Indiana Crop & Weather Report

INDIANA AGRICULTURAL STATISTICS
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CROP REPORT FOR WEEK ENDING JULY 12

Farmers worked around spotty rain to harvest wheat and alfalfa this past week, according to the Indiana Agricultural Statistics Service. Hoosier farmers were also busy planting double crop soybeans where soil conditions would allow, as well as replanting some drown-out soybeans. Excessive rainfall during the spring and early summer has left crops "uneven" in many areas, however overall condition is good. Soils remain saturated in the southern region of the state, while some areas in northeast Indiana are becoming dry.

CORN AND SOYBEANS

Corn condition showed very little change from last week, with 58 percent rated good to excellent. Eighteen percent of the crop is **silked**, ahead of the 8 percent average. By region, 24 percent of the crop is silked in the north, 13 percent in the central, and 16 percent in the south. **Soybean condition** fell off slightly this past week, with 57 percent rated good to excellent. Twenty-eight percent of the soybeans are **blooming**, ahead of 15 percent last year and the 19 percent average. By region, 34 percent are blooming in the north, 30 percent in the central, and only 13 percent in the south.

WINTER WHEAT

Wheat harvest progressed to 92 percent complete, 51 percent ahead of last year and still about two weeks ahead of average. By region, 85 percent is harvested in the north, 95 percent in the central, and 96 percent in the south.

OTHER CROPS

Pasture condition is rated 13 percent excellent, 62 percent good, 21 percent fair, 3 percent poor and 1 percent very poor. **Second cutting** of **alfalfa** is 56 percent complete.

DAYS SUITABLE and SOIL MOISTURE

For the week ending Friday, 3.9 days were rated **suitable for fieldwork**. **Topsoil moisture** was rated 1 percent very short, 4 percent short, 61 percent adequate and 34 percent surplus. **Subsoil moisture** was rated 4 percent short, 66 percent adequate and 30 percent surplus.

CROP PROGRESS

Crop	This Week	Last Week	Last Year	5-Year Avg
	Percent			
Corn Silked	18	4	1	8
Soybeans Blooming	28	9	15	19
Winter Wheat Harvested	92	73	41	55

CROP CONDITION

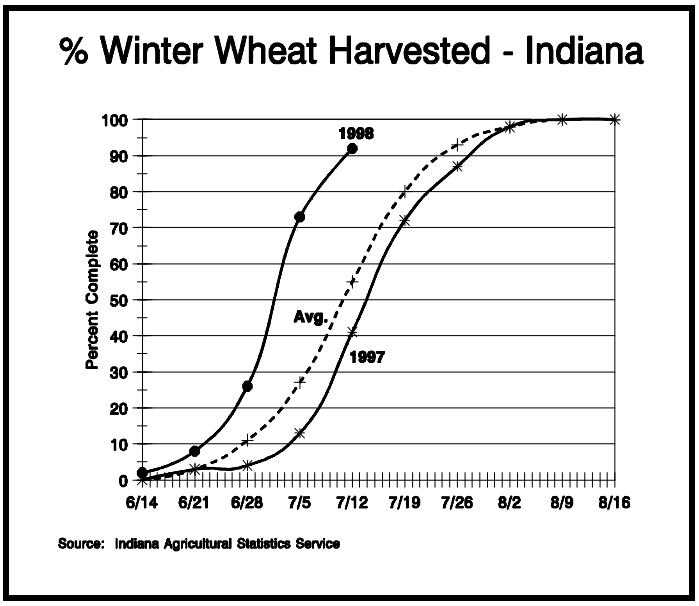
Crop	Very Poor	Poor	Fair	Good	Excel-lent
	Percent				
Corn	3	9	30	42	16
Soybeans	3	8	32	43	14
Pasture	1	3	21	62	13

