June 2016

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2016 M.D. of Wainwright Agricultural Service Board
Front Row: Asst. Ag Fieldman Tanis Ponath, ASB Chairman Clr. Myron Zajic
Back Row: Left, ASB Vice Chair Clr. Phil Valleau, Farm Member Don Jones, Farm Member Grant Rathwell, Ag Fieldman James Schwindt, Farm Member Neil Pugh, and Pest Control Officer Rod Gabrielson

***Have an interesting topic you want discussed in the Newsletter or municipal meeting? Send suggestions to Asst. Agricultural Fieldman Tanis Ponath,*** *asb@mdwainwright.ca or 780-842-4454*

# FOR RENT

**The M.D. of Wainwright has multiple pieces of equipment for rent:**

- **Skunk Traps**
- **Magpie traps**
- **Tree Planter**
- **Plastic Mulch Applicator**
- **Cattle Scale**
- **RFDI Tag Reeder**
- **Bale Core Sampler**

**If you are interested in any of the above items please contact the M.D. office at 842-4454 or the shop at 842-4024.**

Municipal District of Wainwright No.61

# The Municipal Agricultural Connection

Alberta Agriculture and Forestry

***Partners in Rural Conservation***
***www.mdwainwright.ca***

## The Importance of Field Scouting and Early Detection

It is important to stay vigilant and scout your fields, it provides the necessary information on the presence of pests or crop injury and crucial information on the timing of control measures. It is important to work with a consultant because it is very easy to misdiagnose a crop problem. Disease, insect damage and herbicide injury can all look the same. Poor plant emergence can be caused by a number of things such as disease, soil compaction, insects, herbicide or improper planting depth. Wilting plants can be caused by insect disease or drought stress. It may seem that diseases and insects just suddenly appear, but in reality they first appear in small numbers then multiply and spread. Determining the culprit will give you a better chance at implementing the right control measure before they can cause economic loss to your crop.

What should you look for when crop scouting? The most obvious signs are usually crop damage. This comes in many forms such as discoloration, stunting, thinning, damaged leaves or stems, early dying, missing portion of leaves and stems. Each disease and insect causes specific damage to crops.

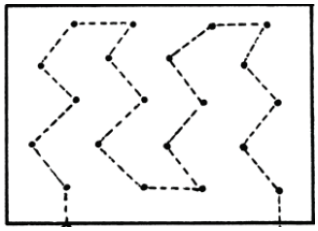

Image 1: W pattern when crop scouting.

In order to scout a crop, it is necessary to walk across a field in a V or W pattern and collect random samples (see image 1). For insects, a crop scout (if distributed throughout the field) will calculate the number of insects that are present in the field. Mobile insects are counted by estimating the number per square meter. Non-mobile insects are shaken from plants onto the ground and counted. This provides a quantitative assessment for insects per 50 by 50cm of crop, multiply by four and you get pests per square meter.

Wind borne diseases and insects will first appear in a field downwind from a shelterbelt or other windbreaks and hills. Targeting these areas when scouting will utilize your time more effective. Insects such as aphids colonize first at the edge of field, they are best found by checking these areas first (see image 2).

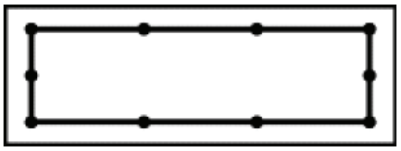

Image 2: Scouting pattern for wind borne disease and insects.

The above are very general means of scouting your fields. Most methods of scouting depend on what pest or disease is being targeted. For example, lygus bugs require you to sweep a portion of the field with a net and grasshopper populations can be determined by walking slowly through the fields and counting the number of insects present. Some types of insects like wire worms even require bait.

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**Pest Monitoring Showcase**

Cutworms are an early season pest which means they primarily feed in late May to June. The species that we are most concerned about is the Pale Western and the Redbacked cutworms. Checking crops especially your canola field every 3-4 days during the first few weeks of crop development will determine if an infestation occurs and the proper treatment can be administered before devastating crop loss occurs. Cutworms can attack other crops such as flax and cereals but canola is the most common. The smaller larvae (12-18mm; 0.5-0.7") pose the biggest threat because at that point larvae are still feeding and growing. Usually after the second or third infestation natural enemies will begin bringing numbers down.

**Scouting**

Most cutworms feed at night and hide during the day, this can make detection difficult. First off determine whether you think bare areas are from poor germination or cutworm damage.

Look for bare areas, holes and notches in the foliage, plants that are wilting or toppling over. Bare areas will appear within the field, on south facing slopes on hilltops where the soils are warmer and the soil texture is lighter. Around the edges of bare spots look for areas of cut off plants and search the first 2-4 inches for larvae around the plants. When notched, wilted, dead and cut-off plants are observed, dig around the roots of the plant for cutworms. A normal threshold is around 25-30% crop loss. If you suspect cutworms in your field, they can be controlled in multiple different ways. Natural enemies, cultural control and chemical control are the most common. If you suspect cutworms it is best to call your local agronomist for a concrete diagnosis , they will also recommend the best treatment options for you.


