

Spain: First gene mapping of Ambrunes cherry

A study coordinated by the Centres of Scientific and Technological Research of Extremadura (CICYTEX) and Aragón (CITA) has made it possible to elaborate the first genetic map of Ambrunes cherries in Spain, with more than 600 molecular markers.

The research, which has counted with the collaboration of the State University of Michigan (US), has been led by Extremaduran Francisco Balas, as reported in a press release of the Government of Extremadura.

The study, called "Analysis of firmness QTL's in cherries", has allowed, among other achievements, "to identify a set of genes responsible for the firmness, weight and size of the fruit of this variety."

This information is very useful in cherry breeding programs, such as those already carried out by CICYTEX, as it would make it possible to select new varieties with genes that give rise to fruits with greater calibres and firmness; something that, until now, seemed impossible in cherries.

This quality of the fruit is especially important in order to improve its transport, storage and processing; that is, the firmer the fruit, the more resistance it has, which means "being able to reach distant markets in better conditions."

This new knowledge opens the door to the genetic study of other specific characteristics, such as colour, resistance to cracking and diseases, the date of flowering or the date of ripening.

Moreover, it would make it possible for the Ambrunes variety to adapt to the needs of the growers in terms of agronomic production, to those of traders in terms of processing, preservation and distribution, and to those of consumers in terms of sensory quality, nutritional properties and health benefits.

The weight, size and firmness of this cherry grown in the Jerte Valley has been evaluated for two years, with funding from the European Fund ERDF and the National Institute of Agricultural and Food Research and Technology (INIA).

The Jerte Valley stands out as the most important area for cherry cultivation in Extremadura, although there are also areas devoted to the fruit's production in the Vera, Ambroz Valley and Las Hurdes.

Of all the varieties traditionally cultivated in these areas, the Ambrunes is one of the most important, since it is the basis of the Protected Designation of Origin Cereza del Jerte.

This autochthonous variety stands out for its great organoleptic quality and firmness, as well as for its good post-harvest performance, as "it maintains that firmness throughout the entire ripening process."

All these characteristics make it a very interesting variety for breeding programs.

According to data from the Ministry of Agriculture, the acreage devoted to cherry cultivation in Spain is approximately 27,000 hectares, of which 8,200 correspond to Extremadura.

Furthermore, Extremadura is the largest cherry producer in Spain, with 35,000 tonnes.

Source: EFE

Publication date: 1/10/2017