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# CropLinks

information on **L** forages, corn and cereals

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This issue of CropLinks is going to NS corn growers to assist with hybrid selection when ordering seed. As of November 18th, it's nice to hear that there's only about 1500-2000 acres of corn left to be harvested. Most NS corn, soybean, winter wheat and alfalfa-grass growers have been pleasantly surprised by the good yields produced by this long-dry growing season of 2016. There is definitely concern on beef and sheep farms that winter hay supplies maybe insufficient due to low 2nd cut grass hay or silage yields, plus having to hay supplement many pastures from July-October. This CropLinks issue also chats about seed depth for winter wheat, local research on inter-seeding Italian annual ryegrass into corn at 6th leaf stage, a new Valley grain facility, and March 28-29th corn, soybean and grain session that you won't want to miss.

## **Maritime Corn Performance List**

The enclosed 2017 Corn Guide shows two or more years data from our five Maritime Corn Testing locations. Every year the 'corn testers' evaluate over 40 grain corn and 25-35 silage corn hybrids. The hybrids that make either of these two "Performance Lists" have met or exceeded our performance index criteria which are based on a combination of both yield and maturity (harvest moisture). Once a hybrid has made the Performance List, it has to be tested every year thereafter and needs to continue to meet the same performance criteria or it will be removed from the Corn Guide. The Maritime Corn Testing program does a good job at identifying the better 2100-2400 corn heat unit (CHU) hybrids for this region. There are also a few 2500-2650 CHU rated hybrids on these lists that will be very well suited to most Production Zone 1 areas of the Annapolis Valley or the sandy loam soils around Truro.

## **Ryegrass Interseeded in Corn**

The November 2014 CropLinks reported on research done on NS farms that had Italian annual ryegrass interseeded into their fields at 6th leaf stage (check Perennia website "farming" section & click on field crops for this article). There was no silage corn yield reduction at either McLellan's (Noel area, Hants. Co) or A & J Bent Farms (Annapolis Co.) from inter-seeding annual ryegrass into their cornfields. At Bent's in 2014 the majority of the field was left for grain corn harvest and again there was no yield reduction from the interseeded ryegrass. The Italian annual ryegrass at McLellan's was applied with a fertilizer company tow spreader. They put the ryegrass seed on top of nitrate fertilizer and mixed it in with a shovel. The fertilizer ended up getting broadcasted the full 60 foot spread width, but the ryegrass seed only went about 35-40 feet. There was still enough ryegrass ground cover in these wide bands after silage harvest to prevent soil erosion on this hilly field. McLellan's grew corn on the same field in 2015, and thought that spring tillage would get rid of the annual ryegrass. The ryegrass from the previous year was not controlled by tillage and remerged early and aggressively in the 2015 corn crop, making it act like a weed. Casey McLellan now suggests that annual ryegrass needs to be killed off with Roundup in the spring well before any tillage occurs.

*(cont. on page 2)*

## **Ryegrass (cont.)**

In 2016, Alana Bent did her 4th year Dal/AC project looking at Italian annual ryegrass interseeded into corn at either the 5th or 8th leaf stage at 23lbs/acre seed rate. This was done at A&J Bent Farms and they used a Tive pneumatic boom fertilizer spreader (40 foot boom) which does a very uniform job of seed distribution. Alana's field trial had an individual plot width of 20 feet (8 rows) and ran the length of the field. The two timings of ryegrass interseeding and a non-ryegrass control treatment were replicated three times across the field. In Alana's project there was excellent establishment of ryegrass at both seeding dates (June 18 and July 1). The good news is that again there was no reduction in silage corn yields from the ryegrass being present, and there will be good erosion control and extra organic matter to spray off and plow in next spring.

The only weed control used on the fields in 2014 & Bent site this year was Roundup (glyphosate) applied at 3-4 leaf stage. Dr. Darren Robinson at the University of Guelph, has just done research on annual ryegrass sensitivity to soil applied (pre-emerge) corn herbicides that have some residual weed control. His work and also similar research by Dr. Gilles Leroux in Quebec looked at various herbicide plots that were pre-emerge applied and then overseeded with annual ryegrass 5-6 weeks later. These researchers rated the injury risk to annual ryegrass from Converge XT or Integrity as "Low" risk; Prowl H2O at "Moderate" and Dual II Magnum at "High" injury risk to ryegrass. Future NS research needs to be done on pre-emerge Converge XT or Integrity on a field that will have ryegrass interseeded into corn to assess this further. I would also like to see if we can still achieve proper soil cover from a lower ryegrass seeding rate (presently 23lbs/ac Italian annual ryegrass has seed cost of \$45/acre).

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## **Winter Wheat Seeding Depth**

Seeding cereals, soybeans or corn too deep causes emergence and development delays and will reduce yield potential. Proper seeding depth in most NS situations for spring cereals is (0.75 inch), winter wheat (1 inch), soybeans (1-1.5 inch), corn (2 inch). With winter wheat make sure you are not shallower than 1 inch depth or you will be more prone to winterkill (planted too deep; at 1.5-1.75 inch depth reduces the chance for quick robust growth & good fall tillering). You need to check drill & planter depths shortly after you get seeding in each field to insure proper depth placement is happening.

**Happy Holidays and All the Best in 2017! We look forward to working with you to make your cropping as successful as possible.**  
~ Jack and Bill

## **New Valley Grain Drying Facility**

Windcrest Farms Ltd., opened a 7000 tonne grain storage and drying facility in October. This facility is just north of Berwick on James and Amanda Kinsman's farm. It will custom dry, store, truck or buy wheat, soybean and corn. Their propane-fired drier has the capacity to do 18 tonne per hour of corn (@25% moisture) or 25 tonne per hour of soybeans (@18% moisture). As of November 17th, James said they have 4500 tonne of corn in storage and expect another 2000-2500 tonne that's still in the field. They will also truck grain or beans back to the farm, to local feed mills or the Port of Halifax. James said "we've been overwhelmed with the support we've had from growers & others". Extra commercial drying and storage capacity for wheat, soybeans and corn is much needed in Nova Scotia. We wish Windcrest Farms well with their new commercial grain centre!

### **RESERVE THE DATES**

**March 28 or 29th**

*We are working with the Atlantic Grain Council (AGC) and Soil & Crop Improvement Association of Nova Scotia (SCIANS) to plan corn-soybean-wheat sessions for March 28th (Truro -Glengarry Motel) and March 29th (Berwick Fire Hall). Invited speakers are Peter Johnson (retired OMAFRA cereal specialist) and Dr. Joe Lauer (University of Wisconsin corn specialist), plus there will be local researchers presenting results from 2015- 2016 AGC field trials. Mark these dates down and plan to attend.*