



Bacterize 5 Granular

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

Product Overview

BioForce Bacterize 5 Granular is an easy to spread granule consisting of 5 Bacterial 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 subtilis</i>
	<i>Bacillus licheniformis</i>
	<i>Bacillus megaterium</i>
	<i>Bacillus mucilaginous</i>
	<i>Bacillus thuringiensis</i>
Biological Concentration	20 billion CFU/gram
Other Ingredients	Oyster shell mineral – provides protein polysaccharides, iron, and calcium carbonate.
Pack Size Available	25kg



Bacterize 5 Granular – Application Details

Apply via Granular Fertiliser Spreader. Apply at 6 weekly intervals to maintain the activity of the soil's biological intelligence. Irrigate following application to incorporate the product into the soil.

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. Utilise this product in combination with a Carbon and Bio-stimulant program to maximise performance.
Nursery Production & Ornamentals	300g per 100m ² 30kg per Hectare	
Industrial Hemp	70kg per Hectare	
Horticulture	45kg per Hectare	



The driving force behind BioForce Bacterize 5 Granular

The Biology

The **Bacillus** species used within Bacterize 5 Granular play crucial roles in improving soil health, enhancing nutrient availability, and promoting plant growth. Here's how each contributes best to the soil environment:

1. *Bacillus subtilis*

- Acts as a **biocontrol agent** by producing antimicrobial compounds that stifle soil-borne pathogens.
- Induces **systemic resistance** in plants, strengthening their defence mechanisms.
- Solubilises **phosphorus**, making it more available to plant roots.

2. *Bacillus licheniformis*

- Produces **enzymes** that break down organic matter, improving soil structure and nutrient cycling.
- Fixes nitrogen, making it more accessible to plants.
- Enhances drought tolerance by promoting root growth and water retention.

3. *Bacillus megaterium*

- Plays a key role in **phosphorus solubilization**, converting inorganic phosphorus into forms plants can absorb.
- Produces plant growth-promoting hormones like auxins and cytokinins, stimulating root and shoot development.
- Improves **soil fertility** by decomposing organic material.

4. *Bacillus mucilaginosus*

- Breaks down **silicates** and **other minerals**, releasing essential nutrients for plant uptake.
- Produces **exopolysaccharides**, which help retain soil moisture and enhance microbial activity.
- Improves **soil aeration** and **root penetration** by enhancing soil structure.

5. *Bacillus thuringiensis*

- Well known for producing toxins that target specific insect larvae, reducing pest pressure.
- Helps maintain a balanced microbial ecosystem, preventing the overgrowth of harmful organisms.

Overall Benefits in the Soil Environment

- ◆ Improve **nutrient availability** (phosphorus solubilization, nitrogen fixation).
- ◆ Enhance **soil structure** and **moisture retention**.
- ◆ Helps to reduce **pathogen** inoculum and **pest** population loads.
- ◆ Promote **root** and **shoot development** through hormone production.
- ◆ Support **drought** and **stress resistance** in plants.

