

INSECTS



GOOD BUGS

and

BAD BUGS



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Acknowledgment:

The following assisted with research.

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INSECTS IN VEGETABLE GARDENS

There are about 30,000 insects species in Texas. Fortunately, fewer than 100 species are pest in vegetable gardens. Most insects found in gardens are either GOOD BUGS or BAD BUGS. GOOD BUGS help to pollinate, balance nature, and recycle organic matter. BAD BUGS will reduce the quality or quantity of vegetables produced and may transmit plant diseases.

Insects can enter vegetable gardens by walking or flying.

As insects grow, they change in size and shape. This process is called metamorphosis.

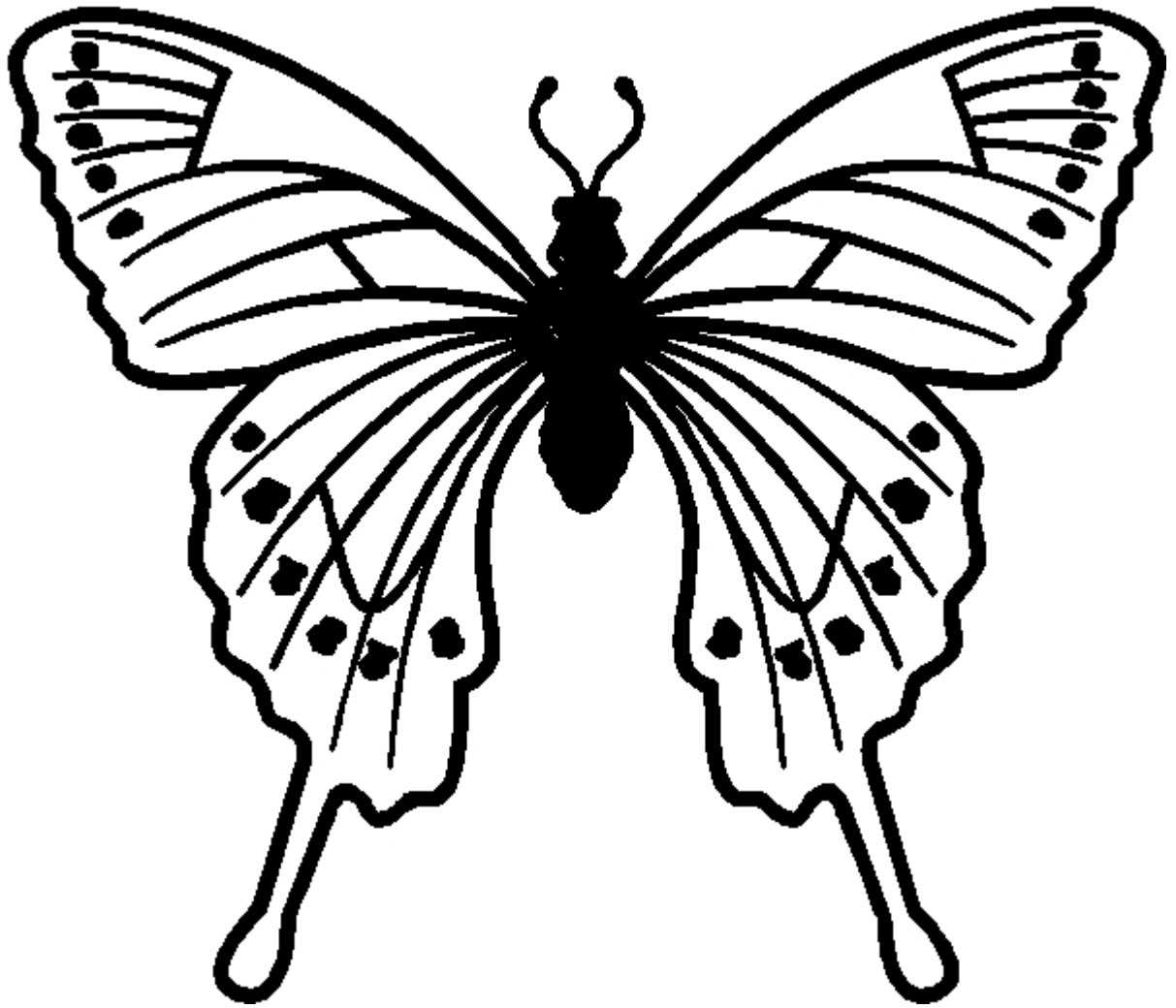
When you plant a garden you will have GOOD BUGS and BAD BUGS. Knowing the different bugs will help you to take care of your garden.

IPM, Integrated Pest Management, is a method of using many different ways to control BAD BUGS. IPM helps to balance the quantity of vegetables and environmental care with the different ways of controlling BAD BUGS. The best thing you can do is be a bug scout.

There are three types of control of BAD BUGS. They are biological control, mechanical control, and chemical control.



