

Pseudotomentella flavovirens

(Höhn. & Litsch.) Svrček

Figures 1–11

Tomentella flavovirens Höhn. & Litsch. 1907 [1 : 831] FH! ≡ *Pseudotomentella flavovirens* (Höhn. & Litsch.) Svrček 1958 [7 : 68]

= *Pseudotomentella griseoveneta* M.J. Larsen 1974 [6 : 165] BPI!, also teste Kõljalg [2]

Basidiome effused, separable, araneose to submembranaceous, becoming pellicular, soft, fragile, up to 0.3 (0.5) mm thick.

Hymenophore smooth, porulose and discontinuous, then continuous, often with crateriform depressions, olive brown, grey olive (2.5Y 5–4/2 to 5Y 5–4/1), often with blue, greyish blue or dark blue colours (5BG 5/2 to 5PB 2/6–10 or 10B 2/4–8) when fresh but loosing the blue tint on drying, some parts becoming very dark.

Hymenial surface becoming continuous, often with a light bloom due to the pale spores.

Subhymenium thin, poorly developed.

Subiculum araneose to hypochnoid or soft fibrous, more or less ochraceous to brownish in older parts (10YR (6) 5–4/3).

Margin indistinct and fertile throughout or almost sterile and distinct, araneose, byssoid or fibrillose, pale yellowish brown.

Rhizomorphs normally evident in subiculum, at the margin and in cracks of the substratum, sometimes hidden and difficult to find, frequently branched, up to 0.1 mm in diam., soft to rigid, with more or less pilose surface due to projecting hyphae, sometimes with smooth and sericeous segments, yellowish brown to brownish, concolorous with the subiculum or sometimes becoming darker when exposed.

Hyphal system monomitic to dimitic or trimitic with skeletal hyphae mostly associated with rhizomorphs; all generative hyphae simple-septate.

Subhymenial hyphae regular, with relatively long cells, 2.5–4.5 µm in diam., thin-walled, subhyaline to pale ochre.

Subicular hyphae of two types: **1**) generative regular, (1.5) 2.5–4 μm , with thin or slightly thickening wall, rarely with open anastomoses, subhyaline to light ochre; **2**) some straight skeletal hyphae (1) 1.5 (2) μm wide.

Rhizomorphs starting as thin strands of generative hyphae soon associated to some skeletal hyphae, then becoming structured with a core of more or less parallelly arranged generative hyphae like the subicular ones, often with simple anastomoses, that progressively become thinner toward the surface and then (1.5) 1.5–2.5 (3) μm in diam., and a surface layer built up by only straight skeletal hyphae, (1) 1.5 (2) μm in diam., rarely with some elbow-like bends, thick-walled, yellowish. Well formed rhizomorphs show a distinct core made by few wider and more or less sausage-shaped thin-walled hyphae up to 10 μm in diam., hyaline to subhyaline, and a thin but continuous and compact layer between the outer skeletal and the inner generative hyphae built up by richly branched hyphae, 1–2 μm in diam., with thickening to thick walls and apparently only with secondary septa, yellowish.

Cystidia absent.

Basidia long clavate to subcylindrical or slightly ventricose with narrowed base, of variable dimensions, some smaller, 50–80 \times 5.5–8.5 μm , some larger, 60–100 \times 9–12 μm , sometimes with a transversal simple septum, hyaline to subhyaline, sometimes with yellowish to light ochraceous content; (2) 4 sterigmata up to 7 (10) μm long and (1) 1.5–2.5 (4) μm wide at the base.

