

Normative Instruction 02/2017 – Brazilian risk assessment of pesticides to bees

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INTRODUCTION

Brazil a megadiverse country & an agricultural powerhouse.

Balancing agriculture production and biodiversity protection presents itself as an important challenge and pollinators constitute a key element for the sustainability of agricultural systems.



NI 02/2017: establishes procedures for the risk assessment of pesticides to pollinators.

This is the first Brazilian specific regulation based on a risk approach.

KEY POINTS OF NI 02/2017

The NI 02/2017 applies to new molecules, active ingredients in re-evaluation or those that a risk assessment had already been done by Ibama in the past (2013).

General Protection Goals (Article 3)

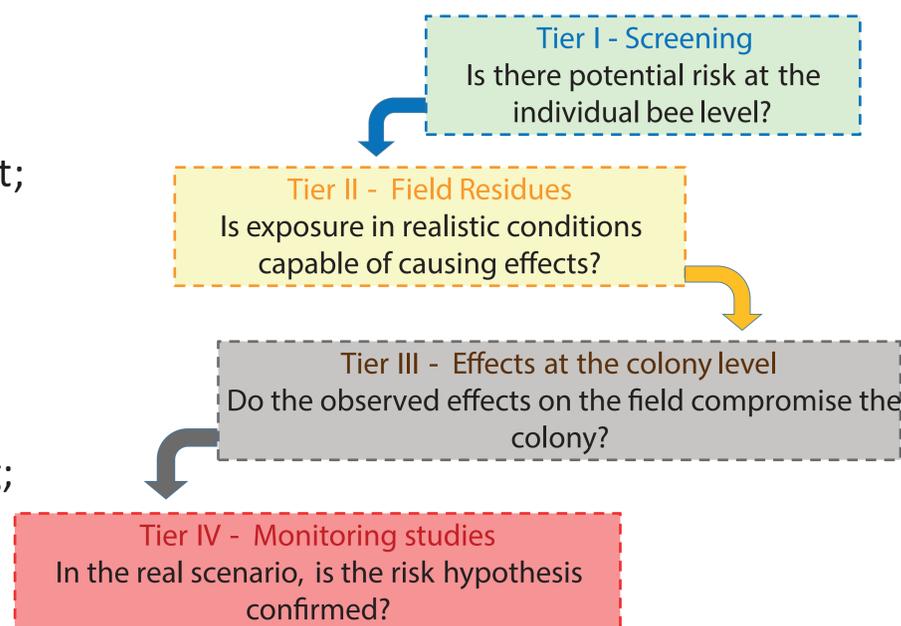
- I - to protect the pollinating insects and their biodiversity;
- II - to ensure the ecosystem services provided by them, including pollination service, production of colony products (honey, propolis, wax, etc.) and the provision of genetic resources.

Widely based on US/Canada's approach...

- it focuses on *Apis mellifera* data;
- the models used for screening are Bee-REX and AgDrift;
- same test requirements for tier 1;
- two schemes: (1) foliar applications and (2) soil/seed/trunk treatments

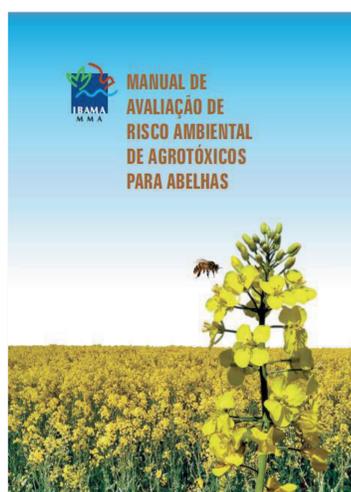
...with few modifications:

- 4 tiers, the last one being post-registration monitoring;
- use of safety factor of 10 for non-*Apis* bees;
- residue trials must be performed in Brazil;
- for tier 2 a crop grouping is considered.

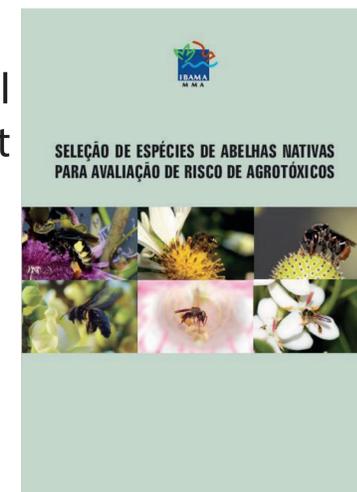


The **crop grouping** a index built taking into account the botanical families, the size and structure of the plants, the supply of matrices relevant to bees, available data on native bees visitation, crop dependence on pollination and cultivated area in Brazil is used to establish a priority order for residue level investigation within each group.

Publications



Guidance of Ecotoxicological Risk Assessment of Pesticides to Bees



Matrix of selection for Brazilian bee species to be used in risk assessment



CONCLUSIONS

With Normative Instruction 02/2017, Ibama expects to contribute for the safe use of pesticides without incurring unacceptable risks to bees. In the near future Ibama intends to assess the need of updating the risk assessment procedure, eventually including a stingless bee as a representative species.

