



ta perfecta

The road to the perfect fruit

Since its beginnings, farming has occupied an important place in Chilean history. In fact, some of the characterizing aspects of Chile on the world stage are the quality of its exported fruits and vegetables and its wide variety of crops.

Nevertheless, these highly celebrated attributes need to be protected since globalization and the entrance of new markets present a constant threat to the preferential standing held by the agriculture sector.

Regarding this, Dr. Claudio Meneses, researcher for the Center of Plant Biotechnology at Universidad Andrés Bello, is developing genetic tools that would elucidate the mechanisms controlling commercially important characteristics of certain fruits.

“Among the multiple options offered by biotechnology, we have opted for using genetic, genomic, and bioinformatics tools. Through these, we have been able to identify certain genetic markers associated with traits of quality in fruit,” explains Dr. Meneses.

Dr. Meneses adds that ongoing research has already resulted in relevant findings, including the identification of candidate genes for characteristics of quality in peaches and of a biomarker that can be used to predict the harvest date. These findings can even be applied by improvement programs during the early stages of selecting peach genotypes.

The line of research led by Dr. Claudio Meneses is supported through funding awarded by Fondecyt, INNOVA-Corfo, Biofrutales and, recently, through an agreement with the University of California–Davis, USA.

“Our research responds to a basic need in the national agriculture sector. Thanks to our findings, we can optimize the efficiency of programs that aim to genetically improve the exported fruit species of Chile. This is in addition to reducing the costs and time needed to obtain varieties that adapt to the technical and commercial needs of target markets,” concludes Dr. Claudio Meneses.