

Sphagnum tenellum reported for the first time in West Virginia

John Atwood¹

Abstract -- *Sphagnum tenellum* (Brid.) Bory is reported for Tucker County, West Virginia. In eastern North America *S. tenellum* is typically a coastal species, and its presence in West Virginia suggests that it may be more or less continuously distributed throughout the mountains of eastern North America.

While annotating bryophyte specimens in the YUO herbarium, I discovered a collection of *Sphagnum tenellum* (Brid.) Bory from Tucker County, West Virginia that had been previously misdetermined as *S. palustre* L. *Sphagnum tenellum* has a golden-brown color and a delicately loose, weakly stemmed appearance. Plants of *S. tenellum* have enlarged branch cortical cells with conspicuously long-necked retort cells. In addition, the stem and branch leaves are similar in size and shape, 1.0–1.5 mm long, and ovate with incurved upper margins and serrated apices. The chlorophyllose cells of the branch leaves, in cross section, are equilateral-triangular with their greatest amount of exposure facing the dorsal surface of the concave leaves. Likewise, the hyaline cells of the branch leaves, in cross section, are largely convex on the ventral surface and only minimally convex on the dorsal surface.

In eastern North America, *S. tenellum* is primarily a coastal species that occurs in mineral poor habitats from Labrador and Newfoundland to New Jersey. *Sphagnum tenellum* is also found in the interior mountains of New York and North Carolina. The presence of *S. tenellum* in West Virginia connects these two inland distributions and suggests that the species may be more or less continuously distributed in the mountains of eastern North America.

The collection of *S. tenellum* was made in the Dolly Sods Wilderness Area, a part of the Allegheny Front within the Monongahela National Forest in northeastern West Virginia. Dolly Sods takes its name after the Dahle family, who farmed the land in the early 1800's and grazed their animals on the mountaintop. This plateau of flat rocky plains, ericaceous

¹ Missouri Botanical Garden, P.O. Box 299, St. Louis MO 63132-0299
USA

shrublands, and spring fed bogs yield a flora rich in northern relics as a result of the advance and retreat of glaciers during the Pleistocene. Gibson (1970) sampled the vegetation zones of Alder Run Bog within the Sods and correlated the unusual flora to the lack of minerals in the sandstone bedrock and the poorly drained springs that result in varying levels of acidity.

West Virginia. Tucker County: Dolly Sods Wilderness Area, ± 1250 m., 15 September 1979, *Sturm* (YUO).

Acknowledgments -- Thanks are extended to Lewis Anderson for confirming the determination of *Sphagnum tenellum* and YUO for the use of their collections.

References

- Gibson, J. R. 1970. The Flora of Alder Run Bog, Tucker County, West Virginia. *Castanea* 35: 81-98.



Atwood, John J. 2005. "Sphagnum tenellum reported for the first time in West Virginia." *Evansia* 22(3), 101–102. <https://doi.org/10.5962/p.346616>.

View This Item Online: <https://www.biodiversitylibrary.org/item/312636>

DOI: <https://doi.org/10.5962/p.346616>

Permalink: <https://www.biodiversitylibrary.org/partpdf/346616>

Holding Institution

New York Botanical Garden, LuEsther T. Mertz Library

Sponsored by

New York Botanical Garden, LuEsther T. Mertz Library

Copyright & Reuse

Copyright Status: In copyright. Digitized with the permission of the rights holder.

Rights Holder: American Bryological and Lichenological Society

License: <http://creativecommons.org/licenses/by-nc-sa/4.0/>

Rights: <http://biodiversitylibrary.org/permissions>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.