

UNIVERSITY OF MISSOURI COLLEGE OF AGRICULTURE  
AGRICULTURAL EXPERIMENT STATION

J. H. LONGWELL, *Director*

# Fertilizer Inspection and Analysis; Fall, 1949

COLUMBIA, MISSOURI

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# Fertilizer Inspection and Analysis; Fall, 1949

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The purpose of this bulletin is to report the results of the work carried on by the Missouri Agricultural Experiment Station in administering the Missouri Fertilizer Law during the period July 1 to December 31, 1949.

In order to provide protection against fraud in the sale of commercial fertilizers, the Missouri Fertilizer Law establishes certain requirements which must be met by the company or individual prior to the sale of fertilizers in this state. These requirements are:

1. Annual registration with the Missouri Agricultural Experiment Station of each brand and analysis to be offered for sale.
2. Proper labeling of the containers stating the same facts set forth in the registration.
3. Affixing to containers registration tags purchased from the Experiment Station giving proof of registry in the current year.

The law further provides that the Experiment Station shall inspect the stocks of fertilizer sold throughout the state and draw samples to be analyzed at the laboratory of the Experiment Station. The detailed results of this work are set forth in the following sections.

## INSPECTION

The inspection work covered by this bulletin began September 1 and was carried on throughout the 1949 fall fertilizer season. Inspectors traveled a total of 11,263 miles calling on 695 dealers located in 336 Missouri cities, towns, and communities. Each county in the state is represented by two or more of the 1,020 official samples collected. An effort was made to obtain samples of every brand and analysis of fertilizer offered for sale in Missouri. The number of samples collected of a particular brand does not necessarily indicate the proportion of that fertilizer sold in the state. However, an attempt was made to secure a large number of samples of those brands and grades which were sold more extensively. This resulted in the collection of one sample for approximately every 143 tons of commercial fertilizer sold during the fall season.

## VIOLATIONS REPORT FOR FALL 1949

### 1. SALE OF NON-REGISTERED FERTILIZER

The following fertilizers were found on the open market prior to being registered with the Missouri Agricultural Experiment Station. In most cases registration was made upon notification.

- Vertagreen 5-10-5 -- Manufactured by Armour Fertilizer Works, East St. Louis, Ill., and found on sale at Schemel Feed Store, Perryville.
- Green Top 0-0-60 -- Manufactured by National Fertilizer Company, Des Moines, Ia., and found on sale at Langfitt Seed Farms and Elevators, Inc., Bethany.
- Sheepo -- Manufactured by Nebraska Fertilizer Company, Omaha, Neb., and found on sale at Earl May Store #22, St. Joseph.
- Ground Rock Phosphate -- Mined by Owens Agricultural Phosphate Corp., Centerville, Tenn., and found on sale at Grain Feed and Company, Salem.
- Soiltone -- Manufactured by Soiltone Company of Iowa, Des Moines, Ia., and found on sale at Earl May Store #22, St. Joseph.
- Bem Brand CSO 20% Superphosphate -- Manufactured by Thurston Chemical Company, Joplin, Mo., and found on sale at Nichols Bros., Southwest City.
- Bem Brand Lawn & Garden Fertilizer 4-12-4 -- Manufactured by Thurston Chemical Company, Joplin, Mo., and found on sale at Arnold Elevator Mill, Butler.
- Westgro Brand Cattle Manure -- Prepared by Westover Nursery, St. Louis, Mo., and found on sale at that location.
- Rock Phosphate -- Marketed by Tri-State Chemical Company, Webb City, Mo., and inspected at Lloyd Thomas Farm, Aurora.

### 2. VIOLATIONS WITH RESPECT TO REGISTRATION TAGS

The stocks of fertilizer listed below did not have registration tags attached unless otherwise stated.

#### Swift and Company, National Stock Yards, Ill.

Red Steer 0-43-0, 15 bags at Rolla Milling Co., Rolla.

Red Steer 0-12-12, 17 bags at Schmelz Feed and Supply Co., Fenton.

Red Steer 0-14-7, 25 bags at Rolla Milling Co., Rolla.

Red Steer 0-20-20, 14 bags at Porter Seed and Feed Store, Canton.

Red Steer 0-20-20, 57 bags at Rolla Milling Co., Rolla.

Red Steer 2-12-6, 90 bags at Farm Bureau Service Co., New London.

Red Steer 2-12-6, 42 bags at Bess Feed Store, Bonne Terre.

Red Steer 2-12-6, 14 bags at Schmelz Feed and Supply Co., Fenton.

Blenn 3-12-12, 108 bags at Rolla Milling Co., Rolla.

Red Steer 3-12-12, 31 bags at Producers Exchange #84, Lincoln.

Red Steer 3-12-12, 49 bags at Rolla Milling Co., Rolla.

Vigoro 4-12-4, 14 bags at Mississippi County Grain Co., East Prairie.

Vigoro 4-12-4, 16 bags at Producers Exchange, Washington.

Vigoro 4-12-4, 10 bags at Rolla Milling Co., Rolla.

Vigoro 4-12-4, 20 bags at St. Louis Seed Co., St. Louis.

Red Steer 4-12-4, 18 bags at Schmelz Feed and Supply Co.,  
Fenton.

Red Steer 4-12-4, 55 bags at Rolla Milling Co., Rolla.

Brimm 4-12-8, 47 bags at Farmers Equity Exchange, Bowling  
Green.

Red Steer 8-24-8, 84 bags at Producers Exchange #84, Lincoln.

**Farm Belt Fertilizer and Chemical Co., Kansas City, Mo.**

Farm Belt 0-20-0, 24 bags at Levasy Elevator Co., Levasy.

T. V. A. Concentrated Superphosphate 47%, 60 bags at Eagle  
Mill and Elevator Co., Higginsville.

Farm Belt 0-20-10, 9 bags at Lafayette Elevator Co., Lexington.

Farm Belt 4-12-4, 100 bags at Feeders Supply Co., Tina.

Farm Belt 4-12-4, 46 bags at Kearney Grain and Supply Co.,  
Kearney.

Farm Belt 4-12-4, 150 bags at Farmers Feed and Supply Co.,  
Lawson.

Farm Belt 4-12-4, 180 bags at Polo Elevator Co., Polo.

**American Agricultural Chemical Co., National Stock Yards, Ill.**

AA Quality 18% Normal Superphosphate, 18 bags at Silvey's  
Feed Store, Potosi.

AA Quality 18% Normal Superphosphate, 52 bags at Farm Bureau  
Service Co., St. Charles.

Agrico Alkaline 0-10-20, 24 bags at Ozark Produce Co., Salem.

AA Quality 2-12-6, 28 at Ozark Produce Co., Salem.

Agrico for Grain 2-12-6, 108 bags at Boland Feed Store, Wash-  
ington.

**Spencer Chemical Co., Kansas City, Mo.**

Spencer's Ammonium Nitrate 33.5%, 20 bags at Farmers Supply  
Co., LaBelle.

Spencer's Ammonium Nitrate 33.5%, 96 bags at Sandy Moody  
Feed Store, Mound City.

Spencer's Ammonium Nitrate 33.5%, 19 bags at Burns Feed  
Store, Savannah.

Spencer's Ammonium Nitrate 33.5%, 70 bags at Farmers Ex-  
change, Hardin.

Spencer's Ammonium Nitrate 33.5%, 25 bags at Braymer Feed  
and Grain Co., Braymer.

**Armour Fertilizer Works, East St. Louis, Ill.**

Big Crop 20% Superphosphate, 25 bags at Farmers Elevator  
Co., Salisbury.

Big Crop 45% Superphosphate, 24 bags at Fogarty Coal and Grain  
Co., St. Joseph.

Big Crop 2-12-6, 48 bags at D. A. Peterein Farm, Silica.

Big Crop 4-12-14, 25 bags at Jenkins Feed Mill, Holister.

**Sears, Roebuck and Co., Chicago, Ill.**

Cross Country Bulb Food, 15 bags at Sears, Roebuck and Co.,  
St. Louis.

Cross Country Cattle Manure, 14 bags at Sears, Roebuck and Co., St. Louis.

Cross Country Sheep Manure, 22 bags at Sears, Roebuck and Co., St. Louis.

Cross Country Sulphate of Ammonia, 29 bags at Sears, Roebuck and Co., St. Louis.

**Davison Chemical Corp., Perry, Ia.**

Davco 20% Granulated Superphosphate, 90 bags at H. H. Green Mill and Elevator Co., Hamilton.

Davco 20% Granulated Superphosphate, 100 bags at H. H. Green Mill and Elevator Co., Pattonsburg.

Davco 20% Granulated Superphosphate, 80 bags at King City Elevator Co., King City.

**Thurston Chemical Co., Joplin, Mo.**

Bem Brand CSO 20% Superphosphate, 90 bags at Nichols Bros., Southwest City.

Bem Brand 2-12-6, 13 bags at Farm Bureau Service Co., Jackson (Oklahoma Tags)

Bem Brand 3-9-18, 30 bags at Farm Bureau Service Co., Benton.

