United States
Department of
Agriculture

National
Agricultural
Statistics
Service

Agricultural Chemical Usage Postharvest Applications - Peanuts Summary

March 2006

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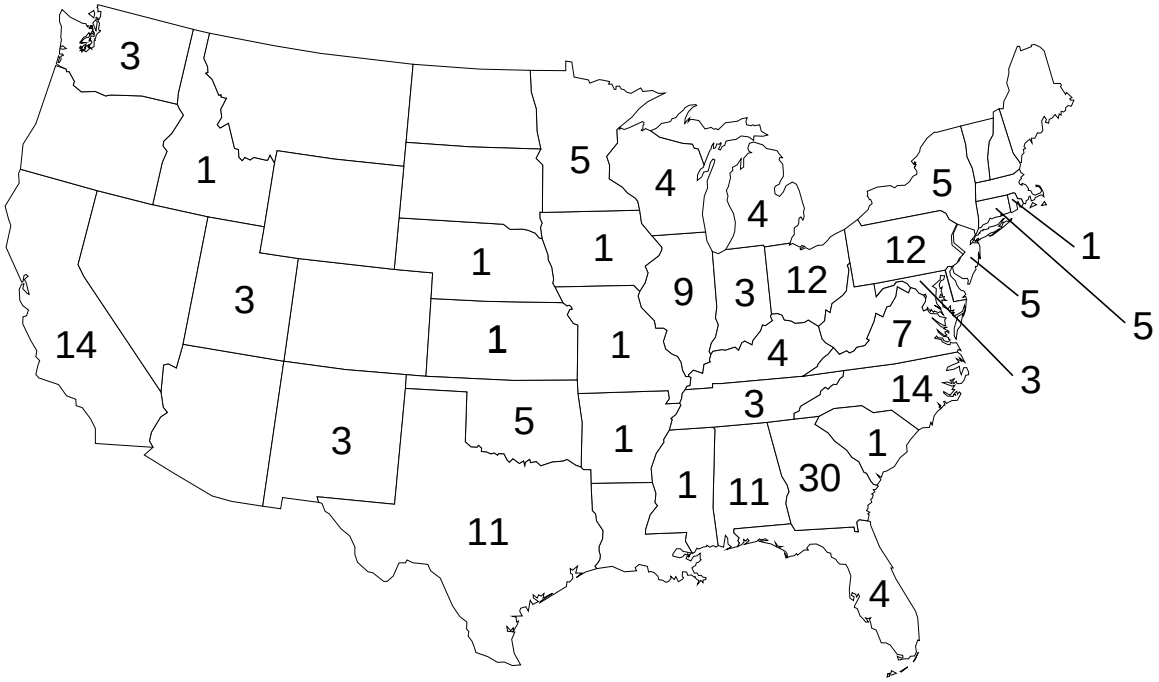
Postharvest Chemical Use Estimates for Peanuts

Overview: The agricultural chemical use estimates in this report are based on data compiled from the 2005 Peanut Postharvest Chemical Use Survey. The Postharvest Survey was conducted for peanuts marketed from August 1, 2004 to July 31, 2005 which covers the 2004 crop. All results refer to pesticide applications and integrated pest management at off-farm storage and processing facilities after the peanuts were harvested. On-farm postharvest applications were beyond the scope of this survey.

There were 187 peanut storage and processing facility reports summarized across 33 States. The U.S. map shows the number of summarized reports by State. There were insufficient reports to publish data for Arkansas, Florida, Idaho, Indiana, Iowa, Kansas, Kentucky, Maryland, Michigan, Mississippi, Missouri, Nebraska, New Mexico, Rhode Island, South Carolina, Tennessee, Utah, Washington, and Wisconsin for chemical application rates and pest management practices.

