



Home, Yard, and Garden Pest Newsletter

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Brown Marmorated Stink Bug

Brown marmorated stink bug (*Halyomorpha halys*; BMSB) is an introduced species that was first recorded in Illinois in 2010. BMSB can feed on over 300 species of plants. It can be a pest of fruits, vegetables, field crops and ornamental plants. It’s ornamental hosts include maple, oak, spirea, viburnum and rose, among many others. These insects have straw-like mouthparts that they use to suck fluids from plants. The resulting injury can look like discoloration or dead patches on leaves. In fruits and vegetables, injury can appear as discoloration, lesions or cat-facing.



Brown marmorated stink bug (Halyomorpha halys), Kristie Graham, USDA ARS, Bugwood.org

In autumn, BMSB can also become a nuisance pest in homes. As the days shorten and temperatures cool, adult BMSB will begin to look for overwintering sites. While they would normally seek out crevices in the landscape, gaps in our homes can also provide shelter from the elements. They cannot reproduce inside homes but they can aggregate in homes and produce an unpleasant odor when they are roughly handled. Once they go dormant for the winter, they will not become active again until temperatures warm in the spring.

BMSB can be identified by the pale banding on their antennae, the dark and light pattern along the edges of their abdomen and the smooth shoulder area near their head (image above). Many similar species have a saw-toothed or spiked shoulder area or lack banding on their antennae.

Control in ornamental plants:

Hand picking insects from plants and netting susceptible fruits are the first line of defense for protecting ornamental plants from BMSB. Netting can be a good option for keeping BMSB from injuring vegetables or ornamental fruits. Netting should be placed over the plants prior to fruiting, so this is something that can be done early in the season. Hand picking insects from affected plants or knocking them into soapy water can be done anytime and on any type of plant.

Control in and around the home:

The best way to prevent BMSB from entering homes is to focus on exclusion by sealing any gaps and repairing window screens. If BMSB find their way into homes, they do not cause damage and can be physically removed by vacuuming, dropping them into a cup of soapy water or smashing them. If aggregations on the outside of the house become a problem, pest control companies may be able to identify and fill gaps or provide a perimeter treatment, though the treatment must be timed correctly to be effective.

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Common Weed Control Mistakes

As Groucho Marx put it so well, “Learn from the mistakes of others. You can never live long enough to make them all yourself.” I’m hopeful my kids will take this lesson to heart. Fortunately, we learn from our mistakes, most of the time. Preventing mistakes is best, but we are all humans and mistakes are unavoidable. Maybe you have seen the bumper sticker, “Mistaeks Happen”.

Often mistakes happen in weed control. Many are preventable simply by carefully reading, understanding, and following the herbicide label. Spills can be prevented but let’s face it, they still happen.

In addition to the label directions being understood, the herbicide mode of action should also be understood at least somewhat. How is it taken up by the plant? Where does it need to be put so uptake can occur? A gentleman told me once that he had tried to use a herbicide on his tree seedlings growing around his house and his control attempts were unsuccessful. We discussed his application methods and he said that he knew trees took things up from the roots. Therefore, he applied the herbicide to the ground. Unfortunately, his herbicide should have been applied to the leaves. Had he read the label? No.

Does the herbicide move in the plant? Is it systemic? If so, patience is needed as it will take a while for injury symptoms to appear on the leaves followed

by complete kill if all goes well. Once I was hired to do some garden work for a professor. She had me spray some weeds with a systemic herbicide. Upon completion of that activity, I inquired about my next task. She gave it some thought, handed me a knife, and told me to return to the weeds I had just sprayed and cut them down. We then had a little chat about how her herbicide works and that patience and time were needed.

How much herbicide is needed to kill unwanted weeds? If a little is good, isn’t more better? No. That line of reasoning only works with things like chocolate. Some would argue it won’t even work with that. Again, the product label will give specific guidance on rates. The maximum rate should never be exceeded. Rates have been carefully evaluated to determine what is most effective. Herbicide rates that are too high can result in poor weed control due to damaged or burned plant tissue which prevents absorption into the plant. It’s like setting out to break into a house by picking the lock on the door, but first you set fire to the door. Entering is going to be challenging.

Certainly too much of a herbicide can reduce control but so can too little and placement is also important. Obtaining uniform coverage of applications can be tricky and skips in the pass can lead to unaffected weeds. Perhaps a uniform preemergent application is made but a well-meaning gardener or dog digs up the area and destroys that chemical barrier that was intended to prevent weed growth. Or maybe a herbicide wasn’t used at all but mulch was applied to cover the soil and prevent germination. If new plants are added to the site and care isn’t taken to keep dug up soil from mixing in with the mulch, you can guess what will happen. Odds are good that there are weed seeds in the newly displaced soil.

That takes us to tillage, which works well to remove smaller weeds. Unfortunately, bare soil won’t stay bare and new weeds will return. Tillage isn’t necessarily a mistake but thinking you’ll need to till only once is. Tillage moves buried weed seeds up to the surface where they can then receive enough sunlight to germinate. So plan to repeat tillage or better yet, invest in a winged weeder that cuts weeds just below the surface without disturbing the soil surface. In my experience, these don’t work perfectly but they do minimize soil disturbance compared to a traditional hoe.