Basidiospores becoming complex with more or less evident primary lobes and secondary lobes as distinct verrucae; isodiametric in frontal view with sinuous outline, becoming incised and 4–7 lobed, sometimes even looking like walnut kernel (mostly macrospores); in side view more or less dorsally flattened and with sinuous outline; in polar view transversally ellipsoid with sinuous outline; of variable dimensions (because the presence of so different basidia): 'microspores' 6–7.5 \times (4.5) 5–5.5 (6) \times 6–7.5 (8) μm , 'normal' spores 7–9 (10) \times 6–7.5 \times 8–9.5 (10.5) μm , 'macrospores' 10–12 \times 7.5–9 \times 10–12.5 μm , with thickening wall, subhyaline; aculei not well differentiated, obtuse, rounded, scattered or grouped on primary and secondary lobes, up to 0.4 (0.6) μm long and 0.3–0.5 μm wide at the base; apiculus almost central in side view, large, often difficult to see because hidden by lobes.

Chlamydospores absent.

Chemical reactions: CB: spores doubtfully cyanophilous, hyphae acyanophilous. IKI: sometimes with bluish or greyish blue basal hyphae. KOH: subicular hyphae often turning blue, hymenial elements turning greenish, olivaceous, greyish, purplish or bluish, here and there even blackish. The bluish colour reaction is normally strongly enhanced by slipping off and replacing the coverglass.

Incrustation: subhymenial hyphae and basidia with adherent ochra-



Fig. 1: Rhizomorphs. Image width = 9 mm [em-2157]

ceous brown to dark brown or olivaceous brown resinous matter visible in water and LA mounts, mostly dissolving in KOH mounts and producing a olivaceous brown or greyish diffusate.

Specimens examined

FRANCE — **Haute-Savoie** – Samoëns, Le Chalet Roux, on decayed wood of a coniferous tree, leg. J. Boidin, 11.IX.1950 (rh-0346)

GERMANY — **Niedersachsen** – Braunlage am Harz, on soil, leg. Lindau, holotype of *Tomentella flavovirens* Höhn. & Litsch. (FH: v.Höhnel herb., sheet 1979) — **Sachsen** – Sayda Mortelgrund, on bark of a lying branch of *Picea sp.*, leg. F. Dämmrich, 7.IX.2002 (em-8549)

SWITZERLAND — **Bern** – Bärau, Habbach, on strongly decayed wood of a coniferous tree, leg. J. Keller, 25.IX.1996 (em-4497) — **Ticino** – Campo V.Maggia, Mott di Tirman, on wood of a strongly decayed branch of a coniferous tree, leg. E. Martini, 13.IX.1986 (em-673) – *ibid.*, on bark of a lying, hard trunk of a coniferous tree, leg. E. Martini, 25.IX.1988 (em-2193) – Nante, Foppette, on wood of a lying, strongly decayed branch of a coniferous tree, leg. E. Martini, 27.VIII.1988 (em-2157)

USA — **New York** – Paul Smith's (NY), on *Betula sp.*, leg. M.J. Larsen, 12.IX.1965 (NYS: M.J.Larsen 1789) — **Oregon** – Near Saddleback Mt., Lincoln Co., on strongly decayed wood of *Pseudotsuga menziesii*, leg. M.J. Larsen, 8.XI.1972, holotype of *Pseudotomentella griseoveneta* M.J. Larsen (BPI: CFMR 133455)

Materials and methods

Specimens sampling and methodological details are described separately in this issue:
Excerpts from *Crusts & Fells*, n° 0

