

Increased strawberry yield with applications of biostimulant Mycorrcin

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Key words

Strawberry, fertigation, increased yield, Mycorrcin

Overview

- A 0.28ha block was divided into 2, one half (17 rows) received a standard fertiliser treatment (control) while the other half (17 rows) received the standard fertiliser program plus an initial application of Mycorrcin at the rate of 5lt/ha (31 May) and then 500ml/ha once a fortnight from the 16 June to the 29 December (treatment) Foliacin was applied to the block at the rate of 500ml/week from the 11 November to 29 December.
- Fertiliser program 1100kg/ha Strawberry Mix, 200gk/ha Gypsum and 300kg/ha Lime
- Two permanent 5m rows within each treatment were selected for recoding picking weights.
- Block was planted in single rows with 1m centres. Rows approximately 80m long.
- The block was harvested twice a week from 29 October 08 to the 14 January 09 (11 weeks). Fruit weights were recorded at each picking
- On the 22 December the pick was graded according to fruit size



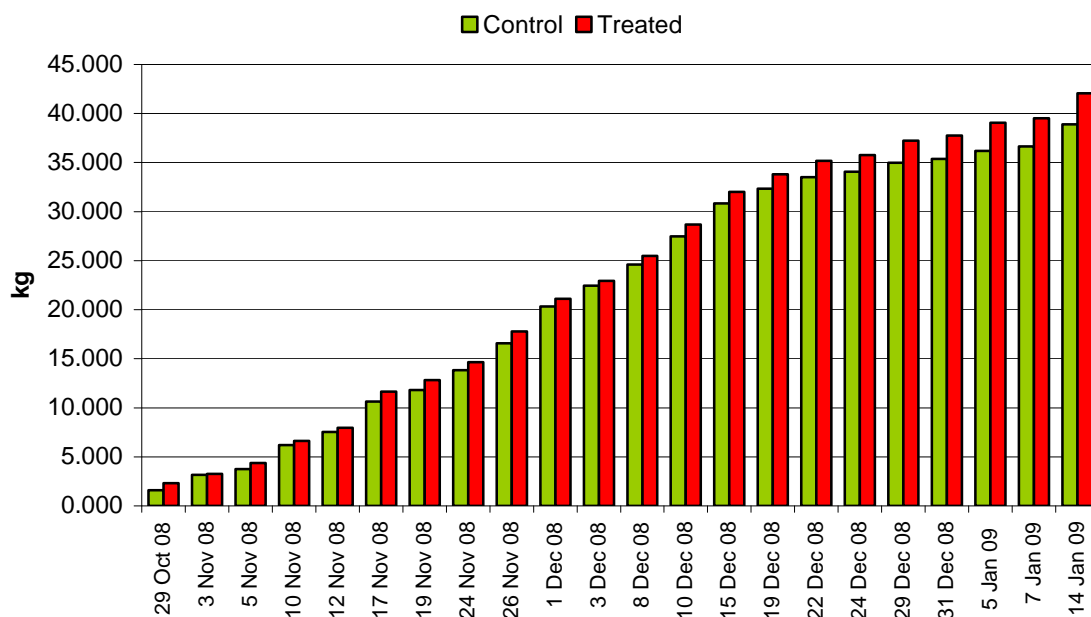
Mycorrcin was added to the standard fertigation program at the rate of 500ml/ha once a fortnight

