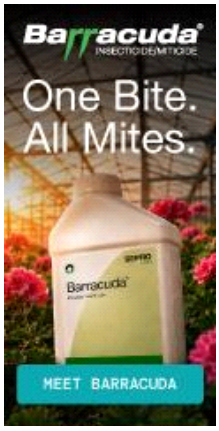
Turf Pesticides of 2023 & Smilax Caterpillar



Research and News on the latest pest management techniques

GROWERTALKS MAGAZINE greenPROFIT MAGAZINE

MONDAY, JANUARY 8, 2024







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Pest Talks

COMING UP THIS WEEK:

Smilax Caterpillar
Turf Insecticides
Turf Fungicides
Turf Herbicides



Who's Eating My Smilax?

Happy New Year, everyone!

I have a love-hate relationship with smilax or greenbriar. I hate the fact that they're everywhere in my woods, impossible to kill and have an amazing ability to draw blood from my legs or arms even if I protect myself. Long-sleeved shirts and long pants can become annoying in South Carolina's summer very quickly. I'm not sure the more permeable chainmail will perform any better.

I love smilax because it's perhaps the favorite snack of my mother-in-law's goats. They'll eat their weight in smilax if I can pull enough long vines off the pine and oak trees without getting myself all cut up. Anything for the insatiable and loudly demanding goats, right?

I also love it because my wife decorates our door with smilax during Christmas. A door adorned with dark green smilax makes you feel like you're going through the mouth of an abandoned cave occupied by dangerous beasts. A few blood-red deciduous holly berries add surprising touches to the atmosphere. A quote from one of our boys: "That's sick!" I didn't know if he meant the decoration worked for him or if my analogy just hit the mark.

I find groups of caterpillars congregating on the basal vine of smilax every fall. These are colorful caterpillars—black-and-white stripes and dots with yellow bellies and white stripes. I'd never tried to identify them. Even though I'm pretty good at identifying most bugs in pictures, I'm not always confident in identifying caterpillars. I tried this time.



It was easier than I thought. I typed in “smilax caterpillar” in my favorite search engine and it’s the second search result. There it is—the turbulent phosphila.

Wait, turbulent what? I assume the “turbulent” part comes from the stripes and dashes on the body. The scientific name is *Phosphila turbulenta* and the common name is the reverse of that. Very convenient and descriptive.

Although the common name is descriptive of the caterpillars, I can’t say the same about the adults. The adults look like many of the cutworm species I've seen—various shades of brown and tan with some faint patterns. They’re sort of bark or lichen-like, non-descriptive and unremarkable (well, at least for my uninterested eyes).

The turbulent phospila is a specialist of smilax or greenbriar, on which the caterpillars feed on the foliage in groups. This species is widely distributed in the eastern half of the United States and Canada from Texas to Ontario. Reportedly, two generations per year. That’s just about all we know about this species.

It amazes me how much I can learn if I can just get over my inertia and initial self-doubt. I finally identified them more than a decade after I'd seen them for the first time. I wonder what I can do if I just set my sights on doing something, like that cochineal scale book I’d been thinking about for years. Nah, I won’t give the idea too much urgency by making it my New Year's resolution. What did I say about inertia?



Turf Insecticides Introduced in 2023

For those of you who've followed this newsletter for a while, thank you, and you’re probably familiar with my top-of-the-year review of pesticides introduced in the previous year. I focus on pesticides registered for use on ornamental plants, but unfortunately, there weren’t many new introductions in 2023.

In lieu of that, I’m bringing you a review of pesticides that have been introduced to the turf market. Most

readers of this newsletter probably don't give a farthing for what's associated with turf, but I'll take the risk of doing such an exercise in this issue with the hope that those who also make a living from turf will learn something new. This exercise also helps me prepare for the yearly update to Clemson University's *Pest Control Guidelines for Professional Turfgrass Managers*.

Well, "new" is perhaps generous because while there are more introductions than the ornamental world, none of the new pesticides introduced to the turf market in 2023 really includes new active ingredients or modes of action.

But here we go …

Syngenta introduced Acelepryn Xtra for use on turfgrass and ornamental plants on golf courses, residential lawns, commercial grounds, landscapes, parks, playgrounds and athletic fields. Aceleperyn Xtra contains chlorantraniliprole and thiamethoxam. Both active ingredients are highly effective against grubs and billbugs, and the combination can achieve high efficacy against many other turfgrass pests, such as caterpillars (including fall armyworm), chinch bugs and ants.

Another insecticide, which has been announced, but isn't available to the market yet, is FMC's Durentis. Durentis contains chlorantraniliprole, which is an effective insecticide against white grubs and caterpillars. Chlorantraniliprole is a systemic insecticide and has long residual efficacy on both foliage and in the soil. I can't tell you much about this product since I don't have a label on hand. FMC stated that federal registration approval was expected in late 2023.



Turf Fungicides & Nematicides Introduced in 2023

Resilia root health solution—a three-way combination of fluopyram, prothioconazole and propamocarn HCL—was introduced by Envu to manage diseases (such as Pythium, fairy ring and summer patch) and nematodes. Resilia is registered for use on both warm- and cool-season golf course turf.

Envu also registered its Densicor fungicide in Hawaii. Densicor contains prothioconazole and has been used for managing many foliar and root diseases, such as fairy ring, take-all root rot and large patch. This fungicide is registered for use on golf course turf only.

