



1, Pseudothecia on leaf of *Salix* sp., $\times 38$; 2, 3, sections through pseudothecia, $\times 375$; 4, seta; 5, ascospores; 6, ascus and ascospores; 4-6, scale = $10\mu\text{m}$. 1,3,4,6, DAOM 62923; 2, DAOM 63265; 5, type (see notes).

Venturia subcutanea Dearn., Mycologia 9: 347. 1917.

= *Mycosphaerella minor* (Karst.) Johanson var. *reticulata* Dearn., Canadian Arctic Exped. 1913-1918, vol. IV; Botany, Part C: Fungi, p. 7c. 1923.

PSEUDOTHECIA subepidermal, erumpent, usually amphigenous, scattered or grouped in blackish spots on the leaves, globose to subglobose, $65\text{-}137\mu\text{m}$ diam., dark brown to black, glabrous or setose; ostiole $15\text{-}30\mu\text{m}$ across. Pseudothecium wall $12\text{-}18\mu\text{m}$ thick and composed of 2(-3) layers of medium to dark brown angular to prismatic cells $6\text{-}16 \times 3\text{-}6\mu\text{m}$. SETAE around the ostiole, dark brown, straight or curved, thick-walled, nonseptate, $28\text{-}70\mu\text{m}$ long, $4\text{-}7\mu\text{m}$ wide near the base; base bulbous, up to $11\mu\text{m}$

wide. PSEUDOPARAPHYSES filiform, hyaline, sparingly septate, 2-4 μ m wide, persisting at the top of centrum. ASCI bitunicate, 8-spored, cylindrical to somewhat obclavate with a short stipe, (53-)63-72(-77) \times 15-17(-18) μ m. ASCOSPORES greenish yellow, becoming yellow-brown at maturity, ellipsoidal to obovoid, (15-)16.5-19 \times (5.5-)6-7.5 μ m, equilateral to slightly inequilateral, obtusely rounded at both ends, 1-septate at or just above the middle, slightly constricted at the septum; upper cell broader; wall strongly echinulate at maturity; irregularly biseriolate in the ascus.

SUBSTRATE: Overwintered leaves of *Salix* spp.

DISTRIBUTION: Quebec, North West Territories.

COLLECTIONS: **Que.**: Mt. Albert, Gaspé Prov. Park, 8 July 1957, on undetermined *Salix* sp., DAOM 174151 (H.E. and M.E. Bigelow); Killinek I., Pt. Burwell, 5 Aug. 1955, on undetermined *Salix* sp., DAOM 62924 (R.T. Wilce 393). **N.W.T.**: Ellesmere I., Cape Belknap, 16 July 1955, on *Salix arctica* Pall., DAOM 63265 (R. Schuster 35279); Ellesmere I., Cape Belknap, 16 July 1955, on *Salix (arctica?)*, DAOM 63261 (R.S. 35277); Baffin I., Frobisher Bay, 1 June 1955, on undetermined *Salix* sp. (annotated as *Salix reticulata* L. by A. Sivanesan), DAOM 62923 (R.T. Wilce).

NOTES: The Canadian collections cited above agree with the holotype (Herb. Dearness 9288, in DAOM) from Kongengevik, Camden Bay, Alaska collected by F. Johansen, June 1914, on dead leaves of *Salix reticulata* L.

No anamorph has been discovered in nature (Nüesch, Phytopath. Zeit. 39:353. 1960; Barr, Can. J. Bot. 46:814. 1968; Sivanesan, The Taxonomy and pathology of *Venturia* species. Biblioth. Mycol. 59, p. 105. 1977). Nüesch (op. cit.) cultured *V. subcutanea* and obtained only sparse development of pseudothecia but no anamorph. *V. subcutanea* differs from other Canadian species of *Venturia* on *Salix* (*V. minuta* Barr, Fungi Canadenses No. 223 and *V. chlorospora* (Ces.) Karst., Fungi Canadenses No. 225) by its larger and more coarsely echinulate ascospores.

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