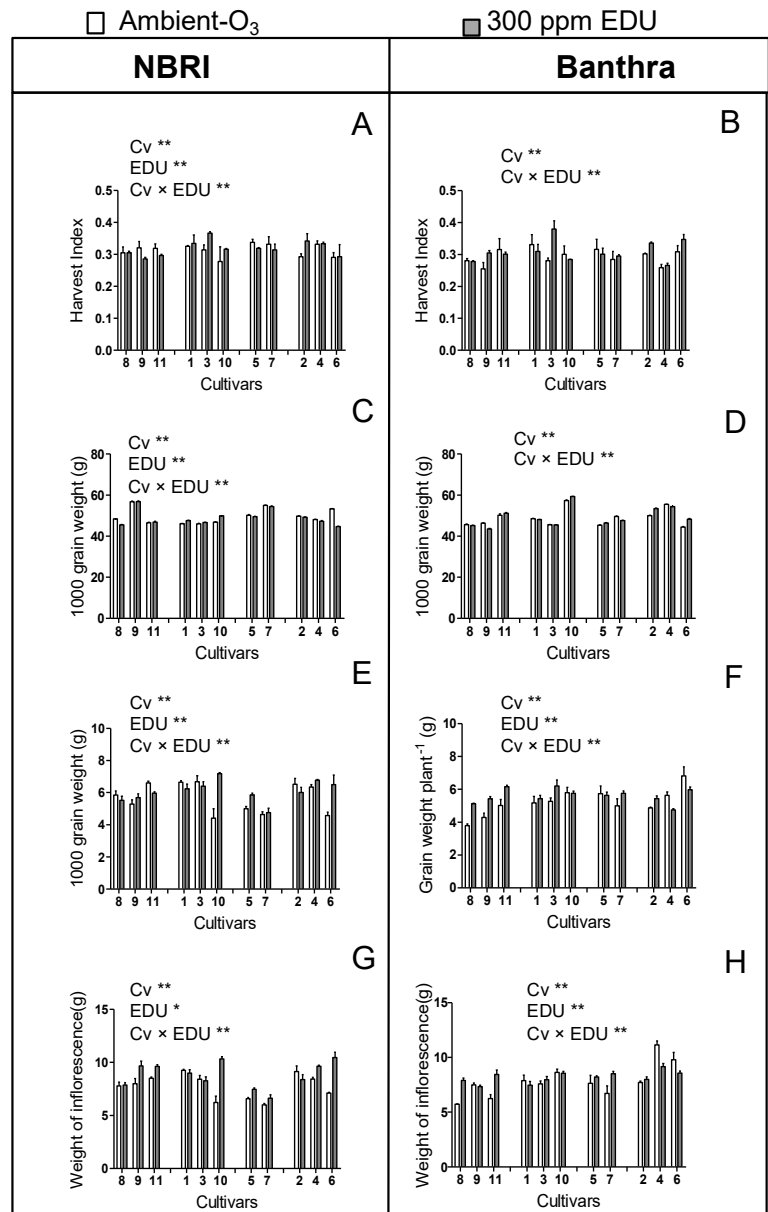


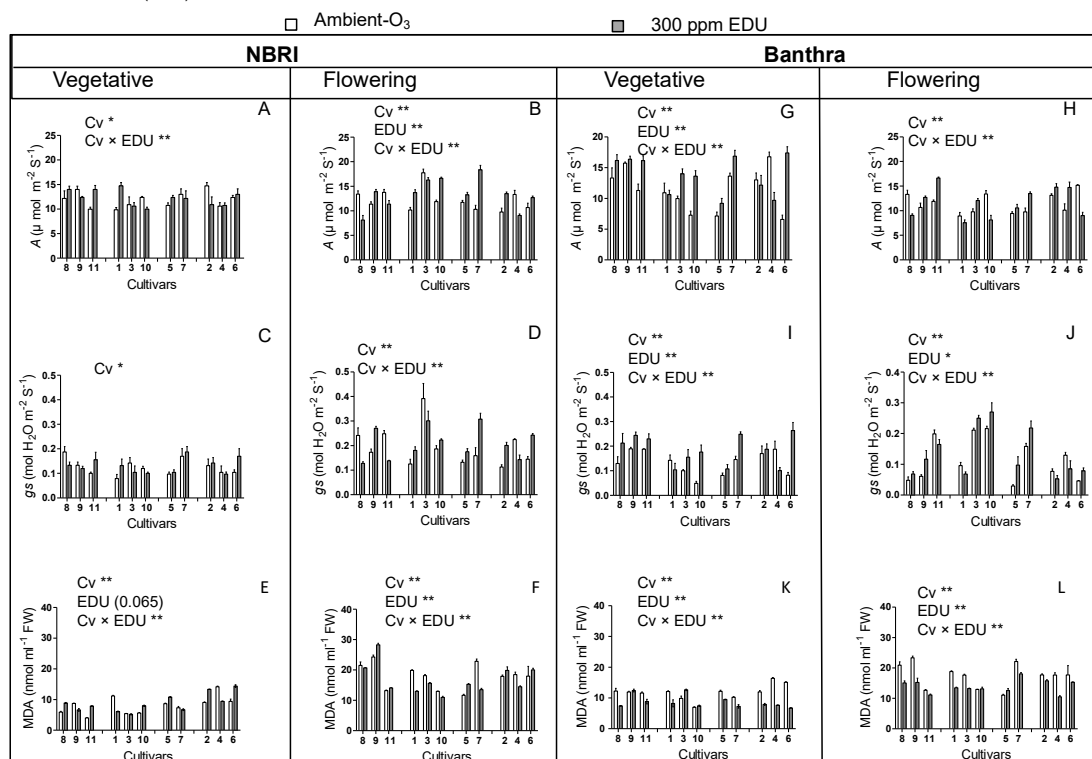
Supplementary table 1. Description of 11 wheat (*Triticum aestivum*) cultivars
<https://www.indiaagronet.com/indiaagronet/crop%20info/wheat.htm>

Cultivar code	Cultivar name	Year of release	Life span (Days)	Grain Yield (Q/ha)
1	PBW-373	1996	126-134	40-45
2	PBW-502	2006	126-134	51-55
3	PBW-154	1996	130-135	55-60
4	WH711	2002	125-130	45-50
5	PBW-343	1996	126-134	46-50
6	DBW-17	2003	130-135	55-60
7	LOK-1	1995	130-135	55-60
8	KUNDAN	2002	125-130	45-50
9	WR-544	2002	126-134	31-35
10	HUW-234	1998	130-135	50-55
11	PBW-550	2007	130-135	45-50

