Master Gardener Foundation
Grays Harbor & Pacific Counties, Washington

Pest Corner

June, 2007

By June most "rhodies" are done blooming and may need deadheading and/or pruning. If weevil damage is present, see info further down. A June garden task is soil preparation for the warm-weather planting. Info below adapted from publications by Don Tapio, GH County Extension Agent.

MANURES

What is known about their benefits, contents, and risks?

Manures might be "over-rated" as fertilizers but are highly "under-rated" as soil builders." A ton of fresh cow manure contains only about 11 pounds of nitrogen, 3 pounds of phosphoric acid, and 10 pounds of potash. Concentrations of N, P, and K in **dried** manures may be **three to four** times higher than in fresh manures.

Poultry and sheep manures tend to be about twice as high in nitrogen and many times higher in phosphoric acid (P) than cattle manures. Potash (K) levels are about the same for all species. Unless fresh manures are applied in excess of about **5 tons per acre**, recommended fertilizer levels should not be altered.

Fresh animal manures could contain human pathogens such as *Salmonela* sp. or *E. coli* 0157:H7, or parasites such as *Cryptosporidium parvum*. **These pathogens are not taken up by the plants**. However, the pathogens can be present in soil that adheres to the surfaces of roots or low-growing leaves and fruits. Careful washing with detergent and/or peeling will remove most of the pathogens responsible for disease, but some risk remains.

The greatest risk from manure-borne pathogens is for root crops such as carrots; leaf crops such as lettuce; and fruit crops such as strawberries. The edible part of these crops may be contaminated with soil (and pathogens). These types of crops are difficult to wash, and they are often eaten raw.

Pathogens in fresh manure typically die off in the environment over time, especially when the manure dries or is exposed to freezing and thawing. The rate of pathogen die-off depends on the type of pathogen and manure, and on environmental conditions (temperature, moisture, and sunlight). High-temperature composting kills pathogens; but it is difficult to maintain these conditions in a backyard compost pile. The best way to reduce the risk when using manure in the vegetable garden is to compost it for a **full year** prior.

RHODODENDRON DEADHEADING

Removing the seed capsules from rhododendrons as soon as possible after they flower allows the energy the plant needs for seed development to be used instead for new growth, and the production of flower buds for the following year. Deadheading is easier when plants are young but becomes a monumental task on older shrubs that are nearing maturity. Fortunately as the plants get too large to dead head, they have the energy to carry the seed. They may not produce quite as many flowers and the new growth may not be quite as vigorous, but they will survive just fine with normal cultural practices.

ROOT WEEVILS

Currently WSU entomologists recommend **Acephate** (trade name of *Orthene)*. When used per labeled directions, Orthene effectively controls Black Vine Weevil, Strawberry Root Weevil and Rough Strawberry Root Weevil on ornamentals. Orthene is **NOT** registered for use on edible food crops like strawberries. Begin Orthene applications when notching of the leaves first appears.

Although adult weevils cause a characteristic notching in rhodie leaves, this damage is relatively minor compared to damage done by larvae to the plant roots. Larvae of all root weevil species are quite similar in appearance and habits. They are C shaped, legless and white with tan heads, up to half an inch in size. The larvae feed throughout the winter and spring on root systems resulting in plants that are stunted, grow poorly and may die.

In April through June, the larvae pupate and adults emerge. The adults are night feeders that remain in the soil or in debris at the base of the plant during the day, then climb up to feed on the leaves at night. Adult weevils cannot fly, but walk or are carried from one location to another. Also, all adults are females capable of laying eggs. Adults are slow moving and should not be confused with swifter, predacious ground beetles.

Eggs are laid in clusters in or on the soil from June to September. The eggs hatch, and the larvae immediately wriggle though the soil to begin feeding. There is one generation per year.

Other options: **Beneficial nematodes** which attack the larvae. Unfortunately**, they have not proven to be very effective in our cold coastal soils**. Another option for those not wanting to use an insecticide involves putting a sticky, gummy substance like ***Tanglefoot*** on the stems of plants to trap adults.