Number of Usable Peanut Postharvest Reports 2004-05 Marketing Year

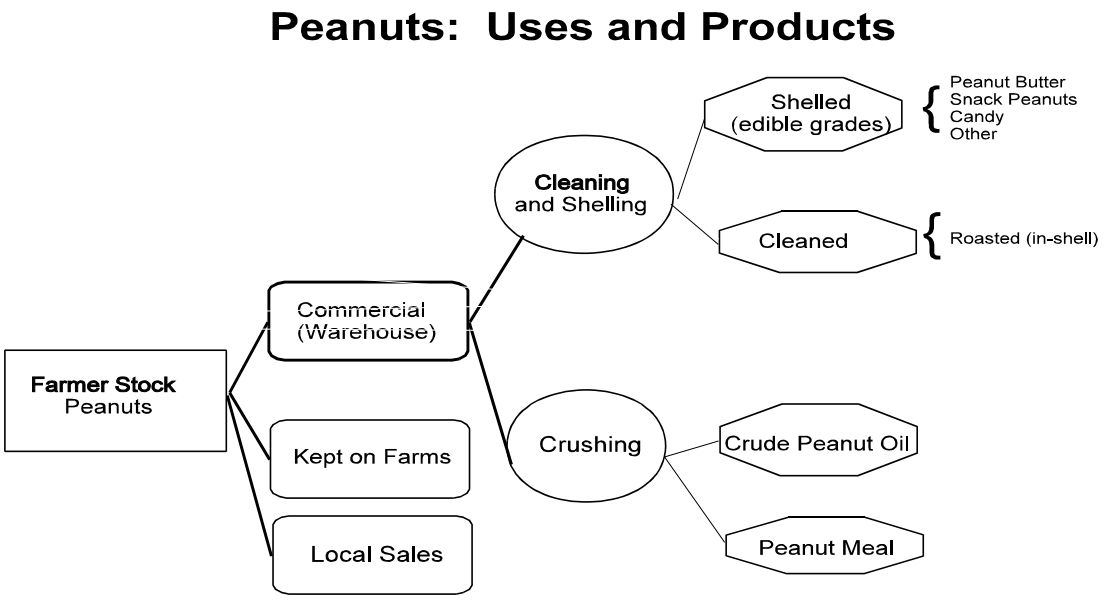


After harvest, the Federal State Inspection Service inspects the peanuts before they are moved into storage facilities or onto peanut shellers and processors. Peanut butter accounts for the largest share of all products made from peanuts. Other products include peanut snacks, peanut candy, and in-shell peanuts. Peanuts are usually marketed through local warehouses or processors. The diagram below shows the traditional postharvest marketing channels for peanuts.

The totals for the All States surveyed, as well as individual State totals where data permit, are published for the percent of peanuts treated, number of applications, rate per application, rate per marketing year, and the total amount of an active ingredient applied. A table detailing total pesticide usage by class for the surveyed States is also included. The State of origin of the peanuts was not part of the survey. Operations included in the 2005 Peanut Postharvest Survey were operations that handle greater than thirty thousand pounds of peanuts annually. The States surveyed include those where peanuts are processed in addition to the major peanut producing States.

Peanuts moving from a warehouse operation to a processing operation will be duplicated in the total amount handled. The intent of this survey was to obtain the entire amount of chemicals applied to the stored peanuts; therefore, this duplication in quantity handled is necessary.

In addition to chemical applications, peanut storage facility operators were also asked a series of questions concerning their pest management practices. Answers to these questions are summarized and included in the report. A copy of the survey instrument used to collect the data is also included.



Highlights

Pesticides: Silicon dioxide and aluminum phosphide were the top two chemicals used on peanuts in 2005, based on total pounds of active ingredients applied. Silicon dioxide is used to control beetles, weevils, moths, and lice. Aluminum phosphide is used to kill insects, insect larvae, and mites.

The following table lists active ingredients applied to peanuts after harvest by State. Of the 15 active ingredients reported, application rate data are provided for six at the All State level and four in Georgia.

Postharvest Chemicals Applied to Peanuts by State, 2004-05 Marketing Year

Active Ingredient	State
Aluminum phosphide	AL, AR, GA, NC, OK, TX, and UT
Captan	NC and OK
Carboxin	NC and OK
Dichlorvos	AL, GA, and NC
Fenvalerate	GA
Magnesium phosphide	GA
Methyl bromide	NE
Octacide-264	AL, GA, and OK
PCNB	NC and OK
Petroleum distillate	GA
Piperonyl butoxide	AL, GA, and OK
Pyrethrins	AL, GA, and OK
Resmethrin	AL and GA
Silica gel	GA and NC
Silicon dioxide	GA and NC

Pest Management Practices: The pest management practices section of the questionnaire asked for mechanical devices or cleaning practices used at the operations surveyed. The timing for inspecting for insects and measuring temperature in the storage bins varies by the season. Therefore, the responses to these pest management questions are organized by "Spring and Summer" and "Fall and Winter."

Peanuts: Postharvest Chemical Applications,
Percent Treated and Total Applied,
States Surveyed and U.S., 2004-05 Marketing Year [1]

State	Volume Handled	Percent Treated and Total Applied					
		Insecticide		Fungicide		Other Chemical	
	1,000 Lbs.	*Percent*	*1,000 Lbs.*	*Percent*	*1,000 Lbs.*	*Percent*	*1,000 Lbs.*
AL	295,756	*	*				
CA	70,106						
GA	3,596,913	45	27.6				
IL	104,471						
MA	62,817						
MN	9,144						
NJ	12,453						
NY	50,917						
NC	653,444	*	*	*	*		
OH	7,845						
OK	254,479	*	*	*	*		
PA	17,478						
TX	246,774	*	*				
VA	137,205						
Oth States	586,896	*	*				
All States	6,106,698	33	29.1	*	*		

* Insufficient reports to publish data.
[1] Blank cells represent no data reported for the item.

Peanuts: Postharvest Chemical Applications, All States, 2004-05 Marketing Year

Agricultural Chemical	Volume Treated	Appli-cations	Rate per Application	Rate per Mkt. Year	Total Applied
	Percent	*Number*	*Pounds per 1,000 Lbs.*	*Pounds per 1,000 Lbs.*	*1,000 Lbs*
Insecticides:					
Aluminum phosphide	24	1.1	0.003	0.003	3.9
Dichlorvos	9	1.0	0.001	0.001	0.5
Octacide-264	6	1.1	*	*	0.1
Piperonyl butoxide	13	1.1	0.004	0.004	3.0
Pyrethrins	13	1.1	*	*	0.3
Silicon dioxide	11	1.0	0.031	0.031	18.1

* Rate applied less than 0.0005 pounds.

Peanuts: Postharvest Chemical Applications, Georgia, 2004-05 Marketing Year

Agricultural Chemical	Volume Treated	Appli-cations	Rate per Application	Rate per Mkt. Year	Total Applied
	Percent	*Number*	*Pounds per 1,000 Lbs.*	*Pounds per 1,000 Lbs.*	*1,000 Lbs*
Insecticides:					
Aluminum phosphide	28	1.1	0.003	0.003	3.1
Dichlorvos	12	1.0	0.001	0.001	0.4
Piperonyl butoxide	18	1.1	0.004	0.005	3.0
Pyrethrins	18	1.1	*	*	0.3

* Rate applied less than 0.0005 pounds.

