

Future Orchards “Business Development Group” Newsletter

Prepared September 2017

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Making OrchardNet (ON) work for your business in 2017~18.

With the 2017/18 growing season now underway, now is the time to make sure Orchardnet is setup and ready to work for you this season.

Although Orchardnet is capable of achieving many management functions, currently most Australian growers are using Orchardnet to:

- Track and benchmark historical block performance
- To set a production target for 2018 that you can farm to
- Monitor fruit growth rate

In this newsletter, we want to ensure that you know how to achieve each of the above functions and a few more.

Track and benchmark block performance

We recommend that you enter your block productive performance for the past 2 years (2016 and 2017).

Make sure you enter gross picked volume, volume sent for packing, class 1 and 2 volume and the average fruit size. If you're not sure of the exact numbers, use a good guestimate (something is better than nothing).

For those new users who haven't done this before please refer to the Future Orchards website library “Orchardnet training and resources” by clicking into this link :<http://apal.org.au/industry-info/future-orchards/archive-library/-otr>

The specific article link that describes how to enter production data and run reports is here :<http://apal.org.au/wp-content/uploads/2013/04/orchardnet-training-1-production-2012-06.pdf>

After entering your data, make sure you run the three production based reports to see how your blocks compare to the database of all other Australian blocks.

Set a production target for 2018 that you can farm to:

Once you have collected and analysed some good history, now you can set a crop estimate or target for 2018. If you give this some good thought, it will give you a target to thin to at hand thinning time.

The above article links also give guidance on how to do this. Remember the year we are in now is the 2018 year.

The OrchardNet system uses a default pick out of 90%. Pickout is the percentage of fruit after hand thinning that makes it into a bin. If you want to adjust this e.g. Fuji might be 85%, then enter a specific block pick out in the metrics section.

Once you entered a 2018 target, now the thinning report will work.

We show an example of one of Silvers Focus blocks in Table 1. The target is 90,000 kg/ha at a 170 gm average fruit size. The thinning report has calculated that to achieve that, the orchard management team will need to harvest 184 fruit per tree. Assuming an 85% pick out, they'll need to thin to 217 fruit per tree. Note that based on past fruit counts the pickout has been as low as 72-80%. This good historical data has identified that if the grower can pick more of the fruit he grows, then there's a potential additional 10% crop. Ways that this might be done is greater use of reflective clothes for better colour development as fruit is often left behind due to lack of colour.

Table 1 Silver Orchard Ruby Pink thinning report

Company:	Silver Orchard	 <h2 style="margin: 0;">Thinning Report</h2> <h3 style="margin: 0;">Season Ending 2018</h3>										
Property:	aSilver Focus Blocks											
Production Site:	Orrvale											
Block:	Ruby Pink 11											
Blockname	Ssn	Type	Gross Kg/ha	Class1 Kg/ha	Fruit Harvested Weight (g)	Fruit /Tree	TCA Harvested Fruit /TCA	Tree Pickout %	Target Fruit/Tree post-thin	Actual Fruit/Tree pre-thin	Actual Fruit/Tree post-thin	
aSilver Focus Blocks												
Orrvale												
Ruby Pink												
Ruby Pink 11	2018	Est	90,000	76,500	170	184	27.3	6.7	85	217	-	-
		Act	-	-	-	-	27.3	-	-	-	-	-
	2017	Act	89,000	75,650	175	177	22.1	8.0	80	197	-	220
	2016	Act	82,000	69,700	180	158	19.6	8.1	72	176	-	220
	2015	Act	80,000	68,000	180	155	-	-	-	172	-	-

Monitor fruit growth rate

Last year there were 400 blocks right across Australia that used OrchardNet to monitor, track and benchmark fruit growth rates. We firmly believe fruit growth rate is the best way to measure plant performance.

To set the blocks up, ready to go for 2018, you need to do the following:

1. Make sure the block is setup
2. Enter the 2018 block year
3. Make sure you collect and enter an accurate full bloom date. The full Bloom date is when the highest proportion of flowers are open, i.e. when the tree is most showy.
4. Now you're ready to enter fruit size data as the fruit starts to form

For more resources to help, please view the fruit sizing resource link below:

<http://apal.org.au/wp-content/uploads/2013/04/orchardnet-training-fruit-size-leader-extension-2012-12.pdf>

NEW FEATURE

Manage your Chemical Thinning

Over the winter months we have added a chemical thinning component to Orchardnet. We believe chemical thinning is one of the most complex, critical management factors to master with pomefruit, so it seemed logical to include it into Orchardnet.

The recording system allows you to plan out a chemical thinning plan for the year and then tweak it as the season unfolds. We have tried to include all the chemicals that the Australian fruit grower is likely to use. If we have missed any let Adrian Stone know.

Have a go using it, and give us your feedback. Our goal is to make Orchardnet a great tool to improve your orchard business.

