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## BRIEF ARTICLES

### SOME NOTES ON *PSEUDOTOMENTELLA*

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The purpose of this communication is to report a heretofore undescribed species of *Pseudotomentella* from western North America, report the occurrence of chlamydospores in *P. vepallidospora* M. J. Larsen, and provide a revised key to the known species of *Pseudotomentella*. The descriptive data presented are based on tissues mounted in 10% aqueous KOH and stained with an aqueous solution of phloxine B. Photomicrographs were prepared with the aid of a Leitz Ortholux microscope and Orthomat camera. Capital letters used to designate herbaria, unless otherwise indicated, are those of Lanjouw and Stafleu (1964), and numerical surface color expressions are those of the Munsell system (1929–1942).

*Pseudotomentella griseoveneta* M. J. Larsen, sp. nov. FIGS. 1–4

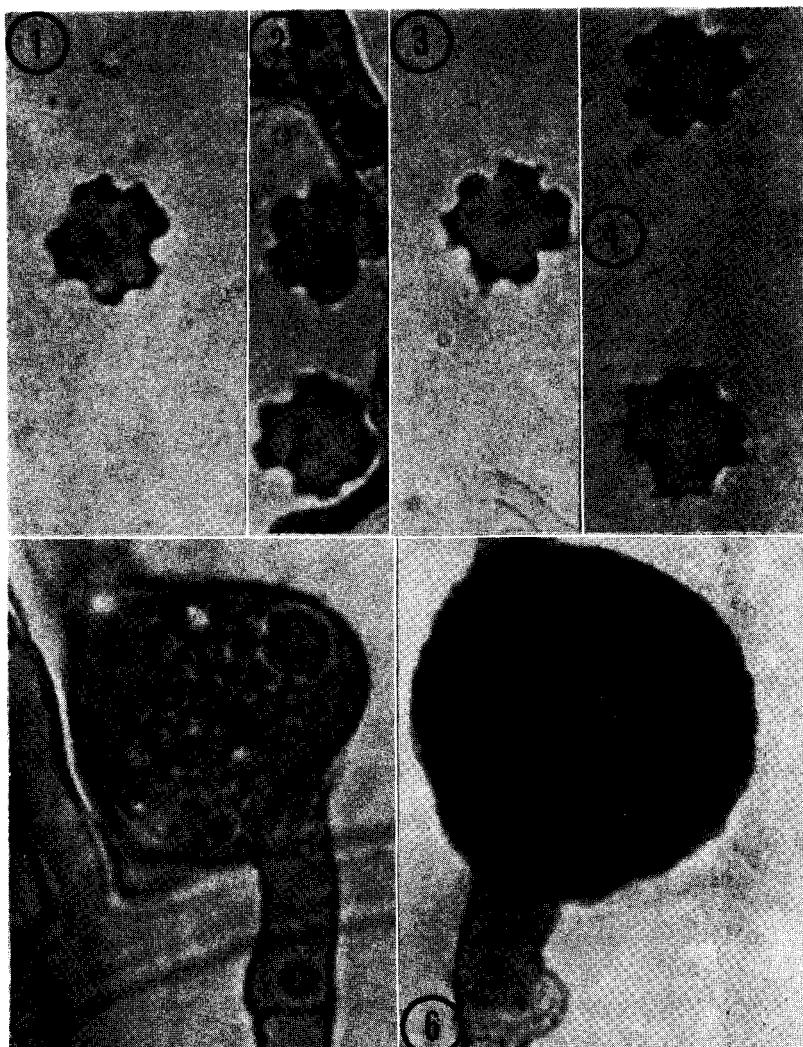
Etymology: From *griseo* (L. comp. form, adj.) = gray + *veneta* (L., adj.) = blue-green.

Basidiocarpis separabilibus, arachnoideis; area fecunda griseoveneta; hyphis generatoris septis, fibulis nullis, 2.5–3.5  $\mu\text{m}$  diam; basidiis clavipedunculatis, 50–70(–80)  $\times$  6–7.5  $\mu\text{m}$ ; basidiosporis (Figs. 1–4) 5.5–6.5(–7)  $\mu\text{m}$  latis, tuberculatis, verrucatis plerumque dichotomis, alboluteis vel hyalinis in alkalinis.

Holotype: U. S. A., Oregon, Lincoln Co., Saddleback Mt., on *Pseudotsuga menziesii* (Mirb.) Franco, coll. M. J. Larsen, CFMR 133455, 8 XI 1972 (BPI); isotype in CFMR.<sup>1</sup>

Basidiocarps effused, up to 0.2 mm thick, arachnoid to byssoid, separable, becoming pelliculose in some parts; fertile areas continuous, grayish blue to grayish blue-green, sometimes with tints of purple (near

<sup>1</sup> Herbarium of Center for Forest Mycology Research, Forest Products Laboratory, U. S. Department of Agriculture, Madison, Wis. 53705.



FIGS. 1-4. Photomicrographs of basidiospores of *Pseudotomentella griseo-veneta* (from holotype). FIGS. 5-6. Photomicrographs of chlamydospores of *P. vepallidospora* (from isotype). Scale  $1 \mu\text{m} = 2 \text{ mm}$ . Brightfield.

10.0 G 7/2 to 5.0 BG 5/2); hymenial surface smooth; subiculum arachnoid, dull honey-yellow brown; cordons evident at 10 $\times$ .

