

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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Is a roly-poly an insect? Nick, 12

Also known as a pillbug and woodlouse, this little crustacean is more closely related to its cousins, shrimp and crayfish, than insects. This tiny animal must have moisture to survive. It breathes through gills, although it cannot survive under water. It feeds mostly on decaying leaves and can be found under logs or rocks. It's called a roly-poly because it can roll into a ball when disturbed. Another cool fact is that momma roly-polys have a pouch, like a kangaroo. 100-200 eggs incubate in the pouch at a time. After hatching, the babies may stay near their mom for a couple of weeks.



Image: Roly-poly by katunchik (cc-by-sa-2.0)

Where does our food come from when there is snow outside? Reggie, 9

In this day and age, much of the food in our grocery stores comes from other states, and even other countries. Because it is warmer in other parts of the world, and because of technology such as refrigerated trucks, we are able to have fresh fruits and veggies year-round. Locally, some farmers grow food in greenhouses or hoop houses, allowing them to have warmer temperatures when it is so cold outside.

What are the holes on an insect's abdomen? Lizzy, 12

Insects breathe through these holes, called spiracles. Unlike us, insects don't have lungs. Breathing is more passive for insects – air travels in and out through these holes and this is one of the reasons insects are so small. If they were bigger, they wouldn't be able to get enough oxygen.

Breathing isn't the only strange (to us) body process. Butterflies and some flies taste with their feet, female crickets taste the soil with their ovipositor before laying eggs, and some parasitic wasps taste potential hosts with their antennae. Many insects use their antennae to smell. And, some insects have "ears" on their legs or abdomen.

Why do bugs bite? Ian, 11

Depending on the insect, some may bite to get food, others may bite to protect themselves. Still others may just be tasting you curiously. Most insects are not interested in you at all. Female mosquitoes need a blood meal in order to make eggs. Bed bugs need to feed on blood in order to grow . . . and can go a year between meals! Soldier termites bite in order to protect their colonies. And, I've been bitten by beetles when I've picked them up for a closer look. Have fun outside, but take some precautions such as wearing insect repellent to avoid annoying bites.

Where do butterflies go when it rains? Laura, 9

One day last summer, while there was a gentle rainfall, I noticed a small butterfly hanging upside down under a thick blade of grass. Butterflies and moths hide when it rains – under leaves, rocks, trees, or wherever they can to keep from being hit by raindrops that are large in comparison to their body. After the storm ends, they bask in the sun until they dry off and can fly again.

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