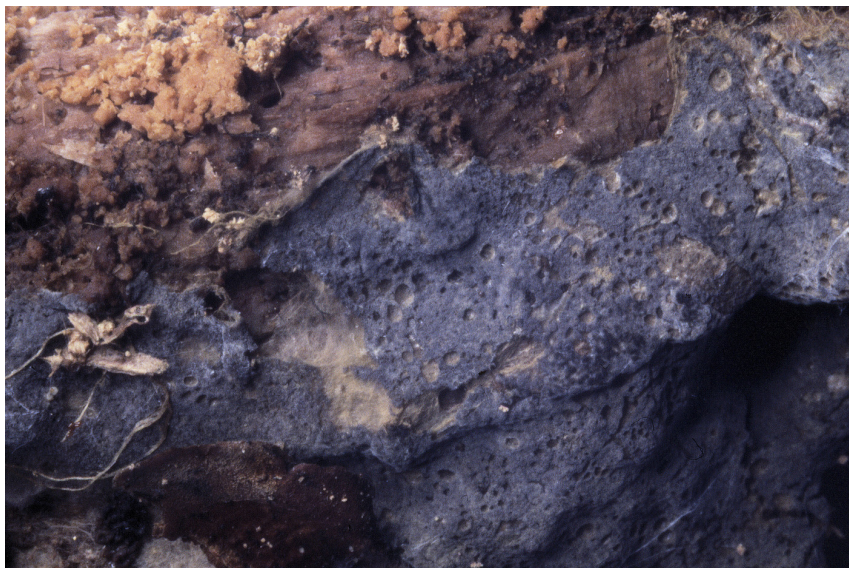


Fig. 2: Fresh basidiome. Image width = 18 mm [em-2157]



Fig. 3: Dried basidiome. Image width = 9 mm [em-2157]



Fig. 4: Dried basidiome with discontinuous hymenophore. Image width = 9 mm [em-673]

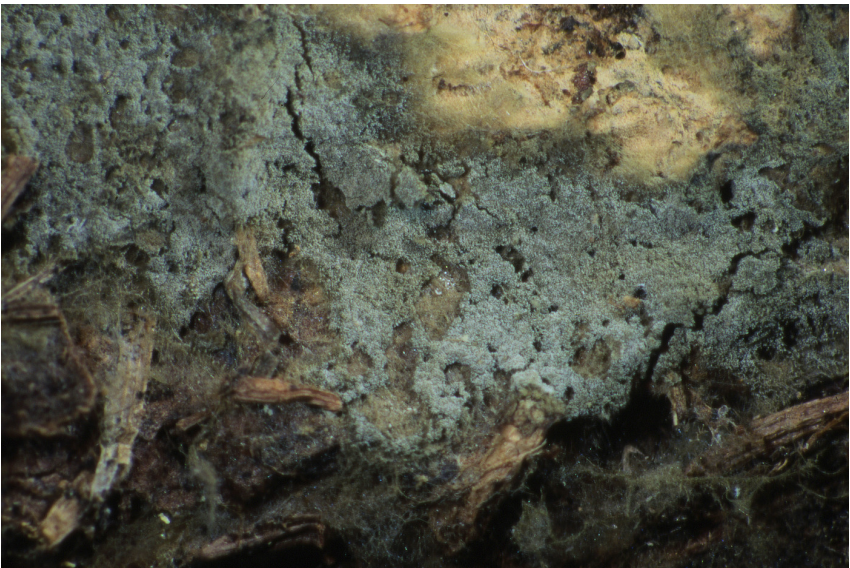


Fig. 5: Dried basidiome with slightly crustose and continuous hymenophore. Image width = 18 mm [em-673]

