



Committed to Bee Health

Bee Conservation Decree contains specific guidelines for the use of crop protection products

In the year 2012, approximately 622,000 bee colonies produced about 15,000 tonnes of honey in Germany¹⁾. Besides honey, many beekeepers also bring popular products such as wax, pollen, royal jelly and propolis to the market. In most cases, flowering oil seed rape, fruits and sunflowers are the most important melliferous plants in agriculture.

One critical issue between agriculture and beekeeping can arise from the use of crop protection products. These products are applied by farmers to secure and increase their yields. Insecticides are particularly regarded as critical by beekeepers, because – and as is indicated by their name – they affect insects. In order to fight insect pests whilst leaving honeybees unaffected, strict application rules have to be followed with regard to the application of crop protection products: That is regulated in the Bee Conservation Decree.



Oil seed rape offers an abundance of nectar and pollen during blooming period (© Thomas Neeser)

Binding obligations

The German Bee Conservation Decree (Bienen-schutzverordnung, BienSchV) is authorised on the basis of the German Plant Protection Act, which in turn is consistent with European legislation. Key elements of the decree are obligations, which are allocated by the Federal Agency for Consumer Protection and Food Safety (Bundesamt für Verbraucherschutz und Lebensmittelsicherheit, BVL) on a product-specific basis in the context of the registration process. They are printed on product labels, they are available in the web, and compliance is mandatory for every user.

- B1: Harmful to bees – must not be used in cultures that are attractive to bees during flowering.
- B2: Harmful to bees – may be used in cultures that are attractive to bees during flowering only after the daily activity of bees has ended, and until 11.00 p.m.
- B3: Not harmful to bees due to regulations with regard to the application, which were defined in the registration process.
- B4: Not harmful to bees.

The advantage of straightforwardness, which is a feature of the classification using B1 to B4, is unmistakable. On the other hand, the complexity of some issues calls for a more differentiated analysis.

¹⁾ German Beekeepers Association (Deutscher Imkerbund)

Synergies

In the context of the registration process of crop protection products, the BVL issues nine different NB-obligations (**NB** = **N**atural **E**nvironment **B**ee **P**rotection), which refer directly to the categories B1 to B4. As part of these obligations, the problem of combined effects of different active ingredients is also taken care of, because the combination of different active ingredients may lead to a higher effectiveness (synergy). Such effects can occur with pyrethroids (class of insecticides) and some specific fungicides (substances against plant pathogenic fungi) for example.

Specific details with regard to obligations and labelling requirements for crop protection products that may pose a hazard to bees as well as an overview of all crop protection products presently registered, and information concerning application control can be found under: [http://www.landwirtschaft-mlr.baden-wuerttemberg.de/servlet/PB/show_/1227940_1/landinfo_Bienenschutz%20hat%20oberste_%20Priorit%C3%A4t%20beim%20Pflanzenschutz%20\(Dr.%20Nagel\).pdf](http://www.landwirtschaft-mlr.baden-wuerttemberg.de/servlet/PB/show_/1227940_1/landinfo_Bienenschutz%20hat%20oberste_%20Priorit%C3%A4t%20beim%20Pflanzenschutz%20(Dr.%20Nagel).pdf)

Honeydew

These secretions of aphids contain sugar and can be an important forage source for bees. Honeydew

can occur on hops, cereals or potatoes, where the blossoms themselves are not attractive for bees. In these crops, farmers have to be very careful! If honeydew is present, crop protection products which are dangerous to bees may not be applied.

Weeds

The same is true for weeds. They can grow and flower in crops that are of no interest for honeybees, and also outside of the crop bloom. So the blossoms of weeds may also be a potential route of exposure for the worker bees which collect pollen and nectar.

Speech is golden

There are many good reasons why beekeepers and farmers should be talking to each other. The Bee Conservation Decree underlines this necessity: "Within a 60 metres radius around beehives, and during the time of daily bee activity, crop protection products which are dangerous to bees may only be applied with the approval of the beekeeper." This is one clear obligation for the user. However, and beyond this rule, talking to each other in between beekeepers and farmers is the best possible additional insurance for honeybees.



Due to the presence of honeydew of aphids, bees also fly to potato fields when more attractive forage is missing (@agrarfoto.com)