

Dacampia

Ascospores with 3-5 transverse septa, 20-40 x 7-12 um, smooth-walled, red-brown, somewhat attenuated at the apices. On Solorina, Leptogium, or unidentified crustose lichens. Not yet reported from N. America. D. hookeri (Borrer) Massal.

Dacampiosphaeria

Not yet reported for N. America.

Paraphyses persistent, branched and anastomosing. AScomata \pm immersed in convex deformations of the host thallus, crowded, (100-)150-250 μ m diam.; asci bitunicate, 4-spored; ascospores 3-septate, the end cells sometimes pale brown to subhyaline, (19-)20-30(-34) x (7-)8-11(-12) μ m. On Peltigera. D. rivana (de Not.) D. Hawksw.

Dactylospora

After Hafellner, 1979

Rev. 1/88

1. **Apothecia on Lobaria spp.** Excipulum and hypothecium d. red-brown. Spores finely warty, 12-14-17 x 4.5-5.2-6.5 um, L:W = 2.7:1. D. lobariella
1. **Apothecia on crustose lichens.**2
 2. **Spores parallel several-celled.**3
 2. **Spores mostly 2-celled, at most occasionally several-celled.**6
3. **Spores at least partly 5 or more septate.** 4
3. **Spores mostly to 3-septate.** 5
 4. Spores 3-7-septate; hypothecium brown, usually interspersed with dark violet blue granules. On crustose lichens over mosses, especially Biatora spp. Michigan. D. deminuta (Th. Fr.) Triebel
 4. **Spores 15-23(-27?) x 4-6 um**, (3-)5-septate (to -7-septate or muriform according to Hawksworth); hypothecium dark. On Protothelenella sphinctrinoides on moss. D. urceolata (Th. Fr.) Arnold
5. **Spores 12.5-15-19 x 5-5.9-7.5 um.** Excipulum and hypothecium in cross-section dark brown. Spores mostly 4-celled, but some 2-celled or 5-celled to 6-celled, very rarely also with incomplete longitudinal septum. On Ochrolechia spp. on soil, moss, etc. Colorado, Massachusetts, N. Carolina. D. glaucomarioides (Willey ex Tuck.) Hafellner
5. **Spores somewhat shorter and mostly somewhat narrower.**6
 6. **Spores (9.5-)12-15(-16) x (3.5-)4.5-6(-7) um**, 1-2(-3)-septate. Hypothecium grayish brown. On Pertusaria and Ochrolechia. D. parellaria (Nyl.) Arnold
 6. **Spores 9-11.5-15 x 3.5-4.3-5 um.** Excipulum in cross-section red-brown; hypothecium red-brown or spottily red-brown. Most spores 4-celled, some also 2-celled, narrow ellipsoid. On Pertusaria or rarely Ochrolechia. D. parasitica
7. **Asci polysporous.** Exciple and hypothecium dark brown. Spores 2-celled, occasionally also several celled, 7-8.9-11 x 4-4.9-6 um. On Pertusaria. D. pertusariicola
7. **Asci 8-spored or occasionally with fewer than 8 spores.** 8
 8. **On saxicolous or terricolous lichens** with green algae. 9
 8. **On lignicolous lichens** (e.g., Pertusaria). Apothecia narrowly bordered, excipulum brown in cross-section, hypothecium hyaline to brownish. Spores 12-13.4-15 x 6-7.3-8.5 um. The report by Hasse, on Lecanora muralis, from southern California, is probably based on a misidentification. D. inquilina

9. On Baeomyces. Epithymenium red-brown, K+ purple. Spores 9-11.6-14.5 x 4-5.2-7 um. Vermont (reported by Keissler, 1933, as Karschia). D. athallina

9. On other hosts. 10

10. On Pertusaria or sterile whitish crusts. Apothecia over 0.25 mm diameter. Spores 9-11.4-15 x 4.5-5.9-7.5 um. Hypothecium hyaline to brownish, distinctly paler than excipulum. Arizona; Greenland. Closely related to D. _____ amygdalariae. D. saxatilis (Schaerer) Hafellner v. saxatilis

10. On other hosts. 11

11. Spores larger than those of D. amygdalariae, thin-walled. On various representatives of Amygdalaria and other Porpidiaceae as well as Pilophorus. Thecial pigments K+ purple. D. purpurescens

11. Spores smaller. Similar to D. purpurescens, but restricted to Amygdalaria. Alaska; Canada, northern U.S.; Greenland. D. amygdalariae

ADD:

On Icmadophila ericetorum. Washington, British Columbia. D. attendenda (Nyl.) Arnold.

