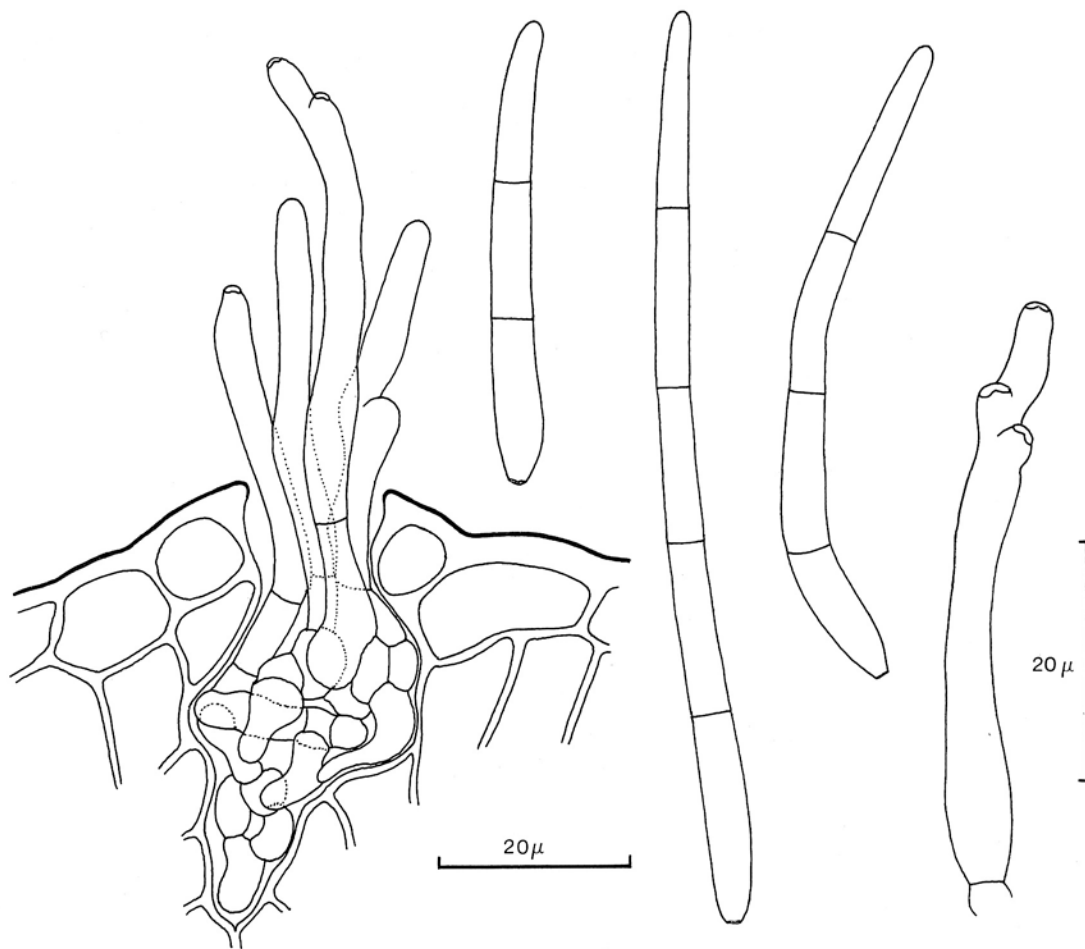


**CERCOSPORELLA
VIRGAUREAE**

Sporodochium, conidiophore and conidia from DAOM 147513

Cercospora virgaureae (Thümen) Allescher, Hedwigia 34: 286. 1895.
 ≡ *Ramularia virgaureae* Thüm., F. austriaci no. 1072. 1874.

SPOTS not sharply defined, yellowish, brown when old, angular or vein-limited, up to 5 mm across. FRUITING amphigenous but predominantly hypophyllous, in form of greenish grey to white coalescing and densely matted tufts. STROMATA subglobose to ovoid, substomatal, colourless, plectenchymatous, up to 40 μ diam., bearing up to 50 conidiophores. CONIDIOPHORES colourless, usually in form of simple conidiogenous cells, sometimes subdivided by one or two septa near the base, up to 100 μ long, mostly 4-7 μ wide, almost straight below, proliferating sympodially above to leave behind up to twelve pronounced geniculations bearing thickened, refractive scars 1.5-2 μ diam. CONIDIA colourless, obclavate-cylindric, 25-100 μ long, about 6 μ wide near the base and 4 μ wide at the apex, thin- and smooth-walled, (1-2)-3(-4-10)-septate, not constricted; basal hilum slightly thickened, often protruding.

