

1. Linkage studies with su_2

A three point test from $A/a Pl Su_2 py / pl su_2 Py$ selfed gave results as follows:

	$Pl Py$	$Pl py$	$pl Py$	$pl py$	Sum
Su_2	96	12	32	16	156
su_2	4	1	60	0	65

Recombination values were $Pl-su_2$, 6 ± 2 ; and su_2-py , 17 ± 6 .

Two point tests of su_2 with Y in F_2 gave:

	$Y Su_2$	$Y su_2$	$y Su_2$	$y su_2$	Sum	Recombination
Repulsion	90	46	48	7	191	34
Coupling	179	44	35	31	289	33
"	76	15	16	10	117	34
"	102	22	19	24	157	34

Backcross tests of su_2 with T6-10a and T6-10b are compared with backcross tests of Pl with T6-10a and T6-10b from Anderson and Kramer, Genetics (in press) as follows:

su_2T	T6-10a	T6-10b	$Pl-T$	T6-10a	T6-10b
Su_2SS	56	53	$Pl SS$	147	8
$Su_2 N$	21	5	$Pl N$	56	64
su_2SS	21	6	$pl SS$	50	62
$su_2 N$	69	68	$pl N$	140	4
Sum	167	132		393	138
Recombination	25	8		26	9

The linkage values indicate that su_2 is probably slightly distal to Pl on chromosome 6. The map may be summarized as follows:

Standard	$Y - 31 - Pl - 20 - py$			
		$Pl - su_2 - py$		
Observed	$< - 34 - 17 >$			
		$Pl - 6 - su_2$		
	T6-10b	Pl	su_2	T6-10a
	$< -9-$			$>$
	$< -8-$		26	$>$
			25	$>$