

Forage Variety Testing in Ontario: An Uncertain Future

In Ontario, the responsibility for providing growers with forage production information, including the assessment and recommendation of varieties, has been delegated to the Ontario Forage Crops Committee. (OFCC) Toward this end, OFCC annually publishes a brochure entitled “The Ontario Forage Crop Variety Performance Report”, which provides growers with data from trials conducted by the OFCC comparing the relative performance of most of the forage varieties available for sale in this province. It should be noted that this report is the only comprehensive source of independent information regarding forage variety performance in this province.

Historically, the OFCC conducted two types of variety trials:

1. Registration Trials to evaluate candidate cultivars for support of registration by the Canadian Food Inspection Agency (CFIA). (See Appendix 1: Background on Forage Variety Testing in Ontario) These trials are funded by entry fees paid by the seed companies.
2. Performance Trials to compare registered varieties and generate performance data to assist growers in choosing superior forage varieties for use on their farms. These data have been distributed to growers via the Variety Performance Report.

At one time, OFCC planted forage variety performance trials on a regular basis, often annually, with the cost being funded by the provincial government. Because the provincial government no longer supports performance testing financially, there has been no regular schedule for planting performance trials in Ontario in recent years, and most of the data used in the Variety Performance Report has been generated in registration trials. OFCC has occasionally conducted performance trials but these have been funded with short-term grants.

Impending Changes: The End of Registration Trials

Following an industry-wide consultation in 2010, CFIA has proposed regulatory changes that will significantly affect the ability of OFCC to continue to conduct forage variety tests in Ontario. Specifically, all forage species may be moved into Part III of Schedule III of the Seeds Act, thereby eliminating merit (e.g. yield) testing as a requirement for registration. The placement of forages into Part III could happen as soon as 2013. (See Appendix 2: “Crop Placement” for more detail).

Because the need for companies to test new varieties in registration trials would disappear, OFCC would no longer conduct registration trials. If the registration testing system is not replaced with a comparable performance testing system, OFCC would no longer have a source of information from which to generate a Variety Performance Report and growers have no source of independent data on forage variety performance.

Performance Testing of Forage Varieties in Ontario in the Future

Because OFCC believes that independent forage variety performance information is important to Ontario growers and to the continued advancement of forage crops in Ontario, the committee

hope to implement a regular performance testing program as soon as the spring of 2013, if possible. However, OFCC will not initiate a performance testing program unless a framework is in place for it to be financially sustainable on an on-going basis. A portion of the cost would be covered by entry fees paid by participating seed companies. However, for a performance testing program to be useful to the farmers of Ontario, it must include the majority of varieties being sold in Ontario. For this level of participation to be attained, seed companies must believe that entering their varieties in OFCC performance tests is to their advantage and more cost-effective than other means of promoting their varieties. Given the relatively high cost of conducting forage trials, the seed companies have indicated that they would be unwilling to fund the full cost of performance testing through entry fees.

Therefore, in order for the OFCC to be able to offer performance trials, it must secure other sources of long-term funding. At present, the only potential source of additional long-term funding is from the users of the Variety Performance Report, (i.e. farmers who grow forages) via the organizations which represent them.

Appendix 1: Background on Forage Variety Testing In Ontario

In Canada, responsibility for matters related to crop varieties is shared between the federal and provincial governments. Under The Seeds Act, administered by the Canadian Food Inspection Agency (CFIA), the federal government is responsible for regulating which named crop cultivars may be sold in Canada, and the conditions under which they may be sold. In the case of most major field crops including forages, crop varieties must be registered with CFIA before they can be legally sold in this country. It is the responsibility of provincial governments to provide farmers with information and recommendations regarding the production of crops, including provision of a list of recommended varieties, where that is deemed advisable. Thus, there are two lists of varieties available to Ontario growers: 1) the list of registered varieties that can be legally sold here, and 2) the list of “recommended” varieties that are recommended provincially for use in a specific province. In most cases, a registered variety may be sold anywhere in Canada regardless of the province from which it originated. Thus, the Ontario “recommended list” does not include all registered varieties that could be sold here.

