

Improving Wheat Yield and Water-Use Efficiency by Optimizing Irrigations in Northern China

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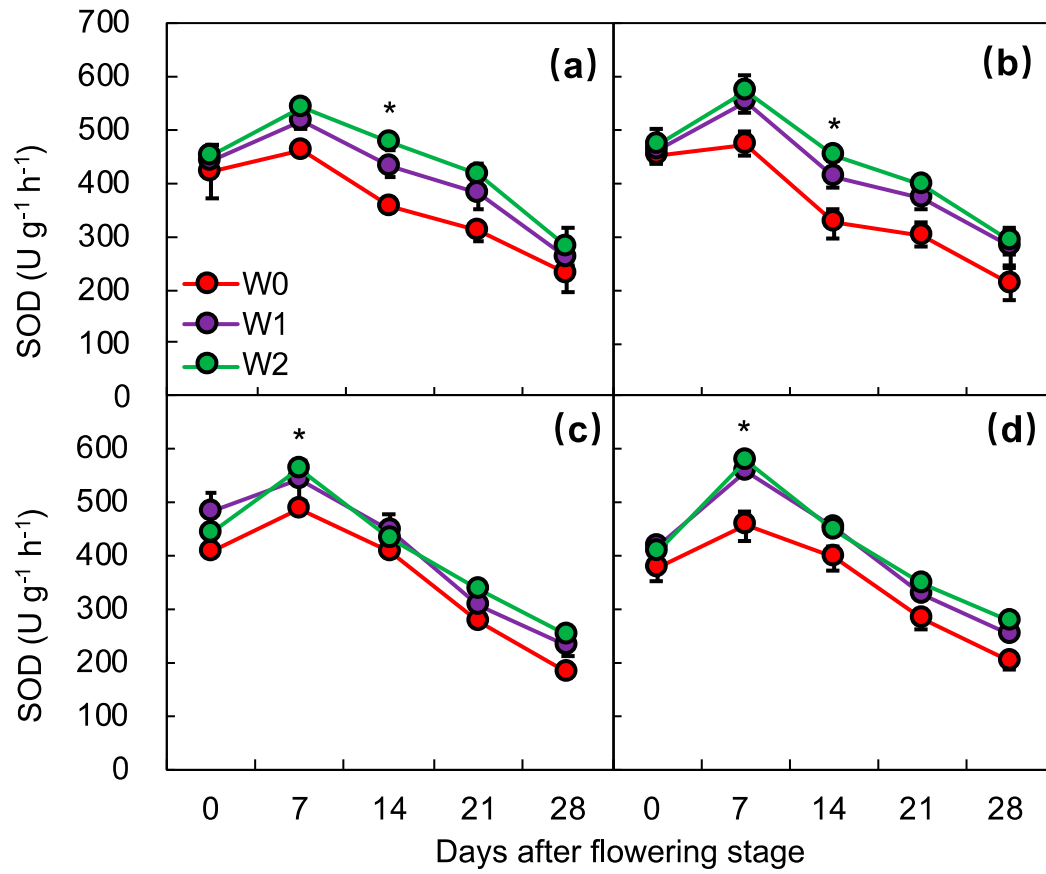


Figure S1. Superoxide dismutase (SOD) activities of flag leaf under different irrigation treatments.

a, S086 in 2018~2019; b, J22 in 2018~2019; c, S086 in 2019~2020; d, J22 in 2019~2020. W0, no irrigation events after overwintering stage; W1, irrigated in jointing stage; W2, irrigated in jointing and flowering stages. * indicates a significant difference at $p<0.05$ between W1 and W2.

