

# RUBITROL

BACILLUS SPP. MIXTURE FOR HEALTHY GROWTH OF PLANTS

## FOR HEALTHY PLANT GROWTH



### KEY BENEFITS

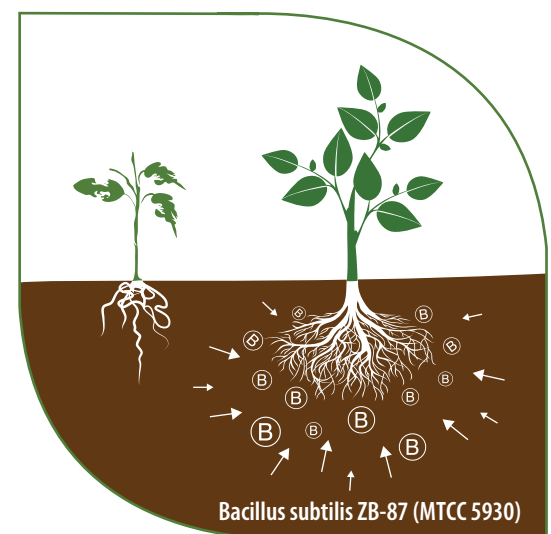
- Preventively limits growth and development of diseases in crops
- Activates plant's own defense system
- Helps to fight against various plant pathogens
- Beneficial for agricultural crops
- Effective even in hard weather conditions
- Safe for the environment and farmers

### COMPOSITION

*Bacillus subtilis* ZB-87 (MTCC 5930)

### GENERAL INFORMATION

- It preventively limits many foliar and soil borne diseases
- Application of Rubitrol prior to or in the early stages of disease development gives maximum effective control
- It is best to include Rubitrol in IPM programme, when conditions are conducive to heavy disease pressure
- Rubitrol may be applied with spray equipment commonly used for making foliar applications and irrigation systems commonly used for chemigation



plant**bioti**x

### SHELF LIFE

2 years from the date of manufacturing

### PACKAGING

500 g, 1 kg



# SAY "YES" TO HEALTHIER CROPS & BETTER PRODUCE

## MODE OF ACTION

- It produces a broad spectrum of class of lipopeptide antibiotics (Iturin, surfactin, etc.) that disrupts pathogen cell wall formation. These antibiotics help *B. subtilis* ZB-87 (MTCC 5930) bacteria out-compete other microorganisms by either killing them or reducing their growth rate
- It inhibits plant pathogen spore germination, disrupts germ tube growth, and interferes with the attachment of the pathogen to the plant
- It is also reported to induce Systemic Acquired Resistance (SAR) against bacterial pathogens
- It is competitive and fast colonizing rhizosphere bacterium which takes up space on the roots, leaving less area or source for occupation by disease pathogens
- Feeds off plant exudates, which also serve as a food source for disease pathogens. As it consumes exudates, deprives disease pathogens of a major food source, thereby inhibiting their ability to thrive and reproduce



## TARGET PEST AND RECOMMENDED CROPS

It protects against pathogens causing diseases in plants like *Uncinula spp.*, *Rhizoctonia spp.*, *Alternaria spp.*, *Fusarium spp.*, *Colletotrichum spp.*, *Sclerotinia spp.*, *Phytophthora spp.* and *Pythium spp.*

Rubritol effectively controls many diseases in:

**Fruits** - Grapes, Pomegranate, Banana, Citrus, Mango, Papaya, Strawberry

**Vegetables** - Tomato, Potato, Brinjal, Capsicum, Chilli, Onion, Cucumber, Gourds, Okra, Cabbage, Cauliflower, Melons

**Cash Crops** - Cotton, Sugarcane, Tobacco

**Flowers** - Roses, Gerbera, Carnation, Marigold, Chrysanthemum, Tuberose

**Cereals** - Maize, Rice, Wheat, Oats

**Pulses** - Peas, Soybean, Green Gram, Black Gram

**Oilseeds** - Groundnut, Sunflower



## APPLICATION RATE

**Soil Application:** 1-2 kg per acre    **Foliar Application:** 2.5 g per lit.    **Seed Application:** 5-10 g/kg of seeds

## DIRECTIONS FOR USE

### SOIL APPLICATION

**Broadcasting** - Mix the recommended quantity of bio-products in 50 kg well decomposed FYM / Compost and broadcast in the field before last interculturing operations before sowing.

**Drenching** - Calculate the volume of water required for drenching to the number of plants in the desired area. Add the recommended dose of formulation in the water and drench it in root zone.

**Fertigation** - It is completely soluble in water giving advantage for easy and labor saving application through drip irrigation system. Mix recommended dose of formulation in ample amount of water and apply to the desired area.

**Foliar Application** - Rubritol is used as foliar spray. Apply in sufficient water to provide thorough coverage. Frequency of foliar spray depends on the crop stage at 7-10 days interval or as needed.



**SEED TREATMENT** - Can be applied as water based slurry to cover seeds uniformly.