27. **Pseudombrophila purpurea** (Seaver) Brumm., *comb. nov.* — Fig. 30, Pl. 24d

Humarina purpurea Seaver, N.-Am. Cup-Fungi (Operc.) 138. 1928 (basionym). — *Octospora purpurea* (Seav.) Khare & Tewari, Can. J. Bot. 56: 2118. 1978. — Lectotype (chosen here): U.S.A., Colorado, 1914?, *E. Bethel*, (NY-B2740; in part, exclusive of the *Byssonectria* element).

DESCRIPTION. — *Apothecia* gregarious, or closely crowded, sessile, on a broad base, up to 2–3 mm across, 1–1.5 mm high. *Receptacle* at first subglobular to cupulate, then becoming scutellate, 'often irregular from mutual pressure, dark reddish-purple to blackish-brown'; surface 'rough', tomentose covered with more or less interwoven appressed hairs; margin crenate, with narrow upstanding border and with tufts of hairs. *Disc* at first concave, then concave to almost flat, smooth, 'reddish purple (lighter than the outside of the apothecium)'.

Hymenium about 160 μm thick. *Hypothecium* 18–25 μm thick, of closely compacted thin-walled isodiametric angular cells 2.5–6 μm wide. *Medullary excipulum* up to or over 800 μm thick, hyaline, consisting of loosely intermingled hyphae 3.5–12 μm wide with subglobular rounded cells 9–35 x 8–23 μm (textura globulosa) in the spaces between. *Cortical excipulum* clearly differentiated, near the base 25–45 μm thick, at the margin 36–70 μm, brownish, consisting of relatively thick-walled isodiametric to oblong angular cells 9–25(–30) x 9–18 μm (textura angularis), tomentose. *Hairs* of two types, both arising from the outermost layer of the excipulum. Near the margin subcylindrical, appressed, sparsely branched, septate, 3.5–9 μm wide; the wall covered with amorphous reddish purple pigment. Near the base hairs standing away from the surface, curved or undulate, slender, more frequently branched than those near the margin, septate, hyaline, 2–3 μm wide.

Asci cylindrical to subcylindrical, rounded above, operculate, 'reaching 150–175 x 11–12 μm', 8-spored; the wall not staining blue with iodine. *Ascospores* uniseriate, 'parallel with the ascus or slightly oblique', ellipsoid, (length/width ratio 1.4–1.7, average 1.57), hyaline, 12.1–14.1 x 7.8–8.9 μm (average 13.0 x 8.3 μm), with one or rarely two guttules, at first smooth, becoming delicately sculptured at maturity, ornamented with an irregular incomplete net-work of striae of changing width, apiculi not seen in material examined, but according to Seaver (1928: 138): 'often with a minute apiculus at each end'; ornamentation up to 0.3 μm high. *Paraphyses* septate, slender, filiform, 'often adhering together at their apices', hyaline, with amorphous intercellular purplish brown pigment between the upper ends, 1.8–2.5 μm wide, not enlarged upwards.

HABITAT. — On damp soil associated with the subiculum of *Byssonectria terrestris*.

DISTRIBUTION. — Known only from the type locality in Colorado, U.S.A.

ETYMOLOGY. — From Latin, purpureus, purple coloured.

SPECIMEN EXAMINED. — **U.S.A.**: COLORADO: Denver, on soil [sand with vegetable debris, associated with the subiculum of *Byssonectria terrestris*], 1914?, *E. Bethel, s.n.* (lectotype of *Humarina purpurea* Seaver, NY-B2740).

NOTES. — This species was described from damp soil by SEAVER (1928). But on closer examination of the type specimen it is clear that the fungus is closely associated with the subiculum of *Byssonectria terrestris* of which fruit bodies are also present. Therefore a lectotype is indicated, excluding the *Byssonectria* element in Bethel's collection.

The ornamentation of the ascospores is in the shape of an irregular incomplete net-work. The minute apiculi mentioned by SEAVER (l.c.) are not conspicuous and could not be found again.

The amorphous reddish-purplish to purplish brown pigment, the subreticulate ornamentation, the presence of two types of hairs, and the association with a species of *Byssonectria* make this a typical representative of *Pseudombrophila* sect. *Nannfeldtiella*. It is not related to *Octospora* Hedw., as suggested by KHARE & TEWARI (1978). Perhaps these authors were misled by the accompanying fruit bodies of *Byssonectria*.

Pseudombrophila purpurea can be distinguished from *P. albicans* and *P. ramosa* by its growth in association with *Byssonectria terrestris* and the mixed structure of its medulla. The ascospores in *P. purpurea* are larger than in *P. ramosa* and less elongated in shape than in *P. albicans*.

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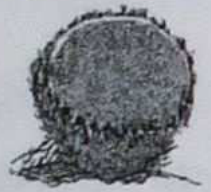

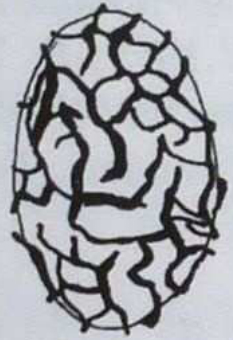

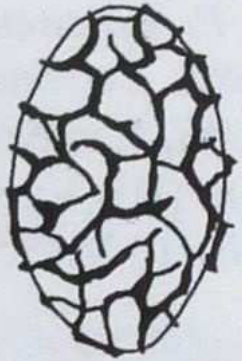

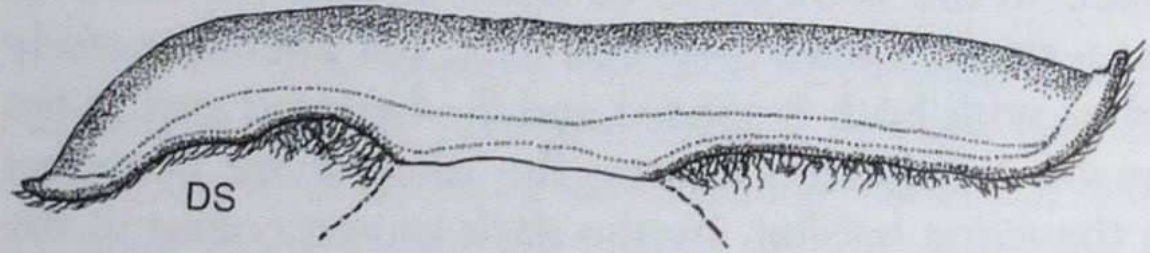

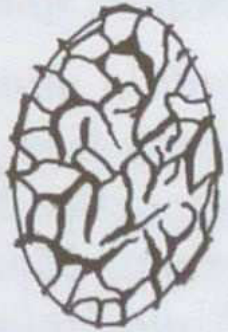

Fig. 30. — *Pseudombrophila purpurea*: habit of fruit bodies, x 8; diagrammatic section, x 50; ascospores, x 1600. All from lectotype of *Humarina purpurea*, NY.