**Central Farmers Fertilizer Co., Chicago, Ill.**

T. V. A. Ammonium Nitrate 33%, 74 bags at M. F. A. Central Coop., Bethany.

T. V. A. Ammonium Nitrate 33%, 97 bags at Putnam County M. F. A. Exchange, Unionville.

**Goulard and Olena, Inc., Skillman, N. J.**

G. & O. Lawn Fertilizer, 18 bags at St. Louis Seed Co., St. Louis.

G. & O. Ground Bone, 400 bags at St. Louis Seed Co., St. Louis.

**Schrock Fertilizer Service, Congerville, Ill.**

Schrock Hi-Test Natural Phosphate, 130 bags at Callao Feed and Produce Co., Callao.

Schrock Hi-Test Natural Phosphate, 871 bags at Mansfield Farmers Exchange, Mansfield.

**Thomson Phosphate Co., Chicago, Ill.**

Four Leaf Powdered Rock Phosphate, 600 bags at Farmers Exchange, Neosho. (Tags sent to dealer, but not attached.)

Four Leaf Powdered Rock Phosphate, 10 tons bulk at University of Missouri, Weldon Springs.

**American Cyanamid Co., New York, N. Y.**

Aero-Phos Florida Natural Phosphate, 15 bags at Farmers Exchange, Houston.

**Excell Laboratories, Chicago, Ill.**

New Plant Life, 48 bottles at Kresges Store, St. Louis.

**J. Harris Manure Co., East St. Louis Ill.**

Hampton Park Brand Cattle Manure, 14 bags at Julius Peterson Seed Co., St. Louis.

**Hydroponic Chemical Co., Copley, Ohio**

Hyponex, 32 packages at Earl May Store #22, St. Joseph. (1948 tags)

**Indiana Farm Bureau Co-op Service, Indianapolis, Ind.**

Farm Bureau 0-20-0, 14 bags at Boone County M. F. A. Exchange, Columbia,

**National Fertilizer Co., Des Moines, Ia.**

Green Top 0-0-60, 90 bags at Langfitt Seed Farms and Elevators, Inc., Bethany.

**Nebraska Fertilizer Co., Omaha, Neb.**

Sheepo, 6 bags at Earl May Store #22, St. Joseph.

**Owens Agricultural Phosphate Corp., Centerville, Tenn.**

Ground Rock Phosphate, 93 bags at Green Feed and Grain Co., Salem.

**Ra-Pid-Gro Corp., Dansville, N. Y.**

Ra-Pid-Gro, 24 packages at Earl May Store #22, St. Joseph.

**San Francisco Chemical Co., Montpelier, Id.**

Mountain Rock Phosphate, 5 tons bulk at Langfitt Seed Farms and Elevators, Inc., Bethany.

**Smith-Douglass Co., Streator, Ill.**

S-D Big Yield 3-18-9, 250 bags at Farmers Elevator Co., Monroe City. (1948 tags)

**Soiltone Company of Iowa, Des Moines, Ia.**

Soiltone, 8 bags at Earl May Store #22, St. Joseph.

**Tri-State Chemical Co., Webb City, Mo.**

Rock Phosphate, 40 bags at Lloyd Thomas Farm, Aurora.

**Virginia-Carolina Chemical Corp., East St. Louis, Ill.**

V-C 0-20-0, 25 bags at Madison County Farmers Warehouse Ass'n., Fredericktown.

**Westover Nursery, St. Louis, Mo.**

Westgro Brand Cattle Manure, 14 bags at Westover Nursery, St. Louis.

**3. VIOLATIONS WITH RESPECT TO LABELING**

The following lots of ground rock phosphate were not labeled with a guaranteed analysis of available phosphoric acid. The Missouri Fertilizer Law requires all phosphatic fertilizers, with the exception of undissolved bone, to be labeled with such a guarantee.

**Ground Phosphate Rock** -- Sold by Owens Agricultural Phosphate Corporation, Centerville, Tennessee, and inspected at Green Feed and Grain Company, Salem.

**Red Seal Brand Phosphate Rock**-- Sold by Ruhm Phosphate and Chemical Company, Mt. Pleasant, Tennessee, and inspected at Arley Fast Farm, Hurdland.

**Rock Phosphate** -- Sold by Tri-State Chemical Company, Webb City, Missouri, and inspected at Lloyd Thomas Farm, Larussell.

**Mountain Rock Phosphate** - Sold by San Francisco Chemical Company, Montpelier, Idaho, and inspected at Langfitt Seed Farms and Elevators, Bethany, and Farm Bureau Service Company, Princeton. (Bulk Shipment)

**Swift's Ground Raw Phosphate** - Sold by Swift and Company, National Stock Yards, Illinois, and inspected at B. F. Broughton's, Shelbina. (Bulk Shipment)

The following lots of fertilizers manufactured by Missouri Farmers Association, Columbia, Missouri, were found on sale with two different grade labels on each container. These discrepancies were brought about by altering the grade printed on the face of the bag, but failing to change that which was printed on the side. Such a practice leads to confusion, and directs unwarranted suspicion toward the local dealer. It is, of course, in violation of the labeling provisions of the Missouri Fertilizer Law.

**M. F. A. 4-12-4** -- Inspected at Hermann Produce Exchange, Hermann, Producers Exchange, Truesdale, and Farmers Elevator, Wright City.

**M. F. A. 2-12-6** -- Inspected at Hermann Produce Exchange, Hermann.

**M. F. A. 0-0-60** -- Inspected at Farm Club, Owensville.

### ANALYSIS OF SAMPLES

Each official sample collected was analyzed by the Experiment Station laboratories located at the University of Missouri, Columbia. These results are set forth in this bulletin by the use of three tables. Tables 1 and 2 summarize the analyses in order that the reader may tell at a glance the relative manner in which manufacturers have met guarantees. Table 3 presents in greater detail a description of each individual sample.

Table 1 compares, by the use of an index number, the amount of plant food present in the sample with that of the guarantee of the manufacturer. If the found value and the guarantee are the same the number 100 is used; should the guarantee be exceeded by the found value the number used is greater than 100; and in the event the guarantee is not equalled by the found value the number used is less than 100.

Table 2 summarizes and expresses as a percentage the deficient nutrients to total analyzed. In this table each of the three primary elements is considered as a sample so that the grand total in this table is greater than the actual number of samples collected.

Table 3 includes the brand name, place of collection, analytical results, and guarantee of each official sample. Where there are two or more like samples of any brand the average analysis is given. If the guarantee is not equalled by an element that figure is underlined and such a sample is classed as deficient.

Table 4 is a list of companies, brand names, and guaranteed analyses of those fertilizers registered for sale in Missouri for 1950 as this bulletin goes to press.

### ANALYTICAL TOLERANCES

The following tolerances have been set up for reporting deficient samples in this bulletin; one per cent (1%) of the guaranteed per centage of total nitrogen, one and one-half per cent (1 1/2%) of the guaranteed per centage of available phosphorus pentoxide ( $P_2O_5$ ), and one and one-half per cent (1 1/2%) of the guaranteed per centage of water soluble potash ( $K_2O$ ).



For example, in reporting the results of a 4-12-4 grade fertilizer we would accept 3.96-11.82-3.94 as meeting the manufacturer's guarantee and would not underline these figures as being deficient.

The tolerances given above represent only the unavoidable analytical error in determinations made by the Experiment Station laboratory.

## FERTILIZER CONTROL FUND

### Financial Report

For the Year ended December 31, 1949

Balance January 1, 1949. . . . .	\$146,874.35
Receipts:	
Receipts from sale of Tags . . . . .	\$134,555.39
Disbursements:	
Personal Service. . . . .	\$76,692.98
Travel . . . . .	3,527.99
Transportation of Things . . . . .	655.01
Communication Service . . . . .	278.77
Rents and Utility Service . . . . .	134.62
Printing and Binding. . . . .	1,250.77
Other Contractual Service. . . . .	3,073.02
Supplies and Materials. . . . .	44,249.68
Equipment . . . . .	44,311.41
Land (Non-Structural Imp.) . . . . .	5,082.75
Buildings & Fixed Equipment . . . . .	837.00
Other Structures (Purchase, Construction & Repairs). . . . .	4,147.84 <u>184,241.84</u>
Excess Expenditures . . . . .	49,686.45-
Balance December 31, 1949 . . . . .	<u>\$97,187.90</u>

