

# *Ascobolus castorensis* n. sp. on dung of beaver in Norway

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*A. castorensis* O. Aas is described as a new species. It is most closely allied to *A. michaudii* Boud.

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During a study of the coprophilous discomycetes of Norway, specimens of an *Ascobolus* which seemed to represent an undescribed species were found on dung of beaver. The dung (from an adult male) was kept frozen for about 10 days after collection. The dried dung was moistened with distilled water and placed in a Petri dish on 7 February 1975; on 27 February apothecia had developed.

*Ascobolus castorensis* O. Aas n. sp. Fig. 1

Apothecia gregaria, sessilia, juvenilia clausa et globosa, matura cupulata. 1-2.6 mm diam., extus verrucosa, verrucae luteo-aurantiacea vel luteolae. Excipulum textura globosa constructum (cellulis globosis vel subglobosis), parietibus flavis. Asci cylindraceuti-clavati. 131-238 × 12-19 μm, octospori. *J* dilute caerulescentes. Ascosporae juventute uniseriatae, maturitate biseriatae, hyalinae, maturitate violaceae, ultimo obscure spadiceo - violaceae, ellipsoideae, 14-17 (-20) × 7-9 μm. Ornamentum e costis longitudinalibus et paucis anastomosantibus compositum. Paraphyses septatae, ramosae vel simplices, 2-3 μm latae, apicem versus 3.5-5 μm crassae.

Habitat in stercore castorensis. Holotypus: Norvegia, prov. Vest-Agder: Sogndalen. Eidså. Castor leg. 19.XI.1974, sterco coll. 3.XII.1974, K. Syvertsen (BG).

Apothecia densely gregarious, rarely scattered, covering the major part of the dung, 1-2.6 mm in diameter, up to 1.4 mm high, sessile, rarely substipitate. Receptacle at first globose to subglobose and closed, opening during a cylindrical state at ripening, becoming cupulate at maturity, greenish-yellow to pale olive green, externally with warts which are yellow orange to more or less yellow; especially below with subhyaline, septate, branched hairs 2-3 μm broad. Disc flat to distinctly concave, greenish-yellow to slightly pale olive green. The margin mealy to warty.

Excipulum of textura globosa, with globose to subglobose cells, with more or less yellow walls. Externally clothed with groups of globose to subglobose, thick-walled, yellowish cells forming the ectal warts.

Asci (Fig. 2) cylindrical clavate, rounded and somewhat narrowed towards the apex, gradually narrowing towards the base, 131-238 × 12-19 μm (mean 170.5 × 15.5 μm),

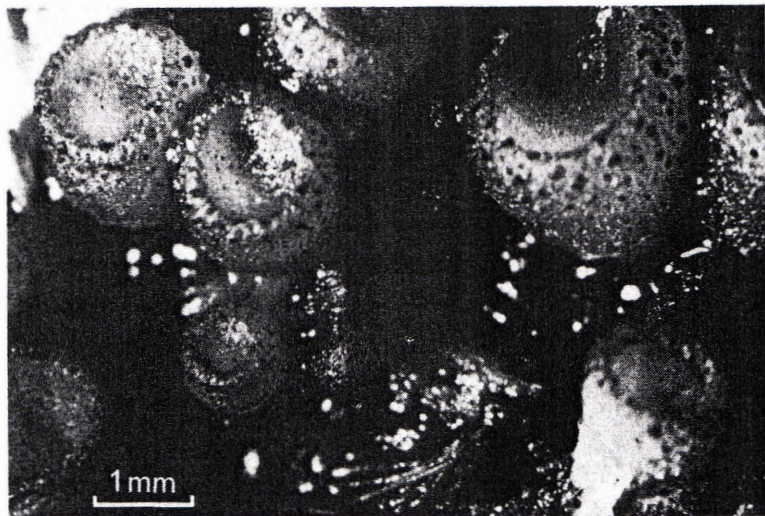


Fig. 1. *Ascobolus castorensis*. Habit of fruit-bodies. When young, globose and closed, finally opening and cupulate.

8-spored, diffusely pale blue in Melzer's reagent.

Ascospores uniseriate to irregularly biseriata, more regularly biseriata at maturity. At first hyaline, then light violet, becoming darker violet, finally dark brown violet to brownish,  $14-17 (-20) \times 7-9 \mu\text{m}$  (mean  $15.6 \times 7.7 \mu\text{m}$ ). Ornamentation consisting of

longitudinal ribs with a few anastomoses (Fig. 4).

Paraphyses (Fig. 3) septate, branched or unbranched,  $2-3 \mu\text{m}$  thick, slightly enlarged at apex up to  $5 \mu\text{m}$  thick, containing yellow pigment.

Type collection: Norway: Vest-Agder: Sogndalen: Eidså (UTM: MK 3153), animal caught 19 November 1974 by Ovin Ude, dung collected 3 December 1974 by K. Syvertsen (BG).

On dung of beaver, *Castor fiber*.

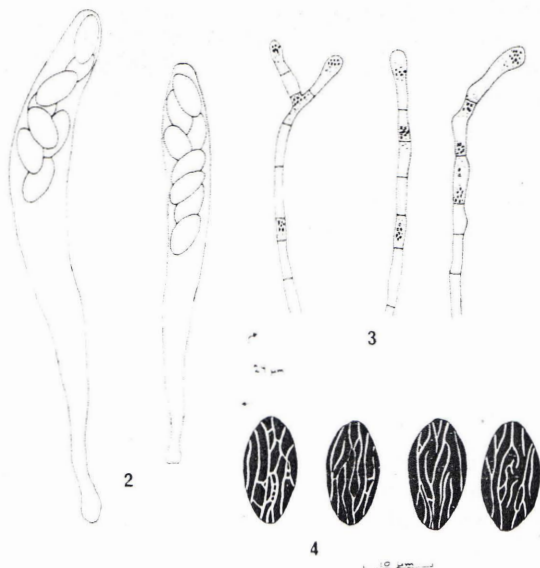
The species appears to be intermediate between *A. michaudii* Boud. and *A. crenulatus* P. Karst. (van Brummelen 1967). It is closest to *A. michaudii*, from which it differs in smaller asci and ascospores, and in the colour of the ectal warts.

#### ACKNOWLEDGEMENTS

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#### REFERENCE

Brummelen, J. van. 1967. A world-monograph of the genera *Ascobolus* and *Saccobolus* (Ascomycetes, Pezizales). *Persoonia Suppl. Vol. 1*, 1-260.



Figs. 2-4. Fig. 2. Asci and ascospores. Fig. 3. Paraphyses. Fig. 4. Ascospores.

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