Peanuts: Pest Management Practices,
Percent of Operations Utilizing Practice,
2004-05 Marketing Year [1] [2]

Practice	State							
	AL	CA	GA	IL	MA	MN	NJ	NY
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Mechanical Devices:								
Aeration controller	27		27					
Deep bin sampler			13			20		
Phosphine pellet dispenser	9		20					
Power probe	36		13					
Re-circulation fumigation device	9		10					
Temperature cable			13	13				
Cleaning Activities:								
Clean dump pits and transfer legs	64	7	77	38		20	60	
Control vegetation around warehouses	100	86	90	88	60	100	80	20
Hose down empty warehouse floors	36	50	73	88	100	20	40	40
Pick up spilled peanuts, clean surrounding areas	100	100	93	88	100	100	100	80
Sweep or vacuum empty warehouse floors	100	100	100	88	100	100	100	40
Use residual insecticides on inner surface of empty warehouses	91	86	47		80		60	
Use rodent traps or bait stations	82	100	93	38	100	100	100	80

Practice	State						
	NC	OH	OK	PA	TX	VA	ALL
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Mechanical Devices:							
Aeration controller	14		20		9		9
Deep bin sampler							3
Phosphine pellet dispenser			20		9		5
Power probe			20				5
Re-circulation fumigation device							2
Temperature cable			20	17		14	6
Cleaning Activities:							
Clean dump pits and transfer legs	86	17	40	33	73	14	42
Control vegetation around warehouses	93	67	100	75	91	71	79
Hose down empty warehouse floors	29	33	100	33	45	29	48
Pick up spilled peanuts, clean surrounding areas	93	83	100	100	91	71	89
Sweep or vacuum empty warehouse floors	86	42	100	92	82	71	86
Use residual insecticides on inner surface of empty warehouses	71	8	100	25	55		40
Use rodent traps or bait stations	93	58	100	92	91	57	82

[1] Descriptions of these items are included in the Terms and Definitons section of this report on pages 18 and 19.
[2] Blank cells represent no data reported for the item.

Peanuts: Pest Management Practices,
Percent of Operations Utilizing Practice,
2004-05 Marketing Year, Spring and Summer [1] [2]

Practice	State							
	AL	CA	GA	IL	MA	MN	NJ	NY
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Inspected for insects:								
Concrete Silos:								
Daily			7					
Twice a week								
Weekly								
Every two weeks					20			
Monthly			3					
Other								
Do not monitor								
Do not have structure	100	100	90	100	80	100	100	100
Flat Storage Warehouses:								
Daily	27	14	33			60	40	
Twice a week			3			40		
Weekly	18	7	10	13			20	20
Every two weeks				25				
Monthly	9		7				20	
Other								
Do not monitor	18	57	13	13			20	
Do not have structure	27	21	33	50	100			80
Other Structures:								
Daily								
Twice a week			3					
Weekly			7	13	20			
Every two weeks	18		7	25				
Monthly	9		7					
Other								
Do not monitor	9		3	13				60
Do not have structure	64	100	73	50	80	100	100	40

--continued

Peanuts: Pest Management Practices,
Percent of Operations Utilizing Practice,
2004-05 Marketing Year, Spring and Summer (continued) [1] [2]

Practice	State						
	NC	OH	OK	PA	TX	VA	ALL
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Inspected for insects:							
Concrete Silos:							
Daily				8	9		2
Twice a week							
Weekly							
Every two weeks	7						1
Monthly							1
Other							
Do not monitor						43	4
Do not have structure	93	100	100	92	91	57	92
Flat Storage Warehouses:							
Daily	14	17		33	9		18
Twice a week		8	20	8	18	14	6
Weekly	21		40	8		14	11
Every two weeks	7						2
Monthly	14	17		8	9		6
Other							
Do not monitor		17		25	18	43	17
Do not have structure	43	42	40	17	45	29	42
Other Structures:							
Daily	29			8	18	14	9
Twice a week			20				1
Weekly	7		20	8	9		4
Every two weeks					9		4
Monthly	7		20				4
Other							
Do not monitor	7	25				43	10
Do not have structure	50	75	40	83	64	43	67

[1] Numbers for each type of structure may not add to 100 due to rounding.
[2] Blank cells represent no data reported for the item.

Peanuts: Pest Management Practices,
Percent of Operations Utilizing Practice,
2004-05 Marketing Year, Fall and Winter [1] [2]

Practice	State							
	AL	CA	GA	IL	MA	MN	NJ	NY
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Inspected for insects:								
Concrete Silos:								
Daily			7					
Twice a week								
Weekly								
Every two weeks					20			
Monthly			3					
Other								
Do not monitor								
Do not have structure	100	100	90	100	80	100	100	100
Flat Storage Warehouses:								
Daily	18	14	30			60	20	
Twice a week	9		3			40		
Weekly	18	7	13	13				20
Every two weeks	9			25			20	
Monthly	9		7				20	
Other								
Do not monitor	9	57	13	13			40	
Do not have structure	27	21	33	50	100			80
Other Structures:								
Daily								
Twice a week	9							
Weekly			7	13				
Every two weeks	18		7	25				
Monthly	9		10					
Other								
Do not monitor			3	13				60
Do not have structure	64	100	73	50	100	100	100	40