TABLE 1.--SUMMARY OF AVERAGE VARIATIONS FROM MANUFACTURER'S GUARANTEE, Fall 1949

MANUFACTURER	Mixed Fertilizers								Miscellaneous Materials						All Fertilizers	
	Superphosphate		Nitrogen		Avail. P <sub>2</sub> O <sub>5</sub>		Potash		Nitrogen		Avail. P <sub>2</sub> O <sub>5</sub>		Potash		No. Samples	Index No.
	No. Samples	Index No.	No. Samples	Index No.	No. Samples	Index No.	No. Samples	Index No.	No. Samples	Index No.	No. Samples	Index No.	No. Samples	Index No.		
American Agricultural Chemical Co.	16	101.7	41	99.9	51	102.5	51	105.8	--	----	4	98.8	--	----	71	102.9
American Cyanamid Co.	--	----	--	----	--	----	--	----	2	101.1	7	107.8	--	----	9	103.4
Armour Fertilizer Works	33	101.7	102	98.7	121	101.8	118	103.5	1	64.5	1	122.0	2	102.3	156	101.8
Central Farmers Fertilizer Co.	30	101.6	--	----	--	----	--	----	29	99.8	--	----	--	----	59	100.8
Consumers Cooperative Association	2	99.9	5	101.7	6	107.6	6	105.3	--	----	--	----	--	----	8	104.8
Darling and Co.	5	105.6	45	94.4	47	100.8	47	111.0	--	----	--	----	--	----	52	103.2
Davison Chemical Corp.	11	103.1	9	103.6	11	100.0	11	108.6	--	----	--	----	--	----	22	102.9
Farm Belt Fertilizer & Chemical Co.	9	100.9	14	101.2	16	103.4	12	102.0	--	----	--	----	1	94.1	26	101.3
Interstate Fertilizer Co.	1	102.8	6	98.6	6	99.6	6	106.8	--	----	--	----	1	100.7	8	101.7
Lange Bros., Inc.	4	99.8	13	103.5	16	98.2	16	101.8	--	----	--	----	1	99.3	21	99.9
Milwaukee Sewerage Commission	--	----	--	----	--	----	--	----	3	100.0	3	143.7	--	----	3	110.9
Missouri Farmers Association	9	98.7	128	106.0	161	104.2	161	110.0	--	----	--	----	10	99.9	180	105.4
San Francisco Chemical Co.	--	----	--	----	--	----	--	----	--	----	6	110.8	--	----	6	110.8
Schrock Fertilizer Service	--	----	--	----	--	----	--	----	--	----	5	156.0	--	----	5	156.0
Spencer Chemical Co.	--	----	--	----	--	----	--	----	44	101.2	--	----	--	----	44	101.2
Swift and Co.	10	101.5	75	99.1	85	102.4	85	101.9	--	----	1	246.0	--	----	96	101.9
Thomson Phosphate Co.	--	----	--	----	--	----	--	----	--	----	3	122.5	--	----	3	122.5
Thompson Sales Co.	--	----	--	----	--	----	--	----	--	----	4	143.1	--	----	4	143.1
Thurston Chemical Co.	19	106.1	98	100.3	117	101.7	113	102.9	--	----	--	----	13	100.3	149	102.0
Virginia-Carolina Chemical Corp.	5	103.2	42	98.0	48	104.6	48	105.8	--	----	--	----	--	----	53	104.1
TOTALS	154	102.2	578	100.6	685	102.6	674	105.7	79	100.2	34	127.5	28	100.1	975	103.3

Results were omitted from this table if less than three samples were obtained in any one class of fertilizer designated above.

An index of 100 = Guaranteed Analysis

TABLE 2.--SUMMARY OF TOTAL AND DEFICIENT FERTILIZER NUTRIENTS, Fall 1949

MANUFACTURER	Nitrogen			Total Phosphoric Acid from Bone			Available Phosphoric Acid			Potash			All Analyses		
	Total No.	Deficient		Total No.	Deficient		Total No.	Deficient		Total No.	Deficient		Total No.	Deficient	
		No.	%		No.	%		No.	%		No.	%		No.	%
American Agricultural Chemical Co.	41	5	12.2	---	--	----	71	7	9.9	51	16	31.4	163	28	17.2
American Cyanamid Co.	2	0	0	---	--	----	7	2	28.6	---	--	----	9	2	22.2
Armour Fertilizer Works	103	38	36.9	---	--	----	155	26	16.8	120	19	15.8	378	83	22.0
Central Farmers Fertilizer Co.	29	9	31.0	---	--	----	30	2	6.7	---	--	----	59	11	18.6
Consumers Co-operative Association	5	2	40.0	---	--	----	8	0	0	6	1	16.7	19	3	15.8
Darling & Co.	45	26	57.8	---	--	----	52	9	17.3	47	4	8.5	144	39	27.1
Davison Chemical Corporation	9	1	11.1	---	--	----	22	3	13.6	11	1	9.1	42	5	11.9
Farm Belt Fertilizer & Chemical Co.	14	2	14.3	---	--	----	25	1	4.0	13	3	23.1	52	6	11.5
Interstate Fertilizer Co.	6	2	33.3	---	--	----	7	2	28.6	7	0	0	20	4	20.0
Lange Bros., Inc.	13	0	0	---	--	----	20	11	55.0	17	2	11.8	50	13	26.0
Milwaukee Sewerage Commission	3	0	0	---	--	----	3	0	0	---	--	----	6	0	0
Missouri Farmers Association	128	9	7.0	---	--	----	170	5	2.9	171	12	7.0	469	26	5.5
San Francisco Chemical Co.	---	--	----	---	--	----	7	3	42.9	---	--	----	7	3	42.9
Schrock Fertilizer Service	---	--	----	---	--	----	5	0	0	---	--	----	5	0	0
Spencer Chemical Co.	44	1	2.3	---	--	----	---	--	----	---	--	----	44	1	2.3
Swift & Co.	75	26	34.7	---	--	----	96	9	9.4	85	15	17.6	256	50	19.5
Thomson Phosphate Co.	---	--	----	---	--	----	3	1	33.3	---	--	----	3	1	33.3
Thompson Sales Co.	---	--	----	---	--	----	4	1	25.0	---	--	----	4	1	25.0
Thurston Chemical Co.	98	19	19.4	---	--	----	136	21	15.4	126	9	7.1	360	49	13.6
Virginia-Carolina Chemical Corp.	42	16	38.1	---	--	----	53	2	3.8	48	5	10.4	143	23	16.1
<b>TOTALS</b>	<b>657</b>	<b>156</b>	<b>23.7</b>	<b>---</b>	<b>--</b>	<b>----</b>	<b>874</b>	<b>105</b>	<b>12.0</b>	<b>702</b>	<b>87</b>	<b>12.4</b>	<b>2233</b>	<b>348</b>	<b>15.6</b>

TABLE 3. FERTILIZER ANALYSES AND GUARANTEES; FALL 1949

MANUFACTURER BRANDS, and DEALER OR PURCHASER	NITROGEN		PHOSPHORIC ACID (P <sub>2</sub> O <sub>5</sub> )			Water Soluble Potash (K <sub>2</sub> O) %
	Total %	Water Soluble to Total %	Total in Bone %	Insoluble %	Available %	
<u>AA Quality Brands</u>						
Phosphate Rock, Ground Florida Pebble 30%						
Ozark Produce, Salem . . . . .	----	----	----	27.60	3.40	----
H. H. Green Mill & Elevator, Pattonsburg	----	----	----	29.20	.70	----
Average Analysis . . . . .	----	----	----	28.40	2.05	----
Guaranteed Analysis . . . . .	----	----	----	----	3.00	----
Phosphate Rock, Ground Florida Pebble 31%						
Bryan Produce, Princeton . . . . .	----	----	----	28.30	3.25	----
Wentzville Feed & Grain Co., Wentzville	----	----	----	28.70	4.50	----
Average Analysis . . . . .	----	----	----	27.50	3.88	----
Guaranteed Analysis . . . . .	----	----	----	----	3.00	----
<u>18% Normal Superphosphate</u>						
Producers Exchange, Vienna . . . . .	----	----	----	1.44	17.81	----
Versailles Feed & Produce, Versailles .	----	----	----	.97	17.95	----
Littnell & Butterfield, Wheeling . . . . .	----	----	----	1.01	17.59	----
Corno Feed Store, Rolla . . . . .	----	----	----	.73	17.92	----
Bryan Produce, Princeton . . . . .	----	----	----	1.08	17.77	----
Ozark Produce, Salem . . . . .	----	----	----	1.06	17.84	----
M. F. A. Producers Exchange, Lohman .	----	----	----	.98	18.42	----
Nixia Hardware, Nixia . . . . .	----	----	----	.59	18.26	----
J. C. Ricketts, Belleview . . . . .	----	----	----	2.20	17.90	----
H. W. Cooperman, New Haven . . . . .	----	----	----	1.89	18.11	----
Farmers Grain Supply Co, Elsberry . . .	----	----	----	1.21	18.29	----
Cuba Roller Mill, Cuba . . . . .	----	----	----	1.07	18.76	----
Silvey's Feed Store, Potosi (D) . . . . .	----	----	----	1.33	19.07	----
Sturgeon Elevator Co., Sturgeon . . . .	----	----	----	1.50	18.15	----
Donphan Feed & Supply Co., Doniphan .	----	----	----	1.09	19.56	----
St. Charles Co. Farm Bureau Service Co., St. Charles (D) . . . . .	----	----	----	1.53	19.47	----
Average Analysis . . . . .	----	----	----	1.23	18.30	----
Guaranteed Analysis . . . . .	----	----	----	----	18.00	----
<u>AA Quality 2-12-6</u>						
M. F. A. Producers Exchange, Lohman .	2.02	89.6	----	1.62	11.51	5.75
Nixia Hardware, Nixia . . . . .	2.01	94.5	----	.99	11.84	6.22
Ozark Produce, Salem (D) . . . . .	2.00	91.0	----	1.67	11.13	6.46
Silvey's Feed Store, Potosi . . . . .	2.09	95.7	----	1.01	12.19	5.76
Shetley Feed Store, Fredericktown . . . .	1.99	89.9	----	1.77	10.93	6.42
Farmers Equity Exchange, Bowling Green	1.99	95.0	----	.67	12.43	5.76
Perry County Milling Co., Perryville . .	1.99	93.5	----	1.42	12.66	6.27
Average Analysis . . . . .	2.01	92.7	----	1.31	11.81	6.09
Guaranteed Analysis . . . . .	2.00	----	----	----	12.00	6.00
<u>AA Quality 3-12-12</u>						
Shetley Feed Store, Fredericktown . . . .	3.03	94.4	----	1.07	12.21	12.19
Farmers Equity Exchange, Bowling Green	2.97	96.6	----	.98	12.22	12.46
Average Analysis . . . . .	3.00	95.5	----	1.03	12.22	12.33
Guaranteed Analysis . . . . .	3.00	----	----	----	12.00	12.00
<u>AA Quality 4-12-4</u>						
Versailles Feed & Produce Co., Versailles	4.01	98.0	----	1.99	11.47	4.62
Perry County Milling Co., Perryville . .	3.99	98.7	----	1.30	12.48	4.34
Average Analysis . . . . .	4.00	98.4	----	1.65	11.98	4.48
Guaranteed Analysis . . . . .	4.00	----	----	----	12.00	4.00
<u>Agrico Brands</u>						
<u>Agrico Alkaline 0-10-20</u>						
Ozark Produce, Salem (D) . . . . .	----	----	----	.78	10.97	18.47
Guaranteed Analysis . . . . .	----	----	----	----	10.00	20.00
<u>Agrico Phosphate and Potash 0-12-12</u>						
Corno Feed Store, Rolla . . . . .	----	----	----	.46	12.24	11.83

