

New Zealand species of *Calycina*, *Cylindrocephalum*, etc

Recent publications by Wu & Diao (2023), Koukol & Seifertová (2026) and Baral (2026) differ in their opinions on how to taxonomically treat several of the genera in *Pezizellaceae*. Baral prefers a broad concept for *Calycina*, while the other authors prefer a narrower concept, with monophyletic sister clades treated as genera distinct from *Calycina*. In a New Zealand context, for *Pezizellaceae* sensu stricto, this particularly concerns *Calycina* and *Cylindrocephalum*. Note that *Pezizellaceae* s.s. excludes 'Pezizellaceae Han Clade 3' sensu Johnston & Park 2025, a clade that includes the type specimens of *Nagrajchalara*, *Rubropezicula*, *Newbrunswickomyces*, *Zymochalara*, *Bloxamiella* and *Parachalara* as well as specimens identified as the types of *Calycellina*, *Austropezia*, *Scutoscypha*, *Scleropezicula* and *Rodwayella*.

ON993981 is labelled in the ITS phylogeny in Johnston & Park (2025) as *Cylindrocephalum aureum* but according to Baral (2026) this sequence is from a misidentified *C. hughesii* specimen. An authentic *C. aureum* may be MH860959 (ex CBS 633.75, but note that in a pers. comm., G. Verkley from CBS throws doubt on the accuracy of the identification of this specimen), and a pers. comm. from Baral in relation to his 2026 manuscript "As long as we do not have a sequence of the type of *C. aureum* we cannot say in which clade it falls." There are two sets of putative *C. aureum* sequences in GenBank. Several specimens were identified by Walter Gams as *C. aureum*; CBS 633.75 is in one clade (labelled as *C. aureum* in Baral 2026), CBS 729.69 is in another clade (*C. hughesii* fide Baral 2026), CBS 138115 is a *Nagrajchalara* (based on an unpublished LSU sequence provided by Gerard Verkley, CBS), yet another specimen CBS 634.77 identified by Gams as *C. aureum* matches *C. cf. aesculi* sensu Baral 2026. *C. aesculi* and *C. cf. aesculi* have the yellow conidia characteristic of *C. aureum*, but *C. aesculi* s.l. differs from *C. aureum* in conidial size and conidiophore morphology (Koukol & Seifertová 2026, Baral 2026). Koukol & Seifertová (2026) illustrated the type specimen of *C. aureum*, describing the distinctive yellow conidia. However, this conidial colour is characteristic of not only *C. aureum*, with yellow conidia found also in *C. aesculi* and *C. spiralis* (Baral 2026).

For now I am treating *Calycina* and *Cylindrocephalum* as separate genera but this may change in the future when DNA sequences become available for a specimen that matches the type of *Cylindrocephalum* macroscopically, microscopically and geographically.

Fig. 1 is an ITS tree incorporating all of the specimens from New Zealand in *Pezizellaceae* s.s., along with representative data from Baral 2026, Wu & Diao 2023 and Koukol & Seifertová 2026. The outgroup and names for the clades more or less follows Koukol & Seifertová 2026.

<https://doi.org/10.7931/wea2-kj98> provides additional data and commentary of New Zealand specimens in *Pezizellaceae* Han Clade 3.

[Note that some of the Wu & Diao GenBank accessions were originally mislabelled - the type of *Cylindrocephalum zhejiangense* was originally mislabelled as *Cy. clavatisetosum*, and the type of *Cy. clavatisetosum* was mislabelled as *Cy. hughesii*. These mistakes were carried over into the Koukol & Seifertová 2026 publication but corrected in Baral 2026.]

[note that GenBank PQ778116 was accessioned as *Cylindrocephalum aureum* but Baral 2026 accepted this species as *Nagrajchalara haituoshanensis* based on an ITS match with the type from China (GenBank NR_187044) and a specimen from England, K(M) 199098 (GenBank MZ159545).]

[note that PX921097/ICMP 25625, supposedly grown from ascospores from PDD 124445 (and cited this way by Baral 2026) is assumed to be a *Chalara*-like contaminant picked up during the culturing process. There was growth in only one of the three ascospore subcultures made from the shot

ascospores, and the morphology of the PDD 124445 specimen is distinctive and typical of *Cistella*, https://scd.landcareresearch.co.nz/Specimen/PDD_124445.]

References

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