

Berlin, 13 and 14 December 2011

**International workshop: consequences of the September 6, 2011 ruling by the Court of Justice of the European Union on the possible presence of GM pollen in honey.**

Working group number 3: Consequences of the ruling for the European honey market and exporter countries.

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The September 6, 2011 ruling by the Court of Justice of the European Union is the most appalling disaster that has ever struck the beekeeping sector.

This is obvious for all clear-sighted stakeholders, be they technicians, beekeepers, scientists, packers or industrial honey clients.

Consequently, rather than go back over what everybody is already fully aware of, it seems preferable to address the fundamental issues:

- How could such a senseless ruling that is out of touch with the most basic technical realities have been made?
- How can we overcome this absurd situation? We need to prevent honey from being taken hostage by those involved in a political and ideological struggle against GMOs that is totally out of touch with the most elementary technical reality and does not concern us.
- How can a future legal framework safeguarding both product and consumers be introduced? It is essential to ensure smooth economic development for the industry, free from barriers to healthy competition.

As professional beekeepers representing French farmers who make a living from raising bees, we obviously have no legal skills. However, the only reason this issue has become so insane is because it was based on totally fallacious technical assumptions.

## **Our involvement will therefore be 100 % technical**

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### **1. Is honey “manufactured” by man or a primary agricultural product that has been around since the origins of humanity?**

Such a legal imbecility only arose because Mr. Bablok and his sidekicks developed the following technical argument:

“Pollen contained in honey is not a natural component. It is intentionally introduced by the beekeeper during the extraction process”.

This is a monumental swindle.

As the judges could not ask an independent organisation which would have denounced the swindle, they simply repeated it without checking it:

§ 110 of the prosecutor’s conclusions (9/02/2011)

*“Moreover, if I had to agree, as the Commission proposes, that in order to be an ‘ingredient’ a substance must be incorporated into food by means of human intervention, then clearly the harvesting of honey by centrifuging, which has the effect of mixing the pollen into the honey, is precisely an act of that nature.”*

And § 88 of the ruling (6/09/2011)

*“That presence (of pollen) is the very consequence of a conscious and deliberate production process by the beekeeper, who wishes to produce **the foodstuff classified as honey by European Union legislation**. Moreover, it results, essentially, from the action of the beekeeper himself, by virtue of the centrifugation operation which he carries out for the purposes of collection”.*

The ECJ therefore delivered this surrealist ruling as a consequence of the technical swindle by Mr Bablok. The Court was misled and believed that pollen came under the legal definition of ingredient:

§ 22 of the prosecutor conclusions (9/02/2011)

“‘Ingredient’: any substance including additives, used in the manufacture or preparation of a foodstuff and still present in the finished product, even if in altered form.”

Countless lawyers and observers have pointed out this extraordinary manipulation of the ECJ by amateur beekeepers. Based on this reasoning, pectin therefore becomes an ingredient in apples, vitamin C an ingredient in oranges, lecithin in eggs etc.

The only reason this happened is because honey and bees are still shrouded in mystery for non specialists. Additionally, there are no technical bee institutes that could be consulted in instances like this.

Similar fanciful interpretations could lead to the following definition of more classic produce:

“Gluten contained in wheat is the consequence of a conscious and deliberate production process by the cereal farmer who wishes to **produce foodstuff classified as wheat by European Union legislation**. It results from the action of the cereal farmer himself, by virtue of the threshing operation which he carries out for the purposes of collection”.

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## 2. Protecting human health

In addition to this monumental technical error, the Court’s primary concern is clearly stipulated:

§ 82 of the ruling (6/09/2011)

“The interpretation proposed {by the commission} would undermine the objective of protecting human health, since a foodstuff such as honey would escape any safety checks, even though it might contain significant quantities of genetically modified material.”

Again, it is absolutely essential to remain focused on the technical issues:

**Honey might contain significant quantities of genetically modified material**, says the Court.

What truth is there in this?

As everyone knows, pollen grains are plant sperm. The air we breathe is full of them as are the clothes we wear and the items we use.

How many are there in honey?

All calculations hereafter come **strictly** from official advice (published in Paris on 28 January 2011), by the scientific committee of the French High Commission on Biotechnology. They are of course very approximate due to quite large differences in the weights of various pollens and the numbers of grains inside different honeys, depending on their geographical and botanical origins.

Depending on the relevant plant and/or geographical sources, 10 g of honey contain between 10,000 and 1,000,000 pollen grains. The approximate weight of each grain is 34ng. Based on an average common number of 100,000 grains, the total weight of the pollen contained in 10 g of honey is therefore 0.0034 g.

This equates to a total of around 0.34 g per kilo.

Considering the largest consumers of honey eat around 20 kg a year, i.e. 50 g a day, daily consumption of pollen contained in honey is therefore 0.0175 g.

If 1% of this pollen is GM, the amount of GM pollen consumed daily is 0.000 175 g.

At this point of the debate, it is essential to ask a number of questions. The ruling is so staggering that it will undoubtedly encourage procedural behaviour.

Nature, towns, schools, offices, restaurants and apartments are full of pollen grains.

