Title: Recovery of Apoplastic Ca^{2+} Released by Heat Shock Accompanied by Pectin Methylesterase Activity Is Required for Thermotolerance in Soybean Seedlings

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Supplementary Table S1. Thermotolerance is lost in the presence of EGTA during recovery from HS and is restored by adding Ca^{2+}, Sr^{2+} or Ba^{2+}. Thermotolerance is lost in the presence of EGTA during the recovery from HS and is restored by adding Ca^{2+}, Sr^{2+} or Ba^{2+} in soybean seedlings. Two-d-old soybean seedlings were treated as indicated by treatments 1 to 12 shown in Fig. 1A. After treatment, seedlings were replanted in moist paper towels and grown at 28°C in a dark growth chamber for an additional 72 h; the length of seedlings was measured at the indicated times. The data represent means ± SD from 3 independent replicates, and 30 seedlings were investigated for each replicate. * Indicates the treatment is lethal.

Supplementary Data

Treatment	Length (cm)			% of Seedlings after 72 h at Following Range (cm)		
	24 h	**48 h**	**72 h**	**< 5**	**5 to 7**	**> 7**
1. 28C	4.0 ± 0.3	8.6 ± 0.5	14.9 ± 0.5	0	0	100
2. 28C+EGTA	3.8 ± 0.4	8.3 ± 0.5	12.7 ± 0.7	0	0	100
3. 40HS	3.8 ± 0.3	7.0 ± 0.3	13.6 ± 0.7	0	0	100
4. 40HS → 28C+EGTA	3.3 ± 0.4	6.0 ± 0.3	10.8 ± 0.7	0	68	32
5. 40HS → 28C → 45HS	3.2 ± 0.4	4.5 ± 0.4	7.5 ± 0.4	0	92	8
6. 40HS → 28C+EGTA → 45HS *	2.5 ± 0.3	2.6 ± 0.3	2.6 ± 0.3	100	0	0
7. 40HS → 28C+EGTA+Ca^{2+} → 45HS	2.9 ± 0.2	4.3 ± 0.3	6.9 ± 0.5	0	100	0
8. 40HS → 28C+EGTA+Sr^{2+} → 45HS	2.7 ± 0.2	4.2 ± 0.5	6.3 ± 0.3	0	100	0
9. 40HS → 28C+EGTA+Ba^{2+} → 45HS	2.7 ± 0.3	4.2 ± 0.2	6.1 ± 0.2	0	100	0
10. 40HS → 28C+EGTA+Mg^{2+} → 45HS	2.3 ± 0.3	3.0 ± 0.4	3.7 ± 0.5	83	17	0
11. 40HS → 28C+EGTA+K^{+} → 45HS *	1.5 ± 0.3	2.2 ± 0.4	2.3 ± 0.3	100	0	0
12. 45HS *	1.5 ± 0.4	2.3 ± 0.3	2.4 ± 0.3	100	0	0