

Canadian Seed Trade Association Submission

Pollinator Health: A Proposal for Enhancing Pollinator Health and Reducing the Use of Neonicotinoid Pesticides in Ontario

Introduction

CSTA represents 130 companies involved in all aspects of the seed industry. Our members work with over 50 different crop kinds and are engaged in all production systems: organic, conventional and biotechnology. Our members range from single farm family retailers to large multinational firms. They are involved in all aspects of the seed industry; plant breeding and research, production, marketing and distribution, packaging, conditioning and international trade. The Canadian seed industry contributes \$5.6 billion to the Canadian economy annually, with exports valued at \$450 million and employing over 57,000 Canadians, many of those in Ontario.

It is estimated that 9 out of every 10 bites of food taken by people around the world start with the planting of a seed. Seed is the driver of the innovation that the world's farmers will need to feed, fuel and clothe a world population that is expected to reach 9.3 billion in fewer than 40 years, while facing the challenges of climate change and competing demand for water, land and resources.

CSTA and our members understand and recognize the importance of pollinators. Pollinators are critical for the production of many crops and for the overall success of the Canadian agriculture industry. Canadian agriculture and apiculture are complimentary and interdependent industries; one cannot be successful without the other. The seed industry also understands that pollinators and crop protection products are complementary and integral components of a sustainable agricultural system.

As an association we support the Government of Ontario's goal of protecting and enhancing pollinator health. However, we do not support the Ontario Government's proposed approach to achieving its goal as outlined in the '*Pollinator Health Action Plan*'. It is well known and commonly understood that pollinator health is complex and multi-factorial and yet the regulatory proposal to enhance pollinator health is entirely focused on pesticides and more specifically neonicotinoid insecticide treated seed.

The proposal recognizes 4 stressors that impact pollinator health:

- 1) Pollinator Habitat and Nutrition
- 2) Diseases, Pests and Genetics
- 3) Pesticide Exposure
- 4) Climate Change and Weather

While the proposal recognizes that there are multiple stressors impacting pollinator health the regulatory proposal only focuses on Pesticide Exposure. To solve an issue that is complex and multi-factorial by focusing on only one stressor is not scientifically defensible and will cause significant economic hardship for Ontario seed companies, retailers and farmers and will most certainly have a negative impact on the environment.

We strongly urge the Government of Ontario to work closely with stakeholders to draft a plan that addresses all of the issues impacting pollinator health.

Science Based Decision Making

In order to be successful and remain competitive as an industry, we rely on government and regulators at every level to make decisions based on sound, reputable science. Sound scientific principles are measurable, reproducible and predictable. Regulatory assessments and approval processes based on science ensure that all products are assessed consistently, giving confidence to consumers and to the developers of innovation.

The Ontario government's current proposal is based on a very loose interpretation of the precautionary principle that directly links the use of neonicotinoid treated seed and honey bee overwintering mortality rates. Despite numerous requests from CSTA and other value chain groups we have not been provided with any data or evidence to suggest that an 80% reduction in acres treated with neonicotinoids will result in overwintering losses being reduced to 15%.

The correlation between overwintering losses and neonicotinoid use has not been scientifically demonstrated or proven. In fact in on November 25, 2014, the day that the Government of Ontario announced that it planned to significantly limit the availability of an important tool in modern agriculture, Health Canada's Pest Management Regulatory Agency (PMRA) issued a report stating that there was not sufficient information to draw conclusions regarding a link between negative colony effects and potential neonicotinoid exposure.

PMRA's scientific report found that the number of bee death incidents reported during planting in Canada was down by 70% in 2014 compared to 2013. In Ontario the number of incidents reported during planting was down even further, by 79% in 2014 compared by 2013.

In its report PMRA also noted that 72 percent of the bee-yards reporting post-planting colony effects were reported by three beekeepers, which contributed significantly to the number of yards reported during that timeframe.

The agriculture industry in Ontario is united that using non-science based targets is the wrong approach. As stewards of the land, we know that this will hurt, rather than help, our environment, which is why we have stood together to strongly oppose this regulatory proposal.

CSTA and the seed company members that we serve request that the Ontario Government defer to PMRA when it comes to regulating pesticides. They have the mandate and expertise to make sound science based decisions based on a wide body of evidence. PMRA is the only agency that is legally obligated to make decisions based on scientific rigor.

