

Thrombium Wallr.
(INCERTAE SEDIS, possibly VERRUCARIALES)

After various authors

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Thallus crustose, thin, uniform, pale green, membranous, film-like and mucilaginous-slimy (subgelatinous when wet), indeterminate, sometimes developed within substrate, effuse or lacking. Photobiont green, Leptosira or Trebouxia. Perithecia entirely immersed, or superficial, simple; ostiole dark, poriform; involucrellum absent; exciple dark brown-black or pale, carbonaceous or horny, widened towards the ostiole. Paraphyses (best seen in squash preparations in Meltzer's reagent) persistent, unbranched, thin, paraphyses absent. Asci elongate-cylindrical or narrowly clavate, thin-walled, with a well defined K/I+ blue apical cap; tholus ring-like, K/I+ blue with narrow, cylindrical axial mass; 4-8-spored. Spores simple, colorless, ellipsoid, thin-walled, without distinct perispore. Conidiomata not known. No substances. On soil.

The genus is characterized by perithecia with simple colorless spores; unlike Verrucaria, it has persistent, simple paraphyses and grows on soil.

1. Corticolous. Thallus crustose, finely areolate, dull black. Perithecia minute, black, embedded in the thallus. Paraphyses slender. Spores broadly ellipsoid, 21-25 x 11 μ m. On oaks, western slope of San Gabriel Mountains at 1000 m. Southern California. T. discordans

1. Terricolous or saxicolous. 2

2. Terricolous. Thallus thin, effuse, uniform, smooth to slightly uneven or scurfy, wide-spreading, inconspicuous or a yellow- or gray-green film, subgelatinous when wet, indistinct. Perithecia 0.25-0.4 mm diam., barely visible as a gray to black ostiole; exciple wall 20-30 μ m wide, pale to dark brown, becoming 50-100 μ m towards the ostiole; paraphyses few to abundant, ca. 1 μ m thick, mainly unbranched, persistent; asci 130-170 μ m tall, cylindrical, \pm clavate at apices, thin-walled; perithecial contents I+ blue. Spores (15-)19-23(-30) x (5-)7-9(-12) μ m, 8 per ascus, ellipsoid or longly ellipsoid, often somewhat clavate, with numerous oil droplets. On damp humic, loamy and sandy soils, or rotting mosses, less often on plant remains, often on recently disturbed, consolidated, neutral to acid soil of sheltered roadcuts and earth banks, especially in well-wooded sites, also cliff tops. The thallus is host to the lichenicolous fungus Leightonimyces phillipsii. New England to Virginia and west to Iowa and Minnesota, and in California. T. epigaeum

2. Saxicolous. Thallus \pm endolithic, pale, thin, uneven, contiguous, 50-70 μ m thick below perithecia. Photobiont cells grouped, 10-12 μ m diam., intensely green; hyphae dense, intricate, 2-3 μ m thick. Perithecia \pm dispersed or two approaching, sessile, to 0.15-0.25 mm diameter, globose, black, somewhat shiny; ostiole impressed, ca. 35 μ m broad, circular, with numerous paraphyses 15-20 x 1 μ m; excipulum laterally and below ca. 20 μ m thick, black. Paraphyses distinct, intricate, much branched, 1-2 μ m thick. Hymenium I-. Asci subcylindrical, to clavate, 60-70 x 13-17 μ m, rather thick walled, I-. Spores

oblong, 16-23 x 4.5-8 um, 8 per ascus. On siliceous rock. T.
mongolicum Magnusson

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