Genetic Relation of Endosperm and Chlorophyll Characters in Maize

W. A. Carver
DISTRIBUTION OF PLANTS ON UPPER SKUNK RIVER IOWA

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Data is presented on the distribution of species along the Upper Skunk River, the percent of different species is given in the principal physiographic divisions.

QUERCITRON OAK AND ITS RELATION TO SOILS

RAYMOND J. BECRAFT

Quercitron oak (*Quercus velutina Lam.*) is sparsely distributed in Iowa, being reported by Pammel in only nine counties. The only patch known in Story County is this area some three miles northeast of Ames, which is a narrow strip about three miles long. Here its distribution conforms very definitely with the occurrence of an area of Carrington fine sandy loam, which soil was apparently deposited by glacial streams on common glacial till of boulder clay. The type lacks uniformity in depth, much of it showing less than three feet of sand. Where the sub-soil corresponds, it is light grayish-brown to yellowish sand. The oak has failed to spread to adjacent upland clay loam (Carrington) and terrace silt loam (Wabash), thus showing utter dependence on the fine sandy loam.

GENETIC RELATION OF ENDOSPERM AND CHLOROPHYLL CHARACTERS IN MAIZE

W. A. CARVER

The interrelation of sugary endosperm, virecent, and brindled, a chlorophyll defect, was studied. Brindled was found to be a simple Mendelian recessive to normal green. Brindled and virecent proved to be independent in inheritance. The double recessive condition of the factors for virecent and brindled produces an albino plant. The brindled character and sugary endosperm showed a linkage (in the repulsion phase) with 26.3 percent crossing-over.