

SILVERLEAF GREENHOUSES - 2015 BIOLOGICAL/BENEFICIAL PROGRAM

This is a brief synopsis of how your plants have been handled up until their shipping to your greenhouse.

Sanitation Program

In order for any disease or pest program to be effective there must be a solid sanitation program in place! Before planting in any greenhouse we clean and disinfect all areas, including floors, walls, benches, walkways, etc. All propagation benches are cleaned & disinfected with Green-Shield between each planting rotation.

We start our biological program in the propagation area using the follow products:

Preventative Program

The following drench solution is applied weekly to all plant material stuck and all rooted material transplanted during that week:

Rootshield Plus for preventive control of plant diseases such as Phythium, Rhizoctonia, Fusarium & Thielaviopsis.

Steinernema Feltiae Nematodes - for control of fungus gnat larvae & thrips

Steinernema Carpocapsae Nematodes - for control of shoreflies & caterpillars.

We also apply the following beneficial Insects

Amblyseius Cucumeris - Predatory mite for control of thrips. This is repeated after 8 weeks to any long term crops. (ie: Lavender & Rosemary)

Atheta Coriaria - for control of soil insects Fungus Gnats, Shoreflies, Thrips

Hypoaspis miles - Mite that preys on Fungus Gnat eggs, larvae & pupae in the soil

Amblyseius californicus - Mite that preys on Spider Mites - used especially in hot & dry summer weather

Phytoseiulus persimilis - Mite that preys on Two-Spotted Spider Mite - especially effective in more moderate temperatures.

Amblyseius Fallacis (works better at lower temperatures)

Orius insidiosus - Minute Pirate Bug. Feeds on Thrips, Whitefly, Aphis & Spider Mite.

Banker Plants for the control of Aphids.

The following is applied weekly to all plant material in all greenhouses:

Steinernema Feltiae Nematodes Spray - Thrips & Fungus Gnats control

Steinernema Carpocapsae Nematodes Spray - Shoreflies control

The following is applied prior to shipping:

An additional Rootshield/ Nematode drench is applied to all cells & 2.5" material approximately one week prior to shipping, this takes place after plants are pulled for packing.

The Friday before shipping all plant material that is to be boxed or palletized is sprayed with Actinovate SP to help reduce botrytis & disease while plants are in boxes. This does not mean that you do not have to unbox material as soon as it is received.

Chemicals used to supplement above program on an "as needed" basis only. All are compatible with beneficial insects.

Azatin O (MOA UN)-Insect growth regulator works on larval & pupal stages. Controls thrips, whiteflies, aphids, leafminers, fungus gnats & more.

Botanigard WP (MOA - UN) -Safer to beneficials when used as a spray.

Cease (MOA - NC) is applied as a foliar spray at 1.25 ozs./1 gallon or 1 gallon/100 gallons (OMRI listed)

Bacillus subtilis is the active ingredient. Provide preventative control of certain fungal & bacterial diseases.

Companion Liquid (MOA - NC) as a drench at 1tsp./gal. or as a spray at 2tsp./gal.

Biofungicide based on Bacillus subtilis GB03. Controls root, stem & foliar diseases.

M-Pede - (MOA UN) insecticidal soap for **spot-sprays only** on Spider Mite, Whitefly, Aphid, Thrips & others

Decree 50 WDG (MOA 17) Controls botrytis with long acting residual.

Fosphite (MOA 33) -Broad spectrum fungicide. Controls downy mildew, Pythium, Phytophthora & many more.

Oxidate 2.0 (MOA NC) OMRI Listed - used as a broad-spectrum contact foliar & root fungicide

Milstop (MOA - NC) OMRI listed -Fast acting broad spectrum fungicide. Quick knockdown of powdery mildew.

Downy Mildew Protocol

Every 5 to 7 days we apply a beneficial-insect-friendly spray for Downy Mildew Prevention. We alternate Fosphite and a combination of Milstop & Cease. Occasionally we use Oxidate 2.0 if we are also targeting other foliar issues but, Fosphite has the longest residual effects, & Milstop/Cease also has some residual effects.

We Highly Recommend continuing a 5-7 day Downy Mildew preventative rotation

There is no completely effective curative fungicide. Once the symptoms appear, the disease has progressed too far; it is best to discard the crop. Downy Mildew Symptoms include, poor plant vigor, yellowing leaves & blackish spores on undersides of leaves. Downy Mildew spores can travel through air from many sources. If a preventative program is not in place, infection may occur rapidly.

**The above are not recommendations or endorsements of any products or methods for treating your plants. This is strictly to let you know how your plants were cared for prior to shipping.*