

Table 1

Testcross data for crosses of l^*-1106 with T4-9g, T4-6 (4447), T4-6b, and T4-6 (8380)

Translocation	Parental classes		Recombinations		Total	% recom- bination
	T +	+ 1	T 1	+ +		
T4-9g	133	133	6	4	276	3.6%
T4-6 (4447)	148	177	4	8	337	3.6%
T4-6b	55	120	1	8	184	4.9%
T4-6 (8380)	142	121	3	1	267	1.5%

Table 2

Testcross data for plants of the genotype $\frac{+ \quad \text{su} \quad \text{gl}^4}{l^*-1106 \quad + \quad +}$

Parental classes + su gl/1 + +	c.o. region 1 + + +/1 su gl	c.o. region 2 + su +/1 + gl	c.o. region 1 & 2 1 su +/ + + gl		Total			
113	132	3	3	22	38	0	0	311
%		1.9		19.3				

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3. Location of pale yellow*-PI177593 on chromosome 4.

A pale yellow seedling mutant was found segregating in a Plant Introduction accession from Turkey. Young seedlings of this mutant start out medium yellow and fade to a pale yellow with age.

Data from an F_2 linkage test with $wxT4-9g$ (4S.27, 9L.27) indicated the gene was on chromosome 4. Testcross results involving $py^*-PI177593$ and T4-9g, T4-6 (4447) (4S.28, 6L.14), and T4-6 (8380) (4S.47, 6L.18) are given in Table 1. The data from Table 1 are not

Table 1

Testcross data from crosses of py*-PI177593 and T4-9g, T4-6 (4447) and T4-6 (8380)

Translocation	Parental classes		Recombinations		Total	% recom- gination
	T +	+ pg	T pg	+ +		
T4-9g	118	100	2	0	220	0.9%
T4-9g	T pg	+ +	T +	+ pg	134	0.7%
	56	77	0	1	354	0.8%
Total	351		3			
T4-6 (4447)	T +	+ pg	T pg	+ +	443	0.5%
	260	181	1	1		
T4-6 (8380)	T +	+ pg	T pg	+ +	365	1.1%
	193	168	2	2		

very helpful in placing the gene. They do suggest, however, that it is located in about the proximal one quarter of the short arm. This was confirmed when crosses with TB-4a (4S.25) failed to segregate for py*-PI177593 seedlings.

The results of linkage tests of this mutant with su are given in Table 2. Since py*-PI177593 is not uncovered by TB-4a and su is, the data from Table 2 would indicate that py*-PI177593 is 9.5 crossover units proximal to su.

Table 2

Testcross data from the cross su su x su py*-PI177593

Parental classes		Recombinations		Total	% recombination
+py	su+	++	su py		
120	128	21	5	274	9.5%

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