

REDUCING SUN STRESS AND DAMAGE IN AVOCADOS

30 September 2008

SUN-damaged fruit and sun-stressed trees are an increasing problem for avocado growers – with an estimated 30 to 40% loss of saleable fruit, and increased water consumption by trees.

Recent predictions from the Intergovernmental Panel on Climate Change - for an average global temperature rise of 1.1 to 6.4°C, and a marked increase in the frequency of hot days and warm nights by the end of this century; plus the likelihood of 40% more droughts in eastern Australia by 2070 – indicate that the impact of sun and moisture stress is likely to increase.

New technology from Crop Care is available for this season to help avocado growers reduce the sun's impact on their fruit.

Growers are already using Parasol liquid sunscreen to manage sun damage in a range of fruit and vegetable crops in Australia. The liquid formulation forms a thin, reflective film on produce and the leaf canopy – reducing the impact and damage from sun exposure.

The recommended time to start applying Parasol sunscreen on avocados is when temperatures are expected to be higher than 30°C, with subsequent applications every 1 to 3 weeks to keep exposed fruit and foliage covered. 2 to 3L/100L of water is recommended for the initial application, and 1 to 1.5L/100L of water for subsequent applications. Spray volumes should be half or one third of the dilute volume required.

Avocados are already on the Parasol label.

Trials are underway this spring and summer to help growers determine their potential return on investment from application of Parasol.

A farm at Tolga on the Atherton Tableland has been selected for this evaluation by agricultural consultant Harry Townley.

The trial will study the impact of Parasol for protection from sun stress – and will provide growers further information on spray volumes and correct application times.

Hass avocados were treated with Parasol in late August, and further applications will continue until May.

Harry Townley: "In the hot spring conditions we are experiencing in the north, there is already a visible difference between treated and untreated trees, with the treated trees showing a healthier, blue-green colour.

"Parasol has been very easy to apply to avocado trees, with around 4 litres of spray volume appearing to provide adequate coverage (mixing 2 litres of Parasol per 100 litres water) for the average 4metre x 4metre avocado tree.

"The aim is to avoid wasting the product. We're just after coverage of the outside of the tree, not the centre - where the canopy and fruit are more protected from the sun.

"Why apply a sunscreen?"

Crop Care Australasia Pty Ltd

ABN: 53 061 362 347

Portal North – Unit 15/16 Metroplex Avenue Murarrie QLD 4172

PO Box 84 Morningside QLD 4170

Phone: 07 3909 2000 Fax: 07 3909 2010 www.cropcare.com.au



“Temperatures have already been 30°C and above, and we are starting to see sun damage on untreated trees – with an early estimate of 30% sun-damaged fruit, particularly on the north-western side of trees.

“Avocados only have one use, so fruit is totally wasted if it is spoiled.”

A trial on another avocado farm has already shown that Parasol is easily washed off the surface of avocados in the packing shed.

Parasol:

- Coats fruit and foliage with a light film to provide protection from the sun.
- Washes off easily after harvest.
- Protects from harmful Ultra Violet and Infra Red damage, but allows natural fruit coloring & photosynthesis to continue.
- Is easy to mix & spray – a liquid formulation that can be applied with standard air-blast sprayers and is compatible with most fungicides and insecticides.
- Can be applied successfully by aircraft.

Parasol is available for use in Australia to protect both the fruit and foliage of agricultural crops including apples, pears, stone fruit, citrus, tree nuts, olives, grapes, avocados, bananas, mangoes, lychees, guavas, pawpaws, pineapples, vegetables – including capsicums, tomatoes, potatoes, onions, cucurbits, and lettuce, seedlings, ornamental and nursery plants, cotton and peanuts.



APPLYING the liquid sunscreen Parasol to avocado trees in a trial at Tolga.



LEAVES covered with a protective film of sunscreen Parasol.



YOUNG avocado fruit with the reflective sunscreen Parasol.

More information:

Shaun Heidrich

Australian Region Manager – sunscreen products

Crop Care Australasia

0488 424 698

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