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Common Pests

The following information is to help you identify some of the most common pests that you may find in your gardens and houseplants. The treatment methods suggested for each pest will suggest ways to eliminate the culprit without harming other beneficial insects that help to control infestations and avoid harming beneficial pollinators like the endangered bee population. There may be many other treatments you could use other than those suggested, but here at Wolf Hill Garden Centers we would like to urge you to use great care in the use of any method of control that would be detrimental to the health of our delicate eco-system.

Budworms - This is a moth caterpillar that feeds on the buds and petals of Petunias and Calibrachoa (as well as other common Annual flowers). You may never see the caterpillar since they usually feed at night, but the damage they leave behind will be evident. If these budworms are left unattended to, they can de-flower an entire container before you know it. Signs of budworm damage are small holes in unopened flower buds, petals that have been eaten or the entire flower chewed off to the green. Also, small black granules appearing on leaves are the droppings from the caterpillar and are a tell tale sign that you have a pest problem.

Treatment for budworms in the form of a spray containing Spinosad is most commonly used to control this pest, being careful not to use it during times that bees are active, dusk is the best time. Captain Jacks Dead Bug Brew is sold here at Wolf Hill and contains the needed ingredient to control Budworms.

Japanese Beetles - Starts out as a pest in your lawn as a grub that eats grass roots and kills patches of your lawn. The beetles then emerge from the soil in their adult form, approx. 1/2 inch long, metallic green head and copper brown body/wings. These beetles will skeletonize leaves by feeding between major veins and a favorite of the Japanese Beetle are Rose buds.

Treatment for grubs is available as a lawn treatment and will help to reduce adult beetle population. Treatment for the Adult Japanese Beetle comes in several forms. Small infestations can be treated manually by physically knocking them into soapy water to drown and is considered the safest method of treatment. Traps aren't recommended for small areas because it invites more beetles into your yard (drawn in by a scent in trap) and if you don't have enough area away from gardens to place traps you may end up with more than you would have without the traps. There are sprays available but caution in use of these is strongly recommended so that you don't cause harm to beneficial pollinators like bees. Applying insecticides during low bee activity, such as at dusk is best and avoid spraying flowers that bees are pollinating is very important. Neem Oil is effective for a couple days, will need to be reapplied regularly and is low risk to bees. Insecticides containing pyrethrins are effective but must be sprayed directly on the insects. There are residual insecticides that will last for a week or two at a time but they are toxic to pollinators and contain pyrethroids, carbaryl or acephate and if possible should be avoided or used with great caution.

Aphids - Aphids are tiny soft bodied, pear shaped bugs with long antennae. Various species are different colors, light green, yellow, white, black, gray, brown and pink. These pests feed in large groups on branches and buds of your plants tender new growth by piercing stems and sucking sap, leaving behind yellowed misshaped leaves and deformed flowers. Often leaving a sticky substance 'honeydew' behind as waste that attracts other insects like ants. The honeydew can cause a fungal growth called sooty mold which causes stems and leaves to blacken.

Treatment of Aphids may be accomplished without using methods that are harmful to beneficial pollinators. Some of these suggested treatments are to spray the infected plants with strong stream of water to dislodge the pests, also dusting with flour which constipates them may help eliminate them. Neem Oil, Insecticidal Soap and Horticultural Oils are additional methods of treatment that will not harm pollinators. Pruning the affected area on the plant and dropping the infected material into soapy water can be effective as well as knocking the pests into a container of soapy water while wearing garden gloves can work on small infestations. Soap sprays made of 1 Tablespoon on liquid soap to a quart of water can also be effective by drying out the aphids outer cell membrane, killing when sprayed directly. Be mindful of when you spray to avoid risk of burning plants if the infected plants are sitting in direct sun, pick a time of day when sun is not as strong.

White Fly - Adult White flies are tiny moth like insects with white wings and short antenna. Like aphids they are sap suckers that rob nutrition from plants, usually tender new upper shoots, causing the leaves to turn yellow, dry and fall off plants. Another Aphid comparison is the sticky residue called 'Honeydew' that White Flies also leave behind as well as the resultant sooty mold that grows on the honeydew. Infestation can sometimes be evident when plants are disturbed the adult insects will fly up as a small cloud over the plants. Oval shaped eggs and immature feeding nymphs hide on the undersides of leaves which is where you should check to see if you have the pest on your plants. Removal of the leaves that are harboring the eggs and nymphs is a good way to try and control the problem.

Treatment for White Flies, including removal of infested foliage, is similar to Aphid controls. Keep in mind that beneficial pollinators can be affected by the use of insecticides so it is very important to avoid using something that will be detrimental to the bee population. Yellow sticky traps can be used to help monitor and suppress Adult White Flies. Strong stream of water can help eliminate immature nymphs and eggs from undersides of leaves. Soap sprays, Neem Oil and Horticultural Oils can be used without hurting pollinators but pests must be directly sprayed for the treatment to be effective. Ladybug and Lacewing larvae are natural predators and feed on the immature whitefly eggs and nymphs but it may be hard to coordinate the existence of both at the same time in your garden.