Ontario Forage Crop Committee (OFCC)

In Ontario, the responsibility for providing growers with forage production information, including the assessment and recommendation of varieties, has been delegated to the Ontario Forage Crops Committee. This aspect of the work of the OFCC is stated in its “Blue Book” http://www.plant.uoguelph.ca/performance_recommendations/ofcc/pdf/blue_book_2010.pdf (which details the Variety Performance Procedures of the OFCC) as follows:

“It is in the interest of Ontario agriculture that farmers are provided sufficient, accurate, and independent performance information for varieties used in Ontario, that they are provided assurance that perennial forage varieties have adequate persistence, and varieties that are harmful to the industry are excluded from Ontario. The Ontario Forage Crops Committee has been

assigned responsibility for evaluating under Ontario conditions the performance of experimental strains and varieties of forages in Ontario.”

Variety Registration

Before CFIA will consider a forage variety for registration, CFIA requires that the variety be supported by a provincial recommending committee. The OFCC has been designated as the approved recommending body for forage crops for Ontario.

To be supported for registration by the OFCC, a variety must yield at least as well as other varieties that are currently registered, and meet certain criteria for disease resistance. Before it will consider a variety for support, the OFCC requires that there be a minimum of 6 station-years of valid performance data for that variety (3 of those station-years must be from the 2nd or later production years). At one time, all of the data used in assessing the merits of a variety were generated from trials conducted by the OFCC. More recently, OFCC has accepted data from valid trials conducted by the sponsoring seed company or by a third party.

“Fast Track” Registration

In 1997, the OFCC introduced “Fast-Track Registration” in response to a concern that the CFIA registration process delayed the availability of newer, high-performance alfalfa varieties by at least 3 years (seeding year + 2 production years). The fast-track registration option enables Ontario alfalfa producers to use newer varieties more quickly to manage emerging problems such as potato leafhopper and *Aphanomyces* root rot.

Under this system, the OFCC will consider a variety for which there are the required data, regardless of whether it has been entered in trials conducted by the OFCC or not. Data are accepted from valid trials conducted by the sponsoring seed company or by a third party. In recent years, most of these “private” trials have been conducted outside Ontario and thus, do not provide information on the performance of the varieties that can be used in the Variety Performance Report.

Appendix 2: Crop Placement

The following sections are extracted from a CFIA document entitled: “Discussion Document: Crop Placement for Forages”. A complete copy is available upon request.

1.2 The Registration of Forage Varieties

Variety registration is required prior to the sale or import for sale of seed of varieties. This requirement includes both pedigreed and non-pedigreed seed. However, there are restrictions on the use of variety names on non-pedigreed seed of forage varieties.

Currently, all forage species that are subject to variety registration are listed in Schedule III, Part I. Part I is described as:

Part I (status quo): The registration of new varieties of crop kinds in Part I would require pre-registration testing and merit assessment to determine whether the variety performs as well as or better than reference varieties. This part is intended for crop kinds for which there is a continuing need for stringent government oversight to ensure that varieties meet minimum performance standards.

Recommending committees are recognized to establish testing protocols for the evaluation of varieties, and to make recommendations to the CFIA as to whether the variety was tested according to protocol, and whether the variety has merit. A variety is considered to have merit if it performs better than or equal to reference varieties.

1.8 Flexible Variety Registration System

The Government of Canada implemented regulatory changes in July 2009 to create a more flexible variety registration system with reduced regulation while continuing to maintain the integrity of seed certification and environmental, food, and feed safety.

Previously, all crop types requiring variety registration were subject to the same pre-registration testing and merit assessment requirements. The Regulations now partition the list of crop types requiring registration of varieties (Schedule III) into three Parts with differing requirements for each Part.

Part I will continue to require pre-registration testing and merit assessment. This includes recommending committee recommendation that the variety was tested according to appropriate protocols and that the variety is equal to or better than reference varieties.

Part II will require pre-registration testing. In this model, recommending committees would establish protocols for the testing of varieties. These protocols would be reviewed and approved by the CFIA. The protocols could include public and/or private testing. Testing would need to be completed prior to recommending committee assessment of whether the variety was tested according to protocols established by the committee. Recommending committee recommendation that the variety was tested according to appropriate protocols would be required as part of the application for registration submitted to the CFIA.

Part III will require basic registration information only. Applications for registration would be submitted directly to the CFIA. The applications for registration would include a reference sample, application for registration, details of the pedigree and history of development of the variety, variety description, whether the variety contains a novel trait, fees, etcetera.