

Supplement figure captions

Fig. S1. Effect of germination time on the isoflavone content of soybean sprouts. Each data point represents the average (average \pm SD) of three independent biological replicates. Lowercase letters reflect significant differences ($P < 0.05$) in indicators between treatments at a given germination time using Tukey's test. 2: 2 days of age; 3: 3 days of age; 4: 4 days of age; 5: 5 days of age; 6: 6 days of age.

Fig. S2. Effect of UV radiation duration on growth condition (I), shoot length (II), fresh weight (III) and isoflavone content of soybean sprouts during germination. Each data point represents the average (average \pm SD) of three independent biological replicates. Lower-case letters reflect significant differences ($P < 0.05$) in the indicators between treatments at a given germination time using Tukey's test. CK: control; 3: 3 h/d UV radiation; 6: 6 h/d UV radiation; 9: 9 h/d UV radiation; 12: 12 h/d UV radiation; 15: 15 h/d UV radiation.

Fig. S3. Effect of applied concentrations of GABA under UV radiation for 9 h/d on the growth status (I), shoot length (II), fresh weight (III) and isoflavone content of soybean shoots during germination. Each data point represents the average (average \pm SD) of three independent biological replicates. Lowercase letters reflect significant differences in indicators between treatments at a given germination time using Tukey's test ($P < 0.05$). CK: control; 0.05: 0.05 mM GABA; 0.25: 0.25 mM GABA; 1: 1 mM GABA; 5: 5 mM GABA; 10: 10 mM GABA; 20: 20 mM GABA; 40: 40 mM GABA

