

# CropLinks

information on forages, corn and cereals

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So far it's been a tough cropping year in many respects. Starting with high fertilizer prices and extensive alfalfa winter kill, then yellowed or poor growth areas in many cornfields, lots of later season weed growth in crops, and lower wheat yields at harvest. The yellowed or uneven growth in some cornfields that worsened during July was generally due to poorer drained areas, extreme differences in pH within the same field, or cooler soil temperatures that caused slower organic release of nitrogen from manures. There are however, many good looking corn and soybean crops around also. This issue of CropLinks talks about fall management of alfalfa, herbicide residue caution for vegetables, winter wheat harvest comments, proper way to manure sample and some upcoming crop tours.

### Feeding Fusarium Contaminated Grain

This year's winter wheat crop has been harvested with yields generally down 25%, and 2- 5 % fusarium or tombstone kernels showing up from several fields. Yield loss, started with winter kill damage, plus nitrogen inefficiencies (i.e. less N used, more leaching loss, too late an application, or poor N mineralization due to cool June-July soils). The final blow for yield loss was the poor growing conditions in July with 23% less sunshine, 10% less heat units, and over twice as much rain as July 2008. These dull and damp conditions during early grain development really accelerated fusarium head blight disease problems. This caused both yield loss and vomitoxin feeding concerns that we haven't seen in winter wheat in almost a decade. Similar or worse DON vomitoxin levels are expected in barley and spring wheat.

Tips for dealing with fusarium contaminated grain or higher DON vomitoxin levels:

- 1) If you are on-farm feeding this grain, and there are orange-pinky fusarium kernels, a lot of shrunken kernels, or you had more than 20% yield reduction there is a strong chance DON vomitoxin is present. To find out what the DON level is, spend \$40-50 and test for it. Send a sample to ACS Lab, 1030 Lincoln Road, Fredericton, NB E3B 8B7 (506-457-0769) or Coop Feed Testing Lab in Moncton (506-858-6319). DON vomitoxin tolerance levels in the complete ration are; less 1ppm swine, 1 – 5ppm dairy cattle, 5 – 10ppm beef and sheep, with poultry being the most tolerant. In feeding cattle or sheep the % wheat used in the complete ration is fairly low when you consider the DON dilution effect you'd have from the forage and silage corn components, although all types of corn can also get fusarium.
- 2) Don't reuse this fusarium wheat for seed, or crop with wheat in the same fields, if this can be avoided. Fusarium is both a seed and soil borne disease. Buy new certified wheat seed.

### Alfalfa — Late Fall Cut?

Nice fall growing conditions often have farmers asking, what are the risks of harvesting alfalfa after fall dormancy has occurred in late October? The importance of a fall rest period for the persistence of alfalfa is well documented. For most of the province, no cut should be taken from August 30th until the mid October. The fall rest period allows the plant to build up reserves in the roots and crowns, reserves needed for winter survival and new growth the following spring.

But what about a late harvest? Both observations and some local research have shown a harvest can be taken after mid October without reducing next year's yield, but there are some risks. Frost heaving is the biggest risk associated with a late harvest. Frost heaving jacks the plants out of the soil breaking the roots and destroying the plants. A late harvest removes soil cover exposing the soil to a greater risk of frost heaving. Several other factors are associated with the incidence of frost heaving: soils higher in silt and clay, soils with a high soil moisture content and lack of snow cover.

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## Alfalfa — Late Fall Cut? (cont)

If you are considering taking a late alfalfa harvest Don Myers, Ohio State suggests you consider the following points when making the decision.

- The stand should be well established not a new seeding
- The field should be well drained
- The field should have a high level of fertility. Annual applications of potassium are important to boost winter survival.
- Cut high, leave at least 10cm (4") of stubble.
- Less frost heaving will occur in areas where snow cover remains longer

A tall stand of alfalfa will trap more snow, and won't smother itself particularly when there is at least a 50:50 alfalfa to grass ratio.

### Valley Corn and Soybean Tour Tuesday, September 22th, 1-3pm

Our corn & soybean trials look good, so come and see them!

1pm – Maritime Corn Test located on upper end of Sutton Road, which is a crossroad just west of Cornwallis Farms (Newcombe family) and Port Williams School. Extra corn has been planted for you to check cob size and kernel moisture of the 41 hybrids under test. Seed reps will be in attendance.

