



Sweet Corn and the Sugarcane Beetle

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Sweet corn is a garden favorite and most people might say that sweet corn requires considerably more effort to get a successful crop compared to other crops. The most frustrating thing is to have all that hard work ruined by a tiny black beetle that decimates your crop apparently overnight. This particular insect is known as the sugarcane beetle (*Euethola regiceps*) and has been a problem the last couple of years and is difficult to control, but here is some information and some tips that might help.

These insects are black beetles about 0.5 inches long with a hard black shell that is dome-shaped and faintly ribbed with strong legs and coarse spines. They burrow into the soil and feed on corn roots at or near the soil surface. They are most common in low, wet spots or near turf areas (which describes most of our home gardens). These beetles are most often found in warm season turfgrasses such as bermudagrass, which makes the problem even worse. These beetles do not occur every year, but when they do occur they can cause a good bit of damage in your sweet corn crop. Sugar cane beetles only have one generation each year. These beetles over-winter as adults in the soil and emerge in the spring. They fly to grassy areas to lay their eggs. Larvae develop over the spring and summer and emerge in late summer and fall. The adults will fly at night to find an overwintering site, and are strongly attracted to lights.

Usually beetle larvae are the cause of most crop damage, but with the sugar cane beetle it is the adult that is of most concern in corn crops. The adults damage corn, especially young corn, and can also sometimes damage cotton, sugarcane, pastures, and other row crops by feeding below the soil surface on the outer walls of lower stalks leaving large ragged holes. Damage primarily occurs from April to June.

Control measures are difficult because the adult beetles causing the damage are most often below ground except at night. Since the beetle larvae and adults are most often found in sod, avoiding corn planting near these areas is best; this of course is often difficult to avoid. As with many problems, preventive measures will most likely be the best means of control. Although work is still ongoing to study these insects and the best measures of control, it has been shown that insecticides are difficult to use against these insects because of their life cycle and their location (underground). Since they typically hatch and overwinter in lawns, I recommend trying to control these insects in your lawn when possible. Products including synthetic pyrethroids such as bifenthrin and cyfluthrin are typically helpful. Imidacloprid is another product that provides good control against the larval stage of this insect. You can often find these in granular lawn and garden insecticide products. The adults may soon be laying eggs so perhaps look to be applying insecticides during the next few months and follow label directions for application.

I believe trying to stop these insects in sod will be the first and best line of defense for your corn crop. You can also attempt to use these similar products if they are listed for use in home vegetable gardens and sweet corn in particular (reading through the label will provide this information). If looking to apply prior to corn planting, incorporating the insecticide prior to planting would likely be most effective. If corn is already planted, you can try to incorporate these products along either side of the corn rows or apply aboveground and water in. Please read label instructions to make sure these products are labeled for use in gardens. I do not advise using any products that are not labeled for that use. If you are willing to postpone your corn plantings until later in the summer, most beetle activity appears to be done by June so planting later might help reduce problems with sugarcane beetles.