(D) Registration tags not attached.

Deficiencies are underlined.

TABLE 3. FERTILIZER ANALYSES AND GUARANTEES; FALL 1949 (Cont'd)

MANUFACTURER BRANDS, and DEALER OR PURCHASER	NITROGEN		PHOSPHORIC ACID (P <sub>2</sub> O <sub>5</sub> )			Water Soluble Potash (K <sub>2</sub> O) %
	Total %	Water Soluble to Total %	Total in Bone %	Insoluble %	Available %	
(Agrico Phosphate and Potash 0-12-12 cont'd)						
Guaranteed Analysis. . . . .	----	----	----	----	12.00	12.00
<u>Agrico Phosphate and Potash 0-14-7</u>						
M. F. A. Producers Exchange, Lohman . . . . .	----	----	----	.58	14.92	7.50
Nixia Hardware, Nixia. . . . .	----	----	----	.49	14.81	7.85
Downey Feed Store, Atlanta . . . . .	----	----	----	.63	14.92	7.54
Paul Seabaugh, Bloomfield. . . . .	----	----	----	.80	15.40	6.73
Cape Egg and Feed Co., Cape Girardeau. . . . .	----	----	----	1.28	14.87	7.83
Average Analysis. . . . .	----	----	----	.76	14.98	7.49
Guaranteed Analysis. . . . .	----	----	----	----	14.00	7.00
<u>Agrico Alkaline 0-20-20</u>						
Versailles Feed and Produce, Versailles . . . . .	----	----	----	.48	21.07	21.39
Cuba Roller Mill, Cuba . . . . .	----	----	----	.92	20.53	20.63
Eggiman Feed and Produce, Cape Girardeau . . . . .	----	----	----	.98	21.87	18.48
Average Analysis. . . . .	----	----	----	.79	21.16	20.17
Guaranteed Analysis. . . . .	----	----	----	----	20.00	20.00
<u>Agrico for Grain 2-12-6</u>						
Farmers Exchange, Shelbyville. . . . .	2.02	91.1	----	1.60	11.91	6.38
Farmers Coop # 96, Wyaconda . . . . .	1.99	90.5	----	1.28	12.20	5.97
Griders Elevator, Appleton City . . . . .	2.16	90.7	----	1.72	11.83	6.22
Corno Feed Store, Rolla . . . . .	<u>1.89</u>	<u>94.7</u>	----	.73	13.07	6.12
Cuba Roller Mill, Cuba . . . . .	1.99	94.5	----	.82	12.41	6.33
Rosebud Feed Co., Rosebud . . . . .	<u>1.92</u>	<u>93.2</u>	----	1.15	12.08	<u>5.71</u>
Farmers Equity Exchange, Bowling Green . . . . .	2.03	95.6	----	.89	12.24	<u>5.63</u>
Doniphan Feed and Supply Co., Doniphan. . . . .	1.98	85.4	----	1.35	11.90	<u>6.34</u>
L. Langenburg, Drake . . . . .	2.05	96.6	----	.89	12.06	5.65
Wentzville Feed and Grain Co., Wentzville . . . . .	1.99	93.0	----	1.42	11.91	<u>5.79</u>
Producers Grain Co., Montgomery City . . . . .	2.00	92.5	----	1.33	12.67	5.93
Boland Feed Store, Washington (D) . . . . .	2.06	95.6	----	1.03	12.22	<u>5.26</u>
Cape Egg and Feed Co., Cape Girardeau . . . . .	2.04	91.2	----	1.28	12.05	<u>6.30</u>
St. Charles County Farm Bureau Service Co., St. Charles. . . . .	1.99	91.0	----	1.01	12.19	5.76
Average Analysis. . . . .	2.01	92.5	----	1.18	12.20	5.96
Guaranteed Analysis. . . . .	2.00	----	----	----	12.00	6.00
<u>Agrico for Corn 2-14-8</u>						
Bryan Produce, Princeton . . . . .	2.01	92.5	----	1.80	14.85	8.77
Guaranteed Analysis. . . . .	2.00	----	----	----	14.00	8.00
<u>Agrico for Midwest 3-12-12</u>						
Griders Elevator, Appleton City . . . . .	3.00	94.3	----	1.25	12.29	13.09
Rosebud Feed Store, Rosebud . . . . .	2.98	93.3	----	1.32	12.28	12.12
Farmers Grain Supply Co., Elsberry . . . . .	2.86	96.2	----	1.22	12.10	12.55
Wentzville Feed and Grain Co., Wentzville . . . . .	2.97	93.9	----	1.01	12.67	<u>11.10</u>
Average Analysis. . . . .	<u>2.95</u>	<u>94.4</u>	----	1.20	12.34	<u>12.22</u>
Guaranteed Analysis. . . . .	3.00	----	----	----	12.00	12.00
<u>Agrico for Cereals 4-12-4</u>						
Corno Feed Store, Rolla . . . . .	4.19	94.3	----	1.37	12.18	<u>3.89</u>
M. F. A. Producers Exchange, Lohman . . . . .	4.01	96.0	----	.97	12.26	4.23
Lopez Store Co., Ironton . . . . .	4.06	95.1	----	1.43	12.20	4.23
H. W. Cooperman, New Haven. . . . .	3.98	95.2	----	1.47	12.32	4.39
St. Charles County Farm Bureau Service Co., St. Charles. . . . .	4.10	97.3	----	1.98	<u>11.31</u>	4.23
Cuba Roller Mill, Cuba . . . . .	4.06	96.1	----	1.29	<u>12.85</u>	4.28
Wentzville Feed and Grain Co., Wentzville . . . . .	4.08	97.5	----	2.11	11.82	4.09
Paul Seabaugh, Bloomfield. . . . .	3.98	95.5	----	2.18	12.00	3.75
Boland Feed Store, Washington. . . . .	4.17	98.1	----	1.76	12.15	<u>4.13</u>
Average Analysis. . . . .	4.07	96.1	----	1.62	12.12	4.14
Guaranteed Analysis. . . . .	4.00	----	----	----	12.00	4.00
<u>Agrico Top Dresser 8-8-8</u>						
Farmers Exchange, Shelbyville. . . . .	<u>7.81</u>	<u>98.7</u>	----	.62	8.03	8.40
Guaranteed Analysis. . . . .	8.00	----	----	----	8.00	8.00

(D) Registration tags not attached.

Deficiencies are underlined.

