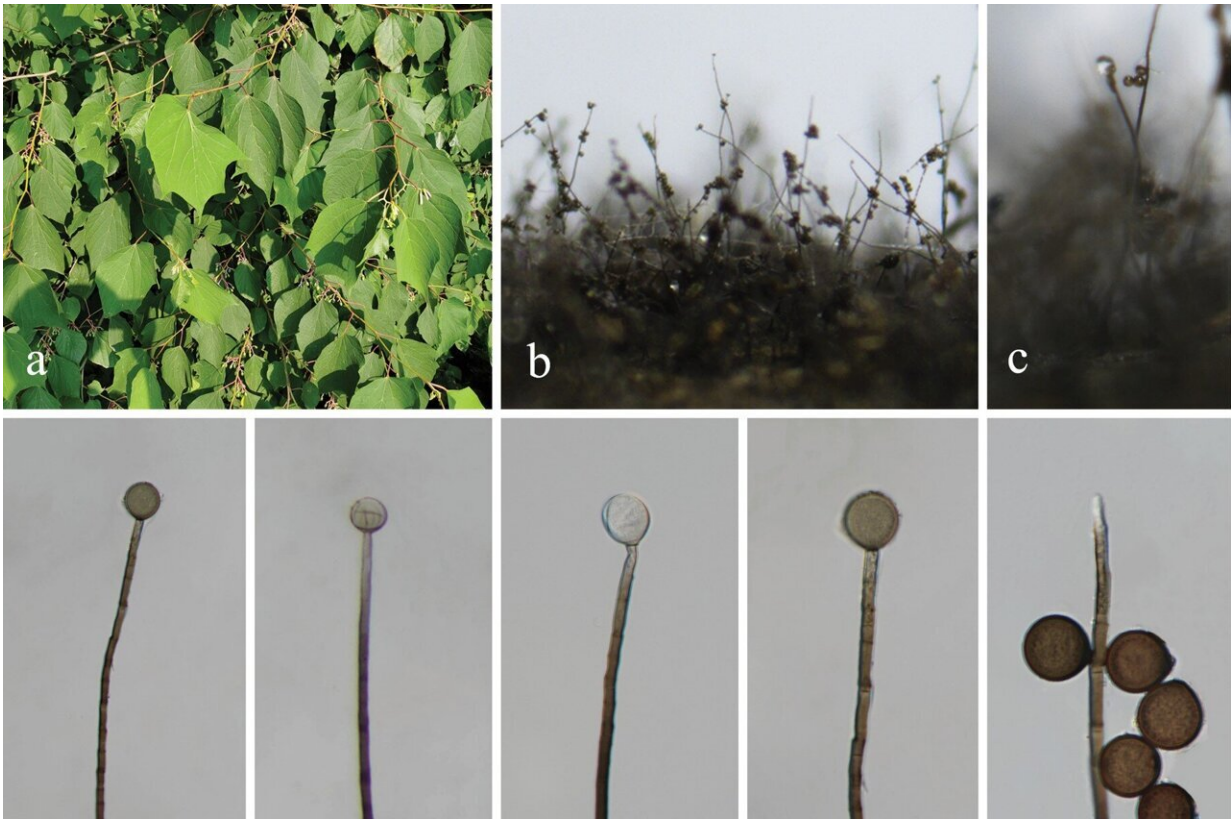


Two new freshwater fungi species in China enhance biodiversity knowledge

February 6 2024



Acrogenospora alangii (KUN-HKAS 130312, holotype) a hostplant growing near water body b, c colonies on host substrate d–h conidiophores, conidiogenous cells and conidia i germinating conidium j, k colony on PDA (up-front, down-reverse) l, n conidia with apical appendages l–p conidia. Scale bars: 100 μm (d, e), 40 μm (f–i), 20 μm (l–p). Credit: *MycKeys* (2024). DOI: [10.3897/mycokeys.101.115209](https://doi.org/10.3897/mycokeys.101.115209)

Researchers have discovered two new freshwater hyphomycete (mold) species, *Acrogenospora alangii* and *Conioscypha yunnanensis*, in southwestern China.

This discovery, detailed in [a study](#) published in *MycologyKeys*, marks the addition of these species to the *Acrogenospora* and *Conioscypha* genera, further enriching the diversity of freshwater [fungi](#) known in the region.

