PLANT TAXONOMY

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ABSTRACTS

Hybridization between Elymus virginicus and E. hystrix. JOHN E. EBINGER, Department of Botany, Eastern Illinois University, Charleston, Illinois 61920.——*Elymus virginicus* and *E. hystrix* are very distinct, wide ranging species that are common in upland wooded habitats throughout eastern North America. An analysis of specimens from areas where both species occur indicate that they commonly hybridize. The results of this analysis plotted on scatter diagrams show that F_1 hybrids commonly occur in disturbed habitats, and that these hybrids occasionally backcross with the parent species. These hybrids, which are usually sterile, are intermediate in their characteristics showing considerable variation in glume structure and partially spreading spikelets.

Numerical Classifications: Cladistics or Phenetics? RICHARD J. JENSEN, Department of Biology, Saint Mary's College, Notre Dame, Indiana 46556.——The construction of a classificatory system by numerical taxonomic methodologies requires an *a priori* conception of what it is that the classification should represent. Phenetic classifications, based on overall similarity, have been argued to best represent natural groups. These classifications are not intended to present precise views of phylogeny, but may be used as close approximations. Cladistic classifications, based on the recognition of monophyletic groups, are intended to accurately represent phylogenetic history. Cladists argue that their classifications are, therefore, more natural than phenetic classifications. Pheneticists and cladists perform similar operations in the initial stages of constructing a classification. Cladistics, however, requires the estimation of character state polarities and it is argued here that this introduces a significant source of error not found in phenetic classifications. The conclusion is that general classifications should be based on phenetic criteria and that cladistic methods be employed to construct hypotheses of evolutionary relationships, but not as a means of constructing classifications. An example, based on analyses of American oaks, is presented to demonstrate the complementary use of both methods.

A Unique Ruderal Plant Association in the Central Panhandle of Florida. GAYTON C. MARKS, Department of Biology, Valparaiso University, Valparaiso, Indiana 46383.—— A most unlikely plant association has become established in a Walton County highway ditch near Freeport, Florida.

These plants probably should be considered opportunists as they have taken advantage of wet soil, full sun, an unlimited supply of insects and ideal growing temperatures.

Nine species of carnivorous plants can be identified. Eight of these are insectivorous. Four genera of three families are found here in great numbers. These

include two species of pitcher plant, *Sarracenia*; three species of sundew, *Drosera*; three species of butterworts, *Pinguicula*; and but a single species of bladderwort, *Utricularia subulata*.

Their beauty in flower is enhanced by several colorful orchids, gaudy milkworts, composites, sedges, grasses, many aquatic or semiaquatic monocots and a single species of a clubmoss, *Lycopodium*. Anthesis is primarily limited to spring but a few species tardily exhibit flowering into summer and autumn.

The singularity of such a plant community is truly a delight for the northern botanist.