



1, Habit ( $\times 10$ ); 2, fructification (ca  $\times 35$ ) from DAOM 5631; 3, paraphysis, ascus and ascospores from Ell. & Everh. F. Columb. 40(b).

**Diatrype albopruinosa** (Schw.) Cooke, Grevillea 13: 37. 1884.

≡ *Sphaeria albopruinosa* Schw., Trans. Am. Phil. Soc. Ser. II, 4: 195. 1832.

≡ *Valsa albopruinosa* (Schw.) O. Kuntze, Rev. Gen. Pl. 3(2): 539. 1898.

≡ *Diatrype disciformis* (Hoffm. ex Fr.) Fr. var. *macrospora* Berl., Icon. Fung. 3: 97. 1902.

= *Diatrype roseola* Wint., J. Mycol. 1: 122. 1885.

≡ *Valsa roseola* (Wint.) O. Kuntze, Rev. Gen. Pl. 3(2): 540. 1898.

= *Diatrype webberi* Ell. & Ev., in Webber, Rept. Nebr. Bd. Agric. 1889 p. 192, 1890 (*nomen nudum*).

= *Eutypa sheariana* Berl., Icon. Fung. 3: 68. 1902.

**FRUCTIFICATIONS** stromatic, scattered, discrete but sometimes closely gregarious, erumpent, at first subconical with the ruptured periderm closely adhering to the exposed stroma, becoming flat, discoid, circular or oval in outline, normally 1-2 mm but sometimes up to 5 mm across, with torn periderm reflexed away from the disc to form the characteristic sepaloid "teeth". Stromatic disc at first brown and covered with characteristic, white, pruinose down, becoming almost black and quite smooth. Inside, the stroma is white and of waxy consistency. **PERITHECIA** usually fewer than 10 per stroma but more numerous in exceptionally large fructifications, monostichous to irregularly or partly distichous, crowded and somewhat compressed laterally by mutual pressure when mature, up to  $400\mu$ .

wide and 600 $\mu$  deep, not converging, opening through small, obconic, widely spaced, shining-black and distinctly (3-)4(-5)-sulcate ostioles. ASCI slender, clavate, very thin-walled and long-stalked, up to 120 $\mu$  long and 12 $\mu$  wide at the widest point, containing 8 ascospores grouped in the upper half or third of the ascus. PARAPHYSES filiform, septate, composed of relatively narrow (5 $\mu$ ) cells alternating with swollen ones (10 $\mu$ ), exceeding the asci in length by 20-30 $\mu$ . ASCOSPORES 1-celled, (10-)11-15(-20)  $\times$  (3.5-)4(-6.5) $\mu$ , either allantoid to lunate, long, relatively narrow and slightly attenuated towards both ends, or reniform, short and relatively wide, inequilateral or even subellipsoid, pale yellowish brown to dark olive- or chestnut-brown, with the smaller and wider spores being usually darker.

**SUBSTRATE:** On dead branches and twigs of *Carpinus*, *Corylus*, *Fagus*, *Ostrya*, *Prunus*, *Quercus* and *Ulmus* spp.