Harvest results

Total yield

Standard program	Mycorrcin
38.880kg	42.268kg

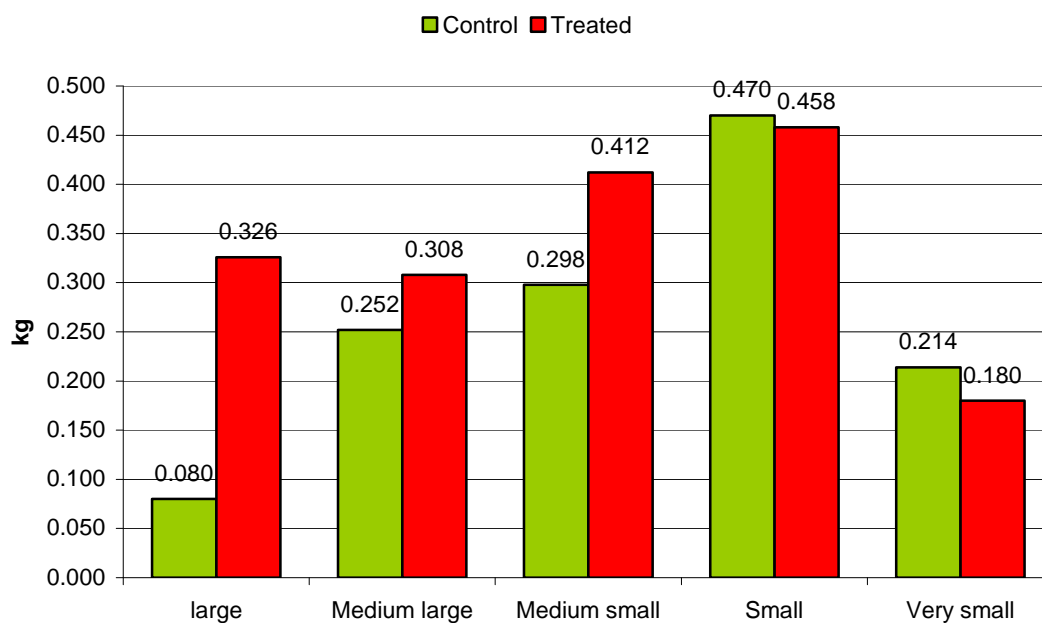
Cumulative Yield



- The Cumulative Yield graph shows the addition of Mycorrcin consistently resulted in heavier picks. The weight difference accelerated from mid December to the end of the trial. At the end of the trial the 10m sample row treated with Mycorrcin yielded an extra 3.178kg over the control.

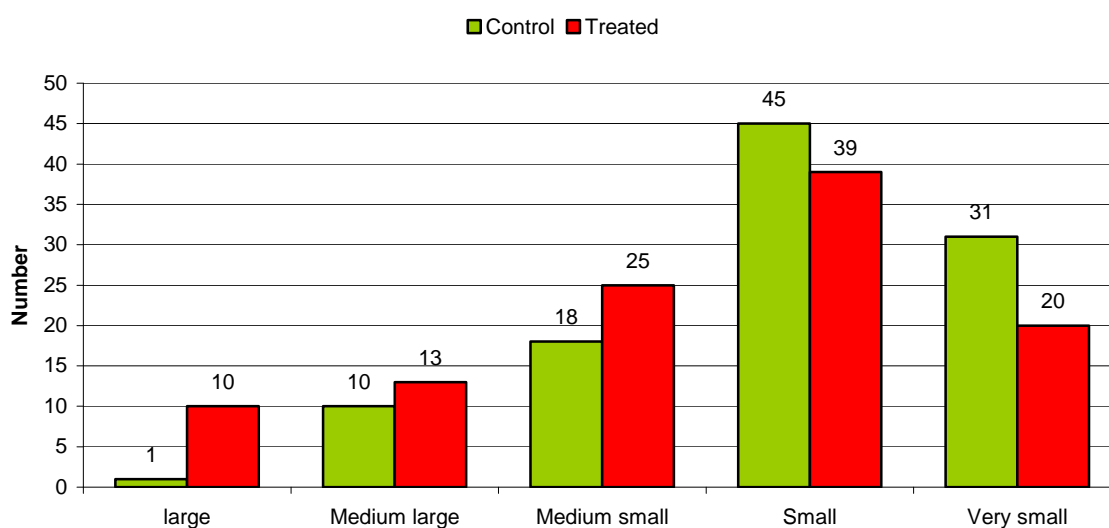
Fruit size analysis

Pick Weight Distribution



- This Weight Distribution graph shows the addition of Mycorrcin increased the total weight of fruit in the large, medium large and medium small grades, and reduced the total weight graded as small and very small.

Pick Count Distribution



- When fruit numbers were assessed the addition of Mycorrcin increased the number of fruit in the large, medium large and medium small grades and reduced the number of fruit in the small and very small grades.



This photo clearly illustrates the impact the addition of Mycorrcin has had on fruit size. The fruit have been grouped into 5 grades

Observations

- There was no noticeable difference in vegetative growth between the treatment and control blocks
- Generally Auckland growers struggled with fruit size this season.

Return on investment

The return on investment has be extrapolated to a per hectare basis

	Standard program	Mycorrcin + Standard program
Total crop weight 1ha	47,221kg	51,078kg
No 380gm punnets	124,265	134,417
Gross revenue at \$2.00/punnet	\$248,531	\$268,834
Cost of treatment		\$425
Net revenue	\$248,531	\$268,409
Increase		\$19,878

Conclusion

- The addition of Mycorrcin increased the total weight of the picked fruit with the greatest increase coming from mid December onwards.
- The addition of Mycorrcin increased fruit sizing
- The addition of Mycorrcin increased gross revenue by \$20,303 for the cost of \$425 when extrapolated to a per hectare basis.