

Executive Summary

Contrary to the assessment of the European report, the consensus opinion of those interviewed for this report is that glyphosate exposure of Canadian organic commodities to glyphosate residues is **taking place on-farm** rather than off-farm. Improved sampling/pre-testing protocols and lot preparation measures undertaken by Canadian farmers and traders since 2011 (see Spotlight on sampling, above) should have reduced to nil the incidence of organic crop contamination with glyphosate residue due to off-farm factors.

The literature review, interviews and other content collected for this report indicate that **background levels of glyphosate currently present in the environment, and drift (to a lesser scale), are sufficient in quantity to explain the typical “positive” glyphosate residue test results associated with Canadian organic commodities.** Many uncontrollable variables—such as the timing of spraying, relative crop readiness for harvest on neighboring operations, wind speed and direction when neighbors are spraying substances prohibited by organic agriculture etc.—all factor into an organic farm’s risk for glyphosate exposure. What it means for the organic sector, if glyphosate is ubiquitous at background levels in the agricultural environment, is that organic crops may risk being exposed to glyphosate deposited from the air (through drift and dust) and precipitation. Because glyphosate persists in then environment longer than previously thought, especially when bound to soil or dust, detected residues cannot necessarily be traced back to a discrete spraying event, or even to the growing season in which they are discovered. In the perspective of one trader interviewed for this report, who deals in both organic and conventional crops, dust as a source of glyphosate contamination in Canada is much more likely to be a cause of crop contamination with glyphosate residues both pre- and possibly post-harvest than commingling. The bottom line is that extensive use of chemicals by conventional agriculture and their potential impact on organic systems, especially with glyphosate being sprayed so many times per year, can and should not be overlooked.

Recommendations

1. Glyphosate contamination is an educational opportunity for the organic sector.

- ***Difference between conventional and organic exposure*** -COTA’s communications should proactively and clearly provide the context necessary to understand the difference between glyphosate exposure on organic and conventional products (parts per billion versus parts per million). There is an opportunity here for COTA to build on its messaging response to the CBC’s Winter 2014 pesticide report—that data showed that Canadian field crops had very low levels of prohibited substances.
- ***Glyphosate is already in the environment***- COTA should take a leading role in communicating (to consumers, to buyers and other interested parties) that the low levels of glyphosate present at times in organic products are also likely present at times in the air all around us—essentially defusing, through education, the potential for overreaction once the existence of this prohibited substance residue in organic

food is “exposed”.

- **Organic is not free of pesticide-** COTA should have a direct role in shaping and sharing the message that organic products provide a documented process and guarantee for products “produced without” prohibited substances.

2. Research needs highlighted by the issue of glyphosate contamination

- A. As previously noted, there is a real need to identify realistic and reasonable glyphosate residue levels that make it possible to distinguish between fraudulent and non-fraudulent use, in a manner that takes into account the variability and non-reliability of low-level testing. To this end, COTA should solicit and compile glyphosate residue testing data generated since 2011 by Canadian certifiers, farmers, and traders. Analysis of this data should involve consultation with Canadian experts in herbicide loading/stacking in the environment, such as Hugh Beckie, Wally Hamm, and others.
- B. The existence of market barriers and market impacts that the glyphosate residue issue has had/is having for Canadian sellers of organic product is also difficult to gauge due to a lack of detailed organic commodities data on the amount and value of goods exported. Such data and analysis of related market impact topics, such as changes in organic rotations (for example, farmers switching from lentils to peas, as noted in this report) would be of great value to the organic sector.

COTA outreach efforts.

Several possible roles exist for COTA in terms of coordinating the organic sector around this issue:

- As a first step, COTA will administer a survey (see Appendix), followed by conference calls to collect information from affected and interested parties with regard to this issue.
- Working with traders COTA could play a role helping to solidify/standardize the sampling protocol used to create representative samples for glyphosate (and/or other residue) testing. Since documentation with the EU is a major point of concern, a standardized sampling protocol may involve pre- and post-cleaning samples, i.e., one on-farm test of product, followed by a test of a sample from bagged, ready-to-ship product.
- COTA should collaborate with (AAFC? CFIA?) and other government partners worldwide (specifically Japan, the U.S. and the E.U) to identify the potential of establishing a cost-sharing program and or cost-effective testing protocols that could alleviate the burden of test costs.
- COTA should identify political partners to identify what support and/or action can be in regard to the fact that the practice of using glyphosate as a pre-harvest management tool for crop burn-down (rather than weed control), while not an authorized label use, has seriously compromised Canadian organic trade. One person interviewed for this report suggested following up with Ted Menzies (former

cabinet minister and current president/CEO of Crop Life Canada) regarding the investigation of political approach to this situation.

- COTA should work with AAFC and CFIA in crafting its approach of EU authorities if import tolerance level (“Special Notice”) for lentils and other organic crops is an option that the organic sector wants to pursue. David MacDonald, Director of Compliance Deputy Director Europe at AAFC was named as being involved with this kind of work.
- Concerning the European trade sector: BNN has stated that “Public Statements” can be used to potentially modify the BNN orientation value specific to certain substances. As a first step, COTA should urge BNN to make a Public Statement that prevents outright shipment rejection and undue delays when residue testing detects glyphosate contamination of Canadian organic product above the orientation value. COTA’s outreach to BNN should focus on bumping up, by one order of magnitude, the orientation value for residue tolerance of glyphosate (to 0.1 ppm +/- 50%). Such a change would eliminate the double confounding of the current orientation value with test variability and background levels of glyphosate in the environment.

An expanded role for certifiers

More than one person interviewed for this report expressed that certifiers, who have on-site experience with regard to verifying which residue levels would be fraudulent, could play a larger role in helping the organic sector address this issue. For example, the development of an organic sector-wide science- and reality-based protocol that explains how to handle the existence of background levels glyphosate in Canada should take place with certifier involvement. Having such a protocol in place for consistent use by all certifiers would make it easier for farmers to approach certifiers with their concerns about glyphosate exposure and/or to obtain an affidavit that will let them finalize sales for product on which glyphosate residues have been found. The farmer interviewed for this report mentioned anecdotally that he is aware of some cases in which spray drift has led to decertification of farms. The current nature of the farmer-certifier relationship is such that farmers are often fearful to approach their certifier to talk about glyphosate residue contamination—opening the dialogue feels like a potential path towards decertification, this farmer said. A clear certifier protocol for dealing with glyphosate residues would serve to put emphasis on organic certification being about organic standards being followed more than about outcomes possibly beyond a farmer’s control, such as contamination exposure.