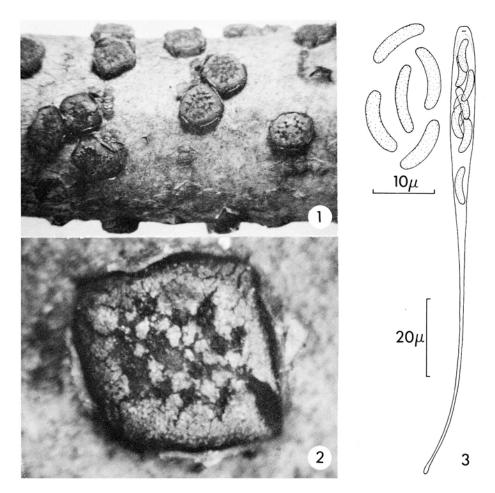
DIATRYPE VIRESCENS



1, Habit (× 5); 2, fructification (ca × 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. PERITHECIA usually 10-20 per stroma, at first rounded, flask-shaped, becoming oval or ovoid and compressed laterally by mutual pressure, up to 400μ wide and 600μ deep, monostichous or nearly so, not converging, opening through small, obconic, widely spaced, shining-black, distinctly quadrisulcate ostioles. ASCI slender, clavate, very thin-walled and long-stalked, up to 120μ long and 7μ wide at the widest point, containing 8 ascospores irregularly grouped in the upper third of the ascus. PARAPHYSES sparse, inconspicuous, filiform, septate, about 3μ 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 $23-34 \times 1-1.5\mu$.

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