

Trapelia M. Choisy
(LECANORACEAE: TRAPELIACAE)

After Hertel, 1969, and Purvis, 1992

Rev. 5/94

Thallus crustose to minutely squamulose, pale, upper cortex thin, of entangled hyphae, only present in species with distinctly squamulose thalli; attached to substrate by medullary hyphae.

Apothecia sessile to adnate, round, yellow-brown to reddish or almost black, biatorine, pseudolecanorine, or lecideine, sessile or emergent; constricted at base, adpressed, mostly small, to 0.2-0.5(-1.5) mm diam., biatorine, bursting through thallus cortex, the pseudolecanorine margin soon disappearing; at first globose and appearing perithecia-like, then splitting at apex and margin appearing \pm lobed; thalline exciple pronounced or absent; true exciple of colorless hyphae, the gel-matrix occasionally weakly pigmented, but never dark brown, varying from relatively weak and of short-celled, thin-walled hyphae to well developed and of long-celled, pachydermatous hyphae; hypothecium hyaline; paraphyses thin (under 1.75 μ m), very delicate, mostly easily free, often branched but little anastomosing, usually colorless throughout, the apices never abruptly swollen, the upper parts in some species (in the ephymenium) may appear slightly swollen due to an external coating of pigment; asci clavate to cylindrical, unitunicate, thin-walled, I-; apical dome I- or weakly I+ blue; spores 8, ellipsoid, simple, hyaline or faint pink, 14-32 x 6-14 μ m, smooth, without a distinct perispore.

Pycnidia immersed; fulcrum exobasidial; pycnospores oblong-cylindrical to filiform. Thallus and exciple often C+ reddish. Gyrophoric and traces of lecanoric often present. Photobiont chlorococcoid. On siliceous rock, soil, wood, or bark.

Very close to Trapeliopsis.

Placynthiella has a true exciple of brown-walled pseudoparenchymatous cells and paraphyses with irregularly capitate apices, each crowned with a dark brown apical cap.

1. On bark. Thallus effuse, immersed, of inconspicuous, dull green to greenish brown, \pm scattered, non-effigurate areoles to 0.15 mm diam. Soralia (0.1-)0.15-0.25(-0.4) mm diam., punctiform, rarely confluent, markedly convex, pale buff to pale greenish buff, often erupting from a single areole; soredia farinose. Apothecia 0.07-0.1(-0.2) mm diam., very rare, sessile; disc flat when mature, pinkish brown; true exciple very thin, paler than disc. Spores 11-14 x 4.8-6.5 μ m. Soralia P-, K-, KC+ red, C+ red (gyrophoric acid). On bark (Alnus and Quercus in England; on Picea

sitchensis in British Columbia). In open, forested, seaside meadow, British Columbia. T. corticola Coppins & P. James

1. On rock or soil. 2

2. Thallus C- (but apothecia in section and pycnidia C+ red, with gyrophoric acid), beige (pale fawn), yellow-gray, pale yellowish or ochre, granular-verrucose, sometimes secondarily cracked, Spores 15-21(-32) x 6-10(-14) um; apothecia, when present, to 1.5(-2) mm, sessile, with strongly constricted base; disc dark brown to black brown, concave to flat; proper margin swollen, often inflexed, mostly paler color. Pycnidia ca. 50-80 um diam., often numerous, immersed in thalline warts; conidia 5-6 x 0.7 um, bacilliform. On sheltered, \pm metal-rich, siliceous rocks, especially basalts and pebbles in moorelands. S. Carolina, Wisconsin, Minnesota.T. mooreana

2. Thallus usually C+ red (gyrophoric acid). Spores 14-26 x 7-12 um. Apothecia, when present, to 0.8 mm; discs often reddish, especially when wet, flat to convex, with distinct, thin, not raised proper margin only when young.3

3. Thallus sorediose, often sterile, thin to thickish, cracked or areolate. 4

3. Thallus not sorediose. 5

4. Thallus conspicuous, forming small, \pm delimited patches or an extensive crust to 15 cm across, white- or pink-tinged, matt; edge usually with discrete, \pm effigurate, flat or \pm convex areoles 0.2-0.4(-0.6) mm diam., giving the thallus a placodioid appearance, towards center areoles coalesce, the thallus then becoming secondarily cracked. Soralia 0.2-0.3 mm diam., numerous, pale greenish or yellowish white, rarely ochraceous, usually developing from sides of areoles or cracks in thallus; soredia 20-30 um diam., farinose. Apothecia very rare, similar to those in T. coarctata. On hard siliceous rocks, mine-spoil heaps and walls. Apparently pollution tolerant (does well in the Bronx, New York City). Common in Michigan and New York, and probably elsewhere in eastern U.S. T. placodioides

4. Thallus inconspicuous, uneven, of \pm scattered, often convex areoles or squamules, dark gray, olivaceous, pale green \pm suffused ochraceous brown, pink-brown to brownish; margin diffuse; soralia excavate to slightly convex, 0.2-0.4 mm diam. Apothecia often present, but usually few and scattered, 0.2-0.5 mm diam. On siliceous rocks, stones, or more rarely plant debris.T. obtegens

5. Thallus areolate, effigurate or subsquamulose, marginally

crenate to lobed, often lumpy-squamulose, smooth or minutely rugose, mostly beige, gray or brownish whitish; areoles \pm convex, often \pm overlapping; marginal squamules 0.2-0.4 mm wide and 0.04-0.15(-0.12) mm thick, contorted, sometimes in irregular, knotted clusters. Apothecia often absent; when present similar to those of T. coarctata, with thin, whitish pseudothalline exciple. On siliceous rocks, rarely on worked timber, and occasionally on peaty turf amongst rocks, especially those on the coast. California. T. involuta

5. Thallus effuse and continuous to cracked or areolate, never distinctly effigurate at edge; areoles mostly contiguous but sometimes dispersed and \pm squamulose at margins, smooth to \pm rugose, thin, not marginally crenate to lobed, whitish to gray, green-white or brownish often tinged pinkish, K-, P-; prothallus \pm present, white. Apothecia 0.2-0.8(-2) mm diam., round, scattered; disc rose-pink to red-brown or brown-black, \pm roughened, often with a thin, whitish, smooth to crenate, pseudothalline margin caused by its eruption through the thallus, part of which may remain adhering, \pm forming a halo-like rim, at least when young. Hymenium 90-140 μ m high. Hypothecium colorless. Spores 14-25 x 7-13 μ m. On siliceous rocks and stones, brickwork, occasionally on consolidated clay soil. Very variable; distinguished by the even, smooth to areolate, non-effigurate thallus. Immature apothecia may appear as scattered, starkly white, punctiform dots. California, to Washington and British Columbia? (northern material on sandstone looks somewhat different than southern material on soil), and elsewhere. T. coarctata

Literature

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