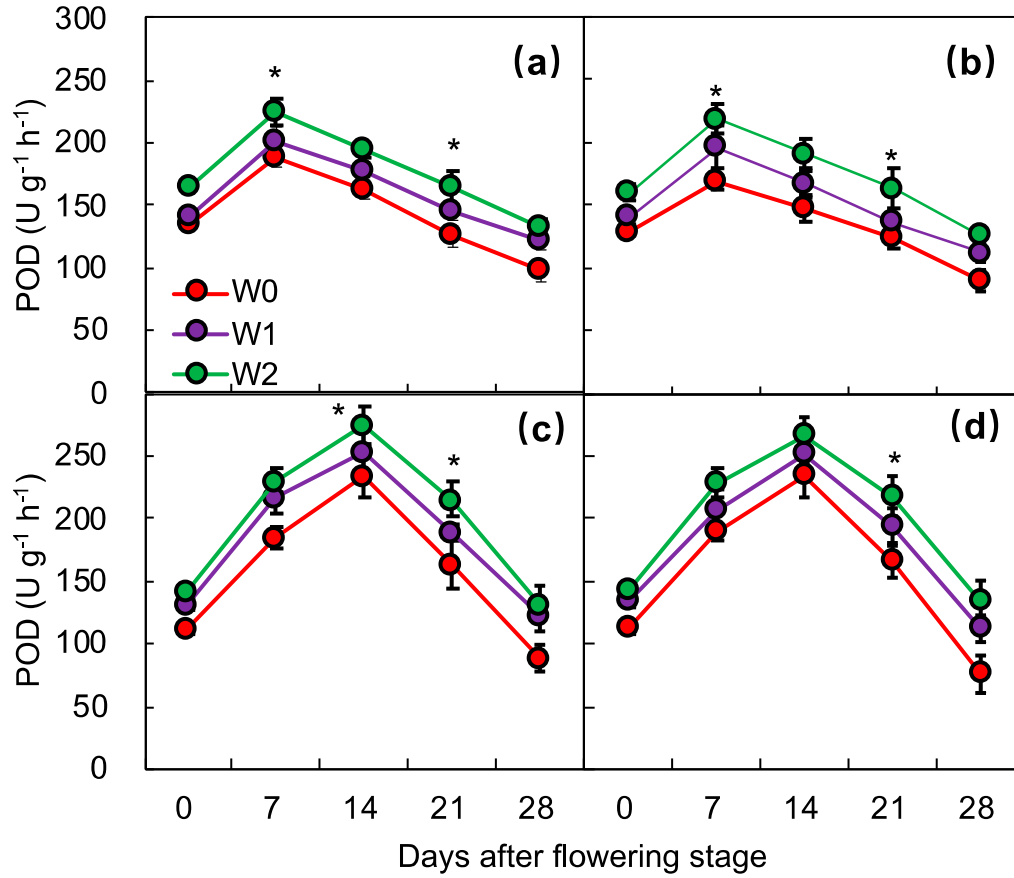


Figure S2. Peroxidase (POD) activities of flag leaf under different irrigation treatments. a, S086 in 2018~2019; b, J22 in 2018~2019; c, S086 in 2019~2020; d, J22 in 2019~2020. Definitions of different irrigation treatments (i.e., W0, W1, and W2) are given in caption of Figure S1. * indicates a significant difference at $p < 0.05$ between W1 and W2.

