Nova Scotia Report to the CWSS/SMC Sawyer Olmstead, Plant Protection Coordinator Sawyer.Olmstead@novascotia.ca October 2022

Legislation

Agricultural Weed Control and Regulations

Nova Scotia is still in the process of updating our Agricultural Weed Control Act and Regulations. Risk assessments for currently listed noxious weeds have been written and are in the final stages of revision by the Weed Control Advisory Committee.

Agricultural Weed Control Act:

https://nslegislature.ca/sites/default/files/legc/statutes/agreweed.htm

Weed Control Regulations:

https://novascotia.ca/just/regulations/regs/WControl.htm

Invasive Plants

Noxious Weed Mapping Initiative

Nova Scotia has 10 weeds that are currently listed as noxious weeds under the Agricultural Weed Control Act. The department maintains and updates a database of locations for each noxious weed sighting in the province.

Wild Chervil Control Program

Wild Chervil (Anthriscus sylvestris (L.) Hoffm.) is a noxious weed under the Agricultural Weed Control Act. It is an aggressive competitor in grass forage which, if left unchecked, will readily spread, forming dense patches, void of desirable grass species, which increases susceptibility to erosion of dyke structures on our agricultural marshlands. A summer assistant was hired to work under the direction of the Plant Protection Coordinator to assist in control initiatives on Agricultural Marshlands and landowner education from 2017 to present. Results have been promising and work will continue next year.

Nova Scotia Invasive Species Council

The Nova Scotia Invasive Species Council held their invasive species forum in March 2022. Topics addressed included: climate change, organisms in trade, species at risk and citizen science. In August, the council held a dog-strangling vine volunteer weed pull in the Kentville area. Dog-strangling vine is a new invasive species identified in Nova

Scotia that has only been identified in a few locations. New factsheets are added to their website frequently: https://nsinvasives.ca/

Invasive Weed Calls

A significant number of calls come in each summer about weeds of concern. Many calls come in with questions and concerns about wild parsnip which has been spreading quite quickly around the province. Wild parsnip has not been reported to be a significant issue in agricultural systems but is frequently seen roadside in ditches and on landowner properties. The province has a fact sheet available for more information on wild parsnip: https://novascotia.ca/agri/documents/NoxiousWeeds-Wild_Parsnip.pdf

Weed Survey

Animal and Crop Services staff have continued with the annual, rotating weed survey initiated in 2017. This information will give us a snapshot of current weed flora and can determine changes in species composition and densities over time by comparing to surveys from subsequent years. This will help identify development of herbicide resistance and research needs. It will also help in assessing management practices when developing weed management recommendations for extension personnel. To date, corn, soybeans, strawberries carrots and onions, apples and forage have been surveyed. In 2022, corn was surveyed again completing the five-year rotation.

Weather/Crop Reports

Extreme cold through January caused bud damage to many raspberry, strawberry and some tree fruit crops. The growing season started out warm and dry in the spring changing to wet and rainy through late June and early July. July and August were quite hot and dry with many nights above average for temperature impacting some crops. The early fall remained warm and dry. Frost was not received through most of Nova Scotia until early October. For much of the growing season, degree day accumulations were slightly above the 5- and 10-year averages. With the warm spring we saw fast plant development resulting in larger populations of spring weeds emerging early in some crops. Hurricane Fiona arrived in Nova Scotia late September and caused widespread damages. Although reports of crop loss and damage are still coming in, the Northeast area of Cape Breton, Antigonish Co., Pictou Co., Colchester Co., and East Hants Co., of the province has been the most severely impacted. The Annapolis valley has reported some damage, but not to the same extent.

Minor Use

Currently there is an emergency use registration (EUR) in place from July 2022 – December 31, 2022 for the herbicide Tough 600 EC to control broadleaf weeds in carrots. This EUR was critical as there were regulatory and supply issues with the normal herbicide Linuron, relied on by growers. A request for label expansion of using

Clethodim for grass control in wild blueberry management has been submitted and is waiting for approval. In the coming weeks, growers and commodity associations will be asked to identify priority pests and preferred solutions in preparation for the National Priority Setting Meeting. PMRA has been reviewing many pesticide products, and the possible loss of any herbicide may occur or there may be regulatory restrictions applied to the use pattern of herbicides. The risk of losing herbicide products due to either regulatory or resistance can be devastating to minor crops grown in Nova Scotia.

Branch/Department and Personnel Updates

Laura Anderson, our Plant Protection Coordinator that primarily focused on weeds left the NS Department of Agriculture for a new position this past June. This position has since been posted with anticipation that the roll will be filled by early 2023.

Challenges/Research Needs

Field crops

There are no new weeds of concern in field crops this season, although waterhemp is on the radar for growers and agriculture extension specialists since it has not yet been identified in Nova Scotia.

Horticulture crops

Canada fleabane is becoming an increasing issue in many horticulture crops. There have been no indications to suggest glyphosate resistant to date, although this is something on the radar of extension specialists.

Cow cockle is becoming an increasing challenge in June bearing strawberry fields since there are limited chemical control options.

Wild Blueberry

Weed competitiveness continues to be the top management challenge in wild blueberries. This issue is exacerbated by chemical supply issues. Some wild blueberry growers failed to obtain and apply herbicides during critical management timings in 2022. This will result in high weed competition in the 2023 crop year and future seasons if the supply chain issues continue.

Cover crops

With an increased interest in cover cropping, challenges exist with identifying herbicide programs that are compatible with cover cropping plans or practices. Regional extension specialists are working with growers to help address these issues.

This report was completed with the assistance of Perennia Extension Specialists:

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