

Bouldering in south-central Madagascar: A new 'rock-climbing' gecko species of the genus *Paroedura*

October 11 2023



The newly described *Paroedura manongavato*. Credit: Javier Lobón-Rovira

Named after its habitat preference, *Paroedura manongavato*, from the Malagasy words "manonga" (to climb) and "vato" (rock), is a bouldering

expert. Part of its "home range" is also very well-known to rock climbers for its massive granitic domes.

"Its description represents another step into the crux (in climbing jargon, the most difficult section of a bouldering problem) of resolving the taxonomy of the recently revised *P. bastardi* group, where the [new species](#) belongs, and reaching a total of 25 described species in this genus, all exclusively living in Madagascar and Comoros," says C. Piccoli from CIBIO—Research Center in Biodiversity and Genetic Resources, Portugal. She and her team just published a paper describing the new gecko.

Thus far, this species has only been found in Anja Reserve and Tsaranoro, both of which are isolated forest patches in the arid south-central plateau of Madagascar. These sites, at a distance of ca. 25 km, have a peculiar conformation, with huge granitic boulders close to rocky cliffs and surrounded by vegetation.

The survival of *P. manongavato*, defined as microendemic for being restricted to a very narrow distributional range, thus depends on the preservation of these small forest patches. Subsequently, the authors proposed an evaluation of its conservation status as Critically Endangered, a category designated for species threatened of extinction by the International Union for Conservation of Nature.



The newly described *Paroedura manongavato*. Credit: Javier Lobón-Rovira



Habitat of *Paroedura manongavato* at Anja Reserve. Credit: Javier Lobón-Rovira

Its discovery history is long, starting during the Malagasy summer of 2010, when the first evidence of another *Paroedura* species was found in Anja, together with the recently described *P. rennerae* in 2021.

Distinguishing these two species on the field is a difficult task. Both species have prominent dorsal-enlarged keeled scales and a similar dorsal pattern, although adults of *P. manongavato* have an overall less spiky appearance, less contrasted dorsal markings, and a smaller body size compared to *P. rennerae*.

The need to collect more samples brought researchers A. Crottini, F. Andreone, and G. M. Rosa to return to Anja in 2014, and collect the future holotype (i.e. the name-bearing and description reference individual) of this new species.

Later in 2018, F. Belluardo, J. Lobón-Rovira, and M. Rasoazanany, visited Anja and Tsaranoro again and were able to collect several [tissue samples](#) and high-resolution photos of the reptiles living in the area, including the new gecko species. This cumulative data collection was fundamental to advance with its description.

[Published](#) in the open access journal *ZooKeys*, this study highlights the importance of conducting herpetological inventories in Madagascar to improve our understanding of species diversity and progress with species conservation assessments.

"The description of this species shows the importance of collaborative efforts when documenting biodiversity, especially for those range-

restricted and isolated [species](#) at greatest risk of disappearing," points out the leading author of this study C. Piccoli.

More information: Costanza Piccoli et al, Another step through the crux: a new microendemic rock-dwelling *Paroedura* (Squamata, Gekkonidae) from south-central Madagascar, *ZooKeys* (2023). [DOI: 10.3897/zookeys.1181.108134](#)

Provided by Pensoft Publishers

Citation: Bouldering in south-central Madagascar: A new 'rock-climbing' gecko species of the genus *Paroedura* (2023, October 11) retrieved 24 April 2024 from <https://phys.org/news/2023-10-bouldering-south-central-madagascar-rock-climbing-gecko.html>

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