
Leaf Cutter Ant Control with Sweet Potato

In 1997 James Gordley visited ECHO and told us about a method he had started using to protect his garden from leaf cutter ants (*Atta* sp.). A neighbor had told James that as a boy, his uncle used sweet potatoes as a barrier to keep the ants away from the garden. Other people in the area have heard of this method, but James knows of no one else trying it. James has been using this method for several years now. When ECHO contacted him for an update, he shared some interesting observations.

EDN and our book *Amaranth to Zai Holes* have already featured some ideas for discouraging leaf cutter ants. The following information from James might give some members of our network further ideas for controlled experiments to confirm these results and test why and how the sweet potatoes work.

James plants the sweet potatoes wherever there is extra space, but especially on banks, next to walls and on the edge of the lawn. The potatoes seem to form a barrier that the ants do not like to cross. They are also planted around the base of cassava plants to protect them, since the ants seem to prefer cassava. "By making it difficult to get to our plants, the ants default to other areas with easier pickings."

James writes, "As with any other insect control, I try to combine the sweet potatoes with other methods. I have also planted sesame and Jack Beans. The ants do not bother the sesame. They have eaten one or two bean plants and then disappeared from that part of the garden. [Editor: The explanation is that jack bean is known to contain a fungicide which when carried to the nest will kill the fungus that the ants cultivate for food. See *Amaranth to Zai Holes* p. 217.] Three years ago when I started I was using almost one pound of ant poison per month. Now a one-pound bag lasts six months or more. Our land is clean of their hills but the surrounding vacant lots have colonies of hills. I generally use the poison for the occasional invasions from outside. In those cases I trace them back to their nest and put a teaspoon full down the hole and cover it with a stone.... Another one of the tricks is to keep the weeds and grass outside our wall mowed short so that it is easy to see the movement of any ants trying to invade. Then I also plant a few stalks of cassava outside the wall for them to attack before they get to the wall. This helps give me a warning."

Only one time in his three years of using sweet potatoes to control the ants did they actually cut any of the leaves of the sweet potato (which was planted near cassava). The ants did not carry away the cut pieces of sweet potato, however; they seemed to be cutting it only to clear a path to the cassava.

Some final observations from James:

1. The ants are most active and aggressive just before the rainy season begins and/or before a big rainstorm. Those are the times when one must be on the lookout for invasions
2. Just recently I discovered there are two kinds of cutter ants. The most common are heavy bodied, dark rust colored ants. They are easier to control. The other kind are small, thin, almost transparent. They are by far much more aggressive. If they attack, the only solution I've found is to locate the nest and poison it.
3. There are certain plants that seem to attract cutter ants of either type. Eucalyptus trees and Gmelina trees really draw them in. Try not to have these or any other attractants near the garden. Perhaps even plant some of the attractant plants in other areas to draw them away from the garden.
4. Cassava leaves and other wilted or diseased leaves should be cleaned up as they attract the ants. As I usually have a compost pile "cooking" I try to put those leaves in the pile. The heat of the pile keeps the ants away. Once the leaves are composted the ants lose interest in them.