TABLE 3. FERTILIZER ANALYSES AND GUARANTEES, FALL 1949 (Cont'd)

MANUFACTURER BRANDS, and DEALER OR PURCHASER	NITROGEN		PHOSPHORIC ACID (P <sub>2</sub> O <sub>5</sub> )			Water Soluble Potash (K <sub>2</sub> O) %
	Total %	Water Soluble to Total %	Total in Bone %	Insoluble %	Available %	
<u>Agrico for Corn 8-8-8</u>						
Farmers Equity Exchange, Bowling Green	7.42	98.0	----	1.00	9.15	7.78
Guaranteed Analysis. . . . .	8.00	----	----	----	8.00	8.00
AMERICAN CYANAMID CO. NEW YORK, N. Y.						
<u>Aero-Phos Florida Natural Phosphate</u>						
Farmers Exchange, Kirksville . . . . .	----	----	----	31.80	1.65	----
M. F. A. Central Coop., Green City. . . . .	----	----	----	29.50	4.25	----
Putnan County M. F. A. Exchange, Union- ville. . . . .	----	----	----	30.95	2.55	----
Farmers Exchange, Macon. . . . .	----	----	----	30.40	3.10	----
Farmers Exchange, Houston (D). . . . .	----	----	----	29.88	3.74	----
M. F. A. Central Coop., Ste. Genevieve. . . . .	----	----	----	30.45	3.10	----
Producers Exchange # 2, Washington . . . . .	----	----	----	29.15	4.25	----
Average Analysis. . . . .	----	----	----	30.30	3.23	----
Guaranteed Analysis. . . . .	----	----	----	----	3.00	----
<u>20.6% Aero Cyanamid, Granular</u>						
Pearce Produce, Fairfax. . . . .	20.64	96.6	----	----	----	----
Weston Milling Co., Weston. . . . .	21.01	97.4	----	----	----	----
Average Analysis. . . . .	20.83	97.0	----	----	----	----
Guaranteed Analysis. . . . .	20.60	----	----	----	----	----
ARMOUR FERTILIZER WORKS, EAST ST. LOUIS, ILL.						
<u>Big Crop Brands</u>						
<u>20% Superphosphate</u>						
Ruby Green, Inc., Kirksville. . . . .	----	----	----	1.75	20.95	----
Nichols Bros., Southwest City. . . . .	----	----	----	2.11	21.49	----
Economy Feed Mills, Harrisonville. . . . .	----	----	----	1.75	18.85	----
Scheets Hardware, Houston . . . . .	----	----	----	1.65	20.00	----
Redal's Feed Store, Vienna . . . . .	----	----	----	1.89	19.76	----
Evans Bros., Laclede . . . . .	----	----	----	.90	19.47	----
Yates Produce, Ava . . . . .	----	----	----	.98	19.82	----
Farmers Elevator, Salisbury (D) . . . . .	----	----	----	.45	20.90	----
Swift's Hatchery and Produce, Grant City	----	----	----	1.01	20.19	----
Tevebaugh Feed Store, Gainesville . . . . .	----	----	----	1.20	20.20	----
Rosebud Feed Co., Rosebud . . . . .	----	----	----	1.66	19.99	----
T. C. Davison, Wellsville. . . . .	----	----	----	1.69	19.81	----
Farmers Elevator and Supply Co., Troy. . . . .	----	----	----	1.52	20.88	----
St. Louis Seed Co., St. Louis . . . . .	----	----	----	.88	20.82	----
Average Analysis. . . . .	----	----	----	----	20.22	----
Guaranteed Analysis. . . . .	----	----	----	----	20.00	----
<u>45% Superphosphate</u>						
Farmers Elevator and Exchange Co., Palmyra. . . . .	----	----	----	1.25	45.30	----
Ruby Green, Inc., Kirksville. . . . .	----	----	----	.89	47.51	----
Economy Feed Mills, Harrisonville. . . . .	----	----	----	.91	45.04	----
Greenfield Milling Co., Greenfield. . . . .	----	----	----	1.41	45.14	----
Brammer Produce, Hale . . . . .	----	----	----	.76	45.24	----
Ellman and Heinz, Eminence . . . . .	----	----	----	1.34	45.66	----
Bryan Produce, Princeton . . . . .	----	----	----	.92	45.88	----
Fogarty Coal and Grain Co., St. Joseph (D)	----	----	----	.79	45.96	----
Leroy Blount's Feed Store, Jefferson City	----	----	----	.54	46.91	----
Swift's Hatchery and Produce, Grant City	----	----	----	.53	45.82	----
Lafayette Elevator Co., Lexington. . . . .	----	----	----	.59	44.81	----
Lebanon Packing Plant, Lebanon. . . . .	----	----	----	.58	46.77	----
M. F. A. Producers Exchange, Lohman . . . . .	----	----	----	.87	46.73	----
Tevebaugh Feed Store, Gainesville . . . . .	----	----	----	.49	46.76	----

(D) Registration tags not attached.

Deficiencies are underlined.

TABLE 3. FERTILIZER ANALYSES AND GUARANTEES, FALL 1949 (Cont'd)

MANUFACTURER BRANDS, and DEALER OR PURCHASER	NITROGEN		PHOSPHORIC ACID (P <sub>2</sub> O <sub>5</sub> )			Water
	Total %	Water Soluble to Total %	Total in Bone %	Insoluble %	Available %	Soluble Potash (K <sub>2</sub> O) %
(45% Superphosphate cont'd.)						
Forbridge Feed and Produce Co., Poplar Bluff . . . . .	----	----	----	.80	45.65	----
Spark-O-Life Trading Post Fredericktown . . . . .	----	----	----	.90	45.95	----
Midco Mercantile Co., Fremont . . . . .	----	----	----	1.13	45.27	----
Schemel Feed Store, Perryville . . . . .	----	----	----	1.01	45.49	----
Dixie Feed Store, DeSoto . . . . .	----	----	----	1.03	45.47	----
Average Analysis . . . . .	----	----	----	.88	45.86	----
Guaranteed Analysis . . . . .	----	----	----	----	45.00	----
0-12-12						
Kelso Milling Co., Mt. Vernon . . . . .	----	----	----	1.83	12.00	12.32
Knight Produce, Delta . . . . .	----	----	----	1.57	12.11	<u>11.00</u>
Forbridge Feed and Produce Co., Poplar Bluff . . . . .	----	----	----	1.38	12.37	12.32
Average Analysis . . . . .	----	----	----	1.59	12.16	11.88
Guaranteed Analysis . . . . .	----	----	----	----	12.00	12.00
0-14-7						
Scheets Hardware, Houston . . . . .	----	----	----	1.76	14.77	7.88
Leroy Blount's Feed Store, Jefferson City . . . . .	----	----	----	1.97	13.83	<u>6.53</u>
Tevebaugh Feed Store, Gainesville . . . . .	----	----	----	1.74	14.86	<u>8.06</u>
Beumel Bros., Westphalia . . . . .	----	----	----	1.98	14.97	7.97
Wards Store # 3 Patterson . . . . .	----	----	----	1.26	14.89	7.30
Wingrath Feed Store, Linn . . . . .	----	----	----	1.72	14.73	7.57
Ronald Hixon Store, Belleview . . . . .	----	----	----	1.53	14.77	7.21
Forbridge Feed and Produce Co., Poplar Bluff . . . . .	----	----	----	2.28	14.02	7.35
Average Analysis . . . . .	----	----	----	1.78	14.61	7.48
Guaranteed Analysis . . . . .	----	----	----	----	14.00	7.00
0-20-20						
H. L. Emery and Sons, Nevada . . . . .	----	----	----	1.16	21.29	20.86
Craig Bros., Memphis . . . . .	----	----	----	1.36	21.94	<u>19.54</u>
Montgomery Feed Store, Rich Hill . . . . .	----	----	----	1.25	21.75	<u>18.52</u>
Washburn Produce, King City . . . . .	----	----	----	1.26	21.39	<u>19.58</u>
LaMonte Elevator Co., LaMonte . . . . .	----	----	----	.94	21.56	<u>19.78</u>
Leroy Blount's Feed Store, Jefferson City . . . . .	----	----	----	.96	19.86	<u>19.11</u>
Tevebaugh Feed Store, Gainesville . . . . .	----	----	----	1.19	20.36	<u>18.72</u>
Midco Mercantile Co., Fremont . . . . .	----	----	----	1.08	19.82	<u>20.34</u>
Average Analysis . . . . .	----	----	----	1.15	21.00	<u>19.56</u>
Guaranteed Analysis . . . . .	----	----	----	----	20.00	<u>20.00</u>
2-12-6						
Ruby Green Produce Co., Kirksville . . . . .	2.00	86.5	----	2.24	12.26	6.56
Kelso Milling Co., Mt. Vernon . . . . .	2.14	90.7	----	5.32	<u>10.66</u>	6.92
Farmers Elevator & Exchange Co., Hannibal . . . . .	2.10	86.2	----	2.34	13.09	6.80
H. L. Emery & Sons, Nevada . . . . .	1.99	86.4	----	2.30	12.13	6.51
Hannah & Masterson, Lamar . . . . .	2.04	86.3	----	2.54	12.76	6.73
Clatt & Davis, Gorin . . . . .	<u>1.80</u>	83.3	----	2.32	13.06	6.36
Redal's Feed Store, Vienna . . . . .	2.15	85.1	----	1.71	12.09	6.20
Tevebaugh Feed Store, Gainesville . . . . .	2.01	84.1	----	1.49	12.26	6.50
Scheets Hardware, Houston . . . . .	2.03	86.2	----	2.53	12.37	6.25
Pierce Produce, Blythedale . . . . .	2.14	92.1	----	2.06	11.84	7.02
Leroy Blount Feed Store, Jefferson City . . . . .	2.00	89.0	----	2.06	<u>11.70</u>	6.22
Jenkins Feed Store, Hollister . . . . .	1.81	81.8	----	2.18	<u>11.46</u>	5.50
Rolla Milling Co., Rolla . . . . .	2.03	84.7	----	2.38	<u>11.34</u>	6.56
Nixon Feed Store, Potosi . . . . .	<u>1.92</u>	85.4	----	2.77	11.98	6.43
Knight Produce, Delta . . . . .	2.14	86.4	----	1.27	13.08	6.40
Schemel Feed Store, Perryville . . . . .	2.04	84.8	----	1.72	12.68	6.18
Midco Mercantile Co., Fremont . . . . .	1.99	89.9	----	1.91	12.44	6.10
Dixie Feed Store, DeSoto . . . . .	2.01	84.6	----	1.58	13.12	6.38

Deficiencies are underlined.

