



ONTARIO  
**Bean  
GROWERS**



## MESSAGE FROM THE CHAIR

### A New Normal?

After 9/11 some things changed forever. Airport security jumped to a new level. After Covid-19, I think global supply chains will come under increased scrutiny. Relying on other countries for crucial items such as face masks needs to be re-examined from a production and inventory perspective.

It's comforting to think as we work through these massive societal changes that the humble bean may have a role to play in helping us out. From its ancient origins in Central and South America to its adoption around the world, beans have given civilizations food security. Judging by grocery store demand during this pandemic (see insert) many people still feel the same way.



have no doubt that our growers will, in spite of the challenge this virus is throwing at us, grow a crop of the highest possible quality and standards to feed families around the world and at home to help us out in this crisis.

Canada has a great reputation as a food supplier that the world's people can count on to honour contracts and fulfill commitments. We have always been there for them in the past and we will continue to do so in this new future.

Stay Healthy,  
Mike

Please note: Event subject to COVID-19 pandemic. Go-no-go decision in July

*Research Day, Plot Tour & BBQ  
August 19, 2020*

**Huron Research Station  
70257 Airport Line, Exeter**

Visit [ontariobeans.on.ca](http://ontariobeans.on.ca) for updates on this event.

### LICENSE FEE REMINDER

OBG's revenue comes through the collection of license fees (\$6.80/MT in 2019-20), under the authority of the Farm Products Marketing Act. Bean dealers are required to submit license fees on behalf of growers when buying beans. There are currently 10 Ontario Bean Dealers remitting license fees to OBG (see PDF at [bit.ly/ONbeandealers](http://bit.ly/ONbeandealers) for listing). If you are selling to someone not on this list, they are not remitting license fees on your behalf. If you are unsure if license fees have been remitted on your behalf, please contact Jennifer at the OBG office at [jennifer@ontariobeans.on.ca](mailto:jennifer@ontariobeans.on.ca).



# SCN Management Tips for Dry Beans

Meghan Moran, Canola and Edible Beans Specialist, OMAFRA  
Chris Gillard, University of Guelph, Ridgetown Campus

Soybean cyst nematode (SCN) are tiny soil worms that have become the largest pest of soybean worldwide. Dry beans are an alternate host for SCN, so here are some key tips for you to use:

## 1) Is SCN near you?

SCN is present in at least 22 counties in Ontario (Figure 1), which includes key dry bean producing regions. At least 80% of southwestern Ontario fields have tested positive for SCN. It will continue to move across the province into previously non-infested fields and counties.



Figure 1. Ontario counties where SCN has been confirmed.

## 2) Do you have SCN?

To know for sure, you must sample your fields. Take 15 cm deep soil cores in the crop row just after harvest. Send separate samples from potential SCN hot spots like sandy knolls, field entrances, or circular areas where your bean crop was stunted. In-season crop symptoms are often blamed on other diseases (root rot), fertility deficiency (nitrogen or potash), drought stress or water ponding. SCN is a hidden yield robber - 30% losses have been measured in soybean without any visible plant symptoms.

## 3) If SCN is present, what do you do?

Test Regularly – Are populations increasing? Is your management working?

Crop Rotation – is a key management tool, especially for dry bean growers. Most crops (except soybeans and dry beans) will reduce SCN populations.

What variety to grow? Some soybean varieties have SCN resistance genes. Limited research from North Dakota and Ontario suggest navy and black beans are tolerant, cranberry and kidney beans are susceptible and azuki beans are very susceptible. Use this information wisely to match varieties to the SCN levels in each field.

Other tools? Seed treatments like Clariva (Syngenta) and Ileva (Bayer) are registered for SCN in soybeans, but not in dry beans. Public research has shown NO effect of seed treatments on SCN in Michigan (M. Staton, MSU) or Ontario (C. Gillard, UofG).

More information? Go to soybean diseases at [www.soybeanresearchinfo.com](http://www.soybeanresearchinfo.com) or <https://extension.umn.edu/soybean-pest-management/soybean-cyst-nematode-management-guide>.

They focus on soybeans but the information is applicable to dry beans too.

