



DISCUSSION PAPER ON THE REVIEW OF FIPRONIL WITH REGARD TO THE RISK TO BEES

1. BACKGROUND

Fipronil is an insecticide which has been linked in the past to incidents with bee deaths. Fipronil does not belong to the group of neonicotinoids but to the group of phenylpyrazoles. It acts by disrupting the insect central nervous system and has an acute toxicity similar to the three neonicotinoids thiamethoxam, clothianidin and imidacloprid.

The main uses of fipronil today are in maize and sunflower, in both crops as seed treatment only. Uses are also authorised for seed treatment of different leafy, stalk or bulb vegetables.

In the light of the high controversy over the risk of fipronil for bees, of the numerous studies and research activities carried out in the last years and of the EFSA statement published in June 2012 "Assessment of the scientific information from the Italian project "APENET" investigating effects on honeybees of coated maize seeds with some neonicotinoids and fipronil"¹, the Commission asked EFSA for an updated risk assessment for bees, in particular as regards:

- (1) the acute and chronic effects of colony survival and development, taking into account effects on bee larvae and bee behaviour;
- (2) the effects of sub-lethal doses on bee survival and behaviour.

The Commission's request was sent to EFSA in August 2012 and was based on Article 21 Article 21 of Regulation (EC) No 1107/2009.

The EFSA conclusions were published on 27 May 2013.

2. EFSA CONCLUSION

EFSA's main conclusions were:

¹ EFSA Journal 2012;10(6):2791

- Risk from dust drift: **A high acute risk was identified for maize**. For other field crops, including sunflower, full risk assessments could not be completed due to lack of data on dust drift.
- Nectar and pollen: The available studies – field and semi-field – had weaknesses and thus were insufficient to establish the level of risk to honey bees from the use of fipronil as a treatment for sunflower and maize seed. However, there was deemed to be a **low risk to honey bees from the authorised use of fipronil on vegetables**, as these cannot be foraged for pollen and nectar.
- **No concerns have been highlighted for greenhouse uses**. However data gaps were identified for uses where seedlings are subsequently transplanted to the field.
- **Several gaps** were identified in the available data related to acute, chronic and sublethal effects, effects on larva and other potential routes of exposure.

3. MEASURES PROPOSED BY DG SANCO

Based on the conclusion by EFSA we consider it appropriate to propose measures in line with those for the neonicotinoids. The proposed measures would have the following consequences:

- Use on maize and sunflower will not be possible anymore; no treated seeds should be allowed to be sown from spring 2014. EFSA could not conclude on the risk from use on sunflower due to lack of data on dust drift. It is reasonable, due to the very high chronic toxicity of fipronil, to assume that also use on sunflower would pose a risk and therefore the precautionary principle should apply. The same measures were taken for the neonicotinoids regarding sunflower although EFSA did not identify a high risk.
- Restrict the use of fipronil to seed treatment of crops not attractive to bees. This restriction would allow continuing the use of fipronil in certain crops, such as vegetables harvested before flowering;
- Sowing of treated seeds in greenhouses would still be allowed;
- In order to avoid the risk that in future authorisations are granted for cereals, we would also propose to introduce a restriction of these crops that are currently not authorised in any Member State.

A review of the measures should be foreseen, as for neonicotinoids, within 2 years on the basis of new data and studies, or earlier if new data are submitted by the applicant (BASF).