



USDA, National Agricultural Statistics Service
Indiana Crop & Weather Report

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Released: September 2, 2008
 Vol. 58, WC090208

CROP REPORT FOR WEEK ENDING AUGUST 31

AGRICULTURAL SUMMARY

Another week with very little rain placed stress on the major field crops, according to the Indiana Field Office of USDA's National Agricultural Statistics Service. Crops on lighter soils or higher ground have showed the most stress. There are growing concerns of light grain weight in corn and pod abortion in soybeans. The hot, dry conditions are causing the crops to shut down prematurely in some areas. Third cuttings of hay have had low yields in many areas. Harvest of corn silage, tobacco and many vegetable crops is underway.

FIELD CROPS REPORT

There were 6.9 **days suitable for field work**. **Corn condition** declined and is rated 59 percent good to excellent compared to 44 percent last year at this time. Eighty-nine percent of the corn acreage is in the **dough** stage compared with 97 percent last year and 94 percent for the 5-year average. Forty-two percent of the corn acreage is in the **dent** stage compared with 74 percent last year and 64 percent for the 5-year average.

Ninety-three percent of the soybean acreage is **setting pods** compared with 99 percent last year and 97 percent for the 5-year average. Six percent of the soybean acreage is **shedding leaves** compared with 17 percent last year and 11 percent for the 5-year average. **Soybean condition** declined and is rated 49 percent good to excellent compared with 43 percent last year at this time.

The **third cutting of alfalfa hay** is 84 percent complete compared with 79 percent last year and 82 percent for the 5-year average. Major activities during the week included: preparing equipment for the fall harvest, harvesting corn silage, mowing roadsides, scouting fields, baling hay, and taking care of livestock.

LIVESTOCK, PASTURE AND RANGE REPORT

Pasture condition declined and is rated as 7% excellent, 24% good, 33% fair, 24% poor and 12% very poor. Pastures continued to deteriorate in many areas of the state. Livestock are in mostly good condition.

CROP PROGRESS TABLE

Crop	This Week	Last Week	Last Year	5-Year Avg
Percent				
Corn in Dough	89	72	97	94
Corn in Dent	42	22	74	64
Soybeans Setting Pods	93	78	99	97
Soybeans Shedding Lvs	6	N/A	17	11
Alfalfa - 3rd Cutting	84	71	79	82

CROP CONDITION TABLE

Crop	Very Poor	Poor	Fair	Good	Excellent
Percent					
Corn	4	10	27	43	16
Soybean	6	12	33	37	12
Pasture	12	24	33	24	7

SOIL MOISTURE & DAYS SUITABLE FOR FIELDWORK TABLE

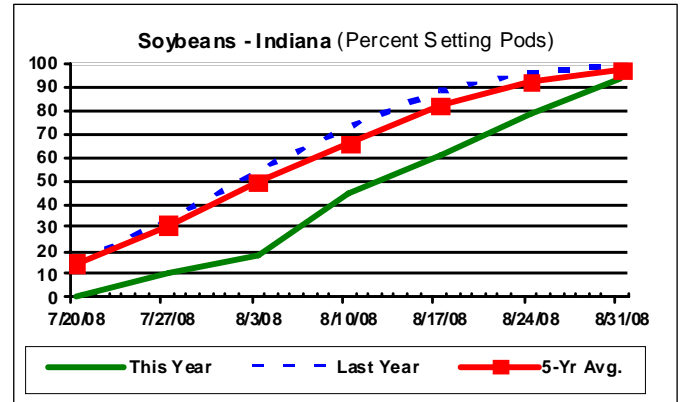
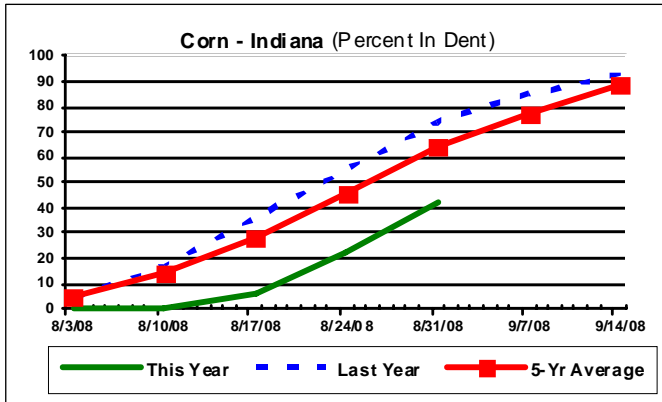
	This Week	Last Week	Last Year
Percent			
Topsoil			
Very Short	27	14	37
Short	46	40	24
Adequate	27	45	37
Surplus	0	1	2
Subsoil			
Very Short	18	12	37
Short	38	31	28
Adequate	44	55	33
Surplus	0	2	2
Days Suitable	6.9	6.6	6.3

CONTACT INFORMATION

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http://www.nass.usda.gov/Statistics_by_State/Indiana/

Crop Progress

Other Agricultural Comments And News



Dry Weather May Lead to Stalk Lodging Problems in Corn

(The conditions described within this article are also pertinent to some Indiana counties)

Exceptionally dry weather has plagued many corn fields since early July. Drought conditions experienced during grain fill often increase the potential for stalk rot and lodging problems in corn. When stalk rot occurs late in the season as it often does, it may have little or no direct effect on yield. Nevertheless, stalk lodging, which results from stalk rot, can have such an impact on harvest losses that many plant pathologists consider stalk rots to be the most significant yield limiting disease of corn.

