





# CITRUS BLACK SPOT CONTROL WITH OROCIT® ADJUVANT + AZOXYSTROBIN/MANCOZEB

TARGET	Citrus black spot	CROP	Oranges (Valencia)	TRIAL DATE	September 2010 – July 2011
LOCATION	Letsitele, Limpopo Province, South Africa			RESEARCHER	W. Brooks

## **APPLICATION**

This trial compared the efficacy of OROCIT as an adjuvant against mineral oil, when combined with Dithane (mancozeb) and various azoxystrobin formulations in a standard program for control of black spot. The trial was established in a 14-year-old grove in 20 ft.  $\times$  10 ft. rows, laid out in a randomized block design with single tree plots and 4 replicates. Treatments were applied using a pickup-mounted, high-pressure sprayer equipped with a Mitra 1.8mm nozzle, operating at 360 psi and delivering a spray volume of 5.5 gallons per tree. A sample of 25 fruit was taken from each plot on July 21, 2011 and evaluated for the presence of black spot. Fruit with no visible black spot lesions were counted during evaluation.

#### **RESULTS**

Because citrus black spot is a phytosanitary problem in export fruit and 80% of South African citrus is exported, no black spot lesions are permitted on any fruit - thus complete commercial control requires fruit that are 100% clean. All the treatments gave excellent control of black spot when compared with the untreated. Using OROCIT as an adjuvant compared well with mineral oil and both treatments gave equally good control.

### BLACK SPOT CONTROL IN VALENCIA ORANGES MEASURED AS THE PERCENT OF FRUIT SHOWING NO BLACK SPOT LESIONS

### UNTREATED

Mineral Oil + Standard Treatment

Sep 22 - Mancozeb (20 oz.)

Nov 11 - Azoxystrobin (2.6 fl. oz.) + Mancozeb (20 oz.)

Dec 22 - Azoxystrobin (2.6 fl. oz.) + Mancozeb (20 oz.)

Jan 13 - Mancozeb (20 oz.)

Feb 04 - Mancozeb (20 oz.)

All with mineral oil at 39 fl. oz./100 gal.

OROCIT + Standard Treatment

Sep 22 - Mancozeb (20 oz.)

Nov 11 - Azoxystrobin (2.6 fl. oz.) + Mancozeb (20 oz.)

Dec 22 - Azoxystrobin (2.6 fl. oz.) + Mancozeb (20 oz.)

Jan 13 - Mancozeb (20 oz.)

Feb 04 - Mancozeb (20 oz.)

OROCIT added to all sprays at 13 fl. oz./100 gal.

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