



La santé des abeilles

Apport de la recherche en évaluation des risques

9 décembre 2019

CONFERENCE INTERNATIONALE ANSES-EFSA

> Espace du Centenaire Maison de la RATP, 189, rue de Bercy - 75012 Paris

In 2013 EFSA published guidance for assessing the potential risks to honey bees, bumble bees and solitary bees from the use of pesticides.

The 2013 guidance:

- Considered risk assessment for chronic or repeated exposure
- Added schemes for bumble bees and solitary bees
- proposed a new method for assessing whether the potential harm posed to bees from the use of a plant protection product is acceptable.
- provided up-to-date advice to those involved in the evaluation of pesticides, including industry and public authorities.







- Risk to bees can be performed using specific protection goals (SPGs), which were set in consultation with EU risk managers.
- SPGs define the maximum acceptable level of harm that can be caused to bees without compromising the ecosystem services they provide e.g. pollination. This assessed against a series of "attributes to protect".
- For honey bees these are:
 - survival and development of colonies;
 - health of larvae
 - bee behaviour
 - abundance of bees
 - ability to reproduce







- For honey bees: all the attributes to protect are related to colony strength i.e. the number of individuals in a hive. It is not acceptable for colony size to fall by more than 7% as a result of exposure to pesticides at any time.
- Data on mortality rates of bumble bees and solitary bees were scarce, so the data for honey bees were used with additional uncertainty factors
- New procedure for calculating if the potential level of harm is acceptable:
 - gives a more precise assessment of acceptable loss of foragers than the approach in place at that time;
 - should afford greater protection to honey bee colonies situated on the edge of fields treated with pesticides.
- the risk from exposure to sub-lethal doses of pesticides requires more work as there are differences between laboratory test findings and what actually happens in a bee colony: need to design an accurate method







- Routes of exposure to pesticides from:
 - spray deposits or dust particles;
 - consumption of pollen;
 - consumption of nectar;
 - consumption of water (guttation fluid, surface water and puddles).
- Sources of exposure from:
 - treated crop, flowering weeds in the field, flowering field margin and adjacent crops, succeeding crops
- A further element considered is exposure to metabolites of pesticides in pollen and nectar.







- In March 2019 EFSA was mandated by EC to review the 2013 guidance due to:
 - A majority of Member States requesting updates
 - New scientific evidence has become available since 2013
- The Commission has asked that the review should focus on:
 - Evidence on bee background mortality, taking account of realistic beekeeping management and natural background mortality.
 - Exposure routes, particularly through spray application and seed treatment or granular application.
 - The list of bee-attractive crops.
 - The methodology with regard to higher tier testing
- EFSA committed to
 - Finalise the work (pending definitions of Protection Goals by the risk managers) in March 2021
 - Involve stakeholders and MSs throughout the process







Terms of reference

The review of the Bee GD should, in particular:

- take account of the feedback from Member States and stakeholders on the EFSA (2013) guidance document.
- provide a review and summary of the evidence as regards **bee background mortality**, in particular considering realistic bee keeping management for *Apis mellifera* and natural background mortality. EFSA is requested to provide this summary in a separate document from the guidance document.
- review the list of bee-attractive crops in particular considering presence of bees, guttation and agricultural practices (harvesting time before or after flowering). This reviewed list shall also mention at which growing phases (e.g. BBCH codes) a crop is considered bee-attractive.
- review the current risk assessment methodologies in light of recent scientific research and developments e.g. exposure estimation, relevance of the exposure scenarios (e.g. weed scenario) and relevance of some risk assessment schemes. Available relevant guidance developed by Member States should be considered (e.g. draft Guidance Document on seed treatments and/or its follow up work).
- **review the requirements for higher tier testing**, in particular by reconsidering the magnitude of detectable effects *vs* the statistical power and validated population modelling in light of realistic agro-environmental conditions.
- take into account planned and on-going discussions initiated by the Commission on defining specific environmental
 protection goals and review the risk assessment guidance based on the specific protection goals agreed during this
 process.







Stakeholder involvement

- 17 applications received
- Based on the predefined criteria, 9 had been selected
- All the 9 organisations plus MSs are involved in all ad-hoc consultations

5. <u>List of selected stakeholders</u>

Name of Organisation	Stakeholder Category	Name of Expert
European Crop Protection Association (ECPA)	Business and food industry	Mark Miles
European Seed Association (ESA)	Business and food industry	Anne Alix
International Biocontrol Manufacturers Association (IBMA)	Business and food industry	Silvia Hinarejos
Pesticide Action Network (PAN) Europe	Environmental/health NGOs and advocacy groups	Martin Dermine
Pollinis*	Environmental/health NGOs and advocacy groups	Barbara Berardi Tadié
Beelife European Beekeeping Coordination	Environmental/health NGOs and advocacy groups	Noa Simon Delso
APIMONDIA*	Farmers and primary producers	Fani Hatjina
Copa and Cogeca	Farmers and primary producers	Chris Hartfield
International Confederation of European Beet Growers (C.I.B.E.)	Farmers and primary producers	Alexander Krick

^{*} Association is invited to register as EFSA stakeholder organisation.







1

Current GD (EFSA, 2013)

20 commenters; >> 300 comments

Feed into the list of issues to be reconsidered

2

Protocol on background mortality 19 commenter; 290 comments

Improve the protocol







The working group

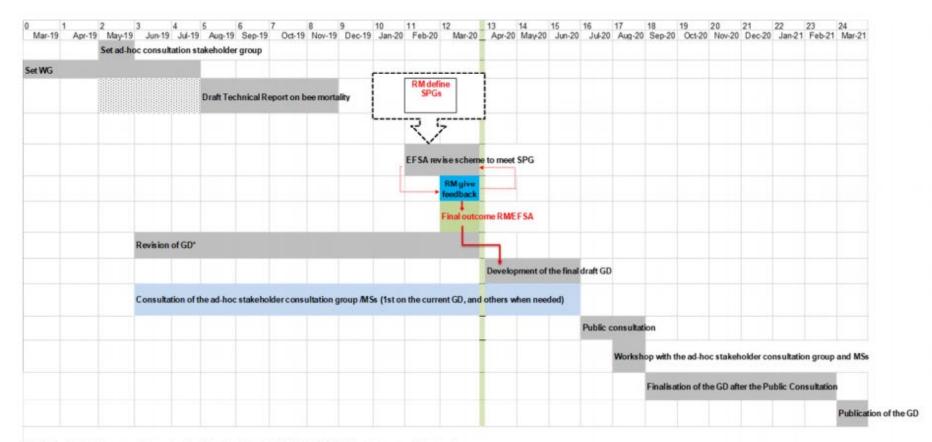
- Pauline Adriaanse (WUR, PPR panel)
- Andres Arce (Imperial College London)
- James Cresswell (University of Exeter)
- Maj Rundlöf (Lund University)
- Brecht Ingels (FPS, BE)
- Daniela Jölli (AGES, AT)
- Dirk Süßenbach (UBA, DE)
- EFSA PREV Unit
- EFSA SCER Unit
- EFSA AMU Unit











^{*} Revision of dust drift exposure will depend on the finalisation of the draaft SANCO/10553/2012 guidance on seed treatment







Merci de votre attention





