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
Phone (800)363-0469
FAX (765)494-4315
FAX (800)363-0475

Released: Monday, 3PM June 11, 2001 Vol. 51, #23 West Lafayette, IN 47907

CROP REPORT FOR WEEK ENDING JUNE 10

AGRICULTURAL SUMMARY

Showers along with isolated thunderstorms halted fieldwork in most areas of the state. Ponding and flooding exists in low lying areas of some fields. Central regions of the state are the wettest. Farmers are having a difficult time spraying fields along with getting hay cut and baled. Weeds are becoming a problem in some fields. Sunshine and warmer weather finally arrived late in the week which helped improve the growth of major crops.

FIELD CROPS REPORT

There were 1.3 **days** suitable for fieldwork. Corn **condition** continued to decline and is rated 57 percent good to excellent compared with 64 percent last week and 82 percent last year at this time. Ninety-eight percent of the **soybean** acreage has been planted compared with 81 percent for the average. Ninety-seven percent of the intended soybean acreage has **emerged** compared with 90 percent last year. Soybean **condition** has also continued to decline and is rated 50 percent good to excellent compared with 59 percent last week and 64 percent last year. Major activities during the week included spraying, cleaning and repairing equipment, mowing and baling hay, chopping forage, mowing roads and hauling manure.

Winter wheat **condition** is rated 62 percent good to excellent compared with 84 percent a year ago at this time. Wheat harvest is beginning in scattered locations throughout the state.

LIVESTOCK, PASTURE AND RANGE REPORT

Pasture condition is rated 9 percent excellent, 42 percent good, 27 percent fair, 15 percent poor and 7 percent very poor. Transplanting of **tobacco** is 52 percent complete compared with 76 percent last year. First cutting of **alfalfa** hay is 57 percent complete compared with 83 percent last year and 60 percent for the 5-year average.

CROP PROGRESS TABLE

Crop	This Week	Last Week	Last Year	5-Year Avg
	Percent			
Soybeans Planted	98	98	97	81
Soybeans Emerged	97	95	90	NA
Wheat Harvested	0	0	1	0
Tobacco Plants Set	52	48	76	51
Alfalfa First Cutting	57	47	83	60

CROP CONDITION TABLE

Crop	Very Poor	Poor	Fair	Good	Excel-lent
			Percent		
Corn	2	8	33	45	12
Soybeans	3	9	38	45	5
Pasture	7	15	27	42	9
Winter Wheat 2001	4	7	27	51	11

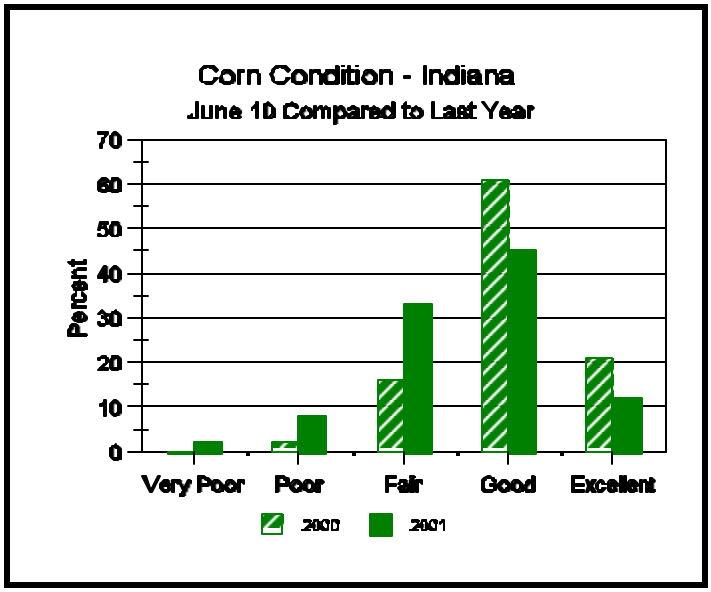
SOIL MOISTURE & DAYS SUITABLE FOR FIELDWORK TABLE

