Salvinia natans

Selaginella africana

Brownii
caesia (uncinata)
caulescens
denticulata
emiliana
emiliana aurea
haematodes
Kraussiana
Mandiana

Martensii variegata

Martensii

patula Pitcheriana serpens viticulosa Wildenovii

Selliguea caudiformis elliptica

Stenochlaena tenuifolia

Tectaria cicutaria heracleifolia

Vittaria lineata

Woodwardia orientalis

By way of summarizing, it may be noted that the total number of forms listed is 248; that of these W. A. Manda showed one hundred and forty-eight different kinds; A. C. Burrage one hundred fifteen; the Brooklyn Botanic Garden one hundred and eight. In the total list, fifty-four genera out of the total one hundred fifty fern genera known, were represented. Mr. Burrage's collection included forty different genera.

BROOKLYN BOTANIC GARDEN

Notes on American Ferns—XVIII¹

WILLIAM R. MAXON.

Asplenium Palmeri Maxon. This species, which is common in Mexico, has heretofore been known in the United States only from specimens collected in the Mule Mountains, Cochise County, Arizona, August, 1911, by Leslie N. Goodding (no. 976). It may now be reported from the Organ Mountains, New Mexico, upon material collected by E. O. Wooton, March 3, 1907. The specimen referred to is in the Dudley Herbarium of Stanford University, mounted with plants of A. resiliens Kunze, these apparently collected at the same time and place.

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Notes on A. palmeri were published in this Journal² a few years ago.

Polystichum acrostichoides (Michx.) Schott. In this Journal there was described in 1913 a fern from the vicinity of Great Falls, Virginia (a few miles above Washington, D. C.), which was regarded by the describer Mr. F. C. Greene, as a hybrid between Polystichum acrostichoides and Dryopteris cristata. The plants "were found in company with a great number of typical P. acrostichoides, and with several plants of D. cristata growing a few feet distant." Since the figures accompanying the description seemed to represent a plant differing in no important respect from some of the forms with incised or pinnatifid pinnae that P. acrostichoides often assumes, the writer expressed a desire to examine a portion of the material. To this request Mr. Greene very obligingly responded by presenting two typical fronds, a fertile and a sterile, to the National Herbarium. These entirely confirm the view that the plant in question is only an extreme condition of P. acrostichoides. There are no indications of D. cristata as a possible parent, nor were any definitely stated in the original description. Unfortunately the hybrid is listed as valid in the second supplement of Christensen's Index Filicum.

Polystichum and Ersoni Hopkins. An interesting extension of range for this species, previously known from British Columbia, Washington, and Montana, is noted in a specimen from Tracy Arm, Sumdum Bay, southeastern Alaska, collected August 17, 1921, by William S. Cooper (no. 50). The specimen, though consisting of a single poor frond, is unmistakably of this species rather than *P. alaskense* Maxon.⁴ Tracy Arm is a short distance southeast of Juneau.

² 3: 109. 1913.

³ Amer. Fern Journ. 3: 83–85, figs. 1–7. 1913.

⁴ Amer. Fern Journ. 8: 35. 1918. See also, Amer. Fern Journ. 10: 2, 3. 1920.

Equisetum palustre L. Several years ago the writer reported this species from the Wenaha National Forest, northeastern Oregon (Lawrence 95), a new record for the state.⁵ A wide extension of range is indicated by recent specimens from Marion County, Oregon. These were collected by Prof. J. C. Nelson in a wet meadow in bottom land near the Williamette River, 3 miles northwest of Waconda, May 13, 1921 (Nelson 3605) and in a grain field 3 miles north of Chemawa, May 28, 1921 (Nelson 3705). According to Professor Nelson's notes the plant is abundant in the low ground north of Chemawa, but is rarely found in a fruiting condition.

Selaginella asprella Maxon. This species, described from specimens collected on Ontario Peak, San Antonio Mountains, southern California, by Ivan T. Johnston (no. 1815), and known from two other collections in the same range (Johnston 1595, 1807) has more recently been gathered in the neighboring San Bernardino Mountains by Mr. C. F. Saunders. Mr. Saunders' plants were collected September 14, 1921, on the side of Snow Canyon, at an elevation of 1,800 meters, from the chinks and base of rocks in sunny situations. It was locally abundant, matting the rocks where it grew. Snow Canyon is otherwise of interest as being the only known California station for Dryopteris filixmas.

WASHINGTON, D. C.

⁵ Amer. Fern Journ. 7: 106. 1917.

⁶ Smiths. Misc. Coll. 725: 6. pl. 4. 1920.