

# Postharvest avocado

Non-destructive methods for determining appropriate harvest dates



Dominican Republic / Chile

## The implemented initiative

The objective of the project was to develop a post-harvest avocado management system with the use of chlorophyll fluorescence to determine the optimal harvest time; and the use of molecular markers to

identify elite individuals-plants (based on quality characteristics and agronomic behavior) to homogenize harvest time based on genetic profiles.

## The technological solution

The chlorophyll fluorescence technique was experimented with, with the help of a fluorometer, as a non-destructive method to determine the optimal harvest time. In addition, the traditional methods used by producers to determine the maturity index were established. 48 Creole materials with export potential

were identified, of which 27 came from the Creole collection of the Pedro Henríquez Ureña University (UNPHU), 3 from different producers in San Cristóbal, 7 from a producer's farm and 11 from an Educational Farm located in the Espailat Province, in the North of the country.



**150**  
Beneficiary farmers



**148**  
Characterized accessions

MÁS INFO



## Results

A methodology was developed to determine the optimal time to harvest avocado. The effect of the edaphoclimatic conditions of the production areas and the management of the avocado crop on the quality attributes was determined. Non-destructive

(fluorometry), quality and phenotypic methods have been explored to determine the optimal harvest time. It was found that there is no feasibility of the use of chlorophyll fluorescence as a non-destructive method in determining the optimal harvest time in green avocados.