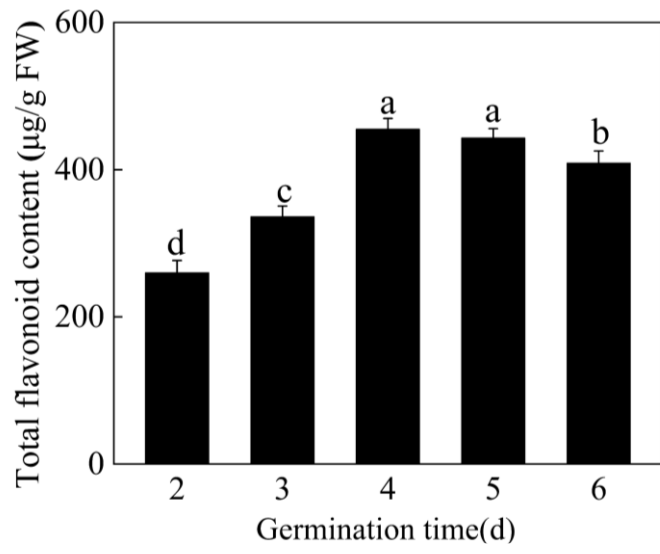


Fig.S1

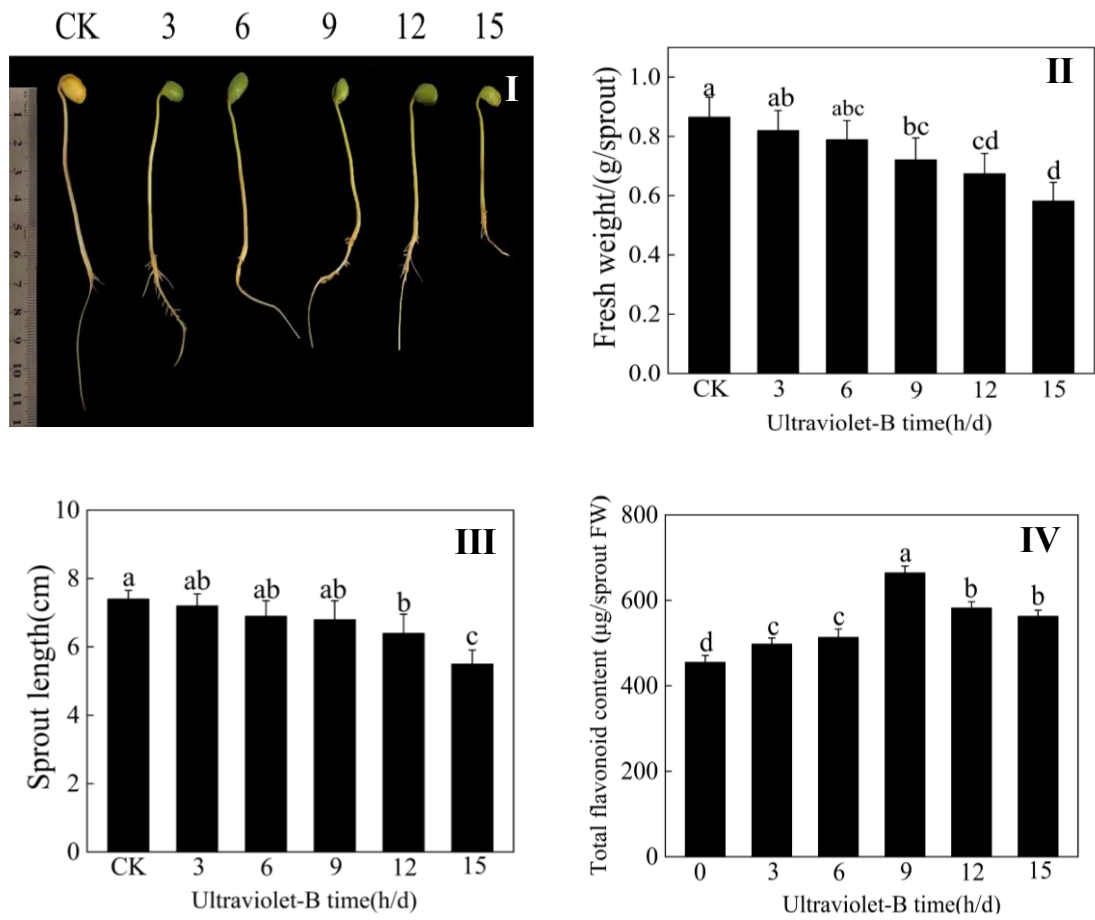


Fig. S2

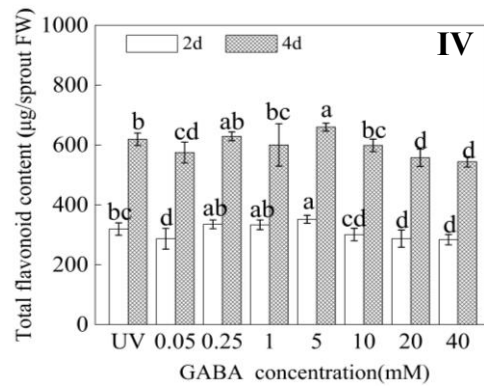
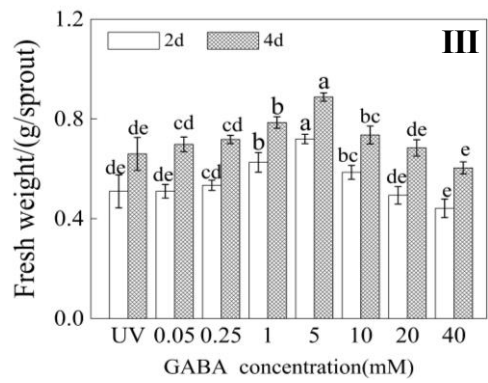
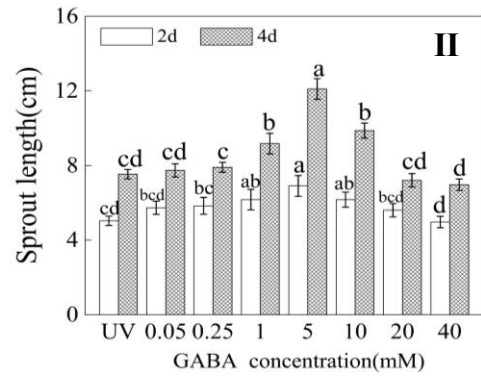
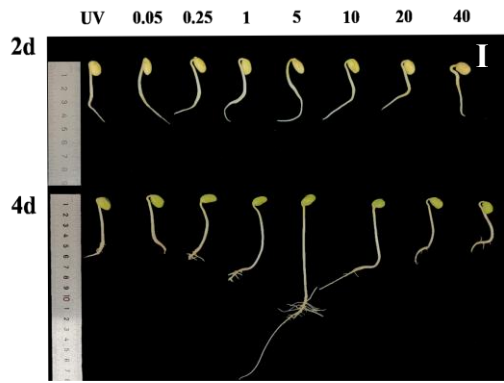


Fig. S3

Supplement Table S1. Specific primers used in the present study.

Gene	Gene name	Primer	Primer sequences (5' - 3')
<i>PAL1</i>	Phenylalanine ammonia lyase 1	Sense	AGCAACACAACCAGGATGTCAA
		Ant-sence	CAATTGCTTGGCAAAGTGCA
<i>C4H</i>	Cinnamic acid 4-hydroxylase	Sense	AGGCGAGATCAACGAAGACAAC
		Ant-sence	G TTCACAAGCTCAGCAATGCC
<i>4CL</i>	4-coumarate coenzyme A ligase	Sense	AGGCAATGTACGTGGACAAGCT
		Ant-sence	TCCGAGAGGACAGAGAAGTGGA
<i>CHR</i>	Chalcone reductase	Sense	CAAAGCCATTGGAGTCAGCAA
		Ant-sence	CCATGCAAGGTTTCATCTCCACT
<i>CHS</i>	Chalcone synthase	Sense	GCTTGTTGTCTGTTCTGAG
		Ant-sence	CACCTTCACTGTCTGGAG
<i>IFR</i>	Isoflavone reductase	Sense	AGATGGAAATGTGAAAGGAGCG
		Ant-sence	TGTGCACGGCTTTGTTCAAG
<i>CAT</i>	Catalase	Sense	ACTACAAATTCTGGTGCTCCTA
		Ant-sence	TGCAAGCTTCTCCACAAGA
<i>POD</i>	Peroxidase	Sense	GCTTTGAGCACCATTAGA
		Ant-sence	TTGGTGAAGGGTC TAGTA
<i>APX</i>	Ascorbate peroxidase	Sense	ATCCTTGCTACGCACACACT
		Ant-sence	TCCACATGCTTGGTCCACA
<i>SOD</i>	Superoxide dismutase	Sense	GCTTGTTGTCTGTTCTGAG
		Ant-sence	GCTAACGGTACCATCATCA
<i>Actin</i>	Reference gene	Sense	CTTCCCTCAGCACCTTCCAA
		Ant-sence	GGTCCAGCTTTCACACTCCAT