Characteristics

Gliocladium catenulatum Strain J1446

Formulation Type I Wettable granule

Contains I Minimum $1x10^9$ cfu/g (cfu = colony forming unit) of active ingredient

Packaging Size I 2.2 lbs (1 kg)

Storage I Store in original container in a cool, dry place. Avoid overheating.

LALSTOP G46 WG

Biological and Natural Alternative to Chemical Control

LALSTOP® G46 WG is an EPA-registered biological fungicide used in the production of vegetables, fruits, herbs, and ornamentals. It is a naturally occurring soil fungus that contains mycelium and spores of the *Gliocladium catenulatum* strain J1446 that controls a range of crop diseases.

Benefits

- Effective control of a wide variety of plant pathogens
- Compatible with most chemical pesticides for use in an Integrated Pest Management program
- OMRI-Listed
- No risk for resistance due to several modes of action
- Safe for growers, consumers, beneficial insects, and surrounding environment.

Mode of Action

Competition: Deprives pathogenic fungi of space and nourishment by colonising the plant

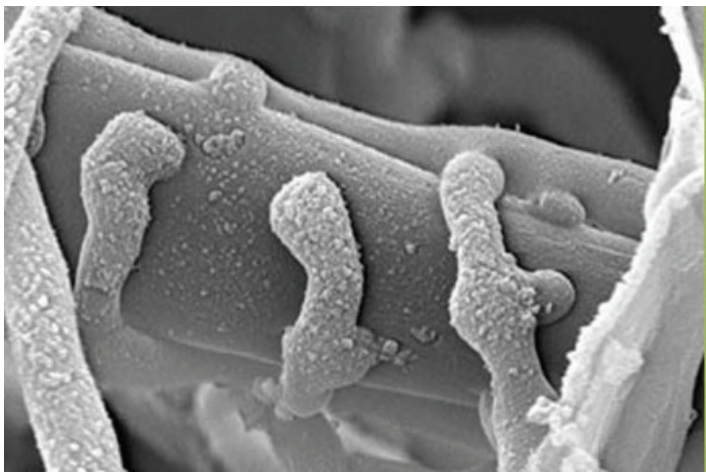
Hyperparasitism: Produces enzymes, which disrupts the cell walls of pathogens

Colonization: Lives on roots, foliage and flowers

Application Methods

Applied as an aqueous suspension via:
Foliar spray
Drip irrigation
Drench
Growing media treatment

Compatibility: Compatible with many chemical pesticides. For more details, ask your distributor.



A visual of the hyperparasitism of the prodution of enzymes that disrupts the cell walls of the pathogens.

Effective Pathogen Control

LALSTOP G46 WG Provides Effective Control on a Wide Range of Pathogens Which Include:

- **Grey mold and stem canker** caused by *Botrytis cinerea* on a large variety of fruit and vegetables including, but not limited to, tomatoes, peppers, cucumber, lettuce, herbs and ornamental plants
- **Gummy stem blight** (*Didymella bryoniae*) on cucurbits such as cucumbers and melons
- **Damping-off and root diseases** caused by *Pythium, Fusarium* and *Rhizoctonia solani* on a large range of vegetables, herbs and ornamentals
- **Crown rot** caused by *Phytophthora* on a variety of fruits, vegetables and ornamentals

Results: Greenhouse

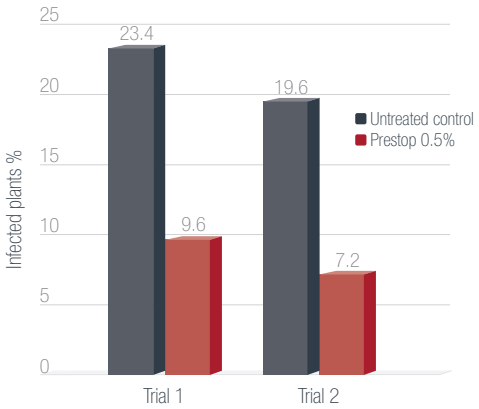
LALSTOP G46 WG | Control

Broccoli with club root, LALSTOP G46 WG applied by drench and control is untreated. LALSTOP G46 WG drench 1 grams/m² one week before planting in the field

LALSTOP G46 WG | Control

Leeks with Fusarium, LALSTOP G46 WG applied by drenching at sowing and control went untreated. The photo was taken 6 weeks after sowing.
*Vegetable Research Centre PCG, Belgium

Control of *Didymella* on cucumbers

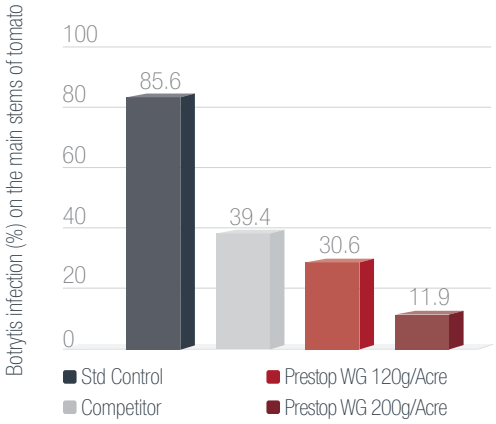


Trial 1 Rockwool: 1st treatment - 6 days after transplanting
2nd treatment: 47 days after transplanting
Trial 2 Peat: 1st treatment - 7 days after transplanting
2nd treatment: 30 days after transplanting

Control of *Botrytis cinerea* on Tomatoes

Holland, 2014

33 days after infection



Results: Field

For Use to Control Charcoal Rot Against Strawberries

A soil-borne fungus that produces small black sclerotia that persist in the soil and in plant debris. When fumigation is ineffective and soil temperatures reach 77-86° F (25-30° C), the sclerotia germinate and infect strawberry roots and crowns. In the crown, the vascular ring is preferentially colonized and destroyed, leading to plant collapse and mortality.

In a trial conducted by University of Florida, LALSTOP G46 WG (*Gliocladium catenulatum*) was considered the best biological fungicide control against charcoal rot based on measurements of yield and disease incidence (DI). Trial results showed more uniform and consistent efficacy using LALSTOP G46 WG.

Result	Control	LALSTOP G46 WG	Competitor
Yield (lbs)	6,740	9,170	8,691
Disease incidence (%)	1.36	0.35	0.82

Plant mortality due to charcoal rot