

Cave dwelling nettle discovered in China

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Flowers of a new species from the nettle family known only from caves, *Pilea cavernicola*, where it grows in very low light conditions. Credit: Alex Monro

South West China, Myanmar and Northern Vietnam contain one of the oldest exposed outcrops of limestone in the world. Within this area are thousands of caves and gorges. It is only recently that botanists have sought to explore the caves for plants. This exploration is yielding many new species new to science, that are known only from these habitats. The current study was published in the open access journal *PhytoKeys*.

Kew botanist and nettle expert Alex Monro says, "When my Chinese colleague Wei Yi-Gang from the Guangxi Institute of Botany first mentioned cave-dwelling plants to me, I thought that he was mis-translating a Chinese word into English. When we stepped into our first cave, Yangzi cave, I was spell-bound. It had an eerie moonscape look to it and all I could see were clumps of plants in the nettle family growing in very dark condition".



Botanists Wei Yi-Gang, Guangxi Institute of Botany, and Alex Monro, Royal Botanic Gardens Kew, standing within Yangzi cave with clumps of plants from the nettle family nearby. Credit: Alex Monro

The plants do not grow in complete darkness but do grow in extremely low light levels, deep within the entrance caverns of the [caves](#) (sometimes, in as little as 0.04% full sunlight). The British and Chinese authors have been collecting plants from the [Nettle](#) family in this limestone landscape for several years and have just published a paper describing three new species, one from a cave and another two from deep gorges.

The cave-dwelling nettle species in question, was found growing in two caves in the Guangxi province of China. Of the species discovered in gorges, one is known from an unusual and striking rock mineral formation called petaloid travertine. Petaloid travertine is a form of limestone deposited by mineral springs that over time forms large petals of rock, in this case clinging to the vertical walls of a gorge.



Petaloid travertine formation in the Malinghe Gorge, habitat of another new species from the nettle family, *Pilea guizhouensis*. Credit: Alex Monro

These [plants](#) are members of a genus of Nettles known as [Pilea](#), that is believed to have over 700 [species](#) Worldwide, up to one third of which may remain undescribed.

More information: Monro AK, Wei YG, Chen CJ (2012) Three new species of *Pilea* (Urticaceae) from limestone karst in China. *PhytoKeys* 19: 51–66. [doi: 10.3897/phytokeys.19.3968](https://doi.org/10.3897/phytokeys.19.3968)

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