

FISH HOEK VALLEY RATEPAYERS & RESIDENTS ASSOCIATION

(Incorporating Fish Hoek, Clovelly and Sun Valley)

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TO: REGISTRAR: GENETICALLY MODIFIED ORGANISMS ACT
GMOAppComments@daff.gov.za

**SUBJECT: OBJECTION - PUBLIC NOTICE FOR THE GENERAL RELEASE OF
GENETICALLY MODIFIED MAIZE
DUE: 27 MARCH 2018 (30 DAYS AFTER 25 FEBRUARY NOTIFICATION)**

1. EXECUTIVE SUMMARY

Dow (Du Pont) AgroSciences Southern Africa (Pty) Ltd is applying for the general release of GMO MON 89034 * TC1507 * NK603 white and yellow maize (corn) capable of producing Cry1A 105, Cry2Ab2, Cry1F, PAT, CP4 EPSYS proteins for so-called protection against certain lepidopteran (second largest insect class and most diverse, usually leaf eating) pests, but mainly for tolerance to glufosinate-ammonium and glyphosate herbicides. The latter would allow the Bayer's Liberty and Monsanto Roundup products to be widely used without harming these plants. RoundUp is the most widely used herbicide worldwide.

What is usually most effective against corn Lepidoptera pests are Cry1Ab, Cry1Ac, Cry9C and Cry3Bb1¹. The Cry1A must be broader covering both b and c strains while the Cry9C and Cry2Bb1 aren't even employed. One has to wonder the effectiveness of this intended GMO.

There are interesting developments in research and building negative sentiment towards GMOs, pesticides and herbicides. A judge has ordered the California Department of Food and Agriculture to stop using chemical pesticides. Monsanto lost its bid to overturn Arkansas' ban on dicamba, a controversial weedkiller linked to extensive damage to farmers' crops in the state as well as several other states. The agribusiness giant makes a version of the herbicide called XtendiMax that's paired with its seeds that are genetically engineered to resist the product. DuPont Co. and BASF SE also sell their own dicamba-based formulations. Monsanto's Roundup destroys healthy microbes in human stomachs. Honey bees are attracted to flowers laced with glyphosate that are likely harmful to their sustained health. New data released recently by the U.S. Food and Drug Administration (FDA) shows a rise in the occurrence of pesticide residues detected in thousands of samples of commonly consumed foods.²

Currently 87% of South Africa's maize is GMO. Soybeans in South Africa are already 100% GMO. Other GMOs include: canola, sugar beet, sugar cane, eggplant, potato, squash, wheat, papaya, tobacco and cotton. We don't need GMOs to feed the world and it is a fallacy to think otherwise. The global population is approximately 7.6 billion and current food production is capable of feeding 14 billion people.³

The Genetically Modified Organisms Act #15 of 1997 seeks to provide for measures to **promote the responsible** development, production, **use and application** of genetically modified organisms; to ensure that all activities involving the use of genetically modified organisms (including importation, production, release and distribution) shall be carried out in such a way as to **limit possible harmful consequences to the environment**; to give

¹ <https://pdfs.semanticscholar.org/3e09/52515ba88bdcab2d15fd29911c370bc8de81.pdf>

² <https://www.ecowatch.com/california-pesticides-health-2539988928.html>

³ <https://www.facebook.com/GMOFreeUSA/photos/a.468695639837571.108816.402058139834655/1944423592264761/?type=3&theater>

attention to the prevention of accidents and the effective management of waste; to establish common measures for the evaluation and **reduction of the potential risks** arising out of activities involving the use of genetically modified organisms; to lay down the necessary requirements and **criteria for risk assessments**; to establish a council for genetically modified organisms; to ensure that genetically modified organisms are appropriate and do not present a hazard to the environment; and to **establish appropriate procedures for the notification of specific activities** involving the use of genetically modified organisms; and to provide for matters connected therewith.⁴

Promote Responsible Use and Application of GMOs

There are seven giant seed and agro-chemical companies in the world with millions of smallholder farmers locked into buying from this monopoly block (as they are not “allowed” to collect and trade in their own seeds) and billions of us, dependent on what the food farmers grow. The commercialisation of the seed system threatens bio-diversity, food security and indigenous knowledge. The seeds from seed companies are sold along with the companies’ agri-chemicals products engineered to work specifically with the seeds. They promise higher yields and drought and pest resistant crops, but this has not always been fulfilled.⁵

Smallholders produce most of Africa’s cotton. When Burkina Faso initially tried Monsanto’s short staple cotton in 2008, it did result in pest-free and a more abundant crop, but their previously high sheen quality and related high value, began to fall leading them to abandon GM cotton in 2016 after losses of \$85m over five seasons. Monsanto agreed to “breed” its pest-resistant Bt genes into their native long staple plants, but never did this successfully.⁶

Limit Possible Harmful Consequences to the Environment

Pesticide usage has increased six to 18 times in the UK, not halved as claimed by the pesticide industry. New scientific evidence from around the world showed that very low doses of pesticides, well below official ‘safety’ levels, pose a significant risk to public health from pesticides in our food supply. It is well known that some toxic chemicals accumulate in the environment and in our bodies. Repeated doses, no matter how small, will build up over a lifetime. Real world multiple active ingredients and adjuvants cocktails applied to crops that may increase their potency, are not tested on humans.⁷

