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## WHAT IS THE BEST STRATEGY TO SAMPLE BEES IN THE AMAZON REGION?

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Tropical ecosystems shelters more than 3/4 of Earth's biodiversity, being the Amazon region is home of the world's largest rainforest. Despite its size and importance, this biome is the least known in relation to bee fauna in Brazil. The hardship of access, high costs of mobility and distance from research centers are the main factors that contribute to this lack of knowledge. Therefore, the objective of this work was to evaluate the best strategy for bee sampling in the region. Samplings were carried out in the forest, surroundings shrubbery and experimental guaraná (*Paullinia cupana*) areas of Embrapa Amazônia Ocidental, located on the highway AM 010 (2 ° 53'29.19 "S / 59 ° 58'40.58" W), km 29, municipality of Manaus / Amazonas. Twelve samples were performed with each of the methods. Traps of the Malaise type (6 traps) and yellow pantraps (Möerick type, 24 traps) were used, with biweekly intervals between the samples from between September 2012 to February 2013. Monthly active samples using insect net were also carried out from June 2016 to May 2017, by two collectors, totaling 12 hours by month. In total, 4845 bees belonging to 175 species were sampled; of these, 118 species (2817 individuals) were collected through active collection, 116 (1934 individuals) with Malaise trap and 16 (94 individuals) in pantraps. Only 8 species were common to all methods, 58 species on two methods and 109 species unique to a sampling method (56 active samples, 50 Malaise and 03 pantraps). The diversity index H 'for the whole area was 3,705, the active samples (3,294) and Malaise trap (3,419), obtained similar results and, pantrap (1,989), the lowest diversity index. Despite the temporal and methodological differences, the results indicate that the best strategy for the Amazon region is to jointly use active samples and Malaise traps.

Keywords: biodiversity; Apidae; sampling methods.

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