

## **Chilling Requirements and Flower Bud Development in Cherry**

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Fruit trees in temperate regions stop their growth and enter dormancy in winter, in order to survive to low temperatures. But this is not just a survival strategy and chilling is a prerequisite for an adequate flowering. Chilling requirements are specific of each genotype and determine the possible geographical distribution of cultivars. In spite of the relevance of dormancy for fruit production, very little is known on the biological events along this process in flower buds, in which no visible changes can be observed until bud burst. In this work, flower bud development has been sequentially examined in sweet cherry (*Prunus avium*) cv Bing, in relation to dormancy and chilling accumulation. The work was performed along two consecutive years, paying attention to the possible anatomical and cytochemical changes accompanying dormancy. Results show that while no anatomical variations occur along dormancy, conspicuous cytochemical changes can be tracked along this period that may help to understand the requirement for chilling.

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