Slug: Ask the Master Gardener

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<u>Caution!</u> Keep away from children, dogs, and pets. Hazardous to humans and domestic animals. May be fatal to dogs or other pets if eaten. May be attractive to dogs. Confine pets during application to prevent them from believing they are being fed.

This warning is on the label of commonly used slug and snail baits. Any of us who have a dog, know a dog, love dogs or just care about animals should think hard before casually using of these products. April is the perfect time of year to begin the battle with slugs, but before you grab the container and start to sprinkle bait, STOP____ THINK____& PLAN.

Slugs are the most common and persistent pests in Washington. We must first accept the fact that we will never get rid of all of the slugs and snails in our garden. "Good control" is considered when only 60% have been destroyed. Accept it, slugs and snails are here to stay and, in fact, are an important part of the food chain. Birds, snakes, frogs, and beetles (things we love in our gardens) all eat slugs. Many species of slugs (like banana slugs) don't actually attack live plants. They are great composters, eating only dead and decaying matter.

However, several species of slugs are eating in gardens of the Northwest. Slugs live from one to six years. They lay up to 80 small gelatinous eggs at a time, up to 6 times a year. They have both male and female parts (hermaphrodites), so every slug can lay eggs which hatch in 2 to 8 weeks. The eggs are laid beneath wood or debris, in a small crevice, or hole in the ground and can over winter, if protected. When they hatch, they are hungry.

Before you grab the bait, think about other ways you can decrease your slug population. During the day, slugs hide in dark, damp places. You can follow their slime trail to find their hiding place. This can be under ivy or large overhanging shrubs, under stacked firewood, in tall grass, in mulch or compost piles, under stacked building materials or in rock piles. The list could go on and on. One way to decrease numbers of slugs is to change their environment. Eliminate their hiding places. Get rid of that ivy; clean up those piles; mow that grass; stir up the compost pile; use the mulch; choose plants they don't like (those with thick or hairy leaves); or plant sacrificial plants with high slug appeal (marigolds, mustard, horseradish) and check them regularly, handpicking the slugs from the plant. When you do this, use a dandelion digger, tweezers or tongs, and drop them into a jar of soapy water. (Hint: If you happen to use bare hands to grab a slug and get some of the slime on you, don't rinse them with water, it'll just spread the slime around. Simply rub your dry hands together or use a dry cloth or paper towel to gather the slime into a little ball, like rubber cement, and toss it.) Another important way to decrease populations is to cultivate the bare soil in your yard. By doing this, you disturb possible hiding places and destroy any eggs hidden there. This is especially effective in the early spring, before those over wintered eggs hatch.

After you've eliminated their hiding places, you may want to try some traps. Slugs love the smell of malt and yeast. That's why beer traps can be effective. Place a shallow container in the ground with the rim at ground level and fill with beer. If you add a dash of baker's yeast, they'll love it even more. Don't empty this every day because live slugs are also attracted to dead slugs.

Another type of trap can be made from a soda bottle. Cut it across at the shoulder and place the neck end inside the bottle base. Tape this together, fill halfway with beer, and bury the bottle sideways so the entrance is level with the ground. The slugs will crawl in, but they can't crawl out.

Three inch wide copper strips are sometimes used by gardeners to protect specific plants, pots, or raised beds. The copper causes a kind of electrical shock that the slugs would rather avoid. Place the strips vertically so the slug must contact both sides of the strip.

There are a few things that have been found not to work well. One is laying down sharp or

rough objects such as diatomaceous earth, wood ash, and gravel. Because of the incredible make-up of their slime, slugs and snails are sometimes able to crawl along the edge of a razor blade without getting cut, so those things may not work. Salt application is another idea you might want to skip. Excess salt will contaminate your soil and can kill your plants.

Your last resort should be the use of baits. There are 2 kinds recommended by Washington State University Extension. By far, the safest contain iron phosphate. This chemical has been found to be comparably non-toxic to children and animals. And has been approved for organic gardening. Sluggo, Escar-go, and Worry-Free are examples of this product.

The most common kind of bait contains metaldehyde. This chemical affects the slugs' mucus producing system, which is necessary for eating and movement. Examples of this type are Cory's Slug and Snail Death, Deadline and Slug-tox. Carbaryl is sometimes added to this chemical but that is even more toxic and will kill earthworms and other beneficial organisms. This type of bait is mixed with molasses, apple meal, or some other sweet smelling base. This attracts the slugs and snails, but also attracts dogs, cats, and other animals. Birds and amphibians eat slugs and snails that have consumed the bait. Methaldehyde causes nervous system damage and death. It is also very important that you not contaminate edible portions of plants. Try to use other methods to control your slugs and snails but if you decide you must use baits, make sure you read and follow all directions and protect your kids, pets, and wildlife.

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This column is written by Washington State University/Skagit County certified Master Gardeners. Questions may be submitted to WSU/Skagit County Extension, 306 S. First Street, Mount Vernon, WA 98273-3805.