

Naetrocymbe

After Harris (1995)

Rev. November 16, 1998

The genus is characterized by ascomata with a single chamber, peculiar pseudoparaphyses which are short-celled, with \pm refractive, differentially staining areas at the tips, asci with obpyriform apical loculi without a nasse, often subtriangular in section, ascospores that are hyaline, soleiform, 1-septate to submuriform, often granularly oriented, and microconidia that are shortly bacilliform.

Based on my current understanding (which may be screwed up) there is some problem involved with this genus, or at least with N. punctiformis. Esslinger (1998) does not accept Naetrocymbe as a separate genus, and puts the species into Arthopyrenia.

1. Ascospores 6-celled, 20-23 x 5-5.5 um; physes persistent. Florida. N. sp. (Harris 1995)

1. Ascospores 2-4-celled. 2

2. Ascospores 4-celled. 3

2. Ascospores 2-celled (rarely 4-celled when postmature). 4

3. Ascomata resting in extensive dark brown subiculum, 0.2-0.3 mm diam.; ascospores 17-20 x 5.5-7 um. Northern. Thallus dark brown; hyphae thick, epiphloeodal; spores 17-20 x 5.5-7 um. (N. rhypona (Ach.) R. C. Harris) [no "good" material seen from for N. America]

3. Ascomata not surrounded by a subiculum, 0.1-0.2 mm diam.; ascospores 17-21 x 5-6 um. Subtropical. Thallus whitish, grayish or little different from the surrounding bark. Asci ovate, 35-50 x 18-22 um; spores 17-21 x 5-6 um (perispore not obvious). Ascocarps superficial or partly immersed, hemispherical, 0.1-0.2 mm diam.; wall brown, lacking below. Paraphyses thick and irregular, somewhat gelatinized. Spores irregularly arranged, narrowly ovate, soon 4-celled, a few becoming 6-celled. On smooth bark. Florida. N. atomarioides (Mull. Arg.) R. C. Harris

4. Physes dissolving with only fragments remaining; ascospores 14.5-17 x 4-5 um.

Florida. N. quassiaecola (Fee) R. C. Harris

4. Physes persistent. 5

5. Ascospores large, 25-32 x 6-8 um. Ascocarps superficial, flattened, 0.4-0.6 mm in diameter or length, sometimes less in width; Ascocarps orbicular to elliptical in outline. Paraphyses slender but rather irregular and somewhat gelatinized. Asci narrowly ovate, 85-100 x 24-27 um. Microconidia rod-like, ca. 5 x 1 um. On smooth bark. Maine. N. megalospora (Lonnr.) R. C. Harris

5. Ascospores smaller, 26 um or less long. 6

6. Ascomata superficial, flattened, often surrounded by dark hyphal ring. 7

6. Ascomata at least initially immersed, \pm globose. 8

7. Spores larger, 19-25 x 5.5-7.5 um; ascocarps hemispherical or flattened, 0.3-0.5 mm in diameter, superficial; wall lacking below. Paraphyses quite slender, but rather irregular and tending to gelatinize. Asci ovate to narrowly ovate, 60-90 x 16-25(-30) um. Spores irregularly arranged, narrowly ovate, rarely narrowly elliptical, 2-celled; perispore often rather thick. Microconidia rod-like, 4-5 x 1 um. On smooth bark, most often on young Fraxinus. Maine, Vermont, Minnesota. N. fraxini (Massal.) R. C. Harris)

7. Ascospores 15-20 x 4.5-5.5(-6.5) um. Asci shorter and stouter, 30-60 x 15-24 um. Ascocarps superficial, flattened to hemispherical, 0.1-0.3 mm diam.; wall lacking below. Paraphyses thick, to 2-4 um wide, irregular, with short cells and often appearing rather parenchyma-like, occasionally somewhat gelatinized. Spores ovate to narrowly ovate, rarely narrowly elliptical, 2-celled, rarely 4-celled in old age; perispore thin. Microconidia short, rod-like, 3-4 x 1 um. On smooth bark. Arizona, California, Connecticut, Iowa, Ontario, Massachusetts, Minnesota, New York, S. Dakota, Washington, Maine, British Columbia. Ascospores 2-celled (rarely 4-celled when postmature); physes persistent; ascospores 15-20 x 4.5-5.5(-6.7) um. On a variety of smooth barks, northern U.S., south to Long Island. N. punctiformis (Pers.) R. C. Harris

8. Ascospores 21-33 x 6-7.5 um. Ascocarps subglobose, semi-immersed, 0.1-0.15 mm in diameter; Thallus endophloedal; Trentepohlia present. Paraphyses thick, to 3 um wide, irregular, somewhat gelatinized. Asci narrowly ovate, 60-90 x 20-25 um. Spores irregularly arranged, narrowly ovate, 2-celled; perispore thin. Microconidia short, rod-like, ca. 3 x 1 um. On bark. Florida and Alabama. Not mentioned by Esslinger. A. cedrina (Naetrocymbe cedrina (Zahlbr.) R. C. Harris)

8. Ascospores smaller, 15-22 x 4-5.5 um. Asci slender, 55-70 x 12-16 um. Ascocarps immersed, subglobose, ca. 0.2 mm diam.; paraphyses somewhat gelatinized; asci narrowly ovate, the ascus wall strongly thickened in the tip. Spores irregularly arranged, narrowly ovate, 2-celled, the lower cell often somewhat longer and narrower; perispore not obvious; 16-22 x 4-5 um. Microconidia rod-like, 4-5 x 1 um. On bark. Florida and Alabama. A. atractospora Zahlbr. (Naetrocymbe atractospora (Zahlbr.) R. C. Harris)

Literature

Harris, R. C. 1995. More Florida Lichens.