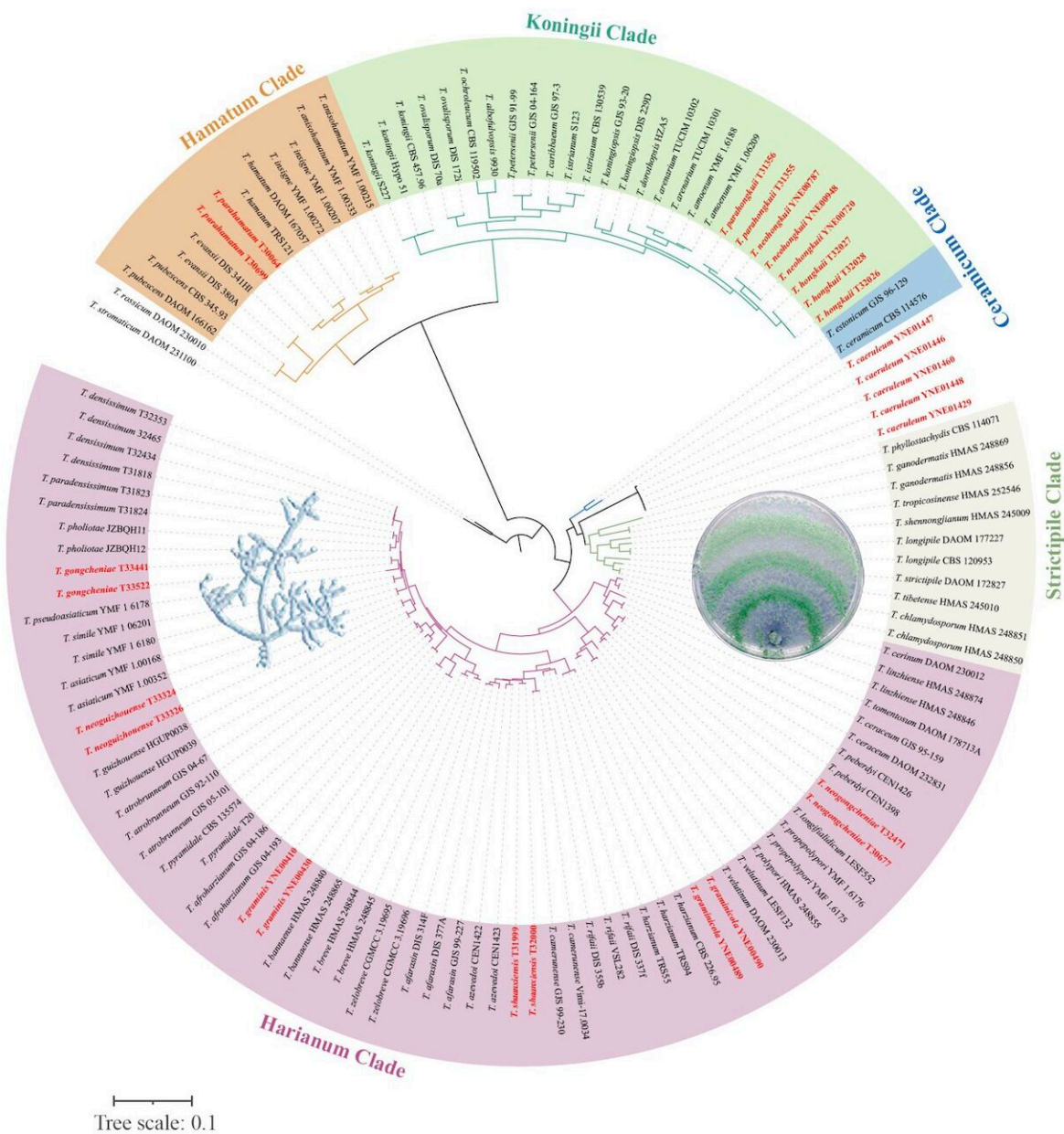


Fungal resources: Eleven new species of *Trichoderma* from China

April 1 2024



Phylogenetic tree of Trichoderma. Newly proposed species are highlighted in red. Credit: Professor Dr. Chu-Long Zhang, Zhejiang University, Hangzhou, China

Trichoderma spp. are globally distributed and are considered significant fungal resources. They are widely studied and applied due to their economic and ecological importance, offering numerous benefits, such as producing enzymes and antibiotics, aiding in plant growth, and protecting them from pathogens.

A study [published](#) in the journal *Mycology* and led by Prof. Chu-Long Zhang (Fungal Resources Utilization and Plant Protection Research Group, Zhejiang University, Hangzhou, China) presents the discovery of eleven new species of Trichoderma.

The team obtained a total of 618 Trichoderma strains from soils in crop and orchard fields across five provinces in China: Anhui, Guizhou, Yunnan, Shaanxi, and Zhejiang. 27 strains of Trichoderma were identified in 11 new species through the morphological observation and [phylogenetic analysis](#) of combined sequences of the second largest nuclear RNA polymerase subunit encoding gene (*rpb2*) and the translation elongation factor 1-alpha encoding gene (*tef1*).

The new species namely *T. caeruleum*, *T. gongcheniae*, *T. graminicola*, *T. graminis*, *T. hongkuii*, *T. parapeberdyi*, *T. neoguizhouense*, *T. neohongkuii*, *T. parahamatum*, *T. parahongkuii*, and *T. shaanxiensis*. All of these [new species](#) were isolated from soils, except for *T. caeruleum*, *T. graminicola*, *T. graminis*, and *T. neohongkuii*, which were found as endophytes in Poaceae plants.

"The discovery contributes to the advancement of knowledge about Trichoderma species resources in China," Prof. Chu-Long Zhang said.

More information: Rui Zhao et al, Eleven new species of Trichoderma (Hypocreaceae, Hypocreales) from China, *Mycology* (2024). [DOI: 10.1080/21501203.2024.2330400](https://doi.org/10.1080/21501203.2024.2330400)

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