

FUTURE ORCHARDS BUSINESS DEVELOPMENT PROGRAM

Fruit Size and Leader Extension Monitoring Protocols

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Prepared by Ross Wilson, AgFirst

Future Orchards has a “Business Development Program” that allows growers to use many management tools within the online database called “OrchardNet”. One of the tools allows growers to track fruit sizing and leader extension. “OrchardNet” includes good reporting of the data and the ability to compare against regional / national averages, historical data and target lines.

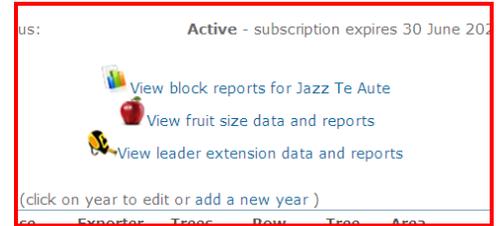
Fruit Sizing Protocol

The protocol you use will depend on the intended use of the data. If you primarily want to monitor growth rate and an accurate fruit size prediction at harvest is secondary, we suggest monitoring 20 fruit per block weekly.

Go to a representative row in the block and mark 4 average trees with coloured tape. You will probably choose a row that you need to visit regularly for other reasons, e.g. pest traps or soil moisture monitoring sites. Close to the tape, mark 5 representative (average) pieces of fruit. You can either write directly on the fruit with a permanent marker or tag the fruit with a numbered bread clip. Both options are shown below. You will therefore mark 20 fruit per block. The same fruit are measured either weekly or fortnightly, we recommend weekly to really get a good idea of growth rate.

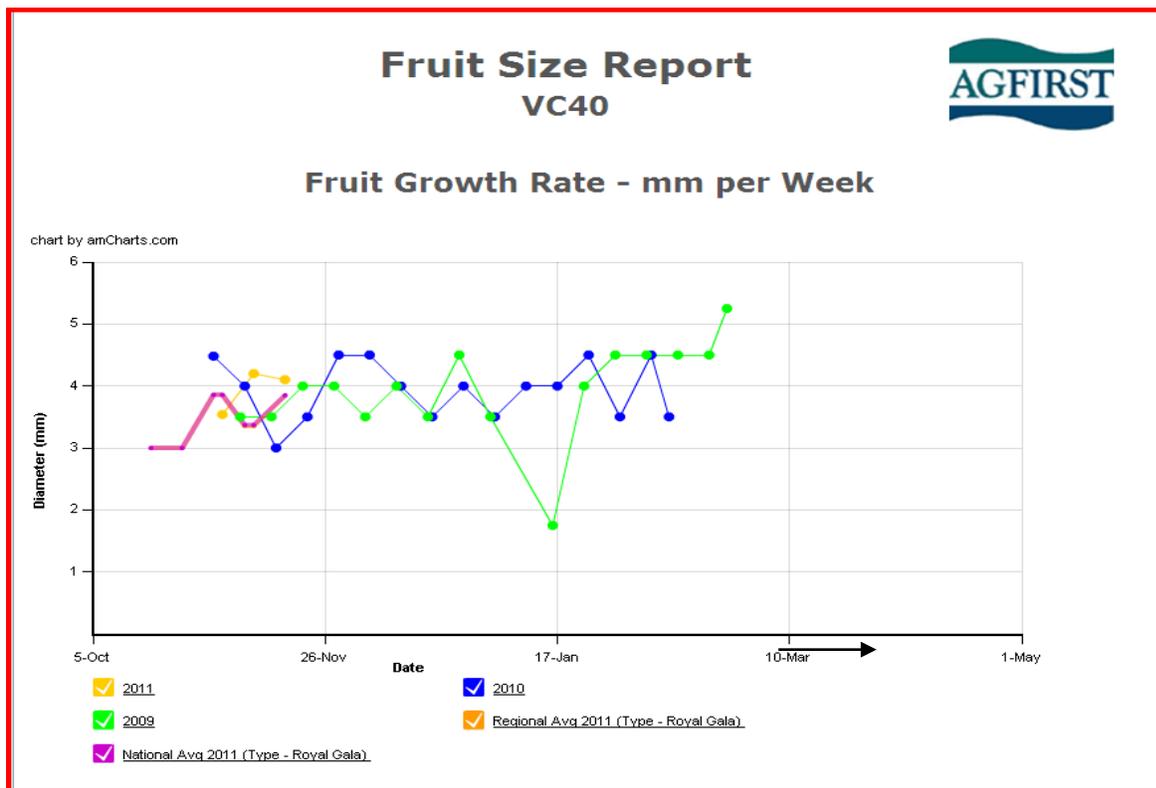


To enter your fruit size data into Orchardnet, go to the fruit size data entry screen by clicking into the block and then click on the Red Apple icon, where it says “View fruit size data and reports”



Enter the date the measurement was made, the average reading and the number of fruit measured. Also, make sure your Full Bloom date is entered. Once this is done, you can run a series of management reports that can assist you make better orchard management decisions.

The figure below shows the growth rate of a Gala block VC40 in Southern Victoria. The growth rates are just over 4mm/week which is better than the corresponding weeks last year and above the current national average of 3.75mm/week. So far so good for VC40.



If you require fruit size monitoring to give you good data for crop estimate profiling, we suggest you increase the number of fruit to 100 minimum per block. This is best done using digital computer interfaced calipers.

If you are interested in pursuing this option, please contact Agfirst Hawke’s Bay on +64 6 8727080.

Leader Extension

This is useful for first and second leaf blocks to check growth rates are on target and making management changes if you can see things are not progressing as planned. Future Orchards has beaten the drum regularly about making sure you get those young trees to perform.

With good management, we have seen first leaf trees make 900-1,000mm of extension growth in a season and second leaf trees make 500-600mm. This should be your target.

To monitor leader extension, we suggest you mark 10-20 trees in an average part of the block. Every week measure the total leader extension from the point the new growth started to the terminal bud. Enter the average leader length into OrchardNet and then run the reports. Voila, it's that simple.

The figure below shows leader extension of a Jazz block that reached over 900mm by the end of the season. This compared to the regional average of 820mm and the national average of 700mm.

Enter your data and compare yourself to targets and regional and national averages. Watch the weekly growth rates and then be ready to change your management practices if things aren't going to plan.

