

Supplementary Material

Enhanced antioxidant enzyme activities in developing anther contributes to heat stress alleviation and sustains grain yield in wheat

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Table S1. Sowing time and phenological stages of five wheat genotypes (n = 5) grown in the dry season of 2015-16 at the field of ICAR research complex for Eastern Region, Patna, India.

Fig. S1. Effect of heat stress on H₂O₂ content (A), •O₂⁻ production rate (B) and MDA content (C) of five wheat genotypes at anthesis stage, grown under TS and VLS conditions. Data represent means ± standard error (n = 3). The level of significance was compared among the five wheat genotypes under TS and VLS conditions separately. Values for different letters indicate significant differences at P ≤ 0.05.

Fig. S2. Effect of heat stress on SOD activity (A), CAT activity (B), POX activity (C) and APX activity (D) of five wheat genotypes at anthesis stage, grown under TS and VLS conditions. Data represent means ± standard error (n = 3). The level of significance was compared among the five wheat genotypes under TS and VLS conditions separately. Values for different letters indicate significant differences at P ≤ 0.05.

Table S1. Sowing time and phenological stages of five wheat genotypes (n = 5) grown in the dry season of 2015-16 at the field of ICAR research complex for Eastern Region, Patna, India.

Sowing date		Genotypes	Days to anthesis*		Days to physiological maturity*		Grain filling duration*	
TS	VLS		TS	VLS	TS	VLS	TS	VLS
26.11.2015	05.01.2016	GW 273	84±0.8	67±2.2	114±2.5	87±2.5	30±2.2	20±1.3
		Kundan	84±1.7	67±1.6	117±2.5	90±2.1	33±0.9	22±1.7
		NW 1014	83±1.6	63±2.6	113±3.4	85±2.2	30±1.9	22±0.9
		Raj 3765	83±1.6	62±1.6	115±3.3	85±2.9	32±1.7	23±1.3
		WH 730	86±2.2	64±2.9	113±2.9	84±1.7	27±2.1	23±1.3

* Average of 5 wheat genotypes

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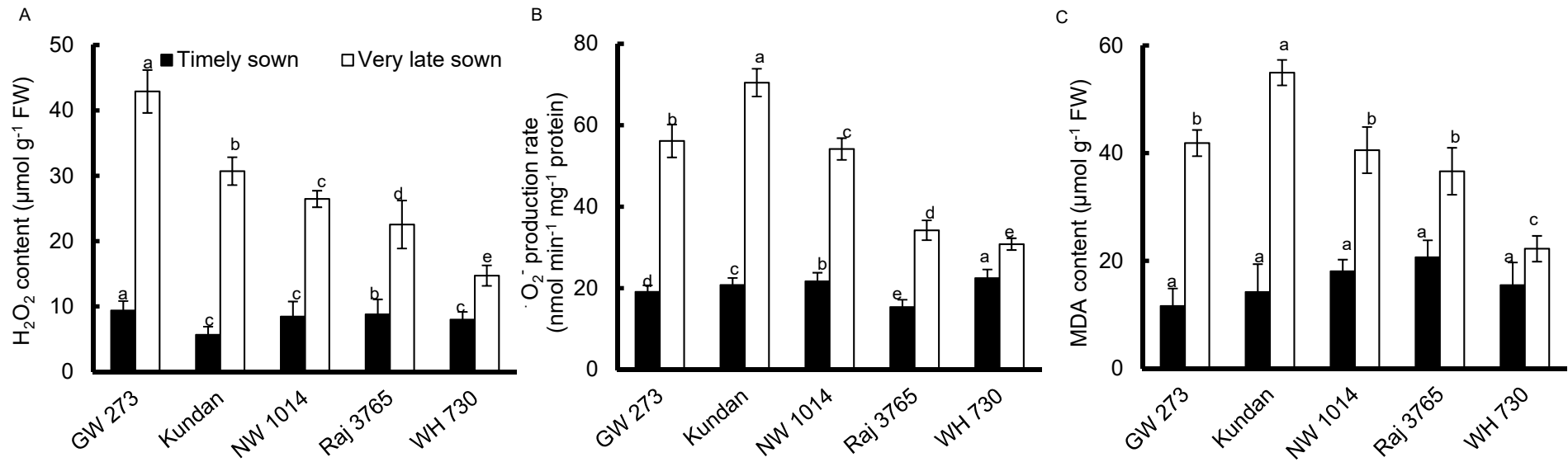


Fig. S2. Effect of heat stress on SOD activity (A), CAT activity (B), POX activity (C) and APX activity (D) of five wheat genotypes at anthesis stage, grown under TS and VLS conditions. Data represent means \pm standard error ($n = 3$). The level of significance was compared among the five wheat genotypes under TS and VLS conditions separately. Values for different letters indicate significant differences at $P \leq 0.05$.

