



Bacstim[®]100

High Performance Biology

**BACSTIM[®] 100 works with the crops root system
giving increased nutrient uptake.
Crop yield and returns can be increased.**



www.nutriology.co.za

 **omnia**
NUTRIOLOGY

WHY BACSTIM® 100?



Plants work closely with the microbes that live around their roots for a multitude of reasons. BACSTIM® 100 is a way to introduce highly beneficial bacillus species into the root zone to:

- Produce phytohormones encouraging root growth
- Improve nutrient mineralization and uptake
- Improve stress resistance
- Increase crop biomass and yield



The microbes in BACSTIM® 100 are spore formers, which means stable product in the drum and more resilient in the field.

BACSTIM® 100 is produced to Omnia's strict specifications to ensure consistent product quality and performance.

Contains 5 strains of *Bacillus* spp.
Total concentration of 2×10^9 CFU/ml (2 billion CFU/ml)
2 strains of *Bacillus licheniformis*
2 strains of *Brevibacillus laterosporus*
1 strain of *Bacillus amyloliquefaciens*

Application Rates

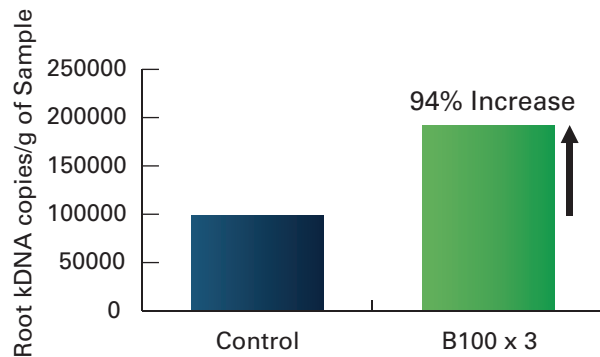
| Crop | Dosage | Timing | Placement |
|------------|------------|--|---|
| Vegetables | 2 x 1 L/ha | At planting One month later | In furrow close to seed or transplant roots Via fertigation system in shallow irrigation to target active root zone. |
| Tree crops | 3 x 1 L/ha | At first root flush Mid spring Late spring | Via fertigation in shallow irrigation to target active root zone. |
| Vine crops | 3 x 1 L/ha | Budburst 20cm shoot growth Flowering | Via fertigation in shallow irrigation to target active root zone. |

**Improved performance has been observed
by combining BACSTIM® 100 with RHIZOVATOR™**

Apply 1 L/ha of BACSTIM® 100 tank-mixed
with 10 L/ha RHIZOVATOR™ per application.

ALMONDS

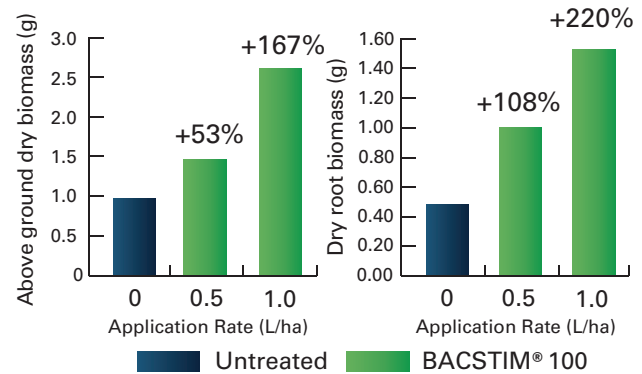
Improved Root Growth



A key aspect of plant production is a healthy, established root system. BACSTIM® 100 applied at 3 x 1L/ha on young almonds in Loxton, SA resulted in an increase in roots of 94% over the control.

