

# Field Crop Report

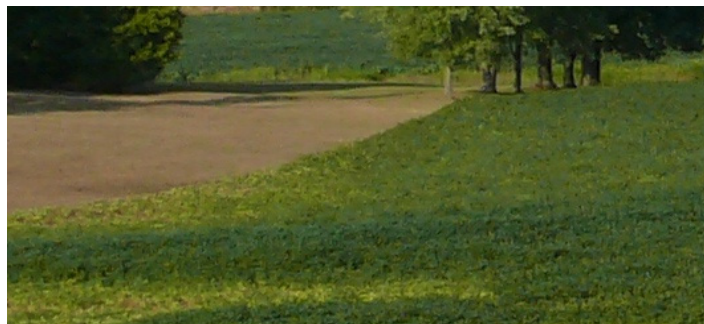


## Soybeans: Horst Bohner

Soybean plants have progressed rapidly over the last two weeks. A very warm and dry summer has sped up plant development. Soybeans stressed with a lack of moisture and hot temperatures will go through their life cycles much more quickly than during more favorable growing conditions.

Most fields are at the R5 (beginning seed) to R6 (full seed) stage of development. Areas that have remained very dry for most of the growing season have fields that are beginning senescence. (Yellowing and dying of leaves) This is especially true of shorter season varieties. Once the leaves start to yellow significantly rainfall will have little impact on final yield. These fields will be ready for harvest by the beginning of September, which is 3 to 4 weeks ahead of normal. Those areas that received more moisture earlier in the growing season and longer season varieties have flowered again and a normal harvest date can be anticipated.

Spider mites have been a major problem across many areas of the province. Severe stippling causes yellowing, curling and bronzing of leaves, is evident along field edges and pockets within fields. Damage is most severe under hot dry conditions. There can be up to seven generations in a given year but a rain along with cooler weather will reduce numbers in fields naturally.



Spider mite damage often starts at field edges and is worse during prolonged hot, dry periods.

Dimethoate is the only registered product that will control spider mites in soybeans. Fields should be sprayed if they are above threshold (one damaged leaf per plant) up to the R6 growth stage (seeds within one pod on the top four nodes fills the pod cavity).

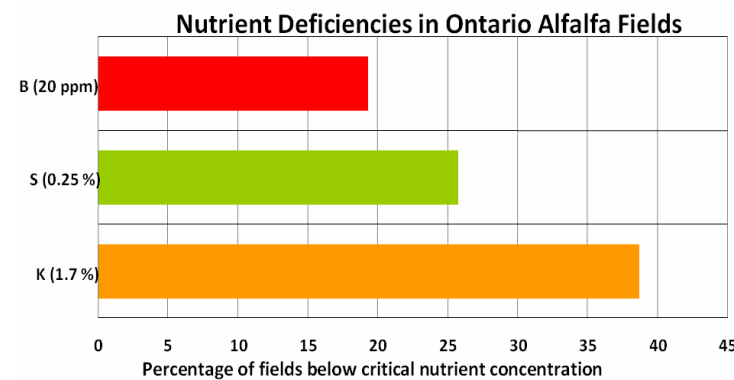
## Crop Fertility: Bonnie Ball / Christine Brown

Late summer is an ideal timing for application of solid manure with high bedding content, such as cattle or horse manure. High carbon to nitrogen ratio in this manure type will provide time and microbial activity for maximum nutrient availability next spring. Risk of N volatilization and compaction are lower with solid manure applied now, however cover crops would enhance the organic matter contribution. An analysis of nutrients applied, including C:N ratio and the micro nutrients zinc, manganese and sulphur will help determine where and how much additional commercial fertilizer is required for next year's crop.

Plant samples are being collected this summer to assess the extent of potassium (K), sulphur (S) and boron (B) deficiency in Ontario alfalfa fields. Survey results show that 26% of fields tested below the critical level of 0.25% for S as designated by recent Wisconsin studies. Critical level is defined as "the nutrient concentration below which yield loss due to deficiency is expected". Nineteen percent were below critical



Sulphur deficiency on alfalfa leaves shows up as chlorosis (often inter-veinal) on young leaves.



boron (B) concentration. Over one-third of the alfalfa samples were critically low in potassium (K). Alfalfa removes about 300 lb K<sub>2</sub>O/ac in 3 cuts. Monitoring soil K is important to avoid mining the land and avoiding crop deficiencies. Ontario soil K levels have been declining in recent years. The median K in Ontario samples dropped from 134 ppm in 2005 to 121 ppm in 2010.

Growers interested in participating in the alfalfa survey can contact [bonnie.ball@ontario.ca](mailto:bonnie.ball@ontario.ca). Alfalfa should be in the late bud to early bloom stage. Samples are collected from top 6 inches of the plant.

## Weather Summary



Location	Aug 1 - Aug 7 2012	Temperature (°C)		Rainfall (mm)	Heat Units CHU	Total Since May 1	
		Max	Min			Rain	CHU
Outdoor	2012	28.9	15.5	6.9	179.9	194.7	2155.9
Farm Show	30 Yr. Avg.	26.1	15	20.4	178.1	274.7	2043.9
Windsor	2012	30.1	18.7	6.5	204.6	258.9	2563.8
	30 Yr. Avg.	27.3	16.4	16.9	189.1	244.6	2227.9
Trenton	2012	28.9	16.2	1.5	188.5	203.8	2255.5
	30 Yr. Avg.	25.9	14.8	16.7	176.5	251.3	1966.4
Mount Forest	2012	27.6	14.9	9.3	178.3	157.3	2066.3
	30 Yr. Avg.	25.2	14.2	20.6	170.8	271.6	1891.4
London	2012	29.7	15.4	1.8	184.5	171.2	2295.3
	30 Yr. Avg.	26.3	15.2	20.2	179.4	273.4	2066.4
Hamilton	2012	30.4	15.8	10.5	186.6	130.3	2222.5
	30 Yr. Avg.	26.4	15.7	18.3	183.3	254.7	2070
Ottawa	2012	30.3	17.1	25.1	193.3	163.5	2234.4
	30 Yr. Avg.	26.3	15.1	23.3	179.3	284.6	2049.6
Elora	2012	28.2	14	17.9	173.3	148.8	2073.4
	30 Yr. Avg.	25.7	14.3	20.4	173	271.1	1947.2
Peterborough	2012	28.1	14.5	4.2	177.3	258.5	2075.1
	30 Yr. Avg.	25.6	14.5	16.7	173.5	254.8	1937.1

For more information please contact the CropLine at 1-888-449-0937, [www.omafra.gov.on.ca/croppest](http://www.omafra.gov.on.ca/croppest), [www.fieldcropnews.com](http://www.fieldcropnews.com)