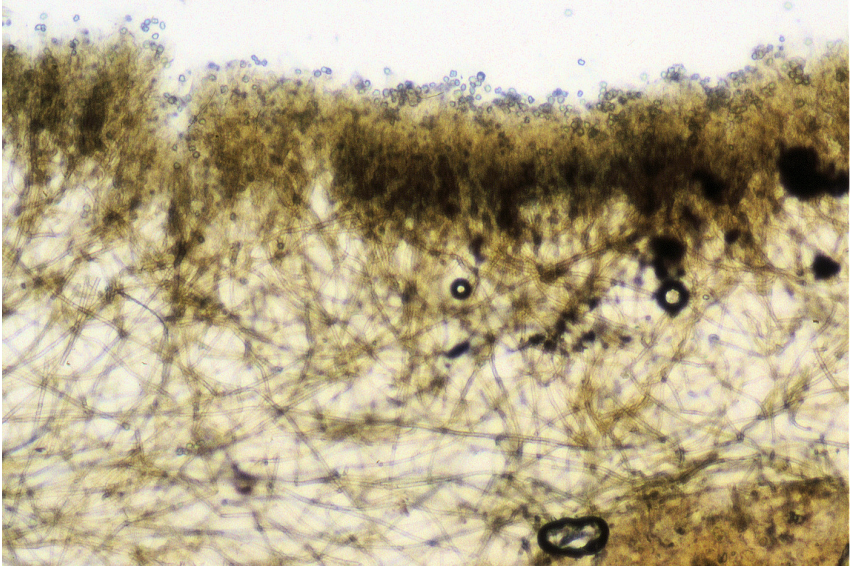


Fig. 6: Vertical section through basidiome. First mount in KOH [em-673]

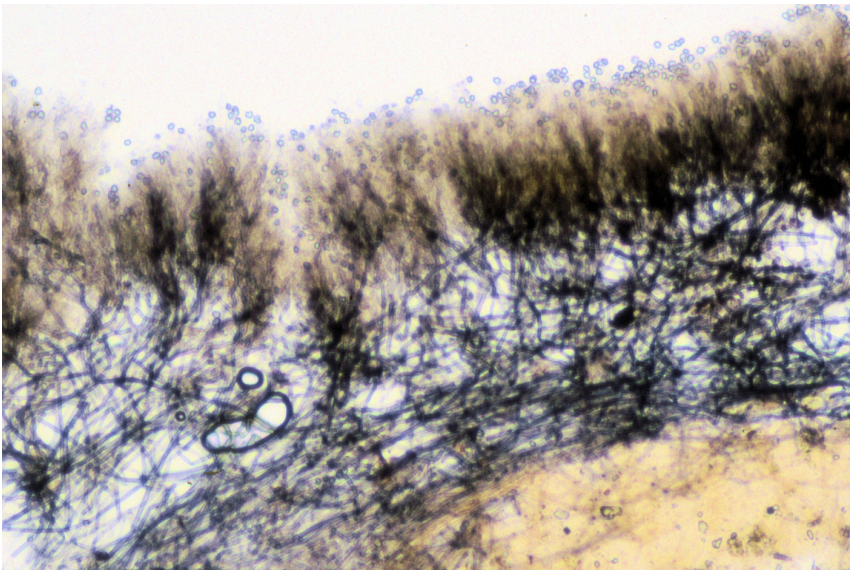


Fig. 7: Vertical section through basidiome. Second mount in KOH (after air exposure) [em-673]