TABLE 3. FERTILIZER ANALYSES AND GUARANTEES; FALL 1949 (Cont'd)

MANUFACTURER BRANDS, and DEALER OR PURCHASER	NITROGEN		PHOSPHORIC ACID (P <sub>2</sub> O <sub>5</sub> )			Water Soluble Potash (K <sub>2</sub> O) %
	Total %	Water Soluble to Total %	Total in Bone %	Insoluble %	Available %	
(2-12-6 cont'd.)						
Silvey's Feed Store, Potosi . . . . .	2.12	89.2	----	1.80	13.30	6.17
Lutesville Feed Store, Lutesville . . . . .	1.99	86.4	----	2.67	12.03	6.56
Barber Cash Store, Silva . . . . .	2.24	85.7	----	2.39	12.71	6.30
Piedmont Feed & Grocery Supply Co., Piedmont . . . . .	2.07	87.0	----	1.86	13.09	6.05
Ronald Hixson Store, Belleview . . . . .	2.11	85.3	----	1.98	12.72	6.67
New Haven Feed Co., New Haven . . . . .	2.02	85.1	----	1.96	12.49	5.51
Spark-O-Life Trading Post, Fredericktown	1.64	82.9	----	1.48	11.82	8.29
Price Mercantile Co., Van Buren . . . . .	<u>1.85</u>	84.9	----	2.26	12.59	6.06
D. A. Peterein, Silica (D) . . . . .	2.08	85.6	----	2.16	12.64	6.62
Average Analysis . . . . .	2.02	86.1	----	2.20	12.36	6.44
Guaranteed Analysis . . . . .	2.00	----	----	----	12.00	6.00
3-12-12						
David Barnes, Williamsburg . . . . .	2.93	92.2	----	1.99	12.35	12.30
Seward & Quinn, Monroe City . . . . .	3.07	91.9	----	1.70	<u>11.68</u>	12.93
Redal's Feed Store, Vienna . . . . .	3.00	89.7	----	1.10	<u>12.90</u>	12.34
Tevebaugh Feed Store, Gainsville . . . . .	3.14	90.8	----	1.47	11.83	12.27
Fogarty Coal & Grain Co., St. Joseph . . . . .	3.10	92.6	----	1.82	<u>11.77</u>	<u>11.45</u>
Alton Feed and Grain Co., Alton . . . . .	2.97	94.6	----	1.56	<u>11.84</u>	<u>11.52</u>
Ronald Hixson Store, Belleview . . . . .	<u>2.91</u>	91.1	----	1.74	12.16	11.86
D. A. Peterein, Silica . . . . .	3.09	89.6	----	1.55	13.30	11.97
Average Analysis . . . . .	3.03	91.6	----	1.62	12.23	12.08
Guaranteed Analysis . . . . .	3.00	----	----	----	12.00	12.00
4-12-4						
Oliver Feed Store, Fulton . . . . .	3.78	92.3	----	2.42	13.03	<u>3.87</u>
Farmers Elevator & Exchange, Palmyra	<u>3.65</u>	93.2	----	2.21	12.97	<u>4.23</u>
Montgomery Feed Store, Rich Hill . . . . .	4.00	92.3	----	1.93	11.87	4.43
Center Elevator Co., Center . . . . .	<u>3.49</u>	91.7	----	1.90	13.35	4.75
Ruby Green Produce Co., Kirksville . . . . .	4.43	95.3	----	2.05	12.38	5.87
Hannah & Masterson, Lamar . . . . .	4.29	93.2	----	1.45	12.43	4.44
David Barnes, Williamsburg . . . . .	4.00	93.3	----	1.65	12.28	4.38
Seward & Quinn, Monroe City . . . . .	<u>3.84</u>	92.7	----	2.23	12.55	4.78
Fogarty Coal & Grain Co., St. Joseph . . . . .	<u>3.86</u>	92.7	----	1.91	11.89	4.35
Leroy Blount Feed Store, Jefferson City . . . . .	<u>4.13</u>	95.9	----	2.43	11.66	4.42
Yates Produce, Ava . . . . .	<u>3.75</u>	93.9	----	1.61	<u>12.09</u>	4.47
Jenkin's Feed Mill, Hollister . . . . .	4.10	92.7	----	1.63	12.06	3.98
Concordia Farm Cooperative Co., Concordia . . . . .	4.00	92.0	----	2.45	<u>11.70</u>	4.42
Ellman & Heinz, Eminence . . . . .	4.04	92.6	----	1.27	12.06	4.45
Farmers Elevator, Salisbury . . . . .	3.97	92.4	----	2.36	11.96	4.35
Chula Produce, Chula . . . . .	4.08	94.9	----	1.15	11.83	4.40
Burn's Feed Store, Savannah . . . . .	<u>3.84</u>	94.3	----	2.75	<u>11.03</u>	4.40
Evans Brothers, Laclede . . . . .	<u>3.83</u>	91.1	----	1.98	11.82	4.08
Tevebaugh Feed Store, Gainsville . . . . .	<u>3.59</u>	95.0	----	2.68	11.55	3.98
Callao Feed & Produce, Callao . . . . .	<u>3.83</u>	91.9	----	1.21	<u>12.69</u>	4.04
H. A. Ballard, Doniphan . . . . .	<u>3.81</u>	86.1	----	2.63	<u>11.67</u>	4.69
New Haven Feed Co., New Haven . . . . .	<u>3.96</u>	93.9	----	2.16	<u>11.65</u>	4.14
Price Mercantile Co., Van Buren . . . . .	4.18	93.3	----	2.38	<u>12.12</u>	5.43
H. E. Stone Produce, Centralia . . . . .	4.26	93.0	----	1.67	11.98	4.52
Shetley Feed Store, Fredericktown . . . . .	4.12	91.5	----	1.85	11.80	4.44
Schemel Feed Store, Perryville . . . . .	4.05	92.8	----	1.19	<u>12.36</u>	4.18
Midco Mercantile Co., Fremont . . . . .	<u>3.75</u>	92.3	----	1.75	12.70	4.85
D. A. Peterein, Silica . . . . .	4.07	92.9	----	2.71	<u>11.12</u>	4.42
Ronald Hixson Store, Belleview . . . . .	<u>3.32</u>	89.5	----	2.45	<u>11.82</u>	4.71
Bueneman's, Wright City . . . . .	4.13	93.5	----	2.61	<u>11.31</u>	4.71
Piedmont Feed & Grocery Supply Co., Piedmont . . . . .	4.31	92.8	----	2.45	12.15	5.72
Average Analysis . . . . .	<u>3.95</u>	92.7	----	2.04	12.06	4.51

(D) Registration tags not attached.

Deficiencies are underlined.



TABLE 3. FERTILIZER ANALYSES AND GUARANTEES; FALL 1949 (Cont'd)

