ORNAMENTAL - DOGWOOD (CORNUS SPP), EUONYMUS, ETC. - ANTHRACNOSE

General Information

PRODUCT INFORMATION
BROADFORM is a broad spectrum fungicide with preventative, systemic, and curative properties for the control or suppression of certain ornamental and crop diseases.

FOR USE ON:

- Ornamentals in residential and commercial landscapes, interiorscapes, field grown and container ornamentals in nurseries and greenhouses, lathhouses, shadehouses, and other enclosed structures.

- Crops in residential and commercial landscapes, interiorscapes, field grown and container crops in nurseries and greenhouses, lathhouses, shadehouses, and other enclosed structures.

RESTRICTIONS

- Do not apply more than the maximum annual rate for each specific use from any combination of products containing FLUOPYRAM.

- Not for sale, distribution, or use in Nassau and Suffolk counties, New York except as permitted under FIFRA 24(c), Special Local Need registration.

- Do not apply BROADFORM as a drench.

RESISTANCE MANAGEMENT
The active ingredients in BROADFORM belong to two different fungicide groups, the pyridinyl-ethylbenzamides (Group 7) and the QoI or strobilurins (Group 11). To maintain long-term effectiveness of this fungicide, follow the specific resistance management guidance listed on this label. The following practices may delay the development of fungicide resistance.

1. Start spray programs early: Spray programs that begin before pathogens attack
keep fungal populations low and reduce the likelihood of resistance. Consult your local extension specialist, certified crop advisor and/or manufacturer representative for recommendations on when to begin spray programs.

2. Alternate products: Use spray programs that include alternation of products from different fungicide groups. Group numbers are listed in a box at the top right of product labels.

3. Use at least the minimum labeled rate and do not extend spray intervals beyond label requirements: Use of rates below the minimum labeled rate can shorten the useful life of a fungicide. Furthermore, stretching application intervals too long may leave ornamentals or crops unprotected, allowing the pathogen population to multiply, and increasing the likelihood for resistance to develop.

4. IPM: Applications of fungicides should be integrated into an overall disease and pest management program. Cultural practices known to reduce disease development should be followed. Consult your local extension specialist, certified advisor and/or manufacturer representative for additional IPM strategies established for your area.

SPRAY DRIFT MANAGEMENT
Airblast (Air Assist) Applications for ornamental trees and crops.

Airblast sprayers carry droplets into the canopy of trees/vines via a radially, or laterally directed air stream. Follow the following specific drift management practices:

- Adjust deflectors and aiming devices so that spray is only directed into the canopy;
- Block off upward pointed nozzles when there is no overhanging canopy;
- Use only enough air volume to penetrate the canopy and provide good coverage;
- Do not allow the spray to go beyond the edge of the cultivated area (i.e., turn off sprayer when turning at end rows);
- Only spray inward, toward the tree stand, for applications to the outside rows.

APPLICATION INFORMATION
Applications using sufficient water volume to provide thorough and uniform
coverage generally provide the most effective disease control. Do not make
applications when conditions favor drift beyond the target application area. Avoid
spraying when windy, high temperature, drought, low relative humidity, or
temperature inversion conditions exist.

Ground Application
For ground application equipment, apply:
- 50 to 100 gallons of solution per acre for disease control on ornamental plants and
crops

Chemigation Application
Apply this product only through center pivot, motorized-lateral move, traveling gun,
and solid set or portable (wheel move, side roll, end tow, or hand move) irrigation
systems. Do not apply this product through any other type of irrigation system.
Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result
from non-uniform distribution of treated water. If you have questions about
calibration, you should contact State Extension Service specialists, equipment
manufacturers or other experts. A person knowledgeable of the chemigation system
and responsible for its operation or under the supervision of the responsible person,
shall shut the system down and make necessary adjustments should the need arise.
BROADFORM has not been sufficiently tested when applied through irrigation
systems to assure consistent product performance for all labeled uses. The
following application techniques are provided for user reference but do not
constitute a warranty of fitness for application through sprinkler irrigation
equipment.

