



Mata Atlântica enchytraeids (Paraná, Brazil): A new genus, *Xetadrilus* gen. nov., with three new species, and four new species of *Guaranidrilus* Černosvitov (Enchytraeidae, Oligochaeta)

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Abstract

Seven new species of terrestrial Enchytraeidae (Oligochaeta) are described from soils of the southern Brazilian Atlantic rain forest. They were found in the framework of the German-Brazilian project SOLOBIOMA, which studied rain forest recovery. Specimens were investigated in vivo and as stained whole mounts. Three species belong to a new genus, named *Xetadrilus*. *Xetadrilus* is similar to *Guaranidrilus* Černosvitov, 1937 and *Tupidrilus* Righi, 1974; it differs in the absence of lateral chaetae from segment VIII on and in peculiar structures of the prostomium: ganglia, inner papillae, and a frontal epithelial recess. Further peculiarities are small body size, absence of oesophageal appendages, and a variable pattern of pharyngeal glands. The three species are named *X. maacki*, *X. aphanus*, and *X. fabryi*. Three further nominal species are transferred to *Xetadrilus*: *Marionina pituca* Righi, 1974, *Marionina righiana* Xie & Rota, 2001, and *Stercutus ugandensis* Bell, 1954. The other four new species belong to *Guaranidrilus*, the species-richest genus at the sampling sites. They are named *G. andreolii*, *G. marquesi*, *G. cingulatus*, and *G. hoeferi*. All species have elongate transverse epidermal gland cells, three pairs of post-pharyngeal ganglia, and a dorsal vesicle in the nephridial postseptale. These traits may be included in the genus diagnosis. In all species described here, most of the species-specific taxonomic traits are found in non-reproductive structures, which means that specimens of all age groups can be identified to the species level, juveniles included.

Key words: Clitellata, microdriles, South America, soil fauna, succession