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CropLinks

information on forages, corn and cereals

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Hot Days of Summer

We're into the hot days of summer and needing a good rain. It's been a challenging cropping season so far, dealing with winterkill in legumes and, in western Nova Scotia, a frustratingly drawn out planting/spraying season due to wet and frequently re-wetted soils. This summer issue of CropLinks looks at: armyworm scouting; SCIANs field days; corn weed concerns; harvesting cereal crops for forage and Agrifest.

Corn Weed Concerns

Two weeds that are becoming an increasing problem in cornfields are horsetail and field bindweed (see insert). Horsetail has been around for years, commonly found along roadsides and ditches; however, it's now becoming fairly prevalent in cornfields, particularly in western Nova Scotia. Our pre-emerge herbicide programs are ineffective on horsetail, and tillage chops up its rhizomes (underground stems) and spreads it around the field more. It's important to note which fields have horsetail, and plan to deal with it next year before you have a major infestation.

Field bindweed isn't as common a problem as horsetail, but this weed can creep in from the edge of fields and has an extensively spreading underground root system. This aggressive weed can climb to the top of corn plants, and competes aggressively for nutrients and moisture.

When is the best time to harvest a cereal crop for forage?

Crop maturity is the biggest factor affecting the yield and quality of a cereal crop harvested as forage. According to an Ontario two-year study, forage yield nearly doubles as the crop matures from the boot stage to the soft dough stage. At the same time, crude protein levels drop by about half, ADF values increase from 35 to 45 percent and NDF values increase from 54 to 65 percent.

The best time to harvest will depend on the quality of forage required. Farmers looking for high crude protein, high energy, and highly digestible forage with the minimum amount of effective fiber (forage fit for a dairy cow) should harvest at the boot stage. Farmers looking for yield, and not as concerned about quality, can delay harvest as late as the soft dough stage.

When it comes to quality, barley is reported to be higher in digestibility and, lower in ADF and NDF, than oats, wheat or triticale. Adding peas in the mix will increase crude protein content of whole plant silage by about two percentage points.

Here are the best strategies in dealing with horsetail and field bindweed....

- grow barley or spring wheat (no underseeding) and use the full rate of MCPA.
- in corn use MCPA at 3-leaf corn or Buctril M at 4-to-6 leaf stage only. Use either product (post-emerge) in combination with your normal pre-emerge herbicide program. Both MCPA and Buctril M can injure corn so be sure to apply them at the specified crop stage.

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Armyworm — it's time to scout

For a second year in a row, moth traps were put out on 25 farms across the province this spring to monitor for armyworm. Several farms have reported substantial activity in their traps. This does not mean that there will be a major problem with armyworms. Last year we had a lot of activity in the traps but had no outbreak.

There have been reports of minor armyworm damage in corn fields this past week (June 29th-July 5th). Damage has appeared in reduced tillage fields where females lay their eggs on grassy weeds. Once the weeds are eaten or controlled by herbicides the armyworm moves quickly onto the seedling corn.

Most major crop damage usually occurs in the regrowth of early first cut grass forage and in pastures. When populations are critically high, they will migrate into cereal and corn fields. In large enough numbers, they can defoliate a whole field in 1-2 days.

To scout for armyworm you need to begin checking under the litter of grass pastures and forage fields in late June. The young larva (caterpillars) will be curled up and hiding there during the day. Armyworms generally feed at night and hide under debris during the day. Young caterpillars have stripes on a greenish grey body, while older caterpillars have stripes on a greenish brown or black body. Seen from the side, there are three stripes running along the length of the body. As the caterpillars get larger, and if numbers are high enough, infested fields will appear browned off, ragged or thin as the armyworms strip the plants of their leaves. The armyworm does most of its damage when the caterpillars are in the final growth stage or about 1 to 1.5 inches long.

You will need to spray in forages when there is 2-5 larva (caterpillars) per square foot or 3 caterpillars per linear foot of row for grain crops and the caterpillars are approximately 0.5 to 0.75 inches long. Once the caterpillars are 1.2 to 1.5 inches long they have done most of their damage and so it is no longer economical to spray.

Be sure to read the label before applying any insecticide, pay particular attention to water volumes. Insecticides should be applied in the evening as the armyworm prefers to eat at night.

More information including information on recommended insecticides can be obtained from the AgraPoint Resource Contact Centre at (902) 896-2345 or by e-mail at info@agrapoint.ca

Corn Weed Concerns

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- For field bindweed another option is to use Roundup Transorb or Liberty on a hybrid that is tolerant of one of these products.

Both horsetail and field bindweed are aggressive and persistent weeds if they are not handled properly. Check out the inserts containing more information on horsetail and field bindweed from Publication 505 — Ontario Weeds.

SCIANS Summer Field Days

submitted by Gloria Pickett

The Soil & Crop Improvement Association of Nova Scotia (SCIANS) is very pleased to have arranged to bring Larry Chase, Dairy Nutritionist from Cornell University, to Nova Scotia from August 6 – 8th. Dr. Chase is an excellent speaker and will be discussing the change in rations due to feeding a higher portion of corn silage and lower quality forages due to alfalfa winterkill. He will also speak briefly on ways to reduce methane production by changing the feed ration.

The Field Days will start at 10:30 am with Dr. Chase, followed by a noon lunch (\$12 cost). After lunch the group will head to the field to check out some interesting crop situations. Please note the different start time below for the second field day on August 6th. Don't miss this great opportunity!

Dates and Locations

August 6th — Alister & Mary McCarron's farm – St. Andrew's, Antigonish Co.

August 6th (7 PM) — Floyd Cock's farm, Scotsburn, Pictou Co.

August 7th — Hardwoodlands Community Hall and local farms

August 8th — Old Orchard Inn, Wolfville and local farms



AgraPoint is pleased to be hosting Agrifest, a celebration of innovations in food production. Located on a 50-acre site, the festival will be a combination of field plots and trials; agri-business/food/retail/informational exhibits; interactive displays; production, farm management, marketing, certification, cooking and gardener seminars; family event centre; and lots of food, Maritime beverages and entertainment! Agrifest will show you hands-on demonstrations and plots including new and niche vegetables, potatoes, forage varieties, berry irrigation methods, crop input trials, weed identification and solutions, organics and farm machinery.

Field/forage plots include: timothy, red clover, alfalfa, brome grass, trefoil, orchardgrass, Kentucky bluegrass, meadow fescue. Demos will include: recommended varieties; nitrogen fertility trials; nitrogen carry over from fall manure; compatible mixtures for grazing/conserved feed; weed control; and effect of second-cut vs third-cut harvesting on alfalfa.

For more information or information on how to participate, please contact Tawnya or Sara at the Resource Contact Centre at (902) 896-2345 or info@agrapoint.ca

August 12-15, 2004 • Lyndhurst Farms • Canning, Nova Scotia