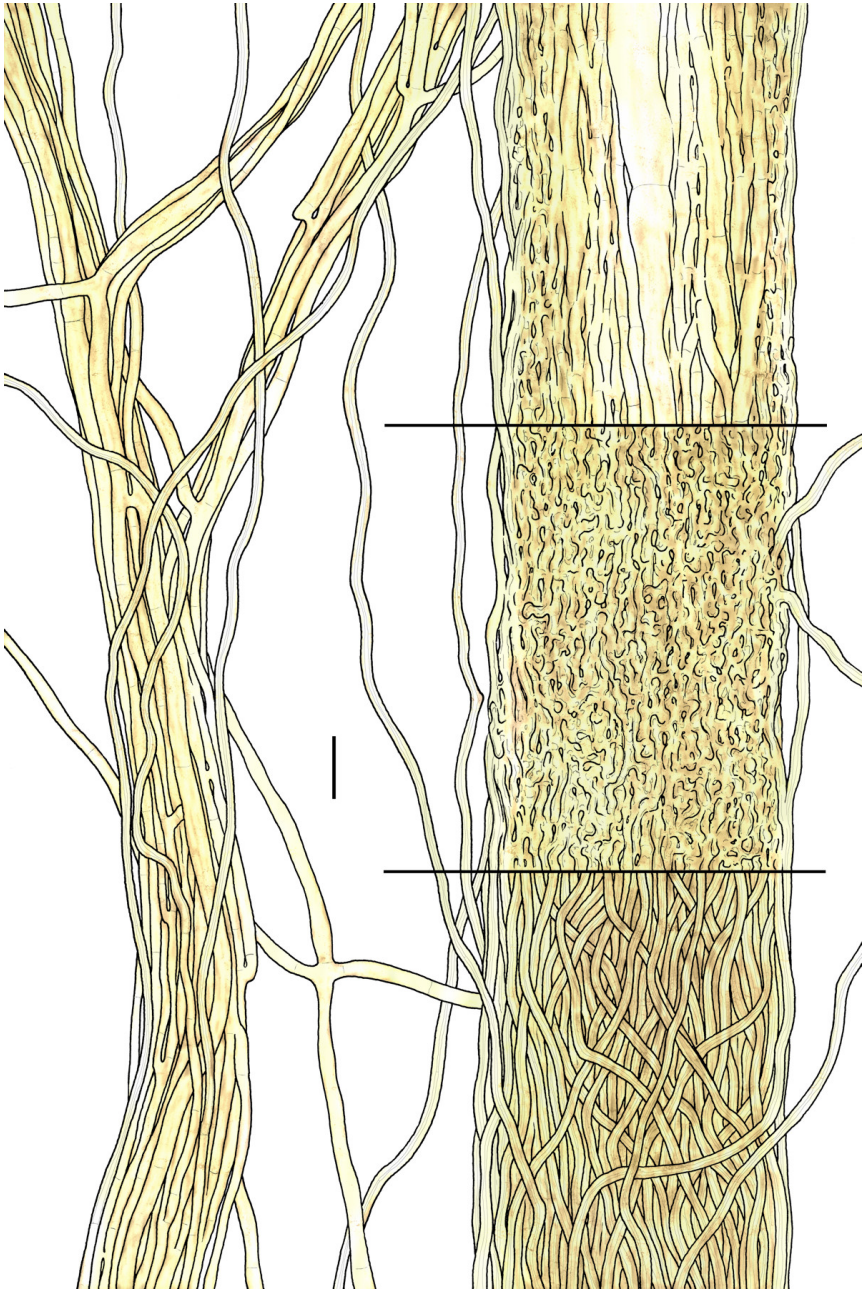


Fig. 8: Rhizomorphs, ex holotype of *Tomentella flavovirens* Höhn. & Litsch. Bar = 10 μm [FH: v.Höhnel herb., sheet 1979]

