

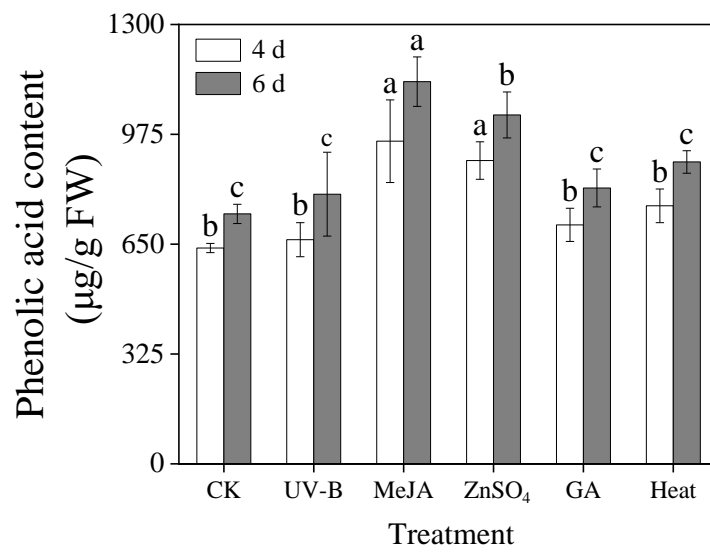
1 **SUPPLEMENT FIGURE CAPTIONS**

2 **Figure S1.** Effect of different treatments on phenolic acid content of barley seedlings. Lowercase
3 letters indicate significant ($p < 0.05$) differences between treatments for the same germination time.
4 CK: Control; UV-B: 9 h/24 h Ultraviolet-B; MeJA: 100 μ M methyl jasmonate; ZnSO₄: 4 mM zinc
5 sulfate; GA: 200 μ M gibberellic acid; Heat: 45°C 30 min/d.

6 **Figure S2.** Effect of MeJA concentration on growth performance (A), phenolic acid content (B),
7 and length (C) of barley seedlings. Lowercase letters indicate significant ($p < 0.05$) differences
8 between treatments for the same germination time. CK: Control; M₁: 50 μ M MeJA; M₂: 100 μ M
9 MeJA; M₃: 150 μ M MeJA; M₄: 200 μ M MeJA.

10 **Figure S3.** Effect of ZnSO₄ concentration on growth performance (A), phenolic acid content (B),
11 and length (C) of barley seedlings. Lowercase letters indicate significant ($p < 0.05$) differences
12 between treatments for the same germination time. CK: Control; Z₁: 2 mM ZnSO₄; Z₂: 4 mM
13 ZnSO₄; Z₃: 6 mM ZnSO₄; Z₄: 8 mM ZnSO₄.

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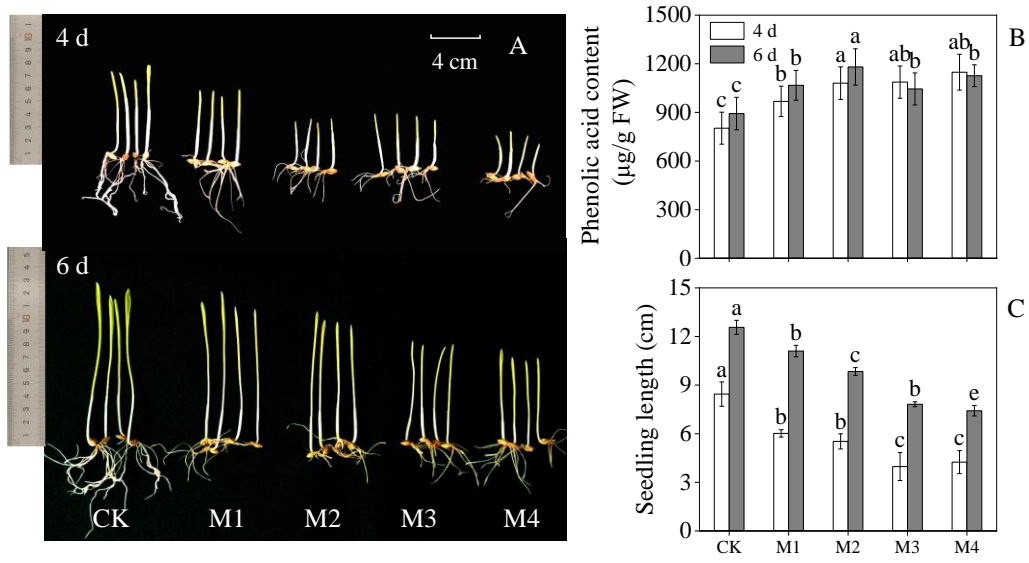


