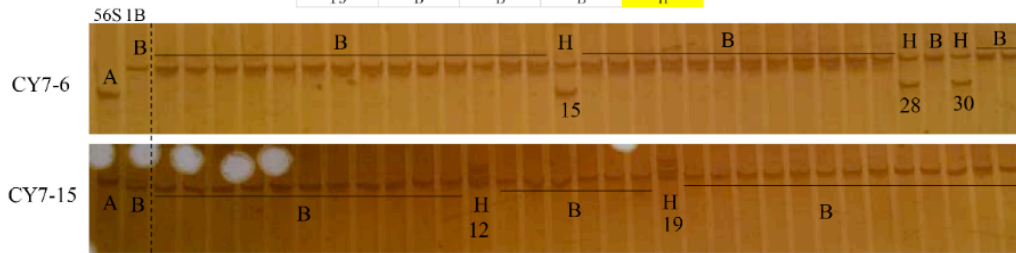


**Supplementary Figure S1.** panicles of *Xinong 1B*, 56S, F<sub>1</sub> plant and mutant plant in F<sub>2</sub> population

A

No.	ZTQ65	ZTQ66	CY7-6	CY7-15
6	H	B	B	B
20	H	B	B	B
25	H	B	B	B
3	H	H	B	B
19	H	H	B	B
21	H	H	B	B
15	H	H	H	B
28	H	H	H	B
30	H	H	H	B
12	B	B	B	H
19	B	B	B	H

B



**Supplementary Figure S2.** results of preliminary mapping of *NSG2*

(A): preliminary statistics of gene mapping; (B): electropherogram of the 32 individuals of CY7-6 and CY7-15; A: electrophoresis band patterns of 56S; B: electrophoresis band patterns of *Xinong 1B* and *nsg2* that only contained mutant parent bands; H: electrophoresis band patterns of the heterozygote, which contained two parent bands

No.	CY7-6	R-20	R-34	R-37	R-39	R-40	R-49	CY7-15	No.
15	H	B	B	B	B	B	B	H	12
23	H	B	B	B	B	B	B	H	19
44	H	B	B	B	B	B	B	H	34
63	H	B	B	B	B	B	B	H	41
83	H	B	B	B	B	B	B	H	59
112	H	B	B	B	B	B	B	H	61
123	H	B	B	B	B	B	B	H	68
132	H	B	B	B	B	B	B	H	78
141	H	B	B	B	B	B	B	H	105
146	H	B	B	B	B	B	B	H	108
154	H	B	B	B	B	B	B	H	117
155	H	B	B	B	B	B	B	H	160
161	H	B	B	B	B	B	B	H	170
184	H	B	B	B	B	B	B	H	163
203	H	B	B	B	B	B	B	H	187
214	H	B	B	B	B	B	B	H	38
264	H	B	B	B	B	B	B	H	507
358	H	B	B	B	B	B	B	H	508
28	H	H	B	B	B	B	B	H	204
30	H	H	B	B	B	B	B	H	205
127	H	H	B	B	B	B	B	H	211
176	H	H	B	B	B	B	B	H	263
285	H	H	B	B	B	B	B	H	270
343	H	H	B	B	B	B	B	H	304
356	H	H	B	B	B	B	B	H	311
372	H	H	B	B	B	B	B	H	335
391	H	H	B	B	B	B	B	H	451
429	H	H	B	B	B	B	B	H	457
470	H	H	B	B	B	B	B	H	589
471	H	H	B	B	B	B	B	H	
565	H	H	B	B	B	B	B	H	
607	H	H	B	B	B	B	B	H	
616	H	H	B	B	B	B	B	H	
619	H	B	B	B	B	B	B	H	
622	H	B	B	B	B	B	B	H	
627	H	B	B	B	B	B	B	H	
638	H	B	B	B	B	B	B	H	
644	H	B	B	B	B	B	B	H	
651	H	B	B	B	B	B	B	H	
652	H	B	B	B	B	B	B	H	
670	H	B	B	B	B	B	B	H	

**Supplementary Figure S3.** results of fine mapping of *NSG2*

B: electrophoresis band patterns of *nsg2* that only contained mutant parent bands; H: electrophoresis band patterns of the heterozygote, which contained two parent bands