There is a large body of scientific research and work being done on pollinator health and yet the current proposal only cites one source, the International Union for Conservation of Nature (IUCN). We strongly urge the Ontario government to also include research that is being done in Ontario by Canadian Researchers such as; Dr. Terry Daynard, Dr. Ernesto Guzman and Dr. Art Shcaafsma. There is a growing body of scientific evidence from the University of Guelph and others that essentially refutes the approach taken in this regulatory proposal.

There are also a number of very important and worthwhile studies underway regarding both pollinators and neonicotinoid seed treatments. However good science takes time, it requires reviewing data over more than one growing season to ensure accuracy of the findings. By rushing forward with a non-science based regulatory proposal the Ontario government is undermining research currently underway.

The government of Ontario in its discussion paper directly links pollinator health with overwintering loss. This is the basis of the paper's assertion that to reach a 15% overwintering loss, the use of neonicotinoids must be reduced by 80%. CSTA is very concerned about the process currently used in Ontario to assess overwintering losses.

In 2014 after the release of the Canadian Association of Apiculturist's (CAPA) overwintering loss report, the government of Ontario raised considerable concerns about the 58% average reported in Ontario as compared to other provinces but did not address the lack of standardization of what constitutes a loss. CAPA defines a loss as a hive with less than 3 frames of viable bees and yet Ontario defines a loss as a hive with less than 4 frames of viable bees. Ontario's overwintering numbers cannot be compared to other provinces unless they standardize the criteria. It is easier to report a loss in Ontario than anywhere in Canada.

If the government of Ontario is to measure success based on overwintering losses Canada wide it must ensure that it is measuring loss in a standardized manner. The government also must practice due diligence and make sure that high overwintering loss numbers are investigated to ensure accuracy and legitimacy, especially because there is financial remuneration being offered in Ontario.

It is interesting to note that based on Statistics Canada information; from 2013 to 2014 the number of beekeepers and colonies in Ontario increased as did the total amount of honey produced in the province.

Honey Production in Ontario	2013	2014	Increase
Beekeepers	3155	3262	3%
Colonies	97500	112800	16%
Production of honey, total (pounds x 1,000)	6363	8192	29%
Value of honey, total (dollars x 1,000)	\$20,362	\$30,310	49%

Pollinator Health

The discussion paper recognizes that there are multiple factors impacting pollinator health and yet it does not address how any of them, other than the use of neonicotinoid treated corn and soybean seed, will be addressed.

The current regulatory proposal will not enhance pollinator health unless it outlines a plan to address the following factors that impact pollinator health:

- Parasites: Varroa mites are often cited as the number one issue facing commercial beekeepers
- Diseases: e.g. Nosema
- Technology: There are very few in-hive treatment products currently available
- Nutrition: Lack of appropriate food at appropriate times

- A lack of genetic diversity within bee stocks
- Climate change and associated changes in habitat and forage
- Pesticides and interactions with modern agriculture, including products used in hive by beekeepers
- Other stress-inducing problems such as colony transport and weather
- Queen quality
- Beekeeper Best Management Practices

Why Seed Treatments?

To meet future global food demand, farmers have to increase their food production while being challenged by competition for land and water and by climate change. To meet these demands, production and yield must increase on a per acre basis. As such farming practices have changed. Farmers are increasingly planting seed earlier in the growing season to allow for a longer growing period to help maximize yields. This is especially true for corn and soybeans.

However, early season planting in cold and wet soils puts the seed and seedling at a greater risk. Seed treatments help offset some of this risk because they offer protection when the plant is most vulnerable; as a seed and seedling. Currently neonicotinoid seed treatments are the only way to protect the seed from pests. There is no rescue treatment available for below-ground pest control after planting.

Seed treatments remain the least environmentally intrusive measure for controlling insects that are an annual concern in many crop types, including corn, soybeans and canola, and as a result are an important tool for many producers. Safe and targeted use of neonicotinoid seed treatment introduces an efficient use of pesticides and reduces the amount of chemical used on large areas of farmland by reducing or eliminating the number of necessary foliar sprays and allowing for a precision agricultural operation.

Precision agriculture means that the farmer does not have to till their land before they plant their crop, which protects fragile soils; reduces erosion and soil compaction while protecting soil nutrients and allowing natural cover crops to grow. It also means that less fuel is used on farm, reducing Ontario's agriculture carbon footprint.

