



Balancing budgets

Matching nutrient removal to tree nutrition

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Aims of analysis

- To determine fertiliser requirements for low chill stonefruit in Nth. NSW and Qld
- To assess whether inputs and crop production are balanced
- To assess the potential of environmental contamination due to excess use of fertiliser
- To minimise production costs by reducing unnecessary applications of fertiliser

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Methods

- Soil and leaf samples using standard protocols
- 2 varieties Tropic B, SunWright
- Samples taken in early Dec 2005
- Processed at an accredited lab.
- Growers provided 05 packout details
- Growers provided fertiliser programs
- Data entered into crop replacement software

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Results

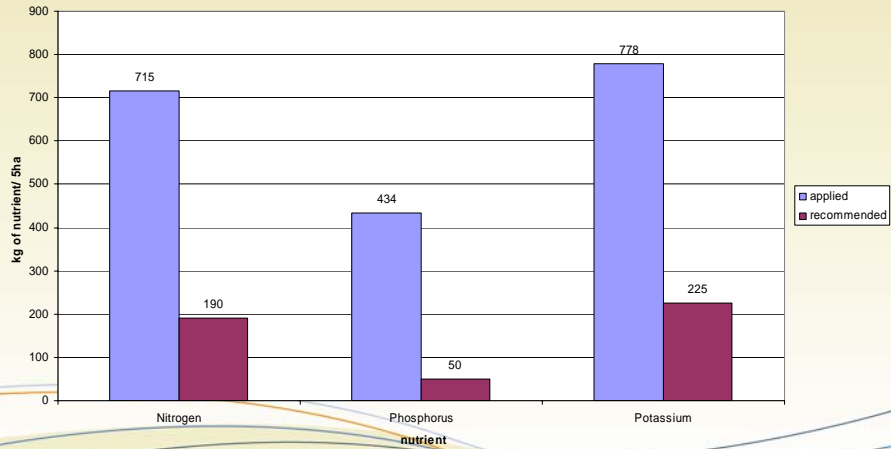
- Grower packout results from 2005 season entered into software
- Compare with actual fertiliser program
- Costings on actual and software fertiliser recommendations



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Actual fertiliser applied compared to software recommended values

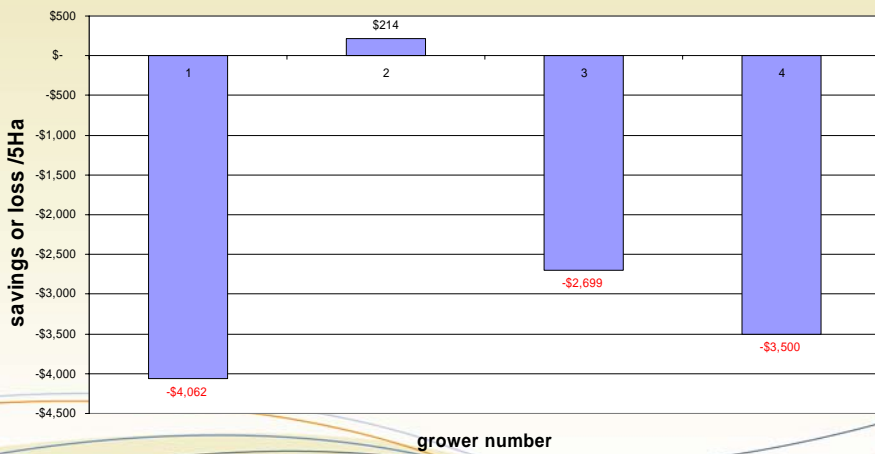
Actual fertiliser vs recommended for grower 1



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\$\$\$ savings or loss?

Cost savings or loss



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Effects on environment

- Acidification
- Algal blooms
- Loss of biodiversity

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Cost of production

- Fertiliser cost < 1% of overall production costs
- Pruning and thinning cost 30-40% of overall production costs
- Fruit quality associated with fertiliser mismatch



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Conclusions

- 3 growers out of 4 in sample not matching inputs and outputs
- crop nutrient replacement is not the only tool
- As an industry are we showing sound environmental management?

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Future work

- Growers are paid on fruit size
- Need to track inputs over many seasons
- Need to check leaf nutrient standards for newer varieties

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Thank you



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