Table 2 Continued

Treatments			Plant Height	Pollen shed *	Survival N = 45 %	Mutation rate %	Fiducial limits .05 level
Chemical	Conc. M.	Time Hrs.	Ins.				
DES	.045	3	71	9	87	.31	.2 — .5
DEB:EMS			61	8	78	.29	.1 — .4
EI	.050	1	0	0	0	0	-- — --
Control			93	0	89	.27	.2 — .3

* Days after control.

H. R. Lund
D. V. Glover

2. Location of small plant (spl) on chromosome 6.

Small plant (spl) mutant stocks were crossed to a series of stocks homozygous for waxy marked chromosome-nine translocations. The F_1 plants were selfed and F_2 starchy and waxy seeds from each translocation cross were planted separately and examined for small plant (spl) segregations.

Expected ratios (25%) of small plant were obtained with all translocations except T6-9$^{4505-4}$. Within the F_2 waxy seed class planted involving this cross a significant association was demonstrated between the small plant (spl) gene and the translocation tester T6-9$^{4505-4}$. Two hundred and seventy starchy and 230 waxy seeds from 7 selfed F_1 plants were planted. Not all of the starchy seeds were planted out for observation thus accounting for the discrepancy in the Wx:wx ratio. The data from the progenies involving T6-9$^{4505-4}$(6L.13 and 9 ctr.) were as follows: starchy seeds gave 158 normal:42 spl and 70 failed to grow; waxy seeds gave 148 normal:4 spl and 78 failed to grow. Progenies of waxy seed gave 2.6% small plants, from which it is apparent that small plant is located on chromosome 6 near the Y locus. However, there is a discrepancy in the progenies of the starchy seed since fewer small plants were observed than expected. Testcrosses have been made and will be analyzed to confirm the location and linkage on chromosome 6.

David V. Glover