The amount of insecticide used in seed treatments, like neonicotinoids, is typically less than 10% of that applied in-furrow and less than 1% of that from a broadcast/foliar spray treatment. Seed treatments are the most environmentally friendly option.

Seed-applied insecticides, or seed treatments, offer real and tangible benefits to the value chain by increasing productivity, facilitating sustainable farm incomes, and targeting the product where it is most effective. They are an important tool for Canadian farmers because they reduce threats to the seedling that could impact plant stand and yield, and they help to maximize resources such as water and soil nutrients, energy, money and labour.

Without access to technologies such as neonicotinoid seed treatments production would drop and costs would rise sharply for both farmers and consumers. The economic costs would be heavy and ironically, the environmental costs would also be high. With increasingly high input costs, the modern farmer needs to maximize crop production. Every seed planted needs to grow.

Seed companies and their grower customer are environmentalists; they are driven to reduce the amount of necessary farm inputs not just from an economic but also from a sustainability and stewardship perspective.

Unprecedented Industry Action

CSTA and our member companies recognized early on that steps needed to be taken to mitigate risk to pollinators during the planting of neonicotinoid treated corn and soybean seed. The decision to take action was industry led and driven and it resulted in unprecedented cooperation and collaboration amongst value chain stakeholder groups.

In July, 2013 CSTA facilitated the creation of a '*Seed Applied Insecticide and Pollinator Health Value Chain Coalition*'. The industry led coalition brings together grower groups, developers, applicators, marketers and users of seed treatments and treated seed who are committed to maintaining the highest possible standards for the development, application and use of all federally approved crop production inputs, including neonicotinoid seed treatments.

In August, 2013 the Coalition sent a formal letter to the Federal and Provincial Ministers' of Agriculture and the Environment that outlined the Canadian agriculture industry's commitment to working with the entire value chain and our federal and provincial regulators to find a workable, non-regulatory solution to protecting and enhancing pollinator health.

(See Appendix #1 at the end of document for the letter sent to the Ontario Minister of Agriculture and the Minister of Environment)

Since making our commitments known, CSTA and our members have been working diligently and collaboratively with the entire value chain to ensure that the technology carried by seed, such as insecticides, is used in a responsible manner to mitigate risk to pollinators.

CSTA and our members specifically have undertaken six key initiatives to help ensure that pollinators and the environment are protected and that farmers are able to continue to access the tools that they need to grow the crops that Canadian's rely on for food, fuel and fiber:

- 1) Promotion of Best Practices (BMPs):** BMPs for planting treated seed known as '*Pollinator Protection: Reducing Risk from Treated Seed*' were developed by the Pest Management Regulatory Agency (PMRA) of Health Canada in the fall of 2013 with the assistance of CSTA corn and soybean members.

CSTA members fully supported and broadly distributed the BMPs to their retailers, customers and value chain partners and spent considerable time and resources educating and training their staff on the importance of following the steps outlined in the BMPs. CSTA and CropLife Canada also created a complimentary industry BMP piece entitled '*Protecting Pollinators: What can you do?*' which was widely circulated and will be updated for the 2015 planting season.

- 2) Additional Labeling:** CSTA's members worked with the federal regulators at PMRA to develop new labeling for corn and soybeans that had been treated with neonicotinoids. The additional labeling was not scheduled to be implemented until 2015; however CSTA member companies exceeded the regulated requirements by adding the new PMRA labeling to neonicotinoid treated corn and soybeans for the 2014 season. The additional labeling appeared on all pallet IDs, was placed in the sleeve/pocket of all bulk containers and polywoven bags and appeared on invoices.
- 3) Improved Technology:** Substantial resources went into distributing, educating, promoting and training on the mandatory use of Bayer's new seed flow Fluency Agent when planting

neonicotinoid treated corn and soybeans. The new Fluency Agent significantly reduces the dust generated during planting and was adopted by nearly every grower for the 2014 planting season. Seed companies had never distributed seed flow lubricants before but did so in the spirit of stewardship.

Resources have also been dedicated to developing new polymers that cover the seed preventing the seed treatment from rubbing off. There are also deflector kit trials underway which significantly reduce the emissions generated by planters, further reducing the chance of bees and other pollinators from coming into contact with dust.

