

Table S1 Genetic analysis of the *Erysiphe pisi*-resistance of the pea germplasms G0004389 and G0004400, which carry the novel alleles, *er1*-8 and *er1*-9, respectively.

Parents and cross	Generation	Individuals	No. of plants or families			Expected ratio and goodness of fit		
			R	Rs	S	R:Rs:S	χ^2	P
Wsu28	P1	30	-	-	30	-		
G0004389	P2	30	30	-	-	-		
Wsu28×G0004389	F ₁	6	-	-	6	-		
	F ₂	120	30	-	90	1:3	0.01	0.92
	F _{2:3}	120	30	63	27	1:2:1	0.48	0.79
Bawan6	P1	30	-	-	30	-		
G0004400	P2	30	30	-	-	-		
Bawan 6×G0004400	F ₁	5			5			
	F ₂	119	32		87	1:3	0.14	0.71
	F _{2:3}	119	32	64	23	1:2:1	2.51	0.29

R: resistant; S: susceptible; Rs: segregated.