--continued

Peanuts: Pest Management Practices,
Percent of Operations Utilizing Practice,
2004-05 Marketing Year, Fall and Winter (continued) [1] [2]

Practice	State						
	NC	OH	OK	PA	TX	VA	ALL
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Inspected for insects:							
Concrete Silos:							
Daily				8	9		2
Twice a week							
Weekly							
Every two weeks							1
Monthly							1
Other							
Do not monitor	7					43	5
Do not have structure	93	100	100	92	91	57	92
Flat Storage Warehouses:							
Daily	14	17		17	9	14	16
Twice a week		8		17	18		5
Weekly	14		40	17		14	11
Every two weeks							2
Monthly	21	17	20	8	9		7
Other							
Do not monitor	7	17		25	18	43	17
Do not have structure	43	42	40	17	45	29	42
Other Structures:							
Daily	29			8	18	14	9
Twice a week							1
Weekly			40	8	9		4
Every two weeks					9		4
Monthly	14		20				5
Other							
Do not monitor	7	25				43	10
Do not have structure	50	75	40	83	64	43	67

[1] Numbers for each type of structure may not add to 100 due to rounding.
[2] Blank cells represent no data reported for the item.

Peanuts: Pest Management Practices,
Percent of Operations Utilizing Practice,
2004-05 Marketing Year, Spring and Summer [1] [2]

Practice	State							
	AL	CA	GA	IL	MA	MN	NJ	NY
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Measure Peanut Temperature:								
Concrete Silos:								
Daily								
Twice a week								
Weekly			10					
Every two weeks								
Monthly								
Other								
Do not monitor			3		20			
Do not have structure	100	100	87	100	80	100	100	100
Flat Storage Warehouses:								
Daily			30			80	40	
Twice a week	9							
Weekly			10					
Every two weeks	9							
Monthly	9						20	
Other								
Do not monitor	45	86	30	50		20	40	20
Do not have structure	27	14	30	50	100			80
Other Structures:								
Daily	9		10					
Twice a week								
Weekly			7					
Every two weeks			3					
Monthly								
Other								
Do not monitor	27		7	50				60
Do not have structure	64	100	73	50	100	100	100	40

--continued

Peanuts: Pest Management Practices,
Percent of Operations Utilizing Practice,
2004-05 Marketing Year, Spring and Summer (continued) [1] [2]

Practice	State						
	NC	OH	OK	PA	TX	VA	ALL
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Measure Peanut Temperature:							
Concrete Silos:							
Daily					9		1
Twice a week							
Weekly				8			2
Every two weeks							
Monthly							
Other							
Do not monitor	7				9	29	5
Do not have structure	93	100	100	92	82	71	92
Flat Storage Warehouses:							
Daily	7	17	40	50	18	14	18
Twice a week							1
Weekly			20	8			4
Every two weeks							1
Monthly		8					1
Other							
Do not monitor	50	33		25	45	43	35
Do not have structure	43	42	40	17	36	43	41
Other Structures:							
Daily					27		6
Twice a week							
Weekly			20	8			2
Every two weeks							1
Monthly							*
Other							
Do not monitor	36	25	40	8	9	57	22
Do not have structure	64	75	40	83	64	43	68

[1] Numbers for each type of structure may not add to 100 due to rounding.
[2] Blank cells represent no data reported for the item.
* Less than 0.5%.

Peanuts: Pest Management Practices,
Percent of Operations Utilizing Practice,
2004-05 Marketing Year, Fall and Winter [1] [2]

Practice	State							
	AL	CA	GA	IL	MA	MN	NJ	NY
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Measure Peanut Temperature:								
Concrete Silos:								
Daily								
Twice a week								
Weekly			10					
Every two weeks								
Monthly								
Other								
Do not monitor			3		20			
Do not have structure	100	100	87	100	80	100	100	100
Flat Storage Warehouses:								
Daily			30			80		
Twice a week	9							
Weekly			10				20	
Every two weeks								
Monthly	18						20	
Other								
Do not monitor	45	86	30	50		20	60	20
Do not have structure	27	14	30	50	100			80
Other Structures:								
Daily	9		10					
Twice a week								
Weekly			7					
Every two weeks			3					
Monthly								
Other								
Do not monitor	27		7	50				60
Do not have structure	64	100	73	50	100	100	100	40

--continued

Peanuts: Pest Management Practices,
Percent of Operations Utilizing Practice,
2004-05 Marketing Year, Fall and Winter (continued) [1] [2]

Practice	State						
	NC	OH	OK	PA	TX	VA	ALL
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Measure Peanut Temperature:							
Concrete Silos:							
Daily					9		1
Twice a week							
Weekly				8			2
Every two weeks							
Monthly							
Other							
Do not monitor	7				9	29	5
Do not have structure	93	100	100	92	82	71	92
Flat Storage Warehouses:							
Daily	7	17	40	50	18	14	17
Twice a week							1
Weekly				8			4
Every two weeks							
Monthly		8					2
Other			20				1
Do not monitor	50	33		25	45	43	35
Do not have structure	43	42	40	17	36	43	41
Other Structures:							
Daily	7				27		7
Twice a week							
Weekly				8			2
Every two weeks							1
Monthly							*
Other			20				1
Do not monitor	43	25	40	8	9	57	23
Do not have structure	50	75	40	83	64	43	67

[1] Numbers for each type of structure may not add to 100 due to rounding.
[2] Blank cells represent no data reported for the item.
* Less than 0.5%.

