

Threats to Wild Bees

Source: DTE

A study published in **journal Science**, has revealed that over **70% of wild <u>bee species</u>**, crucial for **pollination**, are at risk from pesticide residues in soil.

- **Key Finding of the Study:** Current **pesticide** risk assessments mainly focus on honey bees, ignoring the impact on wild bees that nest in the soil.
 - Pesticides like **cyantraniliprole** harm wild bees by reducing their survival and reproductive success, threatening future generations.
- Importance of Bees: Bees are vital for pollinating many food crops, contributing directly to food security. A third of the world's food production depends on them according to the <u>Food and Agriculture Organization (FAO)</u>.
 - Honey bees, living in large colonies, use social detoxification strategies (collective behaviors to manage toxins) to buffer pesticide impacts. Wild, solitary bees lack this protection and are more vulnerable to pesticide exposure.
- **Pollination:** It is the process of transferring pollen from the male part of a flower to the female part, which allows the plant to reproduce.
- Pollinator Decline Impact: The decline in wild bees populations due to habitat loss, pesticides, and climate change threatens plants that rely on bees for pollination, impacting global food security, Beekeeping (or apiculture) and biodiversity.

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INDIAN HONEY BEE

Apis cerana indica

Also known as the Asian Honey bee, they are frequently used in beekeeping for pollination.

GIANT ROCK BEE

Apis dorsata

The giant bees are the largest of all honey bee species in India and are highly effective pollinators.



NATIVE BEES OF INDIA





Apis florea

The smallest of all indigenous bees, they are also known as the little bee.

STINGLESS BEE

Melipona sp. and Trigona sp.

Also known as dammer bees, they are able to penetrate flowers and extract honey with vitamins and minerals.

Read more: World Bee Day

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