

Golden nectar trails: Seasonal Bee Plants Of Amritsar

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Introduction Amritsar is a place for beekeeping because it has a lot of good soil and many different types

of flowers that bloom at different times of the year. Amritsar has seasons like spring, summer, monsoon, autumn and winter. Each season has types of flowers that give nectar and pollen to the bees. This is very important for the honeybees because it gives them food and helps them make honey.

For example in the spring mustard flowers are a source of nectar for the bees. Sunflowers, sesame and fruit trees are also important for the bees. Even wild plants and weeds helps the bees when there are no other flowers around. Because the flowers changes with the seasons beekeepers need to know what is happening in their area so they can take care of their bees. They need to make sure that their bees have food and plan to move them if necessary. The flowers and the bees are equally important for each other. The bees helps to pollinate the plants. In Amritsar, fertile soils and diverse crops allows a wide variety of bee forage throughout the year.

Climate and Geography

Amritsar lies in the Bari Doab—the fertile land between the Beas and Ravi rivers. The soil is rich alluvial and silty loam that retains the minerals. The city's slight elevation to the foothills of the Shivaliks create a gentle slope of the land ensures that water doesn't stagnate, which is crucial for the health of flowering trees like the Shisham and Eucalyptus, preventing the root rot that can often dilute nectar quality.

Amritsar's climate is semi-arid. Here, the Winters are biting cold and morning mists of December and January force the bees into a tight cluster. This period of rest is vital. When the sun finally breaks through, it triggers a "floral explosion" in the mustard and toria fields. The contrast between the frost and the sudden winter sun creates a high-viscosity nectar that is incredibly dense and aromatic.

Spring is the sweet spot. The transition from February to April is gentle, providing a long, stable window for citrus and Ber trees to bloom. And Then the intense heat of May and June serves as a natural dehydrator.

The hot, dry "Loo" winds help reduce the moisture content in the hive naturally, leading to a self-ripened honey that has a legendary shelf life and a thick concentration. Amritsar's low humidity for most of the year means that floral scents travel further and clearer. Bees in Amritsar, follows a high-definition "aromatic highway" created by the dry air, leading them to the most pristine patches of flora.

Importance of Local flora

Healthy bee populations depend on access to nutrient rich food sources. Pollen and nectar are two primary components of a bee's diet , providing essential proteins , lipids and carbohydrates that fuel energy and growth. Local flora is uniquely structured to deliver these nutrients in balanced proportions.

The Native plants have an advantage over imported or non – native plants because they are part of the established ecosystem .Local fauna , such as bees and butterflies, have adapted alongside these plants over centuries. These adaptations often result in symbiotic relationship, where plants and pollinators depend on each other for survival.

Native plants bloom in patterns that align with the active periods of local bees , providing a consistent food supply throughout the year.

Major Bee flora:

S.NO.	COMMON NAME	BOTANICAL NAME	FAMILY
1.	Hibiscus	<i>Hibiscus rosa</i>	Malvaceae
2.	Crown daisy	<i>Glebionis coronaria</i>	Asteraceae
3.	Marigold	<i>Tagetes erecta</i>	Asteraceae
4.	Rose	<i>Rosa alba</i>	Rosaceae
5.	Fenugreek	<i>Trigonella foenum</i>	Fabaceae
6.	Lemon	<i>Citrus limon</i>	Rutaceae
7.	Pea plant	<i>Pisum sativum</i>	Fabaceae
8.	Hollyhock	<i>Alcea rosea</i>	Malvaceae
9.	Mustard	<i>Brassica juncea</i>	Brassicaceae
10.	Flax plant	<i>Linum usitatissimum</i>	Linaceae
11.	Pear	<i>Pyrus calleryana</i>	Rosaceae



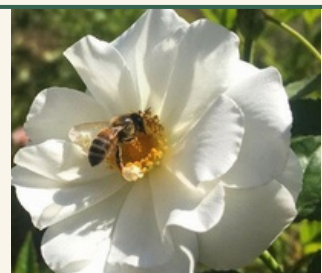
HIBISCUS



CROWN DAISY



MARIGOLD



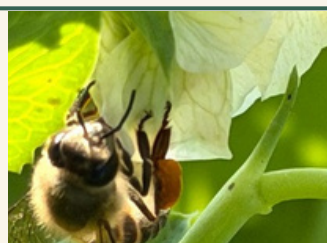
ROSE



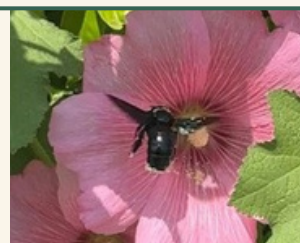
FENUGREEK



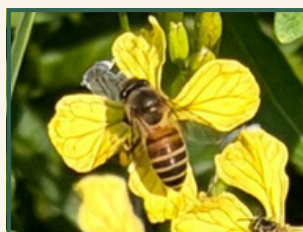
LEMON



PEA PLANT



HOLLYHOCK



MUSTARD



FLAX PLANT



PEAR

Conclusion

Honeybees and flowering plants shares an interconnected relationship that is essential for both ecological balance and agricultural productivity. Bees depends on floral resources such as nectar and pollen for their nutrition and survival and on the other hand, plants depends on bees for effective pollination. This mutual dependence highlights the importance of maintaining diverse flora to support healthy bee populations. Amritsar's climate is best suited for Honeybees. Conserving natural vegetation and promoting bee-friendly farming practices not only protect Honeybees but also the stability of entire ecosystems.

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