Peanuts: Pest Management Practices,
Strategies Used in Determining Fumigation Schedule
2004-05 Marketing Year [1]

Practice	State							
	AL	CA	GA	IL	MA	MN	NJ	NY
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Preset Calendar Date			15			50		
Warehouse Samples			15			50		
Scheduled with other Handling Operations			15					
Insect Trap Counts			15					
Visual Peanut Inspection	67		25					
Customer Request	33		15					
Other								

Practice	State						
	NC	OH	OK	PA	TX	VA	ALL
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Preset Calendar Date				100			13
Warehouse Samples							10
Scheduled with other Handling Operations	25						17
Insect Trap Counts			25				10
Visual Peanut Inspection	50		50		100		33
Customer Request	25		25				16
Other							

[1] Blank cells represent no data reported for the item.

Survey Procedures: The population for the 2005 Peanut Postharvest Chemical Use Survey included off-farm facilities that handled peanuts during the 2004-05 marketing year. Off-farm facilities included processors, blanchers, shellers, millers, and warehouses. Operations included in the survey were operations that handle greater than thirty thousand pounds of peanuts annually.

Estimation Procedures: The chemical application data, reported by product names or trade names, were reviewed within State and across States for reasonableness and consistency. The reported data were compared with manufacturers' recommendations and data from other operations using the same product. Following this review, product information was converted to active ingredient level. Chemical data in this publication are reported at the active ingredient level.

Detailed data within a table may not multiply across or add down due to independent rounding of the published values.

Reliability: The probability nature of the survey provides for expansion of data so estimates are statistically representative of chemical use on the targeted commodities in the surveyed States. The reliability of these survey results is affected by sampling variability and non-sampling errors.

Non-sampling errors are errors that occur during a survey process, and unlike sampling variability, are difficult to measure. They may be caused by interviewers failing to follow instructions, poorly worded questions, non-response, problematic survey procedures, or data handling between collection and publication. In this survey, procedures and analyses were carried out in a consistent and orderly manner to minimize the occurrence of these types of errors.

Variability for estimates of volume of the commodity handled will be higher than the variability for estimates of application rates. This is because application rates have a narrower range of responses and the manufacturer's recommended rates are generally followed.

Sampling variability of the estimates also differs by chemical. In general, the more often the chemical was applied, the smaller the sampling variability. For example, estimates of use of a commonly used product, such as aluminum phosphide on peanuts in Georgia, will exhibit less variability than a rarely used or reported product.

Terms and Definitions

Active ingredient: The specific chemical which kills or controls the target pests. Usage data are reported by pesticide product and are converted to an amount of active ingredient.

Aeration controller: An automatic (usually computer-based) system that determines the optimum running time (considering humidity and temperature) for aeration fans in the peanuts. They can usually be set for drying or storage mode.

Agricultural chemicals: The active ingredients in pesticides.

Application rates: The average number of pounds of a pesticide active ingredient applied to a volume of product. Rate per application is the average number of pounds applied in one application. Rate per marketing year is the average number of pounds applied counting multiple applications. Number of applications is the average number of times a treated volume receives a specific agricultural chemical.

Common name: Officially recognized name for an active ingredient. This report shows active ingredient by common name.

Deep bin sampler: Usually a vacuum type device that allows one to reach deeply into a peanut bin and sample peanuts that are normally out of reach to typical probe samplers.

Dump pit: Place where peanuts are received at a storage operation.

Fumigant: A substance or mixture of substances which produce a gas vapor, fume, or smoke intended to destroy insects, rodents, or bacteria.

Marketing year: The period immediately following harvest of the crop through the marketing or disposition of the crop. The 2005 marketing year for peanuts was August 1, 2004 through July 31, 2005.

Pesticides: As defined by the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), pesticides include any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, and any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant.

Phosphine pellet dispenser: Manually or automatically dispenses phosphine pellets to a stream of peanuts as they are being loaded.

Postharvest: Any subsequent activity after the commodity is harvested from the field. Postharvest chemical usage refers to chemical applications after the commodity is taken from the field.

Power probe: A fully integrated mechanized system for sampling stationary lots of peanuts in trucks or similar conveyance. It obtains a representative sample by inserting a probe-like device into the peanuts, opening the probe to allow peanuts to enter, closing, and then the sample is pneumatically withdrawn from the probe.

Processor: Processors actually change the form of the commodity. These firms may have storage facilities as well.

Protein analyzer: Usually infrared analyzers that can, within a matter of minutes, determine the composition of peanuts. Values obtained can include protein, oil, starch content, moisture content, and kernel density.

Re-circulation fumigation device: A fan that is combined with PVC pipe on the outside of a peanut storage unit. The PVC runs from the top, down the sides, through the fan, and into the bottom of the peanut storage unit. Rather than probing fumigant pellets into the grain mass from the surface of the peanuts, you can use a much lower concentration of fumigant and place the pellets in the PVC pipe from outside of the peanut storage unit. Advantages include using less chemical, increased worker safety, and more uniform distribution of the gas since the fans force the fumigant throughout the peanut mass.

Residual Insecticide: Insecticide or its degraded products remaining on the peanuts or surface of the storage unit.

Temperature cable: Cable running from top to bottom in a storage unit that automatically measures peanut temperature and outputs this information to a central system.