SUBSTRATE: On living leaves of *Aster*, *Erigeron* and *Solidago*.

DISTRIBUTION: Quebec, Ontario, Manitoba and Saskatchewan.

COLLECTIONS: On *Aster multiflorus*, Man., Morden, 14 Sept. 1944, DAOM 19081 (W.L. Gordon). On *Erigeron annuus*, Que., Long L., Buckingham, 23 Aug. 1955, DAOM 51865 (J.A. Parmelee & L. Jenkins); Pink's L., Gatineau, 24 Aug. 1946, DAOM 19062 (D.B.O. Savile); Ont., London, (Dearness: Canad. F. 135), DAOM 37909 (J. Dearness); Ottawa, 9 June 1943, DAOM 13791, 2 Oct. 1943, DAOM 13792, 27 Aug. 1944, DAOM 14569, 2 Sept. 1944, DAOM 14515, 24 Sept. 1944, DAOM 14570, and 12 Aug. 1945, DAOM 15533 (D.B.O.S.), 16 Sept. 1954, DAOM 46033 (A. Payette). On *E. canadensis*, Ont., Ottawa, 28 July 1972, DAOM 147513 (K.A.P.), 14 July 1943, DAOM 13793, 9 June 1944, DAOM 14453 and 28 Aug. 1944, DAOM 14505 (D.B.O.S.); London, Sept. 1909, Ell. & Everh. F. Columb. 2918 (J. Dearness). On *E. philadelphicus*, Ont., Norwich, Oxford Co., 10 July 1943, DAOM 81493 (R.F. Cain); Poplar Hill, Middlesex Co., 12 July 1932, DAOM 81517 (R.F.C.); Hogg's Hollow, Toronto, 12 July 1932, DAOM 81516 (H.S. Jackson). On *Erigeron* sp., Que., Beauceville, 9 Aug. 1943, DAOM 13244 (M. Anselme); Danford L., 8 July 1947, DAOM 19556 (D.B.O.S.). On *Solidago canadensis*, Ont., Ottawa, 31 Aug. 1944, DAOM 14605, 1 Sept. 1944, DAOM 14606, 4 Sept. 1944, DAOM 14607 (D.B.O.S.); London, 25 July 1910 and 20 Sept. 1910, Herb. Dearness 3253 p.p. in DAOM (J. Dearness). On *S. graminifolia*, Ont., London, 26 June 1912, Bartholomew: F. Columb. 4710 (J.D.). On *S. hispida*, Ont., Bear I., Timagami L., 15 Aug. 1930, DAOM 1599 (H.S. Jackson & I.L. Conners). On *S. rigidulum*, Sask., Barford, 13 Aug. 1954, DAOM 44855 (R.J. Ledingham & R.C. Russell) and Wapella, 11 Aug. 1948, DAOM 25988 (R.D. Tinline & R.C.R.).

NOTES: This treatment of the species is based on that of Deighton (Mycol. Pap. C.M.I. 133, 1973), who provided a detailed description and complete synonymy. The species is widely distributed in tropical, but especially in north temperate regions of both hemispheres, and is confined to the Compositae, mainly *Aster*, *Erigeron* and *Solidago* of the Asterae.

According to Conners (Annotated index of plant diseases in Canada, Res. Branch Publ. 1251, Can. Dept. Agric. Ottawa, 1967), *C. virgaureae* (as *C. cana*) occurs in Manitoba also on *Aster cordifolius*, *Solidago canadensis* and *S. canadensis* var. *gilvocanescens*. Shaw (Wash. Agric. Exp. Sta. Bull. 765, 1973) records it from *Grindelia integrifolia* in British Columbia.

The parasite is very destructive to foliage of *Erigeron canadensis* growing in Ottawa.

K.A. Pirozynski