Cherry | Trial Sheet

Foliacin – Victoria, Australia

Aim

The aim of the trial was to measure the impact of Foliacin on cherry cracking and yield compared to a competitor product.

Product

Foliacin is a foliar biostimulant that activates beneficial microbes living on the leaf surfaces (biofilm) to enhance overall plant health, resilience, growth, and green leaf retention.

Trial Design and Assessment

The trial was conducted on a North Victorian commercial cherry orchard, where 20 ha of various cherry tree varieties had Foliacin applied three times at 1 L/ha, while 20 ha of trees were treated with the competitor product. All other grower treatments of the trees was identical.

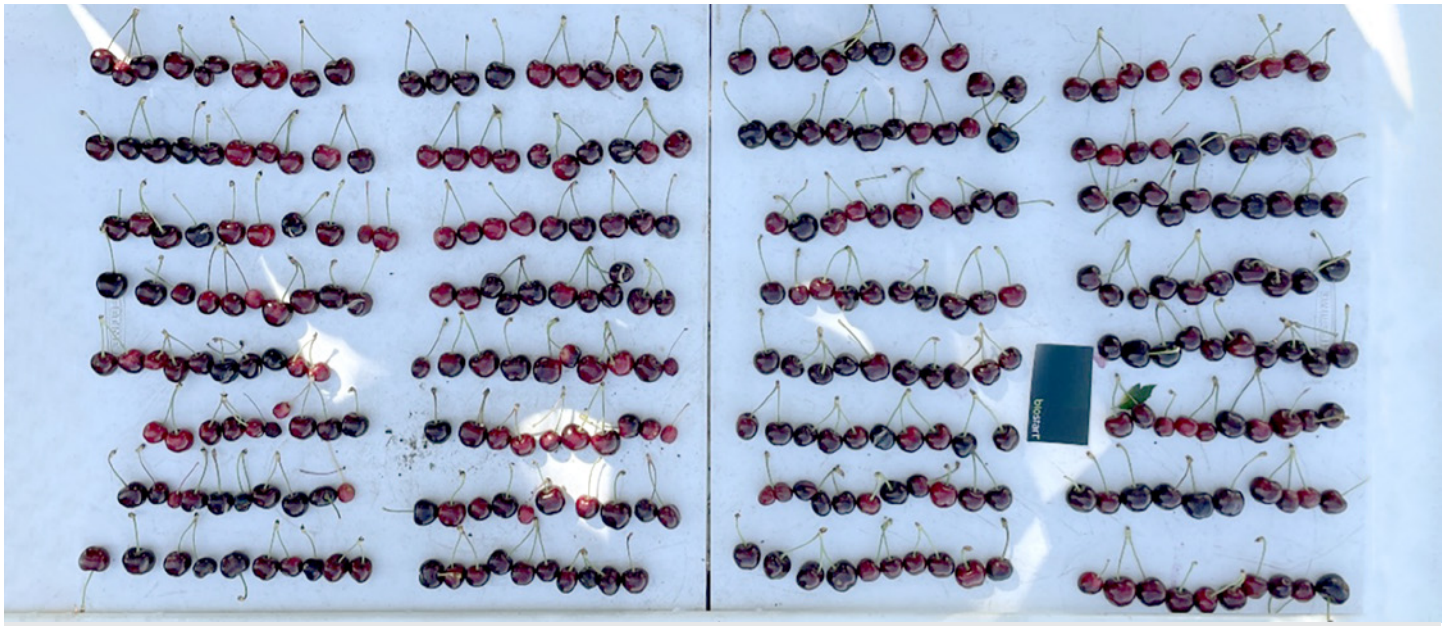
On 4 November 2023, 25 trees from the Foliacin-treated area and 25 trees from the competitior-treated area were strip picked by commercial pickers. Fruit samples were collected from four random trees for both treatments, and 40 cherries from each tree were assessed for cracking and whether it would be rejected at pack house (Picture 1).

Results

Just 4% of the Foliacin-treated cherries were cracked compared with 26% of competitor-treated cherries – showing that Foliacin reduced cracking over the competitor product by 85%. The other reject fruit was 7% for the competitor-treated trees and 10% for the Foliacin-treated. As a result, the total marketable yield for the Foliacin-treated trees was 86%, compared to only 67% for the trees treated with the competitor product (Table 1).

Table 1. Impact of Foliacin and a competitor product on cracking, reject fruit, and overall marketable cherry yield

	Competitor	Biostart	Difference	Difference (%)
Total discards	33%	14%	-19%	-58%
– cracked	26%	4%	-22%	-85%
– other rejects	7%	10%	14%	86%
Marketable	67%	86%	19%	28%



Picture 1. Cherries from competitor-treated (L) and Foliacin-treated (R) trees in Victoria, Australia.

As a result of the lower fruit losses, the overall marketable yield for the Foliacin-treated trees was 1.3 kg/tree higher (a 22% increase), even though the yield per tree was 5% higher (440 g/tree) for the competitor-treated trees.

Table 2. Impact of Foliacin and a competitor Product on marketable cherry yield (kg/tree).

	Competitor	Biostart	Difference	Difference (%)
Total yield	8.96 kg	8.52 kg	-0.44 kg	-5%
Marketable yield	6.00 kg	7.30 kg	1.30 kg	22%

In addition, there was a notable difference in colour, shape and size uniformity between the Foliacin-treated and competitor-treated cherries. The Foliacin-treated cherries were rounder, more uniform-sized, darker, as well as having more consistently coloured fruit.

Conclusion

The application of Foliacin increased marketable yield by 1.3 kg/tree or 22% more than the competitor product.

Competitor-treated cherries

Foliacin-treated cherries

Competitor-treated cherries

Foliacin-treated cherries