

## **New data and input in science available since 2013 to help refine the EFSA Bee Guidance Document**

### **Pollinator Risk assessment guidance**

- Guidance for Assessing Pesticide Risks to Bees (2014) - United States Environmental Protection Agency / Health Canada Pest Management Regulatory Agency / California Department of Pesticide Regulation
- Roadmap for insect pollinator risk assessment in Australia (2015)

### **Protection goals**

- Outcome of the BEEHAVE model regarding the prediction of effects size and duration in honeybee colonies and consequences on trigger values (Becher et al., 2014, Miles et al., 2014, Thorbek, 2014, Thorbek et al., 2014)
- Use of BEEHAVE to explore Honeybee Protection Goals (Thorbek et al, 2016)
- UK CRD Project on Honeybee Protection Goals (contact CRD/DEFRA)
- Analysis of honeybee toxicity slope data and consequences on level of protection reached in a risk assessment and trigger values (Miles, in prep.).

### **Laboratory data**

- Results of chronic tests on adult bees for 87 active substances, and use to support a tiered approach for this data requirement to focus effort on active substances with insecticide activity only (Miles et al., in prep)
- Updates in the repeated exposure test on honeybee larvae, based on the outcome of ring tests and developments by CROs and in the US, and evidence that the test provides more robust results as a concentration test (Becker et al., 2014).

### **Exposure and Risk assessment**

- New data refining the default assumption of 10% flowering weeds in all crops (Maynard et al., 2014)
- Sugar content in crops and sugar consumption (Couvillon et al., 2014, Thorbek et al., 2014, Miles et al., 2014)
- Exposure estimates in larvae (DeGrandi-Hoffman et al., 2013, Thompson et al., 2014, Fairbrother et al., 2014, Purdy, 2014)
- Available data on guttation as a source of exposure and effects (Frommberger et al., 2012, Joachimsmeier, 2012 a, b&c, Miles et al., 2014, Pistorius et al., 2012a&b, Wallner et al., 2012, Nikolakis et al., 2015, Reetz et al., 2015)
- Residue data in pollen and nectar including dissipation over time in bee relevant matrices.
- New BEEHAVE Pesticide Ecotox Module (contact Pernille Thorbek & Thomas Preuss)

### **Field data and monitoring**

- Practicalities regarding the EFSA recommendations on higher tier testing and proposals to overcome this situation (Bakker, 2014, 2015, CEH, 2014 a&b, Hechs et al., 2014, Woodcock et al., 2016)
- Landscape Field trials with Non-*Apis* (BCS, submitted to *Ecotoxicology*)
- Available honeybee colony loss monitoring data from Europe e.g. Chauzat et al, 2015 and COLOSS (Van der Zee et al., 2014).

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