

February 14, 2024

## RE: Canola isolation districts and restrictions on GE varieties.

Dear Chair Helm and Committee Members:

I would like to add the article below to the record. While this article is based on GE/GM pollen and genetic transfer in Oregon grass seed, there is reference to the distance canola pollen can travel. This article demonstrates exactly why we need restrictions on acreage and isolation distances. We all could refer to European isolation distances used in "TRIAL PLOTS," as was shared in the hearing or we could look to our own state for examples of what can happen under real farming conditions, in the absence of a scientifically proven isolation distance.

Whether we're talking about gene transfer from "laboratory" grass to naturally bred grass or the introduction of genetics from gene-altered salmon to native salmon species, it is no different than what can and will happen with canola. It is true, genetically altered plants do in fact behave the same conventional and organic plants, as one testifier mentioned, and that's the problem. Plant genetics are transferred via pollen, far and wide, whether genetically altered in a lab or bred naturally. However, you cannot "unbreed" the altered genes or even know you have them in your crop without testing. Let it be clearly stated - once those genetically altered plants and their genes are introduced to our environment there is no going back – "you cannot kill them all" ... to correct that mistake.

Please read this short article that proves, in our own state, that cross-pollination can occur at distances far beyond what we imagine, far beyond what happens in research plots. We do not farm under "trial plot" conditions. Our farmers are battling strong winds, trucks/trailers that leak seeds as they drive down the road, shared equipment and many other factors that spread seed/genetics.

Also, for the record, the organic industry is not discussing the allowance of GE in organic. The National Organic Standards Board, the Federal Advisory Board to the Secretary of Agriculture, keeps a running agenda item regarding GE- to ensure that the National Organic Standards continue to prohibit GE as new technologies emerge.

# Wind carries GM pollen record distances



## **By Fred Pearce**

#### 20 September 2004

Pollen from a genetically modified grass has blown on the wind and pollinated other grasses up to 21 kilometres away, says a new study. This distance is "much further than previously measured", say the authors, and is thought to be a record for any GM pollen.

The discovery comes as regulators decide whether to allow the planting of the GM creeping bentgrass on golf course putting greens across the US.

Scientists from the US Environmental Protection Agency (EPA) focused on fields that have been growing GM varieties of creeping bentgrass near Madras in central Oregon, US, for two years. The experimental grasses are genetically modified to resist popular herbicides, such as Roundup.

Lidia Watrud and colleagues from the EPA's National Health and Environmental Effects Research Laboratory in Corvallis, Oregon, collected seeds from wild grasses growing tens of kilometres around the experimental plots.

They then grew the seeds in greenhouses and tested the growing grasses for transgenes and resistance to Roundup, which would reveal cross-pollination with the GM bentgrass.

# **Extensive contamination**

Watrud's team found extensive gene contamination within 2 km downwind of the experimental plots. But some pollen went much further. Contaminated grass seeds turned up across 310 square km, with the most distant find 21 km from the source.

Only a handful of studies have ever investigated gene flow from crops – GM or otherwise – at distances greater than a few hundred metres. Studies have found radish and sunflower genes travelling 1 km, marrow (or squash) genes travelling 1.3 km and oil-seed rape (or canola) genes travelling up to 3 km.

But the suspicion is that pollen from many crops could travel hundreds of kilometres on the winds.

"To my knowledge, this is the longest distance reported for GM pollen dispersal," says David Quist, whose research into the genetic spread of GM maize in Mexico caused a row after its publication in Nature in June 2002.

Creeping bentgrass is a favourite of golf course managers, who say it provides a uniquely smooth surface for putting greens. But weeds can interrupt the smoothness, so course managers want a grass that is resistant to the herbicides that kill the weeds.

# Wild-land invasion

GM creeping bentgrass has exactly that characteristic and has been tested in Oregon by seed company Scotts, of Marysville, Ohio, which collaborated on the EPA study.

But the findings now threaten to derail a bid from Scotts for government permission to sell the product to golf courses and more widely. Their efforts have been held up by government agencies who fear that the GM puttinggreen grass could invade the country's wild lands.

Creeping bentgrass grows naturally in many habitats and cross-pollinates with other grasses of the *Agrostis* genus. "It is one of the first wind-pollinated transgenic crops being developed for commercial use," says Watrud.

Gina Ramos of the Bureau of Land Management says: "Our concern is that if it was to escape onto public land, we wouldn't know how to control it."

Respectfully submitted,

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