Hyphal system dimitic. Clamp connections lacking throughout. Subicular hyphae of two kinds, some generative, 2.5–3.5  $\mu\text{m}$  in diam, septate, thin walled, subhyaline to yellowish brown; some skeletal 1.5–

$2(-2.5)\mu\text{m}$  diam, aseptate, thick walled, yellow; *cordons* up to  $30\mu\text{m}$  in diam, pale yellowish brown, with individual generative hyphae  $2-3\mu\text{m}$  in diam, septate, thin walled, subhymenial hyphae  $2.5-4\mu\text{m}$  in diam, septate, thin walled, pale yellow; *basidia*  $50-70(-80)\times 67.5\mu\text{m}$ , septate at the base, napiform when immature, clavipedunculate when mature, often with transverse septa, 4-sterigmate, with sterigmata up to  $7\mu\text{m}$  long; *basidiospores* (FIGS. 1-4)  $5.5-6.5(-7)\mu\text{m}$  across, approximately triangular in optical section when immature, irregularly globose to distinctly symmetrically lobed, warted with the warts normally bifurcate, hyaline to pale yellow.

*Additional specimens examined.*—Oregon, Lincoln Co., Van Duzer Forest Corridor, on conifer wood, coll. M. J. Larsen, 133388, 24 X 1972 (CFMR); Siuslaw Natl. Forest, Cascade Head Experimental Forest, on *Tsuga* sp., coll. M. J. Larsen, 133525, 19 XI 1972 (CFMR).

*Pseudotomentella griseoveneta* is readily distinguished by its pale blue to bluish-green fertile area and basidiospore size [ $5.5-6.5(-7)\mu\text{m}$ ]. It may be confused with *P. flavovirens* (Hoehn. & Litsch.) Svrcek, but the fertile area of the latter is dull green to grayish green. *Pseudotomentella griseopergamacea* M. J. Larsen is also similar, but its fertile areas and subiculum are much more gray and basidiocarps are parchment-like when dry.

**PSEUDOTOMENTELLA VEPALLIDOSPORA.**—When Larsen (1967) described this species, he overlooked the presence of chlamydospores that are closely associated with cordons. A recently acquired collection from Oregon (CFMR 133397), and the isotype at SYRF,<sup>2</sup> possess these structures (FIGS. 5-6). They are hyaline to pale yellow when first formed, becoming dark golden brown when mature, and measuring up to  $35\mu\text{m}$  across. They may be terminal or intercalary.

With the addition of *P. griseoveneta* and the transfer of *Tomentella atrocyanea* Wakef. (Burdsall and Larsen, 1974) to *Pseudotomentella*, it is appropriate now to provide a revised key to the known taxa of the genus.

#### KEY TO THE KNOWN SPECIES OF *Pseudotomentella*

1. Subicular hyphae normally septate, with clamps absent or rare. .... 4
1. Subicular hyphae normally clamped. .... 2
2. Chlamydospores present in the subiculum and associated with cordons ..... *P. vepallidospora* M. J. Larsen
2. Chlamydospores absent. .... 3

<sup>2</sup>Herbarium of State University of New York, College of Environmental Science and Forestry, Syracuse, N. Y. 13210.

3. Spores becoming blue in alkali. .... *P. atrocyanea* (Wakef.) Burdsall & M. J. Larsen
3. Spores not becoming blue in alkali. .... *P. humicola* M. J. Larsen
4. Spore walls pale brown to umbrinous. .... 5
4. Spore walls pale yellow to hyaline. .... 6
5. Spores 5.5–6.5(–7) $\mu\text{m}$  across. .... *P. atrofusca* M. J. Larsen
5. Spores 7–10(–11) $\mu\text{m}$  across. .... *P. tristis* (Karst.) M. J. Larsen
6. Subiculum dark blue or violaceous black. .... 7
6. Subiculum some shade of brown, gray or green. .... 8
7. Subicular hyphae 2–3(–4)  $\mu\text{m}$  in diam; hyphal system dimitic; basidiospores mostly irregularly globose. .... *P. nigra* (Hoehn. & Litsch.) Svrcek
7. Subicular hyphae 1.5–2.5(–3)  $\mu\text{m}$  in diam; hyphal system monomitic; basidiospores mostly globose. .... *P. tenebrosa* (Malenc.) M. J. Larsen
8. Fertile areas blackish green, dark green, grayish blue, pale gray, grayish green or dull green. .... 9
8. Fertile areas tan, lavender-brown, or brownish black. .... 11
9. Subiculum distinctly ferruginous brown; sterigmata up to 18  $\mu\text{m}$  long. .... *P. longisterigmata* M. J. Larsen
9. Subiculum not distinctly ferruginous brown, but some shade of gray, green, or blue; sterigmata up to 7  $\mu\text{m}$  long. .... 10
10. Fertile area dull green to grayish green. .... *P. flavovirens* (Hoehn. & Litsch.) Svrcek
10. Fertile area grayish blue or grayish blue-green. .... 12
11. Fertile area brownish black. .... *P. atrofusca* M. J. Larsen
11. Fertile area tan to lavender-brown. .... *P. mucidula* (Karst.) Svrcek
12. Fertile area pale gray to grayish blue; basidiocarps usually drying parchment-like; subiculum gray, but darker than the fertile area. .... *P. griseopergamacea* M. J. Larsen
12. Fertile area grayish blue to normally grayish blue-green; basidiocarps not drying parchment-like; subiculum dull honey-yellow brown. .... *P. griseoveneta* M. J. Larsen

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