Apothecia scattered or in small groups of two to seven, erumpent, black, smooth; disc flat, to 0.7 mm diam. with a low margin. Asci clavate, thick-walled, to 40 x 15 um, 8-spored; ascospores irregularly biseriate, elliptical, light brown, 10-15 x 3.5-5 um, 1-3-septate; paraphyses slender, with one or two olive brown apical cells 4-6 um wide. Leciographa parellaria (= Dactylospora parellaria)

D. athallina (Mull. Arg.) Hafellner

Apothecia 0.2-0.4 mm diam.; disc concave to flat, brown; exciple raised, brownish; hypothecium yellowish green; hymenium hyaline to light brown, 50-65 um high, K-, K/I+ blue; epithecium reddish brown, K+ red to purple; paraphyses not or sparsely branched, to 2.5 um thick, with swollen and reddish brown tips; asci clavate, external gelatin cap K/I+ blue, 35-45 x 10-14 um; spores narrowly ellipsoid to ellipsoid, brown, 1-septate, constricted at septum, (7.5)9-11 x 5-6 um. On Baeomyces, probably commensalistic.

D. attendenda (Nyl.) Arnold

Apothecia 0.1-0.2 mm diam., disc flat to convex, brown; exciple raised, brownish black; hypothecium light brown to dark brown, K-; hymenium hyaline to light brown, 50-70 um, epithecium brownish, K-, paraphyses not or sparsely branched, to 2.5 um thick, with swollen and brownish tips; asci elongate-clavate, external gelatin cap K/I+ blue, 30-40 x 10-12 um; spores ellipsoid or oblong, brown, 1-3-septate, slightly constricted at septa, epispore smooth, (7-)9.5-11.0-12.5(-13) x (3-)4-5.3-6.5(-8.5) um. On Icmadophila, probably commensalistic.

Literature

Hafellner, J. 1979. Karschia. Beih. z. Nova Hedwigia 62: 1-248.

Ihlen, P. G. 1998. The lichenicolous fungi on species of the genera Baeomyces, Dibaeis, and Icmadophila in Norway. Lichenologist 30: 27-57.

Triebel, D. 1989. Lecideicole Ascomyceten. Bibl. Lichenol. 35: 1-278.

Dinemasporium
(Coelomycetes)

On Peltigera. British Columbia. D. strigosum (Fr.) Sacc.

Sutton, N. 1980. The Coelomycetes. CMI, Kew.

Diploidia

After Lamb [Lynge?], 1940 (E. Greenland)

On thallus and apothecia of Rhizoplaca chrysoleuca and R. melanophthalma, Lecanora spp., and Lecidea spp. Ascocarps black, spherical, 0.1-0.15 mm diam., slightly sunk in the host; spores brown, 1-septate, 7 x 3-4 μ m, differentiated in large numbers from the inner thecial tissue, and lie in masses within the receptacle. D. lecanorae (Vouaux) Keissl.

Diploschistes

Spores (20-)25039(-35) x (8-)12-15 um, with 5 transverse and 1-2 longitudinal septa; asci usually 4-spored. On Cladonia, later becoming independent, with C+ rose thallus. D. muscorum

Diplotomma

Thallus white, at first parasitic? on Xanthoria and Caloplaca, later perhaps free. Apothecia at first immersed in the host, becoming adnate, to 0.5 mm broad. Spores 3-septate to muriform with 1 longitudinal septum, 15-20 x 9-12 um. Arctic-alpine. D. nivalis