

General Comments

- Italian beekeepers appreciate the commitment the EFSA has finally showed to try to improve the unacceptable method currently in use to assess the toxicity and the risk to bees caused by the authorization of active substances and **plant protection products**
- This initial effort shows, however, in many respects, the need for a further improvement, which would lead finally to respect the legislation that defines the hives as "animals" for which the use of plant defence products *"has no adverse effects, acute or chronic, on the survival and development of the colony, taking into account the effects on honeybee larvae and honeybee behaviour"*.
- EFSA's claim on the importance of pollination entomophilous as if it was a "service", important only for the food production crops, is disappointing.

In contrast, the importance of pollination affects the entire ecosystem, which obviously includes crops but, more importantly, all life forms, even those not used directly by humans, but essential to the preservation of the environment and the cycle of life.

Therefore, the best way to certificate that farming practices are sustainable for the environment, is to ensure they are compatible with pollinators.

- Moreover we believe that the contamination of a food product used for long time by humans, such as pollen, should be deeply studied and assessed. The authorization of active substances and/or **plant protection products** that contaminate crops at a grade that turns pollen inedible should be banned.

General comments on chapter 2 Estimation of mortality:

The approach used to assess the mortality of the hive's members, set out in the GD:

- Postulates a false data compared to the amount of insects that make up the hive's super-organism and doesn't take into due consideration its dynamics linked to the seasonal and environmental interaction. This static and numerically unfounded approach (22,000 bees!) does not correspond to the reality of an animal which is characterized, on the contrary, by a dynamic trend of the colony cycle, according to seasons, environmental resources, weather events, parasitism and resulting diseases, etc... The proposed approach does not and cannot take any account of all these important and ongoing changes.
- Doesn't adequately take into account the damage arising from any decrease / loss of insect / animal components (which may have exponential effects, for example, during the formation of the population of bees for the winter) for the balanced union and productive capacity of the animal.
- Takes no account of potential sublethal effects which, as widely demonstrated, can lead to stress, debilitation and death of the bees' colonies.

Since this approach is unlikely, other possible methods should be considered and adopted.

One could be counting foraging bees, provided that the assessment is adequately prolonged in time in order to evaluate all the potential effects (punctual and chronic) on the population of the colony.

General comments on chapter 3

Exposure:

The GD just considers:

- the exposure pathways due to the nectar and pollen, and
- the short-term effects, without considering the potential damages over time, which may occur even in seasons subsequent to the one in which the pesticide has been used.

Instead, it is necessary to consider and evaluate, regardless of the mode of application of the product, how the hive and its components are subjected to multiple exposure pathways:

- **Air.** The hive makes an intense and impressive flight activity and the surface of the bees' body has shaped to collect the dust -and here it is the exposure.
- **Water.** This substance is essential to ensure the thermal conditioning of the animal and can even, in certain conditions, be unique object of foraging. This also determines, in the Mediterranean area, a peculiar risk factor, when pesticides mix in the water of fertirrigation, which could be foraged by bees, if it represents the only source of water available.
- **Honeydew.** This source of supply is very important for the hives in Italy and in other southern European countries, so as to lead to significant production of honeydew, of great economic importance for thousands and thousands of beekeepers. In many areas of Italy, where there are strong populations of *Metcalfa pruinosa* (Say), the contamination via drift or spraying to the vegetation of the crops treated, and of the surrounding areas, has caused, and still causes, increasing and serious damages to the hives. (as in the case of insecticide treatments against the *Scaphoideus titanus*, the insect vector of grapevine. « flavescence dorée »)
- **plants exudates different from the nectar.** Especially the fruit ones, of major relevance, being crops particularly susceptible to the use of pesticides.

The reality has widely demonstrated, through the studies on the toxic effects of seed's treatments as well as on the contamination of guttation, how limited is human ability to predict the potential exposure pathways.

Therefore, common sense should now lead to consider all the phenomena of potential exposure and risks, instead of simplistically restricting the ones to be considered.

General comments on chapter 4

Toxicity test

To assess the real impact on the future of the colony, the risk assessment cannot be limited to considering only the lethal effects.

It is necessary that larvae mortality tests become mandatory.

Therefore, it is crucial that the effects over time are defined, validated and certified by appropriate tests, especially the ones on:

- behavior and
- the development of the colony.

General comments on chapter 8 **Synergistic effects**

The current authorization protocol is limited to the consideration of a product in relation to a specific crop.

In reality, the a.s. are commercialized in special preparations with varied adjuvants and the mixing with other a.s., either in special preparations and in the field, are common.

Synergistic effects are also commonly known and used for pest control.

Therefore, it is essential that the whole of all these potential synergistic effects is differently and adequately assessed.

General comments on chapter 9 **risk mitigation measures**

The survival and productivity of bee hives are an exceptional bio-indicator of the compatibility and sustainability of the choices about how to produce the energy we extract from the cultivation of the land.

The survival and productivity of bee hives, in all areas of rural production, must be a measurable and not distortable objective of the actual environmental acceptability of the new EU Common Agricultural Policy.

It should be a socially shared objective to be taken up necessarily by the DG, so that no difference should occur in the overall development and in the productivity of bee colonies over time, between the cultivated and the non-cultivated areas.

Beekeeping is a zootechnical activity of positive social and environmental relevance. No claim of any prevailing law should be admitted for the protection of crops neither against beekeeping, nor as regards to the location and movements of the colonies.

Communication to beekeepers, prior to the application of a pesticide, can not in any way be regarded as a strategy of risk mitigation for the hives. Neither this communication can obviously have any significance for the mitigation of the risks for the pollinators as a whole.

The use of deflectors on air seeders is proposed as a mitigation strategy against the dispersion of contaminating dust.

However, scientific studies have shown that deflectors reduce the emissions but cause volatility at a greater distance and still with an unacceptable toxicity level to bees.

Therefore, the adoption of such equipment cannot, in any way, be defined as: mitigation.