**Bottom Line:** SCN is spreading quickly across Ontario. It is here to stay, so learn how to manage it. First identify the problem using a soil test. Then use regular soil testing to measure the size of the problem. Seed treatments are not recommended, but following strict crop rotations to corn, wheat and alfalfa will reduce SCN populations. In fields with moderate SCN populations, navy and black beans are a better choice than cranberry or kidney beans. Azuki beans should be avoided when SCN is present.



## BOARD OF DIRECTORS

**Mike Donnelly-Vanderloo**  
Chair  
Thamesford, Ontario  
519-808-1003

**Jamie Payton**  
Vice Chair  
Thorndale, Ontario  
paylanefarms@hotmail.com  
519-284-3429

**Tyler Vollmershausen**  
Research Committee Chair  
Bright, Ontario  
vollmershausen.tyler@gmail.com  
519-617-9896

**Brendan Louwagie**  
Market Promotions &  
Communications Committee Chair  
Mitchell, Ontario  
blouwagie@sylvite.ca  
519-301-1316

**Nick Cressman**  
Dundalk, Ontario  
nick@alpinepfl.com  
519-321-1041

**Adam Ireland**  
Teeswater, Ontario  
adamireland@me.com  
519-357-6176

**Maitland Underwood**  
Wingham, Ontario  
maitland\_underwood@hotmail.com  
519-357-7260



# Farmers Reports of “Green Patch” on the Rise

Meghan Moran, Canola & Edible Bean Specialist OMAFRA



Many growers have had the experience of dry bean plants re-growing at the end of the season, particularly when there has been a dry spell followed by late season rain. It causes headaches at harvest time because the re-growth results in plants having both mature and immature pods. Sometimes the areas of re-growth follow soil type or topography patterns in the field that relate to water holding capacity.

In recent years, more and more Ontario producers are seeing patches of green plants in the field at the end of the season. The patches are often noticed after a pre-harvest herbicide is applied. While the rest of the field dries down normally these patches are not killed by the herbicide and continue to set pods. What I am describing here, in my experience, is something different than the re-growth that occurs after late season rain. Let's call this “green patch”.

When growers describe green patch symptoms, they almost always say the field looked excellent all season. However, plants in the green patches do not produce one single good, saleable bean. Plants continue to grow because they are working to produce viable bean seeds. Symptomatic cranberry and kidney plants have pods that are often oversized and have a corrugated look, while smaller seeded beans tend to have more deformed or curled pods. Many of the beans will be aborted (empty pods) while other pods will have oversized, deformed, hollow or sprouted beans. Some beans look relatively normal on the outside but will be lightweight because they are hollow or have deformed or sprouted tissue under the seed coat.

I have had conversations with many growers about this phenomenon. Most will say they always see a few plants like this, but in recent years I have walked fields with significant acreage of green patch (e.g. 5 or 10 acres). I have seen photos and reports of up to 30 acres affected within a field. Each year I receive more reports from growers in our various bean growing counties. In 2019, with help from agronomists, samples were collected from 20 different fields and a handful of additional growers called to report symptoms. The majority of symptomatic fields were cranberry and otebo beans, and a few were kidney and white beans.

I regret to say that I do not know what is causing green patch. I'm not alone, colleagues in Michigan and Idaho have also seen the problem and do not have answers. There are a lot of theories and I am doing my best to chase them all down. It is clear to me that more and more growers are losing some tonnage to green patch.

To date I have tested for 8 different viruses but may pursue additional virus screening. There is no real indication that this is a fungal or bacterial disease. AAFC researchers in Saskatoon have been generously checking samples for phytoplasmas (formerly referred to as MLO) which are vectored by insects such as leafhoppers, just like aster yellows in canola. While the symptoms do suggest a phytoplasma, so far we have not had a sample test positive. Part of the challenge with green patch is that we cannot identify symptomatic plants until very late in the season, so a virus or phytoplasma could be difficult to detect even if it is the cause. I have not conducted herbicide testing on the plants and have not had any indication from growers that there are herbicides used in rotation that cause concern. Plus, herbicide tests are very specific and fairly expensive, as you must choose which active ingredient to test for.



Continued on next page

Would you like to receive timely news and information from the Ontario Bean Growers? Use this QR code to access the sign up form or send an Email to [jennifer@ontariobeans.on.ca](mailto:jennifer@ontariobeans.on.ca).



