On 11 January 2008, the French Food Safety Agency (Afssa) received a request from the Directorate-General for Food to issue an Opinion on compliance with a management measure recommended for Cruiser.

In its Opinion of 20 December 2007, referring to the marketing application for the insecticide Cruiser via the mutual recognition procedure (2007-3845), Afssa had recommended implementing the following management measure to reduce the exposure risk of bees: “Do not introduce plants that may attract bees in the crop rotation, or apply measures that may limit bee exposure (e.g. reaping before flowering).”

The purpose of the request is to clarify the concept of plants that may attract bees.

The main activity of bees is to build up nectar reserves for the colony. As a result, bees are particularly drawn to nectar-producing plants.

There are many plant species that produce nectar. It is estimated that, out of the 4,000 or so plant species recorded in France, several hundred are attended by bees for gathering nectar from their flowers (Biri, 1989). According to the same author, only about thirty of these plant species have a proven interest for bees.

In this context, we can extrapolate a “plant that may attract bees” to a “nectar-producing plant that flowers”. In principle, any crop of a dicotyledonous plant species likely to flower can be considered a flower that may attract bees.

By considering the crops that depend on insects for pollination (Pham-Delègue, 1999), the plants useful for beekeeping (Biri, 1989) and the possibility that these plant species can be sown in the same plot, i.e. in rotation with maize, the specific plant species that may attract bees are:
- oil-producing plants such as sunflower, rape varieties, mustard, safflower and soya;
- fodder legumes such as alfalfa, red and white clover, sainfoin, lotus and vetch (tares);
- other plant species that constitute intermediate crops, such as phacelia or buckwheat.

By linking this information with agricultural parameters concerning plots where maize is cultivated in France, the main or intermediate crops that may follow a maize seed plot treated with thiamethoxam and attract bees are sunflower, spring oilseed rape, the aforementioned fodder legumes and intermediate crops and fallow land/flowering meadows.

Note that these responses do not take the following into consideration:
- the flowering of weeds that may come up after maize harvesting;
- specific cases that must be exceptional under good agricultural practices, such as the production of honeydew after an attack of piercing/sucking insects or the sowing/planting of a replacement crop if a maize seedbed does not germinate properly.
Afssa – request no. 2007-SA-0393-2
Request related to no. 2007-SA-0393, Associated application no. 2007-3845

References
http://apisite.online.fr