



## 2015 AGRICULTURAL CHEMICAL USE SURVEY

# Oats

### About the Survey

The Agricultural Chemical Use Program of USDA's National Agricultural Statistics Service (NASS) is the federal government's official source of statistics about on-farm and post-harvest commercial fertilizer and pesticide use and pest management practices. NASS conducts field crop agricultural chemical use surveys as part of the Agricultural Resource Management Survey.

NASS conducted the oat chemical use survey in fall 2015.

### Access the Data

Access 2015 chemical use data, as well as results from prior surveys of oats chemical use, through the Quick Stats 2.0 database (<http://quickstats.nass.usda.gov>).

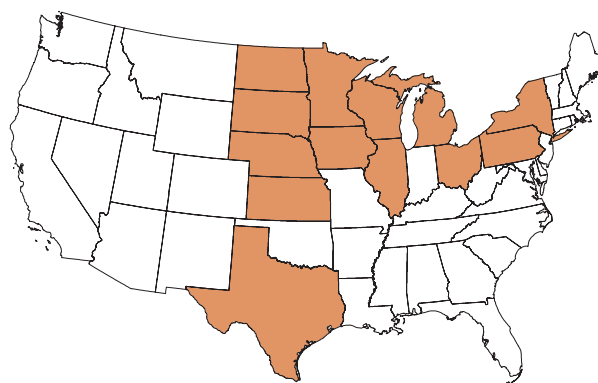
- In Program, select "Survey"
- In Sector, select "Environmental"
- In Group, select "Field Crops"
- In Commodity, select "Oats"
- Select your category, data item, geographic level, and year

For pre-defined Quick Stats queries, go to <http://bit.ly/AgChem> and click "Data Tables" under the 2015 Cotton, Oats, Soybeans and Wheat heading. For methodology information, go to <http://bit.ly/AgChem> and click "Methodology."

The 2015 Agricultural Chemical Use Survey collected data about fertilizer and pesticide use as well as pest management practices in growing oats. NASS conducted the survey among oat producers in 13 states that accounted for 77 percent of the 3.1 million acres planted to oats in the United States in 2015: Illinois, Iowa, Kansas, Michigan, Minnesota, Nebraska, New York, North Dakota, Ohio, Pennsylvania, South Dakota, Texas, and Wisconsin (Fig. 1).

Data are for the 2015 crop year, the one-year period beginning after the 2014 harvest and ending after the 2015 harvest.

**Fig. 1. States in the 2015 Oats Chemical Use Survey**



### Fertilizer Use

Fertilizer refers to a soil-enriching input that contains one or more plant nutrients, primarily nitrogen (N), phosphate (P<sub>2</sub>O<sub>5</sub>), and potash (K<sub>2</sub>O). For the 2015 crop year, farmers applied nitrogen to 76 percent of planted acres, at an average rate of 51 pounds per acre, for a total of 92.5 million pounds. They applied phosphate to 62 percent of oat planted acres and potash to 40 percent of acres. (Table 1)

**Table 1. Fertilizer Applied to Oat Planted Acres, 2015 Crop Year**

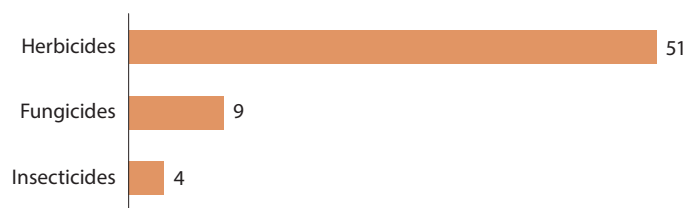
	% of Planted Acres	Avg. Rate for Year (lbs/acre)	Total Applied (mil lbs)
Nitrogen (N)	76	51	92.5
Phosphate (P <sub>2</sub> O <sub>5</sub> )	62	33	49.6
Potash (K <sub>2</sub> O)	40	36	34.2

## Pesticide Use

The pesticide active ingredients used on oats are classified in this report as herbicides (targeting weeds), insecticides (targeting insects), fungicides (targeting fungal disease), and other chemicals (targeting all other pests and other materials, including extraneous crop foliage). Herbicides were used most extensively, applied to 51 percent of planted acres. Fungicides and insecticides were applied to 9 and 4 percent of planted acres, respectively. (Fig. 2)

Among herbicides, 2,4-D, dimethylamine salt was the most widely used active ingredient (applied to 15 percent of planted acres), followed by glyphosate isopropylamine salt (11 percent). (Table 2)

**Fig. 2. Pesticides Applied to Oat Planted Acres, 2015 Crop Year**  
(% of planted acres)



**Table 2. Top Herbicides Applied to Oat Planted Acres, 2015 Crop Year**

Active Ingredient	% of Planted Acres	Avg. Rate for Year <sup>a</sup> (lbs/acre)	Total Applied <sup>a</sup> (lbs)
2,4-D, dimethylamine salt	15	0.473	166,000
Glyphosate isopropylamine salt	11	0.776	197,000
2,4-D, 2-EHE	7	0.528	83,000
MCPA, dimethylamine salt	7	0.373	58,000
Clopyralid monoethanolamine salt	7	0.128	21,000
Fluroxypyr 1-MHE	7	0.104	17,000

<sup>a</sup> Expressed in acid equivalent.

## Pest Management Practices

The survey asked growers to report on the practices they used to manage pests, including weeds, insects, or diseases. Oat growers reported practices in four categories: prevention, avoidance, monitoring, and suppression (PAMS).

- *Prevention* practices involve actions to keep a pest population from infesting a crop or field.
- *Avoidance* practices use cultural measures to mitigate or eliminate detrimental effects of pests.
- *Monitoring* practices involve observing or detecting pests through sampling, counting, or other forms of scouting.
- *Suppression* practices involve controlling or reducing existing pest populations to mitigate crop damage.

The most widely used pest prevention practice in growing oats was no-till or minimum till, used on 48 percent of planted acres. The top avoidance practice was rotating crops (77 percent). Scouting for weeds was the most widely used monitoring practice (76 percent), and maintaining ground covers, mulches, or other physical barriers was the top suppression practice (44 percent). (Table 3)

The same practices were either the first or second most widely used practice in a similar survey in 2005.

**Table 3. Top Practice in Pest Management Category, 2015**  
(% of oat planted acres)

<i>Prevention</i> : Used no-till or minimum till	48
<i>Avoidance</i> : Rotated crops during last three years	77
<i>Monitoring</i> : Scouted for weeds (deliberately, or by general observations while performing tasks)	76
<i>Suppression</i> : Maintained ground covers, mulches, or other physical barriers	44

### Surveyed States: Acres of Oats Planted, 2015

U.S. Total	thousands of acres 3,088	% of U.S. 100
Texas	520	16.8
South Dakota	325	10.5
Minnesota	280	9.1
Wisconsin	280	9.1
North Dakota	275	8.9
Nebraska	135	4.4
Iowa	125	4.0
Kansas	95	3.1
Pennsylvania	95	3.1
Michigan	75	2.4
New York	70	2.3
Ohio	70	2.3
Illinois	40	1.3
<b>Total, Surveyed States</b>	<b>2,385</b>	<b>77.2</b>

Numbers may not add due to rounding.