

# **TURFGRASS - ARMYWORM, CUTWORMS AND SOD WEBWORM**

## General Information

### Product Information

Applications of Zylam 20SG Systemic Turf Insecticide in residential areas may be made by commercially licensed applicators.

### Application to Turfgrass:

Use Zylam 20SG Systemic Turf Insecticide for the control of soil inhabiting pests of turfgrass such as Masked Chafers, European Chafer, Green June Beetle, May or June Beetle, Japanese Beetle, Oriental Beetle, Billbugs, Annual Bluegrass Weevil, Black Turfgrass Ataenius, Ants (excluding fire, pharaoh, harvester, Argentine, or carpenter ants), and Mole Crickets. Zylam 20SG Systemic Turf Insecticide is also suitable for surface feeding insects such as: armyworms, cutworms and chinchbugs in turfgrass areas.

Apply Zylam 20SG Systemic Turf Insecticide as directed on outdoor residential, recreational and commercial turfgrass in sites such as home lawns, commercial lawns, multi-family residential and apartment complexes, grounds or lawns around business and office complexes, shopping centers, airports, military and other institutions, cemeteries, golf courses, playgrounds, parks, athletic fields and sod farms.

Target timing of Zylam 20SG Systemic Turf Insecticide applications at or just prior to or during egg laying of the target pests. The need for an application can be based on historical and/or physical monitoring of the site, current season adult trapping, previous experience or other methods.

Optimum control will be achieved when applications are made at first appearance or just prior to or at egg hatch of the target pests followed by sufficient irrigation or rainfall to move the active ingredient through the turf thatch layer. Consult your State Extension Service for information regarding specific application timing.

Do not apply when the target site is saturated with water. Adequate distribution of the active ingredient cannot be achieved when these conditions exist.

### Resistance Management

Zylam 20SG Systemic Turf Insecticide contains a Group 4A insecticide.

Insect biotypes with acquired resistance to Group 4A may eventually dominate the insect population if Group 4A insecticides are used repeatedly in the same crop or in successive years as the primary method of control for a targeted species. This may result in partial or total loss of control of those species by Zylam 20SG Systemic Turf Insecticide or other Group 4A insecticides.

To delay the development of insecticide resistance in greenhouse, nursery and interiorscape use sites, strongly consider the following guidelines:

- Do not apply Zylam 20SG Systemic Turf Insecticide or other Group 4A insecticides to consecutive generations of the same insect pest species.
- Do not drench soil media with Zylam 20SG Systemic Turf Insecticide or other Group 4A insecticides more than one time per crop cycle or three months, whichever is shorter.
- Do not make more than two foliar or broadcast sprays of Zylam 20SG Systemic Turf Insecticide or other Group 4A insecticides to a single crop during a two-month period.
- Do not make more than one soil drench and one foliar or broadcast spray with Zylam 20SG Systemic Turf Insecticide or other Group 4A insecticides during a two-month period.
- Base insecticide use on a comprehensive IPM program.
- Monitor treated insect populations for loss of field efficacy.
- Contact your local extension specialist, certified crop advisors, and/or manufacturers for insecticide resistance management and/or IPM guidelines for the specific site and resistant pest problems.
- For further information or to report suspected resistance, you may contact PBI/Gordon Corporation 1-877-800-5556.

#### Application Procedures and Spray Equipment

Ground Application: Select spray nozzles that will provide accurate and uniform spray deposition. Use spray nozzles that provide medium sized droplets and reduce drift. To help insure accuracy, calibrate sprayer before each use. For information on spray equipment and calibration, consult nozzle manufacturers and/or State Extension Service specialists.

Apply Zylam 20SG Systemic Turf Insecticide using sufficient water volume to provide thorough and uniform coverage. In situations where a dense canopy exists and/or pest pressure is high, use greater water volumes. The use of a spray

adjuvant may improve spray coverage. Do not apply under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur.

Applications to turfgrass: Apply Zylam 20SG Systemic Turf Insecticide through conventional spray equipment in a minimum of 1 gallon of finished spray per 1000 sq. ft. Ensure adequate distribution in the treated area using accurately calibrated equipment normally used for application of turfgrass insecticides. Use equipment that will produce a uniform, coarse droplet spray, using a low pressure setting to eliminate off target drift. Check calibration periodically to ensure that equipment is working properly. Prevent skips by using marker dyes or foam aids.

#### Restrictions

- Do not graze treated areas or use clippings from treated areas for feed or forage.
- Prevent runoff or puddling of irrigation water following application.
- Keep children and pets off treated areas until spray has dried.
- Do not apply to areas that are water logged or saturated, or frozen, which will not allow penetration into the root zone of the plant.

#### Minimizing Spray Drift

As with all crop protection products, it is important to minimize off target movement. Do not allow spray to drift onto adjacent land, crops, or aquatic areas.

To minimize spray drift:

1. Make applications when wind velocity favors on-target product deposition (approximately 3 to 10 mph). Do not apply when wind velocity exceeds 10 mph. Do not apply when wind gusts approach 10 mph.
2. Risk of exposure to sensitive aquatic areas can be reduced by not applying when wind direction is toward the aquatic area.
3. Do not cultivate or plant crops within 25 feet of the aquatic area as to allow growth of a vegetative filter strip.
4. Do not make applications during temperature inversions. Inversions are characterized by stable air and increasing temperatures with increased height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.
5. Use the largest droplet size consistent with good pest control. Small droplets are more prone to spray drift and can be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible, and by not using excessive spray boom pressure.

6. Apply as close to target plants as practical to obtain a good spray pattern for adequate coverage. Do not apply more than 10 ft above the crop canopy.

7. For aerial applications, mount spray boom on the aircraft so as to minimize drift caused by wing tip vortices. Use minimum practical boom length and do not use boom that exceeds 75% of wing span or rotor diameter.

## Limitations, Restrictions, and Exceptions

### Restriction

Do not apply more than a total of 2.7 lb per acre (1.0 oz per 1000 sq.ft.) of Zylam 20 SG Systemic Turf Insecticide per acre of turf per year.

### Important Notes:

- Apply in sufficient water to ensure thorough coverage of target area. Use a minimum of 50 gallons finished spray per acre.
- Consult your local State Extension Service or State Extension Turfgrass Specialists for more specific information on timing of insecticide applications.
- For optimal absorption, translaminar movement, and control, avoid applications immediately before rainfall or irrigation.

For best results, do not irrigate or water for 24 hours after application. If rainfall does not occur in 48 hours after application, irrigate with sufficient water to ensure movement of the active ingredient through the thatch and into the root zone.

### Method

[Broadcast/Foliar Ground](#)

### Rates

[field rates 0](#)

[field rates 1](#)

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### Restricted Entry Interval

12 hours

EXCEPTION: If product is drenched or soil-injected, workers may enter the area at any time if there will be no contact with anything that has been treated.

### Timings

[At first appearance while pests are small.](#)