



# Indiana Crop & Weather Report

INDIANA AGRICULTURAL STATISTICS  
 U.S. DEPARTMENT OF AGRICULTURE  
 PURDUE UNIVERSITY  
 1148 AGAD BLDG, ROOM 223  
 WEST LAFAYETTE IN 47907-1148  
 Phone (765)494-8371  
 FAX (765)494-4315

Released: Monday, 3PM

June 23, 1997

Vol. 47, #12

West Lafayette, IN 47907

## CROP REPORT FOR WEEK ENDING JUNE 22

Wheat harvest has begun in isolated areas across central and southern Indiana, according to the Indiana Agricultural Statistics Service. Favorable weather during the middle of the week also allowed farmers to continue planting soybeans, apply herbicides and nitrogen, and harvest hay. Replanting of corn and soybeans continued as soil moisture allowed. The greatest need for replanting is in the southern region of the state particularly along the Ohio and Wabash Rivers.

### CORN AND SOYBEANS

**Corn condition** is rated 54 percent good to excellent, 38 percent fair, and 12 percent poor to very poor. **Soybean planting** is 96 percent complete. This is well ahead of 62 percent last year, and the average of 9 percent. By region, soybean planting is 99 percent complete in the north, 98 percent complete in the central, and 84 percent complete in the south. **Condition** of the crop is 55 percent good to excellent, 34 percent fair, and 11 percent poor to very poor.

### WINTER WHEAT

Winter wheat **condition** is rated 65 percent good to excellent, compared with 32 percent at this time last year. Statewide, wheat **heading** is complete. Wheat **harvest** is 3 percent complete, compared to the 4 percent average for this date. Harvest had not begun at this time last year. Ripening of the crop has been slowed by cool, wet weather.

### OTHER CROPS

**Pasture condition** was rated 14 percent excellent, 62 percent good, 19 percent fair, 4 percent poor and 1 percent very poor. Transplanting of **tobacco** is 51 percent complete. First cutting of **alfalfa** is 58 percent complete.

### DAYS SUITABLE and SOIL MOISTURE

For the week ending Friday, 3.1 days were rated **suitable for fieldwork**. **Topsoil moisture** was rated 1 percent short, 51 percent adequate and 48 percent surplus. **Subsoil moisture** was rated 54 percent adequate and 46 percent surplus.

#### CROP PROGRESS

Crop	This Week	Last Week	Last Year	5-Year Avg
Percent				
Soybeans Planted	96	93	62	90
Wheat Harvested	3	0	0	4

#### CROP CONDITION

Crop	Very Poor	Poor	Fair	Good	Excellent
Percent					
Corn	3	9	34	47	7
Soybeans	3	8	34	47	8
Winter Wheat 6/22	1	5	29	52	13
Winter Wheat 1996	7	21	40	29	3
Pasture	1	4	19	62	14

#### SOIL MOISTURE

	This Week	Last Week	Last Year
Percent			
<b>Topsoil</b>			
Very Short	0	0	0
Short	1	0	0
Adequate	51	42	44
Surplus	48	58	56
<b>Subsoil</b>			
Very Short	0	0	0
Short	0	0	0
Adequate	54	50	40
Surplus	46	50	60

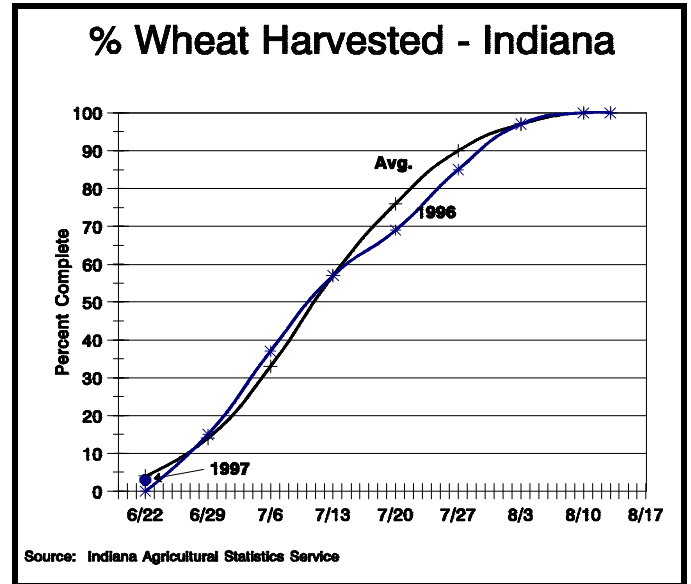
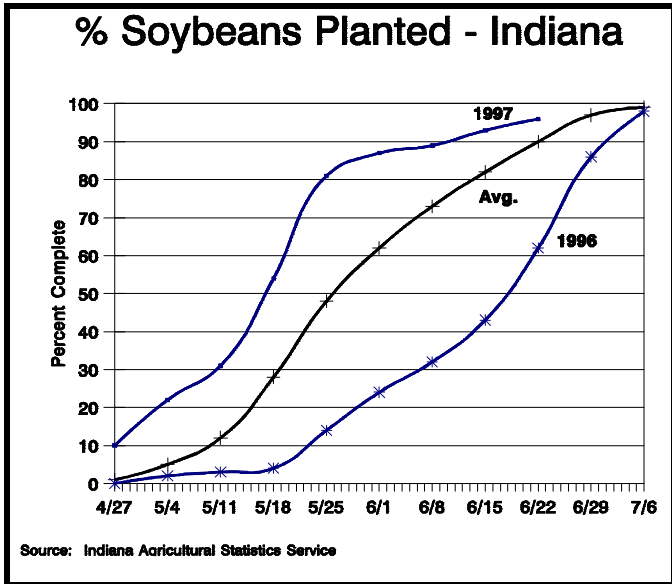
--Ralph W. Gann, State Statistician

