

Radulodon erikssonii

Figures 1–7

Radulodon erikssonii Ryvarden 1972 [6 : 2075] (O!)= *Radulodon casearius* sensu Nikolajeva [5]

Basidiome effused, adherent, orbicular then confluent and sometimes reaching some meters of length.

Hymenophore hydroid, whitish to pale yellowish brown, sometimes ochre in older parts.

Aculei conical, subcylindrical, subulate, rarely spathulate, crowded, up to 3 (4) mm long, ceraceous, becoming corneous when dry.

Subiculum farinaceous, chalky to membranaceous or slightly fibrillose, thin, up to 0.3 (0.5) mm thick, very rarely up to 1 mm, whitish.

Margin indeterminate, shortly thinning out, porulose to finely fibrillose, whitish to pale yellowish brown.

Hyphal system monomitic.; all hyphae with fibulate primary septa, 2–4 (5.5) μm in diam., hyaline. Subhymenial hyphae compactly arranged, sometimes indistinct, thin-walled. Subicular hyphae with thickening to thick wall.

Gloeocystidia infrequent to numerous, hymenial, of variable shape: clavate, cylindrical, slightly subulate, torulose, frequently with apical or lateral outgrowths, 30–65 (120) \times 6.5–10.5 (13) μm , thin-walled, with oily and refractive content, hyaline.

Basidia clavate to subcylindrical, 20–40 \times 5.5–7.5 μm ; 4 sterigmata up to 5 μm long.

Basidiospores subglobose to broadly obovoid, (4.5) 4.8–6 (6.5) \times (3.8) 4–5 (5.2) μm , Q = 1–1.3 (1.4), smooth, thick-walled, hyaline. Apiculus often invisible on the outline.

Chemical reactions: IKI–; CB–; SA–

Comments

Radulodon erikssonii selectively attacks trees of *Populus tremula*. It is an important decaying agent of living trees. In Northern America is present a closely related species: *Radulodon americanus* whose forest damages are well documented by Basham [1] sub *Radulum casearium*).

I observed this species in the 'Maia' wood of Losone all over 3-4 years, in a small sector (25-50 m²) where all aspens were apparently killed by the fungus: some lying on the ground, other still standing (see photos).

On one of these images is well visible the extent that may be reached by the fungus in aerophytic position: up to two-three meters of height.

Voucher specimens

FRANCE — **Isère** – Bourg-d'Oisans, ENS de la Vieille morte, on wood of a lying, decayed branch of *Populus tremula*, leg. B. Rivoire, 2.VII.2015 (em-12791)

NORWAY – Sorkedalen, on decayed wood of *Populus tremula*, leg. L. Ryvarden, 24.X.1968, isotype of *Radulodon erikssonii* Ryvarden (O 9785, em-1526)

SWITZERLAND — **Ticino** – Golino, on wood and bark of a lying, decayed branch of a deciduous tree, leg. E. Martini, 6.XII.1986 (em-1513) – Losone, Maia, on bark of a lying, hard trunk of *Populus tremula*, leg. E. Zenone, 15.II.1988 (em-1546) – *ibid.*, on bark of a hanging, hard trunk of *Populus tremula*, leg. E. Martini, 24.VI.1988 (em-1789) – *ibid.*, on bark of a standing, hard trunk of *Populus sp.*, leg. E. Martini, 20.IX.1988 (em-2016) – Meride, Bolle, on wood of a hanging, rather hard trunk of *Populus sp.*, leg. E. Martini, 26.XI.2006 (em-9566)



Fig. 1: Basidiome growing on a standing trunk [em-1789]



Fig. 2: Effects of a visit by *Radulodon erikssonii* [em-1789]



Fig. 3: Basidiome [em-9566]



Fig. 4: Basidiome : aculei on vertical substrate [em-9566]

