



Indiana Crop & Weather Report

United States Dept of Agriculture

Indiana Agricultural Statistics
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Released: May 16, 2005
Vol. 55, No. 20

CROP REPORT FOR WEEK ENDING MAY 15

AGRICULTURAL SUMMARY

Showers along with strong thunderstorms moved through portions of the state during the week bringing much needed relief to the dry soil conditions, according to Indiana Agricultural Statistics. However, soil conditions remain very dry in some areas of the state, especially in the northern regions. Planting of corn and soybeans continued to make good progress. Many farmers have completed planting of their intended corn acreage, but reporters indicate several early planted corn fields will be replanted because of poor germination and emergence. Farmers were rotary hoeing many corn and soybean fields last week. Growth and development of hay and forage crops remains slow. First cutting of hay crops is underway in the southern regions.

FIELD CROPS REPORT

There were 4.8 **days suitable for fieldwork**. Eighty-nine percent of the intended **corn** acreage is planted compared with 92 percent last year and 70 percent for the 5-year average. By area, 92 percent of the intended corn acreage is planted in the north, 89 percent in the central region and 83 percent in the south. Fifty-one percent of the corn acreage has **emerged** compared with 67 percent last year and 50 percent for the average. Fifty-seven percent of the intended **soybean** acreage is planted compared with 63 percent last year and 47 percent for the average. By area, 65 percent of the soybean acreage is planted in the north, 54 percent in the central region and 47 percent in the south. Twelve percent of the soybean acreage has **emerged** compared with 28 percent last year and 21 percent for the average.

Virtually all of the **winter wheat** acreage has **jointed**. Forty-three percent of the winter wheat acreage is **headed** compared with 60 percent last year and 56 percent for the 5-year average. Winter wheat **condition** is rated 68 percent good to excellent compared with 84 percent last year at this time.

Major activities during the week were tillage of soils, spraying chemicals, preparing equipment, mowing hay, hauling manure and taking care of livestock.

LIVESTOCK, PASTURE AND RANGE REPORT

Pasture condition is rated 11 percent excellent, 64 percent good, 22 percent fair and 3 percent poor. Livestock are in mostly good condition.

CROP PROGRESS TABLE

Crop	This Week	Last Week	Last Year	5-Year Avg
Percent				
Corn Planted	89	76	92	70
Corn Emerged	51	24	67	50
Soybeans Planted	57	33	63	47
Soybeans Emerged	12	NA	28	21
Winter Wheat Headed	43	12	60	56

CROP CONDITION TABLE

Crop	Very Poor	Poor	Fair	Good	Excellent
Percent					
Pasture	0	3	22	64	11
Winter Wheat 2005	2	6	24	56	12
Winter Wheat 2004	0	2	14	65	19

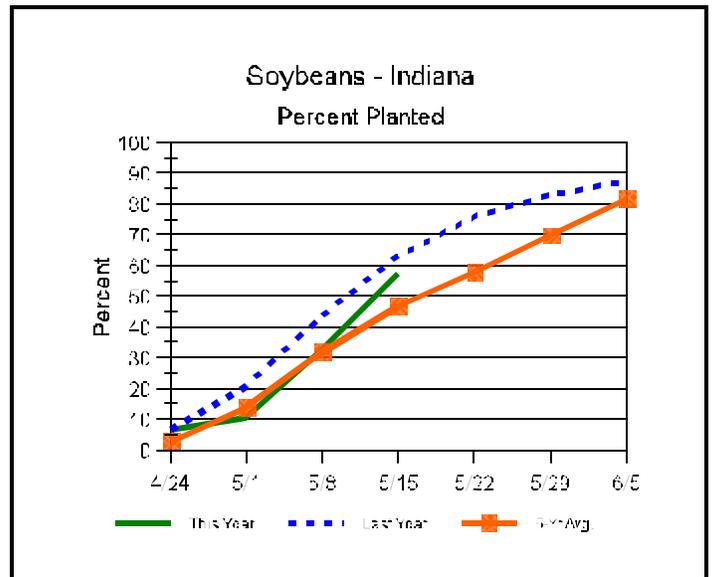
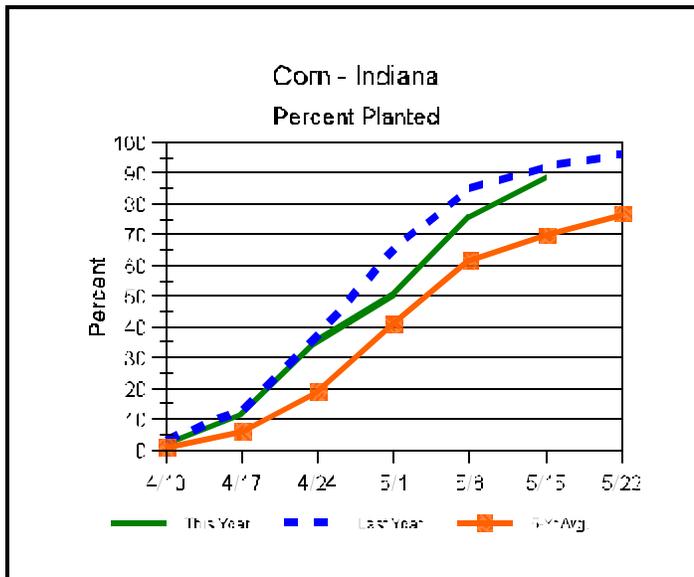
SOIL MOISTURE & DAYS SUITABLE FOR FIELDWORK TABLE

