature as we could find on all the species of this genus. Contrary to what was expected according to the reduced number of species concerned, the small size of their colonies and their aggressiveness, an amazing variety of associates was found ranging from facultative mutualistic lepidopteran caterpillars to true primary ant parasitoids, fungi and bacteria. At least 192 species belonging to 48 families from 18 orders are involved in at least 265 associations. Half of them concern trophobiotic associations with Hemiptera. Most of the myrmecophiles listed are rare, extremely specific, and exhibit highly specialized biology. We discuss the limitations of the knowledge of their impact on individuals and host colony fitness. *Ectatomma* ants, though being a small group, serves as a remarkable resource for the evolution of a wide variety of myrmecophilous associations and the diversity of such communities might be much more important than previously expected.