- 4) **Lifecycle Stewardship:** Additional standards for the handling, storage, use and disposal of treated seed are being developed by CSTA, and will be enforced by the industry. CSTA is also working to ensure that our products are disposed of responsibly at the end of their lifecycle. CSTA partnered with CleanFARMS, a not-for-profit industry stewardship organization, which is running a seed bag and pesticide container collection pilot project in over 200 locations in Ontario and Quebec in 2015.
- 5) **Giving Farmers Choice:** CSTA members will continue to ensure that farmers have access to a range of products including untreated seed, fungicide-only treated seed, and seed treated with fungicides and insecticides. More treatment options were offered in 2014 than ever before on more hybrids in different maturity zones.

In 2014 CSTA members provided Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) staff with a list of available fungicide only corn options and associated ordering deadlines which was made public to ensure transparency and reiterate that there is choice. The choice of seed treatment options will continue to be customer driven.

(See Appendix #2 for a complete list)

- 6) **Working Collaboratively:** CSTA staff and members are fully committed to continuing to work with all relevant stakeholders. CSTA was an active participant at the Ontario Bee Health Working Group and was very involved at the federal level with the establishment of a National Bee Health Roundtable that is co-chaired by Agriculture and Agri-Food Canada and the Canadian Honey Council. CSTA continues to support the National Bee Health Roundtable as a member of the steering committee and subsequent working groups.

CSTA and its members are committed to working together with the value chain, including farmers, regulators and policy makers to reduce the dust generated during planting to ensure the safe planting of insecticide treated seed. We are actively educating and training those who choose to use insecticide treated seed, to ensure that it is being used in a safe and responsible manner. We recognize and appreciate that industry has a role to play in mitigating risk to pollinators from treated seed.

The seed industry is committed to an ongoing dialogue and continued action to find sustainable solutions for our industry, the Canadian economy, and the health of our environment. The stewardship initiatives undertaken by CSTA and our value chain partners have yielded positive results and we are committed to continuing to collaborate to ensure the success of agriculture and apiculture.

CSTA's Request

The Canadian Seed Trade Association and our member companies have reiterated in meetings, letters and via email our commitment to work with the government of Ontario to find a workable, long term, science based solution that allows for the success of the apiculture and agriculture industries in the province.

We have also reiterated our commitment to continuing to support the farmer customers that our industry serves.

As such, CSTA requests that the government:

- 1) Conduct a thorough cost benefit analysis before proceeding with the approach outlined in the Pollinator Health Discussion Paper.
- 2) Return to the Pollinator Task Force and collaborate on real solutions to protect pollinators and the environment.
- 3) Abandon the goal to reduce neonicotinoids by 80% in Ontario and support an agri-industry led approach that will work for the complexities of modern agriculture and apiculture
- 4) Ensure that neonicotinoid treated corn and soybeans are not be placed in a new Class 12 under the Pesticides Act

Conclusion

CSTA and our member companies have been very engaged on the pollinator health issue, we have dedicated significant time and resources into working with policy makers, regulators and value chain stakeholders to ensure that every reasonable step is being taken to mitigate risk to pollinators. The seed industry has undertaken considerable efforts to mitigate risk to pollinators while ensuring that Canadian growers have access to the technologies that they need to produce food in a safe, sustainable and environmentally friendly way.

CSTA's member companies are stewards of seed and the technology that seed carries. We take our role very seriously and understand that we have a responsibility to ensure that seed and seed technology are used in a way that contributes to an abundant and safe food supply, a vibrant agricultural economy and a healthy environment.

The current proposal places the burden to implement a flawed and unworkable regulatory system solely on the agriculture industry. In order to effect positive change a genuine and sincere collaborative process is needed and is expected moving forward.



canolacouncil
OF CANADA



CANADIAN
CANOLA GROWERS
ASSOCIATION



August 12, 2013

Honourable Kathleen Wynne
Minister of Agriculture
77 Grenville Street
Toronto, Ontario
M7A 1B3
Fax: 416-326-3083

Honourable Jim Bradley
Minister of Environment
77 Wellesley Street West
Toronto, Ontario
M7A 2T5
Fax: 416-314-6748

Dear Ministers' Wynne and Bradley,

The Canadian Agriculture and Agri-food system makes a significant contribution to the Canadian economy, directly providing one in eight jobs, employing 2.1 million people and accounting for 8.0% of total GDP.

