TURFGRASS SITES - PYTHIUM ROOT DYSFUNCTION

General Information

Product Information
This package contains Lexicon Intrinsic brand fungicide, a suspension concentrate (SC) containing the active ingredients fluxapyroxad and pyraclostrobin. The active ingredients in Lexicon Intrinsic belong to two classes of fungicides, the succinate-dehydrogenase (SDHI) inhibitor and the strobilurins or quinone outside inhibitor (QoI) classes. To maximize disease control, apply Lexicon Intrinsic in a regularly scheduled protective spray program and use in a rotation program with other fungicides.

Preventive applications optimize disease control resulting in improved plant health.

Because of its high specific activity, Lexicon Intrinsic has good residual activity against target fungi.

Modes of Action
Fluxapyroxad and pyraclostrobin, the active ingredients in Lexicon Intrinsic, belong to the groups of respiration inhibitors classified by the U.S. EPA and Canada PMRA as target site of action Group 7 and Group 11 fungicides, respectively.

Resistance Management
Lexicon Intrinsic contains fluxapyroxad and pyraclostrobin, a premix of a Group 7 and a Group 11 fungicide, and is effective against pathogens resistant to fungicides with modes of action different from those of QoI fungicides (target site Group 7 and Group 11), such as the dicarboximides, sterol inhibitors, benzimidazoles, or phenylamides. Fungal isolates resistant to Group 7 or Group 11 fungicides may eventually dominate the fungal population if Group 7 or Group 11 fungicides are used predominantly and repeatedly in the same turfgrass area in successive years as the primary method of control for the targeted pathogen species. This may result in reduction of disease control by Lexicon Intrinsic or other Group 7 or Group 11 fungicides.

To maintain the performance of Lexicon Intrinsic in turfgrass, DO NOT exceed the total number of sequential applications of Lexicon Intrinsic. Follow label instructions

for sequential use of Lexicon Intrinsic or other target site of action Group 7 or Group 11 fungicides with a similar site of action on the same pathogens.

The following recommendations may be considered to delay the development of fungicide resistance:

1. Tank mixtures - Lexicon Intrinsic provides more effective resistance management of most of its target pathogens because it is a premix of two fungicides with different modes of action. If Lexicon Intrinsic is used in tank mixes with fungicides from different target site of action groups that are registered/permitted for the same use and effective against the pathogens of concern, use at least the minimum labeled rates of each fungicide in the tank mix.

2. Integrated Pest Management (IPM) – Integrate Lexicon Intrinsic into an overall disease and pest management program. Follow cultural practices known to reduce disease development. Consult your local extension specialist, certified crop advisor, and/or BASF representative for additional IPM strategies established for your area. Lexicon Intrinsic may be used in agricultural extension advisory (disease forecasting) programs, which recommend application timing based on environmental factors favorable for disease development.

3. Monitoring - Monitor efficacy of all fungicides used in the disease management program against the targeted pathogen and record other factors that may influence fungicide performance and/or disease development. If a Group 7 or Group 11 target-site fungicide such as Lexicon Intrinsic brand fungicide appears to be less or no longer effective against a pathogen that it previously controlled or suppressed, contact a BASF representative, local extension specialist, or certified crop advisor for further investigation.

Restrictions and Limitations

Maximum seasonal use rate - DO NOT apply more than a total of 1.95 fl ozs of Lexicon Intrinsic per 1,000 sq ft per year (85 fl ozs Lexicon Intrinsic per acre per year) [2.77 lb ai/A/year].

New York State maximum seasonal use rate - DO NOT apply more than a total of 1.7 fl ozs of Lexicon Intrinsic per 1,000 sq ft per year (74 fl ozs Lexicon Intrinsic per acre per year)

Aerial Applications - When spraying in the vicinity of aquatic areas:
- DO NOT apply more than a total of 1.7 fl ozs of Lexicon Intrinsic per 1,000 sq ft per year (74 fl ozs Lexicon Intrinsic per acre per year) [2.14 lbs ai/A/year].
- Use medium-to-coarse spray droplet size spectrum.

