To: <u>GMOAppComments@daff.gov.za</u>

L.S.,

We, The European GMO-free Citizens, want to object against the intended commodity clearance for GMOs by Monsanto - public notice in *Business Day* - 8th of April 2019. See attachment below.

The GM maize products are:

- 1. MON 87427 x MON 89014 x MIR 162 x NK 601 x MON 87419
- 2. MON 87427 x MON 89014 x MON 810 x MIR 162 x MON 87411 x MON 87419 en
- 3. MON 87427 x MON 87419 x NK 601

The products are made to withstand the following herbicides: glyphosate, glufosinate-ammonium and the pesticide Dicamba. The **plants** have been also modified with **genes** from **Bt**.

When you will place it on the market we will never buy seed, food, feed and all other applications from this GM maize.

We will put our objections on the internet, Twitter, Facebook and our website. If you want to put these GM maize on your market, it will be likely that we never will visit your beautiful country again because we do not know anymore what we are eating in your country.

See for our comments and objections and that from others below.

Regards,

Mrs. Miep Bos, spokeswoman of the European GMO-free Citizens and Farmers, on behalf of them (De Gentechvrije Burgers en Boeren, Europees Consumenten Platform).

Also on behalf of Stichting Ekopark, Lelystad, The Netherlands

Stichting Natuurwetmoeders, Bussum, The Netherlands, they support us.

Donaustraat 170

8226 LC Lelystad

The Netherlands

EU

https://www.gentechvrij.nl/

2 attachments

Our objections

Bt

Quote: "In addition, the use of potent plant promoters such as the CaMV to switch on GM genes has other potential downsides. The CaMV promoter functions in all the different types of cells within the plant. Such ubiquitous expression is necessary in cases such as when the GM crop is engineered to tolerate being sprayed with a herbicide, to ensure that the plant survives.

But in other situations, ubiquitous GM gene expression is not so desirable. For example, GM maize engineered with the insecticidal Bt toxin gene obtained from bacteria aims to target either the corn borer or rootworm pest. Therefore the GM Bt toxin gene only needs to be expressed in stems, corn cobs, and roots, in order to ensure protection from these pests. However, the use of the CaMV promoter to drive expression of the Bt toxin transgene unit (as is the case in all current GM crops) results in the presence of this insecticide in all plant structures, not just the stems, cobs, and roots. This in turn increases the possibility of toxic effects on non-target insect populations that may feed on the pollen of these Bt GM crops, such as bees and butterflies. Thus valuable pest predator or pollinator insect populations **may be harmed when feeding on Bt GM crops.**"

"In conclusion, the use of ubiquitous promoters such as the CaMV in an effort to override the host plant's gene regulation systems and force expression of the GM gene at high levels may have undesirable effects on plant biochemistry, crop performance and the surrounding environment."

GMO Myths and Truths page: 33

About GMOs

Quotes: "GMO proponents claim that genetic engineering is just an extension of natural plant breeding. They say that genetically modified (GM) crops are no different from naturally bred crops, apart from the deliberately inserted foreign GM gene (transgene) and the protein it is intended to make.

But GM is technically and conceptually different from natural breeding and poses different risks. This fact is recognized in national and international laws and agreements on genetically modified organisms (GMOs). For example, European law defines a GMO as an organism in which "the genetic material has been altered in a way that does not occur naturally by mating and/or natural recombination" and requires the risks of each GMO to be assessed.1"

"Natural breeding can only take place between closely related forms of life (cats with cats, not cats with dogs; wheat with wheat, not wheat with tomatoes or fish). In this way, the genes that carry information for all parts of the organism are passed down the generations in an orderly way.

GM, in contrast, is an artificial laboratory-based technique that is specifically designed to enable the transfer of genes between unrelated or distantly related organisms. It even enables the introduction of synthetic DNA into the genome of living organisms.

In an attempt to reassure the public and regulators about GMO safety, GMO developer companies are now focusing on transferring genes from a related organism or the same organism (so-called

"cisgenesis"). For example, a gene from one potato may be inserted into another variety of potato. However, even in cisgenesis, a new GM gene unit may contain genetic elements from other organisms, including bacteria or viruses. Cisgenesis also involves the same laboratory methods that are used in genetic engineering and thus carries the potential for unexpected knock-on effects (see Myth 1.4)."

From: GMO Myths and Truths

An evidence-based examination of the claims made for the safety and efficacy of genetically modified crops and foods

John Fagan, PhD Michael Antoniou, PhD Claire Robinson, MPhil

2nd edition <u>https://livingnongmo.org/wp-content/uploads/2014/11/GMO-Myths-and-Truths-edition2.pdf</u>

Toxicology

NK603

The conclusions of Prof. Séralini about toxicity and carcinogenicity of glyphosate for rats at low dose are correct. His research has been put in bad light by an employee of Monsanto. See https://www.oneworld.nl/bedrijfslobby/monsanto-speelde-rol-intrekking-geruchtmakende-studie-roundup-tonen-nieuwe-e-mails/ . Several court cases about glyphosate are ongoing. https://usrtk.org/monsanto-roundup-trial-tracker-index/

Allergenicity

Monsanto pressured Wallace Hayes, Editor of Food and Chemical Toxicology Journal to retract the famous Séralini study, which discovered the damage caused by **GM maize NK603**. <u>https://sustainablepulse.com/2017/08/01/monsanto-secret-documents-show-massive-attack-on-seralini-study/#.XLjVEPZuKUk</u>