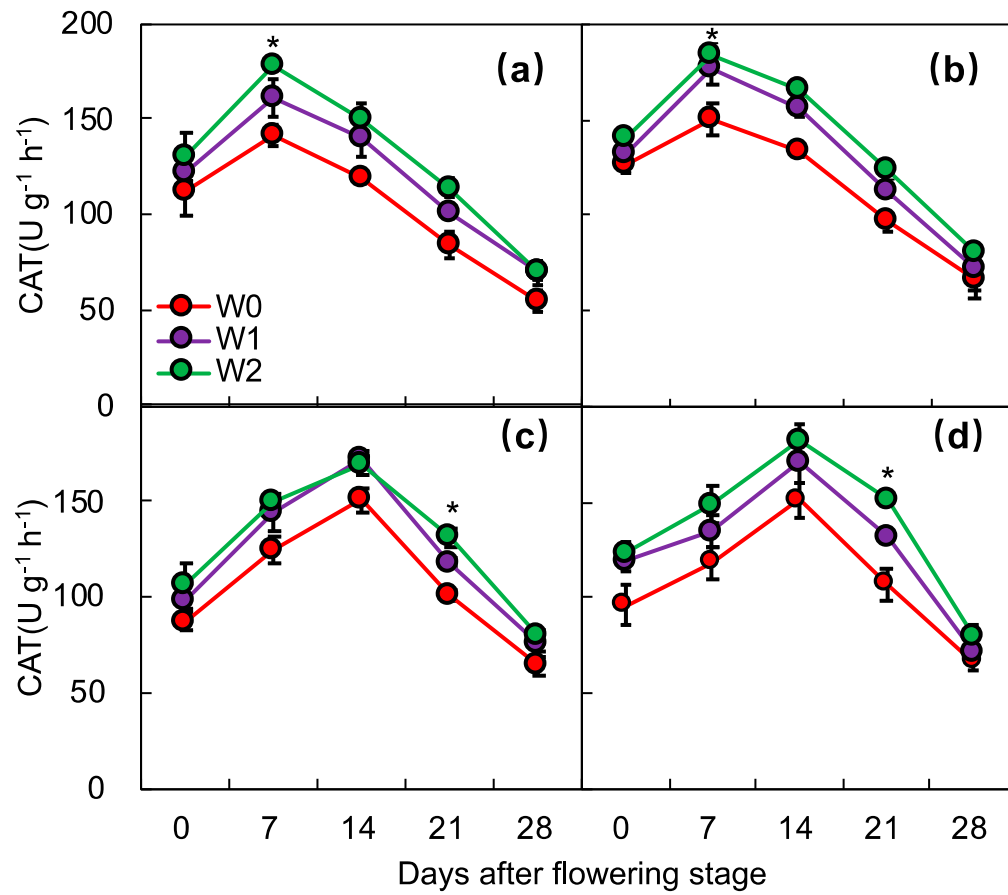


Figure S3. Catalase (CAT) activities of flag leaf under different irrigation treatments. a, S086 in 2018~2019; b, J22 in 2018~2019; c, S086 in 2019~2020; d, J22 in 2019~2020. Definitions of different irrigation treatments (i.e., W0, W1, and W2) are given in caption of Figure S1. * indicates a significant difference at $p < 0.05$ between W1 and W2.

