WAXLESS POD (wp) SHOWS LINKAGE ON CHROMOSOME 6

Marx, G.A. NYS Agricultural Experiment Station Geneva, New York 14456, USA

In 1971 (1) I reported that the waxless pod character found in WL 1256 (P. fulvum) behaved as a monogenic recessive but, until now, the requisite supporting evidence has not been offered. Recently I discovered in my files the as yet unreported data in Table 1. Monogenic inheritance is demonstrated and linkage on chromosome 6 is indicated.

Table 1. Monohybrid (A) and dihybrid (B) segregation in F_2 populations from two crosses.

A (Population B271-717-731 *)

Wp wp Total Chi-square (3:1)

222 68 286 0.38

B (Populations B272-386-394 and B272-399-408)

						Chi-so			
								Recomb.	
Wp Pl	Wp pl	wp Pl	wp pl	Total	Wp	Pl	Linkage	fract.	S.E
157	36	40	23	256	0.02	0.52	8.03**	37.5	4.0

5 non-segregating progenies excluded. Significant at the 0.01 level.

1. Marx, G.A. 1971. PNL 3:20-21.

34