

PREVENT HERBICIDE DRIFT IN SEED POTATOES



PROTECT YOURSELF

- Can you afford to damage a seed potato crop with non-target herbicide?
- Seed potatoes are a high input crop and many commercial applicators do not carry enough liability or drift insurance to fully cover damage to a seed crop.
- Commercial applicators are only required to carry \$250,000 general liability insurance and \$25,000 drift insurance.
- Producers often have general liability insurance that does not cover pesticide drift.
- Ask your insurance agent what coverage you have.



Seed Potato Growers Association of Manitoba

DAMAGE FROM NON-TARGET HERBICIDES LEAD TO MAJOR FINANCIAL LOSS

Glyphosate Damage in Seed Potatoes



The use of glyphosate continues to rise as the uptake of Round-up Ready® canola, corn and soybean increases. In addition, other use patterns such as pre- seed burn-off and use as a desiccant or harvest aid mean that the potential for glyphosate injury exists throughout the growing season. Glyphosate is non-selective, extremely systemic, moves mostly through the phloem and accumulates in areas of active growth. This is the reason why glyphosate can effectively control some perennial weed species when applied late in the season; a time when perennial plants translocate nutrients to their roots for storage. This is also the reason why potato crops are so susceptible to damage from this herbicide as a potato plant's fundamental function is to move nutrients to the tubers which may be used for seed the following year.

- Potatoes may be injured from exposure to herbicides which are not approved for use on the crop.
- Herbicide injury can result from spray drift, or sprayer tank contamination.
- Glyphosate injury symptoms may not be visible in the year of exposure but may greatly effect the daughter tubers and therefore has significant implications for the seed potato industry.
- Some group 2 herbicides, commonly used on cereal crops, may persist in soil and in spray tanks if not adequately cleaned; and can cause significant injury to potato crops at very low levels.
- Visual identification of herbicide injury may be difficult as symptoms can be similar to injuries caused by other factors such as disease, suboptimal fertility, or environmental conditions. In some cases, levels below detectable limits may still lead to substantial crop damage.



MANAGING THE RISK

- Understand the product you are spraying and follow the label recommendations.
- Know what crops are adjacent to the field you are spraying.
- Leave an unsprayed headland next to sensitive crops such as potato, until the wind is favourable.
- Know the wind speed and direction prior to application.
- Avoid spraying in high temperature conditions and low relative humidity.
- Maintain spray application records.
- Manage your application equipment:
 - Utilize low drift nozzles
 - Manage air pressure to reduce the number of fine droplets
 - Maintain appropriate boom height
 - Manage ground speed to avoid boom bounce
 - Clean spray tank thoroughly to avoid contamination
- If utilizing a custom applicator, ensure the application is conducted by a certified applicator who understands the risks associated with non-target herbicide damage in potato and follows the mitigation practices outlined above.

Photos courtesy Andrew Ronald, Dr. Andrew Robinson, and Stan Wiebe

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