

# RHIZOGONIACEAE

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**Rhizogoniaceae** Broth., *Nat. Pflanzenfam.* I, 3: 614 (1904).

Type: *Rhizogonium* Brid.

Dioicous, synoicous or monoicous. Plants minute to very large, lax to densely tufted. Stems usually simple, sometimes branched or dendroid. Rhizoids  $\pm$ papillose. Leaves imbricate to widely spaced, erect-spreading to squarrose, unranked or in ranks of 2 or 4, linear-lanceolate to ovate-lanceolate; margin simple or comprised of elongated cells,  $\pm$ thickened, entire, dentate, serrate, or with single or paired multicellular teeth; costa strong, ending just below the apex to excurrent, often toothed abaxially; laminal cells usually small and isodiametric,  $\pm$ thick-walled, smooth.

Perichaetia bud-like, basal, lateral or terminal. Calyptra long and thin, usually cucullate. Setae erect, elongate. Capsules erect to cernuous, commonly elongate, often arcuate, short-necked, widest at the mouth; operculum  $\pm$ rostrate. Peristome usually double and well developed. Spores small, globose or ovoid.

Rhizogoniaceae comprises eight genera and about 45 species. It is especially diverse in tropical and subtropical regions of the Southern Hemisphere where it grows on bark and decaying wood in moist habitats, also occurring less commonly on rock and soil. Six genera and 15 species are known from near the east coast of Australia.

The family has gametophytic affinities with the Bartramiaceae and Calomniaceae, and the sporophyte shows similarity to Mniaceae. Rhizogoniaceae is accepted here in its traditional sense; however, it is likely that future research will result in the segregation of new families.

## References

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## Key to Genera

- 1 Peristome single (exostome lacking); costa ending below the long hairpointed leaf apex ..... **HYMENODON**
- 1: Peristome double; costa usually percurrent to excurrent (ending below apex in *Goniobryum*); leaf apex lacking a long hairpoint ..... 2
- 2 Laminal cells more than 30  $\mu$ m long (1:) ..... **GONIOBRYUM**
- 2: Laminal cells less than 30  $\mu$ m long ..... 3
- 3 Marginal teeth paired (2:) ..... **PYRRHOBRYUM**
- 3: Marginal teeth single ..... 4

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- 4 Leaves neither ranked nor complanate, often with propagula between leaves (3:) ..... **LEPTOTHECA**
- 4: Leaves ranked and complanate, lacking propagula between leaves .....5
- 5 Leaves 4-ranked; plants 2.5–8.0 cm long; leaf border composed of elongate cells (4:) ..**MESOGAETE**
- 5: Leaves 2-ranked; plants 1–3 cm long; leaf border with or without elongate cells .....**RHIZOGONIUM**