--Lance Honig, Agricultural Statistician

E-Mail Address: [nass-in@nass.usda.gov](mailto:nass-in@nass.usda.gov)

<http://info.aes.purdue.edu/agstat/nass.html>

# Crop Progress



## Rapid Corn Growth and Nutrient Deficiency

- ◆ Environmental stress has caused mostly temporary nutrient deficiencies
- ◆ Low pH and magnesium on corn addressed
- ◆ Low pH and magnesium on soybeans addressed
- ◆ Manganese deficiency in soybeans addressed

It has finally warmed up and corn is really starting to grow in most of Indiana. Unfortunately that rapid growth is not without some problems. The root systems of many corn plants are small and shallow. This is the result of cold temperatures and wet conditions. Because of this shallow and limited rooting, the demand for nutrients to support rapid growth can't be met. Thus, many plants are suffering from temporary nutrient deficiencies and exhibiting nutrient deficiency symptoms. Some of the common problems being seen are: zinc, manganese, iron, sulfur, and magnesium.

In many cases these problems will quickly disappear as root systems expand and explore deeper into the soil. This is especially true for nutrients such as zinc, iron, and manganese which move to the root surface by diffusion and nutrients such as sulfur and magnesium which are often found in higher concentrations in the subsoil.

The current situation is not unusual as corn at the 5 to 6 leaf stage is "shifting gears" from

dependence on the seminal or seed root system to the permanent crown or nodal root system. The demand on the root system for nutrients is normally greatest at this time. When you add the additional stress of unusually rapid growth and unusually small root systems this creates a nutrient demand that the plants roots have a difficult time filling. This is not a reflection on fertility programs and it is unlikely that these temporary problems will cause measurable effects on yield. However there also are some more serious problems which may need to be addressed.

### **Low pH and magnesium deficiency on corn:**

Many soils in Indiana are acid and in need of lime. On the low cation exchange capacity soils of northern Indiana, and throughout southern Indiana magnesium deficiency symptoms begin to show up in June. Magnesium deficiency is characterized by stunting, firing of the lower leaves, striping and a red or purple cast to the fired leaf margins. The problem is generally located in patches across the field and the boundary between deficient and normal growth can be very sharp. It is difficult to correct the problem in this crop year. Liming with at least one ton of dolomite lime is the most economical solution.

### **Low pH and magnesium deficiency on soybeans:**

Soybeans are very sensitive to low pH. When soil pH drops below 6, calcium and magnesium

(Continued on Page 4.)

