

BioForce **BCA Trio Granular**

A proprietary granular blend of beneficial bacteria & fungi for microbial amendment of soils

Product Overview

BioForce BCA Trio Granular is an easy to spread granule consisting of 2 Bacterial species and 1 Fungal species specifically selected for their role in plant growth and soil health.

Granule Specification	
Granule Size (SGN)	200 - 400 (2-4mm)
Biological Inputs	<i>Bacillus amyloliquefaciens</i>
	<i>Paenibacillus polymyxa</i>
	<i>Trichoderma viride</i> SQR T37
Biological Concentration	20 billion CFU/gram
Other Ingredients	Oyster shell mineral – provides protein polysaccharides, iron, and calcium carbonate.
Pack Size Available	25kg



BCA Trio Granular – Application Details

Apply via Granular Fertiliser Spreader. Apply prior to the onset of disease conditions, or showing symptoms of disease activity. Apply at 6 weekly intervals until symptoms have receded.

Situation	Rate	Comments
Turf	1.5kg per 100m ² 150kg per Hectare	This product can be used in combination with chemical fertilisers to improve mineral conversion and nutrient availability.
Nursery Production & Ornamentals	300g per 100m ² 30kg per Hectare	Utilise this product in combination with a Carbon and Bio-stimulant program to maximise performance.
Horticulture	45kg per Hectare	



The driving force behind BioForce BCA Trio Granular

The Biology

The microbial species in BioForce BCA Trio Granular play essential roles in soil health, nutrient cycling, and plant protection. Here's how each contributes to improving plant growth in the soil environment:

1. *Bacillus amyloliquefaciens* (Bacterial species)

- Produces antibiotics and lipopeptides that stifle and manage inoculum load of plant parasitic pathogens.
- Enhances nutrient availability by solubilizing phosphorus and promoting nitrogen fixation.
- Stimulates plant growth hormones (auxins and cytokinins) to improve root and shoot development.
- Improves plant health by inducing systemic resistance.

2. *Paenibacillus polymyxa* (Bacterial species)

- Fixes atmospheric nitrogen, converting it into a form usable by plants.
- Produces exopolysaccharides, which improve soil structure and water retention.
- Produces antimicrobial compounds that stifle growth of fungal plant parasitic pathogens.
- Enhances plant growth by producing plant hormones and promoting root colonization.

3. *Trichoderma viride* (Fungal species)

- Outcompetes and parasitizes harmful plant parasitic fungi reducing inoculum load
- Produces enzymes (chitinases, glucanases) that break down fungal cell walls, reducing pathogen load.
- Stimulates plant root growth through hormone production and improved nutrient uptake.
- Improves soil biodiversity, enhancing the microbial balance in the rhizosphere.

Overall Benefits in the Soil Environment

- ◆ Disease suppression through biocontrol mechanisms.
- ◆ Nutrient cycling (nitrogen fixation, phosphorus solubilization).
- ◆ Improved root development and plant vigour.
- ◆ Enhanced soil structure and moisture retention.
- ◆ Increased resistance to environmental stressors.