What about homemade herbicide mixtures? Aren't they safer and less expensive than traditionally manufactured herbicides? Recipes abound on the internet but they aren't recommended. It's best to



The soil being mixed with this mulch likely contains weed seeds. Michelle Wiesbrook. University of Illinois.

use research based products that come with labels that provide application specifics and tell you how to properly cover up your body just in case something goes wrong and the weed killer ends up in your eye (vinegar is caustic by the way). A weed scientist in Wyoming once compared a “homemade” herbicide recipe to glyphosate. He took a close look at the effectiveness, cost, and toxicity of both and added a dose of humor. Learn what he discovered here: <https://plantoutofplace.com/2014/06/salt-vinegar-and-glyphosate/>. There are vinegar-containing EPA registered products available in a garden center near you. Check them out! But it helps to know what type of weed you are trying to control, yet, another mistake commonly made! Vinegar burns off the top growth and won't move down into the roots. Just like the Terminator, your perennial weeds will be back!

One last mistake is allowing weeds to develop seeds or letting those seedheads remain on site. It's late

in the growing season. Our landscapes likely have more weeds than we care to admit. Usually the heat makes us retreat to the cooler house. We're tired and weary and perhaps ready for frost so the last zucchini plant will finally die. We'll start fresh next year. But allowing weed seeds to stay ensures more work for the next several years. The old saying, “One year's seeding makes seven years' weeding” is sadly inaccurate when it comes to certain weeds that may remain viable for say 50 years. If hand removal of the entire weed seems too daunting, simply pull out or cut off the tops and bag them for disposal.

Finally, don't spend too much time worrying about your mistakes. Mistakes become experience.

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Turfgrass Rust



Close-up view of turf blades with rust pustules.

Turf rust outbreaks are commonly seen late summer to early fall as moderate temperatures and long evening dew periods occur. Rust diseases are most severe on slow-growing turf stressed by drought, summer heat, low-fertility, shade, or compaction. From a distance, severely infected turf appears thin and tinted yellow, red, or brown. Closer inspection will reveal individual blades with numerous yellow-or-

ange pustules (Photo 2). Orange spores produced within these pustules easily transfer to shoes, pets mowers, or anything that contacts the rust-affected grass. While harmless, the spores can be a nuisance.



Turfgrass affected by rust

Rust mostly causes aesthetic damage to established turfgrass. The disease can often be sufficiently controlled using a variety of cultural practices. Start by applying supplemental fertilizer to problematic areas to help stimulate growth and allow the turf out-grow the rust's relatively slow infection cycle. Mowing actively growing turf on a regular basis will remove infected tissues before they become problematic. Irrigation may also be needed to reduce drought stress. However, it is important to water early in the day to allow time for the turf to dry before night. If rust is an annual occurrence, consider overseeding or reseeding with a turfgrass cultivar known to have a high resistance to rust diseases. Several fungicides are available and effective against rust. However, they are usually not warranted on established turf.

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Three Reasons Why You Should Let Your Phone Go to Voicemail While Working With Pesticides

Have you ever tracked how much time you spend using your smartphone? This past week, I averaged 1 hour and 54 minutes per day viewing email, browsing websites, and scrolling social media. The temptation of immediate access to information can be hard to resist. Whatever your opinion on smartphone usage may be, the following are three reasons why your phone shouldn't be in your hand while mixing, loading, or applying pesticides.



Photo by Sara Kurfeß on Unsplash

Reason 1: Increased risk of exposure

Phones add yet another surface that can be contaminated with pesticide residues. There is always some degree of risk associated with using a pesticide. The risk of a pesticide is the probability of harm to a person that will result from its use. Risk is a combination of the pesticide's toxicity (ability to poison) and the amount of exposure. If you are working with pesticides, you need to be diligent about avoiding exposure to pesticides and residues. Even a relatively non-toxic pesticide may present a significant risk if it is used carelessly or in a way that increases your exposure.

Pesticide labels include recommendations for specific personal protective equipment and actions to take to reduce potential exposure. It's also common for labels to include a statement recommending that users should "Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet." This recommendation targets oral exposure and dermal exposure. However, if you handled your phone while working with pesticides, it was likely contaminated. When you pick up your contaminated phone after washing your hands, you have a dermal exposure and the potential for oral exposure.

If you need to use your phone while working with pesticides, take these steps to avoid contaminating your phone. Wash your gloves with detergent and water before you remove them. This way, you will not contaminate your hands when you remove them.

Then wash your hands with soap and water after you remove the gloves.

From my observations as a parent, small children love to grab their mom and dad's phones. They see us glued to them, and they want in on the fun. Unfortunately, any pesticide residues on your phone have now transferred to your child's hands, and it's only a matter of time before they reach for their mouths. While the exposure may be small, children tend to be more sensitive, and small exposures repeated time can have harmful effects.

Reason 2: Distractions lead to mistakes

Phones pose an unnecessary distraction that may lead to application errors. Fred Whitford, Purdue Pesticide Program Coordinator, produced an excellent publication and corresponding presentation titled [Measuring Pesticides: Overlooked Steps to Getting the Correct Rate](#). Within these resources, Whitford advises applicators and handlers not to answer phones or talk to people and encourages applicators to keep distractions to a minimum when mixing products. It is too easy to lose track of or forget what you have or have not put in the tank. Measurement errors can be costly, both in terms of lost product and poor pest control.

Reason 3: It's probably a telemarketer

The majority of calls to my cell phone are unwanted spam. I doubt that I am the only person to ignore calls from unknown numbers. If your phone rings while you are mixing or applying pesticides, let it go to voicemail. Chances are it's Rachel from Cardholder Services or that kind individual that has trying to reach you about your car's extended warranty. If the call is truly important, they will likely leave a voicemail. You can call back after you have finished the job. If the caller was a client or your boss, surely hopefully will appreciate your safety and accuracy.

While you shouldn't use your phone while working with pesticides, you should keep it nearby in the event of an emergency. The ability to call for help can have immediate lifesaving benefits.

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