

Title Effect of orientation on the fruit on-line size determination performed by an optical ring sensor
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Abstract

This work aims to report on the applicability of an optical ring sensor system to the on-line size determination of non-spherical fruits such as tomatoes and kiwifruits. The effect of both the controlled and random orientation of fruits on the reliability, i.e. accuracy and repeatability of measurements, was analyzed. Authors concluded that random orientation negatively affects the reliability of volume measurements due to the swinging movement of the fruit itself when crossing the optical ring sensor.