

# Earlier flowering winter cereals in Spain due to higher temperatures

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Plant phenology is modulated by climate, and closely governed by water availability and air temperature. Over the period 1986–2012, an increase both in temperature and in rainfall intensity in Spain has advanced most phenophases (such as sowing date, emergence, flowering, seed ripening and harvest) for a number of winter cereals (oats, wheat, rye, barley and maize), mainly during the spring. For wheat and oats, for instance, flowering date advanced by about 1 day/year. Changes in phenology could in turn impact crop yield; fortunately, human intervention in crop systems is likely to minimize the negative impact.

Source: Oteros et al., 2015. *Climatic Change* 130: 545–558.

Photo: Steppeland ([www.stckr.com](http://www.stckr.com))