

**2002 SOYBEAN CHEMICAL USAGE**

Nitrogen fertilizer was applied to 20% of the total 2002 soybean acreage in the 20 Program States which includes Arkansas, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, North Carolina, North Dakota, Ohio, South Dakota, Tennessee, Virginia, and Wisconsin. Growers used an average of 1.1 applications per acre while applying an average of 19 pounds of nitrogen per treatment. In the Program States, 26% of the soybean planted acreage received a phosphate application and 29% received a potash application.

Herbicides were applied to 99% of the 20-state, soybean-planted acreage in 2002, while insecticides were applied to 6%. In Minnesota, glyphosate continued to be the most widely applied herbicide with 70% of the reported acreage being treated. Trifluralin, the next most widely used herbicide, was applied to 14% of the soybean acreage and Imazethapyr was applied to 10%. The amount of Minnesota soybean acreage receiving fungicides or insecticides was too small to report.

**SOYBEANS: Acreage, Percent Receiving Chemicals,  
Number of Applications, Rates per Application, Selected States, 2002**

State	Area Planted 1,000 Acres	Nitrogen			Phosphate			Potash			Herbicide	Insecticide
		Area Applied 1/	Appli- cations	Rate per Appli- cation	Area Applied 1/	Appli- cations	Rate per Appli- cation	Area Applied 1/	Appli- cations	Rate per Appli- cation	Area Applied 1/	Area Applied 1/
		Percent	Number	Pounds	Percent	Number	Pounds	Percent	Number	Pounds	Percent	Percent
IA	10,400	3	1.0	26	7	1.0	70	12	10.0	120	99	9
<b>MN</b>	<b>7,200</b>	<b>11</b>	<b>1.0</b>	<b>20</b>	<b>12</b>	<b>1.0</b>	<b>38</b>	<b>10</b>	<b>1.0</b>	<b>52</b>	<b>99</b>	<b>2/</b>
SD	4,250	37	1.1	18	41	1.0	54	15	1.4	27	100	19
WI	1,540	40	1.0	14	35	1.0	35	48	1.0	73	86	2/
<b>Total 3/</b>	<b>71,670</b>	<b>20</b>	<b>1.1</b>	<b>19</b>	<b>26</b>	<b>1.0</b>	<b>48</b>	<b>29</b>	<b>1.0</b>	<b>87</b>	<b>99</b>	<b>6</b>

1/ Refers to acres receiving one or more applications of a specific chemical.

2/ Data not published due to insufficient number of reports.

3/ Refers to twenty major soybean states including: AR, IL, IN, IA, KS, KY, LA, MD, MI, MN, MO, MS, NC, ND, NE, OH, SD, TN, VA, and WI

**SOYBEANS: Frequency and Extent of Chemical Usage  
By Active Ingredient, Minnesota, 2002 1/**

Active Ingredient	Area Applied 2/	Applications	Rate per Application	Rate per Year	Total Applied
	Percent	Number	Pounds	Pounds	1,000 Pounds
<b>Herbicides</b>					
Fenoxaprop	4	1.0	0.10	0.10	30
Fluazifop-P-butyl	4	1.0	0.04	0.04	13
Fomesafen	7	1.0	0.20	0.20	95
Glyphosate	70	1.2	0.74	0.90	4,516
Glyphosate diam salt	9	1.7	0.67	1.16	732
Imazamox	6	1.0	0.02	0.02	10
Imazethapyr	10	1.0	0.05	0.05	38
Pendimethalin	9	1.0	0.91	0.91	561
Thifensulfuron	2	1.0	0.003	0.003	3/
Trifluralin	14	1.0	0.77	0.77	761

1/ Planted acres in 2002 for Minnesota were 7.20 million acres.

2/ Refers to acres receiving one or more applications of a specific chemical.

3/ Total applied is less than 1,000 lbs.