PHYSMA

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Physma A.Massal., Neagen. Lich. 6 (1854); the name is probably from the Greek physao (to blow up, distend), and -ma (to indicate result of an action); in reference to the lobes which usually swell strongly when moistened.

Type: P. boryanum (Pers.) A.Massal.

Thallus foliose, leathery, gelatinous and swelling when wet, laciniate to lobate, spreading to pulvinate. Lobes elongate, oblong or flabellate; margins ±thickened, entire, crenate or incised. Upper surface smooth, wrinkled or ridged, ±pruinose, whitish, leaden grey, olivaceous, brown or blackening; cortical layer paraplectenchymatous, poorly developed or absent, sometimes replaced by anastomosing hyphae below. Medulla homoiomerous. Lower surface rhizinate, pale tan to black. Cyanobiont Nostoc scattered and often in dense packets below upper cortex, ±surrounded by hyphae. Ascomata apothecial, lecanorine, ±sessile; disc concave to flat, reddish brown; thalline exciple thick. Ascospores simple, ellipsoidal; irregular episporium ±present. Conidomata pycnidial, immersed; apices ±emergent, spot-shaped or papilliform. Conidia rod-shaped.

Physma is principally a tropical genus, but a few species grow in temperate regions. About eleven species are recognised, but the genus is poorly understood and badly in need of revision. It is closely allied to Ramalodium, but can be distinguished from most species of that genus by the presence of a thalline exciple. Ramalodium succulentum, however, has immersed apothecia which sometimes appear to have a thalline exciple and may cause some confusion. Some Physma species can also be separated from Ramalodium by the presence of a well-developed cortical layer, but in other species this structure is either poorly developed or absent. Generic delimitation of the two genera needs further study.


1 Laminal and/or marginal white pruina present; rhizines whitish to tan
2. P. chilense

1: Pruna absent; rhizines black
2: Thallus isidiate
3. P. pseudoisidiatum
2: Thallus not isidiate
1. P. byrsaeum