Ground Applications - When spraying in the vicinity of aquatic areas:
- No buffer required for nozzle heights 20 inches or less.
- Maintain a 15 foot buffer when setting spray boom height greater than 20 inches above the crop canopy.
- Use fine-to-medium/coarse spray droplet size spectrum.

Refer to Application Rates and Intervals table for sequential application intervals of Lexicon Intrinsic.

For use on turfgrass only.

After application, allow foliage to dry before mowing.

DO NOT apply through any type of irrigation equipment to turfgrass, except on sod farms.

This product cannot be used to formulate or reformulate any other pesticide product.

Aerial application is permitted on sod farms only.

For aerial application in New York State, DO NOT apply within 100 feet of aquatic habitats (such as, but not limited to lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fishponds).

Lexicon Intrinsic is not for sale, distribution, or use in Nassau and Suffolk counties in New York State.

Application Instructions
Use Lexicon Intrinsic for disease control in the following turfgrass sites:
- Golf courses
- Residential, institutional, commercial, and municipal lawns
- Parks
- Recreational areas including sports and athletic fields

- Cemeteries
- Sod farms

Lexicon Intrinsic controls a range of diseases. See Application Rates and Intervals table for specific use instructions.

Application Rates

Apply Lexicon Intrinsic before disease development or in the early stages of development. Apply Lexicon Intrinsic at the rates specified in the Application Rates and Intervals table. Calibrate sprayer prior to use. Apply Lexicon Intrinsic in 1 to 4 gallons of water per 1,000 square feet (44 to 174 gallons per acre). For maximum efficacy under heavy disease pressure or on higher cuts of turf, 2 to 4 gallons of water per 1,000 square feet is recommended. Use the shorter specified application interval and/or the higher specified rate when prolonged favorable disease conditions exist, or when target disease is persistent. Repeat applications at the specified interval, as necessary. DO NOT exceed the specified application rate or fail to follow the use restrictions listed in the Resistance Management and Restrictions and Limitations sections. All applications must be made according to the use directions. Failure to follow directions and precautions on this label may result in turfgrass injury and/or inferior disease control. For root and crown diseases such as fairy ring and bermudagrass decline, see specific requirements and recommendations in the Application Rates and Intervals Table.

Ground Application

Apply Lexicon Intrinsic using sufficient water volume and pressure for thorough coverage of turfgrass foliage. Apply Lexicon Intrinsic at the rates specified in the Application Rates and Intervals table.

Aerial Application

Aerial application is permitted on sod farms only.

Apply Lexicon Intrinsic at the rates specified in the Application Rates and Intervals table in no less than 10 gallons of spray solution per acre. Repeat applications at the specified interval as necessary. DO NOT apply when conditions favor drift from target area.

For aerial application in New York State, DO NOT apply within 100 feet of aquatic habitats (such as, but not limited to lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fishponds).

Spray Drift Management

DO NOT spray when conditions favor drift beyond the area intended for application. Conditions that contribute to drift include thermal inversion, wind speed and direction, spray nozzle/pressure combinations, spray droplet size, temperature/humidity, etc. Contact your state extension agent for spray drift prevention guidelines in your area. All application equipment must be properly maintained and calibrated using appropriate carriers. Avoiding spray drift at the application site is the responsibility of the applicator.

When drift may be a problem, take measures to reduce drift, including:

1. DO NOT spray if wind speed is more than 10 mph. If non-target crops are downwind, use caution when spraying if wind is present.
2. Use caution when conditions are favorable for drift (high temperatures and or low relative humidity).
3. DO NOT apply when a temperature inversion exists. If inversion conditions are suspected, consult local weather services before applying.

Aerial Application Methods and Equipment

The interaction of many equipment-related and weather-related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

DO NOT apply when possible drift can occur to: unprotected persons; to food, forage, or other plantings that might be damaged; or crops that would then be rendered unfit for sale, use or consumption.

Applicators must follow these requirements to avoid off-target drift movement from aerial applications to agricultural field crops.

1. The distance of the outermost nozzles on the boom must not exceed 3/4 the length of the fixed wingspan or 75% of rotor blade diameter.
2. Nozzles must always point backward parallel with the airstream and never be pointed downward more than 45 degrees.