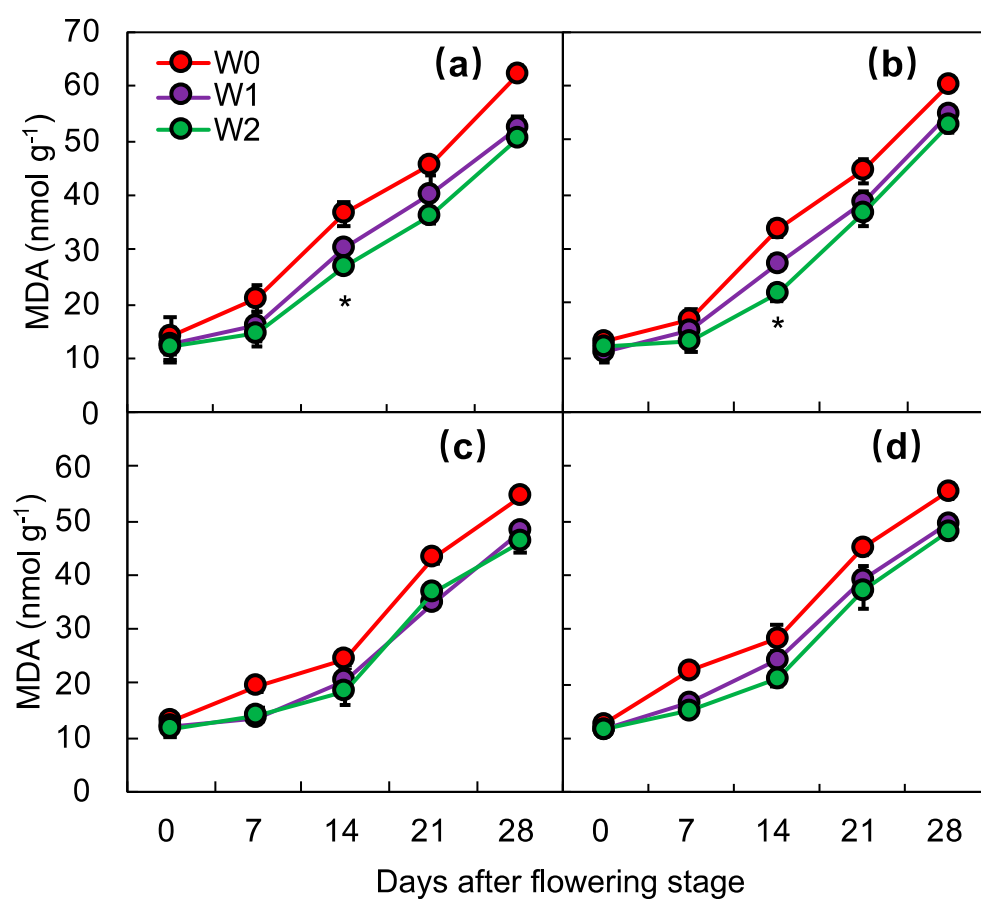


Figure S4. Malondialdehyde (MDA) activities of flag leaf under different irrigation treatments. a, S086 in 2018~2019; b, J22 in 2018~2019; c, S086 in 2019~2020; d, J22 in 2019~2020. Definitions of different irrigation treatments (i.e., W0, W1, and W2) are given in caption of Figure S1. * indicates a significant difference at $p < 0.05$ between W1 and W2.

