

Streptomyces rochei

Introduction

Streptomyces rochei is an alternative to synthetic chemical fungicides and used as a biocontrol agent against common phytopathogenic fungi and improve plant growth. *Streptomyces rochei* have excellent capacities to produce a variety of bioactive compounds, such as antibacterial, antifungal, antiviral, anticancer and antioxidant properties. Some antibiotics produced by *Streptomyces* have been used as fungicides for the control of rice blast, such as Blastocidin-S and Kasugamycin.



Composition

Bacteria count 2×10^9 CFU/g

Fineness: 60-80 mesh screen

Moisture: 8%

1 kg / foil bag , or 25 kg / bag or as per customers request

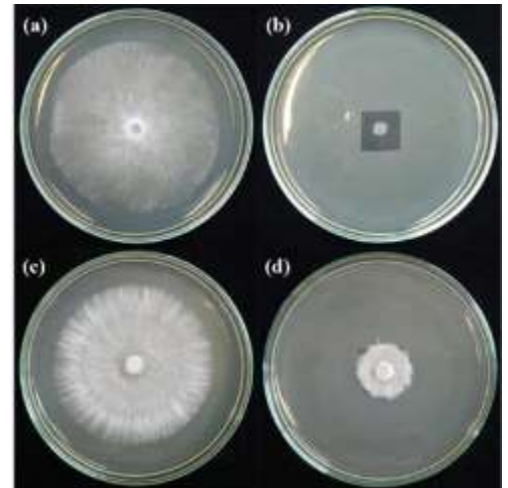
Application

Agriculture, Biofertilizer, Soil Treatment, Crop Protection, Foliar Spray,

Antagonistic activity

Inhibitory activities of antifungal metabolites produced by *Streptomyces rochei* on the growth of damping-off pathogenic fungi.

- (a) *Pythium aphanidermatum* control
- (b) *Streptomyces rochei* treated 1 day
- (c) *Sclerotium rolfsii* control
- (d) *Streptomyces rochei* treated 3 day



Target Disease

- Root rot
- Blight
- Damping off
- Fusarium wilt
- Bacterial wilt
- Rice blast

Benefit

- ✓ Effective control of bacterial wilt, soft rot, Fusarium wilt, Rhizoctonia,
- ✓ Increase plants stress tolerance from drought, salinity
- ✓ Promote the growth of root system
- ✓ Enhance the effect of nutrients uptake
- ✓ Increase crop potential yield and quality
- ✓ Degrades phenolic acid root autotoxic substances

Dosage & Method

Apply 3 kgs per acre when planting, as early as possible to the crop for optimal effect.

Reapply after 4~8 weeks to extend root protection for season-long control

Can be applied by broadcast, hill dressing, drill fertilization, root-irrigation, Turn the soil after watering.

Packing and shelf life

2 year shelf life, 1 kg per foil bag, 10 kg per carton, 25 kg per drum.

Storage

Store in cool, dry location, keep out of direct sunshine and moisture.

Keep out of reach of children.

In vivo antifungal ability of *Streptomyces rochei* on tomato plants



Growth of the tomato plants (from left to right). (a) Untreated seed planted in untreated sterile soil (positive control), (b) seed treated with *Streptomyces rochei* and planted in *F. oxysporum* infected soil, (c) seed treated with *Streptomyces rochei* and planted in *F. oxysporum* noninfected soil, (d) untreated seed planted in *R. solani* infected soil (negative control).