Do not connect an irrigation system (including greenhouse systems) used for
pesticide application to a public water system, unless the pesticide label prescribed
safety devices for public water systems are in place. ‘Public water system' means a
system for the provision to the public of piped water for human consumption if such
system has at least 15 service connections or regularly serves an average of at
least 25 individuals daily at least 60 days out of the year. Chemigation systems
connected to public water systems must contain a functional, reduced-pressure
zone (RPZ), back flow preventer, or the functional equivalent in the water supply
line upstream from the point of pesticide introduction. As an alternative to the RPZ,
the water from the public water system should be discharged into a reservoir tank
prior to pesticide introduction. There shall be a complete physical break (air gap)
between the flow outlet end of the fill pipe and the top or overflow rim of the
reservoir tank of at least twice the inside diameter of the fill pipe. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. Pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The systems must contain functional interlocking controls, to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift. Spray mixture in the chemical supply tank must be agitated at all times, otherwise settling and uneven application may occur. Apply pesticide continuously for the duration of the water application. For mixing instructions, please refer to directions in the “compatibility testing and tank mix partners” section.

This product may be used through two basic types of irrigation systems as outlined in Sections A and B below. The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow. Determine which type of irrigation system is in place, then refer to the appropriate directions provided below for each type.

A. Center Pivot, Motorized-Lateral Move and Traveling Gun Irrigation Equipment For injections of pesticides, these continuously moving systems must use a positive displacement injection pump of either diaphragm or piston type and be constructed of materials that are compatible with pesticides. They must also be capable of being fitted with a system interlock and capable of injection at pressures approximately 2-3 times those encountered within the irrigation water line. Venturi applicator units cannot be used on these systems. Thoroughly mix required amount of this product for acreage to be covered into same amount of water used during calibration and inject into system continuously for one revolution or run. Mixture in the chemical supply tank must be continuously agitated during the injection run. Shut off
injection equipment after one revolution or run, but continue to operate irrigation system until this product has been cleared from the last sprinkler head. This product can be injected during the irrigation cycle or as a separate application.

B. Solid-Set, Portable (Wheel Move, Side Roll, End Tow, or Hand Move) Irrigation Equipment With stationary systems, an effectively designed in-line Venturi applicator unit is preferred to support even and quick distribution. However, a positive-displacement pump can also be used. For solid set systems, determine acreage covered by sprinkler. Fill the tank of injection equipment with water and adjust flow to use contents over 30 to 45 minutes. Mix desired amount of this product for acreage to be covered with water so that the total mixture of this product plus water in the injection tank is equal to the quantity of water used during calibration. Provide chemical supply tank agitation sufficient for mixing until chemigation is completed. Operate entire system at normal pressures recommended by the manufacturer of injection equipment used, for amount of time established during calibration.

RESISTANCE MANAGEMENT ON ORNAMENTALS AND CROPS
BROADFORM is a dual mode of action, site-specific fungicide belonging to the strobilurin class of chemistry and an inhibitor of succinate dehydrogenase (SDHI). Fungal pathogens are known to develop resistance to fungicides with a specific mode of action. When site-specific fungicides are introduced without a clear resistance management strategy, resistance development may be rapid, particularly with greenhouse use.

Many fungi which attack ornamentals and flowering plants including Botrytis and powdery mildews have a history of fungicide resistance development. Because resistance development cannot be predicted, implementation of suitable strategies to manage the resistance risk to BROADFORM is needed.

To minimize the risk of resistance development to BROADFORM, the following practices are prescribed.

1. Use BROADFORM preventively.

2. For Leaf Spots and diseases other than Powdery Mildew, Downy Mildew, and Botrytis:

   A. Use no more than two (2) applications of BROADFORM before rotating to another
effective product that is not in the strobilurin or SDHI class of chemistry for two (2) applications before rotating back to BROADFORM.

