

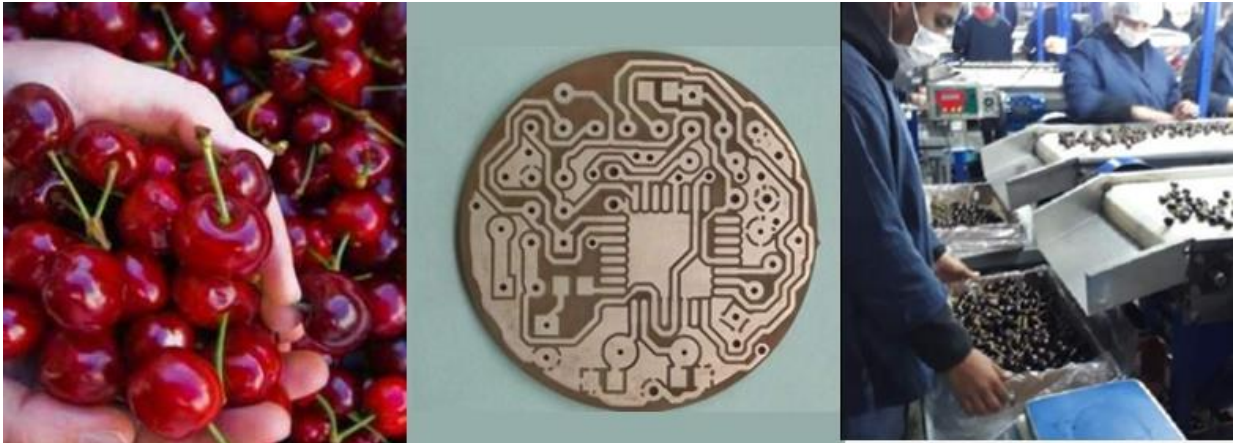
#105-21-Mendoza

Technology

Food Technology

Electronic Cherry to Improve Fruit Quality

<https://www.argentina.gob.ar/inta/tecnologias/cereza-electronica-para-mejorar-la-calidad-de-la-fruta>



Regional Center: Patagonia Sur Los Antiguos Pablo Rimoldi

Santiago Arhancet, Eng., technicians from Los Antiguos Rural Extension Agency, the Rural Engineering Institute of Argentina (IIR) and the Agro-Electronic Laboratory of INTA Castelar

#sensors | #quality | #fruit | #electronic | # microcontroller | #packing | #harvest | #impact | #mechanical damage | #pitting

Cherries suffer damage during the packing and shipping processes. Such damages are called pitting and reduce their market value.

A group of cherry crop specialists from Los Antiguos Rural Extension Agency, in Santa Cruz, Argentina, and researchers from the Agro-Electronic Laboratory of the National Agricultural Technology Institute (INTA), developed an electronic sensor with the shape of a cherry that records the impacts that the fruit suffers in the packing plants.

The instrument consists of a sensor that records impacts and movements during the whole process, a small microcontroller and a wireless transmitter that enables to download the information and monitor data in real time, while the electronic cherry accesses the different sectors of the packing line. The sensor is small and watertight because cherries are submerged in water for the most part of the process.

Eighty-five percent of the cherries produced in Argentina are exported to Europe, United States, Hong Kong, Singapore and recently, China. Cherries are composed by 85% water and their ripening profile is not climacteric, that is to say, they do not continue ripening post-harvest, making it a very fragile product.

This development enables to improve production quality for local farmers, enhancing quality of products for export, opening new markets and improving the agricultural and industrial added value in Argentina.

Presently, the device is under calibration to adjust its performance.

<https://youtu.be/dqktdwLOeDo>

Ana Laura Zamit - Pablo Rimoldi