

Phaeographina Müll. Arg.
(GRAPHIDALES: GRAPHIDACEAE)

After Fink (1935), Awasthi & Singh (1973), and Harris (1990, 1995)

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Thallus crustose, uniform, effuse, epi- or endo-phloic, ecorticate or with a cortex of periclinal interwoven hyphae; attached by medullary or prothallial hyphae. Apothecia generally elongate, often branched, sometimes ellipsoid to round, immersed to adnate or sessile; disk narrow, closed or open; proper exciple usually well developed, black and carbonaceous, brown-black, pale brown or yellowish, entire or sulcate; hypothecium pale to black; paraphyses unbranched; asci clavate, unitunicate, I-, usually 1-3 spored (to 8-spored); spores oblong ellipsoid to elongate ellipsoid, large, muriform, light to dark brown, thin walled, I+ violet. Pycnidia rare, immersed; fulcrum exobasidial; pycnosporos elongate, bacilliform. Norstictic, stictic. Photobiont Trentepohlia. On bark or wood.

1. Exciple not carbonized; hymenium not inspersed; spores 8/ascus. 2

1. Exciple carbonized. 3

2. Disk initially hidden, finally exposed; margin white, separating from thallus; margin and disk densely white pruinose; spores 2-4 x 8-celled, 27-35 x 10-13 um. No substances. Florida. P. asteroides Fink

2. Disk exposed from the beginning; disk weakly white pruinose; spores 1-2 x 6-celled, 20-30 x 10-11 um. Norstictic acid. Florida. P. sp. (Harris, 1990)

3. Lirellae strongly emergent with thin white covering, cup-shaped, oval to weakly elongate and once branched; margin and base thick, heavily carbonized; hymenium inspersed. No substances. Exciple closed below. Spores 95-)100-110(-133-190) x 24-27(-36) um, 8/ascus. Florida. P. quassiaeicola (Fée) Müll. Arg. s. lato

3. Lirellae immersed or if emergent, not white. 4

4. Disk narrow, white pruinose; margin black, carbonized only at edges; hymenium inspersed; spores 2-6/ascus, very variable, 35-50 x 13-24 um. Norstictic acid. P. sp. (Harris, 1990)

4. Disc broad, bluish-grayish pruinose or not pruinose. 5

5. Spores 24-30 x 9-12 um. Exciple usually carbonized below (hypothecium brown). Disk not or weakly pruinose; often clustered, sometimes radiately, rarely branched; hymenium inspersed; spores 1-3 x 5-7-septate, 8/ascus, oblong-ellipsoid. Thallus thin, smooth, greenish yellow to olive green. Apothecia 1-3 x 0.2-0.4 mm, partly immersed to adnate, straight to much more commonly curved or flexuous; disk open and flat, blackish brown; proper exciple dark brown. No substances. On trees, Florida, Alabama. P. explicans Fink in Hedrick

5. Spores (50-)65-75(-85) x 16-23 um, (1-?)4-8/ascus. Exciples with carbonized tissues, not basally continuous (hypothecium hyaline). Disc usually bluish pruinose, at least at first; large; hymenium inspersed. Thalloid exciple usually persistent. Labia divergent; disc very wide.

Thallus thin to moderately thick, smooth, greenish gray to pale olive green. Apothecia 6.5-7 x 0.3-0.9 mm, partly immersed to emergent; disk open and flat; proper exciple brown, surrounded laterally by a rarely disappearing thalloid one. Spores oblong-ellipsoid, 11-17-septate transversely, 2-5-septate longitudinally. No substances. On trees, Florida and Louisiana, to New Jersey. (including P. plurifera, with exciple open below, spores 75-160 x 22-30 um, thalloid exciple disappearing, apothecia to 10 mm long and 1.4 mm wide, and thallus sometimes yellowish). P. caesiopruinosa (Fée) Müll. Arg.

ADD:

Spores less than 50 um in length; apothecia closely grouped and often branched and hypothecium hyaline. Disc pale flesh-colored to brownish. Apothecia K- or pale, often fissurine, short, ± unbranched, gaping, never intricately intertwined; labia dark brown or ashy brown, ± divergent, entire (not striate); exciples brown or pale, discrete. Thallus K-, P+ yellow (psoromic acid). Florida (but not mentioned by Harris, 1990). (Graphina columbina)

EXCLUDED (ACCORDING TO HARRIS, 1990)

Spores 1 per ascus. Hypothecium sometimes dark below. Ascocarps (at least disc) darker than thallus; exciples without carbonized tissues; hymenium without crystals. New Jersey to Florida, west to Alabama and Louisiana. [N. American reports are misidentifications of P. caesiopruinosa according to Harris, 1990]. P. sculpturata

Literature

Awasthi. 19 . Microlichens of India, etc.

Awasthi & Singh. 1973.

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

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

Harris, R. C. 1990. Some Florida Lichens.

Rogers, 19_. Genera of Australian Lichens.