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About the Institute

The Hunt Institute for Botanical Documentation, a research division of Carnegie Mellon University, specializes in the history of botany and all aspects of plant science and serves the international scientific community through research and documentation. To this end, the Institute acquires and maintains authoritative collections of books, plant images, manuscripts, portraits and data files, and provides publications and other modes of information service. The Institute meets the reference needs of botanists, biologists, historians, conservationists, librarians, bibliographers and the public at large, especially those concerned with any aspect of the North American flora.

Hunt Institute was dedicated in 1961 as the Rachel McMasters Miller Hunt Botanical Library, an international center for bibliographical research and service in the interests of botany and horticulture, as well as a center for the study of all aspects of the history of the plant sciences. By 1971 the Library's activities had so diversified that the name was changed to Hunt Institute for Botanical Documentation. Growth in collections and research projects led to the establishment of four programmatic departments: Archives, Art, Bibliography and the Library.

← Salix Geyeriana var. meleina Henry

or

S. meleina (Henry) Jones

(see copy in Specimen Notebook)

In a recent issue of Madrono (6:84, July 1941), Dr. George Neville Jones has raised Henry's variety meleina to specific rank. Whether a botanic entity is to be regarded as a genus, a species, a sub-species, a variety, a sub-variety, or a form, is and must remain a matter of personal opinion, humans ^{and plants} being what they are. When an investigator reaches a decision and publishes his conclusion, ^{however} his colleagues are entitled to detailed knowledge of the facts underlying the conclusion. Dr. Jones merely states that:

"Salix Geyeriana is a smaller shrub with densely glaucous branchlets, the pubescence of the leaves is whitish-sericeous, capsules somewhat longer, and the style obsolete. It is not known to occur west of the Cascade Mountains."

It will be noted that, in the statement quoted above, the facts given are

merely comparative and apply, not to the newly created species, but to the species from which it is segregated. In the case of the statement regarding

pubescence, not even a comparison is made. Because of these circumstances, ^{it} ~~the~~ ^{seems desirable} present writer feels it worth while to set down in order some facts based on

a study of more than 200 sheets of S. Geyeriana and its variety meleina in ^{the} ~~the~~ ^{write} Salix Herbarium and the collections of the U. S. National Herbarium.

1. In his synonymy, Dr. Jones refers to "S. Geyeriana meleina Ball, in Abrams, Ill. Fl. Pacific States 1:506. 1923." The plant listed on the page named is "Salix geyeriana meleina Henry", not Ball.

2. Dr. Jones says "Salix Geyeriana is a smaller shrub" than his species, but gives no comparative measurements. S. Geyeriana is a plant of the relatively dry and mountainous interior, while meleina occupies the low and humid area west of the Cascade Mountains and should grow taller. Nevertheless, ~~Geyeriana~~ ^{credits} ~~over~~ ^{over}

3. The statement quoted above ^{credits} ~~claims~~ S. Geyeriana "with densely glaucous branchlets", the inference being that those of variety meleina are not glaucous. As a matter of fact, the pruinose condition is a physiological rather than morphological, as discussed extensively by Ball and Whited [✓] for S. demmonii Bebb.

condition of the branchlets and bud scales is a physiological condition caused by the exuding of a chemical substance. As it first appears it gives a faint bluish bloom to the surface. As the quantity increases the substance becomes dried, it becomes a whitish powder easily rubbed off. Some species of willow produce this exudate habitually under certain conditions. These species include:

S. Irrorata Andersson, S. Alaxensis var. longistylis (Rydb.) Schn., S. Bella Piper, S. Lemoni Bebb, S. Pellita Andersson, S. Subcoerulea Piper, and S. Geyeriana Andersson, among North American species.

These represent several widely different sections of the genus. Pruinoso bud scales and occasional twigs are found on several other species including S. Arctica ~~pallas~~ pallas, S. Barclayi Andersson, S. Pseudo Monticola Ball, S. Stolonifera Cov., and others.

Ball, Carleton R., and Kirk Whitef. Pruinoso Branchlets and Salix Lemmoni Bebb. Bot. Gaz.

Distinction by the exudation of a wax substance and appears to be governed in part by climatic conditions. As it first exudes, it gives a faint bluish tinge to branchlets and bud scales. As the quantity increases, it dries to a whitish powder which is easily rubbed off, but may be replumished. An examination of abundant herbarium material reveals some pertinent facts. The new branchlets in both Geyeriana and var. melissa are olive-green and gradually become dark brown. In S. Geyeriana of the Rocky Mountains, Great Basin, and Sierra Nevada, the darkening is slow and the pruinose condition common and often dense. In S. Geyeriana of Eastern Oregon and Eastern Washington, adjacent to the habitat of the variety, darkening is slow but the pruinose condition is less common and usually less dense. In variety melissa west of the Cascade Mountains, darkening of branchlets is rapid and intense, but the development of the pruinose condition is only faint and not universal.