Spray should be released at the lowest possible height consistent with good pest control and flight safety. Aerial applications more than 10 feet above the crop canopy should be avoided. Ground applications more than 20 inches above the crop canopy should be avoided. Make aerial or ground applications when wind velocity favors on-target product deposition (approximately 3 to 10 mph). DO NOT apply when wind velocity exceeds 10 mph. Avoid applications when wind gusts approach 10 mph. Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.

Where states have more stringent regulations, they must be observed.

Use Precautions for Sprinkler and Drip Irrigation Application

Drip Irrigation
Apply Lexicon Intrinsic through drip irrigation systems to turfgrass for soilborne disease control. Apply 8 to 16 fluid ounces Lexicon Intrinsic brand fungicide per acre as a preventive disease application. The soil must have adequate moisture capacity before drip application.

Stop drip irrigation at fungicide depletion from the main feed supply tank or after 6 hours from start, which ever is shorter. For maximum efficacy, delay subsequent irrigation (water only) for at least 24 hours after drip application.

Sprinkler Irrigation
Apply Lexicon Intrinsic through sprinkler irrigation to turfgrass on sod farms. Apply this product through sprinkler irrigation systems, including center pivot, lateral move, end tow, side [wheel] roll, traveler, big gun, solid set, or hand move irrigation systems. DO NOT apply this product through any other type of irrigation system except as specified on this label.

Apply with center pivot or continuous-move equipment distributing 1/2 acre-inch or less during treatment. In general, use the least amount of water required for proper distribution and coverage. If stationary systems (solid set, handlines, or wheel lines

other than continuous-move) are used, inject this product into no more than the last 20 to 30 minutes of the set.

DO NOT apply when wind speed favors drift beyond the area intended for treatment. Plant injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water. Adequate coverage of foliage is required for control.

Maintain good agitation during the entire application period. If you have questions about calibration, contact a state extension service specialist, equipment manufacturers or other experts.

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 backflow.

The pesticide injection pipeline must contain a functional, automatic quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also 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 system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor 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.

Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water. 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.

DO NOT connect an irrigation system used for pesticide application to a public

water system unless the pesticide label-prescribed safety devices for public water systems are in place.

Specific Instructions for Public Water Systems

1. 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.
2. Chemigation systems connected to public water systems must contain a functional reduced-pressure zone backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, discharge the water from the public water system into a reservoir tank before pesticide introduction. There shall be a complete physical break (air gap) between the 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.
3. The pesticide injection pipeline must contain a functional, automatic quick-closing check valve to prevent the flow of fluid back toward the injection pump.
4. The 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.
5. The system 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.
6. 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.
7. DO NOT apply when wind speed favors drift beyond the area intended for treatment.

Turfgrass Tolerance
Because of variability within turfgrass species, application techniques and possible tank mixes, neither the manufacturer nor the seller has determined if Lexicon Intrinsic can be safely used on all turfgrasses under all conditions. Therefore,

determine if Lexicon Intrinsic can be used safely before broad application by applying the specified use rate of Lexicon Intrinsic and any potential tank mix on a small test area of turfgrass under conditions expected to be encountered. Monitor for any adverse effects for 14 days after application.

Limitations, Restrictions, and Exceptions

Application Interval (days): 14 to 28
Maximum Number of Sequential Applications: 2

Application Information
- Apply preventively or early curative for control. Following sequential application, rotate to other effective fungicides for this disease prior to additional Lexicon Intrinsic application. Make 2 applications in the fall, 14 to 28 days apart, followed by 2 applications in the spring, 14 to 28 days apart. Irrigate immediately following application.

- DO NOT apply more than a total of 1.95 fl ozs of Lexicon Intrinsic brand fungicide per 1,000 sq ft per year (85 fl ozs Lexicon Intrinsic per acre per year).
- Following a sequential application of Lexicon Intrinsic, DO NOT reapply until after another effective non-Group 7 or non-Group 11 fungicide has been used.

Method
Broadcast/Foliar Air
Broadcast/Foliar Ground
Broadcast/Foliar Air
Broadcast/Foliar Ground
Rates
field_rates 0
field_rates 1

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Restricted Entry Interval

12 hours

Timings
In the fall.
In the spring.