Total quantity treatments: Total volume handled multiplied by the percent of volume treated and the average number of applications.

Trade name: Name given to a specific formulation of a pesticide product. A formulation contains a specific concentration of the active ingredient, carrier materials, and other ingredients such as emulsifiers and wetting agents. Some formulations, as in the case of pre-mixes, can contain more than one active ingredient.

Transfer legs: The last or next to last dump from a boom or an elevator into a warehouse.

Volume Handled: The volume of a commodity handled by the market segment. In this release, it is the total amount of a commodity that passed through the firms summarized in the particular table.

Volume treated: The percentage of the volume handled which received one or more applications of a specific agricultural chemical.

Classes, Common Names, and Trade Names

The following is a list of Classes, Common Names, and Trade Names of active ingredients in this publication. The classes are insecticides (I) and fungicides (F). This list is provided as an aid in reviewing the data. Pre-mixes are not cataloged. The list may not be complete for all postharvest chemicals available for use on peanuts. NASS does not promote use of any specific trade name.

Class	Common Name	Trade Name
I	Aluminum phosphide	Phostoxin, Gastoxin, Fumiphos, Weevilcide
F	Captan	Vitavax
F	Carboxin	Vitavax
I	Dichlorvos	DDVP
I	Fenvalerate	F-V-S Fogger
I	Magnesium phosphide	Magtoxin
I	Methyl bromide	Methyl bromide
I	Octacide-264	CB Total Release, BP-100 ULD, F-V-S Fogger, Pro Control, Entech Fog-10
F	PCNB	Vitavax
I	Petroleum distillate	Pyrenone
I	Piperonyl butoxide	Pyrenone, CB Total Release, BP-100 ULD, F-V-S Fogger, Pro Control, Entech Fog-10
I	Pyrethrins	Pyrenone, CB Total Release, BP-100 ULD, F-V-S Fogger, Pro Control, Entech Fog-10
I	Resmethrin	Resmethrin
I	Silica gel	Protect-it
I	Silicon dioxide	Protect-it, Diatomaceous Earth Insecticide

NATIONAL AGRICULTURAL STATISTICS SERVICE

2005 PEANUT POSTHARVEST CHEMICAL USE SURVEY

Form Approved
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VERSION	ID	SUBTRACT	T-TYPE	TABLE	LINE
01	_____	___	0	000	00

CONTACT RECORD		
DATE	TIME	NOTES

INTRODUCTION:
[*Introduce yourself, and ask for the operator. Rephrase in your own words.*]

We are collecting information on chemical use and need your help to make the information as accurate as possible. Authority for collection of information on the Peanut Postharvest Chemical Use Survey is Title 7, Section 2204 of the U.S. Code. This information will be used for analysis and to compile and publish estimates for your state and the United States. Response to this survey is confidential and voluntary.

We encourage you to refer to your records during the interview.

BEGINNING TIME {MILITARY}..... 004 ____

Name_____

Address_____

Phone(____)_____

☐ [*Name, address and partners verified and updated if necessary.*

1. Did this operation (*as listed on the label*) handle/receive any peanuts from August 1, 2004 to July 31, 2005?

   ☐ **YES** - [*Go to page 3.*]

   ☐ **NO**- [*Go to page 2.*]

CHANGE IN OPERATION

- ***[Complete this section only if item 1 on the front page is answered "No".]***

1. Has the operation named on the label been **sold, rented, or turned over** to someone else?

   ☐ **YES** - [*Go to item 2.*] ☐ **No** – [*Continue.*]

   a. Will the operation handle or receive peanuts or other crops at any of its facilities in 2005?

      ☐ **YES** ☐ **DON'T KNOW** ☐ **NO**

   [Write a note to explain the situation, then go to back page, Conclusion.]

   _____

   _____

   _____

2. Please provide the name and address of the operation that has taken over the business you formerly operated:

   Operation Name:_____

   Operator Name_____

   Address:_____

   City:_____ State:_____ Zip:_____

   Phone:_____

Make notes below and conclude interview.

NOTES AND CALCULATIONS:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Now I would like to ask about the peanuts handled/received from August 1, 2004 to July 31, 2005.

Please use your records to help us get an accurate record of peanut receipts.

1. What was the total quantity of **unshelled peanuts** handled/received from August 1, 2004 to July 31, 2005 on this operation?.....

1 - BUSHEL (60 lbs)
4 - SHORT TON (2,000 lbs)
5 - CWT. (100 lbs)
6 - POUND
7 - METRIC TON (2,204.6 lbs)
9 - OTHER

QUANTITY	UNIT	If "9" enter POUNDS/UNIT
200 ___,___,___.__	201	202 .__

2. What was the total quantity of **shelled peanuts** handled/received from August 1, 2004 to July 31, 2005 on this operation?

QUANTITY	UNIT	If "9" enter POUNDS/UNIT
210 ___,___,___.__	211	212 .__

3. Did **ALL** peanuts received from August 1, 2004 to July 31, 2005 receive a postharvest chemical application?

☐ **YES** - [*Go to Section B, page 4.*] ☐ **NO** - [*Continue.*]

4. Did **ANY** peanuts received from August 1, 2004 to July 31, 2005 receive a postharvest chemical application?

☐ **YES** - [*Continue.*] ☐ **NO** - [*Go to Section C, page 6.*]

5. Of the peanuts in items 1 and 2, how many, both unshelled and shelled, **DID NOT** receive postharvest chemical applications while in storage, on the ground, in barges, ships, railcars or on trucks?