MAIZE

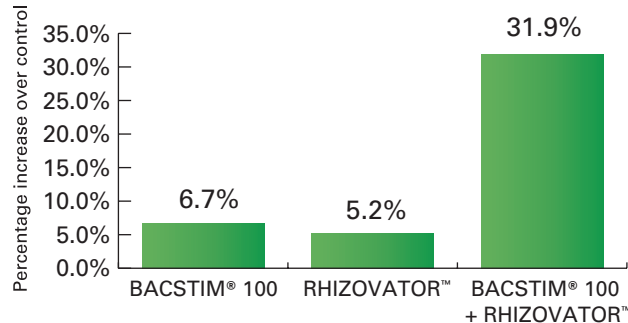
Improved above and below ground biomass



BACSTIM® 100 was applied at 0.5 L/ha and 1 L/ha in the furrow at planting. BACSTIM® 100 at 1 L/ha significantly increased above ground biomass by 167% and root biomass by 220%.

ONIONS

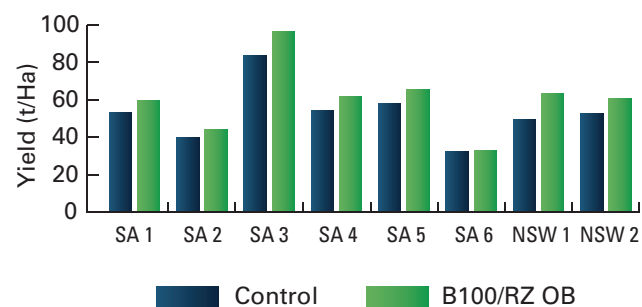
Yield Increase over Control, FSW 2020



Onion yields were increased through the application of BACSTIM® 100 and RHIZOVATOR™ in the Western Free State in South Africa. Note that the individual products gave an increase, but the best result came through the combination of BACSTIM® with RHIZOVATOR™, showing over 30% yield increase.

POTATOES

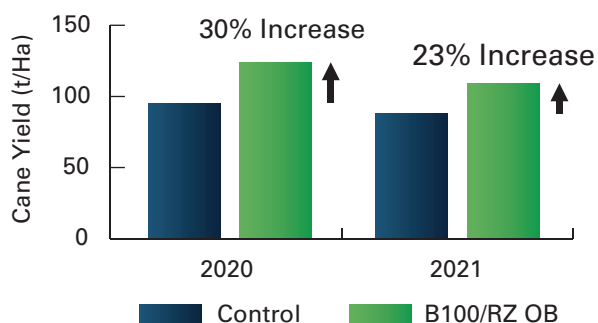
Consistent Yield Increase



Over 8 trial sites, BACSTIM® 100 at 1 L/ha combined with RHIZOVATOR™ OB at 10 L/ha applied once in furrow at planting returned an average yield increase of 14.3%. A gross margin increase of R 37450/Ha, with a return on investment of over R 50/R 1 spent.

SUGARCANE

Increased Yield



BACSTIM® 100 & RHIZOVATOR™ OB

Control

In a sugarcane trial held in Innisfail QLD over 2 seasons. Injecting BACSTIM® 100 at 1L/ha and RHIZOVATOR™ at 20L/ha onto the fertilizer band at planting, and again at first ratoon, resulted in a gross margin increase by an average of over R 6800/Ha per year.

RHIZOVATOR™

The Solution for Healthy Soil

RHIZOVATOR™ is the ideal synergistic partner for BACSTIM® 100 as it has been formulated to feed the microbial life in the soil and encourage biological diversity. RHIZOVATOR™ contains a mixture of high performance biostimulants, including humic acids, kelp, fulvic acids and amino acids. This leads to improved nutrient uptake and stress resistance, enhancing crop productivity.

RHIZOVATOR™ products form an ideal partner to BACSTIM® 100, building the resilience of the biological system while introducing high performance microbial species.

RHIZOVATOR™ PC

- Improves biological diversity
- Stimulates root systems
- Feeds beneficial microbes including fungi
- Is a natural chelating agent
- Suited for permanent crops and soybeans

RHIZOVATOR™ G1 & G2

- Enhances root growth
- Contains fully chelated trace elements
- Best suited for in-furrow application
- Improved nutrient use efficiency

© Copyright 2022. Omnia Nutriology® BACSTIM® is a registered trademark of Omnia Nutriology®.
RHIZOVATOR™ is a trademark of Omnia Nutriology®. BBSAGP0722