GOOD BUGS

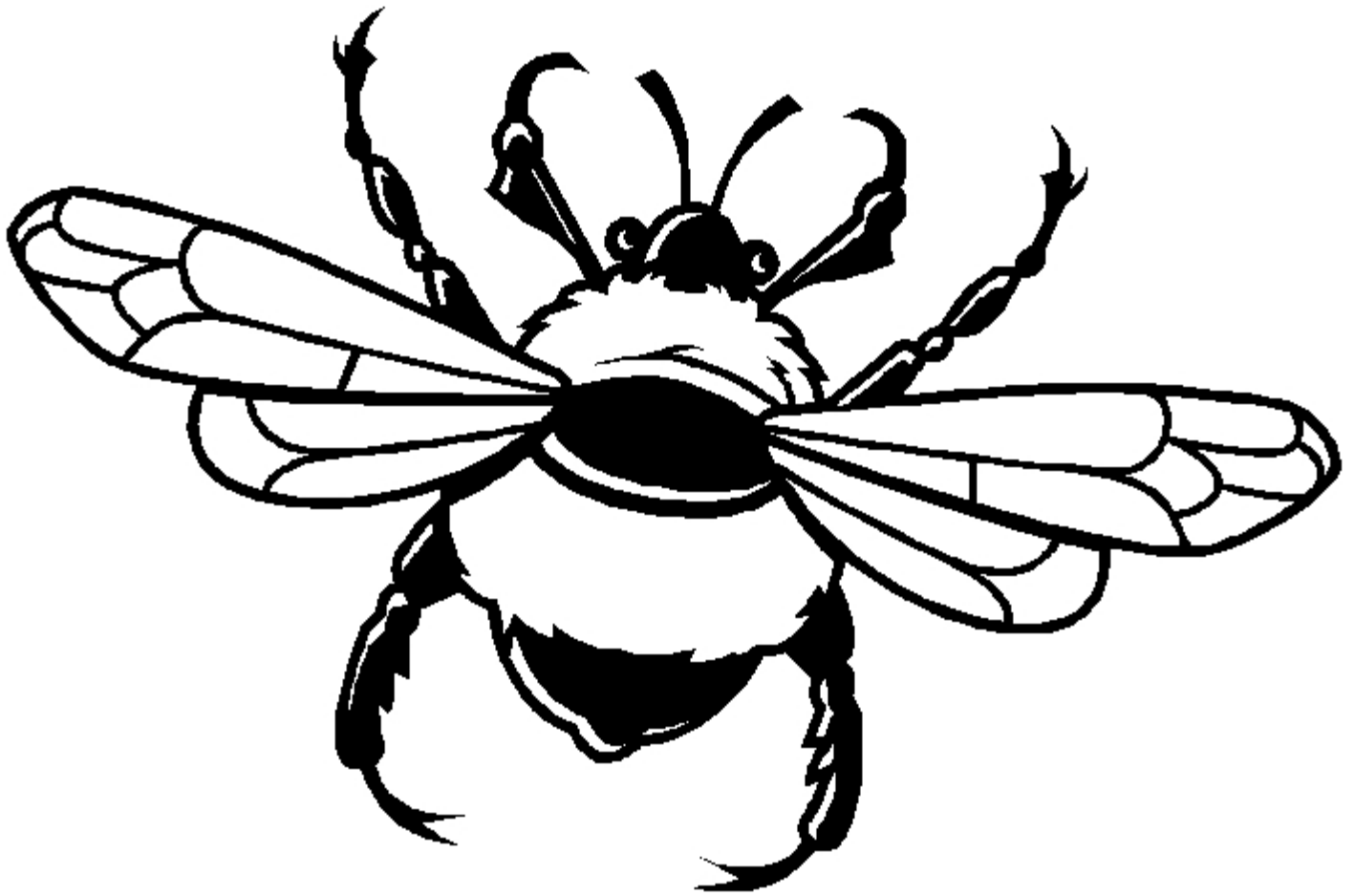


I am a BUTTERFLY. I am a good bug. I come in many colors and sizes. I pollinate many fruits, vegetables, and ornamental flowers by feeding on the nectar of flowers.



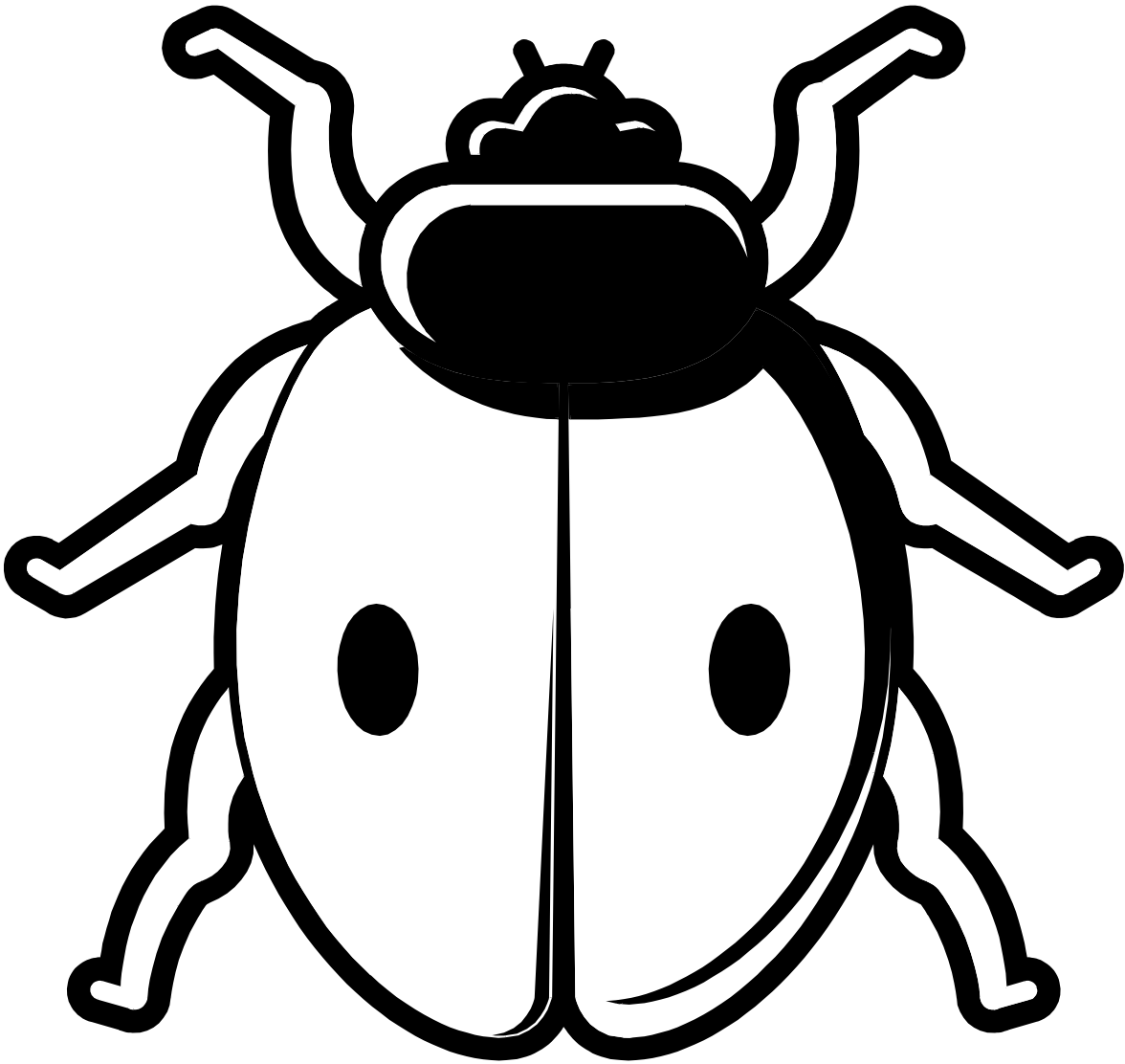
Hi, I am a LACEWING. I am a good bug.

