## Field Crop Report



## **Cereals: Peter Johnson/Albert Tenuta**

**Seed treatments:** All wheat seed should be treated with a fungicide. OMAFRA Publication 812 – Field Crop Protection Guide (Table 4-2) provides a breakdown of the products and the pathogens they control (http://bit.ly/PYGfnL). The most important pathogens affecting Ontario wheat are the smuts and bunts. Some (common bunt, loose smut) occur everywhere in the province and are effectively controlled by most of the available seed treatments. Soil borne dwarf bunt is more localized (snow belt: Georgian Bay/Lake Huron area) and unlike common bunt seed treatment options are limited to only one product (difenoconazole or Dividend). The new seed treatment Vibrance XL is a premix of Dividend XL RTA (Difenconazole and Metalaxyl-M) with the new active ingredient "Sedaxane". As both Vibrance XL and Dividend XL RTA include difenoconazole, both will control soil borne dwarf bunt. These are the only two treatments growers should consider in the dwarf bunt area.

## Insects of 2012: Tom Cowan

2012 may go down as the year of the insect in field crops. We saw an over abundance of many of our usual cast of characters this year as well as some minor actors that somehow managed to steal a lead role. Here are some of the major insect problems we saw this season:

**Alfalfa Weevil:** We started to see alfalfa weevil numbers increase by mid-May. Damage was patchy but quite high in some fields in Lampton and Oxford counties. Some fields were sprayed and others harvested early to keep the insects under control. We saw a few weevils in the second cut, but numbers where no where near what we saw in the first cut.

**True Armyworm:** By June 1<sup>st</sup>, armyworm numbers were extremely high in a number of wheat and hay fields across the province and many fields quickly reached threshold. Southern Ontario was hardest hit and many fields were sprayed. There were reports of armyworm crawling out of hay bails and harvesters coming out of the field covered in armyworm.

**Potato Leafhopper:** Hot dry weather this summer brought with it lots of potato leafhopper trouble for alfalfa. By July many alfalfa fields were well above control threshold, though quite a few fields did not get sprayed. Due to the dry conditions, hopper burn may have been confused with drought, which only emphasizes the need to scout fields to properly identify problems.

**Spider Mites:** In mid July spider mite numbers started to build in soybean fields. The hot/dry weather was ideal for the spider mite populations to explode. With the lack of rain and higher temperatures, the various insect infecting fungi that usually help to keep this pest under control could not develop. By the end of July/early August many soybean fields has to be sprayed for mites. Around this

time corn producers in south western Ontario and the Niagara region began to find spider mites in their corn. We rarely see spider mites reach significant numbers in corn, but stressed corn plants coupled with hot dry weather and extremely high mite populations lead to outbreaks in some fields. We only started to see some relief from spider mite pressure with cooler, wetter weather around mid August.

Variegated Cutworm: Very rarely do we find this pest in soybeans anywhere near numbers that could cause serious damage. Like the armyworm, they fly in the province from the southern states around the same time as the armyworm. The moths flew in under the radar in very high numbers this spring and much earlier then normal. With very little food around they homed in on fields with higher weed pressure to lay their eggs, especially fields containing chickweed. In no-till soybean fields with chickweed and corn stalk residue, the cutworms caused serious

damage when the chick weed was controlled. With their food source removed, the cutworms were forced to feed on the soybeans and the corn stock residue provided the perfect hiding spot from the hot weather. In early June the first signs of feeding started to show up and by mid June significant cutworm feeding was found. Fields in Middlesex, Chatham-Kent and Lambton were hardest hit and in some situations 100-200 acres were completely eaten up. Fortunately by the time replanting was done, the cutworms had stopped feeding and did not affect the newly planted crop.

**Thistle Caterpillar:** Butterfly enthusiasts were very pleased this year with the large numbers of butterflies migrating from the southern states. We don't often see butterflies as pests of field crops, but one of the prettiest one caused a bit of trouble this year. The painted lady butterfly is the adult stage of the thistle caterpillar which normally feeds on thistles and other plants and is rarely a pest of soybeans. This year however, the painted lady butterfly came to Ontario in such biels whet the schele caterpile grain a for a solution of the prettiest of the plants and is rarely a pest of solutions.

high numbers that the adults found their way into quite a few soybean fields. By early July growers started to notice soybean leaves being stuck together with webbing and eaten by a spinney caterpillar. These were the larvae of the painted lady feeding and damage was highly noticeable in some fields.













Fortunately the damage looked worse than it was and the feeding done by the caterpillars did not lead to significant loss of leaf area, though by some accounts it was close to thresholds.

Location	Aug 22 - Aug 28 2012	Temperature ( °C)		Rainfall	Heat Units	Total Since May 1	
		Max	Min	(mm)	CHU	Rain	CHU
Outdoor	2012	27.2	13.4	2.3	162.3	269.5	2619.0
Farm Show	30 Yr. Avg.	24.4	13.5	19.4	164.2	330	2548.1
Windsor	2012	28.7	16.8	11.5	194.2	318.9	3120.3
	30 Yr. Avg.	25.5	14.9	19.2	176	300.5	2769.2
Trenton	2012	27.9	14.4	1.5	176.8	229.6	2774.2
	30 Yr. Avg.	23.9	12.7	18.7	157.1	302.3	2457.5
Mount Forest	2012	26.7	14.1	4.4	175.8	248.1	2534.4
	30 Yr. Avg.	23.6	12.6	21.4	155.8	330.6	2369
London	2012	27.6	13.8	0.7	174.9	229.8	2790.9
	30 Yr. Avg.	24.5	13.7	19.8	166	328.3	2575.2
Hamilton	2012	28.5	14.6	3.8	178.6	173.6	2741
	30 Yr. Avg.	24.5	14.1	18	168.2	308.6	2588.9
Ottawa	2012	27.9	15	0.9	178.8	219.7	2762.5
	30 Yr. Avg.	24.1	12.6	20.4	157.1	337.7	2547.5
Elora	2012	27	11.9	5.3	158.7	193.5	2516.1
	30 Yr. Avg.	24	12.7	20.1	157.7	328.4	2432.9
Peterborough	2012	27.8	12.4	1	161.4	276.8	2531.8
	30 Yr. Avg.	23.7	12.5	19.3	155.3	306.9	2420.5