Figure S2

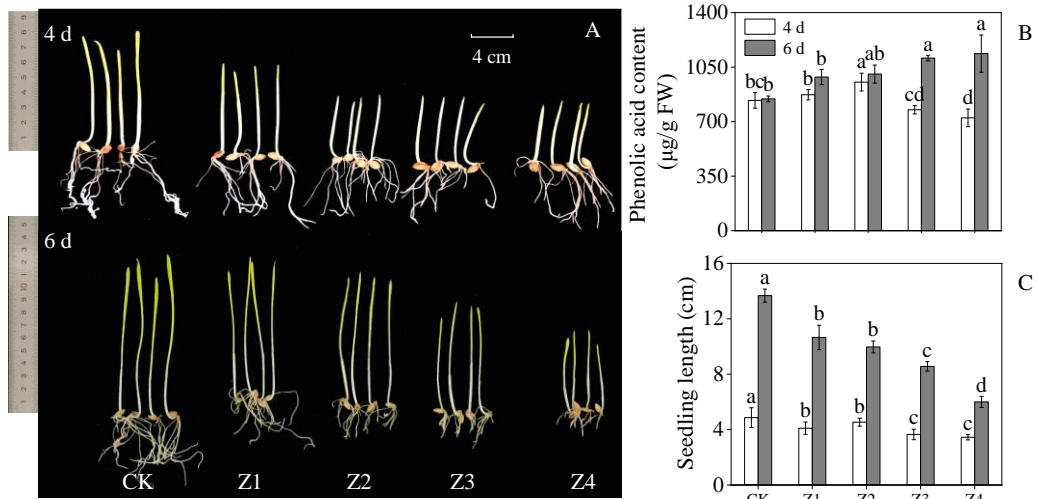


Figure S3

25 **Supplement Table S1.** Sequence-specific primers used in the present study.

Gene name	Forward Primer (5' to 3')	Reverse Primer (5' to 3')
<i>HvPAL</i>	CACTGAATGCCGATCATACCC	CCGTTCCAACCCTTGAGACA
<i>HvC4H</i>	AGCTCGCCGCCTACAACATC	GCCTCCACGTGCTTCTCCTC
<i>Hv4CL</i>	GGTGGAGATCGCCAAGAGCC	CTCCGTCATCCCGTACCCCT
<i>HvC3H</i>	ATCACCGCTGGGATGGACA	GGTACGGCAGGTTCTGGAAGT
<i>HvCOMT</i>	GCCGTCAAAGGCATCAACT	GCAAGGCGTCATAGCAGTTC
<i>HvF5H</i>	TCGACGACATGCTCGCCTTC	TCCCGCCAAACATCACGTCC
<i>HvCAT</i>	TGGACGGATGGTACTGAACA	GTGCCTTTGGGTATCAGCAT
<i>HvAPX</i>	CGCCCTCTTGTGGAGAAATA	CGCGCATAGTAGCAGCAGTA
<i>HvSOD</i>	CCCCTCACCAAGTCAGTCAT	ATTGCAAGTCGGTGTCTTTC
<i>HvCa²⁺-ATP</i>	CCACCGTCATCTGCTCCGAC	ATTGCACACAGCTGCGACCT
<i>HvCAMK1</i>	CGGTGTCCTTCATCTTGCG	ACGAGGTTGATGCTGACGG
<i>HvCDPK</i>	TTTGCTATGTGGTGTCCCCC	GCAGAGAGCCGCTTTGTAGG
<i>HvActin</i>	TCGTGAGAAGATGACCCAGA	CCGAGTCCAGCACAAATACCT

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