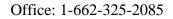
Bug-Wise

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Cowpea Curculio in Southern Peas: Cowpea curculio is one of the more important insect pests of southern peas, also known as purple hull peas, crowder peas, etc. Occasionally, it will also attack beans, such as "butter beans" or string beans, but peas are most preferred. This is the insect that causes the small circular spots on the pea seeds. These are egg-laying punctures. Note however, that care must be taken not to mistake feeding punctures cause by stink bugs with egg-laying punctures caused by cow pea curculio.

The small legless larvae develop inside the individual peas. These larvae are occasionally encountered when shelling peas, especially more mature peas. The adults are dark colored and approximately 3/16 inches in length, but they are rarely seen because they quickly drop to the ground when disturbed.

This insect rarely flies. Adults over-winter in nearby ground trash and crawl into the garden in the spring. Therefore, one practice that can aid in control is to rotate the location of the pea patch from year to year. New sites should be at least a few hundred feet from old sites. However, this does not always work because this insect has a number of weed hosts and site rotation is not effective when alternate hosts are abundant.

As for controlling this pest with insecticides, timing is everything! The adults can't lay eggs until pods are present, so there is no need to spray for cowpea curculio before the first pods appear. However, in gardens with a history of cowpea curculio it is important to begin spraying as soon as the first small pods appear (1/2 inch long) and make three applications at 5-day intervals. Only two insecticides are recommended for control of this pest in home gardens: carbaryl (PHI = 3 days) or endosulfan (PHI = 3 days). Carbaryl is commonly sold under the brand name Sevin and Thiodan is one of the most common brand names of endosulfan. Both of these insecticides are also effective against stink bugs.

Farewell to Diazinon: The phase out for residential uses of Diazinon has been underway for several years now. Manufactures have stopped producing homeowner products that contain diazinon and have added new active ingredients to their line. Many products now boldly display the words "diazinon replacement" or something similar. Currently, few retailers have diazinon products on the shelves, and retailers are required to stop selling diazinon for residential use as of the end of this year. Any product remaining on the shelf after Dec 31 of 2004 must be returned to the manufacturer.

Note however, that **this does not mean that homeowners will have to return any diazinon that they purchased before Dec. 31 of 2004**. Diazinon that has been purchased before the end of the year can simply be used according to label directions until the container is empty. Note that **this does <u>not</u> mean that it's a good idea for homeowners to rush out and purchase extra quantities of diazinon in order to stockpile it.** First, there is no point in doing this. There are many good alternatives, many of which are more effective than diazinon. Second, having large quantities of insecticide in storage represents a significant liability issue for homeowners, and the goal for homeowners should be to limit their pesticide inventory as much as possible. **Chinch Bugs in St Augustine Lawns:** Chinch bugs are important pests of St. Augustine lawns, but they are rarely a problem in other types of grasses. Obviously, this means that chinch bug problems will be more common in the southern portion of the state where St Augustine is more commonly grown. Chinch bugs especially favor the more sunny areas of the lawn, and damage will likely occur in these areas first. Chinch bugs have piercing/sucking mouthparts, which they use to feed on root crowns and stolons. While feeding, they inject a toxin, and it is this toxin that causes heavily infested areas to turn yellow, then brown, and eventually die. Because, there are several diseases and other problems that can cause damaged areas in St. Augustine lawns, it is important to verify the presence of chinch bugs before initiating treatment. Chinch bugs tend to be of greater concern during prolonged dry periods.

Adult chinch bugs are approximately 1/5 of an inch or less in length and are black with white wings that are folded in an 'X' over their back. The nymphs, or immature chinch bugs, are red with a light colored band across the back. Scout turf on sunny days by parting the stems and looking for the small, reddish nymphs and/or the black and white adults in the crown region or running across the exposed soil. Another method is to remove both ends of a gallonsized can, press one end of the can two to three inches into the turf, and then fill the can approximately half full with water. If chinch bugs are present, they will float to the top within a few minutes. When using this method it is important to check several sites, choosing areas where the yellow and green grass meet. If chinch bugs are identified as the cause of the problem, they can be controlled with the insecticides listed in the following table. If the infestation is heavy, a second application should be applied approximately two weeks after the initial treatment. Many of the liquid insecticides listed below are available in ready-to-use hose-end applicators, which is a convenient way for homeowners to apply chinch bug treatments.

Insecticide	Brand Name *	Rate/1000 sq ft	Comments
Treatments Applied as Sprays			
carbaryl	Sevin Concentrate	12 – 16 fl oz	Irrigate before application.
(22.5% liquid)	Bug Killer		
cyfluthrin	Bayer PowerForce	6 fl oz	Irrigate before and after application
(0.75% liquid)	Multi-Insect Killer		5
lambda-cyhalothrin	Triazicide Soil & Turf	4 fl oz	Water lightly following application
(0.5% concentrate)	Insect Killer		
	Concentrate		
permethrin	ProTech Sniper Yard	6 fl oz	Water lightly following application
(2.5% concentrate)	& Garden Concentrate		
permethrin	Hi-Yield 38 Plus	0.8 fl oz	Water lightly following application
(38% concentrate)	Turf, Termite &		
	Ornamental Insect		
	Concentrate		
	Trea	atments Applied as Granu	ules
Bifenthrin	Ortho Lawn Insect	2.4 lbs	Water thoroughly following application
(0.1% granules)	Killer Granules		
Carbaryl	Ortho Bug-b-Gone	3 lbs	Water lightly following application
(6.3% granules)	Multi-Purpose		
-	Insect Killer		
lambda cyhalothrin	Triazicide Soil & Turf	3 lbs	Water thoroughly following application
(0.04% granules)	Insect Killer Granules		
permethrin	Kill A Bug II Lawn	2 to 3 lbs	Water lightly following application
(0.5% granules)	Granules		

Insecticides for Control of Chinch Bugs in Home Lawns

This information is for initial planning purposes only. Always read and follow product label. Brand names listed here are examples only. Many insecticides are marketed under a number of different band names. Other products containing the same active ingredient should provide equal performance, provided they are labeled for use in the site in question and are applied at equivalent rates.