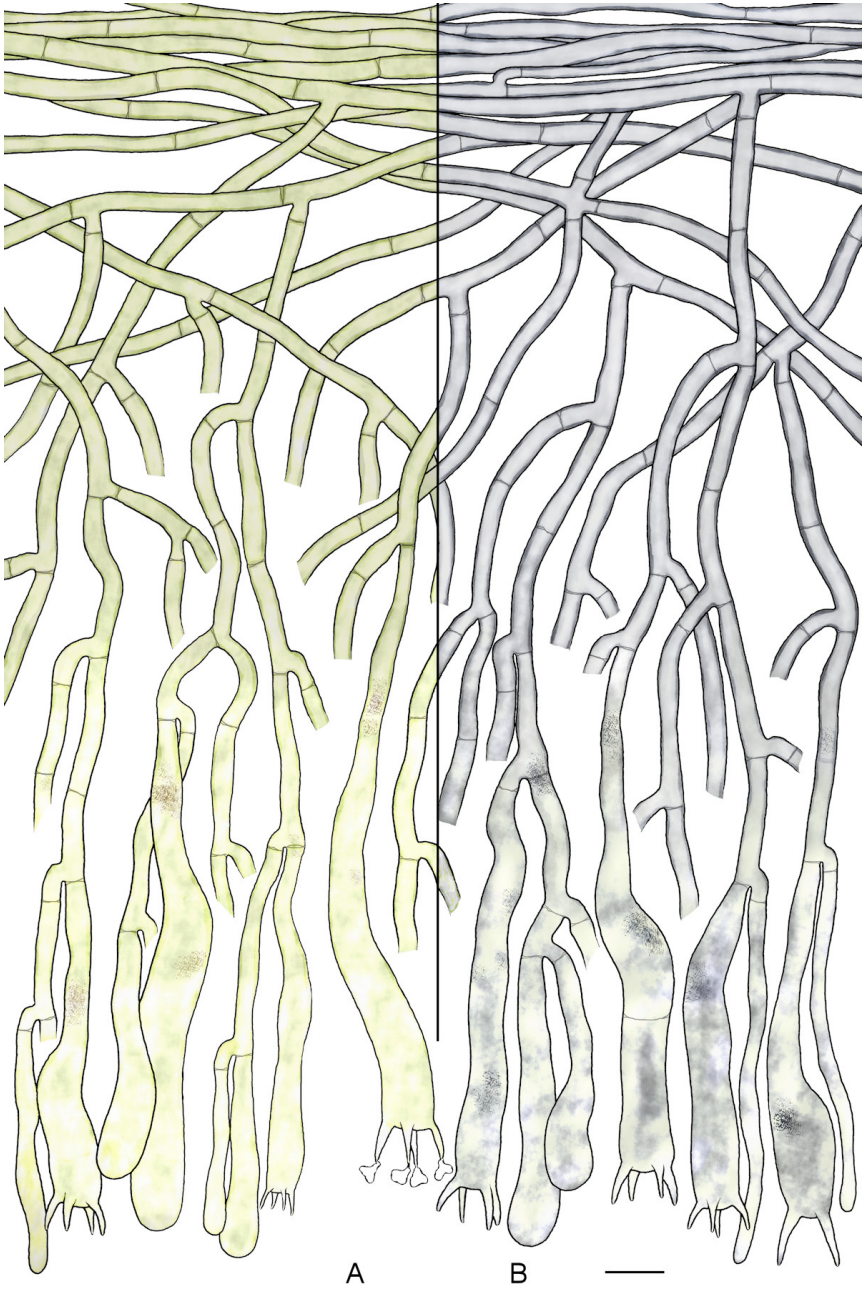


Fig. 9: Basidia, subhymenial and subicular hyphae: A) first mount in KOH; B) second mount in KOH. Bar = 10 μ m [em-2157]

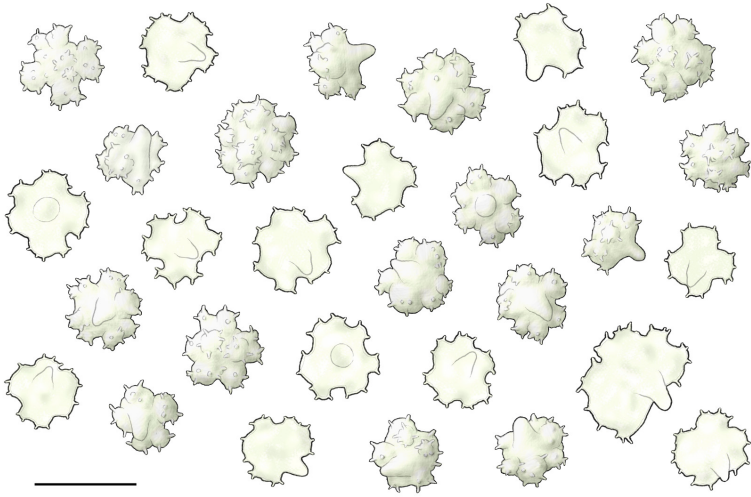


Fig. 10: Basidiospores. Bar = 10 μ m [em-2157]