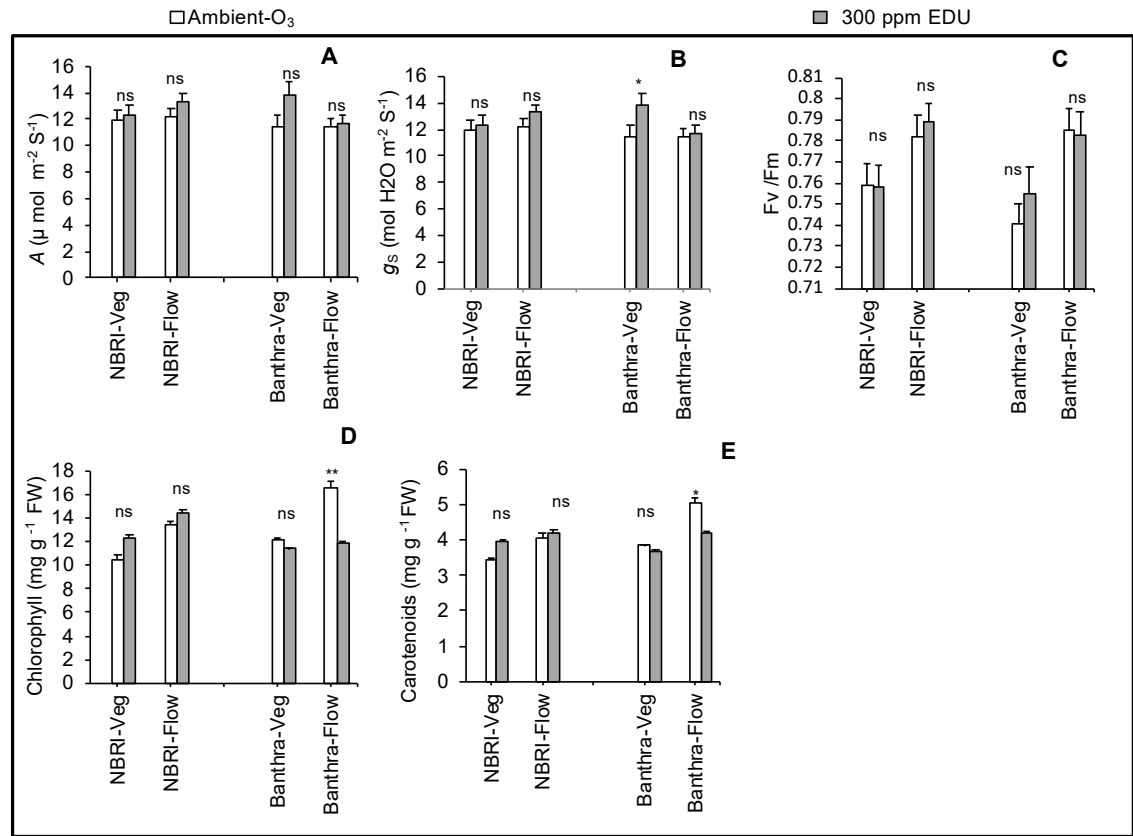
Supplementary figure 1. Effects of EDU treatment (300 ppm) on (A, B) harvest index (HI); (C,D) 1000 grain weight plant⁻¹; (E,F) grain weight plant⁻¹; (G,H) inflorescence weight plant⁻¹ in 11 wheat cultivars at the harvest phase at (A,C,E,G) NBRI and (B,D,F,H) Banthra sites. Significant results of two-way ANOVA are marked with asterisks (* P<0.05 and ** P<0.01) for cultivar (Cv), EDU treatment (EDU) and their interactions (Cv × EDU). (1) PBW-373, (2) PBW-502, (3) PBW-154, (4) WH711, (5) PBW-343, (6) DBW-1, (7) LOK-1, (8) KUNDAN, (9) WR-544, (10) HUW-234, (11) PBW-550. Bars represent mean ± standard error (n=3).