	This Week	Last Week	Last Year
Percent			
Topsoil			
Very Short	4	3	1
Short	14	11	8
Adequate	64	77	73
Surplus	18	9	18
Subsoil			
Very Short	1	1	3
Short	13	9	15
Adequate	75	80	73
Surplus	11	10	9
Days Suitable	4.8	5.6	4.1

CONTACT INFORMATION

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<http://www.nass.usda.gov/in/index.htm>

Crop Progress



Other Agricultural Comments And News

Wheat Yield Response to Cold Stress

Winter wheat is relatively tolerant to cold temperatures once winter dormancy is broken (see Table 1 on Page 4). However, as the wheat crop begins to progress through its developmental growth stages, wheat becomes more sensitive to cold stress. The Indiana crop weather field crops report (week ending May 1st) indicated that 81% of the wheat acres in Indiana have jointed and 4% have headed. This indicates that a majority of the wheat crop is between the jointing and boot growth stages. Based on this morning's temperatures (May 3, 2005) that ranged from 28° to 41° F (average 32.5° F) across Indiana if your wheat crop was still in the jointing crop growth stage it likely avoided any significant damage. If the wheat crop in your area was either in the boot or heading stage you may consider taking a closer look at what air temperatures were on the morning of May 3rd and May 4th. If temperatures did not reach the injurious temperatures listed in Table 1 on page 4, then the wheat crop avoided any significant impact on yield. If the temperature threshold was reached, it may prove beneficial to scout a few of your wheat fields to look for crop injury caused by cold stress. As with corn and soybean, it will take a few days of warm weather for the wheat crop to begin showing symptoms. In general, based on the temperatures given across Indiana and the associated crop growth stages, it is unlikely that significant crop damage or yield loss has occurred.

Symptoms of Spring Freeze Injury:

Boot Stage: Examine the boot and leaves for yellow or water soaked appearance (Image 1). If this has occurred wheat heads may remain trapped in the boot and cannot emerge properly (Image 2). This is relatively common in wheat yields and does not necessarily indicate yield loss. If temperatures were extreme, examine the wheat anthers (male part of flower) which are located in the individual florets. If they are light green and turgid within the floret and yellow after emergence, then no damage has occurred (Image 3). If they appear white or whitish/brown, then the floret may be sterile.

Heading: Crop injury at heading will possess similar symptoms as shown above. An additional symptom to look for is a light green or white frost ring which encircles the stem a few inches below the wheat head. Though this damage does interfere with nutrient uptake it does make the head susceptible to snapping and head loss.

For additional information on spring freeze injury to wheat as well as symptoms at other crop growth stages please review: Spring Freeze Injury to Kansas Wheat: C - 646 <www.oznet.ksu.edu/library/crpsl2/C646.pdf>.

(Continued on Page 4)

