

Supporting Information

Identification of Quantitative Trait Locus and candidate genes for drought tolerance in a soybean Recombinant Inbred Line population

Wenqi Ouyang^{1#} Limiao Chen^{1#} Junkui Ma², Xiaorong Liu², Haifeng Chen¹, Hongli Yang¹, Wei Guo¹, Zihui Shan¹, Zhonglu Yang¹, Shuilian Chen¹, Yong Zhan³, Hengbin Zhang³, Dong Cao^{1*}, and Xinan Zhou^{1*}.

¹Key laboratory of Biology and Genetic Improvement of Oil Crops, Ministry of Agriculture and Rural Affairs, Oil Crops Research Institute of Chinese Academy of Agricultural Sciences, Wuhan, China 430062

²The Industrial Crop Institute, Shanxi Academy of Agricultural Sciences, Taiyuan, China 030006

³Crop Research Institute, Xinjiang Academy of Agricultural and Reclamation Science, Key Lab of Cereal Quality Research and Genetic Improvement, Xinjiang Production and Construction Crops, Shihezi, China 832000

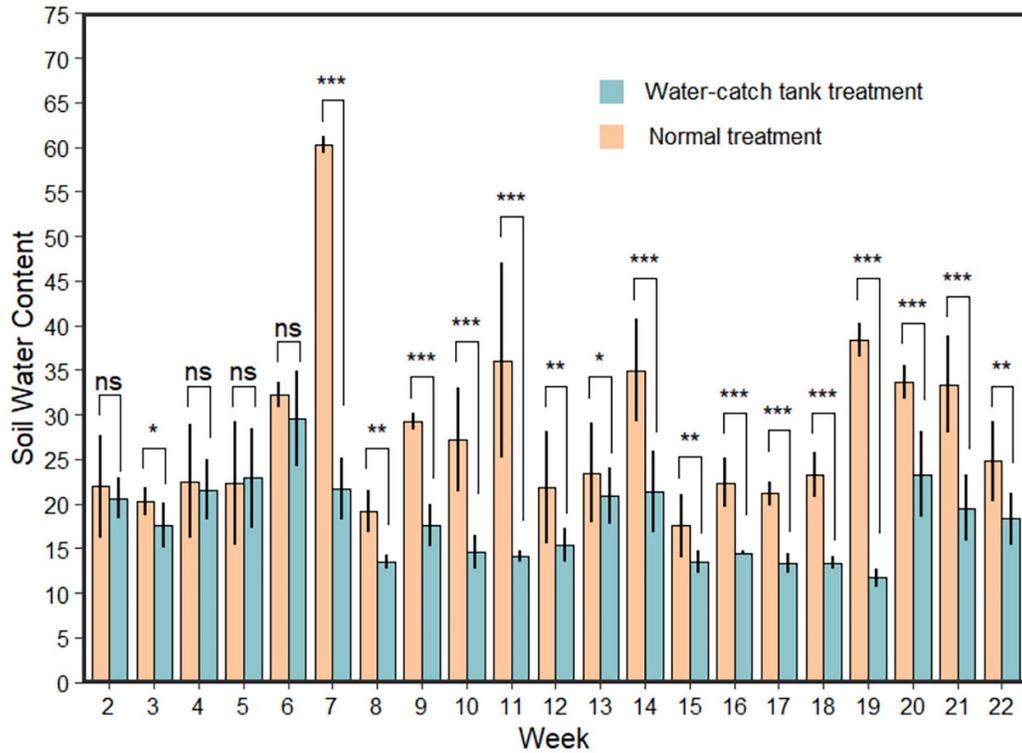
*Corresponding authors:

Xin-An Zhou,

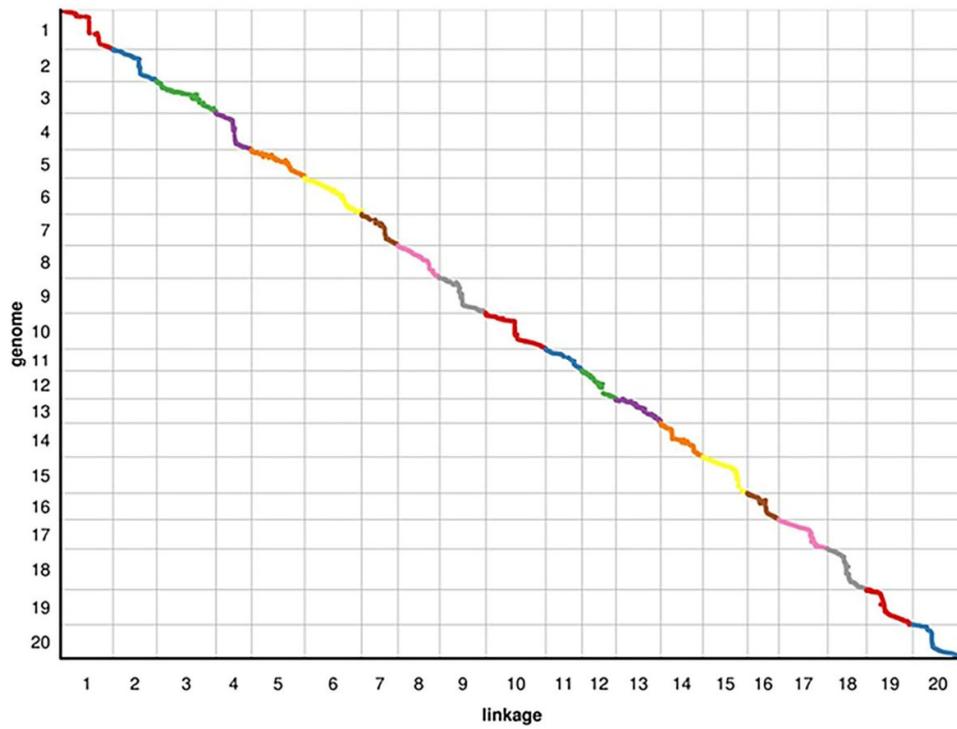
Chinese Academy of Agriculture Sciences, Oil Crops Research Institute, Xudong 2nd Road, Wuhan, China 430062, Phone: 86-027-86711563, FAX: 86-027-86711563, Email: zhouocri@sina.com

Dong Cao,

Chinese Academy of Agriculture Sciences, Oil Crops Research Institute, Xudong 2nd Road, Wuhan, China 430062, Phone: 86-027-86711563, FAX: 86-027-86711563, Email: caodong@caas.cn;



Supplementary Figure S1. Comparison of soil water content between normal and catchment tank treatments over 22 weeks. X-axis represents week of drought treatment, and y-axis represents soil water content (%). Statistically significant differences of soil water content between normal treatment and drought treatment (water-catch tank treatment) are marked with asterisks (* $P < 0.05$, ** $P < 0.01$ and *** $P < 0.001$, Student's t-test. ns, non-significant).



Supplementary Figure S2. Relationship between genetic and physical positions with each chromosome. In each plot, genetic distance is on the x-axis, and physical distance is on the y-axis.