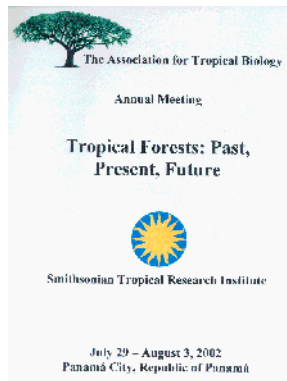


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ROISIN Y¹, A INGENBLEEK¹, M LEPONCE². ¹Université Libre de Bruxelles, ²Institut Royal des Sciences Naturelles, Belgium. yroisin@ulb.ac.be. Testing the transect method to characterize termite assemblages in subtropical forests.

Termites perform an important ecological function in tropical forests. Recent studies have suggested that these insects are valuable indicators of environmental degradation and human disturbance. Belt transects of 100m x 2m representing a constant sampling effort are widely used and considered satisfactory as a sampling procedure. Our present aim was to evaluate whether samples obtained by this method allow a reliable characterization of whole termite assemblages. We worked in a subtropical forest formation, the *monte fuerte*, in the Argentinian Chaco. We ran an extended transect of 500m x 2m and studied the stability of diversity estimators (total species richness, evenness, Shannon's H,...) obtained from standard 100m strips as the start line was moved along the transect. Neither distance to forest edge nor canopy openness had any significant effect on species occurrence, but soil-dwelling species showed sharp abundance peaks in zones densely covered by terrestrial bromeliads. Consequently, the total number of records (1 record = 1 species in a 5m x 2m section) on 100m strips varied from 8 to 61 and observed species richness from 5 to 15 (19 in the full 500m transect). All diversity estimators varied to a considerable extent. Great care should therefore be exerted in interpreting data from single transects: comparisons between sites and extrapolations to entire assemblages should be based on more extensive sampling.

contributed oral presentation