Weather Information Table

Week ending Sunday May 15, 2005

Station	Past Week Weather Summary Data							Accumulation				
	Air				Precip.			April 1, 2005 thru				
	Temperature				Precip.			May 15, 2005				
	Hi	Lo	Avg	DFN	Total	Days	Temp	Total	DFN	Days	Total	DFN
Northwest (1)												
Chalmers_5W	89	40	66	+6	0.17	3		2.58	-3.00	13	300	+35
Valparaiso_AP_I	85	42	63	+5	0.53	5		1.68	-4.14	14	276	+70
Wanatah	86	42	62	+6	0.98	5		2.18	-3.41	15	234	+62
Wheatfield	84	42	63	+5	1.01	6		3.69	-1.76	24	262	+74
Winamac	86	39	64	+6	0.29	5	62	2.25	-3.11	18	290	+68
North Central(2)												
Plymouth	85	42	63	+4	0.46	5		1.81	-3.89	17	257	+21
South_Bend	84	42	63	+6	0.36	5		1.44	-3.92	16	294	+103
Young_America	87	42	65	+6	1.04	3		3.61	-1.66	14	312	+96
Northeast (3)												
Columbia_City	84	42	62	+5	0.94	3	64	2.44	-2.85	15	255	+83
Fort_Wayne	85	40	63	+5	0.55	3		2.88	-2.15	19	270	+67
West Central(4)												
Greencastle	87	41	64	+4	2.33	4		6.03	+0.03	16	297	+1
Perrysville	89	40	68	+9	1.36	3	69	4.77	-1.05	13	354	+101
Spencer_Ag	88	43	65	+6	2.40	5		6.04	-0.31	19	292	+34
Terre_Haute_AFB	88	43	68	+7	2.05	4		5.50	-0.61	18	361	+67
W_Lafayette_6NW	89	42	65	+6	0.76	4	69	2.84	-2.82	17	333	+111
Central (5)												
Eagle_Creek_AP	91	44	69	+8	1.01	4		5.66	+0.01	19	421	+138
Greenfield	87	41	64	+5	2.21	4		7.01	+0.83	19	298	+51
Indianapolis_AP	86	40	66	+6	1.26	5		6.51	+0.86	19	362	+79
Indianapolis_SE	87	41	66	+5	1.27	4		6.28	+0.32	17	324	+58
Tipton_Ag	88	39	64	+5	1.45	3	67	5.48	-0.32	18	255	+62
East Central(6)												
Farmland	86	42	64	+6	0.73	3	59	4.96	-0.41	16	254	+68
New_Castle	85	39	62	+4	2.58	3		6.70	+0.45	14	219	+28
Southwest (7)												
Evansville	88	47	71	+7	1.20	2		3.33	-3.03	15	438	+33
Freelandville	88	44	69	+7	0.92	3		3.91	-2.41	15	403	+87
Shoals	88	45	68	+8	2.05	5		5.71	-0.94	18	392	+84
Stendal	87	44	70	+7	1.35	3		4.63	-2.33	17	465	+110
Vincennes_5NE	90	44	70	+8	3.52	5	71	6.90	+0.58	17	430	+114
South Central(8)												
Leavenworth	88	47	69	+8	1.60	2		5.82	-1.13	15	416	+101
Oolitic	85	42	65	+5	2.37	4	69	5.90	-0.43	19	321	+47
Tell_City	88	51	72	+9	2.11	3		5.56	-1.65	15	499	+128
Southeast (9)												
Brookville	88	44	66	+7	2.25	3		6.00	-0.12	17	322	+94
Milan_5NE	87	44	66	+7	1.69	5		5.96	-0.16	21	320	+92
Scottsburg	87	46	68	+6	2.17	5		6.24	-0.15	19	385	+65

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.

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Wheat Yield Response to Cold Stress (Continued)

Table 1. Approximate injurious temperature needed to cause crop damage in winter wheat.
(Minimum of 2 hours required at these temperatures to cause damage).

Growth Stage	Temp.for 2h	Yield Effect
Tillering	12 ° F	Slight to moderate
Jointing	24 ° F	Moderate to severe
Boot	28 ° F	Moderate to severe
Heading	30 ° F	Severe
Flowering	30 ° F	Severe
Milk	28 ° F	Moderate to severe
Dough	28 ° F	Slight to moderate

Source: Spring Freeze Injury to Kansas Wheat: C-646 <www.oznet.ksu.edu/library/crpsl2/C646.pdf>.

Shawn Conley , Department of Agronomy, Purdue University. This article also contains photos, which can be viewed at: http://www.entm.purdue.edu/Entomology/ext/targets/p%26c/P%26C2005P%26C7_2005.pdf, page 4.

The INDIANA CROP & WEATHER REPORT (USPS 675-770), (ISSN 0442-817X) is issued weekly April through November by Indiana Agricultural Statistics, 1435 Win Henschel Blvd, Suite B105, West Lafayette IN 47906-4145. Second Class postage paid at Lafayette IN. For information on subscribing, send request to above address. POSTMASTER: Send address change to Indiana Agricultural Statistics, 1435 Win Henschel Blvd, Suite B105, West Lafayette IN 47906-4145.