For a corn plant to remain healthy and free of stalk rot, the plant must produce enough carbohydrates by photosynthesis to keep root cells and pith cells in the stalk alive and enough to meet demands for grain fill. When corn is subjected to severe drought stress, photosynthetic activity is sharply reduced as leaves roll tightly and plant growth slows. As a result, the carbohydrate levels available for the developing ear are insufficient. The corn plant responds to this situation by removing carbohydrates from the leaves, stalk, and roots to the developing ear. While this "cannibalization" process ensures a supply of carbohydrates for the developing ear, the removal of carbohydrates results in premature death of pith cells in the stalk and root tissues, which predisposes plants to root and stalk infection by fungi. Even mild, early season water stress during the pretassel stage of development can significantly increase root infection by stalk rot fungi and result in greater stalk rot at maturity. As plants near maturity, this removal of nutrients from the stalk to the developing grain results in a rapid deterioration of the lower portion of corn plants in drought stressed fields with lower leaves appearing to be nitrogen stressed, brown, and/or dead.

Other plant stresses which increase the likelihood of stalk rot problems include: loss of leaf tissue due to foliar diseases (such as gray leaf spot or northern corn leaf blight), insects, or hail; injury to the root system by insects or chemicals; high levels of nitrogen in relation to potassium; compacted or

saturated soils restricting root growth (recent flooding); and high plant populations.

Most hybrids do not begin to show stalk rot symptoms until shortly before physiological maturity. It is difficult to distinguish between stalk rots caused by different fungi because two or more fungi may be involved. Similarly, certain insects such as European corn borer often act in concert with fungal pathogens to cause stalk rot. Although a number of different fungal pathogens cause stalk rots, the three most important in Ohio are *Gibberella*, *Collectotrichum* (anthracnose), and *Fusarium*. For more information on stalk rot in corn, consult the OSU Plant Pathology web site "Ohio Field Crop Diseases" (<http://www.oardc.ohio-state.edu/ohiofieldcropdisease/>) for more details and pictures of the disease symptoms associated with these pathogens.

The presence of stalk rots in corn may not always result in stalk lodging, especially if the affected crop is harvest promptly. It's not uncommon to walk corn fields where nearly every plant is upright yet nearly every plant is also showing stalk rot symptoms! Many hybrids have excellent rind strength, which contributes to plant standability even when the internal plant tissue has rotted or started to rot. However, strong rinds are not will not prevent lodging if harvest is delayed and the crop is subjected to weathering, e.g. strong winds and heavy rains.

A symptom common to all stalk rots is the deterioration of the inner stalk tissues so that one or more of the inner nodes can easily be compressed when squeezing the stalk between thumb and finger. It is possible by using this "squeeze test" to assess potential lodging if harvesting is not done promptly. The "push" test is another way to predict lodging. Push the stalks at the ear level, 6 to 8 inches from the vertical

(Continued on Page 4)

