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CropLinks

information on forages, corn and cereals

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Incredible Growing Season

What an incredible growing season so far. It started with a dry April-May, which resulted in lots of earlier plantings of forages, cereals, and corn. Despite some saturated and cool soils in early June, the July- August period has had a fantastic combination of heat- humidity- rainfall. Those of you that harvested 1st cut alfalfa- grass in late May will have excellent quality (in spite of only 80-90% of normal yield). Any yield shortfall then was more than compensated for by 2nd and 3rd cut yields being much better than normal. There should be an abundance of forage on most farms now, and not the need to cut knee-high alfalfa stands during the September- October recommended "rest period". Right?

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In my 30th year in this business, I've never seen corn and soybeans go through their growth stages so quickly during July & August. There are some soybean fields starting now to yellow (leaf senescence) from normal plant physiology and not drought stress. There are big acreages of early-mid May planted corn that was fully silked by July 20- 22nd (7-14 days ahead of the norm for us). In this last week of August, Valley corn has started to dent, with the starch cap and "milkline" forming in early September. Our CropLinks issue this time will key on getting winter wheat started right, fall legume-grass management, plus silage corn harvest timing.

Winter Wheat Kernels

Let's start off with a quick yield summary on this year's crop. Most growers in the Middleton- Berwick areas and up around to Canning had lower winter wheat yields of 1.3-1.5mt/acre. Growers in the Port Williams – Grand Pre areas are reporting more of the desired 2.0 – 2.25mt/acre yields. Why the difference? My theory is that the lower yields were due mostly to later fall planting dates, poor November growing conditions, resulting in lower spring plant population. Furthermore nitrogen fertilizer inefficiencies also occurred with May too dry and early June way too wet. I don't think either disease pressure or using a fungicide treatment in 2010 had much impact on winter wheat yield, but it will be interesting to see what the CDI research trials tell us on fungicide payback. With fusarium specifically, it didn't stick out in winter wheat fields this year and grain centers are not reporting any serious DON vomitoxin levels. The higher yielding fields in the Port Williams- Grand Pre areas tended to have a history of broiler manure application, thus extra residual nitrogen to draw on, from these dykeland or long term no-till soils.

2007 – 2010 Winter Wheat Test (NS Sites only)

Variety	# Years in Test	Both NS Sites Yield (t/ha)	Canning Yield (t/ha)	Truro Yield (t/ha)	NS Seed Reps
Emmit	4	6.4	6.3	6.5	Hyland, Scotian Gold
Pioneer 25R51	4	6.0	5.7	6.2	Pioneer
AC Sampson	4	5.8	5.5	6.0	Co-op
Freedom	4	5.2	5.2	5.2	Minas Seed
Pioneer 25R47	3	6.7*	6.2	7.1	Pioneer
Pioneer 25R56	2	6.2	5.8	6.6	Pioneer
Pioneer 25R39	2	5.9	5.3	6.5	Pioneer

For this fall's wheat seedling consider using 100lbs/ac of 17-17-17 as a starter fertilizer on high fertility soils and 225lbs/ac of 10-26-25 on these lower P & K soils.

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Winter Wheat (continued)

Place seed at 1" depth (a tad deeper than you do for spring cereals). Minimize the amount of 2nd year wheat on wheat plantings because you'll likely take a 10-20% yield hit. The preferred seeding date in the Valley is Sept.15-25th, a week earlier in other suitable NS areas. Suggested seeding rate is $325 \text{ seeds/m}^2 = 3.25 \text{ million/ha} = 1.3 \text{ million seeds/acre}$. The 2009 seed weight for 25R47 was 11,500 seeds per lb; so $1.3 \text{ mil seeds/acre} \div 11,500 \text{ seeds/lb} = 115 \text{ lbs/acre}$ (127 kg/ha) seeding rate. This seeding rate will be higher for most other varieties so get the appropriate 2010 seed weight and do the calculation. Use 10% more seed when planting after Sept.25th. In variety selection you have 4-5 good options. Pioneer is phasing out of its very reliable long-term leader 25R47, however with 2 years test experience now on both 25R56 & 25R39 these are suitable replacements. Emmet continues to lead the pack with a slight yield advantage.