I can grow up to 2 3/4 inches long. I am green or brown with a wide pale stripe along the top of my body. I feed on a large variety of bad insects.

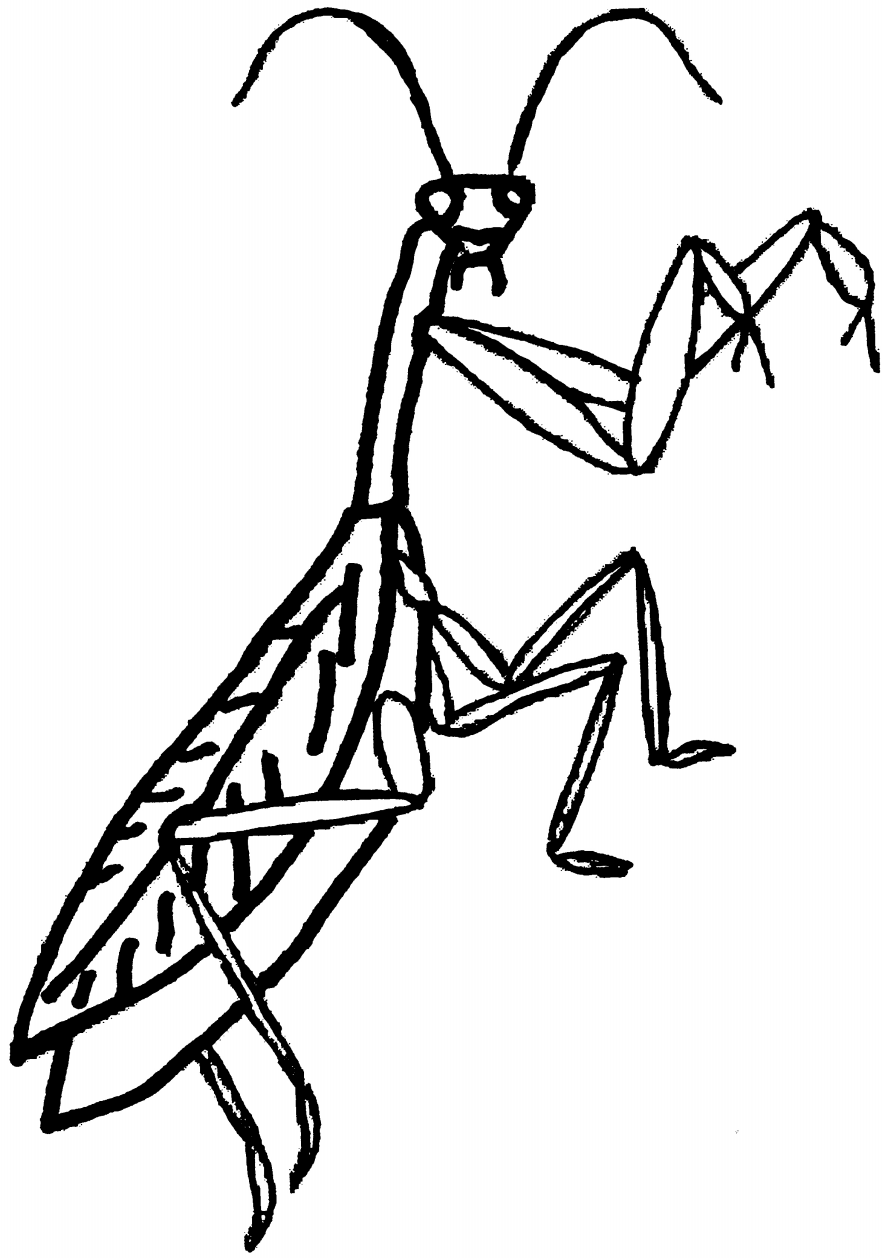


I am a HONEY BEE. I am a good bug. I grow up to $\frac{3}{4}$ inch long.