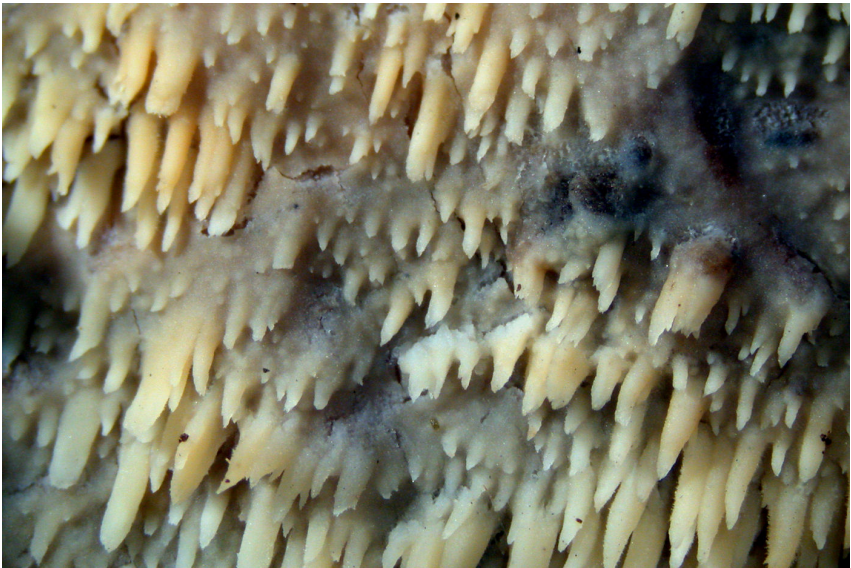


Fig. 5: Basidiome : aculei toward the margin [em-9566]

