

PLANT TAXONOMY

Chairman: CARROLLE A. MARKLE, Earlham College

JOHN E. PELTON, Butler University, was elected chairman for 1957

ABSTRACTS

Variation in *Helianthus angustifolius*. WILLIAM C. MARTIN, JR., Indiana University.—Variation of 8 characters in *H. angustifolius* was studied from over 500 herbarium specimens from all parts of its range. Examination of microsporocytes revealed the species to be diploid with $n=17$ chromosomes. The species was found to be highly variable morphologically, but no clinal trends were evident. Probably both environmental modification and hybridization with other species accounts for the local variation encountered. Habitat differences appear to profoundly modify the species in many areas, particularly in New York and New Jersey. Hybridization with *H. salicifolius* probably explains some of the variants encountered in Texas, Oklahoma and Arkansas. A putative hybrid with *H. atrorubens* is described from North Carolina. The possibility of hybridization with *H. floridanus* and *H. occidentalis* is also discussed.

A Rare Dinoflagellate New to Indiana. WILLIAM A. DAILY, Butler University.—*Peridinium Volzii* f. *vancouverense* (Wailles) Lefevre, a dinoflagellate, heretofore has been reported from only British Columbia, Australia and Minnesota. Indiana is now added to this list. (To be published in the Butler Univ. Bot. Stud. XIII, 1956.)

A Study of Evidences of Introgression Among *Viburnum lentago*, *V. prunifolium*, and *V. rufidulum* Based on Leaf Characteristics. JOE H. BRUMBAUGH and A. T. GUARD, Wabash College and Purdue University.—The range of *Viburnum lentago* L. is northernmost and that of *V. rufidulum* Raf. is southernmost. Little overlapping of ranges occurs between these two species. *V. prunifolium* L. occurs between *V. lentago* and *V. rufidulum* and often overlaps the ranges of these two species. Each species appears to be best suited to a particular type of habitat: *V. lentago* occupies poorly drained areas; *V. prunifolium*, moist borders of woods; and *V. rufidulum*, dry rocky slopes. The above conditions provide favorable situations in which hybridization and resulting introgression could be occurring. The authors conclude that hybridization and introgression could be occurring and that introgression may be an important factor in presenting taxonomic difficulty in accurately defining the species.