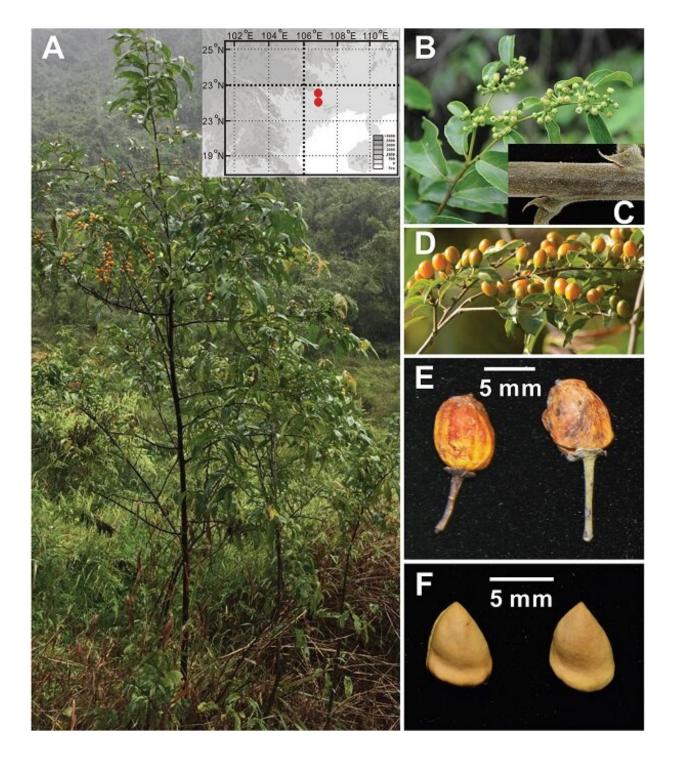


A new evergreen species of Rhamnaceae found in Guangxi

September 10 2020, by Zhang Nannan





Rhamnella intermedia. A: The whole plant, habitat and two geographical locations; B: flowering branches; C: a young branch with the persistent stipule; D: branches with leaves and fruit E dried fruit F mature seeds. Credit: LU Zhiqiang



Rhamnella in the family of Rhamnaceae is a small genus. To date, 10 species have been accepted into this genus. In field investigations, researchers from the Xishuangbanna Tropical Botanical garden (XTBG) found two Rhamnella populations from southwest Guangxi that belonged to the evergreen group but could not be ascribed to any of the evergreen Rhamnella species.

After conducting morphological and <u>molecular studies</u>, they confirmed that the species is new to science and named it as Rhamnella intermedia, owing to its intermediate morphology compared to the other three closely related species. The new species was published in *PhytoKeys*.

The researchers carried out field investigations on the distribution and habitat, and characterized its morphology based on these two populations from southeast Guangxi. They then conducted the <u>principal component</u> <u>analysis</u> based on <u>phenotypic traits</u> to show the morphological differences. Finally, they sequenced the nuclear internal transcribed spacer fragment to clarify its genetic distinctness.

Rhamnella intermedi is morphologically similar to R. rubrinervis based on leaf characters, but they can be easily distinguished between each other by fruit and seed characters. However, it also can be significantly distinguished from R. rubrinervis by the densely pilose young branches, if the specimen has no fruit and seeds.

To date, only two R. intermedia populations have been collected from southwest Guangxi. For its population census, more than 20 <u>mature trees</u> (3 to 6 m in height) and a large number of seedlings grow on the karst limestone hill. Further field investigations on its entire distribution are recommended in the future.

More information: Zhiqiang Lu et al. Rhamnella intermedia (Rhamnaceae), a new evergreen species from southwest Guangxi,



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