

## Earthworm diversity in *Araucaria angustifolia* forests in S and SE Brazil

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*Araucaria angustifolia* is a threatened tree species of the Mixed Ombrophylloous Forest (also known as the Araucaria forest), found in the S and SE regions of Brazil. Originally, Araucaria forests covered about 250 000 km<sup>2</sup> in Brazil, but today only 32 000 km<sup>2</sup> remain. From 2005 to 2010, earthworm density and diversity were evaluated in various fragments with native forest and Araucaria plantations in the states of Sao Paulo, Santa Catarina, Parana, Rio de Janeiro and Minas Gerais. A total of 60 sites were sampled qualitatively and 8 quantitatively. Approximately 60 species were encountered, of which ~10 were exotic (mainly *Amyntas corticis*, *A. gracilis*, *M. schmardae*, *Dichogaster* spp. and *Pontoscolex corethrurus*) and the rest native. Most (~45 spp.) were Glossoscolecidae, mainly in the genus *Glossoscolex* (~30 spp.) and *Fimoscolex* (~10 spp.). Abundance of native species was generally very low. When abundance was high, it was mainly of the exotics *A. corticis* or *A. gracilis* and *P. corethrurus*. Plantations can harbor native species, but they tend to support more exotics (greater richness and abundance). Native forest, especially when well preserved (little disturbance), was more likely to have only native species, or a mixture of both native and exotic species.