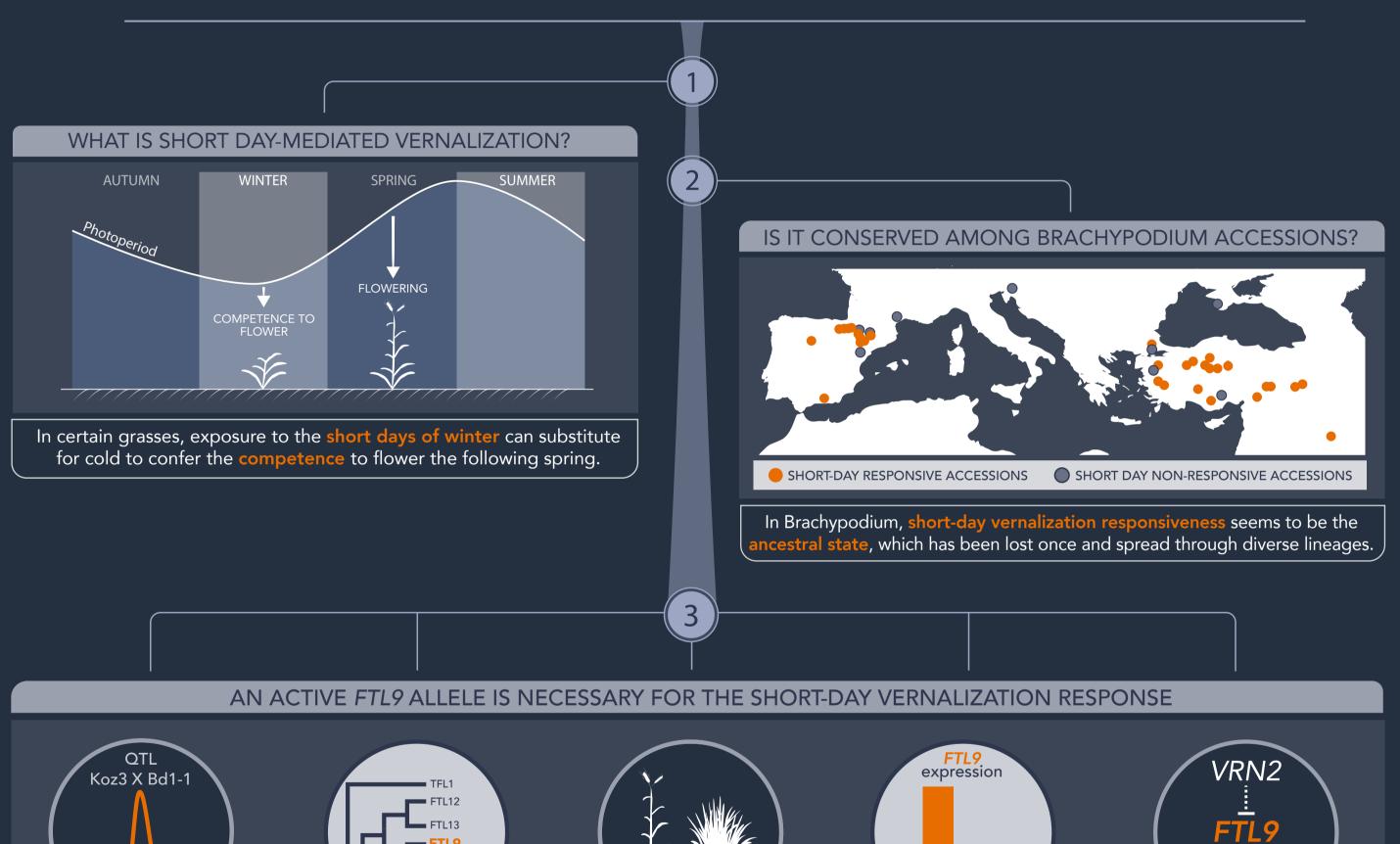
## A FLORIGEN PARALOG IS REQUIRED FOR SHORT-DAY VERNALIZATION IN A POOID GRASS

Woods D.P., Dong Y., Bouché F., Bednarek R., Rowe M., Ream T.S., and Amasino R.M.

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*FTL9* is part of the florigen family of proteins. In photoperiodic maize and sorghum, *FTL9* orthologs (called CN12) are expressed in short-days and are direct activators of flowering. Our results show that FTL9 plays a distinct role in Brachypodium: it is key to the acquisition of floral competence through a process known as short day-mediated vernalization.













**QTL-mapping** shows correlation between short day vernalization and the *FTL9* genomic region

FTL9 is a paralog of FT1/FT2, which are considered as "florigen"

Knocking down FTL9 in SD-responsive accessions supresses their short day vernalization responsiveness

*FTL9* is **expressed specifi**cally in short days and its expression cycles diurnally

VRN2 represses FTL9 in long days, whereas in SD FTL9 activates VRN1 which is required for short-day vernalization responsiveness

## READ THE FULL STORY AT HTTPS://DOI.ORG/10.7554/ELIFE.42153.001