

At Long Last: Meridian (thiamethoxam) is Slated for EPA Registration in Late 2006



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Since early 2000, Syngenta Crop Protection had been anxiously anticipating the registration of Meridian (thiamethoxam) for use on turf (golf and lawn/landscape) and ornamentals (urban landscape). Due to some regulatory considerations, the registration of Meridian had been delayed until additional information/data were provided to complete the necessary fulfillment of Environmental Protection Agency (EPA) guidelines. These requirements have recently been completed; consequently, Meridian is slated for EPA registration in late 2006.

What is Meridian and what does this mean for you?

Meridian™ is the trademark for thiamethoxam, a thianicotinyl insecticide in the neonicotinoid class of insecticides. Meridian controls a wide spectrum of sucking and chewing insect pests at very low use rates through contact and ingestion activity. Meridian is also an excellent systemic compound that is rapidly absorbed and transported in the xylem of the plant, thus providing an alternative use strategy. Meridian has a relatively long residual activity (about 120 days), thus providing long lasting control. Lastly, Meridian will be assigned the pesticide signal word "CAUTION" due to its relatively high Oral LD₅₀ value of > 5000 mg/kg (ppm).

What will the Meridian label look like?

Meridian will likely be available in two formulations (25WG and 0.33G), offering the flexibility of applying it with various application equipment. The target insect pests in turf will likely include: Japanese beetle, northern masked chafer, southern masked chafer, European chafer, May/June beetle (*Phyllophaga* spp.), Asiatic garden beetle, Oriental beetle, green June beetle, black turfgrass Ataenius (BTA), billbugs (*Sphenophorus* spp.), *Aphodius* spp., and ants. As a result of the relatively long residual activity of Meridian, it (like other related compounds) will enable turfgrass managers to have a wider application timing window, thus allowing greater application flexibility.

From an ornamentals perspective, the Meridian label will likely include: aphids, whiteflies, mealybugs, black vine weevil (adults), leafhoppers, plant bug, nipple gall, and blister gall. An added beneficial attribute of Meridian is that it has translaminar properties that enable the active ingredient (thiamethoxam) to penetrate the leaf surface.

What is the potential impact on beneficial arthropods (predators and parasites)?

The potential negative impact of Meridian on beneficial arthropods is minimal due to two factors: 1) short leaf surface residual activity and 2) the systemic properties (root absorption) of Meridian. These are important attributes that allow Meridian to be included in integrated pest management programs.

The registration of Meridian will be a viable addition to the relatively narrow selection of control agents (insecticides) currently commercially available in the turf and ornamental arena. As a result, turfgrass and ornamental plant material managers will soon have another possible choice in their insect control arsenal. ♣

163 Yard Par 3 eighth hole at the Refuge Golf Club in Oak Grove, Minnesota.



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