

FERTILIZER USAGE

FERTILIZER USAGE ON ACREAGE HARVESTED FOR GRAIN INDIANA, 2005

Fertilizer	Crop	Percent Acres	Average Number	Rate Per Treatment	Total ^{1/} Applied
Nitrogen	Corn	100	2.2	67	869,300
Phosphate	Corn	93	1.4	56	420,200
Potash	Corn	88	1.1	111	648,200
^{1/} Totals may not compute due to rounding.					

CLASSIFIED FERTILIZER SALES INDIANA, 2000-2005 ^{1/}

Year by Seasons ^{2/}	Total Tons Fertilizer	Tons Based on Actual Nutrients		
		N	P ₂ O ₅	K ₂ O
2000 Fall	634,648	81,431	66,162	168,796
2001 Spring	1,648,897	434,531	134,809	216,407
2000-2001 Total	2,283,545	515,962	200,971	385,203
2001 Fall	628,403	84,008	69,135	173,888
2002 Spring	1,521,002	378,369	124,821	209,191
2001-2002 Total	2,149,405	462,377	193,956	383,079
2002 Fall	703,126	102,256	76,497	180,499
2003 Spring	1,551,387	403,630	121,163	199,218
2002-2003 Total	2,254,513	505,886	197,660	379,717
2003 Fall	529,433	81,525	55,294	126,283
2004 Spring	1,881,831	489,080	148,430	254,095
2003-2004 Total	2,411,264	570,605	203,724	380,378
2004 Fall	794,328	111,834	89,709	195,927
2005 Spring	1,724,345	474,556	143,012	212,304
2004-2005 Total	2,518,673	586,390	232,721	408,231
2005 Fall	675,784	105,007	73,894	154,820
^{1/} Data from Indiana State Chemist, Department of Biochemistry, Purdue University.				
^{2/} The spring season includes January 1 through June 30 and the fall season includes July 1 through December				

CHEMICAL USAGE

INDIANA PESTICIDE USAGE

Herbicides were used on 97 percent of Indiana's 5.9 million **CORN** acres during 2005 while insecticides were applied to 41 percent of the acreage. Atrazine, commonly known as Atrazine 80, Bicep II Magnum, and Guardsman, was Indiana's most widely used herbicide, applied to 80 percent of the state's acreage. S-Metolachlor, known as Bicep II Magnum, Cinch, and Sequence, was applied to 38 percent of the acreage.

HERBICIDE AND INSECTICIDE USAGE CORN, INDIANA, 2005

	Acres Planted	Percent	Total	Percent of
	Corn			
Herbicide	5,900	97	14,136	108
Insecticide	5,900	41	722	55

MAJOR CHEMICAL USAGE, INDIANA, 2003, 2005

Chemical (Trade Name)	Percent Acres		Rate Per		Total ^{1/}	
	2003	2005	2003	2005	2003	2005
Corn						
Herbicides						
2,4-D, 2-EHE (Barrage, Double Up B+D, Outlaw)	9	4	0.33	0.43	166	110
Acetochlor (Confidence, Harness, TopNotch)	33	23	1.97	1.82	3,621	2,470
Atrazine (Atrazine 80, Bicep II Magnum, Guardsman)	83	80	1.25	1.19	5,814	5,670
Clopyralid (Accent Gold, Curtail M, Stinger)	3	1	0.11	0.14	20	11
Dicamba, Dimet. salt (Banvel + 2,4-D, Weedmaster)	10	3	0.12	0.12	71	23
Dicamba, Sodium salt (Celebrity Plus, Dicamba SG,	*	4	*	0.11	*	26
Diflufenzopyr-sodium (Celebrity Plus, Distinct)	3	4	0.03	0.04	6	10
Flufenacet (Axiom DF, DEFINE SC, Epic)	*	6	*	0.05	*	153
Flumetsulam (Accent Gold, Hornet, Scorpion III)	5	3	0.06	0.04	18	8
Foramsulfuron (Equip Corn Herbicide, Option)	*	4	*	0.03	*	6
Glyphosate iso. salt (Accord, Durango, Roundup Ultra)	*	14	*	0.96	*	772
Glyphosate (Glyphomax XRT, Sequence, Touchdown)	10	*	0.75	*	430	*
Imazapyr (Lightning DG)	*	5	*	0.01	*	4
Imazethapyr (Lightning DG, Pursuit DG, Resolve SG)	*	5	*	0.04	*	13
Isoxaflutole (Balance Pro, Balance WDG, Epic)	10	10	0.06	0.05	34	30
Mesotrione (Callisto, Lexar Herbicide, Lumax)	6	31	0.15	0.15	50	265
Metolachlor (Bicep 6L, Dual 8E, Me-Too-Lachlor)	5	*	1.53	*	390	*
Nicosulfuron (Accent, Basis Gold, Steadfast ATZ)	6	8	0.02	0.02	6	9
Primisulfuron (Northstar, Spirit)	10	5	0.02	0.03	14	8
Rimsulfuron (Accent, Basis, Matrix)	5	5	0.01	0.02	4	5
S-Metolachlor (Bicep II Magnum, Cinch, Sequence)	22	38	1.32	1.34	1,623	3,001
Simazine (Princep 4L, Sim-Trol 4L, Simazine 90DF)	4	9	0.79	1.24	165	638
Insecticides						
Chlorpyrifos (Lorsban 4E, Nufos 15G, Warhawk)	9	6	1.21	1.34	621	510
Cyfluthrin (Granular, Aztec 4.67%, Leverage 2.7)	14	8	0.01	0.01	5	3
Fipronil (Regent 4 SC, Regent 80 WG)	4	*	0.12	*	26	*
Tebupirimphos (Aztec 2.1% Granular, Aztec 4.67%	14	8	0.11	0.11	90	51
Tefluthrin (Force 3G)	15	20	0.11	0.11	93	126
Terbufos (Counter, Counter 20CR)	6	*	1.37	*	473	*
* Insufficient reports to publish data. ^{1/} Totals may not compute due to rounding.						

