

Columbus Insecticide



For the control of African Black Beetle, Argentinian Scarab and Billbug in Turf

Technical Brief

Active Ingredient:	250 g/L thiamethoxam
Mode of Action Group:	4A - Neonicotinoids
Formulation:	Suspension Concentrate
Mode of Action:	Agonist of the nicotinic acetylcholine receptor, affecting the synapses in the insect's central nervous system. Acts by blocking the receptor sites in the nervous system of target pests. The message sent from the preceding nerve is either not received by the next nerve or it receives an incomplete message. Insects that have ingested or absorbed thiamethoxam become immobile and stop feeding very soon after ingesting or coming in contact with thiamethoxam. Insecticide with contact, stomach and systemic activity.
Behaviour in Plants:	Rapidly taken up into the plant and transported acropetally (upwards) in the xylem. Exhibits excellent trans-stemic (translaminar & systemic) movement in the plant tissue.

Benefits

- Control of African Black Beetle, Argentinian Scarab and Billbug larvae (grubs)
- Suitable for use on broad-acre areas such as turf farms, sporting fields, parks, ovals and fairways
- Save up to 60,000 litres of irrigation water per hectare for soil incorporation of applications during dry seasonal weather
- Low to no odour
- Suitable for turf situations with irregular irrigation
- Low environmental impact including low mammalian toxicity

Insect Management

Situation	Pests	Rate	Critical Comments
Turf, lawns	First instar larvae of African Black Beetle (<i>Heteronychus arator</i>)	800 mL to 1.2 L/ha in at least 500 L water per ha	Apply prior to or at peak egg hatch, mid spring to early summer, or when small larvae are present.
	First and second instar larvae of Argentinian Scarab (<i>Cyclocephala signaticollis</i>)		Ensure product placement as close to soil surface as possible. Total application volume should not be lower than 500 L/ha. For best results use extremely course droplets [Turbo Floodjet® (TF5) or TurfJet® (TTJ10)]. Preferably spray onto wet or dewy grass. Irrigate with 6 to 12 mm of water commencing within 1 hour of application.
	Larvae of Billbug (<i>Sphenophorus brunnipennis</i>)		Monitor adult activity through late spring and early summer. Spray when numbers peak or when small larvae (4 mm) are found in the thatch or surface soil. Early application is essential to minimise grass damage due to feeding. Use the higher rate when pest pressure is high or 2nd instar larvae are present. Ensure product placement as close to soil surface as possible. Total application volume should not be lower than 500 L/ha. For best results use extremely course droplets [Turbo Floodjet® (TF5) or TurfJet® (TTJ10)]. Irrigate with 6 to 12 mm of water commencing within 1 hour of application.

Note: The above table represents only a modified extract from the full registered label.

Always read the full product label before use.

How to get the most out of your application

- To be effective Columbus Insecticide must be placed as close to the soil surface as possible. Ensure that equipment is properly calibrated to give an even distribution at the correct volume. Apply in a minimum of 500 L water/ha.
- Total application volume should not be lower than 500 L/ha. For best results use extremely coarse droplets [Turbo Floodjet®(TF5) or TurfJet® (TTJ10)].
- Preferably spray onto wet or dewy grass.
- Columbus is particularly active against the first and second instar larvae of the most destructive turf-infesting grub species. The window for application should thus be around the peak egg laying period by adult beetles. This timing can be monitored by the increasing activity of adult beetles and are usually during spring and early summer.

Mixing and Compatibility

Add the required amount of Columbus Insecticide to clean water in half-filled spray tank with the agitator or by-pass in operation. Maintain agitation while filling tank with remainder of water. Agitate whilst spraying.

As formulations of other manufacturer's products are beyond the control of Turf Culture Pty Ltd, and water quality varies with location, all mixtures should be tested prior to mixing commercial quantities.

Packaging

Pack size: 1L

