What is Fipronil

Fipronil is a <u>phenylpyrazole compound</u> and was developed as an insecticide in the mid-1990s.

Fipronil is seen as a 'useful' insecticide because it is much more toxic to insects than mammals. In Australia it is used to control fleas on pets, as a termiticide and for killing cockroaches, beetles, ants and other insects.

Fipronil is also used to coat seeds and as the plant grows it becomes toxic to foraging pollinators.

In Australia, fipronil is marketed under brands such as Ant Rid, Total Care Flea Knockdown, Maxforth Gold gel, Triumph Spot On and Combat Roach Rid.

In fact there are hundreds of fipronil products approved for use by the Australian Pesticides and Veterinary Medicines Authority in Australia.

You can view the full list of compounds <u>here</u>





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Fipronil Project Pollinator First





Fipronil is responsible for millions of bee deaths in Australia.

There is a disconnect between commercial, agricultural and domestic chemical use and its impact on bees and other pollinators.

The cause of <u>bees deaths</u> can take weeks or months to discover.

Beekeepers suffer significant economic setbacks every time bee colonies die and are not compensated for their losses.

Most of these poisonings are unintentional and have occurred because <u>chemicals like fipronil are being used to</u> <u>manage other insects.</u>

We rely on bees to pollinate 71 of the 100 crops that feed 90% of the world's food, yet we continue to use bee and pollinator killing chemicals..



Apiarist calls for Ban on Fipronil.

ABC article Summary

In April 2019, five beekeepers in Southern NSW collectively lost 340 beehives.

An EPA investigation showed these deaths were most likely a result of fipronil use , but was unable to trace the source of the poisoning

The economic loss has been estimated at \$170,000,-with one beekeeper 's business completely devastated by the incident

Ian Carter told the ABC he had lost three quarters of his bee hives that are used to provide pollination services for farmers.

"One drop of this poison from one bee that takes it back to the hive will then kill the whole hive," Mr Carter said.

Mr Carter was concerned the source of the poisoning could not be found and worried about what that meant in the future.

"Still today we have no idea what has caused it, where the bees foraged for this poison," he said.

"Where do I put my bees next year — if I have any left?"



Key Issues.

Toxicity – <u>Fipronil and Neonicotinoids</u> <u>share a similar toxicity.</u> Like neonics, fipronil can be used as a <u>seed coating</u> <u>treatment for canola, rice, sorghum and</u> <u>sunflowers crops</u>. Fipronil is a systemic poison that pervades the entire plant structure, infecting the sap, nectar and pollen of a plant. This makes the <u>entire</u> <u>plant toxic</u> to any visiting pollinators – caterpillars on leaves, insects on flowers, bees, birds and bats are all at risk of poisoning or death on exposure.

An increase in pesticide toxicity loading over the past 26 years, potentially threatens the health of honey bees and other pollinators.



Non-Target Species - Fipronil impacts non-target species resulting in a negative effect on physiology and survival for a wide range of non-target invertebrates in terrestrial, aquatic, marine and benthic habitats.

Pollinators also have complex social networks. Fipronil interrupts these networks by <u>killing indiscriminately</u>, creating break points between species.