

TIME TO TREAT BAGWORMS

Most bagworms have hatched and have come out of the mother's bag. The latter half of June is a good target to treat for these insects. However, make sure you have living bagworms as sometimes natural predators and parasites provide good levels of control. Look for a miniature version of the mature bagworm. They are still tiny and are about the size of the lead point on a pencil. Insecticides commonly used for controlling bagworms include spinosad (Conserve; Fertilome Borer, Bagworm, Leafminer & Tent Caterpillar Spray; Captain Jack's Dead Bug Brew, Bonide Caterpillar Killer), *Bacillus thuringiensis* (Dipel, Thuricide), acephate (Acephate, Orthene, Bonide Systemic Insect Control), cyfluthrin (Tempo, Bayer Vegetable & Garden Insect Spray) and permethrin (numerous trade names). Products containing *Bacillus thuringiensis* (BT) are only effective when used against bagworm larvae while they are still small. Note that spinosad and BT are both organic but spinosad is a more effective product, especially on larger larvae. Thorough coverage is vital for good control. Most failures are due to the spray not penetrating deep enough in the tree rather than the insecticide not working.

After-Effects of Too Much Rain

Some areas of Kansas have had saturated or near-saturated soils for several weeks now. Gardeners are likely to assume that watering won't be needed for quite some time now as soil moisture levels are very high. Actually, watering may be needed much sooner than you expect. Excessive rain can drive oxygen out of the soil and literally drown roots. Therefore, as we enter hotter, drier weather, the plants with damaged root systems may be very susceptible to a lack of water. Don't forget to check your plants for signs of wilting or leaf scorching and water as needed.

If irrigation is called for, water deeply and infrequently. Usually once per week is sufficient depending on the weather. Soil should be moist but not waterlogged. Any light cultivation that you can do around your plants will help restore oxygen to the soil and in turn greatly help out your plants.

Ticks

Ticks are very active throughout the state, and have been for the past month. The most commonly reported species has been the American dog tick, *Dermacentor variabilis*. The cool, humid weather over the past month has provided great conditions for tick development. These annoying, and potentially dangerous parasites have even been encountered in corn fields, which is unusual as they typically develop in more undisturbed areas of grasses, weeds, and other overgrown vegetation. But, they are very good at finding hosts and getting the blood meal they require for development and reproduction.

Brown Rot of Stone Fruits

The wet weather we have seen in some areas has caused perfect conditions for the formation of brown rot on stone fruits such as peaches and plums. Affected fruit develop a gray to brown, fuzzy growth on the fruit, itself, which may rot in as little as a day or two. It is best to start treating fruit about a month before harvest but spraying is still helpful even if we are within that one month period. Fruit that shows symptoms cannot be saved but should be destroyed to prevent further spread. Use Captan or myclobutanil (Immunox) for control. Many fruit tree sprays contain Captan but check the label to be certain. Apply Captan or Immunox every 7 to 14 days. Both products can be applied up to the day of harvest. Note that though Immunox is labeled for fruit but Immunox Plus is not.

Sidedressing Annual Flowers

Modern annual flowers have been bred to flower early and over a long period of time. They are not as easily thrown off flowering by high nitrogen levels as vegetables are. As a matter of fact, providing nitrogen through the growing season (sidedressing) can help maintain an effective flower display for warm-season flowers. Apply a high nitrogen sidedressing four to six weeks after flowers have been set out. Additional fertilizations every three to four weeks can be helpful during a rainy summer, or if flower beds are irrigated. Common sources of nitrogen-only fertilizers include nitrate of soda, urea, and ammonium sulfate. Blood meal is an organic fertilizer that contains primarily, but not exclusively, nitrogen. Use only one of the listed fertilizers and apply at these rates;

Nitrate of soda (16-0-0): Apply 1/3 pound (.75 cup) fertilizer per 100 square feet.

Blood Meal (12-1.5-.6): Apply 7 ounces (7/8 cup) fertilizer per 100 square feet.

Urea (46-0-0): Apply 2 ounces (1/4 cup) fertilizer per 100 square feet.

Ammonium Sulfate (21-0-0): Apply 4 ounces (1/2 cup) fertilizer per 100 square feet.

If you cannot find the above materials, you can use a lawn fertilizer that is about 30 percent nitrogen (nitrogen is the first number in the set of three) and apply it at the rate of 3 ounces (3/8 cup) per 100 square feet. Do not use a fertilizer that contains a weed killer or weed preventer.

Spring-Flowering Bulb Foliage can be Removed

It is important to leave spring-flowering bulb foliage in place until it “ripens” or becomes brown. The energy produced by the leaves after flowering is transferred to the bulb so that it can flower the following year. The ripening process should be near completion about now for tulips, daffodils and various other spring-flowering bulbs. Use clippers, scissors or even a mower to remove dead foliage. Also, try to map out where the bulbs are planted as there will be no foliage to make the location next fall when it is time to fertilize.

Rose Rosette

Rose rosette is a serious problem in Kansas on wild roses (*Rosa multiflora*) in pastures and hedges. It is also found in domestic rose plantings. Infection is thought to start with rapid elongation of a new shoot. The rapid shoot growth may continue for several weeks to a length of two to three feet. Following shoot elongation, a witches' broom or clustering of small branches occurs. The stems develop excessive thorniness and produce small, deformed leaves with a reddish-purple pigmentation. Stems and petioles of *Rosa multiflora* plants may have reddish blotches or streaks. Rose plants infected with the rose rosette virus die rapidly, usually within one to two years. Rose rosette is caused by an Emaravirus species. Transmission of the disease has been shown experimentally through grafting and is also thought to be spread by mites. Though KnockOut roses are resistant to many diseases, they are susceptible to this one. There is no effective control measure for infected plants. In garden settings, infected plants should be removed and destroyed, including roots. Any roots that remain after plant removal may produce infected shoots which can harbor the disease. If possible, eliminate all multiflora rose plants from the vicinity as they are extremely susceptible and will act as a carrier. Multiflora rose is the wild rose often seen growing in ditches and pastures. Since the disease can be transmitted by pruning shears, disinfect the shears when moving from one plant to another by using rubbing alcohol or a disinfectant such as Lysol.