

Phlyctis Wallr.
(PHLYCTIDACEAE)

After Fink, and others

Rev. 5/94

Thallus crustose, smooth, or \pm cracked areolate or powdery, immersed or superficial, whitish to silver gray to dark gray, often K+ red; prothallus often present, pale or whitish. Photobiont chlorococcoid. Soralia present or absent, discrete to confluent, leprose farinose.

Apothecia (often lacking) immersed in thalline warts or soralia, often scarcely visible, the entire surface sometimes obscured by a white, coarse pruina, or sometimes emergent; disc pale yellowish reddish to brown black or pruinose; thalline exciple irregularly crenate or indistinct; proper exciple poorly developed or lacking; hypothecium colorless to pale brown, thin; hymenium colorless, tall; paraphyses \pm simple and free, slender, sparingly branched near the apices, indistinctly septate with minute swollen tips. Asci broadly clavate, thinwalled, not strongly thickened at the apex; outer sheath I+ blue but tholus scarcely developed, I-. Spores manycelled, 12(4) per ascus, hyaline to pale yellowbrown, elongate, ellipsoid or subspherical, densely muriform, very large, 100170 x 2550 μ m, with a very thin perispore, sometimes apiculate.

Pycnidia with conidiogenous cells simple; pycnospores to 2 μ m long, colorless, bacilliform. Various depsidones, usually norstictic. On bark or wood, on wayside and woodland deciduous trees in often \pm humid, welllit situations, occasionally on rocks.

Probably congeneric with Phlyctella according to James & Hitch, 1992.

1. Spores 4885 x 1420 μ m, with an acuminate cell at each end, oblong ellipsoid, 1521 septate transversely and 59 septate longitudinally, 12 per ascus, hyaline to pale brownish. Thallus thin, smooth or becoming obscurely chinky and areolate, white or grayish white. Apothecia always present, 0.20.5 mm across, the disk flat, black or whitish pruinose, the exciple thin, colored like thallus, becoming powdery; hypothecium yellowish. Thallus without soredia (but apothecia may resemble soralia), P+ redorange, K+ red (norstictic). On broadleaved trees in moist coastal and inland sites, chiefly on the smooth trunks and branches of young trees, in sheltered areas, very rarely on

rocks. California.

.....P. agelaea

1. Spores mostly over 90 um long and over 20 um wide, the ends usually rounded, or sometimes apiculate in P. speirea (or thallus sterile). 2

2. Apothecia immersed or absent. Thalline margin concolorous with thallus. Spores 1 per ascus..... 3

2. Apothecia erumpent, the thalline margin irregular, laceratedehiscent. Spores 1 per ascus (2 according to ?), hyaline to yellowish, 95150 x 2545 um, 2746septate transversely, 812septate longitudinally, ± ellipsoid, often narrower at one or both ends, occasionally the tips nearly apiculate. Thallus thin and scurfy to powderygranular (but not sorediate) or rimosecracked, not distinctly areolate, ashyglaucous, pale gray, olive gray, or light mineral gray, 24 cm broad; particles very irregular and diffuse. Hypothallus white, very finely fibrous, sometimes visible at the margin and occasionally throughout if thallus thin and scurfy. Apothecia abundant, 1(2) immersed in verrucae; verrucae 0.40.6(0.8) mm wide, irregularly breaking or cracking open showing the medulla which is whiter than remainder of thallus; disc plane, black and shiny or more commonly heavily white pruinose; pruina sometimes clumped coarsely together (not distinctly sorediate); hymenium to 175 um; parphyses slender, anastomosing but free except at the apices where coherent; epithecium yellowish to brownish. Thallus K+ yellow then red, P+ orange, C. With norstictic acid. On bark of Salix, Acer and Holodiscus. British Columbia (Saanich Peninsula) and Washington.P. speirea

3. Apothecia 0.150.25 mm wide, the exciple rather thick, becoming wavy; disc concave to flat, black. Thallus becoming chinky, ashy gray to whitish. Hypothecium hyaline to yellowish. Spores oblong, 925septate transversley and 46septate longitudinally, 92130 x 3260 um. On trees, Florida and Texas.....P. willeyi

3. Apothecia rare, 0.250.6 mm wide, the exciple thin, becoming powdery; disk flat, brownish black to black or thickly pruinose; hypothecium hyaline to pale brownish; spores hyaline to brownish, oblong, 1935septate transversely, 59septate longitudinally, 100170 x 3246 um. Thallus smooth to wrinkled, becoming powdery and sorediate (soralia discrete, becoming irregularly confluent), white throughout or creamy toward circumference, P+ orangered, K+ red (crystals), KC+ red, C, UV(norstictic acid). On broadleaved trees, rarely conifers, in welllit wayside and woodland situations, occasionally on damp, shaded, ± basic siliceous rocks,

rarely on limestone. New Hampshire, Oklahoma, Washington to California.P. argena

Literature

Fink, B. 1935. Lichen Flora of the United States. Ann Arbor.

James, P. W. and C. J. B. Hitch. Phlyctis. In: Purvis, et al., Lichen Flora of Great Britain and Ireland.

Noble, W. 19___. Lichens of Douglas Fir dry zone, Vancouver Island, etc. Ph.D. dissert.