

2018 AGRICULTURAL CHEMICAL USE SURVEY

Peanuts

Six states . . .

. . . accounted for 93 percent of U.S. acres planted to peanuts in 2018.

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 in cooperation with USDA's Economic Research Service as part of the Agricultural Resource Management Survey. NASS conducted the peanut chemical use survey in the fall of 2018.

Access the Data

Access 2018 and earlier peanut chemical use data through the Quick Stats database (<https://quickstats.nass.usda.gov/>).

- In Program, select "Survey"
- In Sector, select "Environmental"
- In Group, select "Field Crops"
- In Commodity, select "Peanuts"
- 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 2018 Corn, Peanut, and Soybean heading. For methodology information, click "Methodology."

The 2018 Agricultural Chemical Use Survey of peanut producers collected data about fertilizer and pesticide use as well as pest management practices in growing peanuts. NASS conducted the survey in six states that accounted for 93 percent of the 1.4 million acres planted to peanuts in the United States in 2018: Alabama, Florida, Georgia, North Carolina, South Carolina, and Texas (Fig. 1 and box on p. 2).

Fig. 1. States in the 2018 Peanut Chemical Use Survey



Data are for the 2018 crop year, the one-year period beginning after the 2017 harvest and ending after the 2018 harvest.

Fertilizer Use

Fertilizer refers to a soil-enriching input that contains one or more plant nutrients. For the 2018 crop year, farmers applied nitrogen and phosphate to 32 percent of acres planted to peanuts, at an average rate of 32 and 38 pounds per acre, respectively. They applied potash and sulfur to 33 and 12 percent of peanut planted acres, at an average rate of 68 and 14 pounds per acre, respectively. (Table 1)

Table 1. Fertilizer Applied to Peanut Planted Acres, 2018 Crop Year

	% of Acres with Nutrient ^a	Average Rate (lbs/acre)	Total Applied (mil lbs)
Nitrogen (N)	32	32	13.5
Phosphate (P ₂ O ₅)	32	38	16.1
Potash (K ₂ O)	33	68	30.2
Sulfur (S)	12	14	2.1

^aAcres with multiple nutrients are counted in each category.



Pesticide Use

The pesticide active ingredients used on peanuts are classified 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 94 percent of planted acres. Fungicides and insecticides were applied to 88 and 37 percent of planted acres, respectively. (Fig. 2)

Among herbicides, flumioxazin was the most widely used active ingredient (applied to 65 percent of planted acres), followed by pendimethalin and s-metolachlor (each applied to 34 percent). (Table 2)

Fig. 2. Pesticides Applied to Peanut Planted Acres, 2018 Crop Year
(% of planted acres)

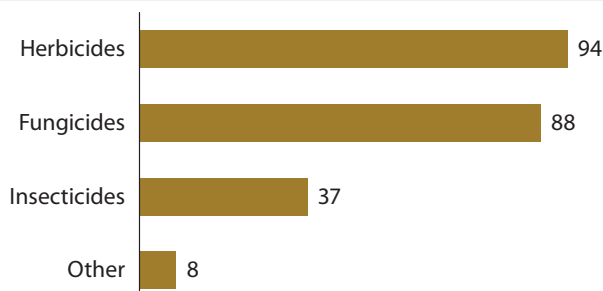


Table 2. Top Herbicides Applied to Peanut Planted Acres, 2018 Crop Year

Active Ingredient	% of Acres with Ingredient ^a	Average Rate (lbs/acre)	Total Applied (lbs)
Flumioxazin	65	0.104	90,000
Pendimethalin	34	0.831	376,000
S-metolachlor	34	1.336	598,000
2,4-D; dimethylamine salt	31	0.354 ^b	146,000 ^b
Imazapic-ammonium	31	0.070	29,000

^aAcres with multiple ingredients are counted in each category.

^bExpressed in acid equivalent.

Pest Management Practices

The survey asked growers to report on the practices they used to manage pests, defined as weeds, insects, or diseases. Peanut 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 the detrimental effects of pests.
- *Monitoring* practices involve observing or detecting pests through systematic 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 peanuts was cleaning equipment and implements after field work to reduce the spread of pests, used on 67 percent of planted acres. The top avoidance practice was rotating crops (84 percent). Scouting for weeds was the most widely used monitoring practice (96 percent). Maintaining ground covers, mulches or other physical barriers and using pesticides with different mechanisms of action were the top suppression practices (each with 42 percent). (Table 3)

Table 3. Top Practice in Pest Management Category, 2018
(% of peanut planted acres)

<i>Prevention:</i> Cleaned equipment and implements after field work	67
<i>Avoidance:</i> Rotated crops during past three years	84
<i>Monitoring:</i> Scouted for weeds (deliberately, or by general observations while performing tasks)	96
<i>Suppression:</i> Maintained ground covers, mulches, or other physical barriers	42 ^a
Used pesticides with different mechanisms of action	42 ^a

^aThe same acres may have both practices.

Surveyed States: Acres of Peanuts Planted, 2018

U.S. Total	thousands of acres	% of U.S.
	1,425.5	100
Georgia	665.0	46.7
Alabama	165.0	11.6
Florida	155.0	10.9
Texas	155.0	10.9
North Carolina	102.0	7.2
South Carolina	87.0	6.1
Total, Surveyed States	1,329.0	93.2

Numbers may not add due to rounding.

