



The nasty little buggers the evergreen bagworms have really reared their ugly head this year. Some years the numbers are larger than others, and this year is a bumper crop for sure. Find out what evergreen bagworms are and if there is anything that you can do yet this year.

Bagworms will feed on a wide variety of trees and shrubs, but they mainly prefer evergreens. Some of their favorites include junipers, cedars, and spruce. The reason that they are called bagworms is because they spin their own individual cases or bags around them for protection. As the bagworm grows, so does the bag that contains them. They will add leaf fragments to the outside of the bag for camouflage. The bags look like baseball bat-shaped ornaments hanging from the trees. There is one way to know if your cedar tree has bagworms. If you see little cone shaped things on your cedar tree, more than likely you have bagworms, because cedar trees don't produce cones.

Knowing about their life cycle can let you know if there is anything that you can do yet this year. The evergreen bagworm usually hatches out around the beginning or middle of June. At that point in time they look like tiny inchworms. These tiny caterpillars have a silk strand behind them that acts as a parachute, moving them wherever the wind takes them. When they land on a suitable host, they begin to feed and make their bag homes around them. The caterpillars continue to feed until the middle of August. At that point in time, they begin to pupate until the middle of September. The adult male clearwing moth looks more like a fly than a moth. The adult males leave their bags in search of the females. Once mated, the female evergreen bagworm lays her eggs inside of her bag, then drops to the ground. Each female can lay between 500-1,000 eggs. The eggs overwinter in the bags until spring when they start the process all over again.

The earliest sign of bagworm injury on junipers is brown stressed needles at the tips of the branches. If the infestation is severe enough, the tree they are feeding on will have a brown tint to it. Heavy infestations of older bagworms are capable of completely defoliating a tree or shrub. This can cause stress to the plant or even kill it if damage is great enough. This is especially true if they have infested an evergreen which is unable to re-grow new foliage until next year. If you have bagworms on any deciduous plant, ones that lose their leaves every year, they are able to re-grow foliage if needed. Just be sure to pick up the leaves this fall and dispose of them.

There are several options for controlling bagworms. Insecticidal sprays require thorough coverage to penetrate the canopy and contact the feeding bagworms. Once the bagworms have stopped feeding for the year to pupate, there isn't a product that can penetrate the bag to control the larvae. The spray has to completely cover the plant, almost to the point the product is dripping off of it. If the bagworms have made their home on a windbreak, the applicator has to be sure to have enough pressure to get product between the two rows of the windbreak. If this area is missed the bagworms that were hiding out there will move and re-infest the rest of the plant. Hand removal is another option for controlling bagworms. After removing the bags, place them in a bucket of soapy water.

There are several options available for insecticidal control of bagworms. Some of the reduced-risk options include *Bacillus thuringiensis* (Bt), spinosad, or azadirachtin (neem oil) are effective on young larvae and may need to be applied repeatedly. Additional insecticidal options include permethrin (Eight), bifenthrin (Talstar), cyfluthrin (Tempo), chlorantraniliprole, carbaryl (Sevin), dimethoate, esfenvalerate, fluvalinate (Mavrik), lambda-cyhalothrin, acephate (Isotox IV), and tebufenozide (Confirm). Depending on the product and size of the insect, secondary applications may be needed especially this late in the season.

Be on the lookout now for bagworms. There still might be time to control them before they make a meal out of your plants.

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