



Supporting the development of export agriculture

Over the last decades, fruit farming in Chile has exponentially increased and now ranks as the third most important industry for the country. Nevertheless, the primary obstacle facing the commercialization of local products internationally is the long distances between Chile and target markets. During transport, fruit is stored at low temperatures that negatively affect the quality of some species.

Led by Dr. Reinaldo Campos, the Post-Harvest Laboratory of the Center of Plant Biotechnology at Universidad Andrés Bello has dedicated years of research to defining the molecular markers associated with phenotypic characteristics in fruits. Specifically, this project is based on genomic studies in peaches.

As explained by Dr. Campos, "There are certain molecular markers that would help us to detect special characteristics in fruit. We are looking for those markers that determine if a peach tree will produce fruit able to adequately withstand transport to target markets while maintaining the best quality possible."

Dr. Campos details that the first stages of this investigation are analyzing the peach genome and linking genetic markers with specific characteristics of the fruit. Once the appropriate genetic markers are identified, this information can be used to select trees that will produce the best quality fruits in terms of flavor, color, and texture.

Dr. Reinaldo Campos reiterates that genetic investigations in fruits have invaluable potential since this knowledge is not only pertinent to the process of obtaining better peach varieties in a shorter period, but also to the wider universe of fruits, thus benefiting the entire sector of export agriculture.

"Chile is one of a few countries so far away from its target markets. Due to this, solutions to the innate problems of post-harvest ripening should originate from Chilean scientists and research," states Dr. Campos.

Desarrollo de la agricultura