

Flower study aids crop development

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Warming autumn evenings are causing plants to flower faster than they used to, scientists have found.

The discovery sheds light on the influence of seasonal temperatures on [plant growth](#) and could help the development of crops suited to changing climates.

Researchers studying the growth of plants have found that increasing night temperatures in autumn accelerate their growth.

This leads them to develop flowers - and fruit - before they have had time to fully grow.

The discovery gives scientists valuable insight into the impact of changing climates on plants.

It could help the development of [crop varieties](#) suited to future [environmental conditions](#), with high yields.

Scientists at the University of Edinburgh compared results, produced by collaborators in the US, for tiny cress plants grown at locations across Europe with a [computer model](#) of how the cress ought to grow.

They found a [discrepancy](#) between the theory and the field trials, which could be explained by accelerated plant growth caused by warmer Autumn temperatures.

Researchers say their findings enable a better understanding of the complex links between factors that affect plant growth, such as exposure to light, and day and night temperatures.

Their study, published in *New Phytologist*, was funded by the Darwin Trust, Biotechnology and Biological Sciences Research Council and the Scottish Universities Life Sciences Alliance.

"The more we understand how factors like sunlight and temperature affect the development of plants through the varying seasons, the better equipped we will be to breed crop varieties that can flourish," said Dr. Karen Halliday, School of Biological Sciences.

Provided by University of Edinburgh

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