For the detail <http://www.hortwatch.com/orchardnet/manual/orchardnet-user-manual.pdf>

Chemical Thinning 2018

Product	Rate	Dilute Label Rate
Thinner		
ATS	<input type="text"/> mL/100 l	1250-1500 mL/100 l
BA(10%)	<input type="text" value="900"/> mL/100 l	600-900 mL/100 l
BA(2%)	<input type="text"/> mL/100 l	120-180 mL/100 l
Carbaryl	<input type="text"/> mL/100 l	80-160 mL/100 l
Ethephon(48%)	<input type="text"/> mL/100 l	21-42 mL/100 l
Ethephon(72%)	<input type="text"/> mL/100 l	14-28 mL/100 l
Lime Sulphur(20%)	<input type="text"/> mL/100 l	500-3000 mL/100 l
Metamitron (70%)	<input type="text"/> g/100 l	25-37 g/100 l
Metamitron(15%)	<input type="text"/> g/100 l	110 - 220 g/100 l
NAA(10%)	<input type="text"/> mL/100 l	5-10 mL/100 l
NAA(2%)	<input type="text"/> mL/100 l	25-50 mL/100 l
Thiram(40%)	<input type="text"/> mL/100 l	150 mL/100 l
Surfactant		
Folion	<input type="text"/> mL/100 l	62-250 mL/100 l
Growett	<input type="text"/> mL/100 l	10-100 mL/100 l
Regulaid	<input type="text" value="250"/> mL/100 l	62.5-375 mL/100 l
Spray-Aid	<input type="text"/> mL/100 l	65-250 mL/100 l
Acidifier		
Buff-IT	<input type="text"/> mL/100 l	50-100 mL/100 l
LT700	<input type="text"/> mL/100 l	60-120 mL/100 l
Water Rate	<input type="text" value="1000"/> l / ha	
Nozzle Config	<input type="text" value="All On"/>	
Crop Stage	<input type="text" value="8-15mm Fruitlet"/>	
Full Canopy	<input type="text" value="80"/> %	
Full Bloom	<input type="text"/> (dd/mm/yyyy)	
Date Applied	<input type="text"/> (dd/mm/yyyy)	
Notes	<input type="text"/>	<input type="button" value="Enter"/>

Chemical Thinning:

(rates per 100 litres)

add a year: 2018 2017 2016 2015 2014 2013

	<input checked="" type="checkbox"/> 2018	<input checked="" type="checkbox"/> 2018	<input checked="" type="checkbox"/> 2018	<input checked="" type="checkbox"/> 2017
ATS				
BA(10%)	800 mL			
Carbaryl	200 mL			
Ethephon(48%)			35 mL	
Metamitron(15%)				35 g
NAA(10%)			8 mL	
Growett		100 mL		
Regulaid	250 mL		250 mL	125 mL
Water Rate	1000 l/ha	632 l/ha	1800 l/ha	1365 l/ha
Date Applied				04/11/16
Nozzle Config	Bottom 2 off	Top Half	All On	Bottom 2 off
Crop Stage	8-15mm Fruitlet	Open Flower 1Yr Wood	Full Bloom + 2	8-15mm Fruitlet
Thinning Notes				Poor thinning result

Sunpeach Orchard		Chemical Thinning Plan				AGFIRST		
Season Ending 2018								
Crop Stage	Date Applied	Product	Rate/100 l	Rate/ha	Water Rate	Total Water	Nozzle Config	Notes
Sunpeach 560-A -Fuji 560								
Full bloom + 2		Ethephon(48%)	40 mL	720 mL	1800 l/ha	1134	Bottom 2 off	
		Regulaid	200 mL	3600 mL				
Open flower 1 yr wood		ATS	1500 mL	9000 mL	600 l/ha	378	Top Half	
		Growett	100 mL	600 mL				
8-15 mm fruitlets		BA(10%)	800 mL	8000 mL	1000 l/ha	630	Bottom 2 off	
		Carbaryl	200 mL	2000 mL				
		Regulaid	250 mL	2500 mL				
Queen 560								
Full bloom + 2		Ethephon(48%)	40 mL	400 mL	1000 l/ha	360	All On	
		NAA(10%)	20 mL	200 mL				
		Regulaid	200 mL	2000 mL				
8-15 mm fruitlets		BA(10%)	800 mL	8000 mL	1000 l/ha	360	All On	
		NAA(10%)	12 mL	120 mL				
		Regulaid	250 mL	2500 mL				
Rose 560								
Full bloom + 2		Ethephon(48%)	40 mL	680 mL	1700 l/ha	1683	All On	
		Regulaid	200 mL	3400 mL				
Pink flower 1 yr wood		NAA(10%)	8 mL	101 mL	1264 l/ha	1251	Top Half	
		Regulaid	250 mL	3160 mL				
8-15 mm fruitlets		BA(10%)	800 mL	8000 mL	1000 l/ha	990	All On	
		NAA(10%)	12 mL	120 mL				
		Regulaid	250 mL	2500 mL				

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