In order to produce an abundant supply of high quality products for food, feed and industrial uses farmers need to have access to the latest technologies and production tools. As participants in the value chain, we are committed to providing and using this technology in a sustainable and responsible manner. The undersigned organizations are committed to maintaining the highest possible standards for the development, application and use of all crop production inputs, including seed treatments.

We all have a vested interest in the health and wellbeing of pollinators. They are critical for the production of many crops and for the overall success of the Canadian agriculture industry. As an industry we agree that bees and other non-target organisms should not come in to contact with seed-borne insecticides, such as neonicotinoids and we are committed to mitigating any potential risk to bees from dust generated during planting. As technology developers, seed treaters, seed and seed treatment marketers, and users of the technology, we have a role to play in ensuring that seed-applied insecticides are used in a manner that minimizes the risk of pollinator exposure.

Specifically we commit to:

- continue to work together with regulators and policy makers, to develop and implement measures and practises that will substantially reduce the dust generated from planting insecticide-treated seed;
- inform, educate and train those who choose insecticide-treated seed on when and how to safely

- use the technology;
- offer untreated seed to those who may decide not to use the technology; and
- engage the beekeeper community to understand the challenges they face as integral components of our agricultural industry.

Seed-Borne Insecticides bring Value to Farmers and to the Environment

By 2050, the world's farmers will need to double their food production while challenged by competition for land and water and by climate change. Seed-applied insecticides, or seed treatments, offer real and tangible benefits to the value chain by increasing productivity, facilitating sustainable farm incomes, and targeting the product where it is most effective.

Farming practices have changed. In order to extend the growing season and maximize yield, many crops are planted earlier in the year in soils that are often cold and wet. This exposes the seed and seedling to a range of potentially devastating pests including those that carry bacterial and viral diseases that could destroy a harvest. Seed-applied insecticides, like neonicotinoids, help protect the seed and seedling against these pests during the most vulnerable period, giving the seed the chance to grow and flourish into a healthy crop.

Seed-applied insecticides provide a real economic benefit to Canadian farmers. The use of seed-applied insecticides has been proven to significantly increase production, with a positive impact on farm income. For example, trials conducted in Ontario and Quebec from 2002-2007 showed that seed-applied insecticides helped to boost average corn yields by 4.2 to 13.3 bushels per acre, which translates to an increase of \$21 to \$67 per acre for the grower. This represents between \$63 and \$201 million for corn growers in Canada in 2012 (based on 3 million acres at \$5.05/bu corn). Similar trials in soybeans showed an average yield increase of 2.1 to 6.8 bushels per acre, resulting in an increase of \$26 to \$108 per acre for the grower. In addition to increased productivity and profitability, evidence also suggests that seed treatments enhance plant health and vigour while improving germination and creating a more uniform plant stand.

Seed treatments are a highly efficient and targeted form of crop protection technology that is more environmentally friendly than the alternative insecticide application methods. Precise amounts of insecticide are applied directly to the seed which is then planted in the ground, minimizing the likelihood that non-targeted organisms, such as bees, are exposed. The alternative to using seed-applied insecticides are broadcast/foliar sprays or in-furrow treatments, which are less targeted and require more chemicals to treat the same amount of farmland. For example, the amount of seed-borne insecticide used is typically less than 10% of that applied in-furrow and less than 1% of that from a broadcast spray treatment. Depending on the crop and pests in the area, seed treatments can reduce the number of foliar sprays by up to 4 applications.

The Value Chain Has a Role

As the developers, applicators, marketers and users of seed treatments and treated seed, we take our stewardship obligations very seriously. We have a responsibility to ensure that the technology is being used in a safe and responsible way. In light of recent events, our industry has taken additional steps to further protect bees from potential risks from unintended exposures to pesticides from treated seeds and is confident that these efforts will have a positive and lasting effect. A recent international meeting of regulators, including Canada's Pest Management Regulatory Agency (PMRA) and industry stakeholders, hosted by the United States Environmental Protection Agency (US EPA), concluded that activities currently underway in our industry would mitigate the risk to bees from planting dust. Some of these efforts include:

- 1. Promotion of Best Management Practices:** Best Management Practices (BMPs) for Planting Treated Seed, have been developed, and are being actively promoted along the value chain.
- 2. Labeling:** All insecticide treated seed bags on the market in 2014 will contain additional text reminding growers that the seeds have been treated with an insecticide and directing them to follow BMPs to reduce pollinator exposure to dust at planting.
- 3. Improved Technology:** Substantial resources have been dedicated to improving seed coating quality, seed flow lubricants, and planting equipment to help keep the insecticide on the seed in order to substantially reduce dust. Initial testing indicates that replacing traditional lubricants could reduce total dust by up to 90% and total active ingredient in the dust by up to 60%.

