

TOXIN Terminology

POISONOUS VS VENOMOUS

Poisonous = dangerous if eaten

Venomous = dangerous if stung/bitten



We likely have heard to never eat a wild mushroom unless it can be absolutely identified. There are around 80 species known to be poisonous, and many mimic edible varieties.

A good rule of thumb in nature is to enjoy everything from a distance; there are a lot of beautiful and interesting plants and animals we can enjoy, but we need to remember that they have developed survival strategies to protect themselves.



Some flowers are indeed safe to eat and many are used in herbal remedies; however, flowers can be every bit as dangerous to ingest as mushrooms. Foxgloves are a bee's delight, but walk a fine line for people, as they are toxic, yet certain extracts are found in some heart medication.

Some plants might be poisonous raw, but safe once cooked thoroughly (young pokeweed, for example), while for others it is a matter of which part of the



plant is consumed. Rhubarb leaves are toxic, while the stalks can be boiled into a tart pie filling. Even a tomato plant has a trick up its sleeve: it's in the

nightshade family, though the fruit is safe to eat. And don't think only plants are poisonous; some animals are too, like the pufferfish. However, they're often creatures we are less likely to add to our menu (a side of poison dart frog, anyone?)



We might be most familiar with the things in nature that are venomous. Spiders, snakes, scorpions, bees, wasps, and other animals have a reputation that instills fear in many. But there is often a lot of myth and misconception surrounding them; for instance, did you know only female wasps and bees can sting? Or that, of those, it's mostly the highly social species (like yellowjackets and honeybees) that do so? Or that wasp and bee venom is different, so an allergy to one does not guarantee an allergy to the other?



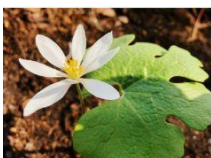
Scorpions (who can fluoresce under certain light!) and spiders are both arachnids and some can pose a risk to people - but not all. About a quarter of scorpion species have a venom potent enough to harm humans, and the percentage of spider species is about half that.

A rattlesnake is an iconic snake, part of the pit viper family. It is recognizable through not just its rattle, but also its elliptical pupils and triangular head. However, not all venomous snakes are pit vipers or share these traits, while many harmless varieties of snake mimic them by vibrating their tails in leaves or flattening their heads. Know your local species - and never handle any wild snake.



...VS IRRITANT

They can be toxic (like the bloodroot, bottom left), or they might be merely allergenic (such as the misnamed poison ivy, bottom right) - whichever category they fall under, these plants (as well as some fungi and animal species) have an extra line of defense: being an irritant to your skin. They don't wait for you to take a



nibble or to provoke a sting; if you so much as handle them, you might come away with an itchy rash, in pain, or even scarred. So what is the moral of the story? Walk with a gentle footstep in the wild, exercise caution and respect, and learn to be wise about local flora and fauna.

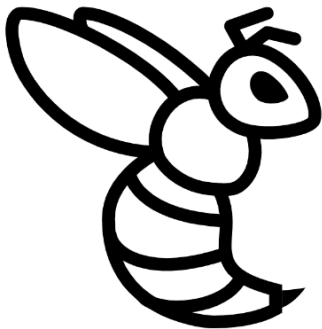


Know your **TOXINS**

POISONOUS VS VENOMOUS VS IRRITANT



If something is poisonous,
it is harmful if you



If something is venomous,
it is harmful if you are



If something is an irritant,
it is harmful if you
