

Ocellularia G. Meyer
(THELOTREMATACEAE)

After Harris, 1990, 1995, and others

Rev. 5/94

Thallus crustose, uniform, ecorticate or with a poorly developed cortex, attached to the substrate by medullary or prothallial hyphae, epi- or rarely hypo-phloic, often splitting and exfoliating, or less commonly loosely organized or absent; medulla well developed to nearly absent.

Apothecia immersed in thallus or sessile in warts; disk round or rarely elongate; concave or flat; thalline rim distinct, incurved to suberect, usually forming a discrete pore; proper exciple fused, carbonized, completely closing the disk, but cracking with age and the remnants bordering the disk, or the disk left free within a thalloid margin; central columella often present, carbonized, simple to becoming reticulate; hypothecium hyaline; paraphyses unbranched; asci clavate, unitunicate, thick walled, I- (but hymenial gel may be I+), 1-8 spored; spores oblong to fursiform, transversely 1-many septate, hyaline or brown, I+ blue or rarely I-; walls unequally thickened to form lenticular locules.

Pycnidia unknown. Chemistry variable. Photobiont Trentepohlia, arranged as in Thelotrema. Usually on bark, tropical-subtropical.

- 1. **Ascospores hyaline.** 2
- 1. **Ascospores brown.** 8
 - 2. **Ascospores transversely septate.** 3
 - 2. **Ascospores densely muriform, 1-2/ ascus, over 100 um long.**
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- 3. **Ascoma large, emergent, hemispherical; medulla pink, C+ pink (gyrophoric acid); ascospores very large, 19-23-celled, 100-130 x 20-35 um.** Florida. O. americana Hale
- 3. **Ascoma smaller; medulla C-; ascospores under 50 um long.** 4
 - 4. **Thallus P+ red (cinchonarum unknowns); apothecia emergent with round pore; columella present; ascospores 9-11-celled, 27-37 x 7.5-8.5 um.** Florida. O. cavata (Ach.) Müll. Arg.
 - 4. **Thallus P+ yellow or P-.** 5
- 5. **Thallus P- (no substances).** Apothecia emergent; rim often eroding to expose black rim around pore. Columella present. 5a
- 5. **Thallus P+ yellow (psoromic acid).** 6
 - 5a. **Ascospores 4-6-celled, 13-20 x 5-8 um; thallus dull, ecorticate.** Florida. O. concolor Meyen & Flotow
 - 5a. **Ascospores 4-celled, 13-17 x 6-7 um; thallus ± glossy, thinly corticate.**

Florida. O. sp. (Harris)

6. Columella present. 6a

6. Columella absent; ascospores 6-8-celled, 25-32 μ m. Florida. O. sp. (Harris)

6a. Ascospores 6-8-celled, 17-24 x 6-7 μ m; apothecial margin not erect; pore usually small; columella undivided. Thallus thin, smooth to minutely granulose and warty, becoming chinky, greenish gray to ashy. Apothecia 0.3-0.8 mm across, immersed; disk concave to almost flat, black or grayish pruinose; proper exciple very thin, black; thalloid maring thin, elevated. Spores 8, oblong-ellipsoid. On trees, Florida (common); Louisiana. O. granulosa (Tuck.) Zahlbr.

6a. Ascospores 8(-9)-celled, 23-33 x 5-6 μ m; apothecial margin erect; disk \pm broad; columella becoming reticulate. Florida (rare). O. emersa (Kremp.) Mull. Arg.

7. Thallus P- (no substances), matt, usually roughened with small warts; medulla not conspicuous. Florida. O. sanfordiana (Zahlbr.) Hale

7. Thallus P+ orange (praestans unknown), shiny, very irregular; medulla conspicuous. Florida. O. praestans (Müll. Arg.) Hale

8. Ascospores transversely 4-celled. 8a

8. Ascospores submuriform. 9

8a. Apothecia immersed with small pore; columella undivided, not carbonized; pycnidia conspicuous, orange. Thallus P- (hypoprotocetraric acid). Ascospores 15-18 x 8-10 μ m, weakly granular or rugose warted. Florida. O. leiostoma (Tuck.) R. C. Harris (syn. Thelotrema leiostomum)

8a. Apothecia immersed to emergent with broadly exposed disk; columella divided, carbonized; pycnidia not conspicuous. Thallus P+ yellow (psoromic acid); ascospores 9-14 x 4-8 μ m, smooth. Florida. O. auberiana (Mont.) Hale

9. Thallus P- (no substances); ascospores 2 x 4-celled, 16-18 x 8-11 μ m, with reticulate ornamentation when older; columella absent. Thallus pale gray, matt, continuous. Apothecia immersed, subglobose, 0.5-0.6 mm across, with round, concolorous pore; exciple weakly carbonized above. Florida. O. retispora R. C. Harris

9. Thallus P+ yellow (psoromic acid); ascospores 2 x 4(-6)-celled, 13-16 x (6-)8-10 μ m, with weak striate ornamentation. Thallus greenish glaucous to greenish ashy gray, thick, epiphloeodal, smooth or cracked with age. Apothecia numerous, crowded, semi-emergent, 0.6-1.5 mm diam., non-lepadinioid, columellate, ostiole minute but wide open at maturity and exposing white pruinose disc, columella carbonized at the tip, dark brown to carbonized at the base, variable in nature, simple or becoming actinoid; proper exciple carbonized at the tip; spores 8, uniseriate, oblong-ellipsoid. Louisiana. O. fissa (Nyl.) Hale

ADD:

O. stictidea (Nyl.) Vezda

ADD (CROSS-REF.):

Thelotrema porinoides

EXCLUDED (according to Harris, 1990):

O. domingensis

O. interposita

O. postposita

O. meiosperma

O. obturascens

Literature

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

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

Hale, M. 19_. Thelotremataceae in Sri Lanka. [Need to get more info. from this and Hale's other treatments on Thelotremataceae].

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Patwardhan, P. G. and C. R. Kulkarni. 1977. A contribution to our knowledge of the lichen flora of India I: Family Thelotremataceae. Kavaka 5: 1-17.

Rogers, 19_. Genera of Australian Lichens.