Thrips - These pests are tiny, slender cigar shaped bodied insects with wings but are poor fliers. They are difficult to detect until infestation gets large or damage becomes apparent on the leaves of your plants, including annuals, perennials, houseplants, vegetables as well as trees and shrubs. Thrips pierce the flesh of tender new vegetation and suck juices and nutrition from the plant. Sticky traps that are blue can help to identify if there is thrips present but will not be effective in controlling the population. Evidence of thrips can be seen in stippling or curling of leaves and it is suggested that routine trimming and pruning of thrip damaged plants can keep an infestation at a manageable level. Keeping debris clear of the base of plants, dead heading and pruning of browned and dead foliage is a good preventative measure in controlling infestations.

Treatment of Thrips can be similar to other sap sucking pests, by washing infected areas with hard blasts of water to dislodge them, focusing on the underside of leaves where they may be hiding. A solution of 2 teaspoons of dish soap to a gallon of water and spraying on entire plant may provide sufficient control. Neem oil is the safest insecticide to use in the control of thrips because it is not devastating to bees and other pollinators. A suggested treatment using neem oil is 4 teaspoons of neem oil, 2 teaspoons dish soap to a gallon of water, spraying directly on infected areas of plants.

Scarlet Lily Leaf Beetle - This beetle is Scarlet red on top and black underneath, 1/2 inch long elongated body with wings and long antennae. Primary victim of this pest is Asiatic/Oriental, Trumpet and Tiger type Lilies. Red-Orange to Brown eggs are laid on the undersides of leaves in tight groupings. Juvenile lily beetles are yellow-brown-orange and will also be found on underside of lily leaves, they are evident by the fecal shield they cover themselves with in the form of a mass of brown goo. The Adult and juvenile beetle larvae are voracious feeders and left un-checked will defoliate an entire lily plant.

Treatment for the Scarlet Lily Leaf Beetle in most gardens is checking for the the pests every couple days once lilies emerge in the spring. A good method of eliminating the beetle, if found, is by having a container of soapy water on hand. Hold the container under the leaf you find the beetle on, nudge the beetle and it will flip on its back trying to land on the soil so it will be hard to find since the underside is black. You will catch the adult lily beetle with your soapy water container, effectively killing it by drowning. The eggs and juvenile larvae can be dealt with by removing the leaves they are found on and dropping in soapy water. If soapy water container is not available, squishing the infected leaf underfoot on a hard surface can be effective. You just need to make sure that you give the foliage harboring the pest a very good twist of the foot to make sure pest is fully eliminated.

Slugs/Snails - These pests are soft bodied mollusks, the only difference between the two is that snails have shells, the damage they inflict is the same and will be referred to here as Slugs. Most slugs are 1 to 3 inches in length, their colors range between dull orange to grey and brown. Much of the eating that slugs do is during the night and then they hide during the day, so you will see the damage but not the culprit. Very often the snail trails of slime can be seen that they secret as they go, first thing in the morning. They will lay their iridescent eggs in moist garden soil which grow quickly in cool moist conditions. Slugs will eat almost anything, leaving irregular holes with ragged edges.

Treatment for Slugs may be as simple as providing a place for them to hide, such as boards on the ground around your plants. In the morning, turn the boards over and collect the slugs that are hiding there in an airtight bag, freeze and dispose of. Keep your garden beds free of old debris that provide places for slugs to hide and lay eggs. Natural predators are snakes, turtles, frogs, toads, ground beetles, firefly larvae and songbirds. Having an environment friendly for these natural predators may keep slug damage to a minimum. There is an organic slug control product that contains iron phosphate which will kill slugs in 3 to 6 days, but should be safe for other wildlife, pets and children. Wolf Hill usually has Sluggo in stock in the garden center.

Earwigs - These 'pinching' insects are about 3/4 inch long, reddish-brown in color and have tails that look like forceps. Earwigs are very quick movers and actually have wings (they don't use very often) which is a fact not commonly known since the wings are not evident on a quick glance. This insect will eat almost anything, when decaying plants and wood are not available they will move on to living plants. Feeding for an earwig

usually happens at night and they will quite often hide under the pot of the plant that they were eating during the day. Damage to plants is very similar to that of slugs with irregular jagged holes in leaves but earwigs will leave behind small black granules of excrement behind rather than the slime trail that a slug would leave.

Treatment for an Earwig infestation could be in the form of placing hollow 1 foot bamboo or garden hose lengths between your plants that earwigs will hide in during the day. Check your 'traps' daily and dump the insects into a bucket of soapy water. A insecticidal spray of one part 70% alcohol (rubbing alcohol) to one and a half parts water can be made to kill earwigs when sprayed on contact. Testing of a leaf of plants you may be spraying is recommended by spraying a leaf and waiting 24 hours to insure it won't hurt the vegetation you are trying to save. Dilute formula if it seems to strong after testing and retest again. In addition to these treatments the Wolf Hill Garden Center sells SluggoPlus which is bait that earwigs will eat and kill them as well as helping to control Slug populations.

