

EU efforts for the development of a Holistic approach for the Risk Assessment on MUltiple STressors in Bees

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### HOLISTIC RISK ASSESSMENT APPROACH FOR BEES

- In the environment, bees are exposed to multiple stressors (physical, chemical, biological & nutritional stressors).
- The way these stressors affect bees and contribute to the current observed trends of population declines is not well understood, neither are the underlying **mechanisms** which remain complex (multiple combinations of interactions)
- At EFSA, several Units and Panels work on bee issues: Animal & Plant Health, GMOs, Pesticides, Assessment Methodology Support and the Scientific Committee & Emerging Risks (SCER).
- In 2012, a multidisciplinary "Bee Task Force" was established in EFSA (with the above Units) to develop a holistic approach to the environmental risk assessment of multiple stressors in bees.





### **MULTIDISCIPLINARY BEE TASK FORCE AT EFSA**

#### Bee Task Force: terms of reference and deliverables

- **Review** the work in the area of bee health carried by ESFA, EC and MS
  - « Inventory of EFSA's activities on bees » (Nov. 2012) http://www.efsa.europa.eu/en/supporting/doc/358e.pdf
  - Scientific colloquium « Towards holistic approaches to the risk assessment of multiple stressors in bees » (May 2013) <a href="http://www.efsa.europa.eu/en/supporting/doc/509e.pdf">http://www.efsa.europa.eu/en/supporting/doc/509e.pdf</a>
- Identify data and knowledge gaps
- Make **recommendations** for future research development, activities and coordination of work at FU level.
  - « Towards an integrated environmental risk assessment of multiple stressors on bees: review of research projects in Europe, knowledge gaps and recommendations » (Jan. 2014) <a href="http://www.efsa.europa.eu/en/efsajournal/doc/3594.pdf">http://www.efsa.europa.eu/en/efsajournal/doc/3594.pdf</a>





## **RECOMMENDATIONS FROM BEE TASK FORCE (2014)**

# Main recommendations

- Consolidate the risk assessment on multiple stressors in bees
- Explore new methods (modelling) to further address multiple stressors/exposures and effects at colony and landscape levels
- Expand the approach to other species (e.g. aquatic organisms) and other functions of the ecosystem (decomposition, soil nutrient cycling, pest regulation, water regulation, etc.)
- Enhance collaborations and knowledge sharing between EFSA, EC, MS



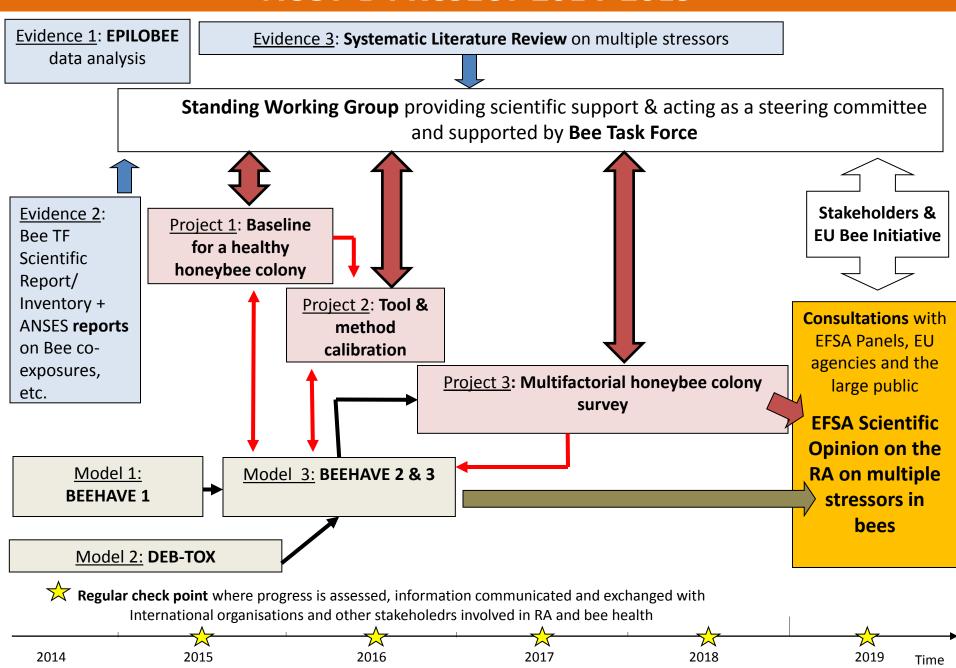


# MUST-B: EU EFFORTS FOR THE DEVELOPMENT OF A HOLISTIC APPROACH FOR THE RISK ASSESSMENT ON MULTIPLE STRESSORS IN BEES

### **MUST-B** project: terms of reference

- To develop a holistic approach on the risk assessment on multiple stressors in bees to be formalised through an overarching Scientific Opinion of the Scientific Committee. Specific Scientific opinions are to be produced through the analysis of specific data sets as they become available through outsourcing and other activities.
- To produce **annual updates** to the technical report on the inventory of EFSA activities in the area of bee health.

#### **MUST-B PROJECT 2014-2019**







Thank you for your attention!