

BMPs for Invasive Plant Species



What are Invasive Plant Species?

Invasive plant species are non-native plants introduced outside of their natural habitats. In this new environment, free from their natural 'enemies', they have an advantage that allows them to out-compete native plants and agricultural crops for space, moisture and nutrients.*

Examples of invasive plant species relevant to the forage seed sector include:

Scentsless Chamomile [1]
Common Tansy [2]

What RISKS do invasive plant species pose to the forage seed industry?

- Reduced profitability
- Elevated production costs
- Increased spread through forage seed
- Compromised international and inter-provincial trade
- Jeopardized grower reputation and negative exposure for the industry



Beneficial Management Practices (BMPs)

Invasive plant species pose a very real threat to production, economic value, and aesthetics of the land. BMPs are practices that can be implemented to fight against invasive plant species, including prevention of their introduction, control of their spread, or elimination of their presence. The following BMPs can assist in these efforts.

HIGH RISK

Invasive plant species in forage seed or a forage seed field

- ✓ Investigate control options
 - herbicide application
 - hand pulling individual plants
 - mowing or cultivating large patches
 - work with local agrologist for control method recommendations
- ✓ Ensure seed is cleaned
- ✓ Identify and isolate contaminated areas and develop a buffer zone around areas of concern — only harvest seed from unaffected areas of the field
- ✓ Ensure forage seed crops are not planted where invasive plant species are present
- ✓ Do not sell contaminated forage seed
- ✓ If necessary, take seed field out of production by haying, glyphosate application or tillage **before** the invasive plant goes to seed — continue to monitor the infestation and treated areas

Become familiar with plant identification and control strategies.



Inspect fields and surrounding areas regularly to identify plants posing potential risk.

Beneficial Management Practices

MEDIUM RISK

Invasive plant species in close proximity to a forage seed field

- ✓ Contact landowner to explain concern
- ✓ Contact Rural Municipality to determine level of awareness concerning the invasive plant species and encourage control
- ✓ Mow or cultivate a border around the field at risk
- ✓ Exercise control methods in adjacent areas (obtain landowner permission)
 - spot spray • hand pull • spray ditches
- ✓ Include a herbicide in forage crop spraying rotation to target the potential infestation

Inspect and clean equipment and vehicles regularly.

Develop a written biosecurity protocol for bringing in new equipment, seed or feed.

LOW RISK

Invasive plant species not present in seed or fields

- ✓ Use certified, weed-free seed when establishing new stands — request seed certificates
- ✓ Make use of borders around seed producing fields to reduce chance of infestation
- ✓ Implement shorter rotations for forage seed stands
- ✓ Produce certified seed — field inspections are conducted and information is provided to growers

Thank you to the many groups and individuals who contributed their expertise to the creation of these beneficial management practices.



*Be extremely cautious and knowledgeable of the **source** when using manure as a fertilizer. Invasive plant seeds are easily brought in with manure.*

The Saskatchewan Forage Seed Development Commission provides expertise and current information on forage seed industry issues. www.skforageseeddc.com

Additional Readings and Resources

- Saskatchewan Invasive Species Council www.saskinvasives.ca
- Saskatchewan Ministry of Agriculture www.agriculture.gov.sk.ca (Environment Stewardship / Invasive Alien Plant Program)
- Saskatchewan Watershed Authority www.swa.ca (Invasive Species Fact Sheets)
- Native Plant Society of Saskatchewan www.npss.sk.ca
- Saskatchewan Forage Council www.saskforage.ca
- Alberta Invasive Plants Council www.invasiveplants.ab.ca (*invasive plant species definition adapted from this source)
- Invasive Species Council of Manitoba www.invasivespeciesmanitoba.com
- Government of Canada www.invasivespecies.gc.ca
- Canadian Food Inspection Agency www.inspection.gc.ca (Invasive Alien Plants in Canada)

Photo Credits

Scentsless Chamomile — R. Holm, University of Saskatchewan
Common Tansy — R. Innes, Powell River, British Columbia
All other photos provided by the Saskatchewan Forage Seed Development Commission

The Bottom Line

Invasive plant species have the potential to impact the bottom line for all producers and industries. Even if it seems unlikely that an invasive plant is going to be found, the risk exists and is very real. Prevention is the first, best, and most affordable option.



Project Partners



Crossing the Medicine Line Network



Funding for this project has been provided by Agriculture and Agri-Food Canada through the Canadian Agricultural Adaptation Program (CAAP). In Saskatchewan, this program is delivered by the Agriculture Council of Saskatchewan.