



Significant Increase in Grape Yield Returns from FCRD Application

- Increased grape yield in Clare Valley trial by up to 26%
- Increased grape yield in Riverland trial by up to 21%
- Grape growers could expect a return on investment of up to 212%
- Riverland trial shows significant increase in grape yield in second growing season, without further FCRD application
- FCRD is a BFA certified fertilizer and soil conditioner

Aim: Based on successful trials undertaken in northern Queensland for a number of crops, FCRD has undertaken trials in South Australia to determine the effects of FCRD fertilizer application on grape yields, and collaterally, whether these effects apply consistently to different grape varieties from different wine growing regions. Furthermore, should the results of those trials be statistically significant, FCRD then aims to determine the financial incentives of the use of FCRD on a cost benefit approach to establish whether FCRD is likely to create value for grape growers.

Method: Since 2005, two separate trials have been conducted in the Riverland and Clare Valley wine growing regions. These trials have tested the effects of FCRD fertilizer on Shiraz and Riesling grapes respectively. The application rate of FCRD fertilizer was varied, and ranged from 0 t/ha, 2.5 t/ha, 5 t/ha, and 25 t/ha. Grape bunches were then randomly picked and weighed, and statistical analysis was undertaken to determine the effect of varying FCRD application rates on grape yield.

A Cost / Benefit analysis was then undertaken to assess the economic outcome to the grower as a result of FCRD fertilizer application.

Results: As illustrated in Figure 1 below, in both trials average bunch weight of grapes increased significantly with the application of FCRD fertilizer. In the first growing season of the two trials, grape yield increased by an average of over 10% when applied with 2.5t/ha of FCRD fertilizer. Similarly, grape yield increased by over 18% when applied with 5 t/ha of FCRD fertilizer.

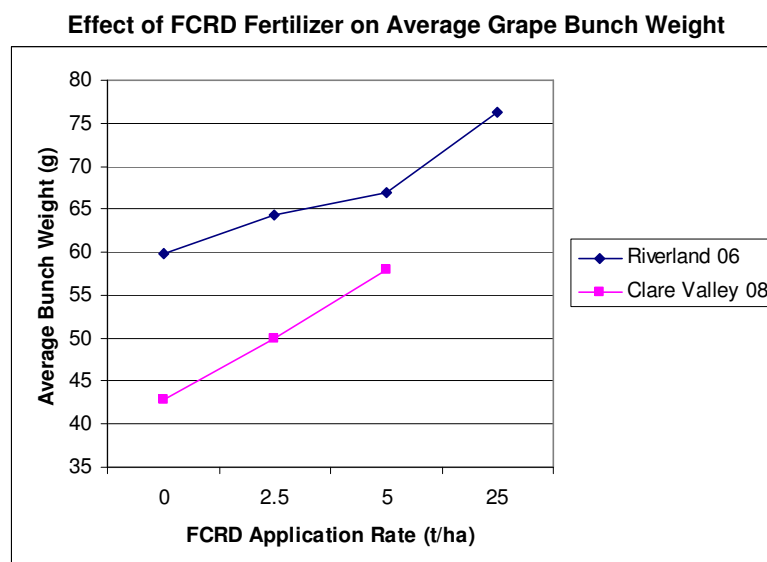


Figure 1. Increases in grape bunch weight as a result of FCRD fertilizer application.

The trial in the Riverland region has been conducted over two growing seasons. Results from the second growing season also show a significant increase in grape yield but without the further need for FCRD application. Results from this trial show an increase in grape yield of over 12% for the 2.5 t/ha application rate. These gains in grape yield had a large effect on the Cost / Benefit ratio, due to the fact that no additional FCRD fertilizer was applied in the second growing season.



Cost / Benefit Analysis: Cost / benefit analysis of each of the application rates across both trials indicates that there are significant financial gains in applying 2.5 t/ha and 5 t/ha of FCRD fertilizer. Results indicate that growers can expect at least a minimum of 76% return for investment over two growing seasons. However, results from individual application rates in both the Riverland and Clare Valley trials suggest that growers could expect significantly greater return for their investment (see Table 1 and Table 2 below).

Table 1 below shows the two year Cost / Benefit of applying 2.5 t/ha of FCRD fertilizer to 10 Ha of Shiraz vines in the Riverland trial. Table 2 shows the one year Cost / Benefit of applying 2.5 t/ha of FCRD fertilizer to 10 Ha of Riesling vines in the Clare Valley trial.

Cost / Benefit Results – Riverland

Riverland Trial Cost / Benefit	(at 2.5 t/ha)
FCRD Cost	\$ 7,497
2 Year Profit	\$ 13,579
Percentage Gain on Investment	181.12%

Table 1. Total Cost / Benefit over 2 growing seasons for Riverland trial at 2.5 t/ha application rate over 10ha

Cost / Benefit Results – Clare

Clare Valley Trial Cost / Benefit	(at 2.5 t/ha)
FCRD Cost	\$ 6,250
Profit	\$ 13,312
Percentage Gain on Investment	212.9%

Table 2. Total Cost / Benefit in first growing season for Clare Valley trial at 2.5 t/ha application rate over 10ha

Conclusions: Based on these two trials, FCRD believes it is reasonable to state that growers can expect to see a significant increase in grape yield in the first growing season after FCRD fertilizer application. Furthermore, based on the results obtained in the second growing season of the Riverland trial, FCRD believes it is reasonable to state that growers can expect to see significant increases in grape yield in the second growing season, without the need for further FCRD fertilizer application.

Finally, based on the fact that these trials were conducted on different grape varieties, from different grape growing regions, FCRD believes it is reasonable to state that FCRD fertilizer application significantly increases grape yield regardless of grape variety, grape growing region, or growing conditions.

The analysis of these trials suggest that growers can expect a significant financial return on an investment in applying FCRD fertilizer to their grapes at both the 2.5 t/ha and 5 t/ha application rates. These returns appear to be at least 76% over two years.

A detailed 11-page report on these trials is available from your FCRD representative, or from the FCRD website (www.fcrd.com.au).

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