

## REPORT ON THE RESULTS OF BIOMIN CALCIUM APPLICATIONS ON ALMONDS SEASON 2010 - 2011

### INTRODUCTION:

In the 2010-2011 season, Sustainable Horticultural Services have conducted a trial on the non-pareil variety of almond, to confirm the results of the 2009-2010 season. In the previous season (2009-2010), kernel size and kernel density was greatly improved.

To confirm these results in the 2010-2011 season, a grower trial was conducted. The trial was conducted in spite of the light nut-set in this season. Generally, light nut-set produces large kernels, hence the application of Biomin Calcium was expected to be disadvantaged in view of this.

### LOCATION OF THE TRIAL:

Adelaide Plains (Virginia)

Co-operators: SHARPE ALMONDS

Dates of application: 30th September & 21st October.

Rate of application: 2 Kg/Ha

Number of applications: 2

### ASSESSMENT OF THE TRIAL:

Date of assessment: 4/3/2011

Samples were collected from 20 trees in each treatment at random. The almonds were de-hulled and de-shelled by hand. The crack-out percentage was 27.5% for the untreated and 37.1% for the treated sample.

### RESULTS:

The higher bulk weight of the control sample is due to the high moisture content of the hull as well as the kernel. The difference in moisture content, after drying the kernels:

TREATED: 4% moisture

UNTREATED: 9% moisture

TREATMENT	KERNEL SIZE % 16-18	KERNEL SIZE % 20-22	KERNEL SIZE % 24>	BULK WEIGHT 200 ALMONDS	HULL & SHELL WEIGHT 200 ALMONDS	KERNEL WEIGHT 200 ALMONDS
UNTREATED CONTROL	11%	41%	48%	1152 grams	884 grams	268 grams
BIOMIN CALCIUM 4 Kg/Ha	21%	53%	26%	1042 grams	760 grams	282 grams

The treated sample was very even in maturity, whereas the untreated sample was very uneven in maturity and had a much higher moisture level.

The treated kernel yielded 5.2% extra weight compared to the untreated. Taking the standard yield in almond production in Australia at 1000 Kg/Ha, the 5.2% increase per hectare equates to 52 Kg of almond kernel per hectare

**CONCLUSIONS:**

In spite of all odds against the application of BIOMIN CALCIUM in the 2010-2011 season, the trial has confirmed the economic viability of the application.

BIOMIN CALCIUM not only improved kernel size and kernel density, it also provided even maturity.

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