



Strawberry Production Canada

Professional growers understand the importance of protecting and nurturing plants from the beginning. A strong start gives an edge for healthy, robust growth and a vibrant finish. BioWorks products support all the hard work that goes into growing beautiful, tasty strawberries. From start to finish, BioWorks has safer products to help you care for your plants, care for your workers, and care for the environment.

ROOT DISEASE CONTROL (Greenhouse)

RootShield® PLUS⁺ WP | OMRI Listed

RootShield PLUS⁺ WP (a.i. *Trichoderma harzianum* Rifai strain KRL-AG2 and *Trichoderma virens* strain G-41) grows around roots “shielding” them against root damaging fungi. These beneficial microbes are used for the suppression of root rots caused by *Pythium* spp., *Rhizoctonia* spp., *Fusarium* spp. and *Phytophthora* spp. in greenhouse crops, produced commercially indoors.

RootShield PLUS⁺ WP Rates:

- Potting Mix Drench:
 - Suspend RootShield PLUS⁺ WP - Biological Fungicide Wettable Powder in 30-60 g/100 L water and apply to 10 m² of soil/potting mixture surface
- 4-hour REI, 0-day PHI
- Shelf Life 10 months refrigerated (<4.5 °C); 12 months frozen (<0 °C)

RootShield HC | OMRI Listed

RootShield HC (a.i. *Trichoderma harzianum* Rifai strain KRL-AG2) grows around roots “shielding” them against root damaging fungi. This beneficial microbe is used for the suppression of root rots caused by *Pythium* spp., *Rhizoctonia* spp. and *Fusarium* spp. in greenhouse crops produced commercially indoors.

RootShield HC Rates:

- Potting Mix Drench:
 - Suspend RootShield HC - Biological Fungicide Wettable Powder in sufficient water (e.g. 30-45 g/100 L) to achieve uniform application and apply at the rate of 55-110 g per cubic meter (loose) of greenhouse potting mix, soil or planting beds.
- 4-hour REI, 0-day PHI
- Shelf Life 12 months refrigerated (<4.5 °C)



GREENHOUSE FOLIAR DISEASE CONTROL

RootShield HC | OMRI Listed

RootShield HC (a.i. *Trichoderma harzianum* Rifai strain KRL-AG2) is a useful tool for the suppression of foliar disease caused by *Botrytis cinerea* in greenhouse commercial production of strawberries.

RootShield HC Rates:

- Apply 10 g/L of water to foliage and blossoms every 7-14 days depending upon disease pressure.
- 4-hour REI, 0-day PHI
- Shelf Life 12 months refrigerated (<4.5 °C)

MilStop® | OMRI Listed

MilStop (a.i. potassium bicarbonate) is a broad-spectrum foliar fungicide, which is a contact fungicide for control/suppression of powdery mildew in both greenhouse and field production. It kills fungal spores on contact by pulling water from the spores and their growing strands. It also inhibits enzymes involved in fungal cell wall formation by altering the pH on the leaf surface.

MilStop Rates:

- Greenhouse foliar spray:
 - 0.28-0.56 kg/1000 sq m
 - Use sufficient volume of spray solution to obtain complete coverage of foliage and stems. Uniform and complete coverage of the foliage is essential for the most effective results.
 - Spray volume per unit of treated area can vary depending upon plant type and stage of development.
 - Number of applications will depend upon disease pressure. Maximum number of applications per crop is ten (10).
- Field/Outdoor foliar spray:
 - 2.8-5.6 kg in a minimum of 1000 L/ha (do not exceed 5.6 kg/ha per application)
 - Uniform and complete coverage of the foliage, stems and fruit are essential for effective results.
 - Spray volume per hectare can vary depending upon plant type and stage of development.
 - Number of applications will depend upon disease pressure. Maximum number of applications per season is ten (10).
- 4-hour REI, 0-day PHI
- Shelf life 2+ years. Store cool, (<29 °C) and do not expose to moisture

GREENHOUSE INSECT CONTROL

BotaniGard® ES and BotaniGard® 22WP

BotaniGard (a.i. *Beauveria bassiana* strain GHA) can be used as a standalone or in rotations or tank mixes. This effective biological insecticide is used to control aphids, thrips, whiteflies and other pests. The applied spores infect directly through the outside of the insect's cuticle (the skin). A spore adhering to the host will germinate and produce enzymes that attack and dissolve the cuticle, allowing it to penetrate the skin and grow into the insect's body. As the insect dies, it will change colour to pink or brown, and eventually the entire body cavity is filled with fungal mass.



BotaniGard ES Rates:

- Spray to wet, but avoid runoff
 - Whiteflies, Aphids 0.5-1 L/400L water
 - Thrips 2 L/400L water
- 4-hour REI, 0-day PHI
- Shelf life 9 months at room temperature (25 °C)

BotaniGard 22WP Rates:

- Spray to wet, but avoid runoff
 - Whiteflies, Aphids 250-500 g/400L water
 - Thrips 0.5-1 kg/400L water
- 4-hour REI, 0-day PHI
- Shelf life 12 months at room temperature (25 °C)

PLANT NUTRITION

ON-Gard® 5-0-0 | OMRI Listed

ON-Gard is an innovative fertilizer based on 100% enzymatically extracted plant-derived amino acids and peptides. It is 100% water soluble and is rapidly absorbed by leaves and roots and translocated throughout the plant. ON-Gard is 30% Vegetal Amino Acids derived from plant protein hydrolysate and is manufactured for consistency.

ON-Gard Rates:

- Foliar spray to glisten during production. Apply every 15 days and up to 6 times per growing season
 - 250 ml - 2.0 L/100 L (2.5-20 ml/L)
- Drench using sufficient water to penetrate the root zone
 - 250 ml - 2.5 L/100 L water (2.5-25 ml/L)

Verdanta® K-Vita® 2-0-20 | OMRI Listed

K-Vita offers a slow, continuous release of extra potassium to assist in producing stockier, more robust plants with shorter internodes. Homogeneous MINIGRAN® granules provide better nutrient distribution and sustainability.

K-Vita Rates:

Strawberries.....5 - 10 kg/100 m²

Verdanta® PL-2® 2-0-6 | OMRI Listed

PL-2 is designed to provide supplemental potassium in a liquid feed program. The exact rate of PL-2 depends on the needs of the crop.

PL-2 Rates:

Constant liquid feed 1 - 1.5 grams/L nutrient solution

Periodic liquid feed (2 times weekly) 3 - 4 grams/L nutrient solution

**Note: PL-2 is not for use in hydroponic or other recirculation systems.*

Verdanta® OFE® 3-0-0 + 3% OFE

Correct iron chlorosis with OFE. An excellent foliar feed that supplies chelated iron from both DTPA and Iron Citrate without leaving a residue. Contains 3% seaweed extract. Excellent foliar feed for better greening and growth.

OFE Rates:

Greenhouse Strawberries 2-2.4 L/ha

Refer to product labels for complete application details. Additional technical information is available on our website (www.bioworksinc.com) or from your BioWorks technical sales representative. Always read and follow label instructions