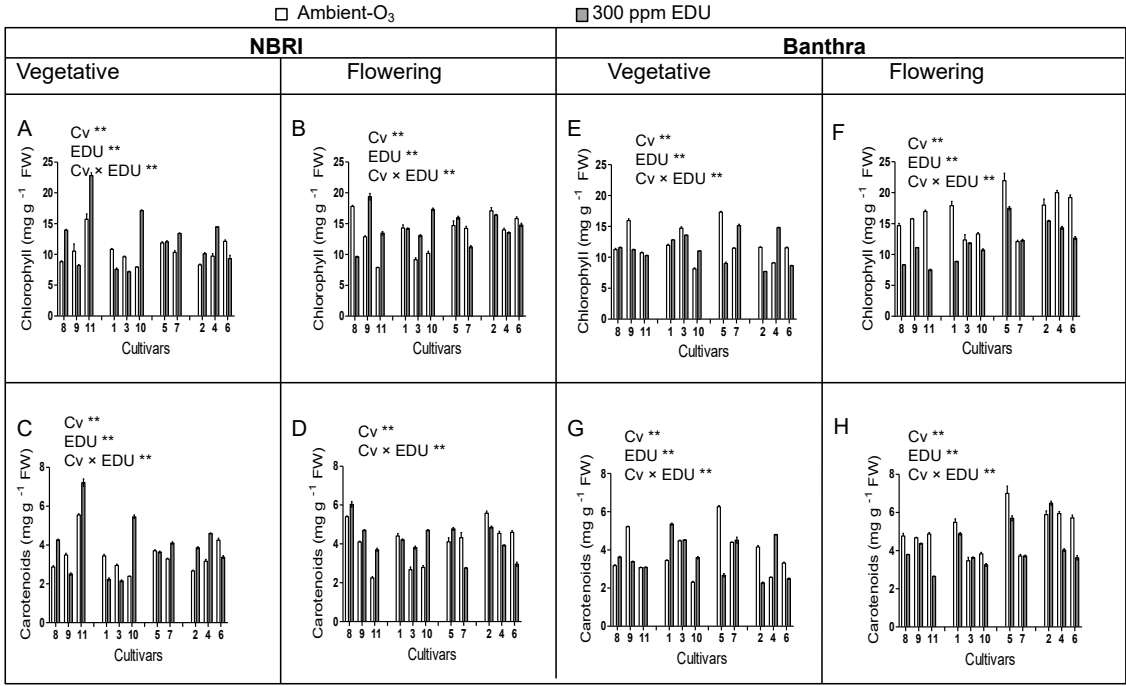
Supplementary figure 2. Effects of EDU treatment (300 ppm) on stomatal conductance (gs) (C,D,I,J) photosynthesis (A) (A, B, G, H) and MDA content (E,F,K,L) in 11 wheat cultivars at vegetative phase (A, C, E, G, D, F) and at flowering phase (B,D,F,H,J,L) at NBRI and Banthra sites. Significant results of two-way ANOVA are marked with asterisks (* $P < 0.05$ and ** $P < 0.01$) for cultivar (Cv), EDU treatment (EDU) and their interactions (Cv $\times$ EDU). (1) PBW-373, (2) PBW-502, (3) PBW-154, (4) WH711, (5) PBW-343, (6) DBW-17, (7) LOK-1, (8) KUNDAN, (9) WR-544, (10) HUW-234, (11) PBW-550. Bars represent mean $\pm$ standard error (n=3).