	QUANTITY NOT TREATED	OR	PERCENT OF TOTAL NOT TREATED
a. **Unshelled peanuts?**.....	206 ___,___,___.__		207
b. **Shelled peanuts?**.....	216 ___,___,___.__		217

ENUMERATOR NOTE: [*If postharvest chemicals were applied, go to Section B, page 4.*]

B POSTHARVEST CHEMICAL TREATMENTS APPLIED B

Now I have some questions about postharvest chemical data on **peanuts** handled, stored, or processed by your operation from August 1, 2004 to July 31, 2005. I will be asking for chemical products used, quantity treated, total amount of product applied, timing and method of application. Please use your records to answer the questions as accurately as possible and to insure we do not miss any products used. Include shelled and unshelled peanuts treated while in storage by this operation or on the ground, or in barges, ships, rail cars or on trucks.

OFFICE USE LINES IN TABLE

T-TYPE	TABLE	LINE	399
3	001	99	

TIMING CODES FOR COLUMN 2
5 - In Bound
6 - Putting in Warehouses
7 - While Stored
8 - Out Bound

NOTES	LINE	1 What product was applied? (*in Respondent Booklet*) (a) COMMON OR TRADE NAME	1 (b) PRODUCT CODE	2 When was this product applied? [*Enter code from above.*]	3 (a) Type of Peanut? 1 = Shelled 2 = Unshelled CODE	3 (b) What was the total quantity of peanuts treated with this chemical (*in column 1*)?
	01		305	307	320	321 .___
	02		305	307	320	321 .___
	03		305	307	320	321 .___
	04		305	307	320	321 .___
	05		305	307	320	321 .___
	06		305	307	320	321 .___
	07		305	307	320	321 .___
	08		305	307	320	321 .___
	09		305	307	320	321 .___
	10		305	307	320	321 .___

[*For pesticides not listed in Respondent Booklet, specify---*]

LINE NO.	EPA No. or Trade name and Formulation	Form Purchased (*Liquid or Dry*)	Where Purchased [*Ask only if EPA No. cannot be reported.*]

B POSTHARVEST CHEMICAL TREATMENTS APPLIED B

UNIT CODES FOR COLUMN 4
1 - BUSHEL (*60 lbs*)
4 - SHORT TON (*2,000 lbs*)
5 - CWT. (*100 lbs*)
6 - POUND
7 - METRIC TON (*2,204.6 lbs*)
9 - OTHER

UNIT CODES FOR COLUMN 7
1 - POUNDS
12 - GALLONS
13 - QUARTS
14 - PINTS
15 - OUNCES, LIQUID
28 - OUNCES, DRY
30 - GRAMS
40 - KILOGRAMS
41 - LITERS
45 - PELLETS
46 - TABLETS
50 - OTHER (*Specify*_____)

APPLICATION CODES FOR COLUMN 8
3 - DIRECT SPRAY DURING LOADING
5 - TOP DRESS
7 - FUMIGATION WITH PELLETS/TABLETS
9 - HEAD SPACE MISTING DEVICE
10 - FUMIGATION WITH GAS
11 - OTHER (Specify_____)

LINE	4 [*Enter Unit code from above*]	5 **If column 4 unit equals "9" enter pounds per unit.**	6 **What was the total amount of formulated product applied to the amount of peanuts in column 3b?**	7 [*Enter unit code from above.*]	8 **What was the method used to apply this product? CODE**
01	322	323 . ___	309 . ___ ___	310	311
02	322	323 . ___	309 . ___ ___	310	311
03	322	323 . ___	309 . ___ ___	310	311
04	322	323 . ___	309 . ___ ___	310	311
05	322	323 . ___	309 . ___ ___	310	311
06	322	323 . ___	309 . ___ ___	310	311
07	322	323 . ___	309 . ___ ___	310	311
08	322	323 . ___	309 . ___ ___	310	311
09	322	323 . ___	309 . ___ ___	310	311
10	322	323 . ___	309 . ___ ___	310	311

Enumerator Notes:

_____

_____

_____

_____

C **PEST MANAGEMENT PRACTICES** C

Now I have some questions about pest management practices you may have used at your facilities. Include **all peanuts** handled.

T-TYPE	TABLE	LINE
0	000	00

1. **Did you use a ---**

a. power probe?

☐ **YES** – [*Enter code 1 and continue.*] ☐ **NO** – [*Continue.*] ..... CODE 650

b. aeration controller?

☐ **YES** – [*Enter code 1 and continue.*] ☐ **NO** – [*Continue.*] 651

c. phosphine pellet dispenser?

☐ **YES** – [*Enter code 1 and continue.*] ☐ **NO** – [*Continue.*] 652

d. temperature cable?

☐ **YES** – [*Enter code 1 and continue.*] ☐ **NO** – [*Continue.*] 653

e. re-circulation fumigation device?

☐ **YES** – [*Enter code 1 and continue.*] ☐ **NO** – [*Continue.*] 655

f. deep bin sampler?

☐ **YES** – [*Enter code 1 and continue.*] ☐ **NO** – [*Continue.*] 656

2. How often are your peanuts inspected for insects in your (*concrete silos, flat storage warehouses, or other structures*) (***including*** *wood bins*) during the spring/summer and fall/winter months?

