Breeds	Sizes	Genotypic frequencies			Allelic frequencies		HWE	Population parameters			
	N	II	ID	DD	I	D	P values	Ho	He	Ne	PIC
LX	113	29	40	44	0.434	0.564	$P < 0.05$	0.509	0.491	1.965	0.371
QC	227	133	68	26	0.736	0.264	$P < 0.05$	0.611	0.388	1.636	0.313
NY	134	13	79	42	0.489	0.511	$P < 0.05$	0.523	0.477	1.911	0.670
JX	140	49	71	20	0.604	0.396	$P > 0.05$	0.521	0.479	1.918	0.364

N: number; HWE: Hardy–Weinberg equilibrium; Ho: homozygosity; He: heterozygosity; Ne: effective allele numbers; PIC: polymorphism information content; LX: Luxi cattle; QC: Qinchuan cattle; NY: Nanyang cattle; JX: Jiaxian red cattle; II: insertion–insertion; ID: insertion–deletion; DD: deletion–deletion.