**DISTRIBUTION:** Quebec, Ontario, Manitoba, Saskatchewan.

**COLLECTIONS:** On *Carpinus caroliniana* Walt., Ont., London, 1 Feb. 1890, in Herb. Dearness 345 p.p. in DAOM; on *Corylus americana* Walt., Ont., London, Oct. 1913, in Herb. Dearness 345c in DAOM; on *C. cornuta* Marsh., Ont., Almonte, 23 May 1939, DAOM 5453 (J.W. Groves), North Gower, 27 Aug. 1960, DAOM 105255 (G.D. Darker); Sask., Saskatoon, 26 April 1928, in Herb. Dearness 345 p.p. in DAOM (W.P. Fraser); on *Corylus* sp., Ont., London, May 1893, Ell. & Everh. F. Columb. 40(b) in DAOM (J. Dearness); Man., Winnipeg, 28 April 1926, in herb. Dearness 345 p.p. in DAOM (G.R. Bisby); on *Fagus grandifolia* Ehrh., Ont., Nashville, 24 Feb. 1952, DAOM 29615 (R.F. Cain), S. Aurora, 28 May 1932, DAOM 85387 (H.S. Jackson); on *Ostrya virginiana* (Mill.) K. Koch, Ont., S. Aurora, 28 May 1932, DAOM 85388 (H.S.J.); on *Prunus virginiana* L., Man., Winnipeg, 25 May 1926, in herb. Dearness 345 p.p. in DAOM (G.R.B.); on *Quercus* sp., Ont., London, in herb. Dearness 345 p.p. in DAOM; on *Ulmus americana* L., Ont., London, 1 Dec. 1913, in herb. Dearness 345g in DAOM; on *Ulmus* sp., Que., Burnet, 25 June 1939, DAOM 5631 (F.L. Drayton); on indet. hosts, Que., Chelsea, 10 May 1939, DAOM 5412 (J.W.G.); Ont., Belleville, 24 Sept. 1878, DAOM 36065, Ottawa, 19 April 1897, DAOM 36067 and 11 Sept. 1903, DAOM 36066 (J. Macoun); Man., Winnipeg, 12 May 1923, in herb. Dearness 345 p.p. in DAOM (G.R.B.). Also, several other collections on *Carpinus*, *Ostrya* and *Quercus* spp., Ont., London, in herb. Dearness 345 p.p. in DAOM.

**NOTES:** *D. albopruinosa* is common and widely distributed throughout North America. It has been reported on hosts other than those mentioned above, namely *Acer*, *Betula*, *Carya*, *Crataegus*, *Fraxinus*, *Juglans*, *Rhus* and *Salix*. Macroscopically it closely resembles *D. disciformis* but is quite distinct on account of its large and deeply coloured ascospores. *D. albopruinosa* is based on *Sphaeria albopruinosa* Schweinitz (1832, loc. cit.) collected from *Fagus* in New Jersey. The original description is inadequate, suggesting only a close similarity to *D. disciformis*, and the type specimen appears to have been lost. For these reasons Saccardo (Syll. Fung. 2: 371, 1883) referred *S. albopruinosa* to "Sphaeriaceae imperfectae cognitae". Cooke (1884, loc. cit.) transferred *S. albopruinosa* into *Diatrype* but his description, confined to the statement "sporidia allantoid, pale fuscous, .02-.022  $\times$  .004 mm", is equally inadequate, and no specimen was cited. Furthermore, Shear (Mycologia 38: 664, 1946) expressed doubt as to correctness of Cooke's figures. Berlese (1902, loc. cit.) discarded the epithet "*albopruinosa*" altogether, and listed this fungus under *D. disciformis* var. *macrospora*. *Eutypa sheariana* was described from a specimen collected by Shear on *Salix*, and (according to Shear, 1946, loc. cit.) was identical with a specimen identified by Schweinitz as *S. albopruinosa*. As was pointed out by Ellis and Everhart (N. Am. Pyrenom., 1892) and Rehm (Ann. Mycol. 4: 406; 1906), *D. roseola* Wint. (1885, loc. cit.), described from *Quercus*, is also the same fungus. The fungus sometimes referred to by the herbarium names "*D. americana* f. *ostryae* Rehm" or "*D. albopruinosa* f. *ostryae*" and "f. *coryli*" is *D. albopruinosa*. What Rehm (Ann. Mycol. 10: 57, 1912) described as *D. albopruinosa* var. *salicina* appears to be distinct, as is also *D. phaeosperma* Ellis described from *Amelanchier* and considered by Tiffany and Gilman (Iowa State J. Sci. 40, 1965) to be the same as *D. albopruinosa*. The European *D. durieui* Mont., which Ellis and Everhart (1892 loc. cit.) listed as a synonym of *D. albopruinosa*, is distinct.

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