Some of these innovations have already been introduced and the plan is for others to be available for broad use by the industry beginning in 2014.
- 4. Lifecycle Stewardship:** Additional standards are being developed, and will be enforced by the industry, around the handling, storage and use of seed treatments and treated seed, from development to disposal of seed and seed bags.
- 5. Giving Farmers Choice:** We will continue to ensure that farmers have access to a range of products including untreated seed, fungicide-only treated seed, and seed treated with fungicides and insecticides.

Farmers around the world face the daunting challenge to feed, clothe and fuel an ever-growing world population and Canadian farmers are in the enviable position to lead that effort. However, in order to do so, farmers need access to new technologies to continue to increase productivity in an environmentally sustainable fashion. We understand that pollinators and crop protection products are complementary and integral components of a sustainable agricultural system. We look forward to an ongoing dialogue and continued action to find sustainable solutions for our industry, the Canadian economy, and the health of our environment.

Respectfully signed:

Grain Growers of Canada
Canola Council of Canada
Canadian Canola Growers Association
Canadian Seed Trade Seed Trade Association
CropLife Canada

Corn Hybrids Available in Ontario with a Fungicide Only Seed Treatment Option for the 2015 Season.

The following list includes all corn hybrids that can be ordered with a fungicide only seed treatment (no neonicotinoid treatments). The ordering deadlines are listed above each hybrid group. For more information company contacts are listed at the end of the document.

<u>Country Farm</u> <i>Dec. 1 2014</i>	<u>De Dell</u> <i>no deadline</i>	<u>Dekalb</u> <i>Nov. 26 2014</i>	<u>Elite</u> <i>Nov. 28 2014</i>
CF230	DL 777	DKC27-54	E44A02 R
CF266	DL 928	DKC30-07RIB	E47A12 R
CF310	DL 1010	DKC31-07	E47A17 R
CF327	DL 1005	DKC34-46	FUSION RR
CF370R	DL 1111	DKC38-01	31Z15
CF409	DL 1197	DKC38-03RIB	E48A27 R
CF440	DL 2020	DKC43-10RIB	E48A29 R
CF460	DL 1445	DKC43-30	YUKON R
CF466	DL 1389	DKC46-18	E49A12 R
CF474	DL 1792	DKC50-78RIB	E50G22 R
CF492	DL 1672		E50G27 R
CF496	DL 1867		E53B12 R
CF600	DL 1528	<u>Hyland</u>	E53B22 R
CF586	DL 1960	<i>Dec. 5 2014</i>	DURANGO
CF626	DL 3393	3093	VENZA R
CF611	DL 3400	HL R219	E56B22 R
CF677	DL 3710	8166	E57L62 R
CF747	DL 3857	8295	E59L19 R
CF762	DL 3596	HL SR35	E61P12 R
CF800	DL 4399	8315	E63D17 R
	DL 4444	3397	E64H22 R
	DL 4170	8486	E64H27 R
<u>Croplan</u>	DL 5601	8505	E64K42 R
<i>Oct. 31 2014</i>	DL 5149	8521	E65D10 LR
2417VT2P-CERT-FUNG	DL 4711		E65F12 R
3399VT2P-CERT-FUNG	DL 6175		E67D10 LR
4199SS-CERT-FUNG	DL 6207		E67D17 R
	DL 7191		E67H22 R
	DL 9585		E68S20 LR
	DL 9812		E69R10 LR
	Delightful		E71T15
	Delicious Too!		
	Delicious Won!		
	De Monster		
	De Challenger		

