

We deliver a full line of biological solutions to control pests, prevent disease and improve plant health. Our products help you grow all season and produce the highest quality Spring ornamentals.



**BioWorks**  
DIVISION OF BIOFIRST GROUP

# CROP GUIDE SPRING ORNAMENTALS

|                     | PEST/DEFICIENCY                             | CROP STAGE   |  |           |
|---------------------|---|--|--|-----------|
|                     |   | PROPAGATION, SEEDS, CUTTINGS                                     | VEGETATIVE                                   | FINISHING |
| DISEASES            | Soilborne Diseases                          | RootShield® PLUS <sup>+</sup> WP, RootShield PLUS <sup>+</sup> G | RootShield PLUS <sup>+</sup> WP              |           |
|                     | Powdery Mildew, Downy Mildew                | CEASE®, MilStop® SP, PERpose Plus®                               | MilStop SP + CEASE, PERpose Plus             |           |
|                     | Fungal Leaf Spot                            |  |  |           |
|                     | <i>Botrytis</i>                             | BotryStop® WP, PERpose Plus, CEASE, MilStop SP                   | BotryStop WP, MilStop SP + CEASE             |           |
| Bacterial Leaf Spot | CEASE, PERpose Plus, BotryStop WP           |  |  |           |
| INSECTS / MITES     | Aphids, Whiteflies, Thrips                  | EpiShield®, PRINCIPLE™ WP  | Molt-X®, SuffOil-X®, EpiShield, PRINCIPLE WP |           |
|                     | Fungus Gnats, Shore Flies                   | NemaShield®  | NemaShield, Molt-X                           |           |
|                     | Mites                                       | EpiShield  | SuffOil-X, EpiShield                         |           |
|                     | Caterpillars                                |  | Molt-X, PRINCIPLE WP                         |           |
|                     | Mealybugs                                   | EpiShield  | SuffOil-X, EpiShield, Molt-X                 |           |
| NUTRITION           | Efficient nutrient use and stress reduction | ON-Gard®   |  |           |



ABOVE AND BEYOND IS WHERE WE BEGIN

|                 | PRODUCT                                      | REI,<br>PHI       | OMRI | PEST/DEFICIENCY  | RECOMMENDED RATE                                       | TYPE OF APPLICATION  |
|-----------------|--|-------------------|------|--|--|--|
| DISEASES        | RootShield PLUS <sup>+</sup> WP <sup>2</sup> | 4-hour<br>0-day   | Yes  | Damping Off, <i>Pythium</i> ,<br><i>Fusarium</i> , <i>Phytophthora</i> ,<br><i>Rhizoctonia</i> | Drench: 4-8 oz/100 gal Dip<br>(URC): 1.5 oz/5 gal      | Drench or Dip at seeding, sticking or transplant. Reapply<br>drench application at 8-10 weeks.   |
|                 | RootShield PLUS <sup>+</sup> G <sup>2</sup>  | 4-hour<br>0-day   | Yes  |  | 1.5-3 lb/cu yd   | Incorporate in potting media.  |
|                 | MilStop SP                                   | 1-hour<br>0-day   | Yes  | Powdery Mildew, Downy<br>Mildew, <i>Botrytis</i> , Fungal<br>Leaf Spot                         | 1.25-3.0 lb/100 gal                                    | Foliar application every 7-14 days.<br>Tank mix rates: CEASE 4-6qt/100gal + MilStop SP<br>1.25-3 lb/100 gal.                                   |
|                 | CEASE  | 4-hour<br>0-day   | Yes  | Bacterial and Fungal<br>Leaf Spot, Powdery<br>Mildew, Downy Mildew,<br><i>Botrytis</i>         | 4-6 qt/100 gal   | Foliar application every 3-7 days.<br>Safe for use with young seedlings.   |
|                 | PERpose Plus <sup>1</sup>                    | 0-1-hour<br>0-day | Yes  |  | 1/3-1 fl oz/gal Mist:<br>1:1000-1:5000                 | 1/3 fl oz/gal preventative application weekly;<br>1 fl oz/gal curative application.  |
|                 | BotryStop WP                                 | 4-hour<br>0-day   | Yes  | <i>Botrytis</i> , Bacterial Leaf<br>Spot <sup>1</sup>  | 2-4 lb/100 gal   | Foliar application every 7-10 days.  |
| INSECTS / MITES | PRINCIPLE WP                                 | 4-hour<br>0-day   | Yes  | Whiteflies, Aphids,<br>Thrips, Caterpillars  | 0.5-2 lb/100 gal<br>Dip rate: 0.25-0.5 oz/gal          | Foliar application every 5-10 days.<br>For thrips use 1-2 lb/100 gal.  |
|                 | Molt-X <sup>2</sup>                          | 4-hour<br>0-day   | Yes  | Aphids, Whiteflies,<br>Thrips, Mealybugs,<br>Caterpillars                                      | 8-10 fl oz/100 gal                                     | Foliar spray to glisten on a 7-10-day interval<br>or as needed.  |
|                 | SuffOil-X                                    | 4-hour<br>0-day   | Yes  | Mites, Aphids, Thrips,<br>Whiteflies, Leafminers,<br>Mealybugs, Scales                         | 1-2 gal/100 gal  | Foliar application every 7 days.<br>Suppresses Powdery Mildew, Rust.<br>Use 1% when in bloom or on sensitive crops.                            |
|                 | EpiShield                                    | N/A               | No   | Mites, Aphids, Thrips,<br>Whiteflies, Mealybugs  | Foliar spray 9-12 fl oz/100 gal<br>Dip rate 2.7 ml/gal | Foliar spray to glisten on 5-7-day interval or as needed.<br>Do not exceed 9 fl oz rate in flower.<br>Dip unrooted cuttings for 10-30 seconds. |
|                 | NemaShield                                   | N/A               | N/A  | Fungus Gnats, Shore<br>Flies   | 100 million/1100-3400 ft <sup>2</sup>                  | Apply as a drench to the substrate as needed.  |
|                 | Molt-X <sup>2</sup>                          | 4-hour<br>0-day   | Yes  |  | 8 fl oz/100 gal  | Apply as a drench.   |
| NUTRITION       | ON-Gard (5-0-0) <sup>3</sup>                 | N/A               | Yes  | Nutrition supplement<br>and stress reduction   | Foliar Spray/Drench/Dip:<br>1 qt/100 gal               | Pre-plant dip or drench at planting.<br>Re-apply as a drench at 2-week intervals.  |

Please refer to product labels for complete application instructions. Always read and follow label directions.

<sup>1</sup>Not available for use in CA; <sup>2</sup>Not available for use in AK; <sup>3</sup>Not labeled for use in MT, ND, SD, WY

Please refer to product labels [bioworksinc.com](http://bioworksinc.com) for fogging application details and rates.



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