

Table S1. LD50 calculation based on the lethal rate with different EMS treatments.

Genotype	EMS concentration (%) and duration	Lethal rate (%)	Model	Ro	LD50 (%)
HY22	1 h		$y = 39.833x + 29.8$	0.8765	0.51
	0	21			
	0.3	52			
	0.6	57			
	0.9	65			
	1.2	75			
	3 h		$y = 71.833x + 20.6$	0.9318	0.41
	0	21			
	0.3	43			
	0.6	55			
	0.9	100			
	1.2	100			
	5 h		$y = 70.5x + 31.2$	0.7999	0.27
	0	21			
	0.3	47			
	0.6	100			
	0.9	100			
	1.2	100			
	7 h		$y = 65.167x + 37.6$	0.7748	0.19
	0	21			
	0.3	63			
	0.6	100			
	0.9	100			
	1.2	100			
YY45	1 h		$y = 73.833x + 3.5$	0.9482	0.63
	0	13			
	0.3	17			
	0.6	45			
	0.9	65			
	1.2	100			
	3 h		$y = 84.167x + 16.4$	0.7725	0.40
	0	13			
	0.3	22			
	0.6	100			
	0.9	100			
	1.2	100			
	5 h		$y = 77.833x + 24$	0.7998	0.33
	0	13			
	0.3	41			
	0.6	100			
	0.9	100			
	1.2	100			
	7 h		$y = 75.667x + 26.6$	0.7979	0.31
	0	13			
	0.3	47			
	0.6	100			
	0.9	100			
	1.2	100			