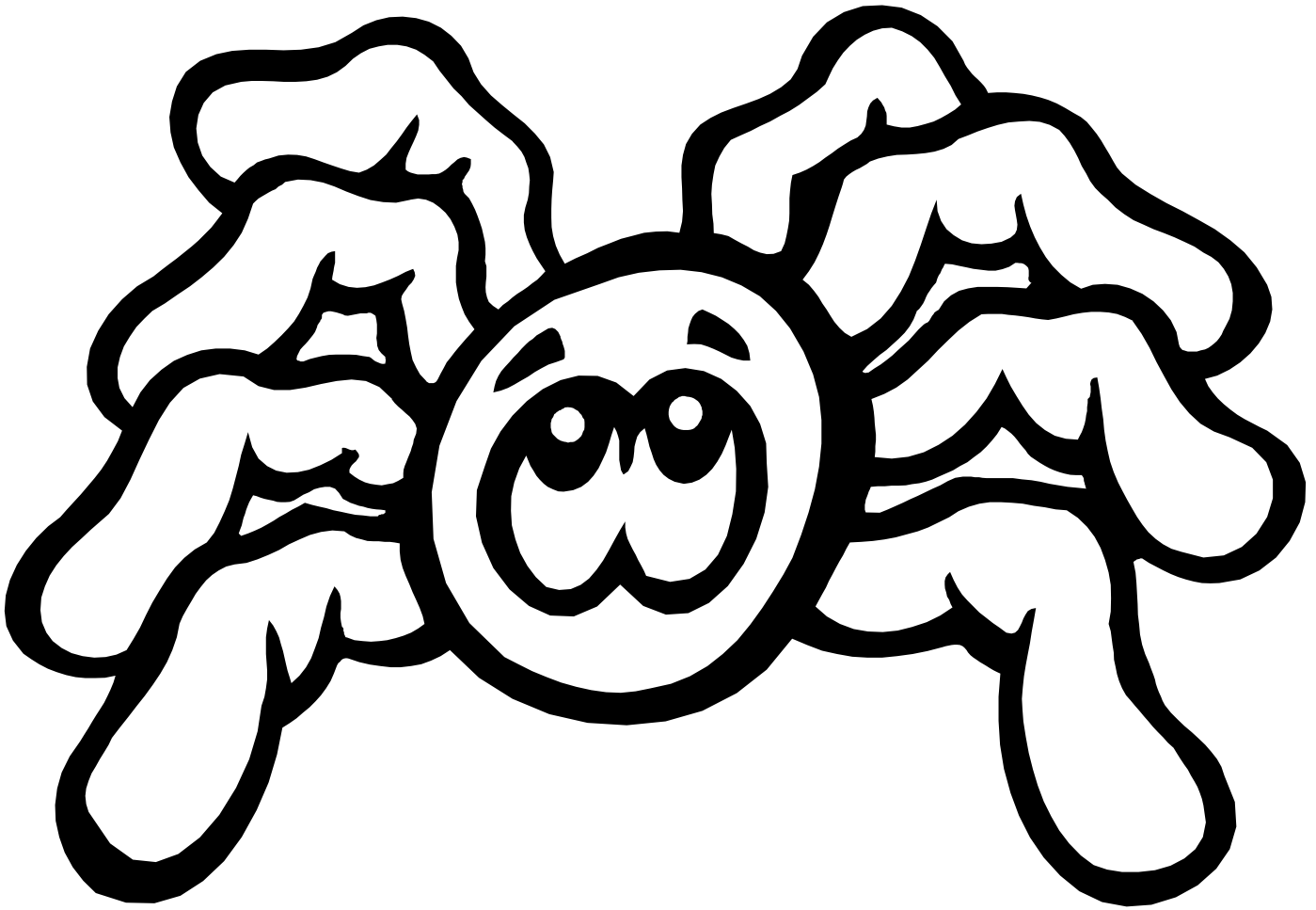
I am black, brown or brown with yellow in color. I pollinate many fruits, vegetables, and ornamental flowers while feeding on the nectar of flowers.



I am a LADY BEETLE but, you might know me as a Lady Bug. I can be mustard yellow, orange or red with up to 19 black spots. I can grow up to 1/4 inch. I feed on soft bodied insects and egg of caterpillars. My favorite meal is aphids.



