Table 1 Suppl. Sequences of primers used in qRT-PCR experiments

Gene	Accession number	Forward primer	Reverse primer
CsSOD$_{(Cu\text{-}Zn)}$	101231664	GAGCAATCAGGGAGTCAGT	TACCATCATCACCAGCAAC
CsPOD	101228793	TTCTTGCCCTTCAGGTTGT	CTCCGATTGATTTGTTCCA
CsCAT	*Cs*a6M356990	AACAACACCGCCGTAATGT	ATGACGGGGGTTTGGACG
CscAPX	*Cs*a1M479610	ATGGCACTCTGCTGGAAC	GTCTGCATATGAGAGGATGG
CsABI1	101229497	AAGATTTGGGATTTGGTGA	TACGGTAAGATGATGATGACG
CsABI2	101230352	CTGTCCACTTCTCCCACC	ACTCCATACGCCGTCTTT
CsABI3	101230126	ACTGAGATTGGCAAAGATA	GACTAATGGTCCTGGGTAA
CsAOX	DQ641114	TCATCATCACCGAACTTACA	GAATCCACCATCCGACAA
Actin	DQ641117	AGAGATGGCTGGAATAGAAC	CTGGTGATGGTGTGAGTC

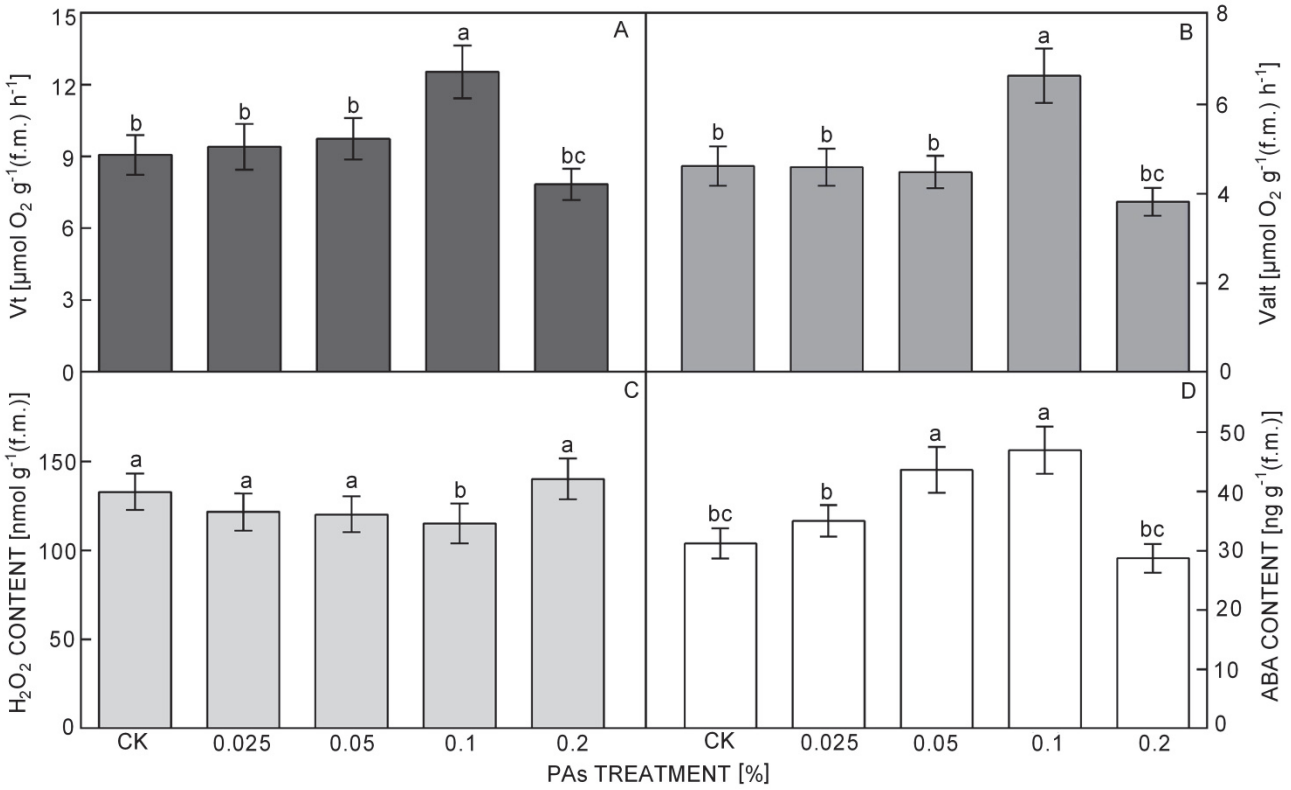

Fig. 1 Suppl. Respiration, H_2O_2 and abscisic acid (ABA) content determination after PAs treatment for 24 h. Seedlings were sprayed with 0.025, 0.05, 0.1, or 0.2 % (m/v) PAs solutions on leaves while