

Evaluation of a rapid assessment protocol for ants and termites in two subtropical forests of Argentina.

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We combined standardized protocols for collecting ants and termites : leaf-litter and soil samples were gathered and pitfall traps were placed every 10m along a 200m long transect. Visual search, especially in wood pieces, was concentrated in a strip of 100m x 2m. Our aim was to test what kind of information in terms of species richness, species proportion, species spatial distribution would be provided by this protocol in relation to an increased sampling effort. Three transects were conducted in two contrasted habitats distant of 400km along the 25th degree of latitude South : a semi-evergreen rainforest and a xerophilous forest. One transect represented ~50% of the termite richness and ~60% of the ant richness observed after 3 transects. A doubling of the sampling effort (6 transects) was expected to yield 25-50% more termite species and 27-36% more ant species. The two sites shared ~30% of their ant species but none of their termite species. One transect appeared sufficient to rank the most common ant species at each site. Three transects were useful to assess spatial heterogeneity of faunal distribution. Over 3 transects seemed necessary to evaluate reliably the total species richness.