

Myriosclerotinia N. F. Buchw.

Type species: *Myriosclerotinia scirpicola* (Rehm) N. F. Buchw. Apothecia cup-shaped to plane to funnel-shaped, brownish, stipitate, arising from a distinct sclerotium with a well-differentiated rind and medulla, medulla at first pinkish, becoming white when mature, developing within (or on) stems (culms) of cyperaceous and juncaceous hosts. Apothecial outer excipulum composed of globose cells (textura globulosa). Ascospores hyaline, unicellular, ellipsoid to allantoid. Macroconidial anamorphic state wanting. Microconidial anamorphic state produced in sporodochia (form genus *Myrioconium* Sydow.) in locules within host tissues of the culms, or wanting. Apothecia produced in spring and early summer. Some authors treat the species as members of *Sclerotinia*.

Literature: Whetzel (1946), Buchwald (1947), Jørstad (1964), Schumacher & Kohn (1985), Vaage (1996), Holst-Jensen & al. (1997b), Holst-Jensen & al. (1998).

1. On juncaceous hosts. Ascospores allantoid to narrowly ellipsoid [2](#).

1. On cyperaceous hosts. Ascospores ellipsoid [4](#).

2 (1). On *Luzula pilosa*. Sclerotia long, cylindrical, 5-30 x 0.5-1.5 mm. Apothecia one to several from each sclerotium, disc 2-6 mm diam., cupulate to applanate, stipe 7-25 x 0.4-1 mm. Asci 80-125 x 7-10 µm, 2- 4 -6 spored. Ascospores ellipsoid to allantoid, 14.5-18.5 x 5-7 µm. Apothecia in spring. Microconidial anamorphic state not observed in nature

Myriosclerotinia luzulae T. Schumach. & L. M. Kohn



Apothecia of *Myriosclerotinia luzulae* arising from sclerotia in decaying culms of *Luzula pilosa*, Norway, Østfold. (© Photo: Roy Kristiansen).

2. On *Juncus* spp [3](#).

3 (2). Sclerotium cylindrical, 4-20 x 0.5-3 mm. Apothecia one to several from a sclerotium, disc 2-12 mm diam., stipe 3-16 x 0.5-1.5 mm. Asci 60-95 x 4-5.5 µm. Ascospores narrowly allantoid with rounded ends, 7.5-15 x 1-2.5 µm. Microconidial anamorphic state in sporodochial locules, 0.5-1 x 0.5 mm, irregularly scattered along the upper host culm. Apothecia in spring

Myriosclerotinia curreyana (Berk.) N. F. Buchw.

3. Sclerotium cylindrical 6-25 x 0.5-2 mm. Apothecia one to several from each sclerotium,

disc 3-7 mm diam., stipe 4-20 x 0.5-1 mm. Asci 65-85 x 5-6 um. Ascospores narrowly ellipsoid with slightly pointed ends, 7-11 x 2-4 um. Microconidial anamorphic state in sporodochial locules, ca. 1 x 0.5 mm, irregularly scattered along the upper host culm. Apothecia in summer, most abundantly on *Juncus filiformis* ***Myriosclerotinia juncifida*** (Nyl.) Palmer

4 (1). On *Carex* spp [5](#).

4. On *Eriophorum*, *Eleocharis* or *Scirpus* [8](#).

5 (4). Sclerotia long and slender, curved, with pointed ends, developing inbetween leaf sheaths of young shoots, 30-200 x 4-12 mm. Apothecia cup-shaped, arising 2 - 16 from a sclerotium, disc 10-30 mm diam., stipe 30-100 x 1.5-2.5 mm. Asci 190-235 x 9-13.5 um. Ascospores ellipsoid, 11-16.5 x 7-10 um. Microconidial anamorphic state in sporodochial locules, 2-4 x 0.5-1.5 mm, distributed with regular intervals along the host culm. Apothecia in spring and early summer, on stems of *Carex rostrata* and *C. aquatilis* ***Myriosclerotinia caricisampullaceae*** (Nyberg) N. F. Buchw.

5. Sclerotia cylindrical to fusoid, or shell-like to tuberoid, less than 30 mm long [6](#).

6 (5). Sclerotia shell-like, becoming tuberoid, developing superficially in leaf sheaths of *Carex* spp. and *Eriophorum* spp. (see [description below](#)) ***Myriosclerotinia ciborium*** (Vahl:Fr.) Holst-Jensen, Vaage & T. Schumach. ined.

