OrganiBOR®

Reliable Boron Fertiliser

Continuous Release / Certified for Organics

NASAA
INPUT FOR ORGANIC PRODUCTION
Cert. No. 6358M

CERTIFIED INPUT FOR ORGANICS
bio gro NZ CERT
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NUTRIOLOGY*
*the science of growing

Boron deficiency is widespread in Australian soils. Boron is critical for fruit set, fruit quality, plant strength and fertility. However, it is easily leached from the root zone and is one of the more common deficiencies seen under irrigation.

The importance of boron

Boron has long been known to have an important role in the plants reproductive cycle, flowering and pollen production. But recent work has shown the importance of boron throughout the plant in cell wall integrity and root health. Calcium movement is facilitated by boron, therefore if you don't have boron, calcium movement is limited in the plant.

Boron works in the primary cell structure of plants, because of this role it will affect nearly every area of plant growth and health:

- **Root growth**
- **Structural strength**
- **Flowering/fertility**
- **Size and quality of fruit**
- **Fruitset**
- **Skin strength of fruit**
- **Fruit firmness and storage**
- **Nutrient uptake**
- **Disease resistance**

Boron deficiency symptoms

Boron deficient banana showing deformed new growth

Brittle leaves and excessive shooting from boron deficiency in sugar cane

(Photos courtesy of IPNI)

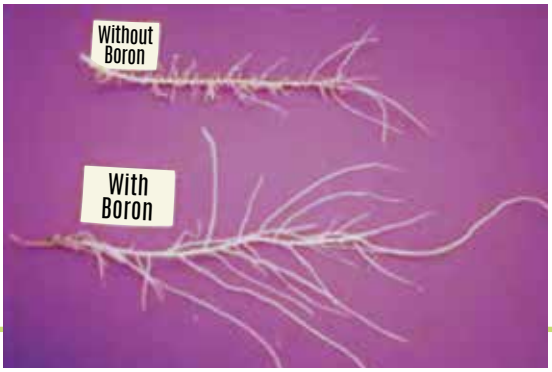
OrganiBOR and calcium interactions

Boron deficiency leads to restricted root growth.

Restricted root growth leads to reduced calcium uptake, as calcium is taken up in growing root tips.

Many boron deficiencies are confused with calcium deficiencies, as both nutrients have a very close relationship together.

In all crops where calcium applications are required, OrganiBOR will provide a base level of boron to underpin the calcium effects.



What is OrganiBOR?

- ***OrganiBOR is a naturally occurring magnesium/calcium borate that is certified for organic use.***
- ***OrganiBOR can be applied at a high rate that will last for an extended period of time in the soil.***
- ***OrganiBOR will not rapidly leach like most available boron products thus providing a continuous source of boron for the plant to uptake and utilise as required.***
- ***OrganiBOR is suitable for most commercial crops including apples, grapes, avocados, potatoes and vegetables.***

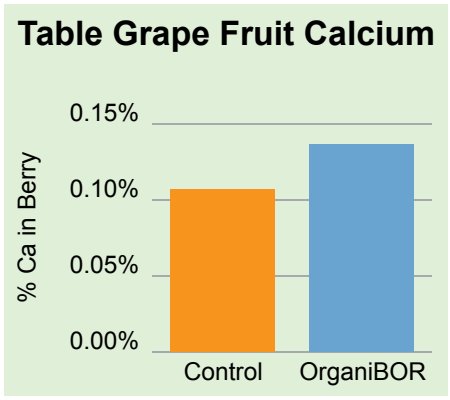
Application

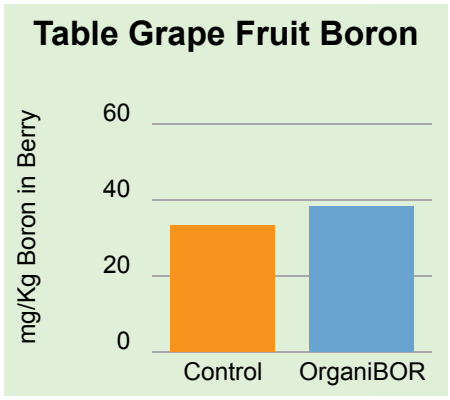
We recommend 50kg/ha of OrganiBOR as a first application, then 25kg/ha every second year.
Soil tests are used to adjust these rates.

Trial Results

Table Grapes

50kg/ha of OrganiBOR was applied. In year 1, little response was seen, due to the slow movement of boron into the plant under sprinkler irrigation. Fruit testing in year 2 gave us a 15% boron increase and a 25% increase in Calcium. Soil tests show a lift of boron from 0.1 to 0.7ppm. A second application of 50kg/ha OrganiBOR to be applied this season to lift boron to 1-2ppm.