MANUFACTURER BRANDS, and DEALER OR PURCHASER	NITROGEN		PHOSPHORIC ACID (P <sub>2</sub> O <sub>5</sub> )			Water Soluble Potash (K <sub>2</sub> O) %
	Total %	Water Soluble to Total %	Total in Bone %	Insoluble %	Available %	
(4-12-4 cont'd.)						
Guaranteed Analysis. . . . .	4.00	----	----	----	12.00	4.00
4-16-16						
Kahoka Implement Co., Kahoka. . . . .	3.99	93.0	----	.94	16.56	16.19
Fogarty Coal & Grain Co., St. Joseph. . .	4.21	92.4	----	1.00	17.60	15.46
Average Analysis. . . . .	4.10	92.7	----	.97	17.08	15.83
Guaranteed Analysis. . . . .	4.00	----	----	----	16.00	16.00
4-24-12						
Robert White, Hurdland. . . . .	4.80	94.0	----	1.12	24.63	12.14
Smith Bros. Produce & Feed Co. Wyaconda	3.74	92.8	----	1.20	23.80	11.76
LaMonte Elevator Co., LaMonte. . . . .	3.53	98.0	----	1.17	24.43	12.02
Swift's Hatchery & Produce, Grant City. .	3.85	92.7	----	1.00	26.45	11.07
Jenkin's Feed Mill, Hollister (D). . . . .	4.00	92.3	----	1.13	21.82	9.67
Farmers Elevator Co., Salisbury. . . . .	4.00	93.5	----	.99	24.51	11.27
Tevebaugh Feed Store, Gainsville. . . . .	3.88	94.3	----	.99	24.21	11.58
Schemel Feed Store, Perryville. . . . .	3.55	91.8	----	.62	23.88	11.89
Boland Feed Store, Washington. . . . .	3.93	92.9	----	1.44	24.21	11.92
Average Analysis. . . . .	3.92	93.6	----	1.07	24.33	11.48
Guaranteed Analysis. . . . .	4.00	----	----	----	24.00	12.00
Velvetgreen 5-10-5						
Nichols Bros., Southwest City. . . . .	5.05	93.7	----	2.75	9.88	5.32
Farmers Elevator Co., Salisbury. . . . .	6.33	94.9	----	1.74	10.14	5.43
Bryan Produce Princeton. . . . .	6.00	97.2	----	1.39	11.34	5.51
Chula Produce, Chula. . . . .	6.21	94.7	----	1.27	10.16	5.14
Arrow Seed & Feed Co., Malden. . . . .	5.04	94.2	----	1.69	10.54	5.05
Ed Bound Auto, Implement, & Hardware Co., Greenville. . . . .	5.07	94.5	----	1.62	10.16	5.30
Average Analysis. . . . .	5.62	94.9	----	1.74	10.37	5.29
Guaranteed Analysis. . . . .	5.00	----	----	----	10.00	5.00
Vertagreen 5-10-5						
Schemel Feed Store, Perryville (A). . . .	4.98	94.2	----	2.39	9.64	5.20
Kahoka Implement Co., Kahoka. . . . .	5.10	93.3	----	2.83	9.65	5.07
T. C. Davison, Wellsville. . . . .	5.00	94.0	----	2.48	9.95	5.01
Hummert Seed Co., St. Louis. . . . .	5.14	94.0	----	3.26	8.87	5.07
Average Analysis. . . . .	5.06	93.9	----	2.74	9.53	5.09
Guaranteed Analysis. . . . .	5.00	----	----	----	10.00	5.00
8-8-8						
Economy Feed Mills, Harrisonville. . . .	7.06	97.7	----	2.00	7.43	9.17
Galloway Bros., Elsberry. . . . .	7.98	98.4	----	1.91	7.47	7.93
Dixie Feed Store, DeSoto. . . . .	7.14	95.5	----	1.31	9.12	7.22
Average Analysis. . . . .	7.39	97.2	----	1.74	8.01	8.11
Guaranteed Analysis. . . . .	8.00	----	----	----	8.00	8.00
8-24-8						
Robert White, Hurdland. . . . .	7.68	93.4	----	.89	24.51	8.06
Kahoka Implement Co., Kahoka. . . . .	7.67	94.3	----	.46	24.84	8.03
Alexander Feed & Supply Co., Pleasant Hill	8.69	94.2	----	.67	25.43	8.29
Montgomery Feed Store, Rich Hill. . . .	7.70	92.3	----	.95	23.65	9.10
Lafayette Elevator Co., Lexington. . . .	8.56	95.1	----	.79	20.95	8.60
Tevebaugh Feed Store, Gainsville. . . .	6.92	96.7	----	.68	22.46	9.40
Fogarty Coal & Grain Co., St. Joseph. . .	7.99	96.7	----	1.01	25.14	8.30
Scheets Hardware, Houston. . . . .	7.68	97.5	----	1.00	24.71	8.04
Boland Feed Store, Washington. . . . .	7.21	97.8	----	.50	23.05	10.28
Average Analysis. . . . .	7.34	95.3	----	.77	23.80	8.68
Guaranteed Analysis. . . . .	8.00	----	----	----	24.00	8.00
10-20-0						
Alexander Feed & Supply Co., Pleasant Hill	10.13	96.7	----	.70	20.20	----
Fogarty Coal & Grain Co., St. Joseph. . .	9.77	98.9	----	.69	20.36	----
Price Mercantile Co., Van Buren. . . . .	10.01	94.8	----	.90	19.80	----
Average Analysis. . . . .	9.97	96.8	----	.76	20.12	----

(A) Not registered.  
(D) Registration tags not attached.

Deficiencies are underlined.

TABLE 3. FERTILIZER ANALYSES AND GUARANTEES; FALL 1949 (Cont'd)

MANUFACTURER BRANDS, and DEALER OR PURCHASER (10-20-0 cont'd.)	NITROGEN		PHOSPHORIC ACID (P <sub>2</sub> O <sub>5</sub> )			Water Soluble Potash (K <sub>2</sub> O) %
	Total %	Water Soluble to Total %	Total in Bone %	Insoluble %	Available %	
Guaranteed Analysis . . . . .	10.00	----	----	----	20.00	----
<u>Pulverized Sheep Manure</u>						
Hummert Seed Co., St. Louis . . . . .	1.29	17.8	----	.22	1.22	2.94
Guaranteed Analysis . . . . .	2.00	----	----	----	1.00	2.00
<u>Muriate of Potash 60%</u>						
Bryan Produce, Princeton . . . . .	----	----	----	----	----	60.50
Guaranteed Analysis . . . . .	----	----	----	----	----	60.00
<b>BLYTHEVILLE FERTILIZER CORP.</b>						
BLYTHEVILLE, ARK.						
B F C 3-9-18						
M. F. A. Coop., Ellington . . . . .	2.59	97.3	----	.68	8.96	18.75
Guaranteed Analysis . . . . .	3.00	----	----	----	9.00	18.00
<b>CENTRAL FARMERS FERTILIZER CO.</b>						
CHICAGO, ILL.						
<u>T. V. A. Concentrated Superphosphate 45%</u>						
Farm Bureau Service Co., Hale . . . . .	----	----	----	3.55	44.80	----
Farm Bureau Service Co., Palmyra . . . . .	----	----	----	2.59	48.16	----
M. F. A. Central Coop., Kahoka . . . . .	----	----	----	3.04	45.41	----
Farmers Elevator & Produce Co., Boonville . . . . .	----	----	----	2.86	44.54	----
Farmers Elevator & Supply Co., Clinton . . . . .	----	----	----	2.93	45.22	----
Farmers Produce Exchange., Lebanon . . . . .	----	----	----	3.79	44.76	----
Farmers Exchange, Houston . . . . .	----	----	----	1.24	46.66	----
M. F. A. Central Coop., Grant City . . . . .	----	----	----	3.63	45.97	----
Farmers Exchange, Milan . . . . .	----	----	----	1.05	47.70	----
Farmers Exchange No. 231, Brookfield . . . . .	----	----	----	3.48	45.32	----
Average Analysis . . . . .	----	----	----	2.82	45.85	----
Guaranteed Analysis . . . . .	----	----	----	----	45.00	----
<u>T. V. A. Concentrated Superphosphate 46%</u>						
M. F. A. Central Coop., Lancaster . . . . .	----	----	----	2.06	47.64	----
Farmers Exchange, Stanberry . . . . .	----	----	----	3.25	46.02	----
Producers Exchange, Marshfield . . . . .	----	----	----	3.07	46.38	----
Dallas County Farmers Exchange, Buffalo Cameron Cooperative Elevator Ass'n., Cameron . . . . .	----	----	----	3.46	45.84	----
M. F. A. Central Coop., Moberly . . . . .	----	----	----	3.10	45.95	----
Bollinger County Farm Bureau Service Co., Lutesville . . . . .	----	----	----	3.79	45.61	----
Average Analysis . . . . .	----	----	----	.70	48.50	----
Guaranteed Analysis . . . . .	----	----	----	2.78	46.56	----
Guaranteed Analysis . . . . .	----	----	----	----	46.00	----
<u>T. V. A. Concentrated Superphosphate 47%</u>						
Eagle Mill & Elevator Co., Higginsville (D) Farmers Produce & Exchange Co., Chillicothe . . . . .	----	----	----	3.12	46.53	----
Farm Club, Owensville . . . . .	----	----	----	1.06	50.64	----
M. F. A. Central Coop., Bernie . . . . .	----	----	----	3.43	46.05	----
Boone County Farm Bureau Service Co., Columbia . . . . .	----	----	----	3.14	45.09	----
Average Analysis . . . . .	----	----	----	2.61	47.19	----
Guaranteed Analysis . . . . .	----	----	----	2.67	47.10	----
Guaranteed Analysis . . . . .	----	----	----	----	47.00	----
<u>T. V. A. Concentrated Superphosphate 48%</u>						
M. F. A. Central Coop., Fulton . . . . .	----	----	----	1.13	49.42	----
M. F. A. Central Coop., Perry . . . . .	----	----	----	.68	50.57	----
Average Analysis . . . . .	----	----	----	.91	50.00	----
Guaranteed Analysis . . . . .	----	----	----	----	48.00	----

(D) Registration tags not attached.

Deficiencies are underlined.