the control seedlings were sprayed with distilled water. The third leaf of cucumber seedlings was used for total respiration (Vt) (*A*), cyanide-resistant respiration (Valt) (*B*), H_2O_2 (*C*) and ABA (*D*) content measurement. Means ± SDs of three biological replicates. Significant differences ($P \leq 0.05$) are denoted by different lowercase letters.

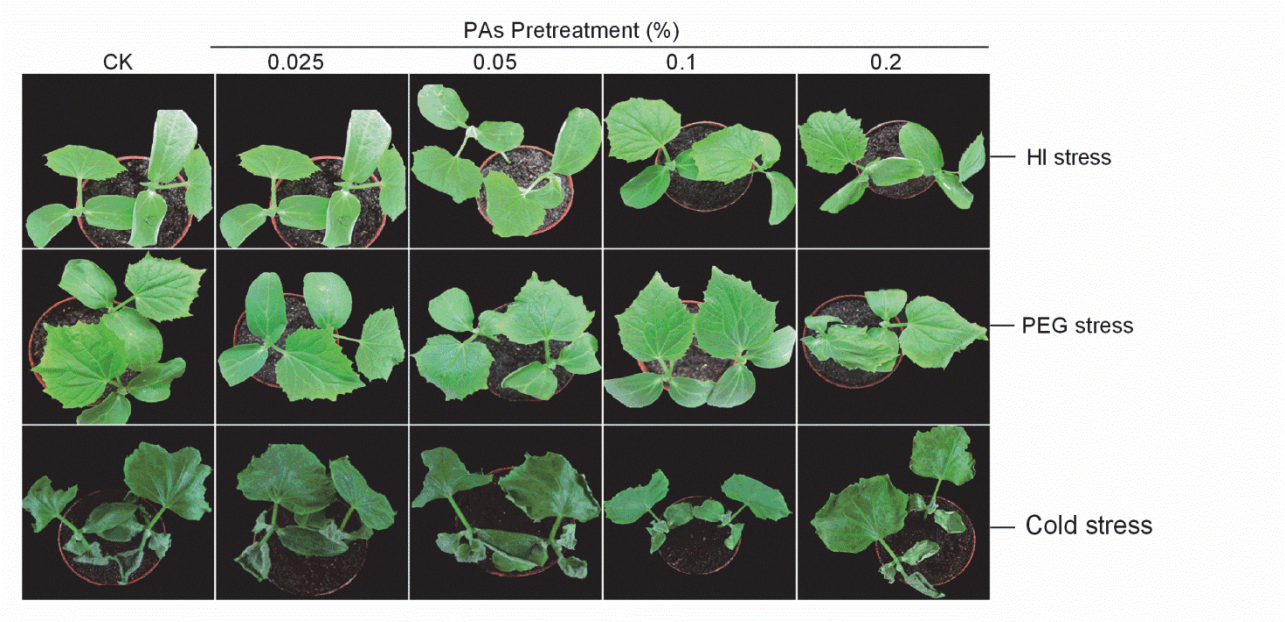

Fig. 2 Suppl. Representative phenotypes of cucumber seedlings under stress conditions for 3 d. Cucumber seedlings were sprayed with 0.025, 0.05, 0.1, or 0.2 % (m/v) PAs solutions on leaves while the control seedlings were sprayed with distilled water for 24 h, respectively, and then parts of the seedlings were subjected to high irradiance (HI; 1000 μmol m^{-2} s^{-1}), PEG (18 %, v/v, PEG 6000) and cold stress (at 4 °C in a controlled growth chamber with a relative humidity 70 %) for 3 d.

