

TORREYA

February, 1903

NOTES ON SOUTHERN FERNS

BY LUCIEN M. UNDERWOOD

OSMUNDA SPECTABILIS Willd.

A study of the royal fern of Europe with our own royal fern, both of which have been growing together for the past three or four years in the New York Botanical Garden, has led to the necessary conclusion that Willdenow's treatment of nearly a century ago is a correct one and we have adopted his above name for our royal fern. The difference between the two plants is very striking from the time when the leaves are first unrolled in the spring. The European plant has dark green foliage which has a firm texture even when young and is sharply in contrast with the thin reddish flaccid leaves so characteristic of our own species, which acquires its firmness long after the leaf has unrolled, though the texture is never the same as that of the European plant. The differences extend throughout the stipe of the two species, which presents marked characters not only in external form but also in internal structure. Mr. George Nicholson, the curator of Kew Gardens, where the two plants have long been under cultivation and observation, has recently told me that he has long regarded the two species as distinct. In herbarium specimens, especially when only the tips of the leaves have been snipped off, these characters of the living plants are obscured. It is very essential to combine life studies of ferns with what has recently been facetiously called "the lie-flat botany," in order to correct the false impressions arising from such a partial view.

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TRICHOMANES PETERSII A. Gray

In addition to the Georgia station noted in this issue of *TORREYA* by Mr. Seymour, Professor S. M. Tracy has recently sent me specimens from Saratoga, Mississippi. It is more than likely that this smallest of our native ferns will be found to have as wide a range as *T. Boschianum*, as it is very likely to be passed by as a liverwort. Saratoga is not on the ordinary map, but is in the southern portion of the State in quite a distinct region from the original locality.

Phymatodes exiguum (Hew.)

✓ *Polypodium serpens* Sw. Nov. Gen. et Sp. Pl. 131. 1788. Not Forst.

Polypodium exiguum Hew. Mag. Nat. Hist. 2: 458. 1838. Not Griseb. 1864.

Polypodium Swartzii Baker, Syn. Fil. 357. 1868.

Jenman has pointed out * that the above synonymy is the correct one although he retains the genus *Polypodium* in its widest sense, following the Kew practice. He cites also the necessity of renaming *P. exiguum* Griseb. and this seemed to deter him from making the change which he surely recognized as inevitable. As we have used this name in Dr. Small's forthcoming flora, it may be well to indicate the reasons here which the above synonymy will make apparent.

HYPOLEPIS REPENS (L.) Presl

Professor C. S. Williamson, of Philadelphia, has sent me a single plant of this species collected, in "rich damp woods, Oakland, Fla., August, 1895," and says it bears no evidence of having been introduced. If this is really indigenous as it appears to be, it adds a new genus to the United States. Oakland is near the middle of the peninsula, south of Lake Apopka and in a region which has scarcely been visited by the botanist. It is hoped we may hear further of this interesting locality.

✓ *Pteris latiuscula* Desv. Ann. Soc. Linn. de Paris, 6: 303. 1827.

Pteris aquilina Michx. Fl. Bor.-Am. 2: 262. 1803. Not L.

Pteris caudata Schkuhr, Crypt. Gen. pl. 96b. 1809. Not L.

* Bull. Bot. Dept. Jamaica, 4: 199. 1897.

Pteris aquilina β Willd. Sp. Pl. 5: 402. 1810.

Pteris aquilina var. *pseudocaudata* Clute, Fern Bull. 8: 39. 1900.

This fern, species or variety, has troubled systematists for over ninety years, and we confess our inability to add anything to the information already published on the subject other than to call attention to its long synonymy. Mr. George Nicholson has recently expressed to the writer a belief that the so-called *Pteridium aquilinum* of the northeastern States is a different species from *P. aquilinum* of Europe. Surely the species is a variable one in both countries as already seen in such field study as we have been able to give it on the other side of the Atlantic. The present plant has a range from Maryland to Texas, extending up the coast line of New Jersey to Long Island. We have assigned it no place in Dr. Small's forthcoming flora because of present uncertainty regarding its specific or varietal limits.

ANCHISTEA VIRGINICA (L.) Presl,
and LORINSERIA AREOLATA (L.) Presl

These plants are neither congeneric with *Woodwardia*, of which we must now regard *W. radicans* the type, nor with each other. The former is probably nearest *Blechnum* and the latter is phylogenetically very close to *Onoclea sensibilis*, in fact much closer than to either of the plants with which it has long been generically associated. The acute Presl separated them as above over a half a century ago, and we have followed his lead in Dr. Small's forthcoming Flora of the Southern States. Incidentally the Californian species is distinct from the Mediterranean one, and we shall have to follow Mr. Maxon in giving it Breckenridge's name.

COLUMBIA UNIVERSITY, 14 January, 1903.

TRICHOMANES PETERSII FOUND ANEW*

BY A. B. SEYMOUR

Trichomanes Petersii is one of three plants recorded in Mohr's Plant Life of Alabama as found only in that state, and I have found no further information except by my own observations.

* Read before the Botanical Club, A. A. A. S., at the Washington Meeting, January, 1903.



Underwood, Lucien Marcus. 1903. "NOTES ON SOUTHERN FERNS." *Torrey* 3(2), 17-19.

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