



## **Agave Borer Weevil and Treatment**

I believe pesticides are often overused and that the less I use, generally speaking, the fewer pest problems I have. However, there are certain pests that are so damaging and difficult to control otherwise that I feel the use of pesticides are appropriate. One such pest is the Agave Borer Weevil and its close cousin the Yucca Weevil.

Agave Borer Weevil, (also known as the Agave Snout Weevil) and the Yucca weevil are devastating insect pests to members of the Agave and Yucca genera. Agaves and Yuccas are generally slow-growing specimen plants, and to lose one or more to these dratted pests can be heart-breaking, especially after having watched it grow ever more bold and beautiful for years!

The life cycle of this pest starts with the adults seeking new plant hosts early in the spring, usually around early April. The adults find a susceptible plant, often a mature individual close to setting flower, and chew their way into the base of the plant, often accessing through the space between leaf attachments. They leave a bacterial infestation in the tunnel they create, which begins a rotting process in the heart of the plant. Eggs are laid in the tunnel and when they hatch, the larvae begin to eat the rotting flesh. After the grub-like larvae mature, they pupate into the next generation of adults. This entire life cycle can occur in as little as 6 weeks, but may take up to 3 months. Adults are dull brown to black, about 1/2" long, and have a distinct, downward curved long snout. Larvae are rotund, legless and cream in color, with dark heads.

The insect eats the heart and damages the root system of these plants and by the time the damage is noticeable, it is often too late. The symptoms of advanced infestation show as the outer leaves laying close to the ground while the center rosette of leaves stays upright, leaving a gap in between. Some of these species are so drought-tolerant and the damage can occur so quickly, that the plant topples over from a severing of the root system before any other noticeable damage is apparent. Less severe infestation can show as a wrinkling of the base of lower leaves that do not respond to additional water (in drought conditions).

In theory, all Agaves and Yuccas are susceptible to this weevil, although some species seem noticeably more so. In the case of Agaves, the larger, older and more blue or blue-gray the coloration of the plant, the more susceptible they seem to be. American Agave (*Agave Americana*, all varieties), Parry's Agave or Artichoke Agave (*A. parryi*, *A. parryi truncata*, *A. parryi hauchachensis*), Murphey's Agave (*A. murpheyi*) and Weber's Agave (*A. weberi*) all seem particularly susceptible. A related plant, Manfreda Macho Mocha (*Manfreda* x 'Macho Mocha) is also known to be very susceptible. Smaller agaves with thinner leaves seem less prone to infestation, such as Twin-flowered Agave (*A. Geminiflora*), Squid Agave (*A. bracteosa*) and Queen Victoria Agave (*A. victoria-reginae*).

The best way to deal with this horrible pest is in a preventative mode, to keep the insect from ever doing much damage in the first place. I recommend that you treat once or twice per year for the weevil with Bayer Tree and Shrub Insecticide, Merit Insecticide, or equivalent (active ingredient: Imidacloprid). The best time for application of these insecticides are when the weevil is most active, early April through late March. If two applications are desired, they should occur at either end of the above time window. One treatment is believed to provide adequate protection, but the 2<sup>nd</sup> may be applied for added security.

If the weevil is present already, or has recently been present in your or a neighboring landscape, we recommend that the treatment occur regardless of time of year. Additionally, be sure to choose a product that not only has the systemic preventative ingredient, Imidacloprid, but also has a contact insecticide.

Please keep in mind that since Agaves generally die after blooming anyway, you should avoid treating a plant that is about to bloom, because the chemical could potentially be passed on to pollinators. The signs that an Agave is likely to bloom soon are older age, stressful conditions and the development and emergence of narrower, shorter leaves from the plant's center.

As with all pesticides, be sure to read and follow all label directions and precautions.

With diligence and a willingness to use an insecticide as a preventative, Agaves and Yuccas can provide many years of good health and great, bold beauty in our landscapes.

