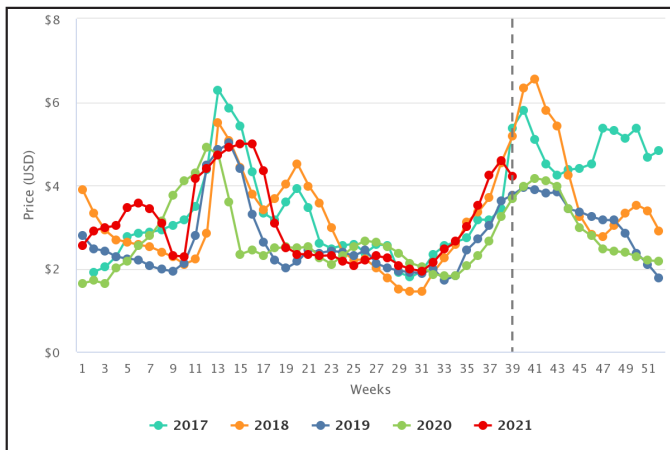




Introduction of Study

Blueberry harvest in the Pacific Northwest runs from the end of June through early September. Growers in Washington and Oregon hit their highest volume harvest from early July through mid-August (weeks 28-31). During this high-volume period, blueberry prices are the lowest of the season (average of \$2.00). By the end of the season (weeks 37-43) the price increases significantly reaching \$4-5/lb for the same quality blueberries (Pic1).



Pic1: Prices by Weeks Annually 2017-2021

Objectives of the Study

Our customer, Sorbatto Fresh (formerly Blueberry Hill Farms) wanted to store their fruit for up to 8 weeks after harvest without loss of quality to reach the highest prices at the end of the season.

Relevant Issues for the Case Study

The Pacific Northwest blueberry market was devastated by a massive heatwave in late June and early July 2021. In July of 2021, the Produce Blue Book reported that “Some growers are seeing 40 to 50 percent losses and had asked Oregon and Washington governors to declare a state of emergency.” As a result of these conditions many retailers temporarily stopped buying fruit from growers in the region. If not for the ability to ride out the turbulent market, the grower would have thrown this fruit away at a loss.

Research Methods & Instruments

During these challenging circumstances, RipeLocker engaged in a commercial deployment with Sorbatto Fresh Wapato, WA. 43 of RipeLocker chambers were used to store both conventional and organic blueberries for up to 51 days (sorted depending on market conditions and fruit quality).



Blueberries 31 weeks in RipeLocker.

Economic Assessment

The 2021 season proved to be a very challenging year for blueberry growers and packers. Unusually hot weather affected fruit quality causing some retailers to stop sourcing berries from affected growers.

Using RipeLocker, Sorbatto Fresh was able to sell their stored fruit at a value-added price. During week 31 (beginning of August 2021) blueberry prices averaged \$2.09 per pound. Four weeks later, on week 36 the price increased to \$3.76, representing a \$1.67 increase. Eight weeks later on week 39 (Beginning of October), blueberry prices hit \$5.39 per pound, a \$3.30 increase from week 31. (Table 1)

Sorbatto Fresh - Season Extension

Table 1: Sorbatto 2021 Season Economic Analysis for Blueberries Stored in RipeLockers.

2021 Season (Sorbatto Fresh)	Blueberry Price (\$/lb.) Week 36	Blueberry Price (\$/lb.) Week 39
Price Going In (Week 31)	\$2.09	\$2.09
Price Going Out	\$3.76	\$5.39
Price Difference	\$1.67	\$3.30
RipeLocker Added Value (per Unit)	\$1,127.25	\$2,227.50
RipeLocker Added Value (43 Units)	\$48,472	\$95,782.50



Fully loaded RipeLocker with trays of blueberries.

Conclusions and Implications

Blueberry growers and packers can take advantage of strong prices late in the season utilizing RipeLocker's technology. Currently, many are forced to sell when production peaks and price plummets. With RipeLocker, growers can intelligently manage their inventory to hold it during mid-season low prices and sell it when prices pick up by the end of the season. This allows them to generate a greater return while confidently delivering a high-quality product to retailers and consumers.

With resounding success, Sorbatto was able to store their unsellable fruit for four to six weeks later than the normal season and this fruit was available to sell at higher market prices. By using the RipeLockers, Sorbatto Fresh was able to gain \$1,100 - \$2,200 of additional value per unit.



The Weijohn family have been farming for 3 generations in Wapato, Washington and are dedicated to providing a quality product, and blueberries are no exception.

"We were extremely pleased with the pristine quality of the blueberries that had been stored in the RipeLocker containers for eight weeks. They looked like they came right out of the field," said Jeff Weijohn, owner of Sorbatto Fresh. "After seeing such great results, we quickly signed up to lease the RipeLocker containers as we anticipate a strong ROI from using them."

www.bhberries.com, www.sorbatto.com