2pm – Maritime Soybean Test located on Lyndhurst Farms in Canning. Plots are behind machinery garage, on the exact same site as Agrifest. Doug MacDonald, researcher from NS Crop Development Institute, who manages this soybean variety test will be attending.

Contact Jack at 902-670-5777.

### North Sydney Corn and Forage Tour

At Hilltop Dairy, Arnie and Frank Verschuren's farm

Thursday, September 24th from 1 - 3 pm

Inviting dairy producers, beef finishers and direct marketing beef farmers to see silage corn started under plastic, alfalfa-grass forages, soil fertility and weed issues. Bring your own farm's soil/forage/weed analysis to discuss, and remember biosecurity precautions when visiting between farms. Gary Koziel 902-563-2000 has more info

## Herbicide Carryover Can Cause Injury

(by Viliam Zvalo, AgraPoint Vegetable Specialist)

The level of herbicide residue carry-over depends on the soil type, moisture, organic matter and pH. Soils lower in organic matter would have less microbiological activity and thus slower microbial degradation of pesticide residue. Herbicide residue carry-over is likely to be higher in dryer and seasonally cooler growing seasons. Herbicide residue of Refine Extra applied to previous year winter wheat crop grown on sandy and sandy loam soils may have contributed to injury of early plantings of radish and cole crops. This was especially obvious on spray overlaps. It is also suspected that herbicide residue of Atrazine and Sencor along with other factors may contribute to physiological onion splitting. It is important to know the cropping history and associated cultural practices of the site. Previously applied residual herbicides can seriously affect vegetable crop growth and development. To avoid problems, keep herbicide records. Before leasing or purchasing land, obtain a record of the herbicides used during the past three years.

## Taking Manure Samples This Fall

With higher fertilizer prices the value of manure has never been greater. Manure sampling basics: 1) ideally at least one sample per year per manure system should be taken; 2) it is best to sample from the spreader (if liquid, the manure should have been properly agitated); 3) for liquid manure, take at least 5 samples while loading over a couple of days, the samples should be refrigerated; mix the samples and send a 1 litre composite sample to the lab (if possible freeze the sample prior to shipping); 4) when sampling solid or semi solid manure take a shovel full from a number of loads and place on a piece of plywood and mix. Place the remaining sample in a wide mouth plastic jar and send to the lab. Sample drop-off or mailing location: 176 College Road, Box 550, Harlow Institute, Truro, NS B2N 2P3

### Queens County Forage Tour

The Lunenburg – Queens Federation of Agriculture and AgraPoint invite you to walk forages with us on the evening of

Thursday, September 10th.

7:00pm – start at Wayne MacKay's farm, 3629 Hwy 208 in Pleasant River (view new seeded alfalfa and pastures)

8:00pm – Duane Crouse's farm, 148 Crouse Road in North Brookfield (see forages and pasture) For more info call Jim Crooker at 902-682-2211.

## 2007-2009 Winter Wheat Test (NS Sites only)

Variety	Canning Yield (t/ha)	Truro Yield (t/ha)	Both NS sites Yield (t/ha)	NS Seed Reps
Emmit	6.4	7.5	7.0	Hyland, Scotian Gold & Jackson Seeds
Pioneer 25R47	6.2	7.1	6.7	Pioneer
Pioneer 25R51	5.7	6.8	6.3	Pioneer
AC Sampson	5.5	6.2	5.9	Co-op
Freedom	5.2	6.4	5.8	Minas Seed

Preferred seeding date in Valley is Sept. 15 – 25th, a week earlier in other suitable NS areas. Seeding rate is 325 seed/m<sup>2</sup> = 3.25 million/ha = 1.3 million seeds/acre. The 2009 seed weight for 25R47 is 11,500 seeds per lb; so 1.3 mil seeds/acre ÷ 11,500 seeds/lb = 115 lbs/acre (127 kg/ha) seeding rate. Use 10% more seed after Sept. 25th. *Trials done by Claude Caldwell (NSAC) and Doug MacDonald (NS Crop Development Institute) with assistance from AgraPoint and SCIANS.*