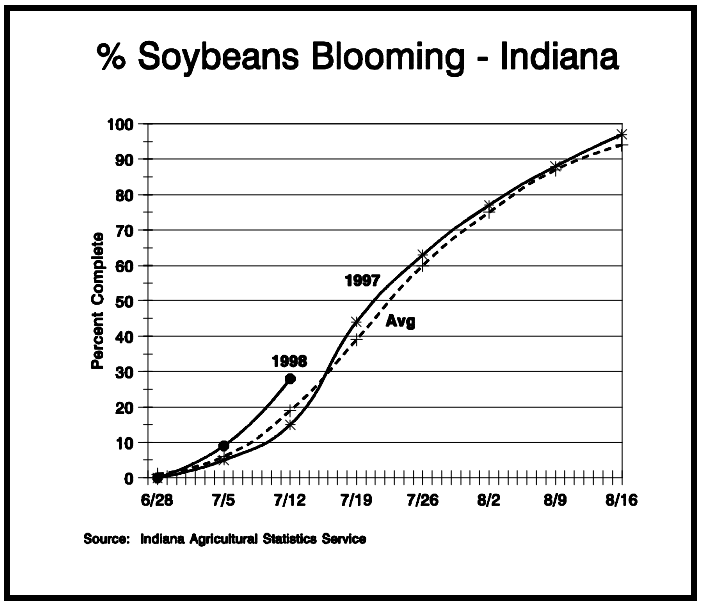
SOIL MOISTURE

	This Week	Last Week	Last Year
	Percent		
Topsoil			
Very Short	1	1	3
Short	4	6	21
Adequate	61	64	71
Surplus	34	29	5
Subsoil			
Very Short	0	0	1
Short	4	4	12
Adequate	66	68	83
Surplus	30	28	4

--Ralph W. Gann, State Statistician
--Lance Honig, Agricultural Statistician
E-Mail Address: nass-in@nass.usda.gov
http://info.aes.purdue.edu/agstat/nass.html

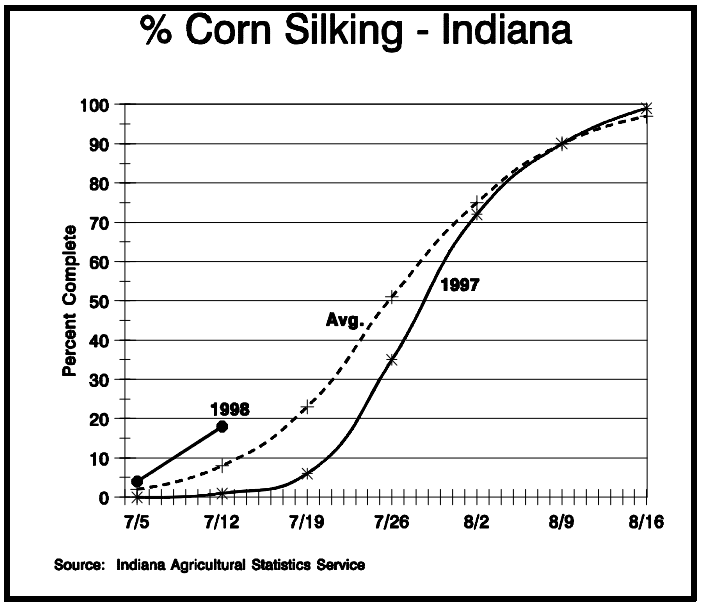
Crop Progress





Frequently Asked Questions on Late Applications of Nitrogen to Corn

Excessive rainfall has forced many growers to sidedress their nitrogen (N) on corn this year - in some cases much later than what is considered normal. The following includes part of an 1996 article by Dr. Dave Mengel (formerly Extension Soil Fertility Specialist at Purdue University, now chair at Kansas State), which addresses various questions concerning N applications to corn after planting.



How Late Can N Be Applied?

Corn utilizes large quantities of N during the grand growth stage. From the 8 leaf stage through tasseling N uptake is 4 to 8 pounds per day. For most corn hybrids N uptake is complete shortly after pollination. So, most of the N should be applied prior to the 10 leaf stage, with any supplemental applications complete by or shortly after tasseling. Under conditions of severe N deficiency, some response would be expected to low rates of N (30 to 60 pounds) as late as three weeks after pollination.

