

10 Webster Street, Suite 210  
Town Square, Box 204  
Kentville, NS Canada  
B4N 1H7

199 Innovation Drive  
AgriTECH Park  
Truro, NS  
Canada  
B2N 6Z4

Prepared by:  
**Jack van Roestel**  
Field Crops  
(902) 678-7722  
j.vanroestel@agrapoint.ca

**Bill Thomas**  
Field Crops  
(902) 896-0277  
b.thomas@agrapoint.ca

## CONTENTS

- Feeding Beef & Sheep this Winter
- Additives that Increase Milk
- Variety Selection Considerations
- Reflecting on a Difficult Season

# CropLinks

information on forages, corn and cereals

This mailout of CropLinks includes the 2007 Corn and Cereal Guides with their respective Recommended Lists, 2006 Maritime Soybean Trial Results, Beef Body Condition Scoring and Horse Hay Buying and Feeding Tips. Selling horse hay is a significant cash crop opportunity in this province and this fact sheet discusses visual signs of good horse hay, the quality levels that various horses need and some considerations for pricing horse hay.

This issue of CropLinks discusses beef, sheep and dairy feeding strategies for these subpar 1st cut '06 forages, plus corn and cereal variety selection decisions, and a look back at why 2006 was such a difficult cropping year. You should also note that a 2007 Forage Guide was not produced this fall because there were no new variety additions to justify printing. We are working at the Maritime level to totally revamp the forage variety testing program in the region with hopes of evaluating a lot more legume and grass varieties that are being sold in other parts of Canada.

## Variety Selection Considerations in Corn, Cereals & Soybean

2007 Cereal Guide – There are two new entries on the 6-row barley list in AC Klinck and Chambly. AC Legend still leads the pack in yield and there are a number of other varieties that will perform well. The key point about the 6-row barley list is the OC designation after Chapais which means this

variety is “Out Classed” because it is being outperformed by new ones and it will be removed from the Recommended List next year. Chapais is still widely grown because its seed is generally cheaper, but at 10-15% less yield than the others on this list should it be grown?

The same can be said for Belvedere and Wilmot spring wheat which are yielding almost 20% less than Hartland and Hoffman. A new variety on the spring wheat list is Nass. This variety has been named as a tribute to Dr. Hans Nass who bred 20 commercial spring and winter wheat varieties during his career at Agriculture Canada in Charlottetown. Dr. Nass passed away in 2005. In winter wheat the Pioneer 25R47 variety has 10-15% more yield, but some growers will sacrifice a bit of yield to get more of a straw crop from Grandview, Freedom or Sampson.

Domingo is a new addition to the oat list, but is very similar to the four other recommended varieties in yield, maturity, straw height and lodging score. There is going to be increased interest in oats on the Prairies with a Saskatchewan mill wanting to produce oat flour for celiac patients that need gluten-free diets.

2007 Corn Guide – On the grain corn Recommended List is six new additions with four of these hybrids being RR (Roundup Ready). Also new to the list is a nice early maturing non-Bt hybrid 20R05 from Co-op. The Bt version of 20R05 is 20T06 which also did well in only its first year of testing, along with another early non-Bt hybrid Pioneer's 39B93. For grain corn growers in the higher heat unit areas of Zone 1 & 2, there are now four hybrids on the grain list that yield close to 9t/ha in our trials (39F61, SilEx, MZ 1754, and Pride's A4175). First year entries Co-op 20T16 and Hyland B211 also are showing similar yield potential, but these hybrids are best suited for our higher heat unit situations and when fields can be consistently planted by May 5-22<sup>nd</sup>.

For the silage corn Recommended List we have two new later maturing additions in Pickseed 2585 & Pride A4741HM. The highest yielder on the silage list is the Maizex's extra leafy LF 763, however many farmers trade a little yield potential off and go for a hybrid that has more grain content

*continued on page 2*

## A Cropping Season To Forget

The 2006 cropping season is one that most Nova Scotian farmers would soon like to forget. Spring planting was going along nicely until May 15<sup>th</sup> when we received 51mm of rainfall that week. Just as fields were starting to dry out the Annapolis Valley was lambasted with another 127mm of rainfall between June 1-10<sup>th</sup>. The overall June rainfall reported by the Kentville Research Station was 222mm (almost 9 inches and over 3 times the last 45 year average), while July had another 129mm. The fallout from all this wet mid May-July weather and soggy soil conditions was that the majority of corn in western Nova Scotia didn't get planted until late June (central N.S. did fair much better).

