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**Diversity of ground-dwelling ants in the Chaco National Park
(Argentina)**

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Chaco National Park (Northern Argentina) is located in the second largest biome of South America, "The Gran Chaco". During several decades this area has been exposed to anthropic pressures (habitat fragmentation, pastures, ...) which deeply degraded the original environment. For the first time, an assessment of the ground-dwelling ant diversity in the dry subtropical forest of Chaco N.P. has been carried out. Ants were collected according to the standardized ALL protocol along 200m line transects. Every 10m, ants were sampled with a pitfall trap and extracted from a quadrat of 1m² of leaf-litter with a mini-Winkler apparatus. Overall, 65 ant species were collected along three transects 5 km apart. Extrapolation of species richness predict over 90 species in the habitat studied, a result which is consistent with other sampling campaigns performed elsewhere in the Chaco. Differences in faunal composition between the two collecting methods show their complementarity for the evaluation of ant diversity. Based on the mini-Winkler data, the average faunal similarity between transects was of 50% (Jaccard Index). Species co-occurrence in the leaf-litter was not random. A negative association between *Brachymyrmex physogaster* and *B. sp01 prox fiebrigi*, and between *Solenopsis sp.01 (AR)* and *S. sp.16 (AR)* was observed, whereas *Wassmannia sulciceps* and *Solenopsis sp.16 (AR)*, *W. sulciceps* and *Cyphomyrmex rimosus*, *Hypoponera sp. prox. opaciceps 1 (AR)*

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and *S. sp.16 (AR)*, *C. rimosus* and *Octostruma rugifera*, *Hypoponera sp. prox. opaciceps 1 (AR)* and *C. rimosus* were positively associated.

This study could be a useful basis to the set-up of a methodology, useable by park rangers, to monitor the effect of anthropogenic disturbance on the invertebrate fauna.

