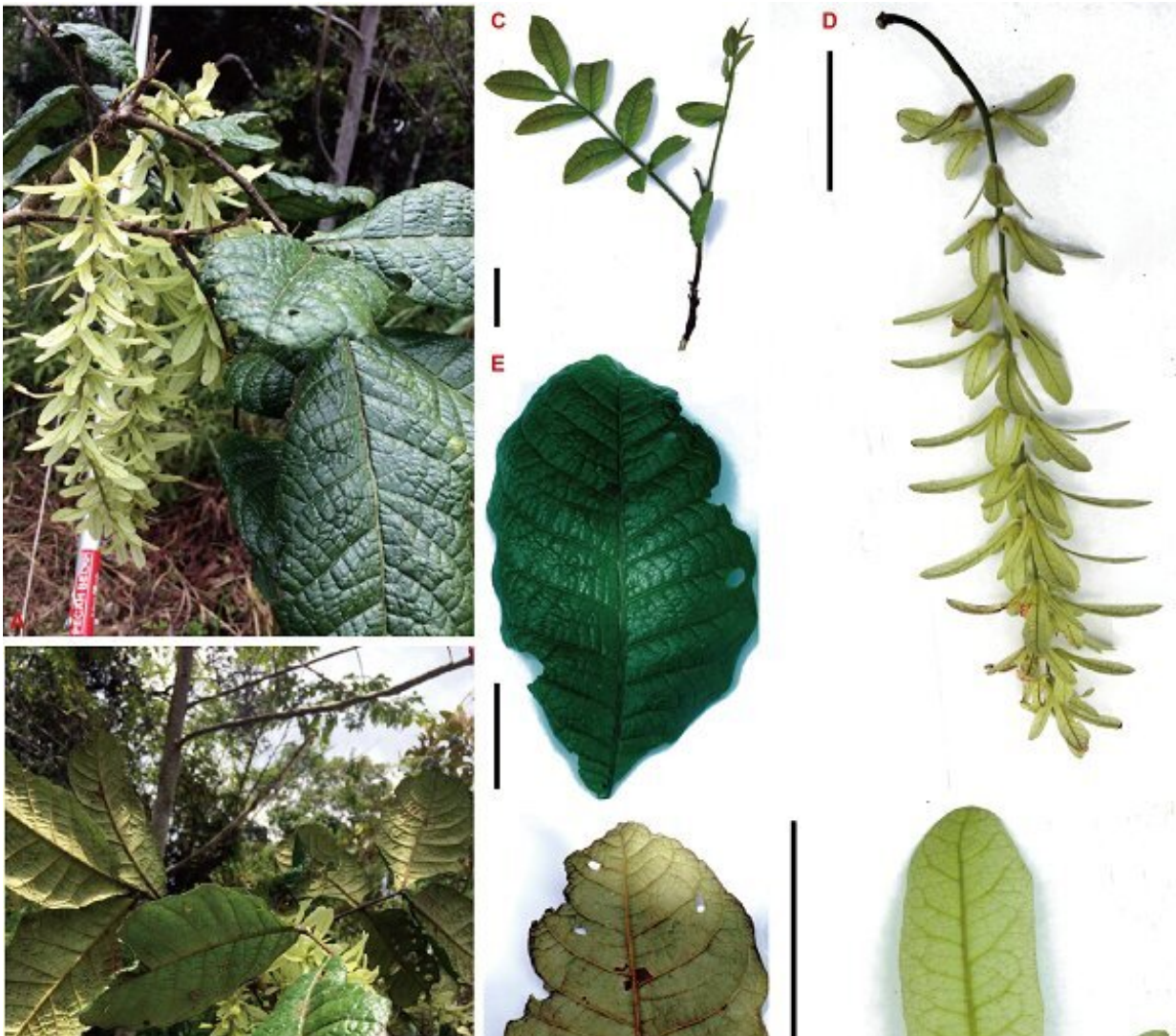


Two new *Engelhardia* species of the walnut family reported

August 30 2022, by Zhang Nannan



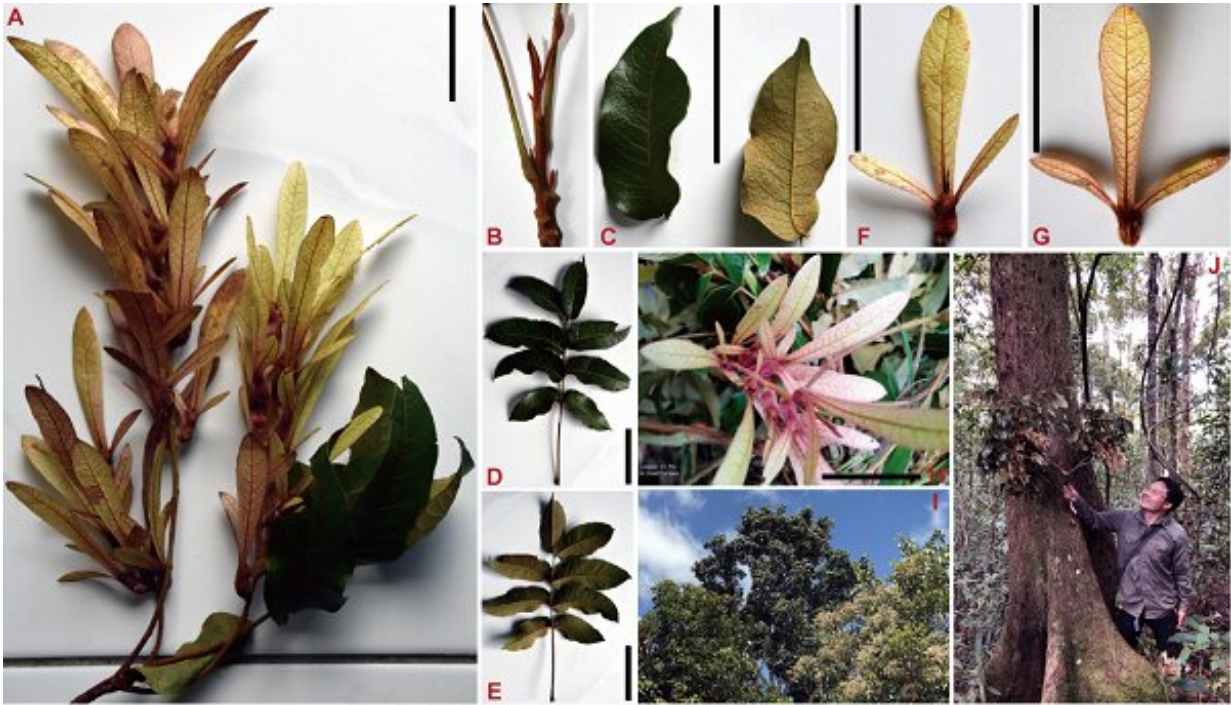
Engelhardia anminiana. Credit: Meng Honghu

Engelhardia is a primitive genus of Juglandaceae (the walnut family) that is endemically distributed in tropical and subtropical Asia. Several studies have attempted to elucidate the taxonomy and phylogeny of Engelhardia by using integrative approaches. However, the taxonomy of this genus has been suffered from a lack of in-depth investigation and good specimens across its distribution ranges.

During a fieldwork in Sulawesi and Borneo, researchers from the Xishuangbanna Tropical Botanical Garden (XTBG) of the Chinese Academy of Sciences identified two new species of Engelhardia, and named them as Engelhardia anminiana and Engelhardia borneensis, respectively. Results were published in *Plant Diversity*.

Engelhardia anminiana is distributed in Sulawesi, the south border line between south Sulawesi and central Sulawesi, near the mountain tracks, in open areas. It has the most unique leaf morphology in Juglandaceae, possessing scaly and large oval leaves, and scales on the leaf surface, with a leaf length > 20 cm, and width > 10 cm.

