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UNIVERSITY & RESEARCH

Blueberry quality in the chain

There is a year-round market demand for high quality blueberries. **Textural parameters as firmness and mealiness are key**. The project goal is to develop a **reliable, fast and objective assessment method** that can support quality management in the industry.

About the research

The research has delivered:

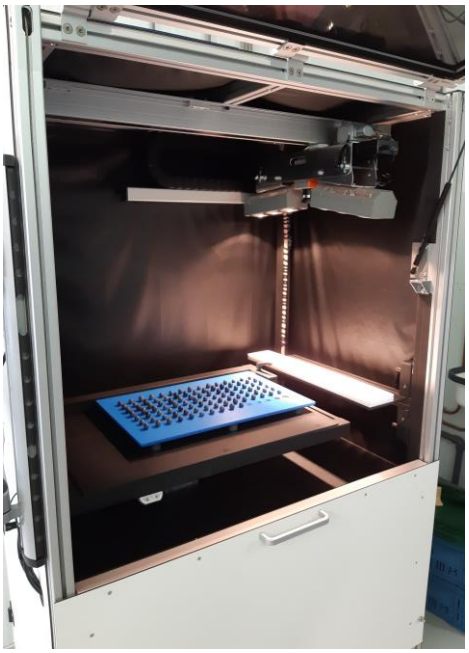
- an assessment method to measure the firmness of blueberries based on Hyperspectral Imaging (HSI), non-destructive and very fast.
- accuracy and robustness of the assessment method validated with blueberries from different cultivars, growers and distribution chains.
- sample size defined: how many blueberries in a batch should be measured to achieve the necessary accuracy.

Scientific innovations

Texture is the most complex (sensorial) quality aspect to be reliably measured. The application of HSI to predict firmness, mealiness and internal breakdown in blueberries is a new development. In addition, a number of other techniques, from Terahertz radiation to an impact deceleration based instrument, have been studied and insight in their potential is now available.

Relevance for industry

Year-round blueberries supply is currently achieved through the geographical segregation of production and relies on global logistics to ensure (long) distance distribution. At the same time blueberries should be picked at a near to full ripe stage, which makes quality management very challenging. The developed assessment method is fast and objective and can support the industry to **manage blueberry quality successfully and avoid unnecessary losses in the supply chain.**



For more information about the project and the partners, please visit:

www.wur.eu/freshondemand

Fresh on demand

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