OR

B. Rotate to another fungicide of non-strobilurin/SDHI chemistry after each BROADFORM application.

3. For Powdery Mildew, Downy Mildew, and Botrytis:

A. Between each BROADFORM application, make two (2) applications of a fungicide of nonstrobilurin chemistry before rotating back to BROADFORM.

OR

B. Rotate to another fungicide of non-strobilurin/SDHI chemistry after each BROADFORM application.

4. Make no more than four (4) foliar applications of BROADFORM per growing cycle or season for each pathogen. Soil applications are independent of this limit.

5. Do not use BROADFORM for disease control in fruit and vegetables grown in greenhouses for crop production.

Limitations, Restrictions, and Exceptions

ORNAMENTALS DIRECTIONS FOR USE

BROADFORM is a broad-spectrum fungicide for the control of certain foliar and stem diseases of listed ornamentals.

Foliar Diseases: BROADFORM will control foliar diseases of ornamentals when applied as a foliar spray. Apply BROADFORM at 2-8 oz/100 gals to the point of drip and repeat at 7 to 14-day intervals until the threat of disease is over. Start applications when conditions are favorable for disease development and continue until the threat of disease is over.

ORNAMENTAL USE RESTRICTIONS
- Do not apply more than 27.3 fl. oz. of BROADFORM per acre of production or acre of landscape per year or crop cycle for plants grown in outdoor nurseries, outdoor seedbeds, field plantings, and landscapes.

- Do not apply more than 27.3 fl. oz. of BROADFORM per acre per year or crop cycle to seedlings and plants grown in greenhouses, containers, and other enclosed structures.

- For foliar applications, do not apply more than 8 fl. oz. of BROADFORM per acre per application.

- Under light disease pressure, do not exceed 13 applications at 2 fl. oz. for foliar applications.

- Do not use aerial applications.

27.3 fl. oz: The yearly rate on ornamentals contains 0.446 lbs each of trifloxystrobin and fluopyram per acre.

8 fl. oz: The maximum single rate for foliar applications in ornamentals contains 0.13 lbs fluopyram and trifloxystrobin per acre.

ORNAMENTAL USE PRECAUTIONS

- Do not apply or allow drift to Concord grapes or plant injury may occur. Spray equipment must be rinsed before application of other products to Concord grapes or plant injury may occur.

- To avoid spray drift, do not apply when conditions favor drift beyond the target area. Avoid spray overlap.

APPLICATIONS FOR ORNAMENTAL DISEASES CONTROL

Application method

- Apply BROADFORM as a foliar spray to the point of drip, at the prescribed rates in 100 gallons of water before disease is detected or when conditions are favorable for disease development. Continue at the prescribed interval until the disease threat is over. Under heavy disease pressure, use the highest rate and the shortest interval. Under light disease pressure, the application interval may be extended. Use of
spray additives is not required. Any spray additive must be evaluated prior to use. Label directions are based on data with no additives.

- For spray application do not exceed 100 gallon per acre of spray volume.

Ornamental disease control use directions
The plants that BROADFORM has been tested on, diseases that are controlled, and specific directions for use are listed in Tables 1 and 2. Refer to Table 1 for information on ornamentals and diseases that have been evaluated, and Table 2 for specific pathogens controlled, and guidelines on the rates and timing of application.

REstrictions:
- Do not use BROADFORM on leatherleaf fern.

Note:
- Non-bearing trees are defined as trees that will not bear fruit until at least 1 year after treatment.
- Due to the large number of species and varieties of ornamentals and nursery plants, it is impossible to test every one for tolerance. For additional desired plants/cultivars, treat several plants with the prescribed rates and evaluate the tolerance of treated plants.

Application Timing
Under heavy pressure, use the highest rate and the shortest interval. Under light disease pressure, the application interval may be extended.

Interval between Applications: 7-14 until the threat of disease is over.

Method
 Foliar spray

Restricted Entry Interval

12 hours

Timings
 Foliar spray