

Citrus Industry Magazine- UF/IFAS SWFREC Citrus Mechanical Harvesting Program “What’s Shakin” column

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The Machine Enhancements Program Update 2 of 2

Catch Frame Improvements

Synchronizing the forward movement of continuous canopy shakers should improve the percentage of fruit caught by the catch frame. The control system under development uses two types of laser scanners to recognize tree trunks and measure the distance to the trunk.

Improvement of Canopy Shaker Mechanism to Reduce Tree Injuries

Field studies are being conducted using a Zig-Bee based wireless mesh sensor network. The sensor has been developed to collect real time data to study the physics and dynamics of fruit removal. By understanding how the vibrational forces are distributed throughout the canopy, operational adjustments can be made to reduce tree injuries..

UF/IFAS Assistant Professor, Dr. Reza Ehsani is leading efforts to perfect yield monitoring devices and further information can be found at our website:

<http://citrusMH.ifas.ufl.edu>.