Reduction of the Potential Risks

Glyphosate has been described as carcinogenic for humans and harmful for animals. In Argentina, serious health issues in children are on the rise. There, incidents of cancer have tripled over the past 10 years. Congenital deformities in new-borns have quadrupled.⁸

A scientist, French Professor Gilles-Eric Seralini, who linked GMOs and glyphosate to cancerous tumour growth and significant chronic kidney deficiencies in rats concluded that GMOs are health damaging and unsafe for human consumption. Marc Fellous, former chairman of France's Biomolecular Engineering Commission (BEC), has been indicted for "forgery" for unauthorised copying of the signature of a non-consenting scientist regarding his statement that multiple GM crops as safe for human consumption. Independent organization CRIIGEN stated that alarming signs of toxicity were reported when GMOs and Roundup were used long-term. Monsanto lobbyists got the journal Food and Chemical Toxicology to retract Seralini’s long-term study linking GMOs and glyphosate to rat tumours. Seralini believes that endocrine disruptions and overexpression of EPSPS transgene or other mutational effects in the GM maize are responsible for causing these issues.⁹ Toxic effects of glyphosate and its commercial formulations below regulatory recommended acceptable daily intake limits, cause teratogenic, tumorigenic and hepatorenal effects explained by endocrine disruption and oxidative stress.¹⁰

⁴ http://www.saflii.org/za/legis/num_act/gmoa1997286/

⁵ <https://www.dailymaverick.co.za/article/2017-12-15-food-security-planting-a-new-food-culture-of-contradictions/#.WjPfJE0UnIW>

⁶ <https://www.reuters.com/investigates/special-report/monsanto-burkina-cotton/>

⁷ <https://www.soilassociation.org/news/2017/november/rapid-increase-in-pesticide-use-and-new-evidence-of-health-impacts-of-very-low-doses/>

⁸ <http://www.dw.com/en/glyphosate-the-sick-children-of-argentina/av-41649212>

⁹ https://www.naturalnews.com/053378_Seralini_Monsanto_fraudulent_scientists.html

¹⁰ <http://www.sciencedirect.com/science/article/pii/S027869151530034X>

Criteria for Risk Assessments

In 2016 the World Health Organization deemed glyphosate a “probable human carcinogen”. A significant exposure to glyphosate in farm workers has been linked to increased risk of non-Hodgkin lymphoma, a type of cancer.¹¹

GMO foods have been linked with leaky gut syndrome, heightened food allergies (ex. gluten intolerance) and several inflammatory diseases. GMOs contain more pesticides than non-GMO foods, which possibly explains the increase in autoimmune diseases due to the higher toxic-burden.¹²

The widespread use of glyphosate has led to a sharp increase in glyphosate-resistant weeds. These “super-weeds” require even greater herbicide use and are often combated using older, more dangerous herbicides, such as 2, 4-D, a chemical that has been linked with non-Hodgkin’s lymphoma, Parkinson’s disease, endocrine disruption, and reproductive problems.¹³

Establish Appropriate Procedures for the Notification of Specific Activities

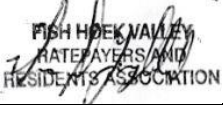
South Africa’s Department of Health (DOH) introduced labelling regulations under the Foodstuffs, Cosmetics and Disinfectants Act #54 of 1972’s and associated Regulation 25 in 2004, but this has proved to be inadequate. The Department of Trade and Industry’s (dti) Consumer Protection Act (CPA) #68 of 2008 and associated Regulation 293 states that ALL GM goods must be labelled, but these GM food labels are placed in the small ingredients table.¹⁴ We want larger labels and we want to know which pesticides have been used (active ingredients, frequency and last spray – the farmers know).

Think about it. Applicants like these allow someone to patent life. Can that be right? Also, we have to pay foreign companies for these seeds and herbicides where we could be selling our own heirloom seeds¹⁵ and using biologically produced “natural organic” herbicides¹⁶.

2. RECOMMENDATIONS

Therefore, it is recommended that for the reasons stated in this report, that:

Dow (Du Pont) AgroSciences Southern Africa (Pty) Ltd’s application request for the general release of GMO MON 89034 * TC1507 * NK603 white and yellow maize, **BE DENIED.**

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SIGNATURE	
DATE	28 February 2018

¹¹ <http://time.com/4295272/glyphosate-pesticide-roundup-hawaii-activists/>

¹² <https://www.amymyersmd.com/2017/08/3-reasons-to-avoid-gmos-if-you-have-an-autoimmune-disease/>

¹³ <http://www.centerforfoodsafety.org/press-releases/3536/epa-approves-new-24-d-herbicide-blend-paving-way-for-controversial-ge-crops#showJoin>

¹⁴ <http://biosafety.org.za/information/know-the-basics/gmo-safety/the-labelling-of-gm-foods-in-south-africa>

¹⁵ http://www.organicseed.co.za/search?orderby=position&orderway=desc&search_query=soybean

¹⁶ <https://www.seedsforafrica.co.za/products/biogrow-finalsan-organic-plant-care-herbicide-moss-algae-killer-500-mls>