



Bee Safe Bee Careful

When using insecticides



The importance of bees

ALTHOUGH THOUGHT OF PRIMARILY AS A HONEY PRODUCER, WITH AN ECONOMIC VALUE OF AT LEAST

£16 million

THE VALUE OF THE HONEY BEE TO THE HORTICULTURE AND AGRICULTURE INDUSTRY IN TERMS OF ITS ABILITY AS A POLLINATOR IS NEARER

£200 million

THE IMPORTANT CONTRIBUTION OF HONEY BEES AND BUMBLEBEES TO BRITISH WILDLIFE IN POLLINATING CROPS AND WILDFLOWERS IS IMPOSSIBLE TO QUANTIFY.



BEE HEALTH IN THE UK AND IN MANY COUNTRIES ACROSS THE GLOBE IS BEING SEVERELY COMPROMISED. BUMBLEBEES APPEAR TO HAVE SUFFERED THROUGH HABITAT LOSS AND DEGRADATION WHILST THE GENERAL CONSENSUS WITH HONEY BEES IS THAT COLONY DECLINES ARE LINKED WITH SEVERE INFESTATIONS OF A PARASITIC MITE CALLED *Varroa destructor*.

The best treatment for controlling this pest up to now has been a selective insecticide. Unfortunately, the Varroa mite is developing resistance to this type of treatment. In addition to Varroa, there are a number of viral and fungal diseases that are damaging bee colonies throughout the UK. Exacerbating this are other parasites such as *Nosema*, which can reduce the lifespan of an infected young bee by nearly 80%.

As the principal economic pollinators, it is extremely important that farmers understand the need to be mindful of bees on the farm. Where insecticide use is considered necessary, they should be applied in strict accordance with the pesticide label requirements and good agricultural practice.

Any stewardship practices apply generally to all insect pollinators including bumblebees and solitary bees.



Being 'bee-careful' is the only option

There are around 250 species of bee in the UK, the vast majority of which are solitary. There are 25 species of bumblebee and one species of honey bee, *Apis mellifera*.

So what can we do?

SOME INSECTICIDES, SUCH AS PYRETHROIDS, CARRY A SPECIFIC BEE RISK WARNING ON THE PRODUCT LABEL. EVEN WITH SUCH PRODUCTS, WHEN USED AS DIRECTED ON THE LABEL, THERE SHOULD BE NO ADVERSE IMPACT ON BEE POPULATIONS.

GENERAL STEWARDSHIP PRINCIPLES

In flowering crops including top and soft fruit, oilseed rape, beans, cereals, maize and pea crops, where there are neighbouring flowering crops, and/or where there are flowering weeds and wild flowers, insecticide application should follow the stewardship principles shown opposite:



- Avoid spraying when bees are actively foraging. Spray in the **evening** or in the early morning when fewer bees forage. Bees usually do not forage in significant numbers at temperatures below 10°C.
- Take care to minimise drift to nearby flowering plants or hives in and around the treated field. Check the wind speed is less than 5 mph, that nozzles are as close to the crop as possible, and appropriate nozzles are being used and properly cleaned - particularly important with older equipment.
- Check with beekeepers for locations of local hives: British Beekeepers' Association (England), Welsh Beekeepers' Association Scottish Beekeepers' Association, Ulster Beekeepers' Association, Bee Farmers Association of UK (BFA).
- Repeat this process annually as beekeepers may change locations of hives.
- Keep local beekeepers contact details in the cab and on your mobile. Give at least 24 hours notice of spraying and provide the name and HSE number of product(s) being used.
- If using with a triazole fungicide use only approved tank-mixes.



All insecticides have an associated Environmental Information Sheet (EIS) which contains specific information on how to protect wildlife, including bees, when using that product.

These can be found at www.voluntaryinitiative.org.uk.



INSECTICIDE SEED TREATMENTS

The widespread application of insecticides to seed instead of spraying the emerging crop is a relatively new approach.

Using new technology the pesticide is applied to the seed by specialised professional contractors, ensuring that the correct dose is delivered and giving the seed and emerging plants the best possible protection from damaging insects.



The stewardship of such products is being closely monitored across Europe to confirm that there are no undesirable effects associated with the correct use of this development.