Fungus Gnats - This insect is a fruit-fly sized pest that affects houseplants mostly. Adults lay eggs in moist potting soil surface, after a couple days the eggs hatch and the larvae burrow down into the soil and feed on fungi, decaying material and plant roots. Early control of fungus gnats when they are just an annoyance flying around can be key to avoiding an infestation that can really harm your plants. An infestation will cause yellowing leaves that drop off, minimal plant growth and eventual death of the plant. Be careful not to over water plants, especially during winter months when plants tend to need/use less water.

Treatment / control methods for adults Fungus Gnats will help to reduce the chance of an infestation of the larvae. Control of adults are in the form of traps; sticky card traps, cider vinegar traps (homemade or commercial), and fly paper. There are many ways you can make a cider vinegar trap, the easiest of which is a small shallow container with a 1/4" deep of cider vinegar and a couple drops of dish soap. Put trap near suspect plants or actually on dirt in the plant pot (don't spill mixture on the dirt, the vinegar might burn your plant), change every few days. Catching adults will keep them from laying eggs that will hatch into the damaging larvae. Sticky card traps are simply yellow note cards with sticky adhesive cut into small squares placed on soil or attached to a stick and placing just above the soil. The gnats are attracted to the color yellow and will get stuck to the cards. You must be consistent with your traps and keep up with the new cycles of Gnats, eventually you should see less insects getting caught in your traps with the eventual goal of seeing none (once there are no more eggs to hatch). Letting soil dry out between watering can help to deter gnats from laying eggs on dry surface. Another suggestion is if you have drainage holes that seem accessible by insects, cover holes with synthetic material to keep gnats from laying eggs at the bottom of the pots. Beneficial Nematodes which are microscopic round worms can be used to top dress houseplant pots and they will destroy larvae.

Spider Mites - These spiders are tiny, approximately 1/50" long. The adults are reddish brown or a pale color, oval shaped with 8 legs. Mites live in colonies, usually on the underside of the leaf and can be found on almost any plant, outdoor and indoor. They pierce the leaf and suck the juices from the plant and the damage appears as light dots on the leaves. Eventually leaves will turn yellow, dry up and fall off. Large colonies of spider mites will be accompanied by fine webbing, making their presence more obvious. Hot dry conditions are ideal for spider mites which makes them a problem for houseplants during the winter when the heat is on and humidity conditions are very low in our houses. Outside, Mites are wind surfers and will ride the breeze on there fine webbing, enabling them to infest wide areas quickly. Quick and careful containment and disposal of infected plant materials is very important to avoid widespread infestation of spider mites.

Treatment of Spider Mites should start with pruning infested parts of plants and throw in trash, do not compost. If a plant is fully infested in webbing it may be well past saving and discarding of entire plant might be best course of action. Blasting plant, including underside of leaves, with strong stream of water will reduce numbers of mites, eggs and larvae, but will probably not eliminate them all together. Treat with Neem oil and insecticidal soaps sprayed directly on infestations regularly for several weeks then stop for several weeks and monitor to make sure infestation does not reoccur. Washing leaves of infected plants (including undersides) early in the morning and allowing to dry during the day will help to reduce population since their preferred environment is hot and dry. Use of other insecticides and over spraying can have the reverse effect in treatment of spider mites because you may be killing the beneficial insects (lacewings, ladybugs and predatory mites) that would feed on spider mites, so great caution should be used when using stronger methods of treatment.

Mealy Bugs - These soft-bodied wingless pests appear as white cottony spots on leaves, stems and fruit. They are less than a 1/4 inch long, oval and covered with a white/grey mealy wax. This bug only survives in warm environments which means that this is a pest seen mostly indoors and in greenhouses in colder climates. Mealy bugs feed on plant juices by piercing with long sucking mouthparts drawing sap which weakens plant. Leaves of affected plants will turn yellow, curl and drop off. Similar to that of aphids and white fly, the Mealy Bug leaves behind sticky honeydew residue that encourages sooty mold.

Treatment for light Mealy Bug infestation can start with pruning or dabbing with Q-Tip dipped in Rubbing Alcohol. Dislodging bugs with a strong stream of water can help reduce numbers and washing foliage regularly with leaf shine made with Neem Oil can discourage future infestations. Heavy Mealy Bug infestation can be treated with insecticidal soap sprays, multiple application may be necessary to control and eliminate pests completely.

Scale - The Scale insect is a sap sucking pest that thrives in warm dry environments, which makes houseplants a common victim. They are 1/16th to 1/4" long, oval and flat with a protective brown armor like shell covering and they can be invasive. They are found on undersides of leaves and at leaf joints. Scale will quite often excrete the sticky honeydew, similar to that of other sap sucking insects, which could lead to the sooty mold that interferes with photosynthesis. Damage to plants from scale turns leaves yellow and they will eventually drop off. Growth of plant will be minimal and if infestation is left unchecked, plant will eventually die.

Treatment of Scale for lightly infested plants can be to pick off the shell like insects with a small tool, lightly scrub them off or dab each with a Q-tip dipped in Rubbing Alcohol. Heavier infestations will be more difficult to manage, Neem oil spray applied weekly for at least a month or more will get the greatest results. Note that a fully infested plant may not be salvageable and discarding it may be the best option.