Horizon***Dec. 15 2014***

HZ 675

HZ872

Feb 01 2015

HZ 730GT

HZ 760GT

HZ 782 GT

HZ 795GT

HZ 797GT

HZ 844GT

HZ 993GT

HZ 1052GT

HZ 1072GT

No Deadline

HZ 750

HZ 794

HZ 805

HZ 912

HZ 991

S2500

S2740

Maizex***Nov. 15 2014***

MZ 1633DBR

MZ 1625R

MZ 1624DBR

MZ 2311DBR

MZ 211X

MZ 266X

MZ 2986R

MZ 2988DBR

MZ 3066DBR

MZ 3202SMX

MZ 3484SMX

MZ 3344R

MZ 3522DBR

MZ 3515DBR

MZ 3550SMX

MZ 3980R

MZ 3985DBR

MZ 4011R

MZ 4010DBR

MZ 4107SMX

MZ 4092DBR

MZ 4525SMX

MZ 4640SMX

MZ 467X

MZ 4676DBR

MZ 4728SMX

MZ 5103SMX

LF 728R

LF 730CBR

LF 804CBR

LFG 875

LF 8877CBR

LF 1010CBR

Mycogen***Jan. 30 2015***

3093

4093

8166

8180

8202

8211

8315

8380

8445

8625

2J337

F2F343

F2F378

F2F498

TMF2L414

TMF2L418

TMF8106

TMF8312

TMF8534

NK Brand***Dec. 19 2014***

N14D-GT

N15T-3110

N20Y-GT

N23M-GTA

N23M-3011A

N29T-3111

N45P-GTA

N45P-3011A

N61P-3000GT

N61P-GT

Pickseed***Sep. 30 2014***

PS 2262RR

PS 2263VT2P RIB

PS 2219RR

PS 2304RR

PS 2305VT3P RIB

PS SilEx VT3P RIB

PS 2346

PS 2348VT2P RIB

PS 2501RR

PS 2589VT2P RIB

PS 2552RR

PS 2676VT2P RIB

PS 2750RR

PS 2792VT2P RIB

PS 2793GSX RIB

PS 2759

PS 2843RR

PS 2844VT2P RIB

PS 2860VT3P RIB

PS 2901RR

PS 2902VT2P RIB

PS 3066GSX RIB

PS ExTend VT3P RIB

PS ExLeafy RR

PS ExLeafy VT2P RIB

PS ExTreme RR

PS ExPert 2

PS EXEL RR

PS ExCept

PS ExMax RR

Pioneer***Dec. 06 2014***

P7332R

P8210HR

P8622AM

P8906

P9188AM

P9675

Pride***Nov. 15 2014***

A4022RR

A4023BtRR

A4414RR

A4177G3 RIB

A4415G2 RIB

A4631G2 RIB

Seed Company Contact Information:**Country Farm Seeds Ltd.**www.countryfarmseeds.com

1-800-449-3990

CROPLAN Winfield Solutions LLCwww.winfield.com/Farmer/Croplan/

1-519-889-0402

P9644AM
P0157AM
P0216AM

A4705HM RR
A4881G2 RIB
AS1047RR EDF
A5151G2 RIB
A5111RR
A5113G3 RIB
A5120G2 RIB
A5430
A5433G3 RIB
A5907RR
A5909G2 RIB
A6028G2 RIB
A5892G3 EDF RIB
A6015
A6016RR
A6020G3 RIB
A6102G8 RIB
A6127G2 RIB

A6419G2 RIB
A6030G8 RIB
A6509G2 RIB
A6840G2 RIB
A6733G8 RIB
A6757G8 RIB
A7188G8 RIB
A7270G8 RIB
A7311G8 RIB
A7330G2 RIB
A7880G8 RIB

De Dell Seeds Inc.
www.dedellseeds.com
1-519-473-6175
DEKALB Monsanto Canada Inc.
www.dekalb.ca
1-800-667-4944
Elite La Coop federee
www.elite.coop/en/seeds/corn.shtml
1-514-384-6450
Horizon Seeds Canada Inc.
www.horizonseeds.ca
1-519-842-5538
Hyland Seeds
www.hylandseeds.com
1-800-265-7403
Maizex Seeds Inc.
www.maizex.com
1-877-682-1720
Mycogen Seeds Dow AgroSciences Canada
Inc.
www.mycogen.ca
1-877-MYCOGEN (692-6436)
NK Brand Syngenta Seeds Inc.
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