Prepping crops for climate change: Genetics of bloom time may be key

Plants possess molecular mechanisms that prevent them from blooming in winter. Once the cold of winter has passed, they are deactivated. However, if it is still too cold in spring, plants adapt their blooming behavior accordingly. Scientists from the Technical University of Munich (TUM) have discovered genetic changes for this adaptive behavior. In light of the temperature changes resulting from climate change, this may come in useful for securing the production of food in the future.

…

[The FLM (*Flowering Locus M*)] gene behaves much like a light dimmer that the plant uses to regulate gene activity — and hence blooming — on a continuous scale.

…

Temperature changes of just a few degrees Celsius during the growth phase of crop plants such as canola or sugar beets have a negative impact on agricultural production. In the future, the findings … may allow the gene to be used as a regulator to help adapt the blooming period to different temperatures as a result of climate change.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: Outwitting climate change with a plant 'dimmer'?

For more background on the Genetic Literacy Project, read GLP on Wikipedia