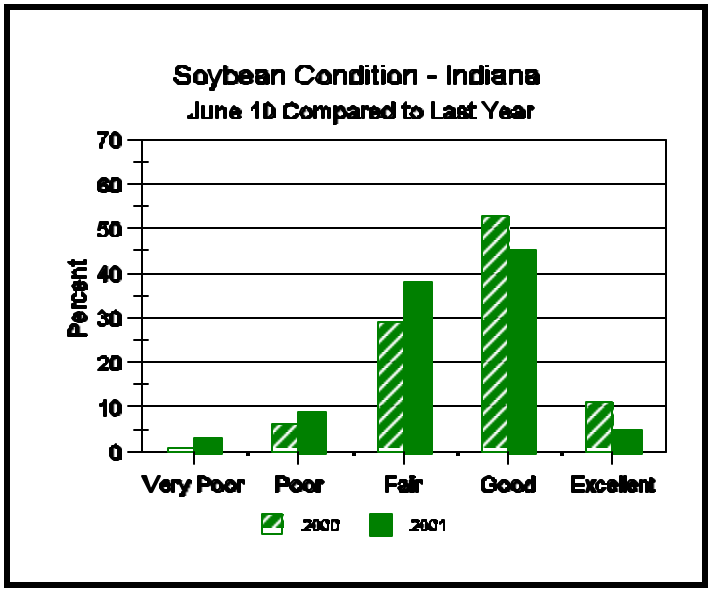
	This Week	Last Week	Last Year
		Percent	
Topsoil			
Very Short	0	1	3
Short	1	3	22
Adequate	56	72	69
Surplus	43	24	6
Subsoil			
Very Short	2	5	9
Short	12	19	39
Adequate	65	66	49
Surplus	21	10	3
Days Suitable	1.3	2.2	5.4

CONTACT INFORMATION

--Ralph W. Gann, State Statistician
--Bud Bever, Agricultural Statistician
--Michelle Schank, Student Intern
E-Mail Address: nass-in@nass.usda.gov
http://www.nass.usda.gov/in/index.htm

Crop Progress





Other Agricultural Comments And News

Cold Weather Impacts On The Soybean Plants

- Why are my soybeans growing so slowly?
- Will my soybeans recover?

A number of extension personnel and farmers have expressed concerns regarding the very slow growth of soybeans over the past two weeks. The name of the game is low temperatures, both of the air and the soil. For the past 15 days, Chalmers and Laporte had low nighttime temperatures at or below 50° F while the Agronomy Research Center, Milan, Columbia City and Wanatah had similar temperatures 13 out of the 15 nights at or below 50° F. Temperatures in southwestern Indiana were slightly higher with the low temperatures at Dubois, Oolitic and Vincennes reaching 50° F or less 9 of the 15 nights. Soil temperatures fared a little better with nighttime lows at or below 60°F across most of the state, but in all cases above 50° F.

Soybean seed will begin the process of germination at soil temperatures of 50° F or above, but the process is very slow. The most rapid emergence occurs at soil temperatures of 70 to 80° F. It is quite typical that at current soil temperatures, three or more weeks may be required for emergence. The major risk of slow emergence at low temperatures is the increased probability of injury to the seedling from fungi and/or insects.

Low nighttime air temperatures can cause injury to the soybean plant or can result in very slow vegetative growth. Many times a soybean plant can tolerate temperatures as low as 28° F without injury, but under certain conditions, temperatures well above freezing can result in plant injury or death. Cold conditions can result in water stress in the plant and can be one of the causes of low temperature injury to the soybean plant depending on the length of time exposed to the low temperatures and the relative humidity. Research data shows that chilling the soybean plant for one week at temperatures close to the temperatures of the past two weeks can result in reduced leaf elongation, rate of leaf emergence, and CO_2 uptake. Usually, all of these will return to normal when temperatures return to levels at or above 75° F.

