**Table S17** Starting states for the calculation of probabilities of the two-locus X chromosome female diplotype of the form $AA|AA$, in the generation of four-way RIL by sibling mating

Prototype	No. states	Initial pattern		Initial probability
$AA|AA$	2		(4)	$1/2$
$AB|AB$	2		(9)	$1/2$
$AC|AC$	4		(8)	$1/4$
$CC|CC$	1		(10)	1