

Grower case study — PR13007 Australian Sweet Persimmon Industry Development Project- Phase 4

Grower	Ross Stuhmcke
Location	Gatton, Queensland
Planted area	2.5 ha planted to Gyro, Rojo Brillante
Sales channels	90% supplied domestic to Brisbane, Sydney, Melbourne, and 10% exported to Hong Kong and Singapore.

What was the research about

Between 2014 and 2017, the Queensland Department of Agriculture and Fisheries (QDAF) delivered *PR13007 Australian Sweet Persimmon Industry Development Project- Phase 4*. The project conducted research, development and extension (RD&E) into a range of issues and opportunities facing the Australian persimmon industry including mealybug and clearwing moth pest management, variety evaluation including previously imported Rojo Brillante, rootstock evaluation including clonal propagation, removing astringency with carbon dioxide (CO₂), and improved cool storage.

Ross Stuhmcke, who along with his wife Karen have been growing persimmons since 1995 on their mixed orchard along with stonefruit and figs, talks about his experience with some of the issues targeted by PR13007.

How has your pest management changed as a result of the research?

Clearwing Moth. “Clearwing moth is lower down the list of pests for us but you don’t want to let it go. And its still a significant pest from a management perspective given the lack of options and high cost. I know one guy used to dig them out of the tree with knife. We had previously adopted the high pressure spray approach. We feel it helps, but its so labour intensive and expensive: one person, three trees/hour and 1000 trees/ha. So we try to limit it to once every second year. Since mating disrupter pheromones became available around 2015 we have added them on top of the chlorpyrifos sprays we do for cluster grub control, which also helps I think. We put out the tags twice per year at 1000 tags per hectare. I believe the mating disrupters have helped. We still get some damage, but its down to an acceptable level, whereas before it was starting to get out of control. On top of the chemical and physical control methods, we have also stopped growing Fuji persimmons (as a lot of people have also done) because it was more susceptible to clearwing moth.”



Rojo Brillante. Image care of Ross Stuhmcke

What has been your involvement with research on new varieties?

Rojo Brillante and removing astringency. “We found out about *Rojo* through QDAF [PR13007 delivery partner], and also from reading about it in industry literature. So when some of the trees became available for trialling through the project we took up the opportunity. Initially we could only get 6-8 trees, but now we are planning for about 1000. We also try to support broader adoption by supplying grafting wood to nurseries and other growers, but getting grafting wood is difficult given the small supply at the moment. Given our early adoption we are now also supporting NSW DPI [delivery partner of follow on project *PR17000 National persimmon varietal evaluation program 2018-2023*] with fruit trials, as well as ongoing wood for grafting.”

“Its hard to say what the benefits of Rojo are compared to the existing varieties given we are only coming into proper maturity now. Planting a new variety can always be a bit of a gamble, and particularly when its in early stages of evaluation like Rojo, but we see the potential benefit. The fruit is larger, and there is possibly also a bit better yield with Rojo, but what will really help is the ability to manage astringency. If I can pick greener and then colour the fruit by treating it with CO₂ then from my end I can avoid farm waste as they aren’t picked so soft, and they reach the market at the right maturity, and with more consistency. Depending on how well we can remove astringency Rojo also has the potential for export we are told. But this will all depend on how the current [PR17000] trials go with removing astringency. For us its two to three years before we start looking at removing astringency seriously given the age of our trees.”

Any final thoughts on PR13007 and related RD&E?

“I’m always happy to try to help, if possible, and improve the industry. Overall we need the levy projects. I don’t know how we would operate or improve our production systems otherwise, as there would be no focus on R&D or extension, or it would only be able to be afforded by large corporate producers. Research like this with new varieties like Rojo, and the potential its shown, it may not necessarily be a world beater but its something different than the same two varieties we had always had. Some other niche varieties are early but don’t taste as good. So that area looks like it can be a valuable bit of research for the industry. The research on Rojo is ongoing but this project helped us to get to where we are today, so I think its been good at progressing research in that regard.”



Rojo Brillante. Image care of Ross Stuhmcke



Jiro. Image care of Ross Stuhmcke

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Hort Innovation is the grower-owned, not-for-profit research and development corporation for Australian horticulture. For more information visit www.horticulture.com.au.

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