Field Crop Report

Ontario

Weed Management: Mike Cowbrough

WANTED: weed specimens from around the province that are found in fields or that border those fields and especially weeds that you can't identify, but want to know what they are!

What if while you were taking soil cores for nutrient testing in the fall you could also get an analysis of annual and perennial weeds found in that field? What if you could probe hay bales or silage to determine whether a poisonous plant existed? These are the type of diagnostic tools that could be developed but first we need to collect weed specimens, have them identified and map their DNA.

Dr. Steven Newmaster (University of Guelph) is looking for weed specimens from Ontario for his DNA barcoding project. He will identify them for free, but you have to send them to him. Below are instructions on how to do it.

The plant samples should arrive at the herbarium no later than 3 weeks after they are collected.
Samples should be placed in NEWSPAPER and placed under some kind of weight until mailed. If the specimen is thick or succulent use more newspaper. The idea is to flatten and dry the specimen as quickly as possible. Specimens placed in plastic go to mush very quickly and even with my extensive identification skills, I will not be able to identify the mush.

Information about the sample should include…..
Location: Latitude and Longitude OR County, Township, Lot and Concession OR Global Positioning Co-ordinates OR description of the location eg. 500 meters east of the junction of Hwy. 58 and Stanley St. in Ayr, Ontario.
Habitat: For example, found on the edge of a corn field or found in a ditch beside a tobacco field or found along a stream bank or found along the highway shoulder. And you can describe the type of soil or drainage if you know it. Eg. Low depression in a corn field which floods when it rains.
A couple of digital pictures would be ideal, a close-up (flower or fruit or some notable characters) and a long shot (whole plant). E-mail the photos to: botcal@uoguelph.ca
Remarks: These are optional. You can put sample found with about 100 other plants of the same kind or single plant found with other weeds or flower colour a bright orange.
Date: The date you collected the sample.
Collector Name and contact information: The person who collected the sample. May be more than one person.

Put the flattened newspaper between cardboard even if the sample is not dry & mail it to:
Carole Ann Lacroix
Science Complex,
University of Guelph
GUELPH, ON N1G 2W1

Corn: Greg Stewart

The corn crop continues to develop rapidly, pushed by above average temperatures this week. Record early tassel emergence was evident in some fields mainly in the southwest. Moisture stress is showing up in some areas, particularly on soils with lower water holding capacity.

The period surrounding pollination is critical in yield determination. High photosynthetic rates driven by healthy crop canopies, adequate soil moisture and warm temperatures correlate with increased kernel numbers.

Scouting your fields for leaf disease pressure can contribute to improved decision making around fungicide applications. Knowing which disease is present is important because some have a greater potential of impacting yield than others. The "big three" in terms of corn leaf diseases for Ontario are Northern Leaf Blight (NLB), Common Rust (CR) and Gray Leaf Spot (GLS). Other diseases such as eyespot can be at high levels, but their overall yield impact is much lower then NLB, CR and GLS.

Weather Summary

WIN Weather INnovations Incorporated

Location	Jun 27 - Jul 3 2012	Temperature (°C)		Rainfall	Heat Units	Total Since May 1	
		Max	Min	(mm)	CHU	Rain	CHU
Outdoor Farm Show	2012	29.4	15.7	4.1	182.3	150.4	1246.2
	30 Yr. Avg.	25.1	13.8	13.7	167.7	168.3	1154
Windsor	2012	32.1	19.8	26.4	209.6	153.1	1524.9
	30 Yr. Avg.	26.4	15.3	16.7	180.5	157.8	1278.4
Trenton	2012	28.2	14.4	1.1	177.5	145.5	1313.4
	30 Yr. Avg.	24.3	13.1	15.5	161.6	166.1	1090
Mount Forest	2012	27.7	13.7	0	172	108.2	1189.5
	30 Yr. Avg.	23.9	12.6	13.7	157	171.1	1045.2
London	2012	30.3	15.8	5.6	186.1	133.1	1341
	30 Yr. Avg.	25.2	14	13.9	169.3	169.7	1169.1
Hamilton	2012	31	16	5	186.2	89.7	1291.8
	30 Yr. Avg.	25.1	14.2	13.9	170.7	157.2	1158.2
Ottawa	2012	29.4	14.6	1.7	178.7	126.1	1306.9
	30 Yr. Avg.	25.1	13.8	21.1	168.1	180.4	1156.4
Elora	2012	28.7	13	0.3	168.3	91.5	1201.6
	30 Yr. Avg.	24.5	13	13.8	161.2	166.3	1086.3
Peterborough	2012	27.7	14.2	1.8	175.2	164.5	1203.8
	30 Yr. Avg.	24.2	12.9	15.9	159.5	167.5	1074.3