



## **Pest Corner**

January, 2005

### **Slugs**

Question: Last year we could hardly wait for our daffodils to begin blooming and apparently neither could the slugs. The flower buds were devoured before they even opened. Is there anything we can do to discourage them now before the daffodils begin their bloom?

Answer: Unfortunately for home gardeners, the consuming passion of slugs is eating. Depending on the species, they can eat a whole lot more than just plants including insects, worms, animal feces and other slugs! Many slugs consume several times their own body weight each day. In addition to their guillotine-like jaws, their mouths are equipped with radula (latin for "scraper"). The radula is a ribbon affixed with thousands of backward pointing, replaceable teeth. It is also used in slug to slug combat, and scars of prior battles can be seen on some species.

Apparently someone actually took the time to survey slug populations and reported that there are more than 70,000 slugs per acre in states that receive heavy rainfall, such as Oregon and Washington. These population numbers do not seem unreasonable when you consider that slugs are hermaphrodites, meaning that each slimy mollusk has both male and female reproductive systems. Offspring are produced by crossfertilization or mating. Slugs can live anywhere from 12 month to two years and are sexually mature in three months.

Slug slime is produced by various glands on the slug body. Some slime is very slippery, easing movement, while another type of slime produced is actually viscous and can increase traction. Banana slugs have been clocked at 6.5 inches per minute, while milky slugs have been known to travel up to 40 feet in a single night.

Slugs differ from snails in their preference for time spent underground. During the summer, only 5 percent of the slug population will be above ground. For this reason, slugs are usually more of a problem with root crops, buried seeds and seedlings. Keep in mind that a hungry slug will probably eat any plant, but like us, they prefer some better than others. In general, they seem to avoid plants with milky sap or hairy leaves. New leaves are preferred over mature growth, so protect your plants from slug attack.

There are two chemicals formulated into slug and snail baits that are used on food and seed crops. Metaldehyde has been used since the early 1930's and iron phosphate since 1998.

Slug control materials containing iron phosphate as the active ingredient are available in most retail garden centers and nurseries under a number of trade names. You might think of these products as the "ultimate diet food" for slugs. After eating the bait, the slugs almost immediately stop feeding, so that no further plant damage occurs. The slugs appear dry and then visibly lose weight. Their mucus is sticky and they seem unable to produce it in abundance. Finally, after 3 to 6 days, they begin to die. This material is registered for use around berries, vegetables and fruit trees. The material is safe to use around dogs, cats and other household pets including birds and wildlife when used according to labeled directions.

Metaldehyde is available in various baits. These include meal formulations, large pellets, and minipellets. Good quality meals may give fast plant protection due to good coverage, but they do not last more than one week. Rainfall quickly reduces the effectiveness by dissipating the active ingredient from the carrier. Cereal-based minipellets have the best performance record in our very rainy climate and can last two to three weeks on the soil. When using baits containing metaldehyde, be sure to cover the material with a container or board to prevent ingestion by pets or birds. As with any pesticide application, be sure to read and follow labeled instructions.

In the Northwest, March, April, May, June and October are considered prime months for slug activity. They are more abundant after light rains and when night temperatures are above 50 degrees F. Many people use beer-baited slug traps made with plastic cottage cheese type containers with lids, sunk into the soil and with 1 inch square holes cut in the sides at soil level. Leaving dead slugs in the traps may also attract slugs. Be sure to handle slugs with gloves because they may carry parasites potentially harmful to human health.