

Hidden diversity: 3 new species of land flatworms from the Brazilian Araucaria forest

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The new flatworm species *Cratera aureomaculata*. Credit: Ilana Rossi

A huge invertebrate diversity is hidden on the forest floor in areas of the Araucaria moist forest, Brazil. Land flatworms constitute a numerous group among these invertebrates occurring in the Neotropical region. Flatworms are considered to be top predators within the soil ecosystem, preying on other invertebrates.

The Araucaria moist forest is part of the Brazilian Atlantic Rain Forest and is considered a hotspot of land flatworm diversity, harboring many yet undescribed [species](#). Study recently published in the open access journal *ZooKeys* describes three new species from areas covered by Araucaria moist forest in South Brazil, which belong to the Neotropical genus *Cratera*.

Land flatworms lack a water retention mechanism and have a low tolerance to intense changes in temperature and humidity. Their low vagility leads to the existence of a high number of endemic species. Thus, they are considered good bioindicators of the degree of impact on their habitat.

The [new species](#) are named after characteristics of their [color pattern](#) and are probably endemic for the study areas. Besides differing from each other, as well as from other species of the genus, by their

characteristic color pattern, they also show other distinguishing features in the reproductive system. The study provides an identification key to the species of the genus.

The work was conducted by the south Brazilian research group on triclads, led by Dr. Ana Leal-Zanchet, of the Universidade do Vale do Rio dos Sinos (UNISINOS), in southern Brazil. The study was supported by the Brazilian Research Council (CNPq).



The new flatworm species *Cratera nigrimarginata*. Credit: Ilana Rossi



The new flatworm species *Cratera cryptolineata*. Credit: Ilana Rossi

More information: Ilana Rossi et al, Three new

species of Cratera Carbayo et al., 2013 from
Araucaria forests with a key to species of the genus
(Platyhelminthes, Continenticola), *ZooKeys* (2017).
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