

Calloriaceae, sensu Baral in Jaklitsch et al. 2016

[from Baral 2016 notes - there are some divergent elements, morphology does not always fit]

| Genus | Type | DNA | PRJ Notes |
|---|-------------------------------|---------------------------------------|--|
| Calloria | <i>C. urticae</i> | ITS/multigenes | Calloriaceae |
| Cylindrocolla | [<i>C. urticae</i> anamorph] | ITS matches <i>urticae</i> teleomorph | Calloriaceae |
| Laetinaevia | <i>L. lapponica</i> | <i>L. carneoflava</i> ITS | Calloriaceae (type not sequenced) |
| Chaetonaevia | | no DNA | |
| Diplonaevia (= Merostictis) | <i>D. caricum</i> | <i>D. bresadola</i> ITS | Clade 9 |
| Duebenia | <i>D. rufa</i> | <i>D. compta</i> ITS | Clade 9 |
| Eupropelella | | no DNA | |
| Hyalocrottes | | no DNA | |
| Iridinea | | no DNA | |
| Unguiculariella | | no DNA | |
| Loricella | | no DNA | |
| Micropodia | | no DNA | |
| Naevata | <i>N. minutissima</i> | CBS 115934, ITS | Discinellaceae |
| Naeviella | | no DNA | |
| Ploettnera | | no DNA | |
| other genera that seem to fit phylogenetically | | | |
| Populomyces | <i>P. zwinianus</i> | ITS | Calloriaceae |
| Tetracladium | <i>T. marchalianum</i> | ITS/multigenes | Calloriaceae |
| Tricellula | <i>T. inaequalis</i> | ITS | Calloriaceae |
| Belonioscyphella | <i>B. hypnorum</i> | ITS | Clade 9; incertae sedis Baral |
| Cistella | <i>C. dentata</i> | <i>C. albidolutea</i> ITS/multigenes | Clade 9 (type not sequenced); Hyaloscyphaceae in Baral 2016 |
| Fabrella | <i>F. tsugae</i> | ITS | Clade 9 (but not consistently across analyses); Cenangiaceae in Baral 2016 |
| Helicocentralis | <i>H. hyalina</i> | ITS | Clade 9 |
| Leohumicola | <i>L. verrucosa</i> | ITS (ex type) | Clade 9 |
| Mycarthris | <i>M. corallinus</i> | ITS | Clade 9 |
| Polyphilus | <i>P. sieberi</i> | ITS/multigenes | Clade 9 |
| Psilachnum | <i>P. lateritioalbum</i> | <i>P. staphylleae</i> ITS/multigenes | Clade 9 (type not sequenced); Pezizellaceae in Baral 2016 |
| Roseodiscus | <i>R. rhodoleucus</i> | ITS/multigenes | Clade 9 |
| Urceolella | <i>U. crispula</i> | ITS/multigenes | Clade 9; Hyaloscyphaceae in Baral 2016 |
| Vandijckella | <i>V. johannae</i> | ITS/multigenes | Clade 9 |

From ITS tree, *C. urticae* falls in a well-resolved clade along with *Laetinaevia* (type not sequenced), *Populomyces*, *Tetracladium* and *Tricellula*. Sister to this is a poorly resolved group of taxa that mostly fall within Han Clade 9/Vandijckellaceae.

Many of the genera not treated by Baral are asexual, thus morphology not very useful to compare with the Baral concept.

In the multigene tree, the Calloriaceae s.s. clade is well resolved, but mixed up in amongst the Clade 9 taxa are things like *Glutinomyces*, *Roseodiscus*, *Lanceolata*, *Stamnaria*, which are phylogenetically distant in the ITS tree.

ITS tree from IMA Fungus Johnston et al. 2019 paper



Notes:

- *Venturiocistella japonica* not the type species, and distant from other Han Clade 4 genera
- *Articulospora proliferata* distant from type species, *A. tetracladia* (*Discinellaceae*)
- There are only a few **NZ isolates** in Clade 9 with *Vandijckella* (none in the *Calloriaceae* clade with *C. urticae*) – D2539 ex *Cyathea* (tiny, sessile, short hair-like elements, lots of white conidial ooze in culture); D574 ex nikau (sessile, small hair-like elements, globose conidia in culture); ICMP 15655/15709 *Helicodendron*; TTT337 (isolated as an anamorph)





cf *Calloriaceae* s.s.