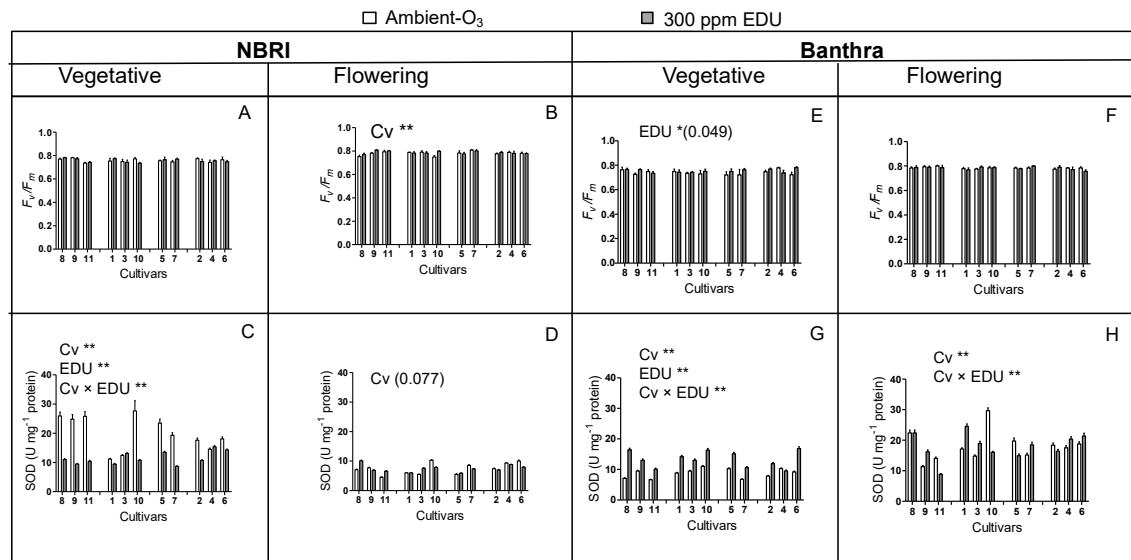
Supplementary figure 3. Effect of EDU treatment 300 (ppm) on (A) photosynthesis (A), (B) stomatal conductance (g_s), the ratio of variable fluorescence to maximum chlorophyll fluorescence (F_v/F_m), (D) chlorophyll and (E) carotenoid content. Bars represent mean of all the eleven cultivars $\pm$ standard error.



