

The Unsung Heroes of Urban Beekeeping: How City Trees Support Honeybee Health

Source : [MDPI](#)

Urban landscapes may seem an unlikely paradise for honeybees, but city trees are emerging as essential foraging resources, providing bees with the pollen and nectar they need to thrive. While sprawling green spaces are limited in urban centers, the diverse assortment of trees planted along streets, parks, and public spaces plays a significant role in sustaining bee populations. A recent study exploring the foraging patterns of honeybees in Vienna reveals that trees, even in densely built-up areas, contribute disproportionately to bee nutrition.

Why Are Urban Trees So Important for Honeybees?

Urban trees stand out as some of the most reliable sources of pollen and nectar for honeybees, offering seasonal blooms and steady resources. In particular, some species, like *Ailanthus altissima* (Tree of Heaven), *Tilia* species (Linden trees), and *Gleditsia triacanthos* (Honey Locust), dominate in terms of pollen abundance in urban honey samples. Notably, though trees constitute only a quarter of plant species in urban green spaces, they account for a major portion of the pollen that honeybees collect. This is essential for bees, as tree flowers often bloom in abundance, creating "mass foraging" opportunities that help sustain entire colonies.

How Do Urban Trees Benefit the Ecosystem?

Urban trees serve a dual purpose. Not only do they beautify cityscapes and provide shade for people, but they also create hotspots for pollinators. Trees like *Sophora japonica* (Japanese Pagoda Tree) and *Koelreuteria paniculata* (Golden Rain Tree), popular in city planting due to their resilience to drought and pollution, also produce abundant pollen, supporting honeybee foraging efforts throughout the season. Moreover, the presence of diverse tree species offers bees a broader range of flowering times, ensuring that they have access to food sources from early spring through late summer.

The Power of Non-Native Trees

Interestingly, some of the most valuable urban trees for bees are non-native species introduced to cope with city conditions. Trees such as *Ailanthus altissima* and *Sophora japonica*, originally from Asia, adapt well to urban environments and withstand the heat and pollution often found in cities. These species not only survive but thrive, filling in gaps where native trees might struggle, and they provide ample pollen and nectar.

Supporting Urban Bees Through Strategic Planting

As urban beekeeping grows in popularity, understanding how to support bees in city landscapes becomes essential. By planting tree species that flower at different times, cities can ensure that honeybees and other pollinators have a continuous supply of food. For example, planting *Tilia*

species, which bloom in summer, alongside early-flowering trees like *Salix* (Willows) can help sustain bee populations from spring to fall.