



1, Habit ( $\times 5$ ); 2, fructification (ca  $\times 35$ ) from DAOM 4849; 3, ascus and ascospores from DAOM 45799.

*Diatrype virescens* (Schw.) Rav., F. Car. No. 48. 1855.

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

≡ *Diatrype disciformis* (Hoffm. ex Fr.) Fr. var. *virescens* (Schw.) Berk., Grevillea 4: 95. 1876.

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

**FRUCTIFICATIONS** stromatic, scattered, discrete, flat, disc-shaped, circular or oval in outline, usually 1-3 mm diam. but occasionally up to 4 mm across, erumpent by tearing of periderm into sepaloid "teeth" which become reflexed away from the disc. Stromatic disc at first yellow, with the characteristic copper oxide-coloured down which, however, soon rubs off to expose the disc which becomes dark brown. Inside, the stroma is cream-coloured to pale yellow-brown. **PÉRITHECIA** usually 10-20 per stroma, at first rounded, flask-shaped, becoming oval or ovoid and compressed laterally by mutual pressure, up to  $400\mu$  wide and  $600\mu$  deep, monostichous or nearly so, not converging, opening through small, obconic, widely spaced, shining-black, distinctly quadrisulcate ostioles. **ÁSCI** slender, clavate, very thin-walled and long-stalked, up to  $120\mu$  long and  $7\mu$  wide at the widest point, containing 8 ascospores irregularly grouped in the upper third of the ascus. **PARAPHYSES** sparse, inconspicuous, filiform, septate, about  $3\mu$  wide, exceeding asci in length. **ASCOSPORES** 1-celled, allantoid, straw-coloured, (8-)9-12(-15)  $\times$  1.5-2.5(-3) $\mu$ .

**SUBSTRATE:** dead twigs and smaller branches of *Fagus*.

DISTRIBUTION: Quebec, Ontario.

COLLECTIONS: On *Fagus grandifolia* Ehrh., Que., Mt. Burnet, 21 June 1937, DAOM 4849 (J.W. Groves), Chelsea, 19 Oct. 1936, DAOM 3900 (M.K. Nobles); Ont., S. Markham, 6 May 1930, DAOM 85401 (H.S. Jackson), Lynden, 7 May 1933, DAOM 85402, and 27 May 1933, DAOM 120957 (R.F. Cain), Vennacher, 17 Sept. 1953, DAOM 45799 (R. Horner Arnold), London, 9 Dec. 1889 in herb. Dearness 1179 p.p. in DAOM.

NOTES: Schweinitz described *Sphaeria virescens* from specimens collected on twigs of unidentified trees in N. Carolina and Pennsylvania, and stated that it differed from *D. disciformis* only in the colour of the stroma. Consequently Berkeley (1876, loc. cit.) made it into a variety of *D. disciformis*. The binomial *D. virescens* coined by Ravenel in 1855 (loc. cit.) was subsequently claimed by Curtis (Geol. & Nat. Hist. Survey N. Car. pt. 3 (Fungi), 1867), Cooke (Grevillea 13: 37, 1884) and Ellis and Everhart (N. Am. Pyren., 1892).

Though listed by Saccardo in "Sphaeriaceae imperfectae cognitae", there can be no doubt as to the identity of *D. virescens*. It is very common in North America, particularly in northern United States and Canada where it replaces the European *D. disciformis* as the most frequent diatrypaceous fungus on *Fagus*. Contrary to the statements of Ellis and Everhart (1892, loc. cit.) and Berlese (Icon. Fung. 3, 1902), the ascospores of *D. virescens* are larger than those of *D. disciformis*. Wehmeyer (Mich. Acad. Sci. Arts & Lett. Papers 4, 1925) grew *D. virescens* in pure culture and obtained a *Libertella* state with acicular, slightly bent conidia measuring  $23-34 \times 1-1.5\mu$ .

K.A. Pirozynski