





Table S8 Recursion matrix for calculating two-locus X chromosome haplotype probabilities in the generation of four-way RIL by sibling mating

State at k		State at $k + 1$			
		1	2	3	4
1		$(1 - r)/2$	0	$1 - r$	$1/4$
2		$r/2$	0	r	$1/4$
3		$1/2$	0	0	0
4		0	1	0	$1/2$