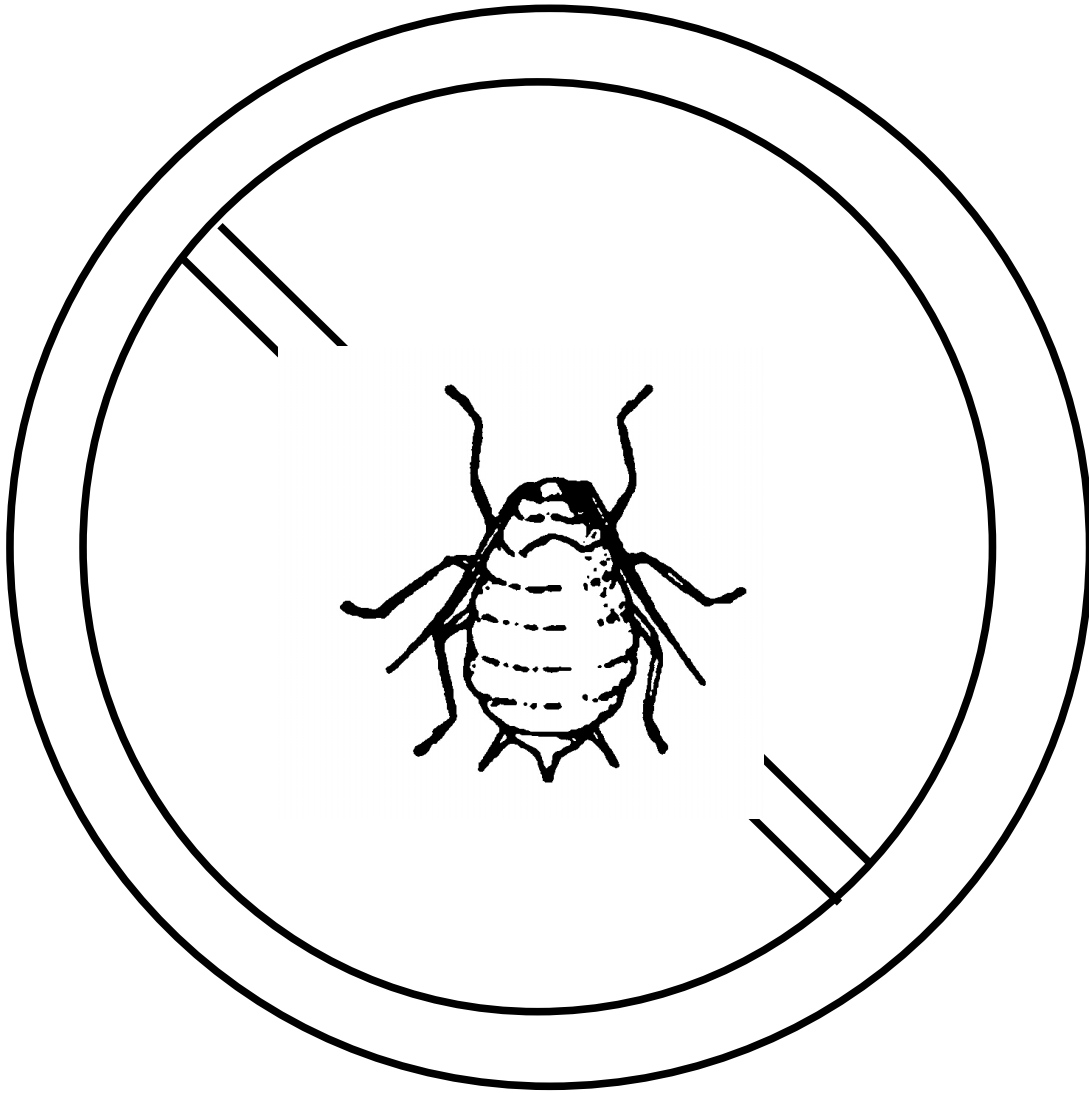
Hi, I am a PRAYING MANTID. I am a good guy. I can grow up to 4 inches long. I am green to grayish brown. I feed on a large variety of bad insects and other arthropods.



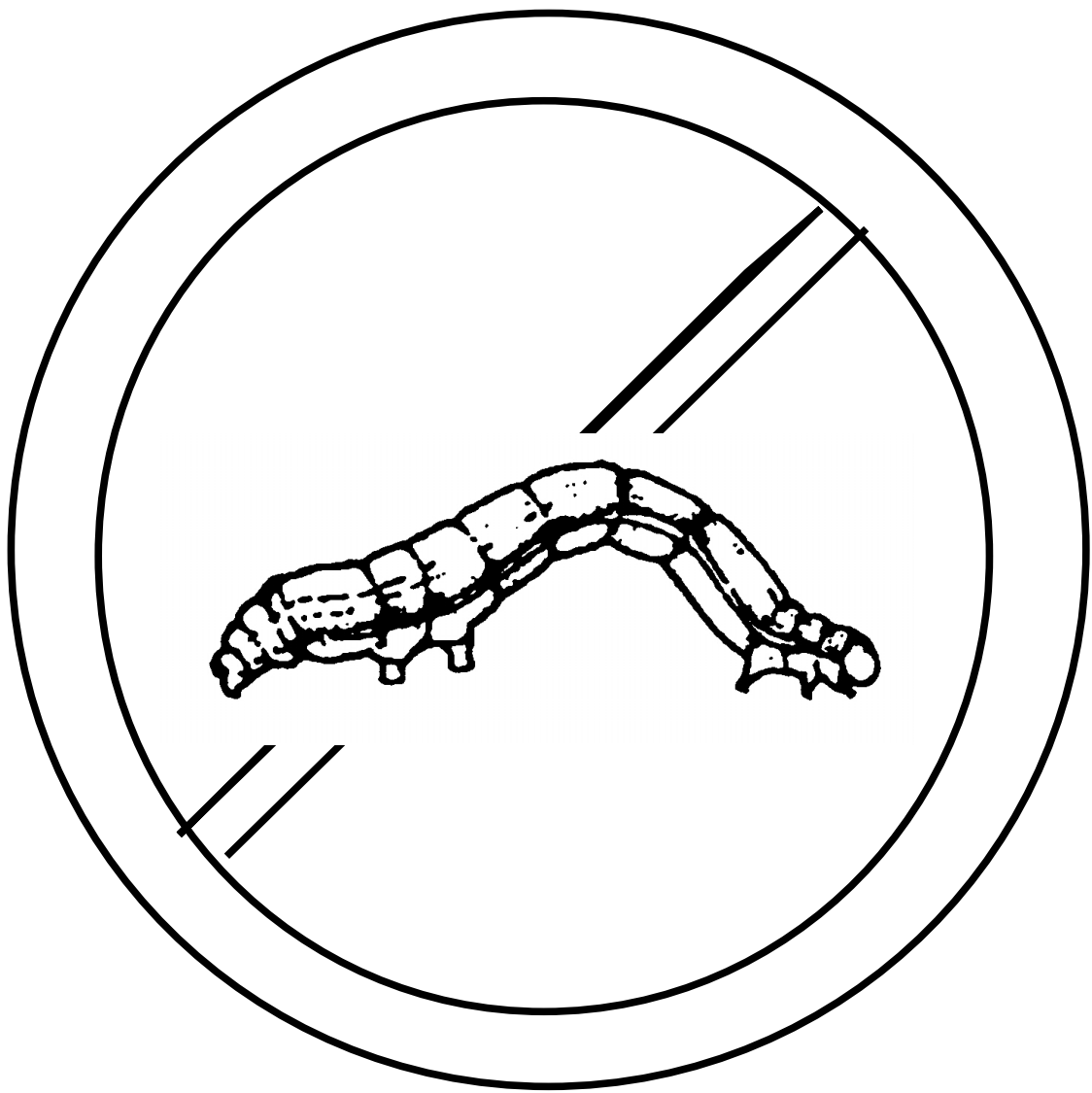
I am a SPIDER. I am a good bug. I have 8 legs. I can grow up to 4 inches long. There are about 900 species of us in Texas and we come in many different colors. I love to build beautiful webs to trap a large variety of bad insects, which I eat.



