

Pesticides Must Be Used Responsibly

By Graeme Peters

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Agrichemical companies understand the critical role bees play in agriculture. The industry supports the importance of thoroughly researching the causes of bee health problems and supports efforts in finding remedies.

Bees are essential for the yield and survival of many agricultural crops - honey bees are the most valuable pollinators of agricultural crops worldwide.

While recognising the importance of bees, we should all understand that crop protection products are also a key part of agri-business.

Safe and effective pesticides are crucial to protect crops against harmful organisms such as destructive insects, plant diseases and weeds. Without crop protection, farmers and growers would produce much less food, and that food would be much more expensive.

Unfortunately, there has been an increase in bee colony losses in many countries.

The losses have sparked discussion on the possible effects pesticides might have on honey bees. When used properly as recommended, the evidence shows the use of pesticides has little or no effect on honey bees.

However, insecticides are designed to control destructive insects, and it is the timing, technologies, dose rates and methods of application that prevent them from being harmful to honey bees; the responsible use of insecticides is therefore paramount.

Simply banning pesticides is clearly not the way forward and not an appropriate option. Instead, we should ensure that approved pesticides are used properly and responsibly.

Given the important role honey bees play in ecosystems and in agriculture in particular, researchers, bee specialists and governments are investigating the causes of the increased honey bee mortality.

The majority of experts agree that the problems stem from a variety of interrelated causes, involving primarily the parasitic mite varroa, but also other honey bee diseases, viral infections, inappropriate hive management and insufficient disease control, as well as certain environmental factors.

In September 2007, a team of scientist from Columbia University Mailman School of Public Health, Penn State, the USDA and the University of Arizona identified the Israeli Acute Paralysis Virus (IAPV) as the most probable cause of CDD in the United States.

The virus had already been cited as one of the possible causes as early as April 2007, but further research seemed to confirm its role, in conjunction with the presence of varroa mites, which suppress bee's immune systems.

Extensive honey bee monitoring programs in Germany, France, Italy and Belgium have not shown any significant impact from the use of pesticides.

For this reason and because the increased honey bee mortality is believed to be caused by multiple factors, with large uncertainty about the influence of each, banning pesticides - as it appears the easiest political solution - would be both ineffective and harmful.

That said, and despite strict regulation, local honey bee incidents have occurred on occasions when products were used incorrectly.

An accident in Germany raised concerns about the safe use of insecticides in seed treatment applications, which is one of the most environmentally sound application methods of crop protection and therefore often the method of choice.

An expert committee established by the regulatory authority in Germany and including the most important beekeeper organisations in Germany determined that the cause of the honey bee deaths was an error in the seed treatment process in combination with the sowing machinery used, leading to an unexpected contamination of foraging honey bees in neighboring fields.

The crop protection industry - which has done everything to support the regulatory authorities in resolving this case – has rapidly reacted to this incident by drastically increasing stewardship measures to ensure that such an incident will not happen again. It would be entirely disproportionate to use this particular accident to call for a ban of all insecticides.

As with most technological developments that improve the quality of our lives, pesticides are safe when used judiciously and with appropriate precaution. Regulation of pesticides must ensure that the benefits arising from their safe and recommended use are carefully weighed against any potential risks.

Agcarm and the National Beekeepers Association agree that education is the key to protecting bees from exposure to agrichemicals, and will remain a priority project for both the crop protection and bee industries.

In the past year Agcarm has distributed more than 15,000 brochures to enhance awareness and co-operation between beekeepers, farmers and agricultural applicators. The brochure has been distributed through Growsafe courses, rural suppliers, the Foundation for Arable Research, and bee industry networks.

In addition, the crop protection industry remains committed to investing in new technologies and improvements to provide the agricultural community with most modern and highly competitive crop management tools, which are safe to honey bees and to the environment, and which do not affect the agricultural need for secure and sustainable crop pollination.

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