It follows from the ECJ ruling that daily intake of 0.000 175 g of GM pollen through consumption of honey requires specific legal measures.

Hence, it would be totally irrational and illogical not to rule on the legality of GM pollen in the air we breathe.

Similarly, in some circumstances, eating outdoors can potentially put consumers at risk of ingesting 0.000 175 g of GM pollen during a meal.

As a logical consequence of the ECJ ruling, legislation will also be required in this area.

But it won't be enough.

Considering the amount of passenger air travel between continents, it is obvious that travellers from countries where GM crops are grown could bring these amounts of GM pollen in on their clothes. Steps will therefore have to be taken to ensure "the objective of protecting human health".

Quite clearly, as soon as technical issues are addressed, the full absurdity of this patently incongruous ruling becomes obvious.

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Since last September 6, everyone has become aware of the dramatic consequences the sudden application of this ruling would have on the beekeeping sector.

Furthermore, the possible disappearance of part of the bee population would undoubtedly have an impact on the necessary task of pollination by bees.

Consequently, EU authorities have suggested draft adjustment or interpretation proposals. However, nothing final has as yet been decided.

### **3. Which measures should be taken to prevent the dramatic and possibly irreversible consequences of this decision?**

The ECJ provides no technical details on Mr Bablok's honey analyses. All we are told is that 4.1% of the maize pollen from traps was GM. There is no mention of the honey.

We know that the relative detection limit for GM analysis methods by PCR is 0.01%. Theoretically, it should therefore be possible to detect 10 GM pollen grains from 100,000 grains in 10 g of honey.

This relative limit is corroborated by matrices whose contamination rates can usually be checked by laboratories: for instance, 1 GM maize grain from 10,000 non-GM grains.

For the honey matrix, in theory the results are the same. However, all the relevant pollen (from many different floral sources) must first be extracted, hence 0.03% of total mass.

The difficulty therefore lies not at quantification stage but at extraction stage. There is currently no DNA preparation or extraction method that can guarantee efficient, representative recovery of DNA from all pollen contained in a sample of honey. Consequently, laboratories usually just mention "detected" or "undetected", giving no further details.

In all commonly studied matrices, in compliance with document CE 787/2004 pertaining to the technical aspect of detecting GMOs for enforcement of regulations 1829 and 1830, the 0.9% rule applies to **a plant species**.

Consequently, the 0.9% of GM pollen that honey might contain must be calculated for each individual floral source.

DG Sanco, however, has already explained that for honey the 0.9% rule must apply to all pollen.

This is a gross technical and scientific error.

It is neither legal nor feasible.

Until now, no PCR method has been able to detect and quantify each of the different vegetal species of different pollen grains in the 10 grams of honey. No scientific method has been validated for detecting GMO on this matrix. All methods validated by JRC (European community laboratory) are not applicable because only a detection limit of 0,045% has been validated. (Source: member of AFNOR commission V03E, European Standards Organisation and International Standards Organisation).

Lastly, the issue of labelling must be mentioned.

As everyone knows, manufactured products must stipulate each ingredient on the label.

Up until now, the packer has stated either “Honey” or “Ingredient: 100% honey”.

From now on, since pollen is considered an ingredient, the ruling implies that a list of all pollens must be stated on the label.

Not only is this totally meaningless, but how can a complete list of the dozens of pollens contained in each of the honeys harvested in Europe and worldwide be featured on a label?

Once again, it becomes clear that **as soon the technical aspects of each facet of this issue are addressed**, things become unenforceable.

By way of a conclusion, there is only one alternative left:

- ❖ Either we must accept that the beekeeping sector be subjected to unenforceable regulations which will ultimately lead to the disappearance of beekeeping in our countrysides and remove honey from supermarket shelves,
- ❖ Or, we need to adapt regulations now so that they take into account the specific technical characteristics of beekeeping and bee rearing.

Setting aside the question of bee survival and pollination requirements, there is no divergence of interest in this issue between the various stakeholders: farmers, beekeepers, packers, industrial honey clients etc. Even consumers can only wish for reason to prevail.

Let us hope that all parties involved will engage in meaningful discussions and issue common proposals. Let us hope too that EU authorities will be able to convert these proposals into regulations.

Perhaps now is the time to finalise the countless issues that have remained unresolved for a long time:

- Palynological analysis of honey is an excellent method for determining the geographical origin of honey. It is very inadequate for identifying floral origin. Much more efficient aroma analysis techniques must be developed.
- Everybody knows that, due to lack of efficient checks, unfair competition is significant in the honey trade. For example, a large part of Asian honeys are not pure honeys but just mixtures of real honeys and industrial syrups (and/or honeys that have already started to ferment and therefore can only be sold for industrial uses). This is also a major problem for business and also a leading and unacceptable swindle of consumers.
- Too little is known of the composition of honey. 600 different substances have been identified in wine. The same research must be applied to honey. It is totally unacceptable that the possible presence of natural compounds such as flavonoids, certain phenols, Pyrrolizidine alkaloids etc. can cast suspicion on this marvellous and wholly natural product.

Let us hope that this case will allow us to “come out smelling roses” from the many difficulties we are all faced with.

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