

Table S1. Primers for the amplification of the *OsCesA7* gene.

Position	Primer F	Primer R	Tm
B1FB1R	GACCTATTGTGTGCTTTCCTC	CGATCATGCCAAAGTTCACAAG	60
MF1MR1	CTGGGAAGGATCTGGAGCAG	GTAGACGATGGTGTGGTGTAG	65 (10X), 55 (25X)
P4FP5R	TCATCAAGGAGGCCATCCAC	GACCAGCATTCTGGGTCAGA	60

The *OsCesA7* sequencing was downloaded from the ROOTomics (<https://rootomics.dna.affrc.go.jp/>).

The primers were synthesized by Integrated DNA Technologies, Inc. with Desalted purification.

Table S2. Agronomic traits of the green brittle (GB) variety, its parents (AZ1803 and CS11), and check line (IR64) in 2021 1st crop season.

Trait	AZ1803	CS11	GB	IR64
Brittleness	Yes	No	Yes	No
Vegetative vigor	Normal	Normal	Normal	Normal
Culm strength	Intermediate	Moderately	Intermediate	Intermediate
Plant height	Semi dwarf	Intermediate	Semi dwarf	Semi dwarf
Leaf senescence	Intermediate	Late	Intermediate	Intermediate
Panicle exertion	Well exerted	Moderately well	Just exerted	Well exerted
Panicle thresh ability	Easy	Intermediate	Easy	Easy
Maturity (days)	112	120	114	112
Leaf length (cm)	38.17±1.04	39.33±4.25	34.17±3.19	37.07±3.30
Leaf width (cm)	1.37±0.06	1.53±0.15#	13.6±0.09	1.42±0.10
Leaf blade pubescence	Intermediate	Late	Late	Intermediate
Leaf blade color	Green	Green	Green	Green
Basal leaf sheath color	Green	Green	Green	Green
Leaf angle/attitude	Erect	Erect	Erect	Erect
Flag leaf angle	Erect	Erect	Erect	Erect
Culm angle	Open	Intermediate	Intermediate	Open
Culm internode color	Green	Green	Green	Green
Panicle type	Compact	Intermediate	Compact	Compact
Panicle axis	Droopy	Straight	Droopy	Droopy

The traits were investigated following standard evaluation system (SES) guide book. Leaf length and leaf width was investigated by 20 plants ($n = 20$).

Table S3. The linkage SSR markers for the selection of *AZ1803* and *Xa* gene selection.

Gene	Chr.	Marker	Primer F	Primer R
<i>AZ1803</i>	10	RM271	TCAGATCTACAATTCCATCC	TCGGTGAGACCTAGAGAGCC
		RM5392	GCCGTCTACCTCATGGTCAC	CCATAACCGTGGTGTTTGAG
<i>xa5</i>	5	RM153	GCCTCGAGCATCATCATCAG	ATCAACCTGCACTTGCCTGG
		RM611	CAACAAGATGGCCTCTTACC	TACAAACAAACAGCTTGTGC
<i>Xa7</i>	6	RM20582	AGAGCGTCGTCCTTCACCATCC	GGCCAATACGACGATACATTACACG
		RM3138	TTGACAAGAGATCAAGGCGG	GTGAATGTTGAGCTGCATGG
<i>xa13</i>	8	RM149	GCTGACCAACGAACCTAGGCCG	GTTGGAAGCCTTTCCTCGTAACACG
		RM3761	CCTCAACAATAGCACCACCC	CTGCAAGTCTGCAAGCACAG
<i>Xa21</i>	11	RM16914	TTTAAAGAAGCCCTCCTCCTTAGC	ACAGGGACGAGGAAGAAGAAGC
		PTA248	GACGCGGAAGGGTGGTTCCCGGA	GACGCGTAATCGAAAGATGAAA

AZ1803 is the brittleness gene in *AZ1803* mutant line. *xa5*, *Xa7*, *xa13*, and *Xa21* are bacterial blight resistant genes in CS11 variety.