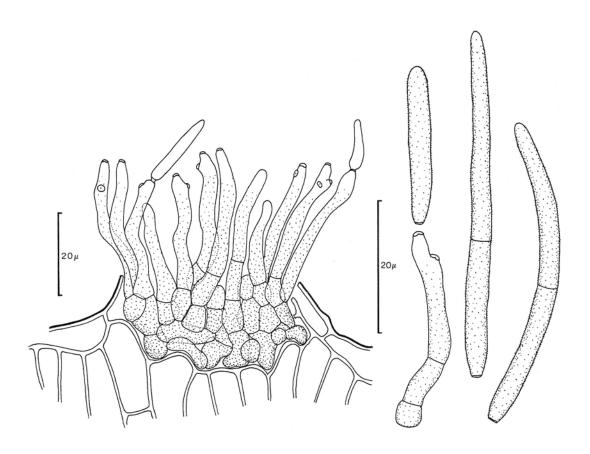
CERCOSPORA AVICULARIS



Sporodochium, conidiophore and conidia from DAOM 147518

Cercospora avicularis Winter, J. Mycol. 1: 125, and Hedwigia 24: 202. 1885.

SPOTS scattered, round or oval, mostly 1-3 mm across, sometimes irregularly confluent, greyish to orange-brown, bordered by a dark purple-brown raised margin. FRUITING amphigenous, usually confined to the centre of the spot, composed of densely gregarious, punctiform, dark olive-brown tufts of conidiophores. STROMATA sub- and intra-epidermal, more or less lens-shaped and about 50µ diam. and 20μ deep, composed of angular or rounded, dark olive-brown cells 5-7 μ diam., bearing up to 50 erumpent, tightly fasciculate conidiophores. CONIDIOPHORES in the form of a conidiogenous cell but sometimes I- or 2-septate near the base, dilute olive-brown, somewhat flexuous or geniculate, up to 40μ long and 4.5μ wide; apex attenuated, at first bearing a single, terminal truncate scar, later proliferating sympodially three or four times to displace the old scars to a lateral position. Conidial scars ring-shaped, much thickened, refractive, 1.5-2µ diam. CONIDIA cylindrical, straight, curved or somewhat twisted, narrowed towards the base which bears a flat, dark brown, ring-shaped and much thickened, refractive scar, gradually attenuated towards blunt, rounded apex, dilute yellowish brown or straw-coloured and minutely roughened throughout, at first continuous or with a single, more or less median, thin, colourless septum, 3μ wide near the base, 1.5- 2μ at the apex, and rarely exceeding 50μ in length, eventually with up to fifteen irregularly spaced septa, 5μ wide near the base, $2-2.5\mu$ at the apex and up to 100μ long. Colonies producing many of these large, multiseptate conidia can be recognized macroscopically by their olivaceous brown colour and thick, velvety texture.

SUBSTRATE: on living leaves of Polygonum spp.

DISTRIBUTION: Ontario and Manitoba.

- COLLECTIONS: On Polygonum achoreum, Ont., Ottawa, 28 July 1972, DAOM 147518 (K.A.P.). On P. aviculare, Ont., Granton, 10 July 1893, Ell. & Everh. F. Columb. 165 in DAOM (John Dearness); London, Dearness Canad. F. 197 (DAOM 37693), and 23 July 1892, herb. Dearness 1903 in DAOM (J.D.); Ottawa, 2 Aug. 1945, DAOM 15522 (D.B.O. Savile); Man., Winnipeg, 6 June 1933, DAOM 3491 (G.R. Bisby & M. Timonin). On P. erectum, Ont., Renfrew, 12 July 1949, DAOM 23332 (V. Wallen).
- NOTES: Bisby et al. (The fungi of Manitoba and Saskatchewan, N.R.C., Ottawa. 1938) reported *C. avicularis* as common in Manitoba on both *Polygonum aviculare* and *P. erectum*. The fungus is widely distributed in the United States (U.S.D.A. Handb. 165. 1960), and is probably widespread also in Canada on species of *Polygonum*, sections *Avicularia* and *Persicaria*.

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