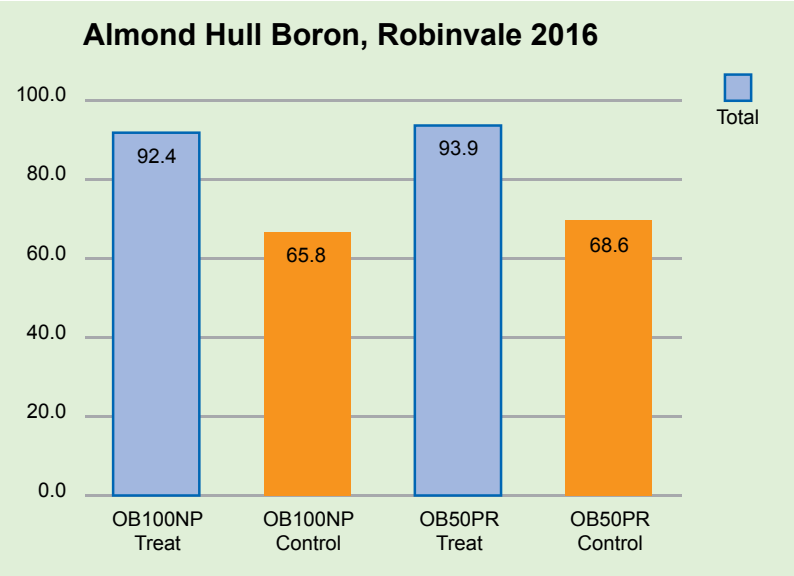


Broccoli

OrganiBOR was applied at 100 kg/Ha and soil boron levels lifted in subsequent months on broccoli fields at Bairnsdale, Victoria. Application was made July, 2011. Broccoli sap boron levels were higher two months after application, giving immediate and long term actions.

Almonds

OrganiBOR was applied on both dripper lines in Non Pariel at 100kg/Ha, and on only one dripper line at 50kg/Ha in the Price variety. The results show that application on one side of the tree alone gives a similar result to spreading on both sides.



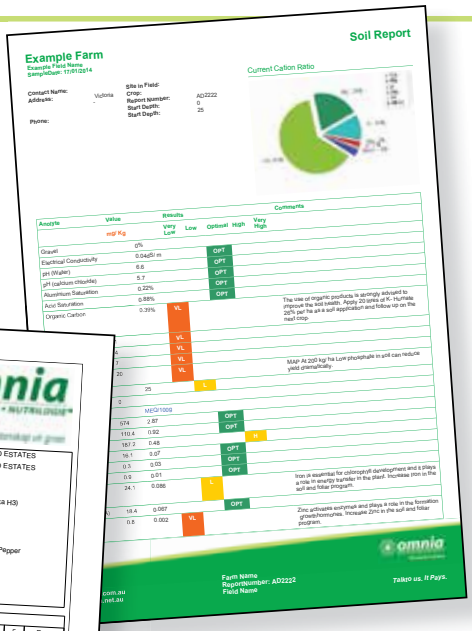
Stonefruit

One by 50kg/ha application of OrganiBOR gave a 380% increase in the boron levels and, more importantly, a 28% increase in calcium IN THE FRUIT. This was achieved in the first year after application.

Diagnostic Services.

OmniSoil®

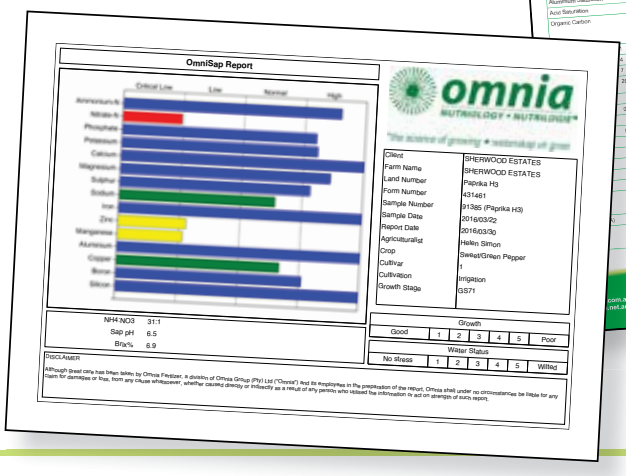
Omnia provides a comprehensive report showing absolute values as well as providing graphic views of the correct ratios and balances required for optimum nutrition, coupled with product specific recommendations to remedy the problems.



OmniSap®

OmniSap® provides a comprehensive element report, based on trademarked sap analysis system, illustrating the relative balances between macro and micro nutrients.

This information is used to provide the customer with corrective recommendations.



OmniBio Assessment

Manage your microbes accurately with an OmniBio™ Assessment.
An assessment of enzyme activity and free living nematodes provides a unique window into soil microbial activity.
An OmniBio™ analysis offers enzyme assays as a means of determining a microbial population's potential to degrade or convert carbon, phosphorus and nitrogen substrates to plant-available nutrients.

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