

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

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At the recent International Symposium on Mechanical Harvesting and Handling Systems of Fruits and Nuts, Karen Lewis, a tree fruit regional specialist at Washington State University, made a presentation about vacuum assist machines being trialed as harvest aids in fresh apple orchards. Fresh market apples currently are being picked by hand with picking speeds ranging from 0.5 - 1 fruit/sec/picker. More importantly, up to 30% of total harvest time is spent repositioning each picker / climbing ladders, and then walking to empty picking bags into harvest bins. Vacuum assist machines can reduce that time. Two companies, DBR and Oxbo International, are evaluating harvesting platforms with vacuum technology for citrus harvesting too. Both companies have been able to deliver apples into dry bins without any significant fruit bruising. Harvesting efficiency gains, however, have been limited to a narrow range of available tree canopies and further work is needed to increase the suitability of this technology for a wider range of orchard types and to increase picking speeds. Take a look at the YouTube video of the DBR machine at: http://www.youtube.com/watch?v=b_C7o-tpeT0&feature=relmfu.