

**Tremolecia** M. Choisy  
(HYMENELIACEAE? BIATORELLACEAE?)

After Hawksworth, 1992

Rev. 5/94

Thallus rustred to blackish, epilithic, thin, areolatechinky or areolate, smooth, dull, K, C, I, with black hypothallus, not effigurate; without cephalodia. Containing only an unidentified rustcolored pigment in the cortex. Photobiont trebouxoid.

Apothecia lecideine, more or less innate, to 0.5 mm diameter, the disc black, generally concave, saucer shaped; margin very thin, entire, usually quite prominent, black or rarely orange, persistent; thalline exciple absent; true exciple well developed, somewhat raised, composed or radially arranged, thick hyphae, dark brown to  $\pm$  black and friable, entirely carbonaceous, not "cellular"; hypothecium conspicuous, brownblack; exciple and hypothecium K+ purple; hymenium I+ blue; paraphyses ca. 2  $\mu$ m wide, branched and loosely anastomosing, regularly septate, not markedly swollen at the apex; epihymenium olive brown or bluish brown. Asci of the Tremolecia type, broadly clavate, the tholus thick and well developed but  $\pm$  nonamyloid (even when pretreated in KOH), without a distinct ocular chamber or internal apical beak, the wall red in concentrated iodine, with a thin I+ blue outer gelatinous coat; spores 8, simple, smooth, ellipsoid, 916 x 59  $\mu$ m, thinwalled, the young ones sometimes slightly halonate, but perispore mostly indistinct.

Pycnidia immersed; pycnospores bacilliform. On hard, ironhigh siliceous rocks, arcticalpine.

[Description based on T. atrata; may be too specific for genus as a whole, since there is now at least one other species]

A segregate from Lecidea.

**T. atrata** (Ach.) Hertel

Thallus forming small, delimited patches, 340 mm diam., thin (ca. 0.2 mm thick), rimose and irregularly areolate, ochraceous to rust red, more rarely  $\pm$  grayblack or ochrecolored in exposed situations, I; prothallus black, marginal. Apothecia 0.10.5(0.7) mm diam., numerous, discrete or crowded in compact clusters,  $\pm$  immersed to adnate or finally sessile, angular when contiguous, shining; disc black, concave to plane; true exciple well developed, massive, somewhat raised, black, swollen, carbonaceous

throughout; hymenium 6580  $\mu\text{m}$  tall; true exciple and hypothecium  $\text{K}^+$  diffusing purplish. Asci clavate, 55 x 15  $\mu\text{m}$ , Tremolecia type. Spores ellipsoid, 1015(17) x 69(10)  $\mu\text{m}$ . Conidia 36 x 11.5  $\mu\text{m}$ . Thallus and medulla P, K, KC, C, UV, with unidentified rustcolored pigment in the cortex. On exposed, hard, siliceous rocks, especially those which are  $\pm$  ironrich, also on minespoils, arcticalpine. Alaska to Washington (and elsewhere see Thomson, 1979, under Lecidea dicksonii).

## Literature

Galloway, D. 1985. Flora of New Zealand Lichens.

Hawksworth, D. 1992. Tremolecia. In: Purvis, et al., Lichen Flora of Great Britain and Ireland.

Poelt & Vezda. 1981. Erg. II.