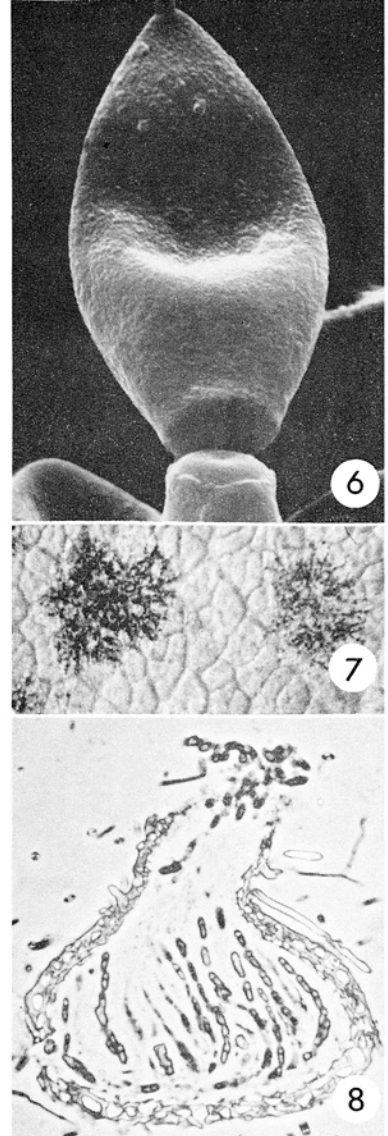
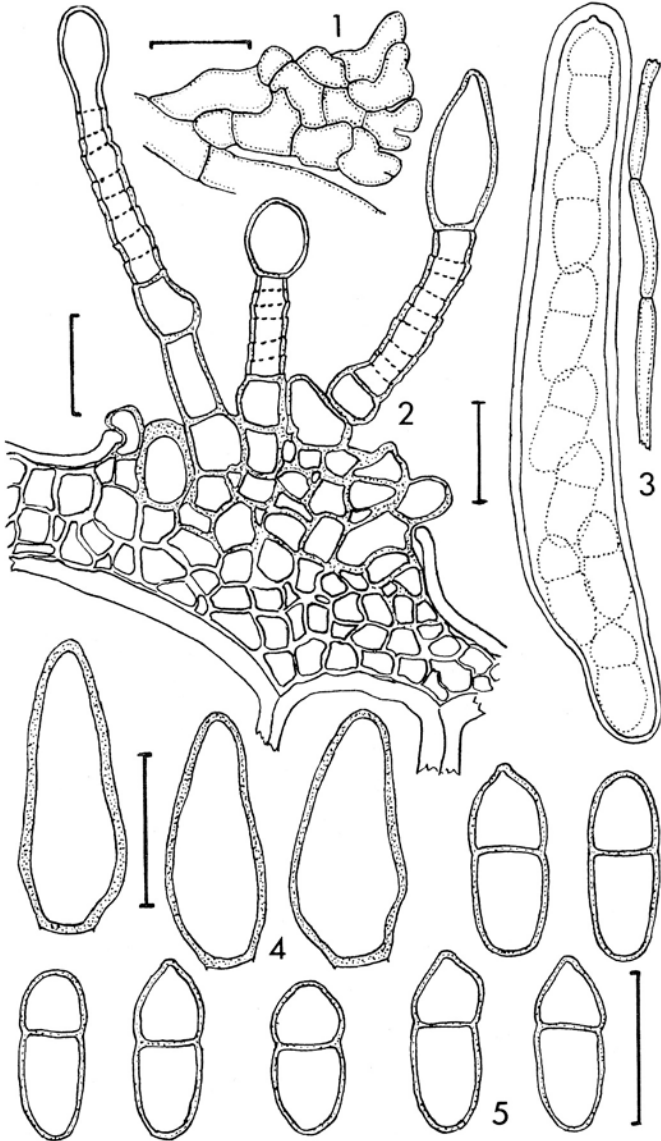


VENTURIA INAEQUALIS



1, Surface view of subcuticular mycelium, from DAOM 44000; 2, vertical section of subcuticular stroma; 3, ascus and portion of a pseudoparaphysis, from DAOM 134053; 4, conidia, from DAOM 44000; 5, ascospores, from DAOM 134053; 6, detaching conidium (X4550); 7, scab lesions, producing conidia, on leaf of "Almey" crab (X6); 8, vertical section of mature ascostroma, from culture (X250). Scales on drawings = 10 μ .

Venturia inaequalis (Cooke) Winter, in Thüm., Myc. Univ. Exs. Nr.261. 1875.
= *Sphaerella inaequalis* Cooke, Jour. Bot. (London) 4: 248. 1866.

Stat. conid.:

Spilocaea pomi Fr., Syst. Myc. 3: 504. 1832.

= *Fusicladium dendriticum* (Wallr.) Fuckel, Symb. Myc. p. 357. 1870.

HYPHAE, throughout overwintered plant tissue, cylindrical, brown. **ASCOSTROMATA** solitary, scattered or gregarious, immersed, eventually erumpent, globose, 90-180 μ in diameter, ostiolate with a distinct papilla; in vertical section, ascostroma wall, 15-20 μ wide, consisting of one to three outer layers of dark brown angular cells and one or more inner layers of hyaline cells. **SETAE** absent, few to numerous, up to 75 μ long, about 9 μ wide at the base, dark brown. **PSEUDOPARAPHYSES** septate, hyaline, 2 μ wide. **ASCI** bitunicate, oblong to obclavate, 45-75 \times 10-12 μ , maturing a few at a time. **ASCOSPORES** greenish, ellipsoid, apex rounded or with a short projecting point, base rounded, smooth, single septate with lower cell often twice the length of the upper cell, usually constricted at the septum, uniseriate to overlapping biseriate, 10-15 \times 4-7 μ .

MYCELIUM producing conidial state, subcuticular on living leaves. The hyphal cells at the periphery of the subcuticular mycelium 5 μ or more wide, lobed or denticulate. **CONIDIOPHORES** epiphyllous, originating from localized thickenings (stromata) of the subcuticular mycelium, brown, simple, erect, fasciculate, often septate, becoming annellate, base of conidiophore usually swollen, up to 55 μ long, 5 μ wide. **CONIDIA** mainly obclavate, yellow to brown, one-celled or occasionally one-septate, 17-25(-30) \times 6-9 μ .

HOST: Conidial state on living leaves, sepals, fruit and twigs of *Malus pumila* Mill., *M. baccata* (L.) Borkh., *M. coronaria* (L.) Mill., and *M. ioensis* (Wood) Britt. Perfect state occurring on overwintered leaves.

DISTRIBUTION: Nova Scotia, Quebec, Ontario, Manitoba, Saskatchewan, British Columbia (see NOTES).

COLLECTIONS (selected): N.S., King's Co., Kentville, 27 March 1953, DAOM 44000 (D. Creelman), imperfect state only. Ont., Ottawa, C.E.F., 30 April 1971, DAOM 134053 (M. Corlett), perfect state only.

NOTES: Collections of the fungus in DAOM are lacking for some provinces although I.L. Connors (Annotated index of plant diseases in Canada, Res. Branch Publ. 1251, Can. Dept. Agric., Ottawa, 1967) reports that apple scab is present in all provinces. The synonymy of the conidial state is given by S.J. Hughes (Can. J. Bot. 31: 560-576. 1953) and synonymy of the perfect state by M.E. Barr (Can. J. Bot. 46: 799-864. 1968).

Michael Corlett