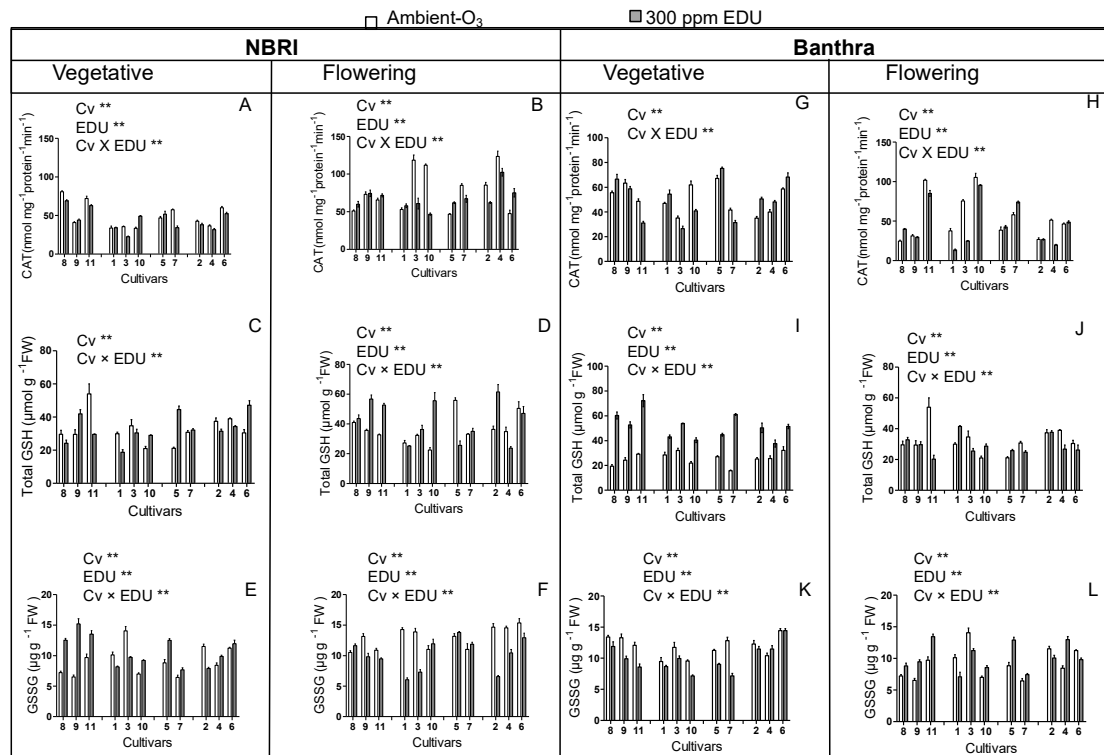
Supplementary figure 4. Effects of EDU treatment (300 ppm) on (A, B, E, F) chlorophyll content; and (C,D,G,H) carotenoid content 11 wheat cultivars at two developmental phases (A,C,E,G) vegetative; (B,D,F,H) flowering phase at the Lucknow and Banthra sites. Significant results of two-way ANOVA are marked with asterisks (* P<0.05 and ** P<0.01) for cultivar (Cv), EDU treatment (EDU) and their interactions (Cv x EDU). (1) PBW-373, (2) PBW-502, (3) PBW-154, (4) WH711, (5) PBW-343, (6) DBW-17,(7) LOK-1, (8) KUNDAN, (9) WR-544, (10) HUW-234, (11) PBW-550. Bars represent mean $\pm$ standard error (n=3).



Supplementary figure 5. Effects of EDU treatment (300 ppm) on (A, B, E, F) ratio of variable to maximal chlorophyll fluorescence and (C,D,G,H) SOD activity in 11 wheat cultivars at two developmental phases (A, C, E, G) vegetative; (B, D, F, H) flowering phase at Lucknow and Banthra sites. Significant results of two-way ANOVA are marked with asterisks (* $P < 0.05$ and ** $P < 0.01$) for cultivar (Cv), EDU treatment (EDU) and their interactions (Cv $\times$ EDU). (1) PBW-373, (2) PBW-502, (3) PBW-154, (4) WH711, (5) PBW-343, (6) DBW-17, (7) LOK-1, (8) KUNDAN, (9) WR-544, (10) HUW-234, (11) PBW-550. Bars represent mean $\pm$ standard error (n=3).



Supplementary figure 6. Effects of EDU treatment (300 ppm) on (A, B, G, H) CAT; (C, D, I, J) GSH content; (E, F, K, L) GSSG content in 11 wheat cultivars at vegetative phase (A, C, E, G, D, F) and at flowering phase (B, D, F, H, J, L) at NBRI and Banthra sites. Significant results of two-way ANOVA are marked with asterisks (* $P < 0.05$ and ** $P < 0.01$) for cultivar (Cv), EDU treatment (EDU) and their interactions (Cv $\times$ EDU). (1) PBW-373, (2) PBW-502, (3) PBW-154, (4) WH711, (5) PBW-343, (6) DBW-17, (7) LOK-1, (8) KUNDAN, (9) WR-544, (10) HUW-234, (11) PBW-550. Bars represent mean $\pm$ standard error (n=3).



Supplementary figure 7. Effect of EDU treatment 300 (ppm) on (A) lipid peroxidation (MDA), (B) superoxide dismutase activity (SOD), (C) catalase activity (CAT), (D) glutathione oxidized content (GSSG) and, (E) glutathione reduced content (GSH). Bars represent mean of all the eleven cultivars $\pm$ standard error.

