

Clark, Curtis, Karen W. Bowers, Phillip Hall, and W. Ethen Perkins. 1973. Fluorescence patterns in selected genera of yellow-rayed Oklahoma composites. Swanews 1973 (1&2):10 (April).

PROGRAM

Section A - Botany

(Room 205-206, MSU)
Gilbert Leisman, Presiding

- 9:15 1. Woody phreatophyte communities of the Republican river in Nebraska. Patricia J. Rand, University of Nebraska - Lincoln. (15 min., illustrated)

Thirteen species of trees are found in the native plant communities of the Republican River valley in Nebraska. Of these, cottonwood is the most important. It averages over 100 trees per acre throughout the valley, contributes a third or more of the canopy coverage in all stands, and has an average basal area of 40.79 ft² per acre. The species composition and physiognomy of the flood plain forests change from west to east, the change being most pronounced between 98° - 100° W Long.

- 9:33 *2. Fluorescence patterns in selected genera of yellow-rayed Oklahoma composites. Curtis Clark, Karen W. Bowers, Philip Hall, and Ethen Perkins, University of Oklahoma. (15 min., illus.)

Yellow-rayed genera of Oklahoma Asteraceae in the tribes Heliantheae, Helenieae, Astereae, and Senecioneae were examined for patterns of UV fluorescence. Species in approximately 3/4 of the genera examined showed these patterns. Implications of these patterns with respect to reproductive biology and taxonomy are discussed.

- 9:50 *3. Germination and establishment of Populus deltoides in eastern Nebraska. Larry Kapustka, University of Oklahoma (15 min., illus.)

Populus deltoides Marsh seeds gathered in May 1971 were tested for germination and seedling survival as a function of the age of seeds after harvest. Results were compared to field observations. Vegetational analysis of two riparian stands dominated by cottonwood was used as an aid to interpreting the results and assessing the role of this important bottomland pioneer species.

* Student papers