Redbacked Cutworm


Pale Western Cutworm

## Ricotta and Basil Manicotti

Ingredients:

- 1 box of manicotti pasta
- 1 jar of pasta sauce
- 4 cups of shredded mozzarella cheese
- 2 cups of ricotta cheese
- 6 tbsp of fresh, chopped basil
- 1/2 cup of parmesan cheese

Instructions:

- Cook pasta according to box directions
- While the pasta is cooking, make your filling by combining 3 cups of mozzarella cheese, 2 cups of ricotta cheese and the basil
- Once pasta is cooked drain and run cold water over to cool it down.
- Take out your baking pan and cover the bottom with pasta sauce
- Start filling each manicotti pasta with the filling and layer in the baking pan.
- Cover with remaining pasta sauce and mozzarella cheese

- Cook at 350 degrees for 15 minutes. Remove and top with parmesan cheese and cook for another 10 minutes until cheese is melted and sauce is bubbling.

## Clean Farms Update

**Producers please remember the following when dropping of containers at the chemical container sites:**

1. We only accept pesticide and fertilizer containers that are under 23L. If you have any containers that are over 23L please return them to your AG Dealer.
2. Before you return containers please make sure they have been triple rinsed and the caps and paper booklets have been removed.
3. We do not accept any obsolete pesticides or any livestock/equine medication. Keep products stored safely until there is a scheduled pick-up for the M.D.
4. Please do not leave your cardboard on site.

**With all of this in mind, stay tuned for scheduled pick-up dates for obsolete pesticides and livestock medication in our region for fall 2016.**

CleanFARMS®

# Forest Tent Caterpillars

Tent caterpillars are a native North American pest that causes severe defoliation on species such as trembling aspen, oak, ash, maple and white birch. Outbreaks usually occur at intervals of 10-12 years and can last up to 3 years at the stand level and 6 years at the landscape level. This of course is dependant on factors such as weather, host-parasitoid interactions and forest structure. Trees can be weakened by repeated defoliation which can make them vulnerable to drought and other pests. When an outbreak lasts for two or more years it can significantly impact the tree by reducing its radial growth , causing branch and twig mortality and reduced leaf size.

Eggs hatch anywhere from late April to early May, larvae are black, hairy and around 2-3mm long. The larvae initially feed on tree buds and later on, leaves. Defoliation of trees occurs from the outside in and is usually complete by June. When not feeding the larvae rest on a silken mat that was spun on the trunk or branches. Larvae eat and rest in large masses for protection from predators. If all foliage is consumed before development they will migrate and feed on understory shrubs and other vegetation. Once mature the caterpillars are approximately 5cm long, hairy ( resembles brown fur) and have bluish lateral bands. The mature caterpillars will spin cocoons usually between leaves and pupate. Moths will emerge about 10 days later. The moths are yellowish brown, hairy and have two oblique dark bands on the fore wings. Female moths deposit eggs on twigs and cover them in a spumaine. Embryos become fully developed larvae in approximately a month but do not emerge again till spring.

Most trees can survive tent caterpillar outbreaks, if tree mortality is present it is usually do to other environmental stress factors. After an outbreak trees will re-foliate 3-6 weeks after defoliation. If you suspect tent caterpillars on your trees there is a couple of options, leave them alone and let them complete their cycle, spray with water until they fall on the ground or spray with an insecticide. Aesthetically trees will not look good however, the caterpillars will eventually die out due to natural enemies.

Egg mass on tree branch

Silk mat for larvae

Mature Caterpillar

Spun cocoon

Moth

## 2016 Weed Spraying Operators

**Division 1 & 2 :** Ray Enstrom, 780-842-8461

**Division 3,4 & 5:** Laine Maron, 780-842-8579

**Division 5,6 & 7:** Dennis Fuder, 780-842-7060

## Strychnine Update

**Please remember that strychnine is only sold on Tuesdays from 1—3 p.m at the M.D. rec shop located at 2010-15 ave N. After June 28, strychnine will be sold by appointment only by calling the office at 842-4454.**

**Roadside Mowing will begin on July 15, 2016.**

# Weeds in the M.D.

**JIMSONWEED UPDATE:**

Back in 2015 Jimsonweed or Devil's Trumpet was reported to be growing in several crop fields in central Alberta. Jimsonweed is regulated as a prohibited noxious weed seed under the Federal Seeds Act, which means it cannot be present in seed imported or sold in Canada. In the fall of 2015 the Canadian Food Inspection Agency conducted an investigation that involved seed lots that were suspected to be contaminated with Jimsonweed. The weed was confirmed in one canola seed lot that had been planted in Alberta. The CFIA worked with the supplier to ensure that any remaining seeds from the infected lot were destroyed from the supplier and its distributers. There is limited information regarding food safety in respect to Jimsonweed. There is low risk of exposure through consumption of foods such as canola oil because it goes through an oil extraction process. The CFIA is continuing to determine the risk of the weed in food. In terms of livestock they believe that canola meal produced from canola seed containing Jimsonweed is not expected to pose a risk to livestock ingesting the meal. However, animals who directly eat the plant in green feed, silage or grazing could potentially be at risk of exposure. The CFIA continues to monitor this situation and considering the need for a regulatory standard.

**If you suspect Jimsonweed in your crop this summer please contact Agricultural Fieldman James Schwindt or Asst. Agricultural Fieldman Tanis Ponath at 780-842-4454.**

**Diffuse Knapweed**

**Hoary Alyssum**

**Common Tansy**

**Nodding Thistle**

**Spotted Knapweed**

**Common Toadflax**

**Leafy Spurge**

**If you come across any of these weeds in the M.D. of Wainwright please report your sightings to the weed inspector for your division or you can contact Agriculture Fieldman James Schwindt or Asst. Agricultural Fieldman Tanis Ponath. Weed identification books are available at the M.D. office.**