

Venturia ribis: a new species of ascomycete

A. SIVANESAN

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Venturia ribis Sivanesan, sp.nov. on *Ribes alpinum* L. from Finland is described and illustrated. No species of *Venturia* has been reported on *Ribes* so far. It is closely allied to the *Venturia* species in which the ascospores are septate just above the middle. *V. aesculi* (H. Sydow) Sivan., *V. corni* E. Müller, *V. frangulae* Krieger and *V. pruni* Barr have similarly septate ascospores whose size also lie within close range of that of *V. ribis*. The differences between these species and that of *V. ribis* are given.

A. Sivanesan, Commonwealth Mycological Institute, Ferry Lane, Kew, Surrey TW9 3AF, United Kingdom

Introduction

The species described here was collected by Mr. Unto Söderholm (Tampere, Finland), who was kind enough to let me describe it. In the monograph of *Venturia* by Sivanesan (1977) no species has been reported on *Ribes*. It was compared with closely related species like *V. aesculi* (H. Sydow) Sivan., *V. corni* E. Müller, *V. frangulae* Krieger and *V. pruni* Barr. It differs from *V. aesculi*, *V. corni* and *V. pruni* in the setose ascostroma and from *V. frangulae* in the shape of asci and in the shorter setae. The ascospores in *V. aesculi* are smooth to verrucose and in *V. corni* they are much wider. The asci in *V. pruni* are much smaller than in *V. ribis*. The differences between these species and that of *V. ribis* are given below (Table 1).

Venturia ribis Sivanesan, sp.nov.

— Figs. 1–5

Ascostromata immersa, subepidermalia, dispersa, amphigena, plerumque hypophylla, globosa, 60–85 µm alta, 65–83 µm in diam, ostiolo papilliformi setulis aculeatis ornato. Setae atrobrunneae, crassitunicatae, aseptatae, 30–50 µm longae, usque 4.5 µm crassae. Muri ascostromati 6.5–8 µm crassi, e cellulis pseudoparenchymati, crassitunicati, stratis 2–3 textura angularum formans. Asci obclavati cylindrici, brevi pedicellati, bitunicati, 38–50 × 6–10 µm. Ascosporae supra medium uniseptatae, constrictae, oblongae, olivaceae, deorsum biseriatae sursum uniseriatae in asco, subtiliter verruculosae, cellula superiore leviter latiore, 9–10.5 × 3–3.5 µm. Pseudoparaphyses filiformes, hyalinae, ramosae, septatae.

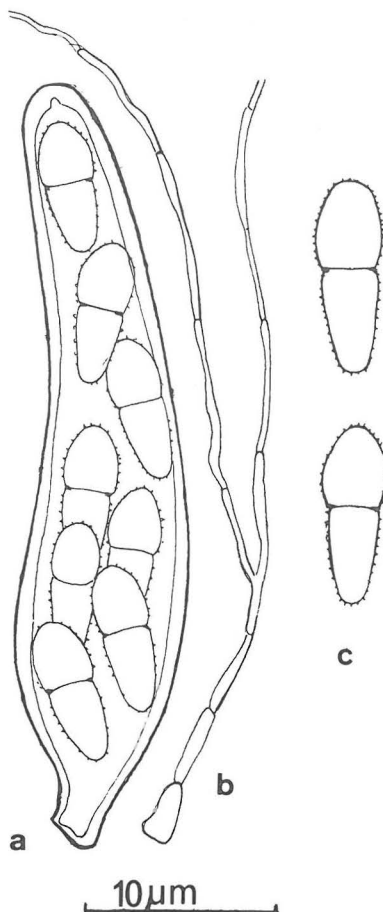
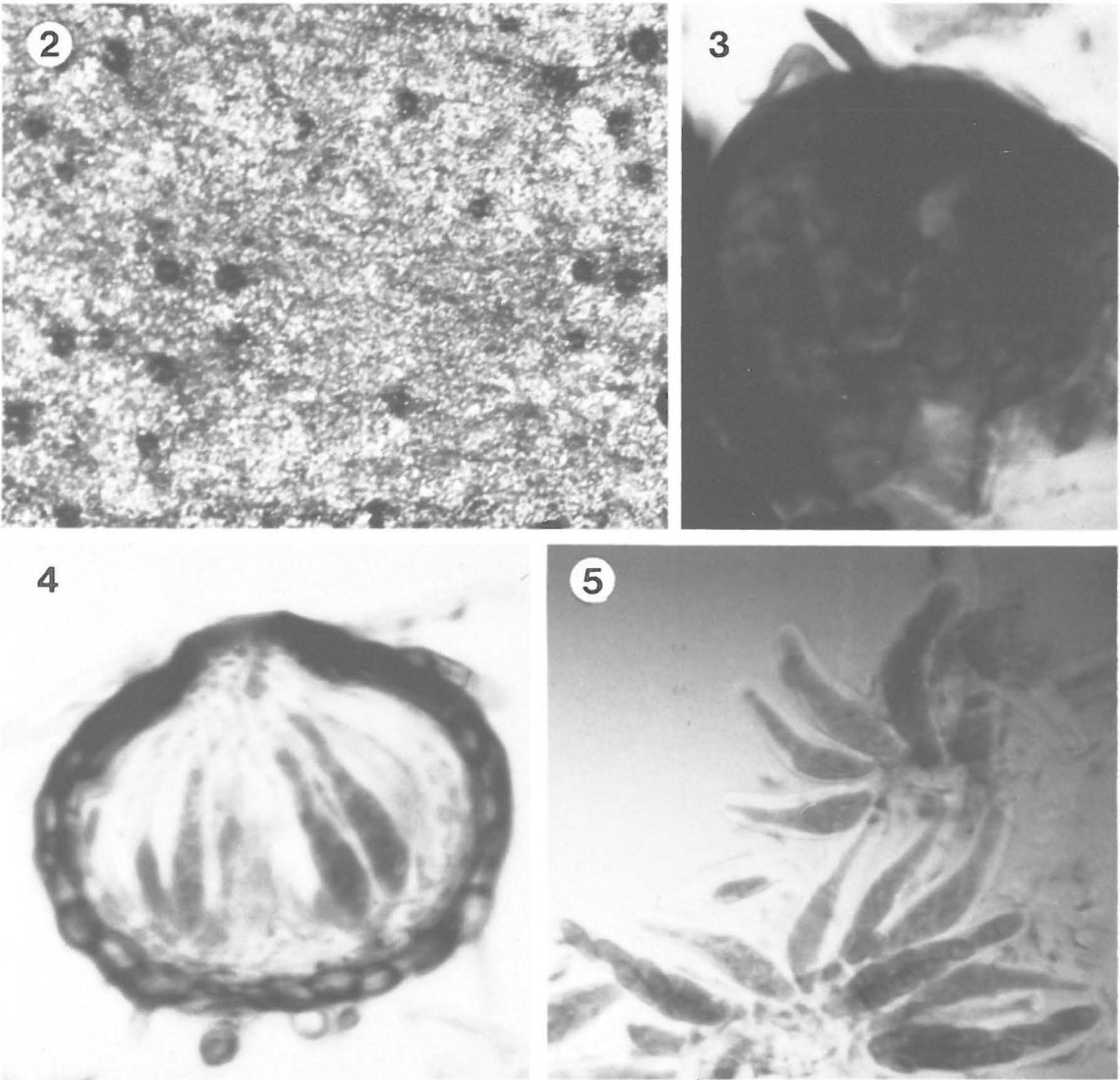