6. Sclerotia tuberoid to cylindrical, developing within culms of *Carex* hosts [7](#).

7 (6). Ascospores navicular, flattened to incurved on one side. Sclerotium cylindrical, 5-18 x 1-3 mm. Apothecia cup-shaped, solitary or two to three from a sclerotium, disc 3-7 mm diam., light brown to medium brown, stipe 2-25 x 0.5-1.5 mm. Asci 130-165 x 7-10 um. Ascospores 10.5-14 x 5.5-7 um. Microconidial anamorphic state in sporodochial locules in groups of 3-6, distributed at regular intervals along the host culm, each group dull black, elongate, 1-3 mm long. Apothecia in early summer on *Carex* spp., particularly frequent on *C. chordorrhiza* ***Myriosclerotinia duriaeana*** (C. Tul. & Tul.) N. F. Buchw.

7. Ascospores ellipsoid, with slightly pointed ends. Sclerotium tuberoid to cylindrical, 3-15 x 2-5 mm. Apothecia cup-shaped, solitary or two to three from a sclerotium, cup (disc) 3-9 mm diam., medium brown, stipe 5-20 x 0.5-1.5 mm. Asci 160-220 x 7.5-10 um. Ascospores 13-17 x 5.5-7.5. Microconidial anamorphic state in sporodochial locules in groups, 1-5 x 0.2-0.5 mm, irregularly scattered on stems of its host. Apothecia in early summer ***Myriosclerotinia sulcatula*** T. Schumach. & L. M. Kohn (= *M. sulcata* (Whetzel) N. F. Buchw. nom. illeg.)

8 (4). Sclerotia shell-like, becoming tuberoid, 10-25 x 4-10 mm, developing superficially in leaf sheaths of *Eriophorum* and *Carex*. Apothecia one to several from each sclerotium, disc deeply cupulate to turbinate, 5-15 mm diam., medium to dark brown, stipe 5-40 x 1.5-2 mm. Asci 140-190 x 7.5-12 um. Ascospores ellipsoid, flat to concave on one side, bi-tri-guttulate, 9.5-18 x 4.5-7.5 um. Microconidial anamorphic state not observed in nature. Apothecia in summer ***Myriosclerotinia ciborium*** (Vahl: Fr.) Holst-Jensen, Vaage & T. Schumach. ined. (= *Ciborinia ciborium* (Vahl:Fr.) T. Schumach. & L. M. Kohn = *Sclerotinia vahliana* Rostr. = *Myriosclerotinia vahliana* (Rostr.) N. F. Buchw. = *S. arctica* Elliott)

8. Sclerotia tuberoid, cylindrical or fusoid, developing within culms of *Eriophorum*, *Scirpus* or *Eleocharis* [9](#).

9 (8). Sclerotia cylindrical, elongate, 3-30 (-50) x 0.5-2.5 mm, developing within the stems, or exceptionally in the leaf sheaths of *Eriophorum* spp., *Scirpus cespitosus* or *Eleocharis uniglumis*. Apothecia solitary or two to four from a sclerotium, cup-shaped to plane, disc 2-9 mm diam., light brown to medium brown, stipe 3-30 x 0.5-1.3 mm. Asci 70-140 x 5-10 μ m. Ascospores narrowly ellipsoid, slightly inequilateral, 8-15 x 3-5.5 μ m. Microconidial anamorphic state not observed in nature. Apothecia in spring and early summer *Myriosclerotinia dennisii* (Svrcek) Schwegler (= *M. gregoriana* (Palmer) Palmer)



Apothecia of *Myriosclerotinia dennisii* arising from sclerotia in decaying culms of *Eriophorum* sp., Norway. (© Photo: Roy Kristiansen).

9. Sclerotia tuberoid to fusoid, from 5-20 x 3-10 mm (tuberoid: in *Scirpus lacustris*, incl. ssp. *tabernaemontani*, *S. sylvaticus*) to 5-22 x 1-3 mm (fusoid: in *S. maritimus*, *Eleocharis palustris*). Apothecia one to several from each sclerotium, cup-shaped to plane, disc 3-15 mm diam., light brown to medium brown, stipe 3-22 x 0.5-2 mm. Asci 110-150 x 5.5-9 μ m. Ascospores ellipsoid, with slightly pointed ends, 9-16 x 4.5-7 μ m. Microconidial anamorphic state in ovoid to elongate sporodochial locules, 0.5-5 mm broad, distributed at irregular intervals along the host culm. Apothecia in spring and early summer *Myriosclerotinia scirpicola* (Rehm) N. F. Buchw. (= *Sclerotinia eleocharidis* Henders.)



Apothecia of *Myriosclerotinia scirpicola* arising from sclerotia inside culms of *Scirpus lacustris* floating on the water, Norway, Telemark, Bamble, N end of Stokkevatn. Note the black spordochia containing microconidia of the *Myrioconium* type. (© Photo: Arne Holst-Jensen).