

South Dakota

2001 AGRICULTURAL CHEMICAL USAGE

Released: September 2002

OVERVIEW: *The agricultural chemical use estimates in this report are based on data compiled from the Agricultural Resources Management Study (ARMS) conducted during the fall of 2001. All results refer to on-farm use of commercial fertilizers and pesticides on the 2001 South Dakota corn crop.*

CORN

SOUTH DAKOTA: Nitrogen was applied to 95 percent of South Dakota's 3.80 million acres of corn in 2001. Growers averaged 1.5 applications at the rate of 72 pounds per acre. Phosphate was applied to 69 percent of the corn acreage at the rate of 43 pounds per acre. Potash was applied to 32 percent of the acreage at the rate of 29 pounds per acre.

Herbicide was applied to 96 percent of the acreage, while insecticide was applied to 8 percent of the corn acres. Atrazine was the most popular herbicide for corn, treating 43 percent of the acres at the rate of 0.62 pound per acre. Corn growers used an average of 1.8 applications per acre while applying 73 pounds per treatment. The next most popular herbicides were Acetochlor, used on 29 percent of the acreage and Dicamba used on 27 percent.

NATIONAL: Nitrogen was applied to 96 percent of the 2001 corn acreage in the nineteen states surveyed. Phosphates were applied to 79 percent of the acreage in the states surveyed, while potash was applied to 65 percent of the planted acreage.

Growers treated 98 percent of the corn acreage with herbicides in 2001. Atrazine was the most prevalent with 75 percent of the planted acreage treated. Acetochlor was a distant second, applied to 26 percent of the acres, followed by S-Metolachlor and Dicamba.

For complete data at the National level visit the website www.usda.gov/nass/ and select "Agricultural Chemical Usage" under Publications, Reports by Commodity.

CORN, SOUTH DAKOTA, SELECTED YEARS

Acreage, Percent Receiving Fertilizer and Pesticides, Number of Applications, Rate per Application

| Year | Area Planted | Nitrogen | | | Phosphate | | | Potash | | | Herbicide | Insecticide |
|------|--------------|--------------|--------------|----------------------|--------------|--------------|----------------------|--------------|--------------|----------------------|--------------|--------------|
| | | Area Applied | Applications | Rate Per Application | Area Applied | Applications | Rate Per Application | Area Applied | Applications | Rate Per Application | Area Applied | Area Applied |
| | 1,000 Acres | Percent | Number | Lbs/Acre | Percent | Number | Lbs/Acre | Percent | Number | Lbs/Acre | Percent | Percent |
| 1999 | 3,600 | 98 | 1.5 | 60 | 88 | 1.1 | 37 | 49 | 1.0 | 24 | 95 | 18 |
| 2000 | 4,300 | 99 | 1.5 | 63 | 92 | 1.0 | 36 | 39 | 1.0 | 21 | 97 | 29 |
| 2001 | 3,800 | 95 | 1.5 | 72 | 69 | 1.0 | 43 | 32 | 1.0 | 29 | 96 | 8 |

CORN, SELECTED STATES, 2001

Acreage, Percent Receiving Fertilizer and Pesticides, Number of Applications, Rate per Application

| State | Area Planted | Nitrogen | | | Phosphate | | | Potash | | | Herbicide | Insecticide |
|----------|--------------|--------------|--------------|----------------------|--------------|--------------|----------------------|--------------|--------------|----------------------|--------------|--------------|
| | | Area Applied | Applications | Rate Per Application | Area Applied | Applications | Rate Per Application | Area Applied | Applications | Rate Per Application | Area Applied | Area Applied |
| | 1,000 Acres | Percent | Number | Lbs/Acre | Percent | Number | Lbs/Acre | Percent | Number | Lbs/Acre | Percent | Percent |
| IA | 11,700 | 87 | 1.5 | 83 | 62 | 1.0 | 53 | 60 | 1.0 | 66 | 99 | 7 |
| MN | 6,800 | 97 | 1.6 | 69 | 90 | 1.0 | 43 | 81 | 1.0 | 57 | 99 | 1/ |
| ND | 800 | 94 | 1.6 | 65 | 83 | 1.1 | 40 | 38 | 1.0 | 31 | 90 | 1/ |
| SD | 3,800 | 95 | 1.5 | 72 | 69 | 1.0 | 43 | 32 | 1.0 | 29 | 96 | 8 |
| Total 2/ | 70,745 | 96 | 1.8 | 73 | 79 | 1.1 | 50 | 65 | 1.1 | 75 | 98 | 29 |

1/ Insufficient reports to publish data. 2/ Refers to the 19 major corn states, which account for 93 percent of the U.S. acreage.



CORN, SOUTH DAKOTA, 2001
Frequency and Extent of Chemical Usage by Active Ingredient

| Active Ingredient | Common Trade Name | Area Applied | Applications | Rate Per Application | Rate Per Crop Year | Total Applied |
|--------------------|-------------------|--------------|--------------|-------------------------|--------------------|---------------|
| | | Percent | Number | --- Pounds Per Acre --- | | 1,000 Pounds |
| 2,4-D | 1/ | 4 | 1.0 | 0.54 | 0.54 | 86 |
| Acetochlor 1/ | Harness, Surpass | 29 | 1.0 | 1.31 | 1.31 | 1,468 |
| Atrazine 1/ | Atrazine | 43 | 1.0 | 0.62 | 0.67 | 1,086 |
| Bromoxynil | Buctril | 9 | 1.0 | 0.22 | 0.22 | 70 |
| Clopyralid 1/ | Stinger | 15 | 1.0 | 0.13 | 0.13 | 74 |
| Dicamba 1/ | Banvel, Clarity | 27 | 1.0 | 0.16 | 0.16 | 161 |
| Dicamba, Pot. Salt | Marksman | 3 | 1.0 | 0.32 | 0.32 | 34 |
| Dimethenamid 1/ | Frontier | 4 | 1.0 | 1.52 | 1.52 | 253 |
| EPTC | Eradicane | 3 | 1.0 | 3.43 | 3.43 | 440 |
| Flumetsulam 1/ | Python | 16 | 1.0 | 0.05 | 0.05 | 28 |
| Glyphosate 1/ | Roundup | 20 | 1.3 | 0.70 | 0.96 | 717 |
| Isoxaflutole | Balance | 8 | 1.0 | 0.09 | 0.09 | 27 |
| Metolachlor 1/ | Dual II | 5 | 1.0 | 1.22 | 1.22 | 244 |
| Nicosulfuron 1/ | Accent | 19 | 1.0 | 0.02 | 0.02 | 14 |
| Primisulfuron 1/ | Beacon | 11 | 1.0 | 0.02 | 0.02 | 9 |
| Rimsulfuron 1/ | Basis | 11 | 1.0 | 0.01 | 0.01 | 4 |
| S-Metolachlor 1/ | Dual II Magnum | 11 | 1.0 | 1.98 | 1.98 | 840 |

1/ Chemical marketed under several trade names.

STATES INCLUDED IN SURVEY: CO, GA, IL, IN, IA, KS, KY, MI, MN, MO, NE, NY, NC, ND, OH, PA, SD, TX, WI.

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| <p>Carter Anderson, State Statistician Stephen W. Noyes, Deputy State Statistician</p> |
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