

Supplementary Table 5. Statistical analysis the relationship between QTL and APA genes

		Have APA gene		Have switch gene	
		p-value	QTL sig. (0.01)	p-value	QTL sig. (0.01)
trait category	biochemical	0.191291	-	0.159479	-
	vigor	5.22E-06	√	0.000142	√
	anatomy	7.60E-05	√	0.000359	√
	abiotic stress	7.20E-05	√	0.16979	-
	yield	8.30E-08	√	0.000132	√
	Biotic stress	0.019159	-	0.019159	-
	quality	8.77E-06	√	0.005341	√
	sterility or fertility	6.52E-06	√	0.008618	√
	development	0.000247	√	0.001187	√
trait name	1000-seed weight	0.008983	√	0.057156	-
	days to heading	0.005622	√	0.00796	√
	grain number	0.006757	√	0.500425	-
	leaf senescence	0.014581	-	0.082919	-
	panicle length	7.70E-05	√	0.029142	-
	plant height	0.000462	√	0.000247	√
	spikelet fertility	3.89E-05	√	0.019457	-
	spikelet number	0.005292	√	0.060145	-

√ indicates the QTL tends to have APA gene or switch gene (p-value <0.01)