SiteOne Landscape Supply introduced LESCO Flash, a broad-spectrum fungicide for many diseases, particularly dollar spot. Flash contains flutriafol and is registered for golf course turf only.

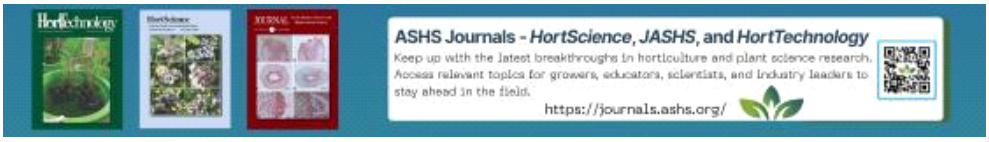
Syngenta launched Tuque exoGEM for protecting turf from snow mold infection. Tuque exoGEM isn't a one-trick pony, however, because it can also be used against other turf diseases, such as Anthracnose, leaf spots and brown ring patch. The broad-spectrum activity comes from the combination of fludioxonil and benzovindiflupyr. It's registered for use on warm- and cool-season golf course turf.

Syngenta has two fungicides that received re-registration approval in California. Ascernity is a combination of benzovindiflupyr and difenoconazole for controlling large patch, gray leaf spot, dollar spot and more. Briskway is a combination of azoxystrobin and difenoconazole. Briskway targets summer patch, Anthracnose, fairy ring and other diseases. Ascernity and Briskway are registered for use on warm- and cool-season golf course turf.

Nufarm introduced a new liquid formulation of metconazole, called Tourney EZ, for broad-spectrum management of more than 16 turf and ornamental diseases. The liquid formulation has the same use rate as the water-dispersible granule formulation for both foliar and drench applications. This new formulation is registered for use on golf courses, sport fields, sod farms, lawns and landscapes.

Corteva Agriscience announced the addition of Floxcor to its portfolio. Floxcor contains fluoxastrobin, which is a FRAC 11 or strobilurin ("strobi") fungicide, and has broad-spectrum, systemic efficacy against

a wide range of ornamental and turf diseases, such as Anthracnose, brown patch, fairy ring and Pythium.



Turf Herbicides Introduced in 2023

Lots of herbicides were introduced to the turf market in 2023. That's not really a surprise since the number of products reflects how much herbicides are being used in the turf industry. An average golf course spends about 30% of its pesticide budget on herbicides. The number jumps to about 50% for lawn and landscape care.

PBI-Gordon's Akron herbicide has been approved for use in most states. Akron contains pyrimisulfan and is registered for the control of nutsedge, kyllinga and a handful of broadleaf weeds in established warm- and cool-season turf. It's approved for use on residential and commercial lawns, golf courses, parks, athletic fields, non-crop areas and sod farms.

Syngenta launched Recognition, which contains trifloxysulfuron-sodium. This is a selective post-emergence herbicide for controlling certain grasses, broadleaves and sedges in established warm-season turf. Use sites include golf courses, sod farms, sport fields, residential lawns and other non-residential turf.

Syngenta also announced the label expansion of Manuscript (pinoxaden) to include uses on cool-season turf in golf courses, lawns, sod farms and sport fields. The label expansion allows cool-season turf managers and producers to more effectively manage grassy weeds in certain turf species, such as ryegrass in annual bluegrass turf.

Neudorff North America introduced Fiesta Granular Weed & Feed in September. Fiesta Granular Weed & Feed not only fertilizes, but it also controls some weeds, mosses, diseases, algae and lichens. If you think this product contains a mix of various ingredients, you're wrong. It has 14% sodium ferric EDTA by weight and the N-P-K analysis of 8-0-1 comes from lysine, sodium ferric EDTA and potassium chloride. That's all. Sodium ferric EDTA is known to be a broad-spectrum pesticide that can suppress many living organisms. This weed and feed is registered for use in lawns, golf courses, parks, playgrounds, cemeteries, athletic fields and other non-crop turf areas.

SiteOne Landscape Supply introduced LESCO Three-Way LO, which is a low-odor, three-way mix of 2,4-D, MCPA and dicamba used for broadleaf management in both warm- and cool-season turf. It's registered for residential and commercial turf, golf courses, sport fields, sod farms, rights-of-ways and other non-crop industrial areas.

Albaugh Specialty Products announced the registration of Ethofumesate 4SC Select. Ethofumesate is a selective herbicide for pre- and post-emergent control of annual bluegrass, and several other grassy and broadleaf weeds. It's registered for sod and seed production, golf courses, parks, cemeteries, and residential and commercial lawns.

Quali-Pro launched Prodoxaben (a pre-mix of prodiamine and isoxaben), a pre-emergent herbicide for grass and broadleaf weeds. The granular formulation is available now and a liquid SC formulation is coming soon. This product can be used on lawns, established turf (excluding golf course greens and tees), non-crop areas, ornamental landscapes, nurseries and Christmas tree farms.

RightLine introduced Addit, which contains carfentrazone, for the management of broadleaf weeds in lawns and stone-covered yards by landscape care professionals.

Moghu USA announced the registration of PoaCure (methiozolin) in California in August. PoaCure is a selective pre- and post-emergent herbicide against annual bluegrass and roughstalk bluegrass. This product is only registered for golf course turf.

See y'all next time!



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