

Forelle Early Market Access:

Unlocking new value from an old cultivar

Words by Anna Mouton

Forelle has been around for 350 years,” says Dr Ian Crouch, director of research at ExperiCo. “Historically it’s been eaten as a sweet and juicy pear. But our problem was that Forelle becomes mealy if it’s sold before it’s had 12 weeks of cold storage.”

Forelle is a bicolour pear. A typical bicolour pear season starts with the export of varieties that don’t have a chilling requirement, such as Rosemarie and Flamingo. In the past, there was then a hiatus until Forelle came out of cold storage. This gave other countries a chance to muscle in on the bicoloured pear market. “The moment you have a break in continuity the supermarkets go to other exporters like Chile,” explains Crouch. “Once they have a supply and they’re happy with the quality, they may not come back to South Africa.”

The 12-week cold storage period also put producers under pressure to pick as early as possible so as to export soonest. This led to harvesting of suboptimally mature fruit. “We had a huge number of complaints from supermarkets about astringency,” recalls Crouch. Astringency is the drying, puckering sensation in the mouth caused by tannins in green fruit.

The problems didn’t end with green fruit. “At the end of the 12-week period, there was a glut of Forelle coming onto the market. The spike in volume crashed the price.” No wonder that researchers tried everything to bring the Forelle season forward and close the gap. “Harvest maturity, ethylene, cold shocks, hot shocks—we just couldn’t get it right,” relates Crouch.

A PEAR THAT EATS LIKE AN APPLE

The solution came in thinking outside the box. What if consumers would accept a crisp pear instead of the traditional juicy Forelle? “We let the pear hang on the tree for longer and we push the sugar so it’s a sweet fruit and then we stop it ripening with SmartFresh [1-methylcyclopropene (1-MCP)],” explains Crouch. “You get a crisp sweet pear.”

Thus the Forelle Early Market Access program, or FEMA, was born. “The biggest challenge was to sell this concept to the market,” says Crouch. “To sell a pear that eats like an apple—initially we wondered whether we could do this.” Forelle harvested later and treated with SmartFresh can be exported immediately without any risk of mealiness. “You’re putting fruit into the market earlier and getting a sustained price throughout the whole season. So now we start with FEMA fruit when Rosemarie and Flamingo come to an end.”

Extensive research showed that certain markets preferred FEMA fruit over traditional Forelle. “In hot areas they were 100 percent for this program, because it’s 40 degrees out there. With FEMA you don’t get pears that overripen between the distribution center and the supermarket — it’s opened up new markets for us in the Middle and Far East.”

Managing consumer expectations at all stages of the Forelle season was critical. “On each of the FEMA pears we had a little sticker that said, ‘Crisp and sweet’. But the rest of the Forelle come

in after 12 weeks and these are soft and juicy,” explains Crouch. “You have a crossover period when the fruit this week is totally different from last week. You have to make sure people know what they’re getting.”

Crouch admits that the FEMA pear is his personal favourite, “I love the crisp and sweet fruit. Juicy fruit have a risk of being either astringent or mealy and both those are bad eating experiences.”

BENEFITS AND CHALLENGES

In the past, the 12-week cold storage period motivated producers to harvest as soon as their orchard or area was released. “With the FEMA program, we take the pressure off people to harvest earlier. Once you have your normal release, the fruit can remain on the trees for maybe another two weeks and then you may get a FEMA release,” explains Crouch. “If you have a FEMA release, you could be in the market five or six weeks earlier than usual.

“Because fruit is in the market earlier, the price is sustained throughout the whole season. And the FEMA fruit lasts longer so you can maintain quality as well. If you have a slow market, you don’t need to discard fruit—you have that buffer to ride through the slower market until it picks up again.”

The FEMA program has been instrumental in growing the market for Forelle exports. “It’s opened new markets and improved the price. It’s had a huge impact — Forelle is now our second-largest cultivar and people are still planting Forelle.”

But the FEMA program does present its own challenges. “Some farmers are putting all their orchards into the race. The first orchards that make the FEMA grade are fine, but they might have pushed other orchards a little past where they should have been picked for the 12-week cold storage,” cautions Crouch.

“The challenge is to ensure that you look after your whole Forelle program on farm. Don’t compromise fruit that don’t make the FEMA grade. If you do have fruit that are a little bit too mature than you can still treat them with SmartFresh and sell them as your last Forelle fruit. So even if you put all your orchards forward you don’t want to end up with pears that are overripe and have internal issues and limited storage capability.” **FO**

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