ONZ AGM 2022

Increasing grove productivity. Hawke's Bay Branch submission by Geoff Crawford.

On behalf of the HB Branch, I'll speak to the responses given by the branch members both at the AGM and Field days when asked the question of what to do next?

The consensus was to Further studies into Grove Productivity, as this would give the most benefit to the individual owners and members.

Specific topics raised where growers could control the inputs and get the benefits are

- yield increase for oil (harvest timing),
- increasing fruit set,
- growing larger fruit
- Polyphenol production,

Increasing kg per tree and oil yield by 10% has a massive effect (+30% Margin) on business profitability. We would like to be more profitable.

Oil yield s from 2021 harvest were:

National average is 14%

2021 BOP 10%

Waiheke 20%

Some would describe BOP as unlucky, and Waiheke as lucky. What we actually need to do is know why there is a difference and what BOP can do about it

NZ Average tree production 2021 11kg

Cost of production fixed - at 20 sprays, mowing and pruning

Simultaneous raising of kg per tree and oil yield the average has a multiplier effect on profitability

Put simply a grower can increase margin by 30% or more by increasing volume by 10% and yield by 10%.

Here are the numbers, based of Olives NZ grove census data.

| | NZ 2021 Base | 110% | increase volume | increase % |
|--------------------------|-----------------|-------|--------------------|---------------|
| # trees | 600 | 600 | | |
| kg per tree | 11 | 12 | | |
| total kg | 6,600 | 7,260 | 660 | 10% |
| Grove cost of production | | | | |
| | \$ | \$ | | |
| 21 sprays | 4,200 | 4,200 | | |
| | \$ | \$ | | |
| pruning \$4 per tree | 2,400 | 2,400 | | |

| | \$ | \$ | | |
|----------------|-------|-------|---|----|
| mowing 5 times | 2,000 | 2,000 | | |
| | \$ | \$ | | |
| Total Costs | 8,600 | 8,600 | 0 | 0% |

| Oil production | yield | | | | |
|----------------|-------|-------|-------|-----|-----|
| ВОР | 10% | 660 | 799 | 139 | 21% |
| NZ Average | 14% | 924 | 1,118 | 194 | 21% |
| Waiheke | 20% | 1,320 | 1,597 | 277 | 21% |

| Income | | | | | |
|-----------------------|-------|--------|--------|-------|-----|
| | | \$ | \$ | | |
| sales value per litre | yield | 30 | 30 | | |
| | | \$ | \$ | \$ | |
| ВОР | 10% | 19,800 | 23,958 | 4,158 | 21% |
| | | \$ | \$ | \$ | |
| NZ average | 14% | 27,720 | 33,541 | 5,821 | 21% |
| | | \$ | \$ | \$ | |
| Waiheke | 20% | 39,600 | 47,916 | 8,316 | 21% |

| Margin | yield | | | | |
|------------|-------|--------|--------|-------|-----|
| | | \$ | \$ | \$ | |
| BOP | 10% | 11,200 | 15,358 | 4,158 | 37% |
| | | \$ | \$ | \$ | |
| NZ Average | 14% | 19,120 | 24,941 | 5,821 | 30% |
| | | \$ | \$ | \$ | |
| Waiheke | 20% | 31,000 | 39,316 | 8,316 | 27% |

Focus Groves have proved that a spray and pruning program can produce volumes of fruit per tree a double the NZ average.

Hawkes Bay growers would like to increase this again, as the incremental increase has **massive profitability impact**.

Additionally to the task of increasing grove production, understanding how to increase polyphenol production in fruit would help NZ oil have a 'polyphenol niche' in any market, allowing to differentiate and add value to NZ products.

So to conclude:

Hawkes bay growers would like Olives NZ to investigate increasing grove production volume of oil per hectare, through tree management. The suggestions from HB members are increasing fruit set, increasing fruit growth size, and optimising harvest timing for oil yield.

This will allow growers to increase the grove income through variables in their control.