

MOLECULAR CHARACTERIZATION OF ANTS OF THE *CAMPONOTUS* GENUS COLLECTED IN URBAN PARKS OF THE CITY OF SAO PAULO, BRAZIL

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Abstract Alate ants are being collected in two urban green areas of the city of São Paulo, differing in their distances to natural Atlantic Forest remnants, in order to characterize the species diversity and the importance of urban parks in the maintenance of such diversity. Ants of the genus *Camponotus* are major components of the ant fauna in urban areas and are largely represented among the alates captured in the light and Malaise traps employed in the current study. Morphological identification is hindered by the lack of keys for alates in this genus. Therefore, molecular methods are being evaluated as an auxiliary tool for the identification and/or characterization of the genetic diversity of the *Camponotus* alates. After separation into morphospecies through external morphological characters, specimens are subjected to DNA extraction, PCR amplification of 28S rDNA and mitochondrial cytochrome oxidase I (COI) genes, and DNA sequencing. Our results show that 28S rDNA sequences confirm that a morphospecies belongs to the genus *Camponotus*, but species identification through COI sequences is limited by the scarcity of sequences of South American *Camponotus* species deposited in public databases. To diminish these problems, *Camponotus* workers are being collected actively or through pitfall traps in the surveyed areas, morphologically identified when possible, and sequenced. We expect that by this strategy, it will be possible to identify a significant portion of the *Camponotus* alates and to compare the efficacy of alates or workers capture to characterize the diversity of this genus in the surveyed areas. Preliminary results of these studies will be presented.