

A NUTRITIOUS BOUNTY OF BLOSSOMS



In many places today, bees are hard-pressed to find enough nectar, particularly in the late summer. They are now getting a helping hand from the Areas in Bloom project started by Bayer.

Honey bees act like squirrels: They gather stocks of food in the summer so as not to go hungry in the winter. They turn the nectar they collect from flowers into honey, which enables them to feed themselves and their brood during the cold months. A bee colony needs about 20 to 25 kg of honey as food, to get through the winter. And to produce one pound of honey the colony's 20,000 to 60,000 female worker bees have to fly up to 88,500 kilometers – more than twice around the globe.

However, even the busiest of bees will not be able to make their quota if there is a lack of diverse forage. On the fields of Europe and North America, most of which are intensively worked, the busy insects do not find enough food or, more importantly, a sufficient variety of nourishment. Wild bees and other pollinators such as butterflies are also suffering from the inadequate supply of food, because, unlike honey bees, they do not have beekeepers offering them sugar syrup when nectar and pollen are not available.

Field poppies and cornflowers are popular food sources for pollinators.

“Our aim is to improve forage diversity for bees and other pollinators in rural areas while also increasing the number of flowered areas and linking up existing structures,”

says Fred Klockgether, a beekeeper and bee health consultant for Bayer. “To contribute to that we have provided flower seeds to some 30 municipalities in Germany and Austria that have created nutritious blooming strips and fields that are beautiful at the same time.” Large stretches of nourishing blooms are also popping up at Bayer’s plants and offices throughout Europe and North America – and plans are underway to make the rooftop of the Bayer Information Center (BayKomm) in Leverkusen more attractive for bees and

AT A GLANCE

- // Honey bees, wild bees and other insects do not find enough food on intensely worked fields of Europe and North America.
- // Cities also often lack forage diversity for pollinators.
- // Flower seed mixtures from Bayer help restocking food sources for insects in rural and urban areas.



INTERVIEW

Dr Sophie Denise-Lecat

In charge of sustainable development at Bayer CropScience in France

visitors alike. So far, the Bayer initiative has led to the planting of almost 1,000,000 m² of wildflowers, an area that is twice the size of the Vatican City, the world's smallest country.

The first results show that strips of flowers in both town and country are doing the pollinators a world of good. This became evident in Bayer's cooperative study "Pollinator Diversity in Southwestern Germany," where test plots, ecologically enhanced with an abundant supply of wild flowers, showed a steep increase in both species diversity and the number of wild bees and butterflies (see pages 26 to 29). This effect has also not gone unnoticed by amateur gardeners, as the bags of mixed seeds have been on sale in many gardening and home-improvement stores in Germany and Austria. It takes about six weeks for a monochromatic stretch of green grass to be transformed into a colorful sea of blossoms. And nature lovers can enjoy this splendor without having to do a whole lot of work: The wildflowers need little water to grow and only have to be mowed or scythed once or twice a year – which makes them the perfect solution for urban areas, for example along bike paths or on traffic islands.

The flowered areas even indirectly help protect plants in the city and on the farm. This is because they provide food and habitat for insects that hunt down harmful plant pests. Ladybirds,

for example, feed on plant-sucking aphids. This will benefit those farmers who plant strips of flowers alongside their fields. And important pollinator insects, like bees, will be abuzz with excitement about the abundance of nourishing forage, which will enhance their diet.

What response has the Bayer initiative "Areas in Bloom" had in France?

"It has proven very successful so far. Dozens of employees have already sown the flowering plants in both their own gardens and those of their friends. What's more, lush stretches of blooming wildflowers have sprouted up at three Bayer locations in France, and we maintain test plots where we are studying the effects of this forage diversity in detail."

How are you getting the word out about the idea?

"Along with our own promotional activities, we are relying on word-of-mouth publicity. And it's working. For example, Merville, a small town outside of Paris, recently contacted us to ask if we could also supply wildflower seeds there. Today, cornflowers and other wildflower varieties cover a total of nearly 5,000 square meters of the land in Merville."



DID YOU KNOW?



Bees need to visit some 2,000,000 flowers in order to produce 0.5 kg honey.