Weather Information Table

Week ending Sunday August 31, 2008

Station	Past Week Weather Summary Data							Accumulation				
	Air Temperature				Precip.		Avg	April 1, 2008 thru August 31, 2008				
							4 in	Precipitation			GDD Base 50°F	
	Hi	Lo	Avg	DFN	Total	Days	Soil Temp	Total	DFN	Days	Total	DFN
Northwest (1)												
Chalmers_5W	83	51	67	-3	0.00	0		19.55	+0.39	52	2201	-373
Francesville	86	50	68	-1	0.13	1		21.06	+1.94	58	2226	-149
Valparaiso_AP_I	85	49	69	+1	0.01	1		9.03	-10.84	46	2384	+32
Wanatah	85	48	66	-3	0.02	1	79	17.25	-2.09	55	2155	-96
Winamac	85	52	69	+1	0.12	1	75	23.10	+3.98	56	2244	-131
North Central(2)												
Plymouth	86	53	68	-2	0.04	1		18.31	-0.98	61	2232	-258
South_Bend	85	53	70	+2	0.67	1		12.82	-5.82	52	2386	+45
Young_America	86	52	69	-1	0.00	0		23.36	+5.05	54	2281	-161
Northeast (3)												
Columbia_City	87	51	69	+2	0.10	1	71	17.82	-0.58	57	2191	-42
Fort_Wayne	89	52	72	+3	0.12	1		18.19	+0.97	59	2460	+15
West Central(4)												
Greencastle	85	55	70	-3	0.25	1		31.54	+10.00	55	2295	-453
Perrysville	84	53	69	-2	0.15	1	78	25.00	+4.48	57	2528	-36
Spencer_Ag	88	58	72	+2	0.02	1		33.52	+11.46	61	2513	-78
Terre_Haute_AFB	86	55	73	+2	0.00	0		26.57	+6.19	48	2643	-90
W_Lafayette_6NW	85	51	68	-2	0.03	1	73	19.82	+0.72	63	2367	-64
Central (5)												
Eagle_Creek_AP	87	58	73	+3	0.11	1		28.07	+8.80	60	2728	+16
Greenfield	88	57	71	+0	0.39	2		29.46	+8.27	65	2408	-192
Indianapolis_AP	88	60	74	+4	0.10	1		24.08	+4.81	57	2764	+52
Indianapolis_SE	86	56	70	-2	0.00	0		27.11	+7.19	52	2402	-295
Tipton_Ag	85	52	68	-1	0.00	0	78	21.69	+2.29	61	2282	-80
East Central(6)												
Farmland	87	50	69	+0	0.00	0	76	19.98	+1.17	55	2205	-102
New_Castle	87	54	70	+2	0.02	1		25.37	+4.95	59	2221	-142
Southwest (7)												
Evansville	92	64	77	+4	0.00	0		22.60	+3.23	49	3149	+6
Freelandville	87	60	73	+2	0.00	0		25.90	+5.68	51	2757	-65
Shoals_8S	89	57	72	+0	0.00	0		24.23	+2.28	51	2536	-195
Stendal	91	63	76	+3	0.16	2		28.34	+6.56	77	2922	-43
Vincennes_5NE	89	60	75	+4	0.00	0	83	22.42	+2.20	45	2866	+44
South Central (8)												
Leavenworth	92	63	75	+5	0.18	1		22.79	+0.29	79	2877	+159
Oolitic	88	62	73	+4	0.31	1	77	25.90	+4.70	56	2496	-118
Tell_City	91	66	77	+4	0.00	0		21.67	-0.56	45	3053	+39
Southeast (9)												
Brookville	92	56	75	+6	0.00	0		21.23	+0.65	61	2605	+122
Greensburg	88	58	72	+3	0.03	1		27.72	+7.05	58	2600	+66
Scottsburg	89	61	74	+2	0.47	5		23.41	+2.54	70	2797	-11

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DFN = Departure From Normal (Using 1961-90 Normals Period).
GDD = Growing Degree Days.
Precipitation (Rainfall or melted snow/ice) in inches.
Precipitation Days = Days with precip of .01 inch or more.
Air Temperatures in Degrees Fahrenheit.

The above weather information is provided by AWIS, Inc.
For detailed ag weather forecasts and data visit the AWIS home page at
www.awis.com

Dry Weather May Lead to Stalk Lodging Problems in Corn (Continued)

If the stalk breaks between the ear and the lowest node, stalk rot is usually present. To minimize stalk rot damage, harvest promptly after physiological maturity (about 30% grain moisture). Harvest delays will increase the risk of stalk lodging and grain yield losses, and slow the harvest operation.

In addition to potential stalk rot problems, mycotoxins, especially aflatoxins, are major concerns in drought-stressed corn. Under normal conditions, aflatoxin contamination is not usually a problem in Ohio, but the dry conditions experienced across the state may lead to such problems this year. Drought-stressed corn is more susceptible to infection by *Aspergillus flavus*, an ear mold fungus that produces aflatoxins. As the corn dries down and we get closer to harvest, producers should start checking for ear molds by stripping back the husks and examining the ears of 80-100 plants sampled from across the entire field. Ear molds tend to be higher in insect damaged fields and are much easier to identify in the field than in harvested grain.

Since not all ear molds are associated with mycotoxin contamination, it is important to properly identify ear molds before harvest in order to determine if mycotoxin will be a concern and to make adequate marketing and storage decisions. For more on ear molds and mycotoxins, including sampling and testing for toxins, visit the field crops disease website at

<http://www.oardc.ohio-state.edu/ohiofieldcropdisease/Mycotoxins/mycopagedefault.htm>

<http://www.oardc.ohio-state.edu/ohiofieldcropdisease/wheat/mycotoxin%20text2.htm>

Dr. Peter Thomison (Ext. Spec.- OSU Hort. & Crop Sciences), Dr. Pierce Paul (Ext. Spec., Plant Pathology-Corn & Wheat), Dennis Mills (Prog. Spec., OARCD - Plant Pathology), Crop Observation and Recommendation Network [C.O.R.N.] Newsletter 2008-28 Aug. 25 – Sept. 2, 2008 by the Agronomic Crops Team,, The Ohio State University, Columbus, OH.

The INDIANA CROP & WEATHER REPORT (USPS 675-770), (ISSN 0442-817X) is issued weekly April through November by the USDA, NASS, Indiana Field Office, 1435 Win Hentschel Blvd, Suite 110, West Lafayette IN 47906-4145. For information on subscribing, send request to above address. POSTMASTER: Send address change to the USDA, NASS, Indiana Field Office, 1435 Win Hentschel Blvd, Suite 110, West Lafayette IN 47906-4145.