Treated seed should be handled carefully and planted in strict accordance with the seed bag recommendations ensuring:

- Drill operators minimise the presence of exposed seed left on the surface after planting. This includes on the field, headlands, field margins and loading areas.
- There is no leaching of seed dressing into puddles and watercourses, recognising that pollinators may use these as a water source.
- There is no unnecessary agitation and abrasion of seed, leading to 'dust' containing insecticide being released into the air.

Caring for Bees

FARMERS AND GROWERS CAN MAKE AN IMPORTANT CONTRIBUTION TO FORAGING, NESTING AND HIBERNATION SITES FOR INDIVIDUAL WILD BEES AND COLONIES. THE OBJECTIVE IS TO OFFER A DIVERSE RANGE OF HABITATS AND FLOWERING SOURCES.



With this in mind consider the following:

1. Sowing flowering nectar and pollen-rich plants such as Phacelia, borage, and white and red clover species on the headland areas and field corners of crops;
2. Conserving, restoring or creating flower-rich grasslands;
3. Encouraging early season forage, such as catkin-producing trees as well as late season forage such as ivy and nectar and pollen-rich plants;
4. Establishing tussocky grass margins will provide nesting, foraging areas and hibernation sites for bumble and solitary bees;
5. Maintaining hedgerows so as to provide nectar and pollen sources, or the resulting berries, nuts and fruits that will be food for birds and small mammals, for example by not cutting all hedges annually;
6. Consider inviting a beekeeper to keep bee hives on your farm.



Many of these suggestions can be funded through Environmental Stewardship, and will support our commitment to the Campaign for the Farmed Environment (www.cfeonline.org.uk).

For further information on honey bees can be found on the British Beekeepers' Association website www.britishbee.org.uk

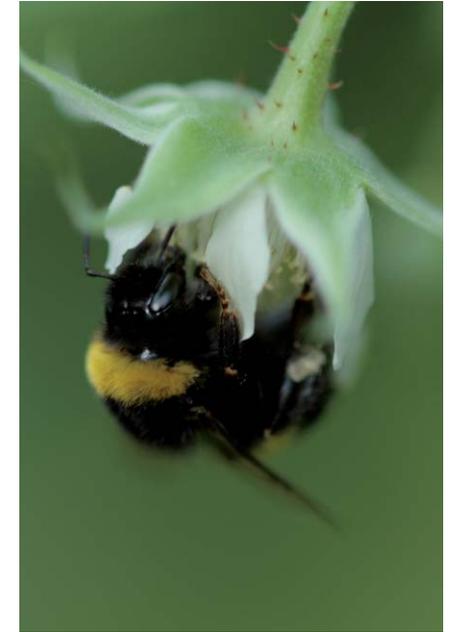
The Crop Protection Association

THE CROP PROTECTION ASSOCIATION (CPA) REPRESENTS MEMBERS ACTIVE IN THE MANUFACTURE, FORMULATION AND DISTRIBUTION OF PESTICIDE PRODUCTS IN THE AGRICULTURAL, HORTICULTURAL, AMENITY AND GARDEN SECTORS.

We all understand the need to produce sustainable supplies of safe, affordable, wholesome food in a way that protects our wildlife and environment. We are proud to be part of an industry that conducts its business with a full commitment to safety and sustainability.

Modern plant protection products are regulated more strictly than ever before to ensure people, animals and other non-target species are not adversely affected, while delivering beneficial and innovative solutions to farmers, consumers, society and the environment.

The CPA combines the industry's expertise and skills to analyse and address key issues. We engage in constructive and intensive dialogue with relevant stakeholders to ensure that the benefits of plant protection products are fully recognised and accepted.



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FURTHER INFORMATION

Crop Protection Association :	www.cropprotection.org.uk
CPA Amenity :	www.amenity.org.uk
Defra :	www.defra.gov.uk
Chemicals Regulation Directorate - Pesticides :	www.pesticides.gov.uk
British Beekeepers Association :	www.britishbee.org.uk
Welsh Beekeepers' Association :	www.wbka.com
Scottish Beekeepers' Association :	www.scottishbeekeepers.org.uk
Ulster Beekeepers' Association :	www.ubka.org.uk
Bee Farmers Association of UK (BFA) :	www.beefarmers.co.uk
NFU :	www.nfuonline.com

ALWAYS READ THE LABEL — USE PESTICIDES SAFELY



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