

Title Overview on advanced optical techniques and technology for assessing pre- and postharvest quality

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Abstract

Particularly, high value tree crops with a life-time of 6 up to 40 years such as apples and citrus have high potential to benefit from automated sensors, information systems, and robotics. At present many technologies are applied on a research level, while only few methods derived were evaluated considering their feasibility. Even less methods are further adapted to approach robust data mining and information for the process management in the production and postharvest. The present work summarizes established and recent developments and, exemplarily, points out a solution for robust calibrations in non-destructive optical pigment analyses. The conclusion is that it is a long but reasonable way to get sensors in practise.