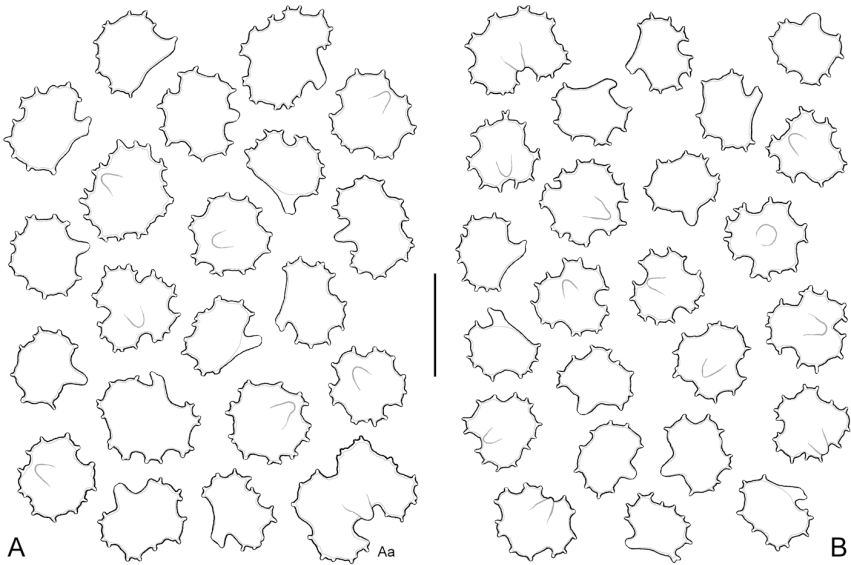


Fig. 11: Basidiospores: A) ex holotype of *Tomentella flavovirens* Höhn. & Litsch.; Aa) a typical macrospore with walnut kernel shape; B) ex holotype of *P. griseopergamacea*. Bar = 10 μ m [FH: v.Höhnel herb., sheet 1979]

References

- [1] HÖHNEL, F.X.R. VON AND LITSCHAUER, V. (1907). 'Beiträge zur Kenntnis der Corticieen. II. Mitteilung'. *Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften. Mathematisch-naturwissenschaftliche Klasse*, 116: 739–852. URL: <http://www.biodiversitylibrary.org/item/31621#page/821/>
- [2] KÖLJALG, U. (1996). 'Tomentella (Basidiomycota) and related genera in Temperate Eurasia'. *Synopsis Fungorum*, 9: 1–213
- [3] LARSEN, M.J. (1967). 'Tomentella and related genera in North America V. New North American records of Tomentelloid fungi'. *Mycopathologia et Mycologia Applicata*, 32: 37–67
- [4] LARSEN, M.J. (1968). *Tomentelloid fungi of North America*. Syracuse. 157 p.
- [5] LARSEN, M.J. (1971). 'The genus *Pseudotomentella*'. *Nova Hedwigia*, 22: 599–619
- [6] LARSEN, M.J. (1974). 'Some notes on *Pseudotomentella*'. *Mycologia*, 66 (1): 165–168. DOI: <http://dx.doi.org/10.2307/3758465>. URL: <http://www.cybertruffle.org.uk/cyberliber/59350/index.htm>
- [7] SVRČEK, M. (1958). 'Contribution to the taxonomy of the resupinate Thelephoraceous fungi'. *Česká Mykologie*, 12 (2): 66–77. URL: <http://www.czechmycology.org/czech-mycology-content.php>



Excerpts from *Crusts & Tells*

Descriptions and reports of resupinate Aphyllophorales and Heterobasidiomycetes

Authored and published by

ELIA MARTINI
Via ai Ciòss 21
CH-6676 Bignasco
Switzerland

Email: emart@aphyllo.net
<http://www.aphyllo.net>
Orcid: 0000-0002-4709-2964



Issue № 128:

Pseudotomentella flavovirens (Höhn. & Litsch.) Svrček

Released on: 1st September, 2018

© E. Martini

This work is licensed under a [Creative Commons Attribution 4.0 International License \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/)

