

Two new beetle genera and four new species from the Australopacific in a new monograph

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The new species and genus *Iridoprinus myrmecophilus* is the first known myrmecophilous saprinine for the Australopacific Region. Credit: Birgit Rhodes



Amid his ongoing revisionary work on a number of hister beetle genera, the Slovakian-born naturalised Dutch entomologist and Alexander von Humboldt Foundation researcher, Dr. Tomáš Lackner, Bavarian State Collection of Zoology, together with fellow entomologist Dr. Richard Leschen, Landcare Research, discovered two new genera and a total of four new species from the Australopacific Region. The newly described endemic insects are featured in an extensive monograph published in the open access journal *ZooKeys*.

Hister beetles, also known as Clown beetles because of their flattened legs, represent a quite diverse family (Histeridae) of beetles living almost everywhere around the world. Amongst their characteristic traits are their shiny metallic wings. Most of these beetles are predaceous and feed on larvae of other insects, including some pests. Occasionally, some species filter-feed on dung. Curiously, the Clown beetles tend to play dead when threatened.

While the hister beetle subfamily Saprininae is common and diverse throughout the globe, with only 40 species in nine native and three introduced genera, they are poorly represented in the Australopacific Region. This is one of the reasons the present discoveries documenting the new diversity in the group are remarkable.

The authors note that their scarcity in the area might be as a result of the long-standing isolation of the Australian continent in combination with the originally densely forested large islands like New Zealand and New Guinea.

However, "the Australopacific Region harbors several species with very interesting morphologies and ecologies," point out the scientists.









The new species *Saprinus rarus* is the first known termitophilous saprinine from the Australopacific Region. Credit: Birgit Rhodes

Amongst the most impressive newly described saprinines, there is the first truly myrmecophilous species and genus (*Iridoprinus myrmecophilus*) known from the <u>region</u>, which is likely to be dependent on its co-habitation with ants. The beetle is only known from Australia where it has been collected from the nests of another species, endemic to the country - the Meat ant.

Similarly, the new histerid species Saprinus rarus is the first known termitophilous saprinine from the Australopacific Region and only the third in the subfamily as a whole. Found in the nest of the arboreal Tree termite, the species had been previously collected, but it has been so rare that it has not been determined as a new to science species until now. Hence, it earned the scientific name rarus as in 'rare'.

In conclusion, the team noted the next challenge about the Australopacific saprinines - the genus *Saprinodes* which is not only restricted to Australia, but also has a life history shrouded in mystery. So far, it has only been collected from pitfalls and flight intercept traps.

For lead author Dr. Tomáš Lackner, this is the tenth in <u>a line of studies</u> focused on the world's remarkable histerids published in *ZooKeys*.





Another saprinine beetle species (*Sarandibrinus araceliae*) showing the extraordinary morphological plasticity characteristic for the subfamily. Previously described, this species is also published in *ZooKeys*. Credit: Tomáš Lackner



More information: Tomáš Lackner et al, A monograph of the Australopacific Saprininae (Coleoptera, Histeridae), *ZooKeys* (2017). DOI: 10.3897/zookeys.689.12021

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