

March 30, 2012



Even today, although it is shown that plants treated with synthetic pesticides produce guttation water dangerous to bees (Girolami et al., 2009) European Community considers this way of exposure of minimal importance for the toxic evaluation of a chemical substance.

To demonstrate the importance of guttation we need your help!

As everybody knows the water is essential for bees survival. They can take water from many places ponds, puddles or the little droplets of "water" that the plants exudate. We need your collaboration to gather information about the activity of bees collecting these exudates. Young plants eliminate droplets of sap through their leaves. Science has called this phenomenon "guttation". Simply put, at risk of betraying the complexity of plant physiology and its many areas still unexplained or unexplored, we can present the guttation as a mechanism involved in the "water management" of the plant. You can find much more detailed information [here](#).

When guttation water, taken by bees, contains pesticides, can have serious consequences for bees as shown in this video:

{youtube}e8Nsn4KvjwM{/youtube}

However the European authority doesn't consider important this contamination, just because there aren't enough information about the importance of this water source for bees.

How can we observe guttation?

Guttation is fairly easy to observe: whenever you have clear sky (no clouds, followed by a sunny day), at night a lot of plants will start to guttate, even if the temperature drops below 0° during the night, as it happens in the early spring or in the late fall.

The only thing you need is your camera (photo or video), thermometer (you can also estimate or you can use the thermometer inside your car) and get up early! If you want to catch bees drinking, you have to be out at the apiaries before the first bees start to leave the hive (6:30-7:30). This can differ a lot, depending on the position of the hive, e. g. early morning sun on the entrance will entice them to leave quite early, even if the temperature isn't much beyond 10° yet.

You can help yourself by collecting very simple information like:

Date

Temperature

Location

Colture

Time

6:50-6:55

6:55-7:00

7:00-7:05

7:05-7:10

Number of bees outside (estimated)

Number of bees inside (estimated)

We would be very thankful if you could observe the crops/plants around your hives; each of them a couple of days. It is very important for us that you send us pictures or videos with guttation droplets and bees collecting them. Please **make that the date and time of the picture/video appear on the picture/video**.

We will show all the data to the European Commission with the hope that they will consider guttation for the pesticide test in a future.

Whenever you have this information, please submit it to info@bee-life.eu just mentioning where you come from.

If you have any question you can contact us by e-mail or at the telephone (Belgium) +32(0)10

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Thank you for your collaboration!!!

European Beekeepig Coordination

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{comments on}