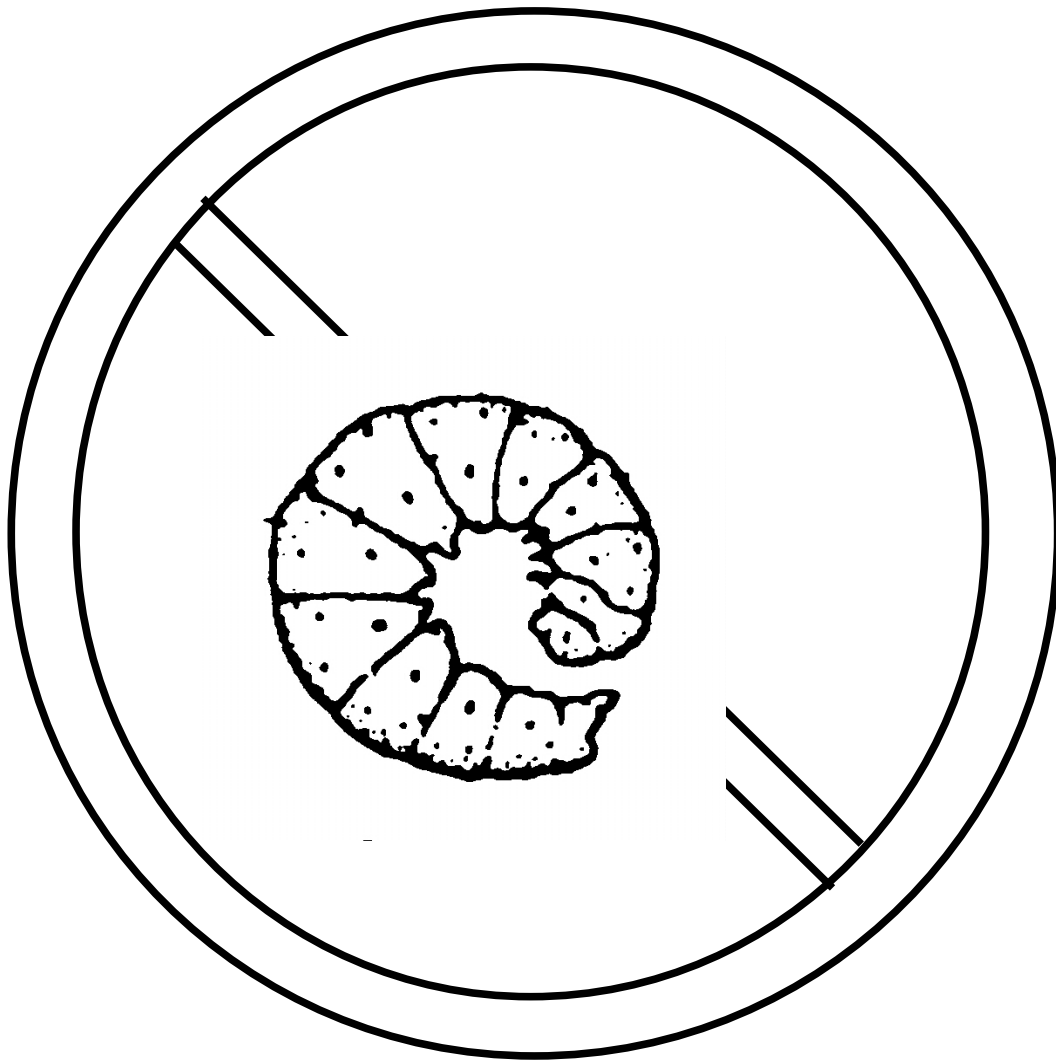
BAD BUGS



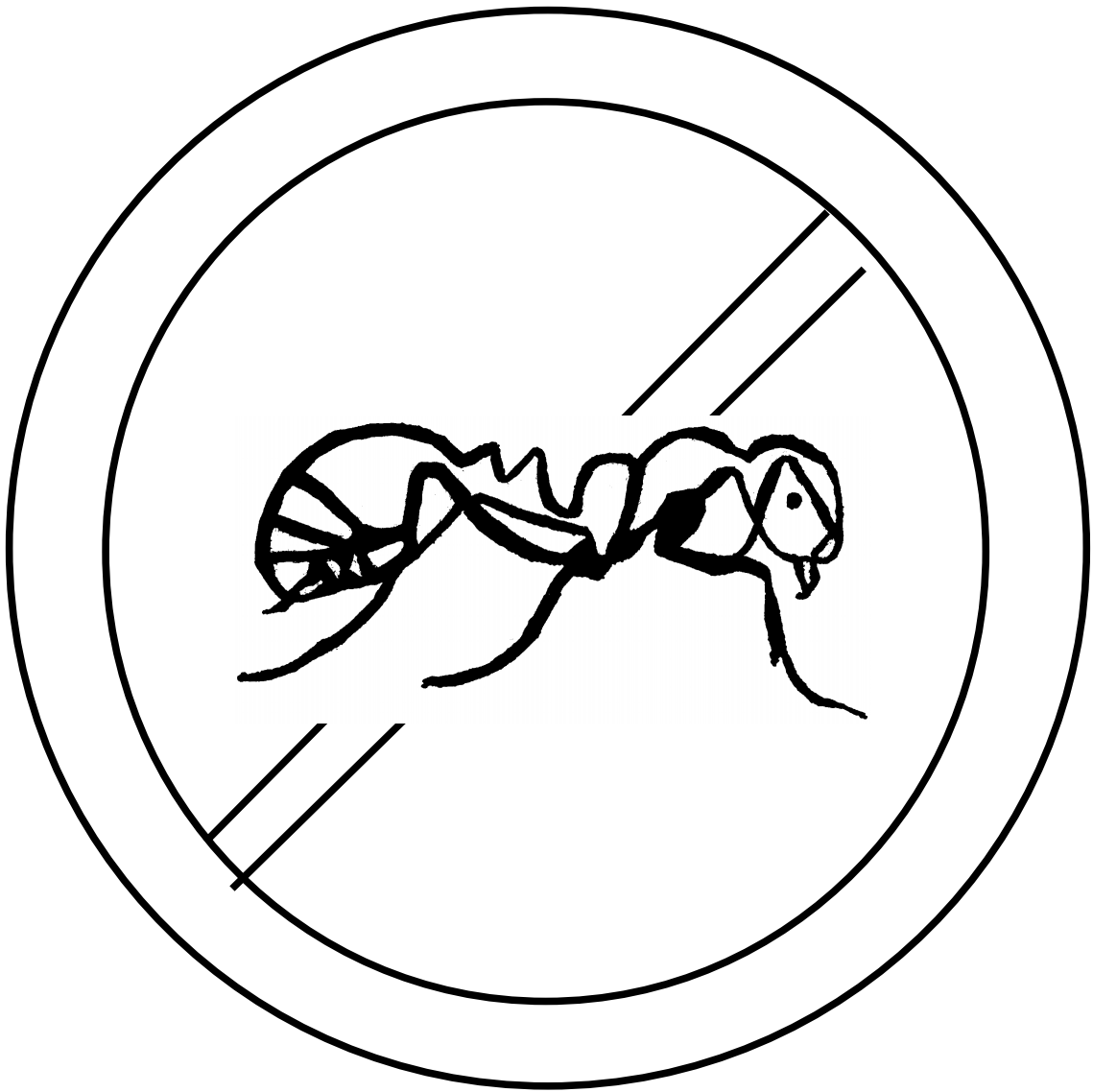
I am a APHID. I am a bad bug. I am a soft bodied and very small, between $\frac{1}{16}$ to $\frac{1}{8}$ inches long. I range in color from green to brown, red, black or purple. I am found in great numbers on your plants. I use my piercing sucking mouthparts to feed on plant sap.



I am a CABBAGE LOOPER. I am a bad bug. I can grow up to 2 inches long. I am light green in color. I feed on leaves of your plants. I am sometimes called an inchworm because of the way I walk.



I am a CUTWORM. I am a bad bug. I can grow up to 1 1/2 inches long. I am grayish-black in color. I live in the soil and when disturbed I curl up into a C-shape. I cut off small plants at or near the soil surface and feed on them during the night.