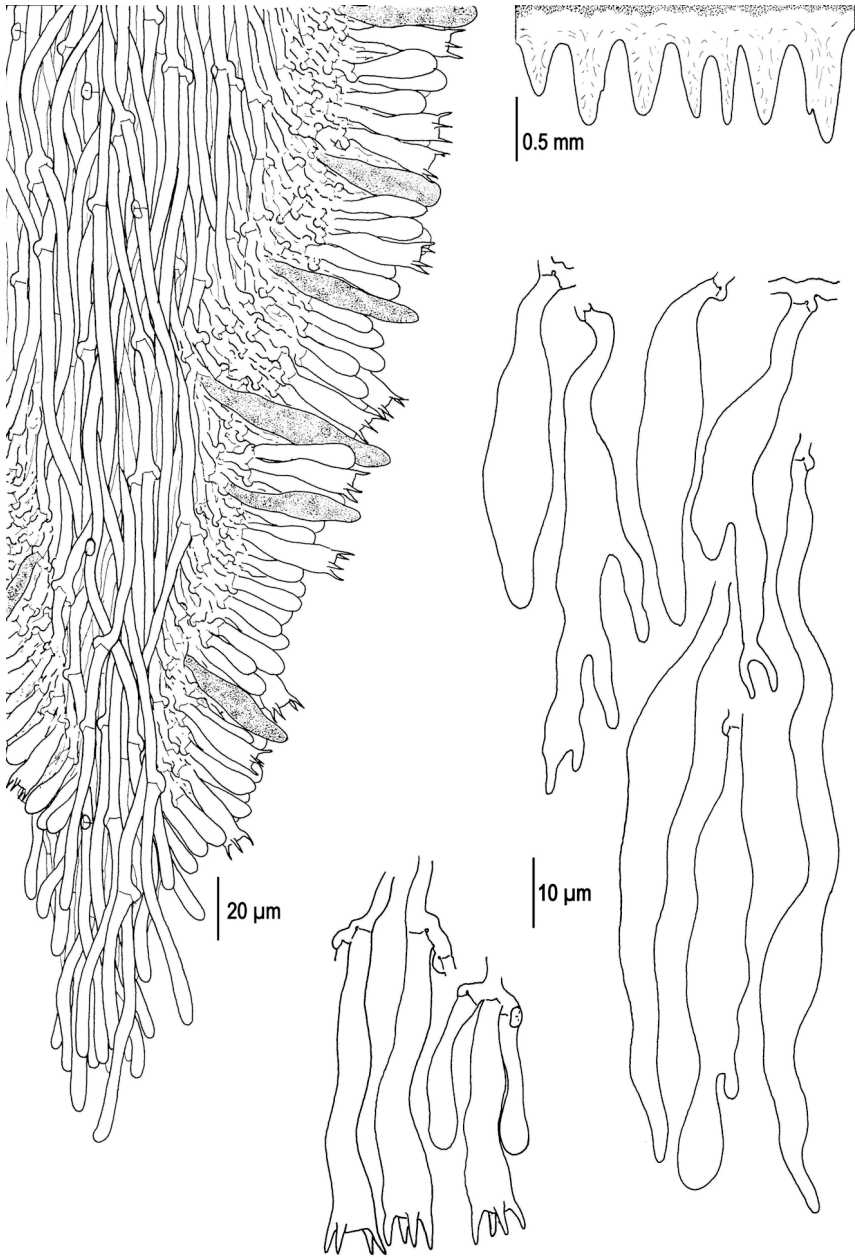


Fig. 6: Vertical sections, gloeocystidia, basidia, basidiospores [em-1546]

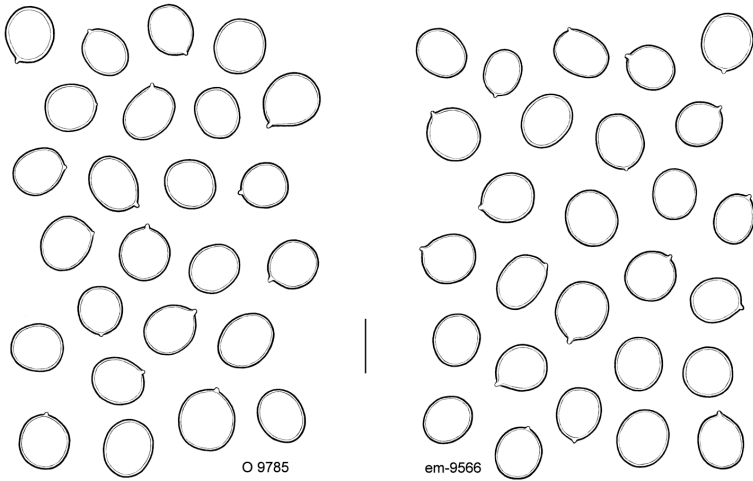


Fig. 7: Basidiospores from O 9785 (isotype) and em-9566. Bar = 5 μ m

References

- [1] BASHAM, J.T. (1958). 'Decay of trembling aspen'. *Canadian Journal of Botany*, 36 (4): 491–505. DOI: <http://dx.doi.org/10.1139/b58-045>
- [2] BERNICCHIA, A. AND GORJÓN, S.P. (2010). 'Corticaceae s. l.' *Fungi Europaei*, 12: 1008 p.
- [3] ERIKSSON, J., HJORTSTAM, K. AND RYVARDEN, L. (1981). *The Corticiaceae of North Europe, vol. 6: Phlebia - Sarcodontia*. Oslo, pp. 1051–1276
- [4] NAKASONE, K.K. (2001). 'Taxonomy of the genus *Radulodon*'. *Harvard Papers in Botany*, 6 (1): 163–177. URL: <http://www.jstor.org/stable/41761639>
- [5] NIKOLAJEVA, T.L. (1961). 'Familia Hydnaceae'. *Flora Plantarum Cryptogamarum USSR*, 6 (2): 1–432
- [6] RYVARDEN, L. (1972). '*Radulodon*, a new genus in the Corticiaceae (Basidiomycetes)'. *Canadian Journal of Botany*, 50 (10): 2073–2076. DOI: <http://dx.doi.org/10.1139/b72-266>



Excerpts from *Crusts & Jells*

Descriptions and reports of resupinate Aphyllophorales and Heterobasidiomycetes

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