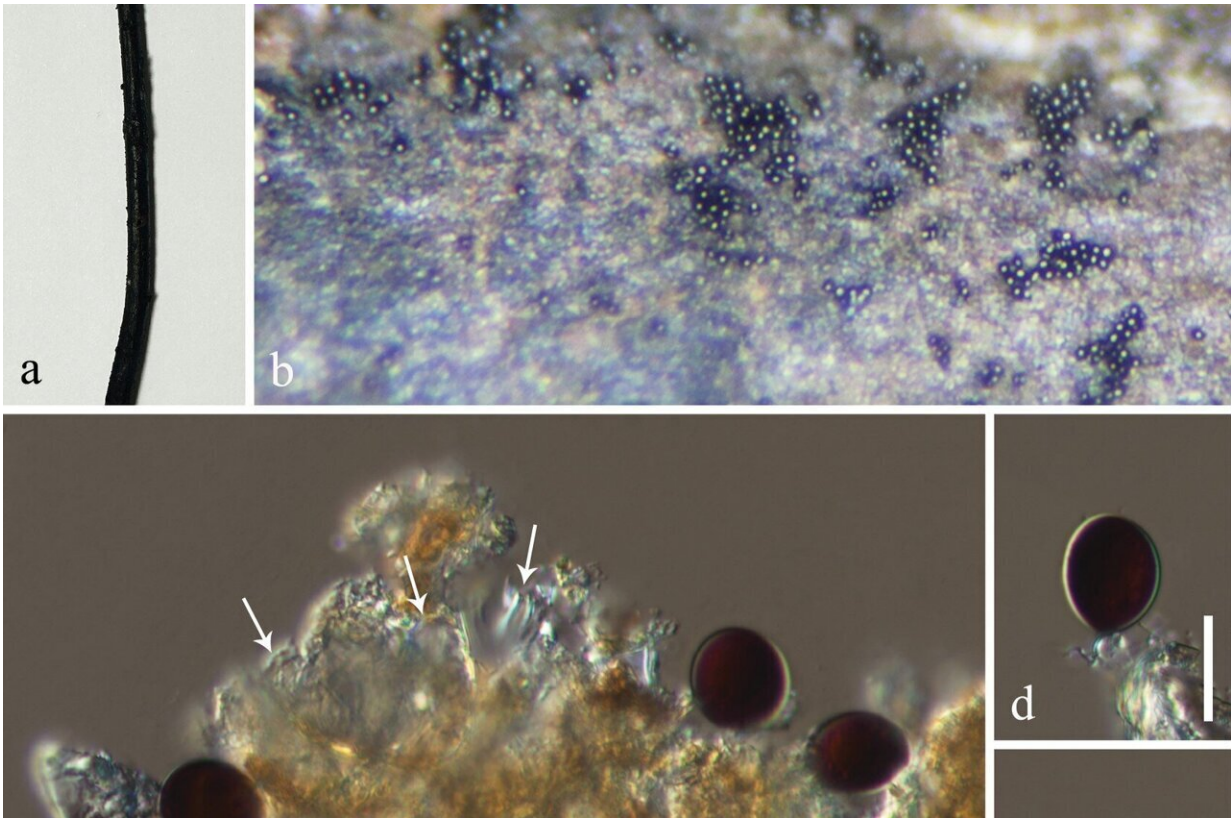
A research team, consisting of Lu Li, Hong-Zhi Du and Ratchadawan Cheewangkoon from Chiang Mai University, Thailand, as well as Vinodhini Thiyagaraja and Rungtiwa Phookamsak from Kunming Institute of Botany, China, and Darbhe Jayarama Bhat from King Saud University, Saudi Arabia, employed comprehensive morphological analysis and multi-gene phylogenetic assessments in their study.

Notably, *Acrogenospora alangii* was identified on submerged branches of the medicinal plant *Alangium chinense*, highlighting a unique ecological association.

Freshwater fungi are highly diverse in China and frequently reported from submerged wood, freshwater insects, herbaceous substrates, sediments, leaves, foams, and living plants.

Most species are well-known as saprobes (organisms that live on decaying organisms) and they play an important role in ecological functioning as decomposers, but also can be pathogens as well as symbionts on humans and plants.

This research underscores the ecological and taxonomic richness of freshwater fungi in China, a country already recognized for its diverse fungal habitats. The findings contribute valuable insights into the roles these organisms play in freshwater ecosystems and emphasize the importance of ongoing biodiversity.



Conioscypha yunnanensis (KUN-HKAS 129616, holotype) a host specimen b colonies on submerged wood c conidiogenous cells bearing conidia (note: arrow points = cupulate conidiogenous cells) d, e conidiogenous cell attached with conidia f–m conidia n germinated conidium o, p colony on PDA (o = up-front, p = down-reverse). Scale bars: 20 μm (c–n). Credit: *MycKeys* (2024). DOI: 10.3897/mycokeys.101.115209

More information: Lu Li et al, Two novel freshwater hyphomycetes, in *Acrogenospora* (Minutisphaerales, Dothideomycetes) and *Conioscypha* (Conioscyphales, Sordariomycetes) from Southwestern China, *MycKeys* (2024). DOI: [10.3897/mycokeys.101.115209](https://doi.org/10.3897/mycokeys.101.115209)

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