



Upcoming Events

Pack Expo Las Vegas '99 - October 18-20 - Las Vegas

PMA International Convention & Exposition - October 22-26 - Atlanta, Georgia

United Quality Control Seminar - October 26-28 - Kansas City, Missouri

Int'l Fresh-cut Produce Association's Technical Seminar - November 8-9 - Alexandria, VA

A student researcher at UC Davis did the research and colleagues voiced amazement at how Ethylene Control handled blue mold and rind breakdown in citrus tests. The fruit retains that just-waxed luster, something that EC customers have seen for several years. I am really excited about a study that was recently published in the Australian Journal of Experimental Agriculture. It shows that very low levels of ethylene shortened shelf life of a number of commodities from oranges to Chinese cabbage. Please contact us for a copy of the complete study.



Rogers Mesa Fruit Committed to Excellence

Rogers Mesa Fruit Co. is nestled on the western side of the Rocky Mountains near Hotchkiss, Colorado. The firm takes its name from the rich farming region that surrounds it, said shed manager Richard D. Kinser, who has been with the company for the last 16 years.

The company was founded in the 1940s by Lewis Owens and later was owned and operated for a number of years by Red Chism. In 1981 the facility was burned to the ground when a freight train's hot brakes caught the building on fire. In order to rebuild the packinghouse, Chism sold stock in the company to 11 grower members. The new facility was built a couple miles down the road from the original structure and today they pack fruit for a total of 21 growers from the surrounding region, Kinser said.

Rogers Mesa Fruit Co. packs their traditional fruits under the Silver Spruce brand while their organically grown crops are packed under High Mesa brand. In a normal year, they handle sweet cherries (25,000 cartons), peaches (30,000 cartons), pears (5,000 cartons), nectarines (1,000 cartons and growing) and apples (80,000 cartons). Rogers Mesa ships fruit all over the United States. The majority of their organics go east into the Philadelphia marketplace and they export some fruit to Jamaica and Honduras.

"Our season runs from June through February and then we go into the repair and maintenance mode and sell pruning and spray equipment and general orchard supplies," said Kinser.

The company had experienced fruit ripening problems in its packing operation over the years. They commonly mixed their fruit in storage. According to Kinser, they often had pears, peaches and apples in the same storage room. The high ethylene off gassing that occurs with apples ripened the pears prematurely.





About four years ago, Kinser began investigating ways of improving their packs and boosting shelf life of their fruit. He started using Ethylene Control's sachets in their cartons of pears and then started hanging throw-away filters in their two main coolers.

"We saw a profound improvement in our efforts to slow the ripening of the fruit," Kinser said. "When we installed our first EC-3 filtration system from Ethylene Control, we saw a radical change in fruit quality. We have three EC filtration units and are planning on adding a fourth.

"We've learned from our mistakes. We now segregate our apples and pears and with the added benefits we gain from our filtering systems, have seen our fruit remain firm and last longer," he said. "Our company is committed to excellence and the EC system enables us to do an even better job for our growers and most important, our customers."

Arkansas Tomato Shippers Focus on Freshness

Arkansas Tomato Shippers (ATS) is a produce distribution company headquartered in Monticello, Arkansas. This young firm is determined to develop practices that will keep their customers satisfied and profitable.

"We know that delivering the best possible product is going to dictate our success or failure," said Brooks Lisenbey, sales manager for ATS. Lisenbey is currently getting the sales operation setup in Nogales, Arizona in time to participate in the prime tomato season there, which runs from October through mid-April. Then the company efforts will revert back to Arkansas in time to catch the June and July market.

"Bringing fruit into our Warren, Arkansas warehouse for precooling and storage is a critical time for the



fruit. Handling it well is a must." That's why Lisenbey uses Ethylene Control's E-3 system in their cold storage facility.

"We've been using the EC scrubbers for about a year and a half and it has helped our arrivals in a big way," he said. "Since we mix our commodities in the cooler, it is extremely critical that we keep ethylene levels as low as possible. Tomatoes can have a bad impact on peppers stored in the same room."

Next season he plans on including EC sachets in each individual carton so that freshness is guaranteed during the actual shipment of the product.

"Our customers want high quality product and Ethylene Control helps us meet those demands," he said.

Lisenbey hasn't always been strictly involved in produce sales. Before joining Arkansas Tomato Shippers, he was a partner in a tomato farming operation in Arkansas and has worked in all aspects of the tomato industry.

Arkansas Tomato Shippers is a distribution company located on a 40-acre compound with a warehouse cooler operation that will handle about 25 truckloads per day and process more than 2 million, 20-pound cartons annually. Most of the shipment volume is tomatoes, but the company also handles bell peppers, cucumbers, squash, cantaloupes and watermelon. Commodities are shipped throughout the states and into Canada.

During the peak season the firm employs about 15 people. Both Brooks and his wife, Denise work in sales. When the tomato season gets rolling in the Southwest they plan on hiring an additional 3 or 4 sales people.

The company was founded three years ago by five partners from Arkansas. Lisenbey is buying and selling for the group in Nogales, Arizona and is planning to establish a warehouse and cooler facility there in the near future.

Strawberries Tested

An article in the 1999 edition of the Australian Journal of Experimental Agriculture focused on the importance of low ethylene levels to delay senescence of non-climacteric fruits and vegetables. Researchers recently examined the effect of atmospheric ethylene levels and reported that the post harvest life of strawberries was markedly extended as the ethylene level was reduced.

In a Sydney wholesale market, researchers found the ethylene concentrations ranged from 0.06 to 1.17 $\mu\text{g}/\text{L}$ with the average concentrations being 0.23 $\mu\text{g}/\text{L}$ for strawberries.



Aussies Report on EC Research in Citrus, Veggies

The storage life of a range of non-climacteric fruit and vegetables was assessed during storage at ambient temperature (20°C) and low temperature (0-5°C) and ventilation with air containing ethylene over the range $0.005 - 10 \mu\text{g}/\text{L}$. The storage life of oranges was found to be linearly extended with a logarithmic reduction in ethylene concentration.

Across 23 kinds of produce, there was about a 60% extension in post harvest storage life when stored in 0.005 compared with 0.1 $\mu\text{g}/\text{L}</math>, commonly considered threshold level for ethylene action. Example: storage life was increased 147% for broccoli, 190% for lettuce and 134% for strawberries.$

The findings in the storage tests are substantial enough to be of commercial value, according to the Australian report. Since the threshold level for ethylene action is well below 0.005 $\mu\text{g}/\text{L}</math>, the levels in commercial situations will always be high enough to have a detrimental impact on the shelf life of produce. Any post harvest intervention that reduces ethylene levels around produce will therefore have a positive effect on post harvest life. Complete reports are available from Ethylene Control.$



What People Are Saying



For two years we've had 'zero' claims when we used the Ethylene Control sachets in our Hong Kong shipments."

**David Roth, President
Cecelia Packing
Orange Cove, CA**



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