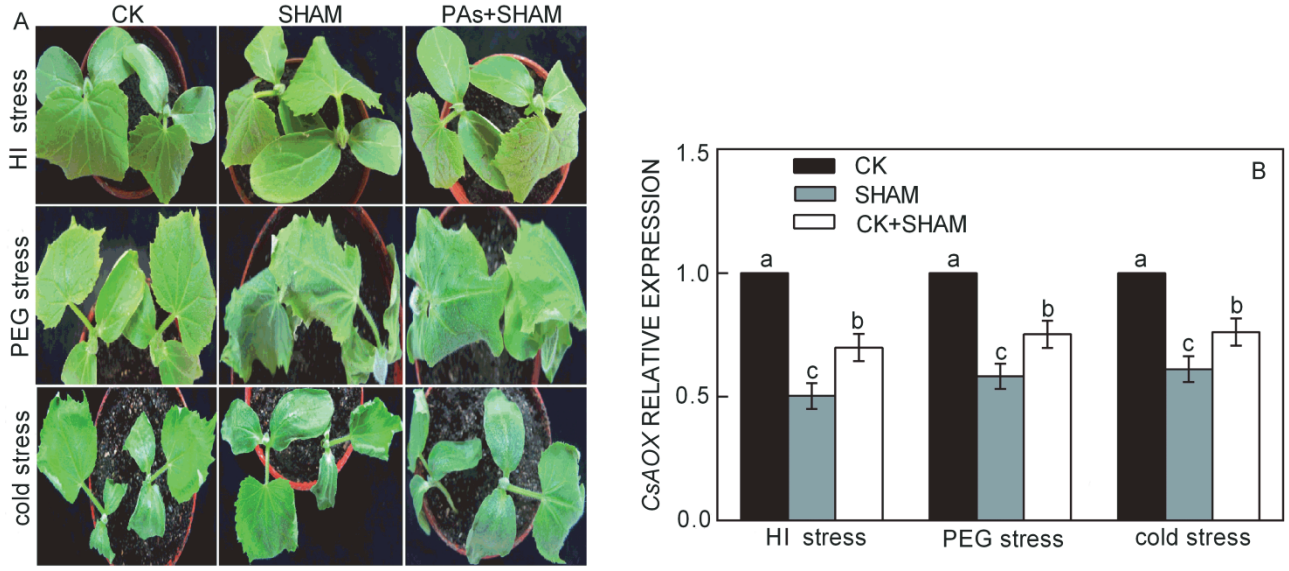

Fig. 3 Suppl. Effects of alternative oxidase (AOX) inhibition on cucumber seedlings subjected to environmental stresses. *A* - Severer damage was shown in the 1 mM salicylhydroxamic acid (SHAM) pretreated seedlings than in the control seedlings (for other detail see Fig. 2). *B* - Changes in *CsAOX* mRNA levels under stress conditions with or without SHAM pretreatment. Means ± SDs of three biological replicates. Significant differences ($P \leq 0.05$) are denoted by different lowercase letters.