As the emails of Monsanto employees that appeared during the court cases show that misleading is commonplace, and that prof. Séralini has it right with his research, we can only conclude these toxic GM maize should not enter the SA market! ! <u>https://www.facebook.com/GmoSeralini/</u> Monsanto Secret Documents Show Massive Attack on Seralini Study . In secret internal Monsanto documents released on Tuesday 1st August 2017 by legal firms in the U.S. it was made clear how Monsanto successfully pressured Wallace Hayes, Editor of Food and Chemical Toxicology Journal to retract the famous Séralini study which discovered the damage caused by **GM maize NK603 and low doses of Roundup herbicide.** <u>https://www.baumhedlundlaw.com/toxic-tort-law/monsanto-roundup-lawsuit/monsanto-secret-documents-page-two/</u>

Molecular characterisation

"Regarding single event MON87427: **Testbiotech** had earlier observed that the process of genetic engineering involved several deletions and insertions in the maize plants. In order to assess whether the sequences encoding the newly expressed proteins or any other open reading frames (ORFs) present within the insert and spanning the junction sites raised any safety issues, it was simply assumed that the proteins that might emerge from these DNA sequences would raise no safety issues; and no detailed investigations were carried out in this regard.

Mostly relevant in this context is that (EFSA and) the applicant completely omitted to assess the stacked event in regard to its intended purpose. The reason for crossing NK603 with MON 87427 was to increase the content of EPSPS enzymes that confer resistance to glyphosate. Indeed, the expression data reveal a much higher content of these enzymes compared to the single trait. In consequence, it has to be expected that these plants can and will be exposed to higher and also repeated dosages of glyphosate. Higher applications of glyphosate will not only lead to a higher burden of residues in the harvest, but may also influence the expression of the transgenes or other genome activities in the plants. This aspect, which is the most relevant in regard to this stacked event, was completely ignored by the risk assessment as performed.

You should have requested that Monsanto submit data from field trials with the highest dosage of glyphosate that can be tolerated by the plants, also including repeated spraying. The material derived from those plants should have been assessed in regard to organ toxicity, immune reactions and reproductive toxicity, also taking combinatorial effects with other plants components and the Bt toxins into account. In the context of risk assessment of this

stacked event, the residues from spraying with the complementary residues must also considered to be a potent co-stressor. The impact on cells and organisms exposed to several stressors in parallel can be of great importance for the efficacy of Bt toxins. As, for example, Kramarz et al. (2007 and 2009) show, parallel exposure to chemical toxins can lead to Bt toxins having an effect on organisms that are not normally susceptible. In addition, Bøhn et al. (2016) show additive effects of several Cry toxins. Cry toxins interact with Roundup / glyphosate when co-exposed to Daphnia magna. These cumulative effects also have to be assessed in regard to food and feed usages." (From Testbiotech).

Dicamba and glyphosate

Glyphosate and dicamba herbicides increase antibiotic resistance in bacteria. **Details** Published: 12 October 2018

"A new study has found that some of the world's most widely used herbicides, Roundup (glyphosate) and Kamba (dicamba), increase the rate of antibiotic resistance development in bacteria by a factor of up to 100,000 times faster than occurs without the herbicide."

https://www.gmwatch.org/en/news/latest-news/18508-glyphosate-and-dicamba-herbicidesincrease-antibiotic-resistance-in-bacteria

Dicamba Might Be Even More Dangerous Than Glyphosate Emily Monaco

OCT 2, 2017

Quote: "But dicamba has posed new problems for farmers, namely the fact that it volatilizes when applied to crops, revaporizing and traveling from the fields where it is sprayed to non-GMO fields. "This material actually becomes airborne in molecules that are much smaller than are being actually sprayed on crops," more: <u>https://www.organicauthority.com/buzz-news/dicamba-might-be-even-more-dangerous-than-</u>

glyphosate?fbclid=lwAR22Gi4qdsTE3qNrVoequjsMTik5hvPobGNZqqdsrg7yPgDc0LGwiGgQqDc

Food en feed studies

"Herbicide-resistant plants are meant to survive the application of the complementary herbicide while most other plants will die after short time. Thus, for example, residues of glyphosate, its metabolites and additives to the formulated product might accumulate and interact in the plants. As the publication by Kleter et al. (2011) shows, using herbicides to spray genetically engineered herbicideresistant plants does indeed lead to patterns of residues and exposure that need to be assessed in detail. According to a reasoned legal opinion drawn up by Kraemer (2012), residues from spraying with complementary herbicides have to be taken into account in the risk assessment of genetically engineered plants from a regulatory point of view.

The European Food Safety Authority (EFSA) agrees that further investigations and data are needed (EFSA, 2015b). In any case, both the EU pesticide regulation and the GMO regulation require a high level of protection for health and the environment. Thus, in regard to herbicide resistant plants, specific assessment of residues from spraying with complementary herbicides must be considered to be a prerequisite for granting authorisation. In addition, cumulative effects have to be investigated if a plant contains or produces other compounds with potential toxicity."

Kleter, G.A., Unsworth, J.B., Harris, C.A. (2011) The impact of altered herbicide residues in transgenic herbicide-resistant crops on standard setting for herbicide residues. Pest Managment Science, 67(10): 1193-1210.

Kraemer, L. (2012) The consumption of genetically modified plants and the potential presence of herbicide residues, legal dossier compiled on behalf of Testbiotech,

http://www.testbiotech.de/sites/default/files/Legal_Dossier_Kraemer_Pesticide_RA_PMP.pdf Kramarz. "(From Testbiotech).

Attachments



We now can connect the dots very easily. Autism and Alzheimer's, Parkinson's, multiple sclerosis, these are inflammatory diseases of the brain. And guess what? It's the bacteria in the gut that regulate inflammation, and these are the bacteria that are damaged when they are exposed to glyphosate.

David Perlmutter, M.D.

SECRET INGREDIENTS

https://secretingredientsmovie.com/