What Is the Best N Source to Use?

Ammonia or N solutions knifed in, or ammonium nitrate over the top are preferred in most situations, especially high residue fields. Granular urea can also be applied over the top in clean tilled situations. Both granular urea and ammonium nitrate broadcast in standing corn will cause some foliar burn when granules fall into the whorl. While it may appear unsightly, little yield decrease normally occurs if the fertilizer is applied prior to the 10-leaf stage.

How Much N Should Be Applied?

If the corn has gotten too tall to sidedress by this point (late June and early July), it has probably not been severely stressed and yield potential is still good. An example would be rotation corn after beans which had some starter or 28 percent applied with herbicides with good green color. Supplemental N rates at this point should probably be in the 0.5 to 0.7 pounds N per bushel of expected yield.

(Continued on Page 4.)

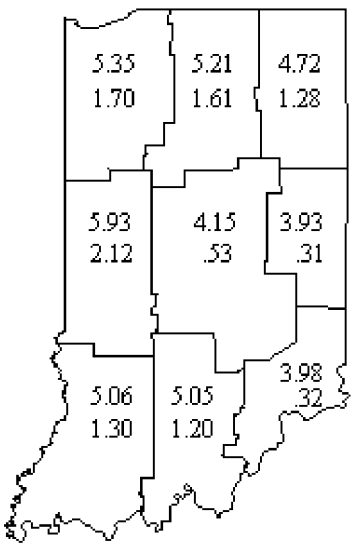
Weather Data

Average Daily Values for week ending Monday morning July 13, 1998

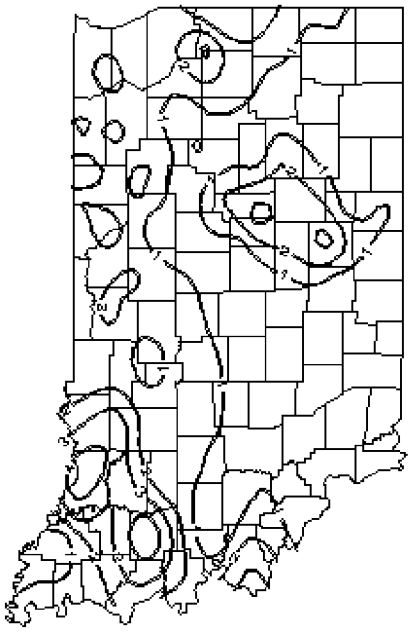
Area	Station	Air Temperature			Precipitation			Growing Degree Days		
		Max	Min	DN	Past Week	Since April 1	DN Since April 1	Past Week	Since April 1	DN Since April 1
NW	Wanatah	82	57	-3	1.72	16.00	+2.94	141	1509	+228
	Kentland	83	63	-1	1.38	18.26	+5.08	162	1647	+207
	Winamac	81	62	-1	.41	14.61	+1.72	156	1598	+205
NC	South Bend	81	63	-1	.22	12.18	-.48	157	1541	+224
	Waterford Mills	83	61	-1	1.55	13.07	+1.32	157	1594	+233
NE	Prairie Heights	82	62	+1	.93	12.00	-.16	156	1583	+407
	Columbia City	81	61	-1	.73	13.46	+.85	152	1543	+272
	Fort Wayne	80	61	-3	.22	14.58	+2.82	150	1611	+213
	Bluffton	81	63	-2	.61	14.13	+1.20	157	1641	+196
WC	West Lafayette	82	62	-1	1.95	21.40	+8.57	157	1696	+289
	Perrysville	82	66	-1	1.57	22.04	+7.54	173	1742	+83
	Crawfordsville	83	60	-1	1.44	19.50	+6.69	156	1639	+223
	Terre Haute 8s	86	67	+1	1.34	20.91	+7.00	185	1879	+289
C	Tipton	81	63	-1	.57	19.75	+6.92	156	1558	+178
	Indianapolis	83	66	+0	.65	23.36	+10.38	177	1765	+186
	Indian Creek	84	66	+1	1.10	20.77	+7.41	177	1760	+275
EC	Farmland	83	64	+1	2.43	19.86	+7.00	168	1621	+308
	Liberty	83	63	-1	1.14	20.65	+6.74	164	1669	+183
SW	Vincennes	85	67	+0	3.51	27.24	+12.90	181	1853	+205
	Dubois	85	66	+0	1.19	20.04	+4.86	178	1812	+219
	Evansville	87	71	+1	1.19	19.94	+6.02	202	2005	+184
SC	Bedford	84	66	+0	1.96	30.05	+15.58	176	1727	+210
	Louisville	86	71	+2	1.87	20.54	+6.42	201	2028	+254
SE	Butlerville	83	65	-1	1.13	24.91	+11.01	171	1755	+85