Low soil temperatures also result in a reduction of nodule formation and activity. Soybean plants that had just emerged prior to the cold soil

(Continued on Page 4)

Weather Information Table

Week ending Sunday June 10, 2001

Station	Past Week Weather Summary Data							Accumulation April 1, 2001 thru June 10, 2001				
	Air Temperature				Precip.		Avg 4 in Soil Temp	Precipitation		GDD Base 50°F		
	Hi	Lo	Avg	DFN	Total	Days		Total	DFN	Days	Total	DFN
Northwest (1)												
Valparaiso_Ag	82	45	61	-7	0.12	3		8.44	-0.77	38	674	+92
Wanatah	81	42	59	-8	1.18	3	61	9.21	+0.51	39	644	+113
Wheatfield	81	45	60	-8	1.42	2		9.28	+0.76	39	706	+146
Winamac	80	45	59	-9	1.72	3	64	10.83	+2.26	37	713	+101
North Central(2)												
Logansport	79	46	61	-7	2.77	3		11.51	+3.08	38	703	+91
Plymouth	79	44	59	-11	1.10	3		8.75	-0.27	38	624	-18
South_Bend	78	37	58	-10	0.76	3		9.58	+1.23	36	676	+116
Young_America	79	47	62	-7	1.06	3		8.34	-0.09	33	783	+171
Northeast (3)												
Bluffton	78	45	60	-9	1.04	3	59	10.23	+1.54	37	716	+85
Fort_Wayne	78	42	59	-10	1.39	3		8.66	+0.65	39	701	+110
West Central (4)												
Crawfordsville	81	48	64	-7	1.00	4	65	7.44	-1.90	34	752	+45
Perrysville	81	49	63	-7	0.83	3	65	5.79	-3.52	33	848	+176
Terre_Haute_Ag	83	46	66	-4	1.82	4	69	12.12	+2.58	32	958	+218
W_Lafayette_6NW	81	47	63	-6	0.90	3	65	7.33	-1.47	32	814	+195
Central (5)												
Castleton	78	50	64	-6	1.43	3		10.92	+1.69	32	837	+131
Greenfield	78	51	64	-6	1.39	4		8.85	-0.57	33	831	+156
Greensburg	79	53	66	-3	2.44	4		10.88	+0.77	30	907	+227
Indianapolis_AP	79	54	66	-5	2.41	4		8.93	+0.09	28	923	+193
Indianapolis_SE	78	49	63	-8	1.93	4		8.03	-1.20	27	798	+92
Tipton_Ag	78	46	61	-7	1.00	3	63	8.57	-0.28	29	701	+123
East Central (6)												
Farmland	79	45	61	-7	0.87	3	60	10.28	+1.56	32	719	+162
New_Castle	76	46	61	-7	1.18	3		12.25	+2.44	34	641	+68
Southwest (7)												
Dubois_Ag	88	54	70	+0	1.25	3	73	6.70	-3.75	26	1022	+257
Evansville	86	58	72	-2	1.06	4		6.62	-3.39	28	1146	+226
Freelandville	83	51	68	-3	1.98	3		7.51	-2.70	27	1008	+230
Shoals	84	48	67	-3	2.50	4		8.20	-2.57	27	935	+189
Vincennes_5NE	86	54	68	-3	2.66	3	64	6.94	-3.27	23	1045	+267
South Central(8)												
Bloomington	82	53	66	-5	2.68	4		8.49	-1.40	32	936	+178
Tell_City	84	49	70	-2	0.91	4		5.29	-5.71	20	1098	+241
Southeast (9)												
Scottsburg	83	51	67	-4	1.69	5		9.05	-0.84	31	984	+206

DFN = Departure From Normal (Using 1961-90 Normals Period).
GDD = Growing Degree Days.
Precipitation (rain or melted snow/ice) in inches.
Precipitation Days = Days with precipitation of 0.01 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 or call toll free at 1-888-798-9955.

temperatures may exhibit nitrogen deficiencies once air temperatures return to normal and the plants grow rapidly. This is the result of a demand by the plant for nitrogen greater than that available from the cotyledons and the soil. Once soil temperatures warm to a level suitable for nodule activity, the leaves well become a darker green color and the plant will resume normal growth.

All of these stresses may result in a plant with the lower internodes that are shorter than normal. Most of the stresses discussed above should not have any long term effects on the soybean crop with the exception of the fungal disease potential.

Ellsworth P. Christmas, Dept. of Agronomy, 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.