INTRODUCING AGROFRESH™

Bruce Bates

AgroFresh, Inc.

bruce_robert_bates@rohmhaas.com

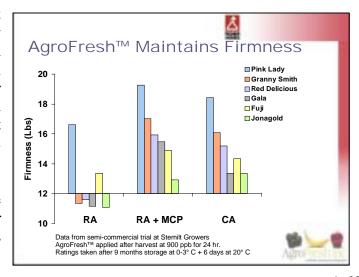
AgroFresh Inc., a Rohm and Haas Company, was formed in December 1999 to develop the technology known in the research community as 1-MCP (1-methylcyclopropene). The product will be commercialized for the apple market under the brand name AgroFreshTM. It's a promising breakthrough in fruit storage technology that preserves the fresh-picked apple crunchiness, taste and juice content. Equally important is that AgroFreshTM will help the apple industry meet retail and consumer demand for higher quality apples.

While AgroFresh, Inc. was formed a little over a year ago, this discovery was made many years before in a lab at North Carolina State University. University researchers looking for a way to inhibit the natural production of ethylene and make fruit less susceptible to external ethylene sources discovered the secret to AgroFreshTM technology. As described by Dr. Dana Faubion of Washington State University:

An apple that smells ethylene is stimulated to undergo the changes associated with ripening. With this compound present, the fruit cannot detect ethylene. This severely slows changes associated with ripening: fruit softening, respiration, ethylene production, and the loss of acidity.

In 1990's, the researchers perfected their development and were seeking commercial applications. They sold it to a company named Floralife Inc. for use in the floral market and for its later development with fruits and vegetables. In the floral market it is used to extend flower life, as well as being a good substitute for silver thiosulfate (STS), the current postharvest standard in the floral market, which is under environmental scrutiny. Floralife's expertise, however, did not extend to the fruit and vegetable market. Rohm and Haas Company recognized an opportunity to purchase a product with a very favorable safety profile, and formed its subsidiary, AgroFresh, Inc. to develop 1-MCP for food production. In 1999, Floralife sold the rights to this technology to Rohm and Haas for development in fruits and vegetables.

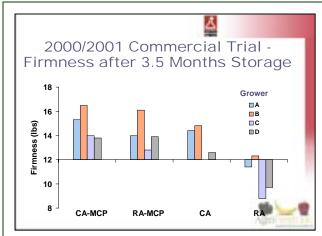
Since then, AgroFresh Inc. has spent considerable effort in the apple industry with research trials being conducted The technology has been worldwide. studied by fruit and vegetable experts for about three years and has demonstrated its effectiveness in maintaining fruit apples that means quality. For controlling scald, maintaining firmness, and preserving the sugar-acid balance. AgroFresh™ will help the U.S. apple industry meet retail and consumer demand for higher quality apples, as

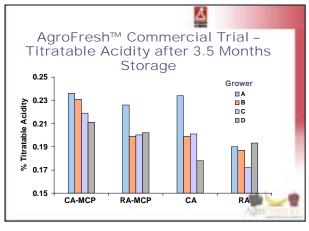


2001 Proceedings, $\mathit{Introducing AgroFresh}^{\textsc{tm}}$

well as to deliver consistent quality to consumers year-round. This product easily complements the current systems of apple storage (controlled atmosphere (CA) and regular air (RA) storage).

The company is expecting U.S. Environmental Protection Agency (EPA) registration for apples later this year. The product has a very favorable safety profile and qualifies for expedited EPA registration due to its low-use rate, non-toxic mode of action and structure similar to naturally occurring ethylene. When AgroFreshTM is ready for a full commercial launch; it will be packaged in a self-contained, one-step, single use delivery system. The user will simply add water to dissolve the AgroFreshTM powder, and it quickly and evenly disperses in the storage room. The company has conducted both large-scale and small-scale efficacy trials with apples. The large-scale trial is underway in a 1,250-bin room of Red Delicious apples. After three and a half months, the treatment is working exactly as expected, holding the apples at much higher levels than control with regard to firmness and acidity.





Firmness as an indicator of quality is a given, and AgroFreshTM has repeatedly been shown to preserve this quality. Data also shows that the technology also preserves other indicators of good apple flavor - like higher levels of titratable acidity. We're also seeing better aroma preservation for apples stored long term, and we are gathering more data for shorter-term storage scenarios. Our intent is that AgroFreshTM will help the apple industry deliver "fresh-picked" quality to the marketplace year-round.