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

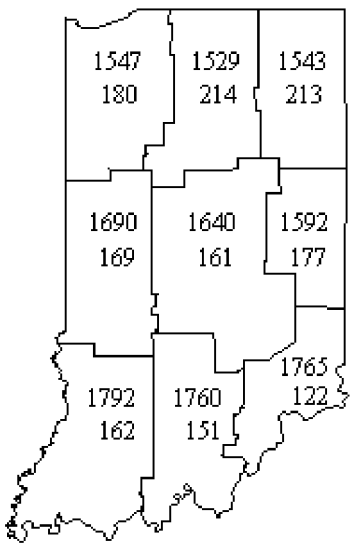
Rainfall for Past 4 Weeks and Departure from Normal



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



Growing Degree Days and Departure since April 1



The above information is provided by Ken Scheeringa, Indiana State Climatologist (765)494-8105
E-mail: kscheeringa@dept.agry.purdue.edu http://shadow.agry.purdue.edu

Questions (continued)

How Can I Apply N to Four Foot Tall Corn?

Tall corn requires the use of high clearance ground equipment such as a high boy. Care must be exercised to ensure that N solutions applied are not sprayed directly on the foliage as they will cause extensive foliar burn. Fitting the machine with drop hoses which deliver the fertilizer in a solid stream on the ground is preferred. Hoses should be long enough to drag on the ground. A weight attached to the hose helps it to drag true through the row.

Can I Broadcast Urea and 28-0-0 Solutions "Over the Top"?

Using broadcast applications of urea and 28 percent N solution to sidedress N will cause some burn to foliar tissue of corn plants. Damage results when urea granules or 28 percent UAN solution get inside the leaf whorl of corn plants.

The severity of injury is determined by the plant's stage of growth, the amount of N used and form of N. If the plant growing point is at or below the soil surface (or when plant has six fully expanded leaves or less), the extent of foliar injury caused by burn will usually be negligible if the N rate is kept below 50 lb/acre. Even at higher N rates and later vegetative growth stages (up to V6) the injury from leaf burn is normally not so severe that it outweighs the potential benefits received from the N addition. The degree of this plant burning is less with urea granules than with other N products.

Dribbling 28 percent solution with drop nozzles as a narrow band on the soil surface is an alternative approach that can help reduce foliar burning. Dribbling 28 percent is also a more efficient use of N than broadcast surface application because it helps reduce N volatilization.

Can I Apply N to Every Other Row?

Research in Indiana, Illinois and Iowa has all shown that farmers can knife ammonia or N solutions in every other row middle (60 vs. 30 inch spacing) with no reduction in yield. The only caution is that extra attention must be paid, especially in wet conditions, that no knives plug with soil. A plugged knife in 60 inch spacing gives 4 rows with no N and will seriously reduce yields.

What About Aerial Application?

Aerial applications of granular fertilizers such as urea or ammonium nitrate can be made to growing corn. Unsightly burn spots will result where fertilizer granules fall into the whorl. However yield reductions will be minimal. N solutions should not be applied by air due to the problem of foliar burn. Even at higher N rates and later vegetative growth stages the injury from leaf burn is normally not so severe that it outweighs the potential.

--Peter Thomison and Jay Johnson, Ohio State University

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