



US: Purfresh offers grocers superior, chemical-free protection against grape spoilage

Publication date: 1/28/2009

Purfresh, provider of clean technologies that purify, protect, and preserve our food and water, today released the results of a study demonstrating that Purfresh Cold Storage™ and Purfresh Transport™ effectively protect table grapes from mold and spoilage, without traditional chemical applications. Table grapes are particularly susceptible to airborne and surface microorganisms in refrigerated storage environments, and until now, noxious and corrosive chemicals were believed to be the only effective approach for controlling contamination.

Certain molds and bacteria thrive in cold storage environments, spreading quickly and damaging the appearance, taste, and value of fresh produce. Sulfur dioxide fumigation and slow-release sulfur dioxide pads have been widely used to kill mold and prevent rotting in table grapes, but sulfur dioxide is highly corrosive to refrigeration equipment, leaves sulfite residues, and can cause health and environmental problems. Federal law does not permit table grapes to be sold when sulfite residue exceeds 10 parts per million. Additionally, sulfur dioxide is not approved for organic produce, and disposal of sulfur dioxide pads comes with an expense. The Purfresh study was performed to explore the use of natural alternatives to sulfur dioxide in preserving the freshness and quality of table grapes.

In the study, boxes of Crimson Seedless grapes were exposed to *Botrytis Cinerea*, a particularly insidious mold, and were processed with four different treatments: one with Purfresh technology, one with sulfur dioxide fumigation, one with slow-release sulfur dioxide pads, and a no-treatment control. After 46 days in commercial refrigeration, the boxes were removed and compared for signs of mold. None of the Purfresh-treated samples showed evidence of *Botrytis Cinerea* nesting, whereas all of the other samples showed significant nesting.

“This study confirms the results of multiple third-party, government and university studies using our cold chain solutions, which demonstrate that our systems protect and maintain produce freshness better and longer than traditional methods,” said David Cope, president and CEO of Purfresh. “Having tolerated decades of caustic sulfur dioxide gases and allergenic sulfite residues, the fresh produce industry is ready for a safer, cleaner and more effective way to protect fruit. Our solutions align with the EU’s initiative to reduce chemical residues on fruit, and they enable the fresh produce industry to cost-effectively meet growing demand for organic produce.”

Purfresh’s patented technology continuously delivers low concentration doses of ozone into refrigerated environments, providing superior protection without damaging the fruit. Purfresh Cold Storage and Purfresh Transport systems are certified organic and can easily be integrated into existing refrigeration equipment in cold storage rooms and shipping containers, respectively. The systems conveniently contain their own monitoring and control technologies for real-time management of the storage environment.