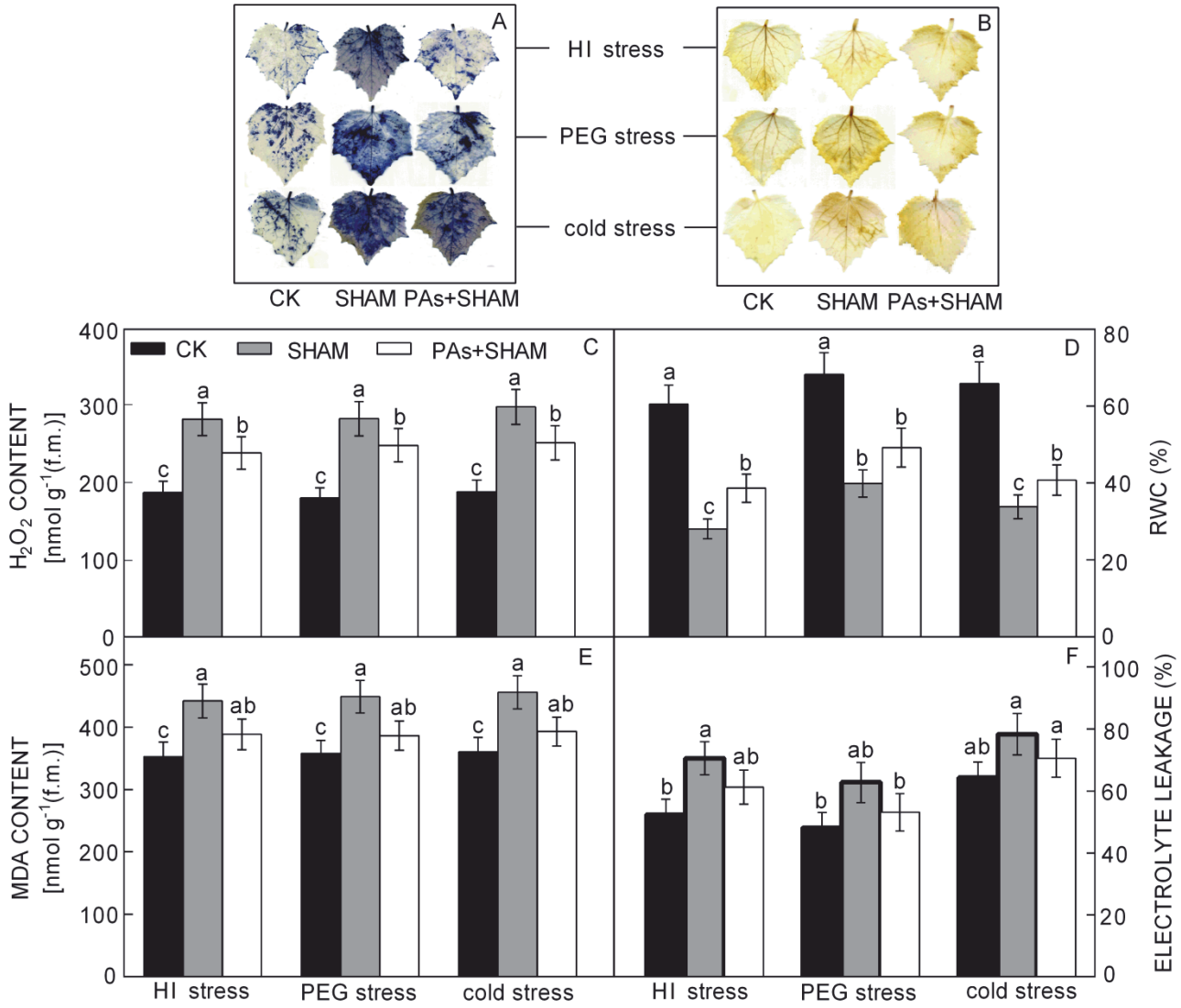

Fig. 4 Suppl. Measurement of oxidative damage under stress conditions with or without 1 mM SHAM pretreatment. *A, B* - Superoxide and H_2O_2 were detected by 0.5 mg cm^{-3} nitroblue tetrazolium (NBT) staining and 2 mg cm^{-3} 3,3-diaminobenzidine (DAB) staining, respectively. Effects of SHAM pretreatment on H_2O_2 content (*C*), relative water content (RWC) (*D*), malondialdehyde (MDA) content (*E*) and electrolyte leakage (*F*) in the cucumber seedlings under stress conditions. Means ± SDs of three biological replicates. Significant differences ($P \leq 0.05$) are denoted by different lowercase letters.