



Impact of land use changes for ethanol production derived from sugarcane on earthworm species richness in Central-Southern Brazil*

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The aim of this study was evaluate the impact of land use changes for ethanol production derived from sugarcane on earthworm species richness in Central-Southern Brazil. The samplings were carried in three counties considered as truth replicates: Valparaíso (São Paulo state), Jataí (Goiás state) and Ipaussu (São Paulo state). In each county, the sampled sites were: native forests fragments, pastures and sugarcane fields. The preliminary results are provided from the qualitative sampling in the sites (the digging of at least 9 points randomly in each site).

We separated seven species belonging to five earthworm families: Acanthodrilidae (*Dichogaster affinis*, *D. gracilis* and *D. saliens*), Ocnerodrilidae (Ocnerodrilidae sp.1); Glossoscolecidae (*Glossoscolex* sp.1), Rhinodrilidae (*Pontoscolex corethrurus* and Rhinodrilidae sp.1) and Eudrilidae (Eudrilidae sp.1). One specie was not identified even to the family level (NI sp.1). In pastures were recorded 8 species (*Dichogaster affinis*, *D. gracilis*, *D. saliens*, Ocnerodrilidae sp.1, *Pontoscolex corethrurus*, Rhinodrilidae sp.1, Eudrilidae sp.1 and NI sp.1). In the sugarcane sites were identified five species (*Dichogaster affinis*, *D. gracilis*, Ocnerodrilidae sp.1, *Pontoscolex corethrurus* and *Glossoscolex* sp.1). The forests, in which only one species was found (*Glossoscolex* sp.1), were characterized by lowest taxonomic richness. Remarkably, we found earthworms only in one forest site out of three sites and in two out of three sites of the sugarcane. Further samplings are needed to complement these data.