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armenia apricot

INHERITANCE OF PHENOLOGICAL TRAITS IN APRICOT PROGENIES

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The impact of global changes is becoming a serious concern at a world scale, and its influence could be rather large on perennial plants behaviour. Within fruit species, it has already been shown advances in blooming dates and floral disorders in relation with temperature increase during period of dormancy and bud burst. Unfortunately among fruit species, apricot is expected to be one of the most susceptible in relation with the restricted adaptation of the cultivars to narrow geographic areas. Thus, in order to overcome the negative trends and to safeguard apricot fruit production, the identification of the genetic components involved in blooming and maturity periods becomes of major interest.

A global genetic analysis has been conducted on 4 apricot progenies issued from different genetic backgrounds; two progenies were cultivated in Avignon (Fr), one in Bologna (It), and one in Murcia (Sp). The four progenies were evaluated for blooming and maturity dates at least for 2 years (except the Italian one evaluated only for maturity date). The inheritance and a QTL analysis have been performed on the whole data set.

The QTL have been defined, and their stability across years have been analysed for the two traits. The influence of the genetic background has been discussed.

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