

# Preserving the best qualities of 'Honeycrisp' apples

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'Honeycrisp' apples are among the most popular varieties in today's fresh fruit market. The apple's explosive crispness, juiciness, and flavor have made them a new favorite among consumers. However, the apples' distinctive characteristics are at peak only when they are properly grown, picked at optimum maturity, and stored under ideal conditions. A new research study in the August 2015 issue of *HortTechnology* contains recommendations for maintaining consumers' interest in 'Honeycrisp' apples while preserving growers' profit margins.

The authors noted that 'Honeycrisp' is not an easy [apple](#) to manage, either in orchards or in postharvest storage. "This cultivar is known to have a strong tendency toward biennial bearing, which can result in a large number of small, poor-quality apples in heavy bloom years," explained corresponding author R. Karina Gallardo, Associate Professor in the School of Economic Sciences at Washington State University. "Managing flower density and crop load to control the biennial nature of 'Honeycrisp' is one of the greatest challenges for [growers](#)."

Gallardo and colleagues Ines Hanrahan, Yeon Hong, and James Luby used a fruit pricing model to calculate the effect of 'Honeycrisp' [fruit size](#) on prices received by growers. They then designed experimental auctions to determine consumers' willingness to pay for the apples.

"We focused on two specific consequences of inadequate crop load management: fruit size and soluble solids content (SSC)," Gallardo explained. "We observed that apple consumers were expecting a

discount of \$0.25/lb if 'Honeycrisp' apples presented external defects." The results also showed that soluble solids content (SSC) and acidity in 'Honeycrisp' affected [consumers](#)' willingness to pay. Consumers were willing to pay an average of \$0.12/lb more for a one-unit increase in SSC; this \$0.12/lb discount for a decrease in SSC can represent a significant \$1,362/acre loss for growers.

Other findings showed that apple sizes of 64-72 count per 40-lb box would realize the highest predicted grower prices. "We estimate that growers would realize a loss of \$5,332/acre if production of size 48-88 count/box decreased by 5% and size 100-163 count/box increased by 5% compared with current 'Honeycrisp' size distribution," the researchers wrote. "This study illustrates potential profit losses if 'Honeycrisp' apples are not supplied with exceptional characteristics in terms of fruit size and SSC."

The authors said that, given the increasing popularity of 'Honeycrisp', growers and allied industries should be aware of the importance of preserving the quality of the cultivar to maintain price premiums and profit margins.

**More information:** The complete study and abstract are available on the ASHS HortTechnology electronic journal web site: [horttech.ashspublications.org/ ... nt/25/4/575.abstract](http://horttech.ashspublications.org/...nt/25/4/575.abstract)

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