** Pioneer 25R47 was not in the 2010 test at either site, which is a benefit in the multi-year yield data for 25R47 because of the lower 2010 Truro yields (3.9 t/ha average yield on 17 entries). The 2010 Truro test had heavy yield loss from orange leaf rust, however it's interesting to see that 25R56 (6t/ha yield) AC Sampson (5.5 t/ha yield) and 25R39 (5.5 t/ha yield) had pretty good leaf rust resistance in this 2010 Truro trial. Neither, Truro or Canning trials in 2010 received a fungicide treatment. **Trials were done by Claude Caldwell (NSAC) and Doug MacDonald (NS Crop Development Institute) with assistance from AgraPoint and SCIANS.***

Should You Take That Third Cut Even if You Don't Need the Feed?

With second cut coming off earlier this year and many forage fields showing exceptionally good re-growth some are wondering if they should be taking a third cut. The only forage stands that I would be concerned about are those heavy in red clover or orchardgrass. Stands heavy in red clover or orchardgrass should not go into the winter with more than 12 inches of growth. Excessive growth can cause smothering and the build-up of disease under the ice and snow. It is best to harvest these fields in late August or early September to allow for sufficient re-growth before winter. If they are not ready to be harvested and excessive growth occurs in the fall, harvest these fields after they have been frosted. Cut high; leave at least 10 cm (4") of stubble. Stands that are mostly alfalfa, especially newly seeded fields are best not harvested. The importance of a fall rest period for the persistence of alfalfa is well documented. For most of the province, it is best not to cut alfalfa after August 30th. 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.

Timely Silage Corn Harvesting

With the fall forage management article, Bill has made good points as to why you should park your forage chopper now, except perhaps for growthy red clover and orchardgrass fields. In this article, I'm going to encourage you to put the corn head on earlier and start checking maturity soon after Labour Day.

An OMAFRA factsheet (Ontario) starts off with this statement..... "The importance of harvest moisture and maturity to corn silage quality and animal performance is often underestimated". We put lots of focus on getting 1st cut alfalfa-grass harvested for optimal quality, but don't often put the same emphasis on silage corn harvest timing. For growers having a kernel processor the temptation is that kernels can be allowed to mature more so you get the whole plant moisture right for minimizing seepage. This is a nice option to get the moisture right for tower silos, as long as you don't go past $\frac{2}{3}$ milkline and allow it to black layer and really reduce the starch digestibility. Dan Wiersma from the University of Wisconsin said that black layer forms about 13 days after half-milkline but I've seen it occur quicker here.

Joe Lauer from U of Wisconsin, points out that corn silage that is too wet will yield less energy/acre, cause silo seepage and produce sour tasting silage resulting in lower intake by livestock. If corn silage is too dry or frosted then yield is often reduced, heat damage, and mold more easily develops because fermentation is inadequate, and the silage has lower protein, digestibility and vitamins A and E. Our mid-May planted corn is starting to show kernel dent, so start checking for a starch cap or kernel milkline around Sept.1st. The old recommendation was to harvest silage corn at $\frac{1}{3}$ - $\frac{1}{2}$ milkline for bunkers and just past $\frac{1}{2}$ milk line for upright silos. However, give consideration that harvest will be delayed slightly with healthier "stay green" hybrids, that are getting extra late season rainfall and lots of fertility. Corn with lots of leaf eyespot disease, soil moisture deficiency and "paper dry" looking husks can be drier than the milkline indicates. So it's important to chop a part load and see what the "hand squeeze test" or "microwave moisture test" indicates.

This U of Wisconsin agronomist says that silage corn hybrids should be almost 65% moisture about 42-47 days after silking. For the Valley Corn Test site (at Palmer's in north Grand Pre), this May 14th planting, which had most hybrids silked by July 22nd, should be ready for silage harvest soon after Labour Day. Check your silage fields soon to get the harvest timing right.