



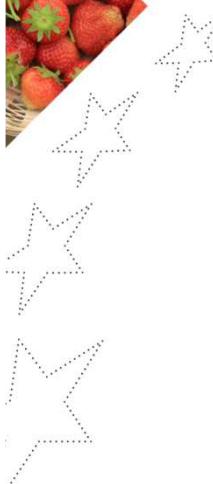
# MUST-B

## MUltiple STressors in Bees



## BACKGROUND

- Between 2012-2014, the SCER unit initiated transversal work with a multidisciplinary Bee Task Force and a multi-stakeholders EFSA Scientific Colloquium to make recommendations on how to move towards an integrated holistic risk assessment of multiple stressors in honeybee colonies.
- Between 2015-2019, the work will be further elaborated with the development of a multi-annual project: MUST-B “EU efforts towards the development of a holistic approach for the risk assessment on **M**Ultiple **S**Tressors in **B**ees ».





## WHAT IS MUST-B?

- MUST-B is a project that will support EFSA scientific developments towards integrated risk assessment of multiple stressors at the landscape level.
- EFSA will provide scientific guidance on protocols and designs (via the work of the Bee TF and dedicated MUST-B WGs) for data collection towards the development of the intended holistic risk assessment approach of multiple stressors in honeybee colonies.
- EFSA will further build on the available knowledge and expertise (e.g. statistical analysis of the EPILOBEE dataset and lessons learnt from EPILOBEE and other bee monitoring programmes in MS) for the development of the MUST-B data collection.
- MUST-B will develop a data collection starting in 2017 for a minimum period of 2 sampling years within representative climatic regions across EU for to develop a holistic risk assessment approach (integrated model and comprehensive data collection) of multiple stressors in honeybee colonies at the landscape level.

# GENERAL FRAMEWORK OF MUST-B

Honeybee colony health status  
(specific indicators/factors and  
methods/tools) (JULY 2016)

HEALTHY-B  
WG

+ Literature on interactions  
between stressors & data sets  
on chemical mixtures (e.g. DEB  
models - JAN. 2016)

MUST-B WG & BEE TF

lessons learnt (e.g. EPILOBEE,  
BEENET, etc.) and statistical  
analysis of the 2 years  
EPILOBEE dataset - JULY 2015)

BEEHAVE  
WG

Suitability of the BEEHAVE  
model to assess risks of bee  
colonies from exposure to  
pesticides and multiple  
stressors at the landscape  
level (JUNE 2015)

Comprehensive data  
collection to calibrate and  
validate the model

DATA

MODEL

Integrated model  
to predict impacts  
and risks of  
honeybee colonies  
from exposure to  
multiple stressors  
at the landscape  
level

MUST-B WG & BEE TF

Collect and assess further  
evidence from the model and  
the data collection to develop an  
**integrated risk assessment of  
multiple stressors in  
honeybee colonies**

2015-2016

2017-2019



## QUESTIONS FOR THE AF

- For the success of the EU MUST-B project, i.e. to improve the data collection from the lessons learnt (from existing bee monitoring programmes in MS), EFSA is seeking information on the following:
  - Which honeybee monitoring programmes are currently underway in MS?
  - What are the parameters/factors investigated/measured under these programmes?
  - What are the contact points of these programmes for further collaboration with EFSA?
  - Is the data collected at MS level available and accessible?
  - Would you be interested in sharing this information with EFSA and other MS?