Fig. 1. *Venturia ribis*. — a) ascus, b) pseudoparaphyses, c) ascospores.



Figs. 2—5. *Venturia ribis*. — 2: Ascostromata on leaf, $\times 50$. — 3: Ascostroma with setae, $\times 650$. — 4: Vertical section of ascostroma, $\times 650$. — 5: Asci and ascospores, $\times 650$.

Typus: **Finland.** *Tavastia australis*: Kangasala, Vihtinen, on dead leaves of *Ribes alpinum* L., 20 May 1984 Unto Söderholm 1064 (IMI 286723) holotypus.

Ascostromata immersed, subepidermal, scattered, amphigenous, mostly hypophyllous, globose, 60—85 μm high, 65—83 μm in diam, with a protruding, often setose, papillate ostiole. Setae dark brown, thick-walled, aseptate, 30—50 μm long, up to 4.5 μm thick. The ascostromatal wall, 6.5—8 μm thick, is composed of thick-walled, pseudoparenchymatous cells forming a textura angularis of 2—3 layers. Asci

obclavate cylindric, short-stalked, 8-spored, bitunicate, 38—50 \times 6—10 μm . Ascospores 1-septate just above the middle, constricted at the septum, oblong, olive green, biseriolate below and uniseriate above in the ascus, upper cell slightly wider than the lower cell, finely verruculose, 9—10.5 \times 3—3.5 μm . Pseudoparaphyses filiform, hyaline, branched, septate. Anamorph not observed.

Other specimen examined: **Finland.** *Tavastia australis*: Kangasala, Vihtinen, on dead leaves of *Ribes alpinum*, 5 June 1983 Söderholm 926 (IMI 279169).

Table 1. Comparison of closely related *Venturia* species.

Species	Ascstroma	Asci	Ascospores
<i>V. aesculi</i>	non setose	broadly cylindrical, 30—40 × 5—9 µm	smooth to verrucose, 8—9 × 2.5—3.5 µm
<i>V. corni</i>	non setose	cylindrical, 38—45 × 8—10 µm	smooth, 10—11 × 5—6 µm
<i>V. frangulae</i>	setose, setae up to 200 µm long	cylindrical to cylindric clavate, 35—50 × 6—10 µm	smooth, 7—10 × 2—4 µm
<i>V. pruni</i>	non setose	cylindrical, 25—30 × 6—9 µm	smooth, 9—10 × 3—3.5 µm
<i>V. ribis</i>	often setose, setae 30—50 µm long	obclavate cylindric, 38—50 × 6—10 µm	finely verrucose, 9—10.5 × 3—3.5 µm

Reference

Sivanesan, A. 1977: The taxonomy and pathology of *Venturia* species. — *Biblioth. Mycol.* 59: 1—138.

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