

**Sphinctrina** Fr.  
(CALICIALES: SPHINCTINACEAE)

After Purvis, Poelt & Vezda, Fink, and others

Rev. 5/94

Thallus usually absent, or possibly rarely developing an autonomous thallus. Apothecia sessile to short-stalked, black, without pruina; head globose to obvoid. True exciple well developed, constricted at the edge, consisting of dark brown to reddish brown or in part pale,  $\pm$  periclinally arranged and interwoven hyphae; central part of stalk pale, outermost part dark brown or reddish brown. Asci cylindrical, disintegrating at a rather late stage, formed singly from ascogenous hyphae with croziers, with a single functional wall layer, I-. Spores uniseriately arranged, simple, globose, the wall thick, dark, in semi-mature stages with gelatinous coat; mature spores smooth or ornamented with ridges or verrucae, accumulating in a black spore mass. Conidiomata unknown. Parasitic or commensalistic on lichens, mainly on bark, sometimes also on rocks according to the host habitat.

Based on the spore mention [measurements?] given, Fink's report of "*S. microcephala* (Sm.) Nyl." is probably based on *S. tubaeformis* rather than *S. anglica*; however the reports from Florida and California may be based on different species.

**1. Spores ellipsoidal**, simple, (9-)12-15.5(20) x 6-8(-9)  $\mu$ m, the ends pointed, with distinctive surface ornamentation of coarse, longitudinally arranged and reticulately interconnected ridges. Apothecia 0.15-0.36(-0.45) mm high, often  $\pm$  immersed, stalks absent to short, 0-1.2 times as long as head, black or dark brown; capitulum 0.14-0.25(-0.36) mm wide,  $\pm$  globose, often somewhat expanded vertically and slightly irregular, shiny black or dark brown; true exciple dark brown in section, K-. Parasitic on thin lichen thalli, e.g., *Pertusaria*.

.....*S. tubaeformis* Massal. (spelled *tubiformis* by Purvis; syn. *S. microcephala* Nyl., non (Sm.) Körber) (see Tibell, 1996 for fuller description)

**1. Spores  $\pm$  spherical.** .....2

**2. Apothecia sessile or with a very short stalk; excipulum in section reddish, K+ red.**  
Spores 8, uniseriate in cylindrical asci,  $\pm$  globose to squarish, mostly (5.39-)4.04-[5.85]-6.66(-6.86)  $\mu$ m (according to Selva), or 8-10  $\mu$ m diam. (according to Tibell), some slightly elongate to bullet-shaped and occupying terminal positions within asci, 4-7.5 x 4.5-6.5  $\mu$ m (Tibell); surface ornamentation consisting of  $\pm$  distinct minute warts, often with some irregular cracks; reticulate ornamentation often obscured by deep, dark brown to black pigmentation, giving the surface a papillate appearance; larger spores irregularly sculptured; semimature spores with hyaline sheaths that become less evident with age. Apothecia 0.16-0.33(-0.7) mm high, typically occurring singly over host's thallus, shiny, epruinose; stalk 0-1 times as long as head, tapering abruptly into the capitulum, dark to pale brown or blackish; capitulum to 0.16-0.36(-0.5) mm wide, turbinate to  $\pm$  globose but often slightly irregular, shiny, black or dark brown; lower portion of excipulum and upper portion of stalks with purplish highlights, reddish brown in wet mount; stalks with

hyaline envelopes; mazaedium black, extruding through constricted apex of excipulum; true exciple dark reddish brown in section, K+ red. Some apothecia colored like the host's thallus but only occasionally bearing normal spores. Pycnidia not seen. Parasitic on Pertusaria or rarely Diploschistes, mainly on old trees (Quercus, Betula, Fagus, Fraxinus). Massachusetts, New York, Illinois, Minnesota; Maine. Fink also reported it on Thelomma mammosum on rocks in California, but the identity of that material should be checked. ....S. turbinata (Pers.) De Not.

**2. Apothecia with a distinct stalk at least as high as the capitulum; excipulum dull or dark brown, K-. ....3**

**3. Stalk about as high as the capitulum (0.6-1.7 times as long), black; spores 7-10 x 6.5-8.5 um, with distinct ornamentation of minute warts.** Apothecia 0.19-0.36 mm tall, with a short but distinct stalk, black or rarely dark brown; capitulum 0.11-0.23 mm diam.,  $\pm$  globose, often slightly irregular, shiny, black; excipulum dull brown. On various crustose lichens over wood. ....S. anglica Nyl. (syn. S. microcephala (Sm.) Körber non Nyl.

**3. Stalk slightly longer than the capitulum (0.8-2.4 times as long), pale to dark brown; spores 4-6 um, with indistinct ornamentation.** Apothecia 0.2-0.3 mm tall, distinctly stalked; stalk pale to dark brown, rarely black; capitulum 0.12-0.19 mm diam.,  $\pm$  globose but often somewhat compressed vertically, regular and smooth, shiny dark brown, rarely black; stalk usually paler; excipulum dark brown. On Pertusaria or Diploschistes, particularly on old deciduous trees. Virginia. ....S. leucopoda Nyl. (see Tibell, 1996 for fuller description)

ADD:

On Lecanora pachysoma on rock, Baja California. .... S. sp. (may or may not be the same as one of the above species).

### Literature

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

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