Engelhardia borneensis is found in the dense forest along the mountain tracks from Bario to Miri in Malaysia. It is, so far, the only species that prefers a humid habitat and not in open areas. It is the biggest tree in this [genus](#), growing in humid habitats. It is distributed in the valleys but is an emergent tree species that grows higher than the other nearby trees on the slope. Its fruit is reddish, with a spike length of about 7.2 cm and sometimes longer than 10 cm.



Engelhardia borneensis. Credit: Meng Honghu



Engelhardia borneensis. Credit: Meng Honghu

In this study, combining molecular and morphological data, the researchers conducted a comprehensive revision of the *Engelhardia* species from the south Yangtze River in China to Indonesia by using a large-scale investigation framework.

The discovery of the two new species of *Engelhardia* in Sulawesi and Borneo suggests that new [species](#) remain to be discovered in untraversed areas across scattered islands in the Pacific Ocean.

"Our findings show that there is an urgent need for inventories, herbarium work, nomenclature, identification, and [comparative studies](#)," said Meng Honghu of XTBG.

More information: Hong-Hu Meng et al, Two new species from Sulawesi and Borneo facilitate phylogeny and taxonomic revision of *Engelhardia* (Juglandaceae), *Plant Diversity* (2022). [DOI: 10.1016/j.pld.2022.08.003](#)

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