## Average Daily Values for week ending Monday morning June 23, 1997

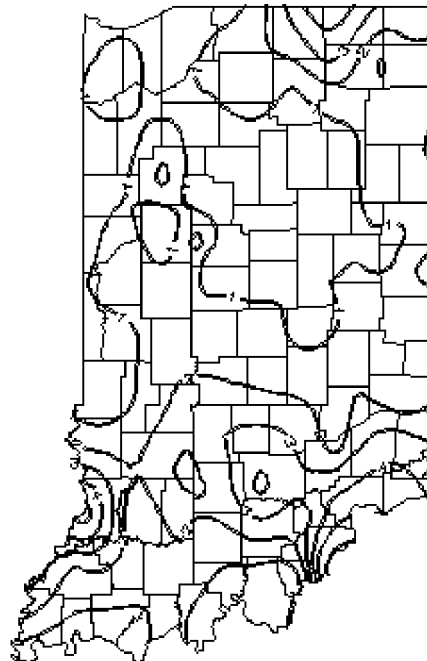
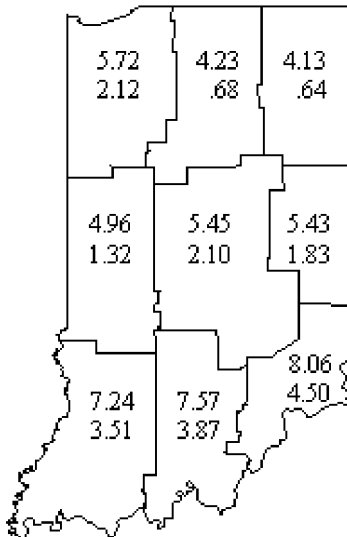
Area	Station	Air			Precipitation			Growing Degree Days		
		Temperature			Past Week	Since April 1	DN Since April 1	Past Week	Since April 1	DN Since April 1
		Max	Min	DN						
NW	Wanatah	84	61	+2	.57	11.55	+1.23	157	757	-93
	Kentland	84	65	+2	.93	9.58	-.95	172	850	-140
	Winamac	84	64	+3	.30	9.52	-.74	167	805	-147
NC	South Bend	82	64	+3	1.19	7.24	-2.79	163	762	-112
	Waterford Mills	84	62	+3	2.85	10.60	+1.25	162	777	-139
NE	Prairie Heights	83	63	+5	1.55	9.14	-.71	165	770	-16
	Columbia City	83	63	+4	.44	9.74	-.40	163	777	-90
	Fort Wayne	83	64	+2	.36	9.69	+2.22	166	790	-145
	Bluffton	83	63	+2	2.13	12.56	+2.13	162	815	-165
WC	West Lafayette	85	66	+5	.32	14.33	+4.00	178	868	-85
	Lafayette	85	66	+4	.30	11.20	+8.7	177	916	-38
	Perrysville	85	65	+2	1.69	8.74	-2.87	174	906	-259
	Crawfordsville	84	63	+3	1.23	9.76	-.53	168	842	-119
	Terre Haute 8s	87	66	+4	.33	12.46	+1.44	181	983	-114
C	Tipton	83	64	+2	.92	13.03	+2.75	164	784	-144
	Indianapolis	83	66	+1	1.50	8.12	-2.19	172	903	-185
	Indian Creek	85	66	+4	1.05	10.96	+0.07	177	930	-109
EC	Farmland	83	65	+4	.95	10.26	-.16	168	847	-49
	Liberty	84	65	+4	1.66	11.01	-.20	172	891	-137
SW	Vincennes	85	67	+2	5.91	16.13	+4.39	180	1024	-126
	Dubois	83	66	+2	1.95	15.48	+3.24	173	972	-133
	Evansville	85	69	+1	1.40	13.76	+2.31	187	1057	-237
SC	Bedford	83	64	+2	1.78	14.78	+2.95	167	940	-128
	Louisville	83	69	+2	2.48	12.31	+8.5	184	1068	-188
SE	Butlerville	82	65	+1	2.99	14.20	+3.02	169	910	-269

DN = departure from normal.

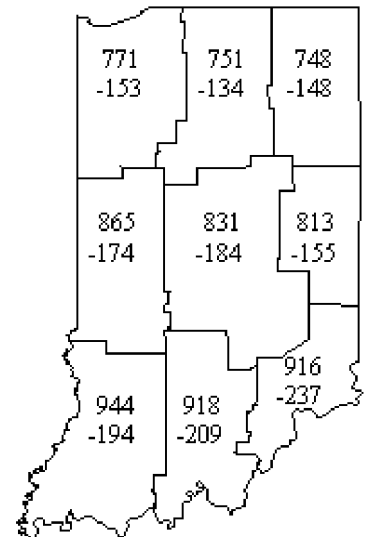
Growing Degree Days = daily mean - 50 (below 50 adjusted to 50, above 86 adjusted to 86.)

Rainfall of 1 Inch or More  
for Past 7 Days  
as of Monday morning

Rainfall for Past 4 Weeks  
and Departure from Normal



Growing Degree Days  
and Departure since April 1



## Deficiency (continued)

levels become inadequate to support good growth. The most sensitive step in the soybean growth appears to be nodulation. At low pH nodulation is poor and nitrogen fixation is low. Plants appear stunted and yellow, similar to deficiency on corn. As with corn, liming is the most economical solution to this problem.

**Manganese deficiency in soybeans:** Many soils in northern Indiana are prone to manganese deficiency. The problem is most pronounced in higher pH soils >6.3, and is common in the Kankakee River valley. Correction is best done by foliar application of 3 to 5 pounds of manganese sulfate (1 to 2 pounds metal). Under severe deficiencies multiple applications may be required.

--Dave Mengel and Sylvie Brouder, Purdue University

The INDIANA CROP WEATHER REPORT (USPS 675-770), (ISSN 0442-817X) is issued weekly April through November by the Indiana Agricultural Statistics Service, Purdue University, 1148 AgAd Bldg, Rm 223, West Lafayette IN 47907-1148. Second Class postage paid at Lafayette IN. For information on subscribing, send request to above address. POSTMASTER: Send address change to the Indiana Agricultural Statistics Service, Purdue University, 1148 AgAd Bldg, Rm 223, West Lafayette IN 47907-1148.