For livestock farmers, most importantly was the quality losses on 1<sup>st</sup> cut haylage and hay crops which couldn't be harvested until well after the desired cutting date due to persistent wetness. Consequently the 1<sup>st</sup> cut forage yields were substantial; however the digestibility and nutrient values are much lower than most years due to fields being harvested 2-4 weeks late. There was an above average 2<sup>nd</sup> cut forage crop both in yield and quality, however this is insignificant when compared to the overall 1<sup>st</sup> cut tonnages.

Yields on winter wheat, spring grains, and later planted corn fields were generally about 50% of normal. Due to increased ethanol production and harvest problems in Central Canada-U.S Midwest, corn and wheat prices have soared to well over \$200 per tonne. It's going to be an expensive winter to feed livestock due to both high commodity prices and subpar forages.

### Feeding Beef and Sheep Lower Quality Forage *by Sean Firth, Livestock Specialist*

A cautionary note for feeding this winter – if your forage is of questionable quality, you need to pay extra attention to body condition and provide strategic supplementation when needed. Hopefully producers have been able to bring ewes and cows off pasture in good to excellent condition this fall. It is vital that breeding stock put on weight at pasture where costs are roughly 1/3 that of stored winter forage. Ewes and cows need to put weight on pasture and have adequate body reserves to lose weight during the winter. This system is economical and has little or no negative consequences on production if the animals are managed properly.

This year poses some challenges simply because some forage quality is too poor to allow this normal cycle to occur. First recommendation – test your forage if you suspect it is poor. Get a “standard forage” analysis for \$12. This will allow you to determine if you will need to supplement. Second recommendation – closely look at your breeding stock and divide them, if possible, into less than ideal condition (body condition score 2) and into good BCS (3.5 – 4). Use the enclosed factsheet to help you body condition score your cows and ewes. If you have to feed the poorer condition animals poor forage you will likely need to be supplemented with energy (grain) when they are dry and will definitely need to be supplemented after they calve/lamb. The consequences of not doing so are poor growth rates for the offspring and definitely poor conception rates for the dams. Also be aware that the daily feed costs associated with poor forage and poor body condition versus average quality forage and good body condition can vary up to 60%. This is too large a cost increase to ignore. Call Amy or Sean if we can be of further assistance with these strategies.

## Variety Selection Considerations (cont.)

or a “dual purpose” hybrid that appears on both the silage and grain corn Recommended Lists. Three early maturing 1<sup>st</sup> year test entries that yielded well for silage were Maizex 725, Pioneer 39B93 and Co-op 20T06.

Whether you are selecting a silage, HMC or “dual purpose” hybrid it's important to not go overboard in selecting too high a heat unit hybrid that won't mature consistently in both good and bad years. Some growers in the Valley have gone with 2550-2600 CHU hybrids such as 39D82 or DKC33-11, these are too risky plus there is just as much yield potential in 39F61, MZ 1754, SilEx and A4175.

2006 Maritime Soybean Variety Trials – The enclosed soybean trial information is not a Recommended List where we don't have enough varieties yet with multi-year results. Thanks to Doug MacDonald from the NS Crop Development Institute for compiling this soybean data and for looking after all the cereal and soybean variety testing in Nova Scotia.

## Additives That Increase Milk Production When Fed With Low Quality Forage

*by Daniel Scothorn, Consultant*

Yeast culture, rumensin and sugar can all be added to the rations of lactating dairy cattle to help improve milk production, especially with low quality forages. With later first cut harvest, this year's forages are higher in fibre (ADF) and lower in digestibility, meaning there is less TDN. However follow these tips to help improve the diet your cows consume.

1. Feed yeast culture at a level of 55 g/cow/day. Yeast may improve the fibre digestibility of forages to help improve milk yield. Yeast will cost around 9 cents daily.
2. Add rumensin to the supplement or dairy rations your cows consume. Rumensin is approved at various levels, but feeding around 12 mg/ kg of diet will improve feed efficiency but most importantly will not suppress milk fat percent. Feeding levels around 22 mg/kg may depress milk fat content. The cost of rumensin is around 2 cents daily.
3. Feeding sugar helps improve fibre digestibility as well. Sugar can be added to your ration from molasses or adding candy byproduct to your TMR.
4. Replace a portion of the rations low quality forage with a non forage fibre source such as brewers or distiller grains. Wet brewers grains can be fed at 5-10 kg daily, while corn distiller grains can be fed at 2-3 kg daily.

Several options exist to improve milk production from low quality forages. Higher production can obviously be achieved with good quality forage, assuming the weather cooperates better. Start planning how to improve next years forages this winter.