Stinging Insects: Bees and Wasps

An In-depth Look at Nature's Tiny Warriors

and How to Stay Safe

Stinging insects, particularly bees and wasps, are fascinating creatures that play essential roles in our ecosystems. How can something so beneficial to our livelihood cause such pain? Have you ever been stung by a bee or wasp? They sting to catch prey or defend themselves. The good news is, not all of the over 35,000 species sting or even have stingers.

Bees, Honeybees

Bees and Honeybees are renowned for their critical role in pollination, which is vital for the reproduction of many plants. Bees typically have hairy bodies, which help them collect pollen. They are generally non-aggressive and will sting only when threatened but they really do not want to. Their stingers are barbed, and when they sting, the stinger becomes lodged in the victim's skin, causing the bee to die after the sting. Despite this, honeybees are generally not aggressive and will sting only in defense. The venom of bees and wasps can cause allergic reactions, and multiple stings can be dangerous.

https://extension.okstate.edu/fact-sheets/honey-bees-bumble-bees-carpenter-bees-and-sweat-bees.html#honey-bees--

Bumblebees

Bumblebees are also social and live in smaller colonies compared to honeybees. These bees are larger and fuzzier, making them excellent

pollinators. Bumblebees can sting multiple times because their stingers are not barbed. They are relatively gentle but can become aggressive if their nest is disturbed.

Wasps

Wasps, unlike bees, are predatory and play a crucial role in controlling pest populations. There are thousands of species of wasps, including yellow jackets and hornets. Wasps have smoother bodies and are generally more aggressive than bees.

Yellow Jackets

Yellow jackets are social wasps that live in colonies. They are known for their bright yellow and black markings and can be quite aggressive, especially when their nests are threatened. Yellow jackets can sting multiple times and are often attracted to human food, which can lead to conflicts.

Hornets

Hornets are larger than yellow jackets and have a more painful sting. They are social insects with colonies that can grow significantly in size. Hornets are also aggressive and will defend their nests vigorously. Their sting delivers a potent venom that can cause severe pain and allergic reactions in some people.

Solitary Wasps

Not all wasps live in colonies; many are solitary. Solitary wasps are often less aggressive and include species like the mud dauber. These wasps are beneficial as they hunt and paralyze spiders and other insects to feed their larvae.

What to Do When Stung

Proper medical care is prudent if stung. Follow these steps to minimize the effects of a sting. Wash the sting site and apply ice pack to reduce swelling. Mix baking soda and meat tenderizer with water to make a paste and apply to the sting site. This helps reduce the spread of venom and aids in the swelling. Take an antihistamine to lessen swelling and mild allergic responses. Consult your physician before taking any medications and seek emergency help for more serious reactions such as dizziness, drop in blood pressure, or nausea.

Protection and Preservation

Protect yourself by staying clear of swarms and bee hives without PPE (proper protective equipment). However, bees and wasps are integral parts of our ecosystem, each contributing uniquely to environmental health. Appreciating their differences and similarities can lead to better coexistence and conservation efforts. We must live in harmony so be careful out there.

https://extension.okstate.edu/fact-sheets/print-publications/epp-entomology-and-plant-pathologhy/paper-wasps-yellowjackets-and-other-stinging-wasps-epp-7305.pdf