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## Earthworm populations in native *Araucaria* forests, *Araucaria* and Pine plantations in Brazil

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Native *Araucaria* forests are a highly fragmented and endangered ecosystem belonging to the Atlantic Forest biome, a global biodiversity hotspot. Only approx. 3% of the original extent remains, and the dominant species of this forest, *Araucaria angustifolia*, is on the red list of Brazilian endangered species. During the 1940's, 50's and 60's, the National Forest system established plantations of both *Araucaria* and *Pinus elliottii* in various sites throughout S and SE Brazil, seeking to reduce environmental degradation and promote the recovery of *Araucaria* forests. The present study was undertaken to assess earthworm populations in these planted forests, compared with native *Araucaria* forests in four National Forests: Três Barras, Irati, Piraí do Sul and Capão Bonito. In each National Forest, three plots of each plantation (*Araucaria* and Pine) and three of native forest were selected, and earthworms sampled using: A) handsorting of five 40x40x20 cm soil blocks and B) 5-L of dilute formol sprinkled over five 50x50 cm quadrats. Formol and handsorting samples were n *Araucaria* plantations, followed by native forests and lowest in Pine plantations. This may be due to negative effects of accumulated Pine needles on the surface and changes in soil properties, as well as to the generally less diverse vegetation cover in these plantations compared with the other ecosystems.