APETALOUS AND PETALIFEROUS FLOWERS IN LESPEDEZA

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It has long been known that both apetalous and petaliferous flowers are found in Lespedeza, and the fact that pods from these two kinds of flowers differ from each other in shape has been incidentally mentioned by taxonomists. The extent and conditions of the occurrence of the two kinds of flowers and their significance, however, seems never to have received attention.

In the past few years in connection with a general study of variation in Lespedeza, an attempt has been made to determine the significance of these two forms of flowers and the conditions under which they occur. General observation of a large number of species indicated that the occurrence of both petaliferous and apetalous flowers is common to most, if not all, species of the Eulespedeza and the Microlespedeza sections. It was further observed that the percentage of the two forms seems to vary with environmental conditions and possibly species. In order to ascertain more definite information on these points and to determine the significance, if any, of these variations, controlled observations were inaugurated at Arlington Experiment Farm, Virginia, where the studies are still in progress.

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