Kids Ask Dr. Bug

Home to more than plants, kids ask Dr. Tamra Reall about the curious things found in the garden.

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What are the white, wormy things in the soil? Charlie, 10

What you are seeing are grubs. Grubs are larvae that will become beetles. Like caterpillars become butterflies, beetles have four major life stages: eggs, larva, pupa, and adult. Grubs live in the soil and feed on plant roots, such as grass, flowers, or trees roots, before coming out in the open and feeding on the above-ground parts of plants. Some of these grubs can get as big as your thumb! We have four main types: May/June beetles, Masked Chafer, Japanese beetles, and Green June Beetles. Even though the adults look very different from each other, the grubs all look about the same. Entomologists can tell them apart by looking at the hair patterns on their hind end, called the raster. Many larvae and nymphs live in the soil for part of their life cycle. You may remember a few years ago when the periodical cicadas

emerged. They had been living underground for 17 years before emerging as an adult!

Do the spots on ladybugs tell you how old they are? Maggie, 7

Ladybugs, also known as ladybird beetles, have four life stages like the grubs in the previous question. Only in the adult stage do they have wings and those wings never change. So, if the ladybug has two spots or 22 spots, that's what will be there their entire adult life. Most ladybugs live about a year. The bright red, orange or yellow wings with black spots (or vice versa) are a warning to other animals that says, "Don't eat me! I taste bad!"

Can mosquitoes send you to the hospital? Emily, 9

The short answer is yes, although not every mosquito is carrying a disease so not every mosquito bite will get you sick. However, because we don't know which mosquitoes are and which are not carrying diseases, be careful so that you don't get bitten in the first place. Wearing insect repellent is a good idea, as well as not playing outside when mosquitoes are out – at dusk and dawn typically. I also recommend emptying any water in containers around your yard. Buckets, old tires, tire swings, gutters . . . these are all places mosquitoes will lay eggs, and that means more mosquitoes that can bite you. If you do get a bite, don't panic. Just be aware that if you start feeling sick, see your doctor.

Image: 7-Spotted Ladybug by Dominik Stodulski

Is it okay to kill insects? Andrea, 10

Yes, if you need to, but remember that most insects are important to our environment and for our health. Insects pollinate plants, are a food source for many animals, break down dead plants and animals to recycle nutrients, and they make our world a much more interesting place because they are beautiful (think: butterflies), fascinating (dragonflies), and magical (lightning beetles).

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