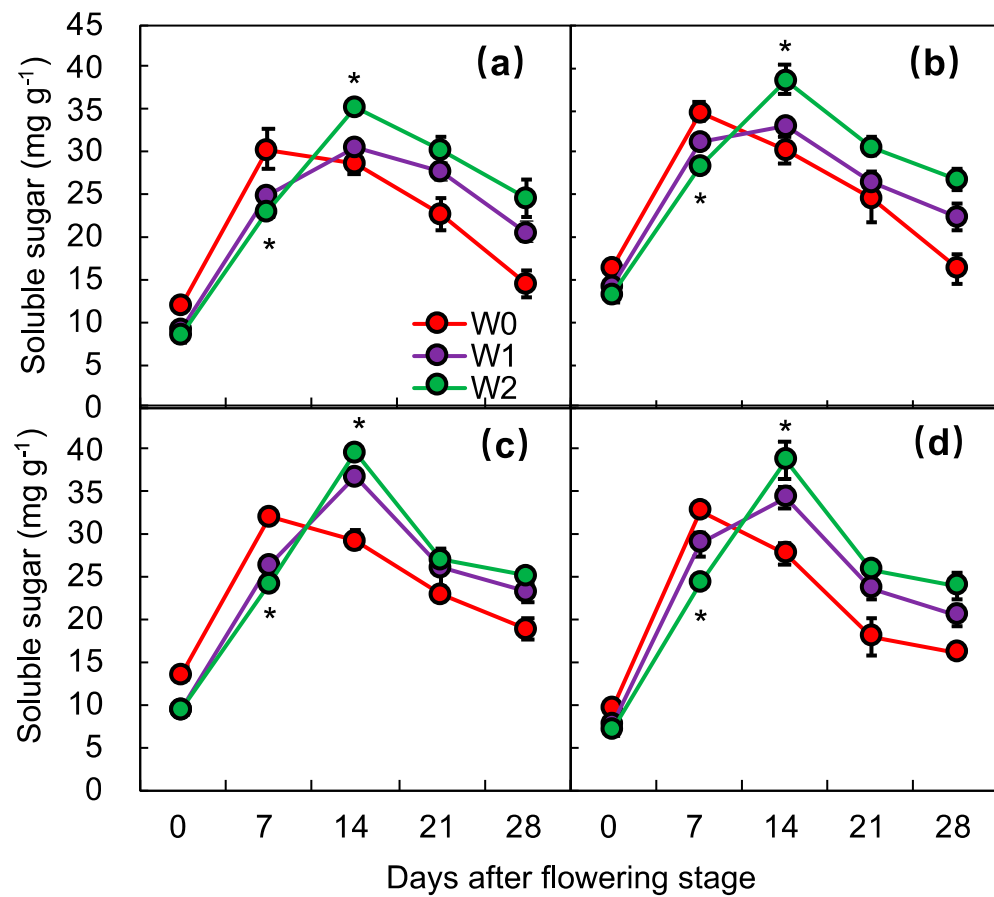


Figure S5. Soluble sugar (SS) activities of flag leaf under different irrigation treatments. a, S086 in 2018~2019; b, J22 in 2018~2019; c, S086 in 2019~2020; d, J22 in 2019~2020. Definitions of different irrigation treatments (i.e., W0, W1, and W2) are given in caption of Figure S1. * indicates a significant difference at $p < 0.05$ between W1 and W2.

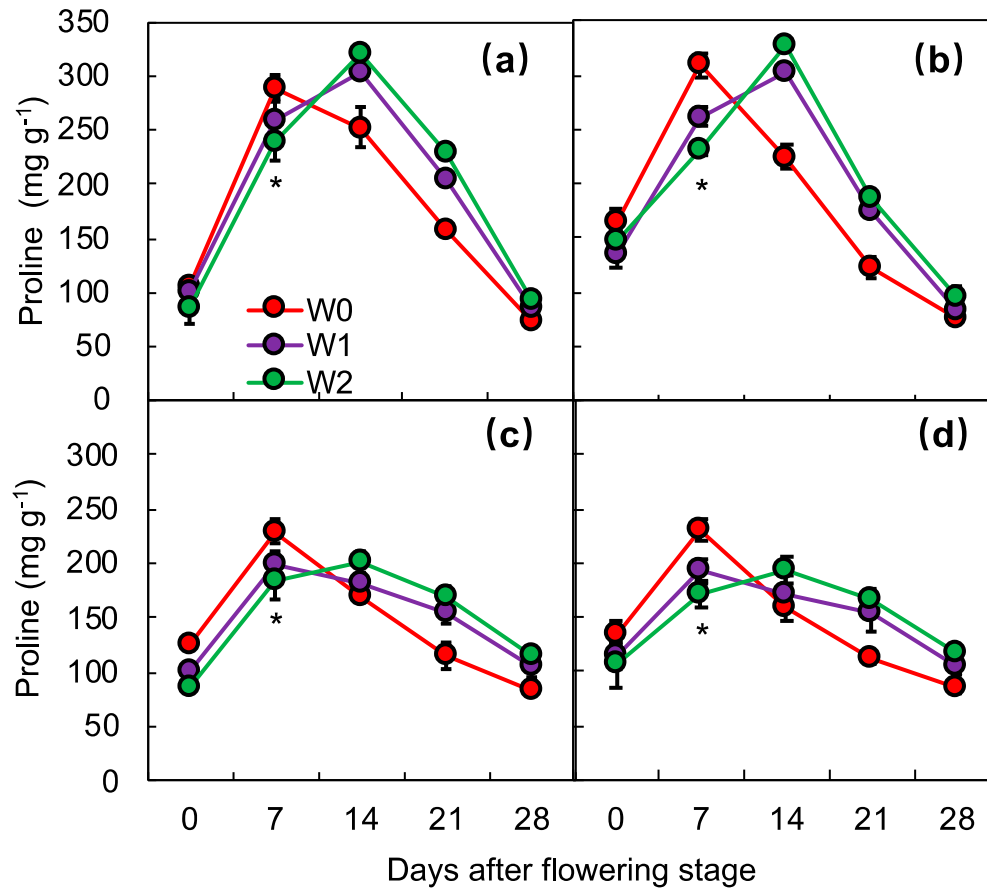


Figure S6. Proline (Pro) activities of flag leaf under different irrigation treatments. a, S086 in 2018~2019; b, J22 in 2018~2019; c, S086 in 2019~2020; d, J22 in 2019~2020. Definitions of different irrigation treatments (i.e., W0, W1, and W2) are given in caption of Figure S1. * indicates a significant difference at $p<0.05$ between W1 and W2.