	SPRING/SUMMER	FALL/WINTER
Concrete Silos.....	658	659
Flat Storage Warehouses.....	660	661
Other Structures (***include*** *wood bins*).....	662	663

..... CODE

1 - DAILY
2 - TWICE A WEEK
3 - WEEKLY
4 - EVERY 2 WEEKS
5 - MONTHLY
6 - OTHER – (*Specify*_____)
7 - DO NOT MONITOR
8 - DO NOT HAVE STRUCTURE

3. How often do you measure peanut temperature in your (*concrete silos, flat storage warehouses, or other structures*) (***including*** *wood bins*) during the spring/summer and fall/winter months?

	SPRING/SUMMER	FALL/WINTER
Concrete Silos.....	664	665
Flat Storage Warehouses.....	666	667
Other Structures (***include*** *wood bins*).....	668	669

..... CODE

1 - DAILY
2 - TWICE A WEEK
3 - WEEKLY
4 - EVERY 2 WEEKS
5 - MONTHLY
6 - OTHER – (*Specify*_____)
7 - DO NOT MONITOR
8 - DO NOT HAVE STRUCTURE

4. Which practices do you use at your storage facilities---

Did you ---

CODE

a. sweep or vacuum, empty warehouse floors?

☐ **YES** – [*Enter code 1 and continue.*] ☐ **NO** – [*Continue.*]..... 670

b. hose down empty warehouse floors?

☐ **YES** – [*Enter code 1 and continue.*] ☐ **NO** – [*Continue.*]..... 671

c. use residual insecticides on inner surface of empty warehouses?

☐ **YES** – [*Enter code 1 and continue.*] ☐ **NO** – [*Continue.*]..... 672

d. pick up spilled peanuts/clean surrounding areas?

☐ **YES** – [*Enter code 1 and continue.*] ☐ **NO** – [*Continue.*]..... 673

e. control vegetation around warehouses?

☐ **YES** – [*Enter code 1 and continue.*] ☐ **NO** – [*Continue.*]..... 674

f. clean dump pits and transfer legs?

☐ **YES** – [*Enter code 1 and continue.*] ☐ **NO** – [*Continue.*]..... 675

g. use rodent traps or bait stations?

☐ **YES** – [*Enter code 1 and continue.*] ☐ **NO** – [*Continue.*]..... 676

5. Did you do any other cleaning activities besides the ones listed above to your storage facilities?

☐ **YES** – [*Enter code 1 and continue.*] ☐ **NO** [*Go to item 6.*]..... 677

a. What did you do? [*Record responses below.*]

OFFICE USE

_____ 678

_____ 679

_____ 680

_____ 681

6. Did you fumigate peanuts?

CODE

☐ **YES** – [*Enter code 1 and continue.*] ☐ **NO** – *Go to Conclusion.*]..... 682

a. What was the strategy(ies) you used to decide when to fumigate peanuts?
(*Enter up to two strategies.*)

1 - PRESET CALENDAR DATE
2 - WAREHOUSE SAMPLES
3-SCHEDULED WITH OTHER HANDLING OPERATIONS
4 - INSECT TRAP COUNTS
5 - VISUAL PEANUT INSPECTION
6 - CUSTOMER REQUEST
7 - OTHER – (*Describe* _____)

..... 683

684

COMPLETION CODE for CHEMICAL APPLICATIONS TABLE	
1 – Incomp/R 3 – Valid Zero	300

COMPLETION CODE for PEST MANAGEMENT SECTION	
1 - Incompl/R	600

CONCLUSION

SURVEY PUBLICATIONS

That completes the survey. Would you like to receive a free copy of the results when they are published? (Results will also be available on the Internet at http://www.usda.gov/nass/)

CODE 099

☐ **YES** – [*Enter code 1 and continue.*] ☐ **NO** – [*Continue.*]

[*Thank the respondent then review this questionnaire.*]

ENDING TIME [*MILITARY*] 005 ____

OFFICE USE TIME IN HOURS

006 ___.___

RECORDS USE

Did respondent use operation records to report chemical data?

☐ **YES** – [*Enter code 1 and continue.*] ☐ **NO** – [*Continue.*] 064

SUPPLEMENTS USED

Record the total number of chemical treatment supplements used to complete this interview. NUMBER 068

Reported by: _____ Telephone No.(____) _____

Response		Respondent		Mode		Enum.	Eval.	Date MM DD YY	R Unit	Adj Factor	Optional	Optional
1-Comp 2-R 3-Inac 4-Office Hold 8-Known Zero	9901	1- Op/Mgr 2-Sp 3-Acct/Bkpr 4-Partner 9-Other	9902	2-Tel 3-Face-to -Face	9903	098	100	007 ____05	921	922	002	003
S/E Name												

Report Features

Released March 29, 2006, by the National Agricultural Statistics Service (NASS), Agricultural Statistics Board, U.S. Department of Agriculture. For information on "Agricultural Chemical Usage" call (202) 720-6146, office hours 7:30 a.m. to 4:00 p.m. ET.

The next **"Agricultural Chemical Usage: Postharvest Applications"** will be released during the spring of 2007. This report will cover the use of postharvest chemicals on oats and potatoes during the 2005-06 marketing year.

Listed below are persons within the National Agricultural Statistics Service to contact for additional information.

Liana Cuffman, Environmental Statistician	(202) 690-0392
Mark R. Miller, Head, Environmental and Demographics Section	(202) 720-0684
Linda Hutton, Chief, Environmental, Economics, and Demographics Branch	(202) 720-6146

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