



## With which other pollinating insects do honey bees share their food sources? The first results of 2024 from [beeplants.eu](https://www.beeplants.eu)

*J. van der Steen, Alveus AB Consultancy, The Netherlands*

*Due to the concern about the capacity of areas to feed the honey bees, bumble bees, solitary bees and hoverflies, this citizen science research is being conducted. These concerns are due to the increasing use of space due to infrastructure, intensification of agriculture and loss of biodiversity. One way to answer these questions is to perform a baseline measurement to determine what the state of affairs is and then to prosecute this for a few years to see if something is changing. In the EU BetterB Study, beekeeper citizen scientists register honey bees, bumble bees, solitary bees, hoverflies and other insects in the flowers and pass this on in the [www.beeplants.eu](https://www.beeplants.eu) app. We ask the participants to register the number of insects mentioned above at least twice a week, and preferably more often. The participants are asked to do the registrations in the vicinity of their place of residence and at their work. We started the study in 2024 with 225 participants in Finland, Latvia, Norway, Denmark, the Netherlands, Belgium and France. The details from January 2024 to the end of September 2024 have been listed. In the results displayed, the aforementioned plant species are not a ranking of the best bee plants; The registrations were made on bee plants in the vicinity of the participants.*

received 7544 observations on 113 plant species. For each observation, 45% of the observations had one pollinating insect, 23% had two insects, 10% had four insects, 1% had five insects and 16% had no insects. After removing all observations in the database on plants that were reported less than 10 times in the entire survey from 2024, 5698 observations remained on 74 plant species. The following results are based on this data. We see that none of the 74 plant species in all observations was visited by only one insect. This means that the aforementioned insects share these food sources. Whether this is the same in all regions will be further analyzed this year.

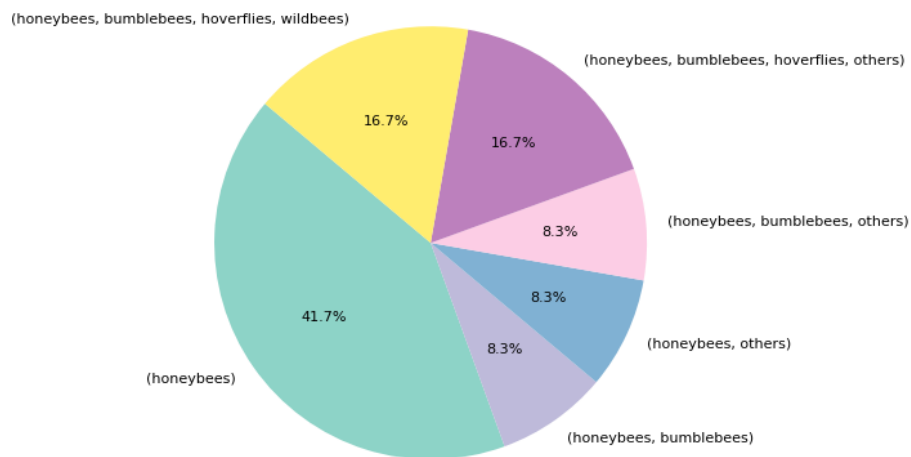
The data was further analyzed for the relative presence of insects on specific flowers in the winter, spring, and summer, as well as the influence of temperature, combinations of insects per observation, and the flowering times of the plants. When this is referred to as more and less, this means "relative to the other insects". In the winter, honey bees were seen the most on crocus, bumble bees and solitary bees on the willow (*Salix* spp). In the spring, we saw honey bees the most on the regular maple (*Acer pseudoplatanus*), bumble bees and solitary bees on cranebills (*Geranium* spp) and solitary bees on Phacelia (*Phacelia tanacetifolium*). In the summer, honey bees were seen the most on the lavender (*Lavendula angustifolia*), the bumblebees on Linde (*Tilia* spp) and the solitaire bees and hoverflies on the bear claw (*Heracleum* spp). At temperatures of 2 to 9 oC we saw the honey bees most often on the maple (*Acer campestre*) and the bumblebees on the dandelion (*Taraxacum* spp). At 9 to 16°C this was the plum (*Prunus domestica*) for the honey bees, and we saw the hoverflies mainly on bear claw. At 16- 23°C, honey bees and bumble bees were most seen on lavender and hoverflies again on bear claw. All data, most honey bees were found on field maple (*Acer campestre*), followed by Lavender and Wilde Marjolein (*Origanum vulgare*), and the bumble bees on the Linde. The solitary bees were reported on a wide range of plants. The hoverflies were mainly reported on bear claw. When we look at the honey bees, bumble bees, solitary bees and hoverflies, we see that the majority of the plants were most visited by the honey bee, except the autumn anemone (*Anemone tomentosa*), hawnbeard (*Crepis* spp), and five other plants which were visited by hoverflies. Viper's bugloss (*Echium* spp) and 12 other plant species were

mainly visited by bumble bees. We have not yet looked at the locations and land use in this report. This is currently being worked on, and the results will be published at a later stage.

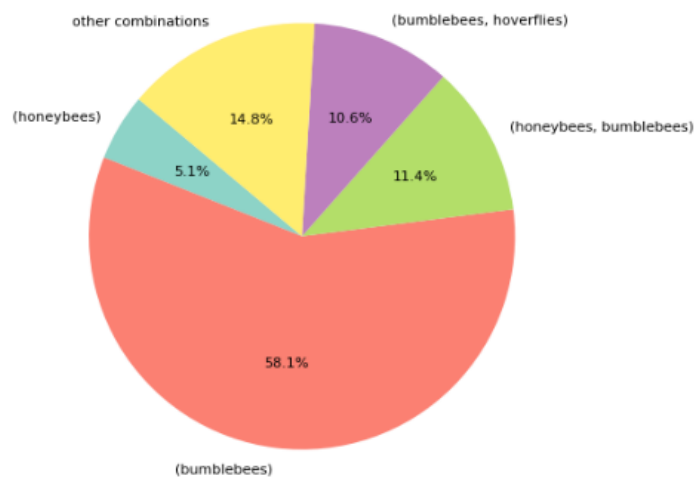
The study will be continued in 2025 and 2026 and beekeepers from at least Spain, Portugal, Italy, Greece, Cyprus, Poland and Germany will be asked to participate.

For the current and future participants, the full 2025 report can be found in English, on the beeplants.eu app: <https://beeplants.eu/static/reports/beeplantsueu-rport-2024.pdf> and the BetterB website ( Learning Platform | Better-B Project). In the short term, a button will be added to the website where the participants can view their data directly and compare their own data with the general picture. This is how you make your own bee-calendar:

### Frequency of pollinator combinations observed on *Acer campestre*



### Frequency of pollinator combinations observed on *Echium vulgare*



Learn more

[www.better-b.eu](http://www.better-b.eu)

Follow us on LinkedIn

Better-B Project

This work was supported by the Better-B project, which has received funding from the European Union, the Swiss State Secretariat for Education, Research and Innovation (SERI) and UK Research and Innovation (UKRI) under the UK government's Horizon Europe funding guarantee (grant number 10068544).



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Swiss Confederation