

Statement about the mission and role of the ICPPR Bee Protection Group

Affiliation

The ICPPR Bee Protection Group is an integral part of an international organisation, the International Commission for Plant Pollinator Relationships (formerly the ICPBR and before that the ICBB). The ICPPR is one of the 82 scientific commissions of the IUBS (International Union for Biological Sciences) which is connected to the ICSU (International Council of the Scientific Unions).

The ICPPR Bee Protection Group is a non-profit organisation of researchers in a broad range of disciplines from within and outside Europe who voluntarily share their common interest of improving tools for assessing and understanding bee protection within the context of modern, sustainable agriculture. The information provided by the experts within the Bee Protection Group is intended to serve as a reasonable foundation with which to base regulatory decision-making efforts.

Background and mission

The ICP-PR Bee Protection Group held its first meeting in Wageningen, Netherlands, in 1980 and over the subsequent 40 years has become the established expert forum for addressing the potential risks of pesticides to bees. The initiative was in response to the need of regulatory authorities for expert advice to support achieving better regulations for protecting honey bees from potential harmful effects of pesticides. As of 2019, the Bee Protection Group has organized fourteen international symposia.

The ICP-PR Bee Protection Group serves as a forum for addressing challenges and uncertainties associated with protecting and enhancing the health of honey bees (*Apis mellifera*) and non-*Apis* bees and to provide a means of coordinating international research efforts within academia, government, and industry to develop suitable testing and evaluation methods for assessing exposure and effects of factors impacting bee health. The ICP-PR provides a means of ensuring that testing methods are fit-for-purpose in terms of providing consistent, reproducible and reliable data to inform decision making. The underlying methods developed through the collaborative efforts of researchers within the ICP-PR have served as a foundation for informing formal regulatory test guidelines and guidance documents of the Organization for Economic Cooperation and Development (OECD) and have contributed to global harmonization of testing and assessment methods. The composition of the ICP-PR Bee Protection Group provides a means of effectively ring-testing testing methodologies to ensure that they are compliant with international good laboratory practice standards prior to their consideration and testing at the OECD level.

The ICP-PR Bee Protection Group consists of multiple subgroups (*i.e.*, Brood Testing, non-*Apis* Bee Testing, Semi- and Full-field Testing, Microbial Testing, Monitoring, and Risk Assessment/Management) which meet independently to advance testing and assessment methods.

Research conducted under the umbrella of the ICP-PR and presented at its international symposia is published in the Julius Kühn-Archiv as well as other international peer-reviewed journals to advance the science of assessing factors associated with bee health.

Membership

ICPPR membership is open to all and no restrictions are placed on participation. The steering committee which leads the Bee Protection Group is comprised of equal representation from three sectors, *i.e.*, government, academia and industry. All members of the steering committee, participants and working group members of the ICPPR Bee Protection Group act on a voluntary basis and are therefore unpaid for their duties. Experts participate in their own name and not as a representative of their professional affiliation.

Tasks

The Bee Protection Group assists and supports ring tests of study protocols and subsequent development guidance documents and test guidelines on assessing and managing potential risk to bees and pollinators from pesticides. The Bee Protection Group members propose and discuss current and emerging test methods and organize ring-testing of promising test methods. The group aims to provide a platform for the exchange of knowledge on the science and the relevant experience of the scientists involved.

Current work and cooperative activities

Since 1980 the Bee Protection Group has developed and pioneered risk assessment methods that have ultimately served as a foundation for regulatory testing and decisions (*e.g.*, sequential testing from lower to higher tiers, the hazard (risk) quotient approach and the development of standardised test methods). Since 1990 ICPPR has collaborated with European and Mediterranean Plant Protection Organisation (EPPO) on honey bees (*Apis spp.*) and provided the technical input for bee-related Guidelines on test methods and risk assessment schemes. The ring tests conducted by ICPPR working groups and their active members have served to create the data for validated guidelines that are elaborated and agreed upon the OECD level.

The increasing demand for a more refined risk assessment in all parts of the world and the requirements of international regulatory frameworks has led to a widening of the scope of ICPPR to a global level.

In the last decade, the scope has broadened and includes assistance for needs of European Food Safety Authority (EFSA), U.S. Environmental Protection Agency (EPA)/Health Canada Pest Management Regulatory Agency (PMRA), Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis (IBAMA) and the Australian Pesticides and Veterinary Medicines Authority (APVMA), the United Nations Food and Agriculture Organization (FAO) and other international institutions. The increasing demand for refined standardized methodologies highlights the ongoing need for and value of expert discussions, scientific exchange, ring-test development and test method improvements. Tasks are organized around working groups dealing specifically with laboratory testing methods on adult honey bees, laboratory testing methods on larval honey bees, semi-field and full-field testing methods on honey bees, testing methods for non-*Apis* bees – such as social non-*Apis* bees (*e.g.*, bumble bees, *Bombus spp*) and solitary non-*Apis* bees (*e.g.*, Mason Bees, *Osmia spp*; leafcutter bees, *Megachile rotundata*), monitoring schemes, assessing risks related to seed dusts, plant guttation droplets, and biological pesticides (such as micro-organisms).

How the group works

The ICPPR Group organises symposia and working groups to discuss and develop new solutions for problems in the area of bee and pollinator protection from pesticides. The symposia papers and discussions are published in proceedings. To date, the ICPPR Bee Protection Group with its subgroups are part of the of the Colony Loss (COLOSS) network and represent an international scientific platform working on the improvement of testing methods. All participants at the meetings are free to volunteer and join the working groups addressing specific topics identified at the symposia or through the ICP-PR Bee Protection subgroups. Scientists from all backgrounds - academic research, contract laboratories, industry, governmental risk assessors and risk managers - are invited to work together and to bring their knowledge to contribute to the subject.

ICPPR Bee Protection Group, Steering Committee

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