

Delytics Helps Citrus Australia with Consistent Quality Taste



The Delytics team's crop quality expertise and ability to analyse complex data helped Citrus Australia identify the maturity measures for their recently adopted Australian Citrus Quality Standards.

The new standards were introduced in 2014 to assist Australian citrus growers, packers, marketers and retailers deliver quality citrus that consumers will enjoy eating and want to repeat purchase.

Before setting the standards, Citrus Australia had to first determine the maturity parameters for oranges and mandarins that would consistently meet consumer preferences for juiciness and taste.

In 2013 Citrus Australia engaged Mark Loeffen and Dr Bob Jordan from Delytics to analyse taste panel data collected across Australia. The data included detailed taste responses from approximately 1200 consumers and information about their socio-demographics, shopping and fruit eating habits. The research team found the data challenging to interpret and Citrus Australia commissioned Delytics to help.

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Citrus Australia Market Information and Quality Manager, Nathan Hancock says, “We wanted the research to deliver commercial outcomes. We set out to get answers that we could comfortably take to our industry and say, ‘if you meet this standard, the likelihood of sales increasing is this percentage’, but conventional statistics couldn’t make sense of the data - and that’s where Mark and Bob really made a difference. They were able to find patterns in the data and then explain it to us in a very clear and concise way that we were able to extend to our growers. Mark and Bob helped us get a commercially achievable outcome from this project. The information that came out of their analysis is the backbone of our new national standards, which is a really positive thing for our industry. Their input has been very, very useful.”



Delytics Managing Director Mark Loeffen (centre) with Citrus Australia's Andrew Harty (left) and Nathan Hancock (right)

Citrus Australia Market Development General Manager, Andrew Harty agrees.

Andrew says, “Mark and Bob were able to analyse our mandarin and navel orange evaluation work quite quickly. They provided us with a very clear, easy to understand curve of acceptance graph for each of those crops that linked the consumer like and repurchase data responses to the *BrimA* scale that we have adopted as our new industry standard. They’ve got an excellent understanding of fruit variability and how that can relate to the range of responses you get in a consumer pattern. There are probably not many people in the world that would have that skill and expertise.”

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“Mark and Bob are great to work with. It’s pretty unusual to be able to sit down with people who are so passionate and focused on fruit quality. These guys can understand exactly what’s happening on the orchard, in the packhouse and in the market place and they are very good at relating to the actual supply chain. They’ve got the technical skills and communication skills as well so it’s really good working with them.”

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Verifying the taste thresholds that will encourage more Australian consumers to eat and purchase more citrus has been a major focus for Citrus Australia for many years.

Andrew says, “We knew the only way we could really achieve our goal was to make sure we presented consumers with fruit that would delight them every time they ate it. The robustness of Mark and Bob’s analysis has given us a lot of confidence that we have tapped into the real consumer demand for quality in our industry.”

Delytics research leader Dr Bob Jordan led the research team that developed the BrimA fruit maturity measure that the Australian Citrus Quality Standard is based on. He now devotes his time developing world leading fruit property models for the Delytics® crop quality decision support system, which has been specifically designed to help growers predict the right time to pick to provide the best eating experience.

Citrus Australia is now looking at developing a pilot project with some of their larger grower/packers to show how using the Delytics® system will help Australian citrus growers meet the new quality standards.

Andrew says, “That’s the really important next step. It’s one thing telling people what the quality of their fruit should be, but the other thing is helping them get it there. The Delytics® system will allow growers and packers to sample fruit correctly, understand variability within the orchard and come up with maturity predictions that will help them make sure that when they push the button to go and harvest a particular block of fruit that the vast majority of that fruit will pass the packhouse grading.”



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