

Kids Ask Dr. Bug

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

One of the best parts of being a scientist is collaborating with others. This month, my son, Christian, joins me in answering your questions.

Are there different kinds of fleas? Aya, 15

Although there are more than 2,500 known species of fleas, fleas are usually grouped together by a common name based on the animal that species preys on, including cats, dogs, rats, and humans. As it turns out though, fleas aren't that picky! According to the CDC, in the United States, cat fleas are more common on dogs than dog fleas are! Many fleas can even bite and feed on humans. So, if you find any on your pets, it's a good idea to reach out to a vet to help your pet. You can also contact your local extension office for research-based pest control information. ~Christian



Are white spider sacs and brown spider sacs from different kinds of spiders? Janette, kid-at-heart

They may be, but the brown sac could just be an older version of the white sac. The egg sacs of spiders are nearly as diverse as the types of spiders. Sacs come in many shapes (spherical, elliptical, flat), sizes (tiny to as big as the spider), colors (white, brown, yellow, yellow-green), and textures (spiky, smooth, rough, fuzzy). Depending on the spider species, the egg sacs can contain hundreds to thousands of eggs. And, some spiders lay a single mass of eggs while other spiders may create multiple egg sacs in their lifetimes. Spiders leave their sacs in many locations, too, depending on the species. The sac can be found in a web, attached to a plant or furniture, or in the soil. And sometimes, such as with wolf spiders, spider moms carry their egg sacs until the spiderlings hatch. Remember that spiders are usually beneficial predators that help us. As long as they don't pose a danger to you, let them, and their egg sacs, live. ~Dr. Bug

Does a scorpion have an abdomen, like insects? If so, where is it? Daniel, 14

Scorpions have something very similar to an insect's abdomen, called an Opisthosoma. Located between the head (the largest segment) and the tail (the chain of longer, thinner segments), the Opisthosoma contains the Scorpion's heart and lungs. ~Christian

How are insects animals? Amelia, 12

All life on earth is organized into categories so that we can understand how everything relates to one another. The categories, known as taxonomic ranks, start out at the most general and become more specific: Domain, Kingdom, Phylum, Class, Order, Family, Genus, Species. The animal kingdom contains all those species you probably think of when you think of animals – dogs, cats, squirrels, etc. This kingdom also includes insects, spiders, roly polys, and other arthropods. Other kingdoms include plants, fungi, protozoa, bacteria, chromista, and archaea. Here's another interesting tidbit: fungi are more closely related to animals than plants! ~Dr. Bug

Do you have questions for Dr. Bug? Send them to ReallT@Missouri.edu. Please include KADB in the subject, and your name and age.

Tamra Reall (@MUExtBugNGarden) is a horticulture specialist for MU Extension – Urban West Region. For free, research-based gardening tips, call 816-833TREE (8733), email MGGKC.hotline@gmail.com, or visit extension2.missouri.edu. The University of Missouri is an equal opportunity/access/affirmative action/pro-disabled and veteran employer.