#efsa4bees

Bulletin Nº 1 **ENVI COMMITTEE MANDATE TO EFSA ON BEE HEALTH**

Welcome to the first MEP bulletin on how EFSA's scientists are working to protect our bees. You might be wondering why you're receiving this update. Let us explain…

EFSA is currently engaged in an exciting project aimed at securing the future of bees in Europe. The project has two main pillars, both the result of important interventions by the European Parliament.

A NEW APPROACH TO ASSESSING RISKS TO BEES

In June 2018, the European Parliament's Committee on the Environment, Public Health and Food Safety (ENVI) asked EFSA to deliver a report outlining a framework for assessing the risks posed to honey bees by multiple stressors. Why?

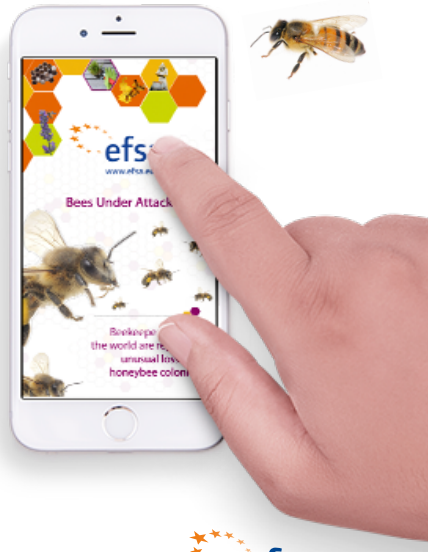
The health of honey bee colonies has been declining in recent years and scientists around the world are working to better understand the reasons, which are complex and involve multiple, interacting factors, such as:

- modern agriculture practices and pesticide use;
- poor bee nutrition;
- attacks by pathogens, parasites and predators;
- environmental changes and habitat loss.

For instance, there is evidence of significant interactions between: different chemicals; chemicals and infectious agents (viruses and parasites); chemicals and nutritional stress; and nutritional stress and biological agents. These interactions are not simple; rather multiple stressors may act together, either simultaneously or in sequence.

The request from Parliament came at an opportune time for EFSA, whose Multiple Stressors in Bees (MUST-B) working group has for the past five years been investigating how these different factors combine to deplete bee numbers.

Learn more about multiple stressors and bees. Click on the image.



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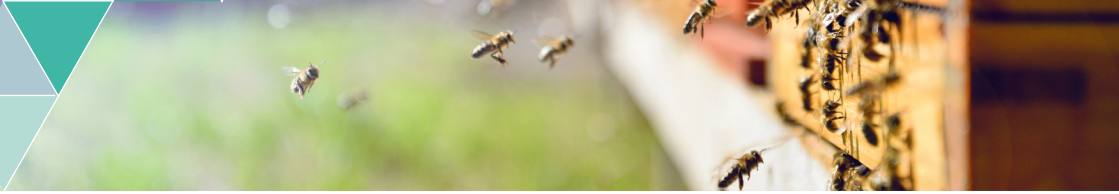
European Food Safety Authority



Building on this existing body of work, the MUST-B group is now working on a framework that would advance assessment of risks to bees beyond consideration of single uses of single pesticides. Based on a predictive computer model, the new scheme would enable assessors to evaluate not only the effects of multiple applications of many different chemicals (pesticides) but also how the additional biological and environmental stressors listed above impede the ability of bee colonies to recover from exposure to chemicals.

It also attempts to resolve two other major shortcomings in the current pesticide risk assessment scheme: it would include information on the landscape-level exposure to pesticides and the other stressors that bees experience in real life i.e. when they leave their hives to forage; and it would be able to detect "sub-lethal" effects such as impaired memory and navigation skills which over time can damage colonies.

This will only be possible if risk assessors have access to high-quality, harmonised data that gives an acute, real-time picture of the health status of bee colonies and the levels of chemical and biological hazards that are present. Monitoring data will therefore be the lifeblood of the model. Ideally, this will be provided by beekeepers and internet-connected technologies that enable real-time, in situ surveillance of colonies. Which brings us to the second pillar of EFSA's bee project…

BRINGING STAKEHOLDERS TOGETHER TO SHARE DATA

The mandate from the ENVI Committee specifically asks EFSA to work closely with the European Bee Partnership. The partnership was set up in 2017 at a scientific colloquium called to discuss ways to improve the collection and sharing of data on bee health in Europe.

The colloquium was attended by around 130 stakeholders – beekeepers, farmers, scientists, risk assessors and managers, the public and policymakers – who agreed to establish the partnership, facilitated by EFSA and supported by the European Commission.

Learn more about data sharing and MUST-B.

The aim of the partnership is to improve collection, management and sharing of data, for the benefit of all. The MUST-B team is supporting the partnership by developing detailed guidance on exactly what kind of data will be needed to make the new assessment scheme work.

This is the first of several updates on MUST-B and the European Bee Partnership that we will be sharing with you over the coming months. We hope you find them useful and are as excited as we are about the potential outcomes of this important work. You can also follow our progress on Twitter @EFSA_EU