ONLINE NON-DESTRUCTIVE AVOCADO FIRMNESS ASSESSMENT BASED ON LOW-MASS IMPACT TECHNIQUE

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An online system to sort fruit according to its firmness was evaluated for avocado ("Hass" cultivar). The system was produced by Sinclair International (SIQ-FT) based on measuring non-destructively fruits' firmness using low-mass impact method. Sensory panel, parallel-plate compression, 8 mm fruit-pressure plunger and cone penetration tests followed the online non-destructive tests, testing at 5 fruit/second. The correlation between the SIQ-FT and the sensory panel and modulus of elasticity were high (R=0.866 and R=0.902 respectively). The findings demonstrated the potential of the SIQ-FT system to assess avocado quality non-destructively.