



[NL] Hardly any mixing between GM and conventional maize

Hardly any mixing occurs between genetically modified (GM) and conventional maize when farmers consider the agreed isolation distances between the different parcels. That is the result of the field experiment that was conducted by Plant Research International of Wageningen University for the Dutch Ministry of Agriculture. The results show that the agreed isolation distances make sure that mixing due to pollen-mediated gene flow in maize stays far below the within the EU agreed 0,9% accidental GMO threshold.



An isolation distance is the distance between GM and non GM fields that must be considered to avoid mixing. In the Netherlands, for maize these distances are 25 meters (between GM and conventional maize) and 250 meters (between GM maize and maize specifically for a non-GM market, such as the organic market).

On one location with an isolation distance of 250 meters one sample from a receptor field with an unusual high value was found. The receptor field is the field with maize that has been planted at a distance of 250 meters in order to take samples and check the mixing. This high value was not the result of mixing due to pollen-mediated gene flow, but can solely be explained by the presence of a GM maize cub in the receptor field.

The most logical explanation is that a GM seed was sown in the non-GM field. This happened despite that the sowing machine had been thoroughly cleaned in accordance with instructions.

Despite the unusual high value sample, the percentage of GMO in the whole field remains under the within the EU agreed 0,9% accidental GMO threshold. This means that if the harvest would be marketed, which is not the case with this field experiment, the batch would not have to be labeled as GMO.

Nevertheless, the mixing did happen despite the strict protocol of the field experiment. That is why the Dutch minister of Agriculture, Gerda Verburg, finds it necessary to establish an extra measure for commercial planting of GMOs. Research shows that the knowledge of co-existence with breeders of GMOs or contractors may be a weak link. To prevent this, the knowledge on coexistence must be implemented. The minister is thinking about an obligated course for farmers and is looking into the possibilities.

Source: Ministry of Agriculture, Nature and Food Quality

See Also:

>> [Coexistence research programme 2006-2007 \(in Dutch\)](#)