

Poinsettia Breeding and Genetics:

Hybridizations between poinsettia varieties with the chromosome numbers $2n=28$ and $2n=56$, using 'White Ecke' as the female and 'Barbara Ecke Supreme' as the male parent were successful in approximately 0.01 percent of pollinations, in producing viable seed. The seedlings which resulted possessed either 56 or 42 chromosomes. Genetic analyses showed that the "56" types resulted from chromosome doubling in the female parent. Types with 42 chromosomes are reported for the first time. Selected plants from among these new types possess desirable floricultural characters, such as good keeping quality of the bracts, foliage retention, variation in degree of red bract color, and are fast growing. Three of these varieties are presently on trial with commercial greenhouse firms to evaluate them for possible introduction to the industry.

Further crosses between the new "42" types and the "28" types have resulted in varieties with a $2n=35$ chromosome number. These are being used in genetic studies and evaluated for their growth and flowering characteristics.—Kenneth C. Sink from Michigan State University Hort Rept. No. 31, Spring 1967.