

PURDUE UNIVERSITY
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1. Opaque-4 designation withdrawn.

The recessive endosperm mutant which was tentatively designated opaque-4 (MGCNL 40) has now been found to be an allele at the floury-1 locus. Our analyses indicate that both fl^a (supplied by Dr. Alex Paez) and o_4 are normal in lysine levels. Also both apparently have the same phenotype when in similar backgrounds. Therefore, we propose to withdraw the opaque-4 designation in favor of the earlier (Mazoti, 1940, Anales del Institute Fit, de St. Catelina 2:17-26) designation fl^a .

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1. Inheritance of date of pollen shedding in a corn diallel cross.

Pollen grain diameters measured on a number of inbred lines in 1970 (Maize Genetics Coop. News Letter 46:171-172, 1972) were used to select ten lines as parents for diallel crosses made in 1971. The parents represented a wide range of phenotype for pollen grain size but were not selected for any measurement of maturity. The complete diallel was planted in the field at Brookings, South Dakota, in 1972 with three replications of seven plant plots for each line and reciprocal cross. As the plants matured the date when four or more of the plants in a plot first shed pollen was recorded as the numerical day of the year.

Table 1 includes the means of the 100 test entries. The earliest parent was W629A which attained 50 percent pollen shedding on day 200. This was equaled by the cross W629A x A641 and its reciprocal. The latest maturing entries were the two parent lines M017 and WF9, both of which shed pollen on day number 218, and parent line B45 which shed on day 220.