

Diplophyllia taxifolia (Wahl.) Trevis. On rock, higher altitude. This species is not common on Mt. Greylock or in the vicinity.

Harpanthus scutatus (Web. f. & Mohr) Spruce. On rotten log by brook, higher altitude.

Lejeunea cavifolia (Ehrh.) Lindb. Rocks by brook, higher altitude. Uncommon on Mt. Greylock.

Lophozia marchica (Nees) Steph. Wet bank by carriage-road near summit.

Nardia hyalina (Lyell) Carringt. Rocks in brook-bed. Dr. Evans kindly named the specimen.

Riccardia sinuata (Dicks.) Trevis. Wet rocks by brook, higher altitude.

Sphenolobus exsectus (Schmid.) Steph. Rocks of brook bed, higher altitude.

Sphenolobus Michauxii (Web. f. & Mohr) Steph. Decaying log by brook, higher altitude.

ITHACA, NEW YORK.

NOTE ON OXALIS STRICTA VAR. VIRIDIFLORA.

HARLEY HARRIS BARTLETT.

Mr. Henri Hus has described ¹ a green-petaled variety of *Oxalis stricta* from the vicinity of St. Louis. During the summer of 1907 this variety was found, in plenty, growing among piles of dead brush at the edge of a pine barren near Thomson, Georgia. The effect of the habitat was to make the plants long and spindling, but otherwise they could have been distinguished from the typical form of neighboring fields only by floral characters.

The petals of *Oxalis stricta* var. *viridiflora* are light green in color, obcordate, much broader than those of the typical form, and of somewhat firmer texture. They do not close after having once opened, and remain at the base of the developing fruit for several days before wilting. In the typical form the petals open in the morning and close toward mid-day. They wilt while closed, and are often borne up as

¹ Report Mo. Bot. Gard. xviii. (1907) 99.

a cap on the tip of the lengthening fruit. At the type station of *Oxalis stricta* var. *viridiflora* Mr. Hus found only a few individuals. The occurrence of the plant in greater abundance at a distant locality strongly confirms its worth as a systematic variety. Although it has doubtless had an independent origin at different places, its characters are definite and show no greater range of individual variation than do those of typical *Oxalis stricta*.

The green petals resemble sepals in the presence of chlorophyll in the sub-epidermal tissue and in the increase in number of stomata and hairs. They differ not only from sepals but also from typical yellow petals in the shape of the epidermal cells, which are prevailingly isodiametric instead of narrowly oblong. The breadth of the petals may be correlated with this character of the epidermal cells. Results of hybridization experiments with typical *Oxalis stricta* and var. *viridiflora* will be looked forward to with interest, since it is difficult to see, if it be true, as Mr. Hus believes, that var. *viridiflora* is a variation differing in only one essential character from the parent species, just how the modified shape of the epidermal cells can be interpreted as a consequence of the presence of chlorophyll, or *vice versa*. It is not as though the variation were true sepalody, for in that case the development of two instead of one whorl of sepals might be a unit character, which would be exclusive with regard to the development of petals.

According to Dr. Small's treatment of the species of *Xanthoxalis*,¹ certain species are classed into two groups, depending upon whether the longer filaments are glabrous or pubescent. *Oxalis stricta* falls in the group with glabrous filaments. Although this character does not hold perfectly in the material from Thomson, there is a sufficient difference in degree of pubescence so that a species like *Oxalis filipes*, which belongs to the group with pubescent filaments, can be very readily distinguished from *Oxalis stricta*. In var. *viridiflora*, however, the filaments are fully as pubescent as those of *Oxalis filipes*. If there should be found variations of other species of *Oxalis* parallel to *Oxalis stricta* var. *viridiflora*, this fact ought to be allowed for if the attempt is made to place them by means of Small's key.

CAMBRIDGE, MASSACHUSETTS.

¹ N. Am. Fl. xxvi. (1907) 50.



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