SUBSCRIBE

At least one farm with green patch uses irrigation, which is one of the reasons I do not believe this is related to soil moisture (or lack thereof). I have also noted that many (but not all) symptomatic fields have a history of manure (particularly hog or poultry), but I am not sure what this might mean, if anything. Some growers say the patches tend to appear in the same areas of the field each year they grow dry beans, but others say the locations vary. None have said the patches follow soil types or topography across the field.

For the 2020 season, Ontario Bean Growers have committed funding for further testing. With help from agronomists, soil and tissue samples will be collected from the green patches and normal areas of the field. The baseline nutrient levels for bean plant tissue at the end of the season are probably not well established, but we may pick up on differences in macro and micro nutrient levels between the normal and green patch areas. Some colleagues believe nutrient imbalances may be at play. Unfortunately, we do not know how to reproduce symptoms or determine in advance where they will appear in a field so I cannot build a reliable protocol for applying micronutrients to see if they resolve the problem.

Please reach out to me if you have issues with green patch so I can continue to document the scope of this issue. I am open to hearing what you think may be the cause and will continue to reach out to researchers and others in the industry for ideas and advice. I know this has caused significant losses for some growers and hope that someday soon I can provide advice on mitigating the problem.

Meghan Moran, OMAFRA Canola & Edible Bean Specialist 519-546-1725 [meghan.moran@ontario.ca](mailto:meghan.moran@ontario.ca)

## 2020 Pulse MRL Advisory

*Please note - Each Bean Dealer could have specific needs for their global markets. Check with your Bean Dealer regarding the products that are acceptable for use on each market class.*

The 2020 Pulse MRL Advisory was released recently and OBG would like to remind growers that while Glyphosate is marked as “Be Informed” on the Advisory, **that no Bean Dealers in Ontario are allowing for the use of Glyphosate as a pre-harvest aid on dry beans.**

OBG supports Bean Dealers in maintaining market access through complying with end-user demands regarding pesticide use.

PULSE MRL ADVISORY – UPDATED APRIL 2020						
CROP PROTECTION PRODUCTS	PEAS	LENTILS	CHICKPEAS	DRY BEANS	FABA BEANS	COMMENTS
<b>A. Pre-harvest weed control</b>						
Glyphosate (e.g. Roundup)	⚠	⚠	⚠	⚠	⚠	Glyphosate is registered for pre-harvest weed control and is not to be used as a desiccant. Pre-harvest glyphosate must only be applied when seed moisture content is less than 30% in the least mature part of the field to prevent unacceptable residues in the harvested grain. Growers are advised to consult with their grain buyer before using this product on pulse crops. Some grain buyers may not accept pulse crops treated with pre-harvest glyphosate due to scrutiny in the global marketplace and low MRLs for some pulse crops in certain major markets.
<b>B. Desiccant</b>						
Diquat (e.g. Reglone)	⚠	⚠	⚠	⚠	⚠	Growers are advised to consult with their grain buyer before using this product on pulse crops. MRLs are established in most major markets but are set at low levels in the U.S.
Glufosinate - Western Canada (e.g. MPower Good Harvest)	NR	⊗	NR	NR	NR	Growers are advised to not use glufosinate on lentils as a crop desiccant. There is an elevated risk of MRL-related trade disruption due to missing or very low MRLs in most major markets. Treated lentils will not be accepted by grain buyers.
Glufosinate - Eastern Canada (e.g. Ignite)	NR	NR	NR	⚠	NR	Growers are advised to consult with their grain buyer before using this product on dry beans in Eastern Canada. MRLs are missing or set at low levels in most major markets.

- ⚠ Be informed. Treated pulse crops may not be accepted by some grain buyers. Consult with your grain buyer before using this product.
- ⊗ Do not use. There is an elevated risk of MRL related trade disruptions. Treated grain will not be accepted by grain buyers.
- NR Not registered. Only use registered product.

For more tips and tools to help you grow a market-ready crop, visit [keepingitclean.ca](http://keepingitclean.ca).



60 Elora Street South, PO Box 100, Harriston, Ontario N0G 1Z0

519-510-8556

[info@ontariobeans.on.ca](mailto:info@ontariobeans.on.ca)

[www.ontariobeans.on.ca](http://www.ontariobeans.on.ca)

Growers



@ontbeangrowers

Consumers



@ontariobeans