PEST MANAGEMENT PRACTICES

PEST MANAGEMENT PRACTICES, PERCENT OF ACRES RECEIVING PRACTICE INDIANA

Practice	2005	2004	2000			
	Corn	Soybeans	All Wheat	Alfalfa Hay	Other Hay	All Other Crops
	Percent		Percent			
Prevention Practices:						
No-till/minimum till used to manage pests	59	59	55	35	29	43
Remove or plow down crop residue	24	11	33	12	11	23
Clean implements after fieldwork	37	19	62	38	22	58
Field cultivated for weed control		2				
Field edges/etc. chopped, mowed/etc.	41	46				
Water management practices			13	12	11	10
Avoidance Practices:						
Adjust planting/harvesting dates	13	1	35	14	5	35
Rotate crops to control pests	89	78	78	37	15	72
Planting locations planned to avoid pests	8	6	35	11	6	40
Grow trap crop to control insects			3	**	**	4
Crop variety chosen for pest resistance	42	37				
Monitoring Practices:						
Scouting by general observation	37	42				
Deliberate scouting activities	53	48				
Field was not scouted	10	10				
Scouted for pests	15					
Established scouting process/insect trap used		11				
Scouting due to pest advis. warning/devel.	18	12				
Scouted for weeds	89	90	48	38	21	55
Scouting for weeds was done by :						
Operator, partner, or family member	85	87				
An employee	1	1				
Farm supply or chemical dealer	9	8				
Indep. crop consultant or comm. scout	4	4				
Scouted for insects and mites	70	66				
Scouting for insects/mites was done by :						
Operator, partner, or family member	75	87				
An employee						
Farm supply or chemical dealer	18	8				
Indep. crop consultant or comm. scout	7	5				
Scouted for diseases	54	66				
Scouting for diseases was done by :						
Operator, partner, or family member	70	87				
An employee	3					
Farm supply or chemical dealer	18	8				
Indep. crop consultant or comm. scout	9	5				
Records kept to track pests	19	11	22	10	8	26
Field mapping of weed problems	17	6	28	13	5	28
Soil/plant tissue analysis to detect pests	8	3	13	8	2	13
Weather monitoring	52	50	33	14	7	36
Suppression Practices:						
Biological pesticides	2	1	8	2	3	6
Beneficial organisms			2	3	6	4
Scouting used to make decisions	23	18				
Maintain ground cover or physical barriers	28	19	34	15	13	32
Adjust planting methods	7	10	12	2	5	22
Alternate pesticides with different MOA	22	16	43	16	8	45
** Less than 1 percent						

PEST MANAGEMENT PRACTICES

PEST MANAGEMENT PRACTICES, PERCENT OF FARMS UTILIZING PRACTICE INDIANA, (Continued)

Practice	2005	2004	2000			
	Corn	Soybeans	All Wheat	Alfalfa Hay	Other Hay	All Other Hay
	Percent		Percent			
Prevention Practices:						
No-till/minimum till used to manage pests	63	59	46	37	37	36
Remove or plow down crop residue	22	9	23	11	10	22
Clean implements after fieldwork	35	16	48	35	28	38
Field cultivated for weed control		3				
Field edges/etc. chopped, mowed/etc.	39	46				
Water management practices			11	7	7	9
Avoidance Practices:						
Adjust planting/harvesting dates	10	3	25	14	7	16
Rotate crops to control pests	89	78	71	31	18	50
Planting locations planned to avoid pests	12	5	24	9	5	23
Grow trap crop to control insects			2	**	**	3
Crop variety chosen for pest resistance	38	36				
Monitoring Practices:						
Scouting by general observation	41	43	38	31	17	39
Deliberate scouting activities	49	45				
Field was not scouted	10	12				
Scouted for pests	8	12				
Established scouting process/insect trap used		12				
Scouting due to pest advis. warning/devel. model	11	88				
Scouted for weeds	89					
Scouting for weeds was done by :		90				
Operator, partner, or family member	87	**				
An employee	2	5				
Farm supply or chemical dealer	9	4				
Indep. crop consultant or comm. scout	3	61				
Scouted for insects and mites	68					
Scouting for insects/mites was done by :		88				
Operator, partner, or family member	80					
An employee		6				
Farm supply or chemical dealer	16	5				
Indep. crop consultant or comm. scout	4	62				
Scouted for diseases	52					
Scouting for diseases was done by :		88				
Operator, partner, or family member	74					
An employee	4	6				
Farm supply or chemical dealer	17	5				
Indep. crop consultant or comm. scout	5	11	14	6	4	11
Records kept to track pests	14	5	21	11	6	15
Field mapping of weed problems	15	3	11	8	3	5
Soil/plant tissue analysis to detect pests	7	53	23	11	7	17
Weather monitoring	49					
Suppression Practices:		**	4	2	3	5
Biological pesticides	1		2	2	**	3
Beneficial organisms		17				
Scouting used to make decisions	17	21	25	13	15	26
Maintain ground cover or physical barriers	32	12	10	3	3	10
Adjust planting methods	7	17	31	16	10	24
Alternate pesticides with different MOA	17					
** Less than 1 percent						