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Title: **Identification of drought-tolerance genes in the germination stage of soybean**

Authors: **Xingzhen Zhao, Zhangxiong Liu, Huihui Li, Yanjun Zhang, Lili Yu, Xusheng Qi, Huawei Gao, Yinghui Li, Lijuan Qiu**

The manuscript describes a technically sound piece of scientific research which contribute to a deeper understanding of the genetic mechanisms underlying drought tolerance in soybeans at the germination stage, thereby providing a molecular basis for identifying useful soybean germplasm for breeding new drought-tolerant varieties. The soybean is the most sensitive vegetable to water. Drought is one of the primary abiotic stresses affecting crop production and severely restricts soybean yield.

Have examined the genetic diversity and drought-tolerance phenotypes of 410 accessions of a germplasm diversity panel for soybean and conducted quantitative genetics analyses to identify loci associated with drought tolerance of seed germination. So, have uncovered significant differences among the diverse genotypes for 4 growth indices and 5 drought-tolerance indices, which revealed abundant variation among genotypes, upon drought stress, and for genotype × treatment effects.

It is extremely important to continue studying drought-tolerance genes and markers to assist with the selection and development of drought-tolerant soybean accessions.