# **Plant Growth Regulator**

In 2010, Grochem brought Sunny® to the New Zealand Avocado industry to improve fruit quality, size and tree vigour control.

## **Key benefits of Sunny®**

- 1. Increased average fruit size
- 2. Reduced branch length of spring flush
- Reduced ridging
- 4. Promotes a fuller necked fruit

#### **How Sunny® works**

Sunny® is applied as a foliar spray to healthy trees at flowering, targeting the start of the spring flush.

It is absorbed by the trees soft tissue including leaves, stems and flowers and is translocated upwards and outwards, via the transpiration flow in the xylem.

Sunny® acts in the growing tip to inhibit gibberellins that promote shoot growth, changing the balance in allocation of nutrients in favour of the buds, flowers and fruit. This results in larger fruit and a reduction in shoot length in the spring flush

Sunny® affects only the spring flush it is applied to and does not continue to impact the growth of the tree in later flushes.

#### Larger fruit size

Fruit size gains due to the redirection of nutrients to the fruit vary depending on rate applied, orchard and season. New Zealand trials have demonstrated gains of between 9% and 22% or between 19g and 69g average increase in fruit weight at harvest.

### **Flush restriction**

The length of the flush that Sunny® is applied to is restricted. Internode (distance between leaves) is shorter and branches appear more "rosette". Flush restriction only affects the flush that Sunny® is applied to.

Over time, this affect may lead to more compact trees and a reduced pruning requirement.

#### Withholding period

For fruit being sold in New Zealand and Australia, Sunny® may be applied no less than 14 days prior to harvest. For international markets without an MRL, nil detectable residues are required. To achieve this will require last seasons fruit to be harvested before application at flowering. Check with your packhouse regarding export destinations.

Sunny® Treated and Untreated fruit at harvest.

Note general increase in fruit size and fuller or "less necky" appearance of treated fruit.





**Treated** 

**Un-treated** 





Sunny® treated and untreated shoot growth. The position of the blue ribbon marks the growth tip at the time of application.



#### **Application**

- The application of Sunny® does not require high water volumes, but does require good coverage of new growth and flowers.
- Apply evenly to the outer canopy to the point of wetness (not runoff). Penetration into the canopy is not required. Spray
- set up should be altered from those used for insecticide or fungicide applications (see label for more detail).
- A non-ionic surfactant such as Spray Aid™ is recommended.
- Do not apply in alkaline water, if water pH exceeds 6.0 add a buffering agent such as Lokit to reduce pH to between 4.5 - 5.5.
- Do not apply to stressed or diseased trees. If trees have lost more than 15% of leaf at application timing or have Phytophthora, do not apply
- See label for full directions and application rates. Label available from https://nz.grochem.com/products/sunny/