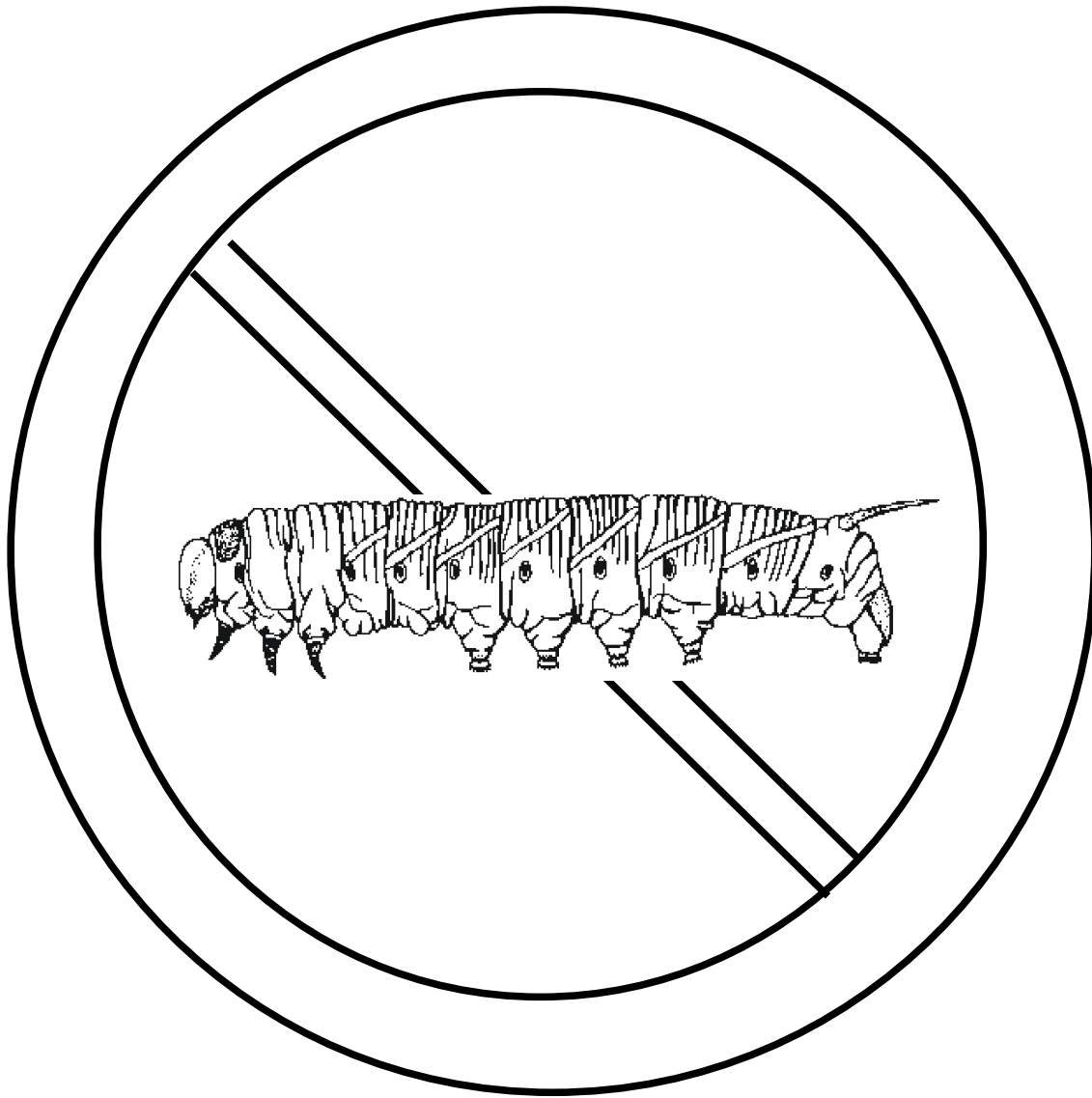


I am a FIRE ANT. I am a bad bug. I can grow to 1/4 inch. I am reddish brown in color. My sisters and I swarm and bite anything that we think is a threat to us.



I am a GRASS HOPPER. I am a bad bug. I can grow to 4 inches long. I am brown or green in color.

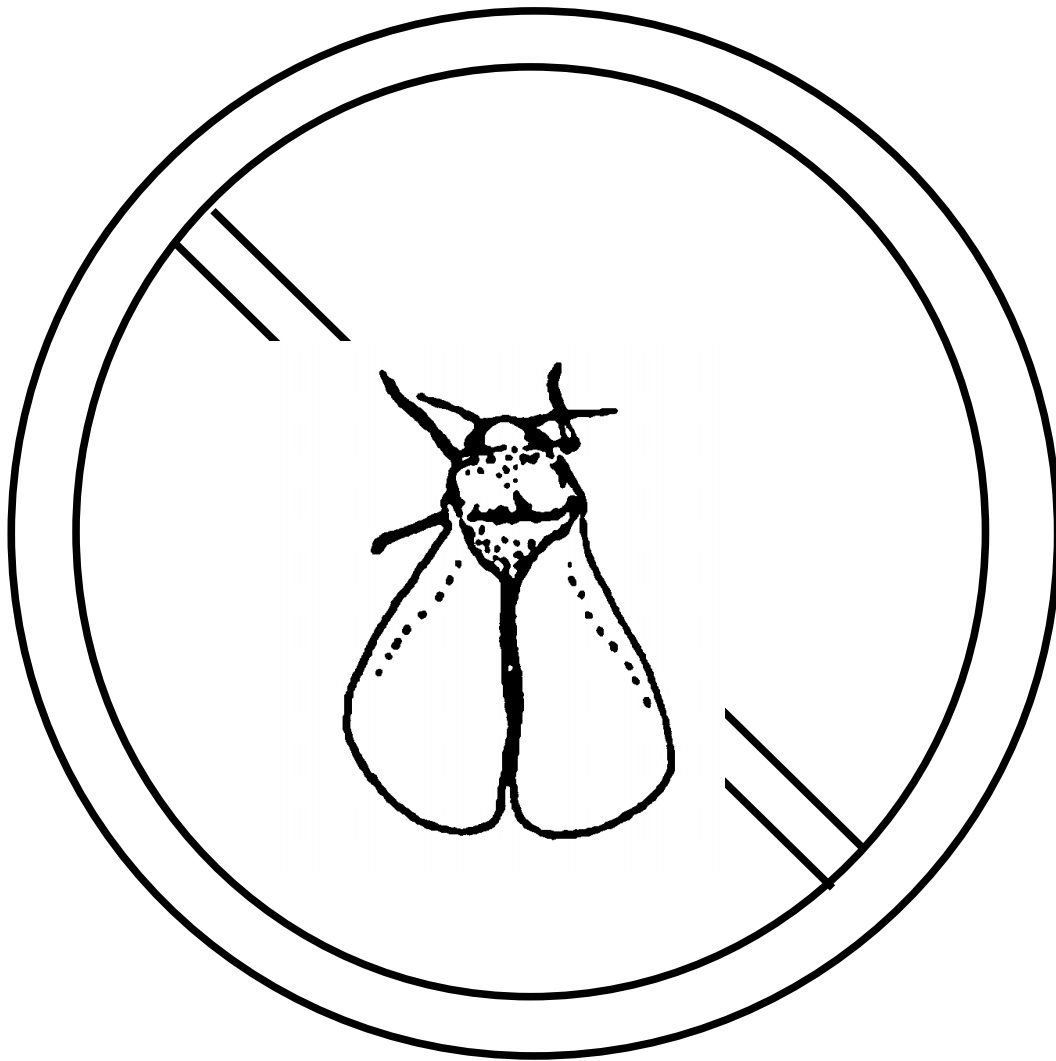
I love to feed on your plants.



I am a TOMATO HORNWORM. I am a bad bug. I can grow up to 4 inches long. I am pale green or brown with white and black markings.

I feed on leaves of tomatoes

and related plants.



I am a WHITEFLY. I am a bad bug. I am very small, about $\frac{1}{25}$ - $\frac{1}{20}$ inch long. My wings are white, but my body is pale yellow. If you shake your plant and see a lot of small snow flakes, then you see me and my friends. I feed on plant sap.

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The Texas A&M University system, U.S. Department of Agriculture, and the County Commissioners Courts of Texas Cooperating

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