TABLE 3. FERTILIZER ANALYSES AND GUARANTEES, FALL 1949 (Cont'd)

MANUFACTURER BRANDS, and DEALER OR PURCHASER	NITROGEN		PHOSPHORIC ACID (P <sub>2</sub> O <sub>5</sub> )			Water Soluble Potash (K <sub>2</sub> O) %
	Total %	Water Soluble to Total %	Total in Bone %	Insoluble %	Available %	
<b>T. V. A. Concentrated Superphosphate 49%</b>						
Putnam County M. F. A. Exchange, Unionville . . . . .	----	----	----	.97	50.58	----
Farmers Exchange No. 231, Brookfield . . . . .	----	----	----	1.64	49.71	----
Mansfield Farmers Exchange, Mansfield . . . . .	----	----	----	.93	48.62	----
M. F. A. Central Coop., Moberly . . . . .	----	----	----	1.81	49.84	----
Average Analysis . . . . .	----	----	----	1.34	49.69	----
Guaranteed Analysis . . . . .	----	----	----	----	49.00	----
<b>T. V. A. Concentrated Superphosphate 50%</b>						
M. F. A. Central Coop., Green City . . . . .	----	----	----	.67	51.08	----
M. F. A. Central Coop., Browning . . . . .	----	----	----	.84	50.91	----
Average Analysis . . . . .	----	----	----	.76	51.00	----
Guaranteed Analysis . . . . .	----	----	----	----	50.00	----
<b>T. V. A. Ammonium Nitrate 33%</b>						
M. F. A. Farmers Exchange, Clarence . . . . .	34.41	I	----	----	----	----
M. F. A. Central Coop., Kahoka . . . . .	34.01	I	----	----	----	----
Pearce Produce, Fairfax . . . . .	33.76	I	----	----	----	----
M. F. A. Central Coop., Perry . . . . .	33.71	I	----	----	----	----
M. F. A. Cooperative Ass'n. California . . . . .	33.79	I	----	----	----	----
M. F. A. Central Coop., Sedalia . . . . .	33.66	I	----	----	----	----
Putnam County M. F. A. Exchange, Unionville (D) . . . . .	33.80	I	----	----	----	----
Farmers Exchange, Trenton . . . . .	33.85	I	----	----	----	----
Emma Cooperative Elevator Co., Sweet Springs . . . . .	33.01	I	----	----	----	----
M. F. A. Central Coop., Moberly . . . . .	33.04	I	----	----	----	----
Farmers Produce & Exchange, Chillicothe . . . . .	33.06	I	----	----	----	----
United Coop., Liberty . . . . .	33.24	I	----	----	----	----
Farmers Exchange No. 231, Brookfield . . . . .	33.54	I	----	----	----	----
M. F. A. Central Coop., Bernie . . . . .	32.16	I	----	----	----	----
Perry County Farm Bureau Service Co., Perryville . . . . .	33.43	I	----	----	----	----
Farmers Elevator & Supply Co., Troy . . . . .	32.17	I	----	----	----	----
Farm Bureau Service Co., St. Charles . . . . .	33.14	I	----	----	----	----
Producers Exchange No. 2, Washington . . . . .	33.40	I	----	----	----	----
Farm Bureau Service Co., Farmington . . . . .	34.27	I	----	----	----	----
Farmers Elevator, Wright City . . . . .	32.70	I	----	----	----	----
M. F. A. Central Coop., Louisiana . . . . .	32.02	I	----	----	----	----
M. F. A. Coop., Ellington . . . . .	32.91	I	----	----	----	----
M. F. A. Central Coop., Marthasville . . . . .	32.34	I	----	----	----	----
Lincoln Central Farm Bureau Service Co., Troy . . . . .	32.74	I	----	----	----	----
Average Analysis . . . . .	33.26	I	----	----	----	----
Guaranteed Analysis . . . . .	33.00	----	----	----	----	----
<b>CONSUMERS COOPERATIVE ASS'N.</b>						
<b>KANSAS CITY, MO.</b>						
<b>Coop Brands</b>						
<b>0-20-0</b>						
United Coop., Liberty . . . . .	----	----	----	1.25	20.00	----
Dannen Mills, St. Joseph . . . . .	----	----	----	.13	19.97	----
Average Analysis . . . . .	----	----	----	.69	19.99	----
Guaranteed Analysis . . . . .	----	----	----	----	20.00	----
<b>0-20-10</b>						
Emma Cooperative Elevator Co., Sweet Springs . . . . .	----	----	----	.30	21.35	6.77
Guaranteed Analysis . . . . .	----	----	----	----	20.00	10.00

Deficiencies are underlined.

(I) Not determined; all H<sup>2</sup>O Soluble.

TABLE 3. FERTILIZER ANALYSES AND GUARANTEES; FALL 1949 (Cont'd)

MANUFACTURER BRANDS, and DEALER OR PURCHASER	NITROGEN		PHOSPHORIC ACID (P <sub>2</sub> O <sub>5</sub> )			Water Soluble Potash (K <sub>2</sub> O) %
	Total %	Water Soluble to Total %	Total in Bone %	Insoluble %	Available %	
<u>2-12-6</u>						
Emma Cooperative Elevator Co., Sweet Springs. . . . .	2.19	88.1	----	.90	13.82	8.27
Producers Coop., Ridgeway. . . . .	2.60	91.1	----	1.68	12.05	6.61
Average Analysis. . . . .	2.40	89.6	----	1.29	12.94	7.44
Guaranteed Analysis. . . . .	2.00	----	----	----	12.00	6.00
<u>4-12-4</u>						
Cameron Cooperative Elevator Ass'n. Cameron. . . . .	<u>3.77</u>	94.2	----	1.30	12.65	3.98
Emma Cooperative Elevator Co., Sweet Springs. . . . .	3.71	91.4	----	1.41	13.54	4.95
Farmers Produce Co., Ridgeway. . . . .	4.00	95.8	----	1.77	12.63	5.23
Average Analysis. . . . .	3.83	93.8	----	1.49	12.94	4.72
Guaranteed Analysis. . . . .	4.00	----	----	----	12.00	4.00
DARLING AND CO.						
CHICAGO, ILL.						
<u>Darling's 20% Superphosphate</u>						
Evans Bros., Laclede. . . . .	----	----	----	1.78	22.12	----
Alton Feed and Grain Co., Alton. . . . .	----	----	----	1.31	21.34	----
Maysville Produce, Maysville. . . . .	----	----	----	1.77	20.78	----
Wingrath Feed Store, Linn. . . . .	----	----	----	.81	19.94	----
Dickerson Feed Store, Doniphan. . . . .	----	----	----	.82	21.38	----
Average Analysis. . . . .	----	----	----	1.30	21.11	----
Guaranteed Analysis. . . . .	----	----	----	----	20.00	----
<u>Darling's Twelve Twelve</u>						
Phil Ratliff, Neosho. . . . .	----	----	----	.36	12.69	12.10
Guaranteed Analysis. . . . .	----	----	----	----	12.00	12.00
<u>Darling's 0-20-10</u>						
Green Feed & Grain Co., Salem. . . . .	----	----	----	.93	19.82	9.63
Guaranteed Analysis. . . . .	----	----	----	----	20.00	10.00
<u>Darling's Crop King</u>						
Phil Ratliff, Neosho. . . . .	2.05	86.8	----	.72	12.06	6.42
Redal's Feed Store, Vienna. . . . .	2.29	90.0	----	.66	13.29	7.78
Warsaw Produce, Warsaw. . . . .	2.34	92.7	----	.71	12.39	7.63
Callao Feed & Produce Co., Callao. . . . .	2.00	91.5	----	1.24	12.44	6.17
Alton Feed & Grain Co., Alton. . . . .	2.00	89.0	----	.60	12.18	6.49
Reed's Farm Supply Co., Trenton. . . . .	2.06	91.3	----	.78	12.05	6.63
Adams Feed & Produce, Iberia. . . . .	2.00	90.5	----	.76	12.09	6.22
Hawkins Milling Co., Springfield. . . . .	2.05	92.7	----	.80	12.05	6.72
Roy's Feed Store, Potosi. . . . .	2.17	89.9	----	.67	12.86	6.38
Boland Feed Store, Washington. . . . .	2.91	92.1	----	.82	13.08	7.66
Farmers Cash Store, Poplar Bluff. . . . .	1.98	86.9	----	.51	12.74	6.91
Average Analysis. . . . .	2.17	90.3	----	.75	12.48	6.82
Guaranteed Analysis. . . . .	2.00	----	----	----	12.00	6.00
<u>Darling's Big Potash</u>						
Hout Feed Store, Linn. . . . .	2.16	91.7	----	.57	9.51	19.77
Farmers Cash Store, Poplar Bluff. . . . .	2.98	93.3	----	.79	9.46	17.44
Average Analysis. . . . .	2.57	92.5	----	.68	9.49	18.61
Guaranteed Analysis. . . . .	3.00	----	----	----	9.00	18.00
<u>Darling's Sure Winner</u>						
Smith Bros. Produce & Feed Co., Wyaconda. . . . .	2.82	90.1	----	.38	12.90	11.46
Green's Feed & Grain Co., Salem. . . . .	3.00	93.7	----	.86	12.27	11.62
Alton Feed & Grain Co., Alton. . . . .	2.87	94.8	----	.68	12.40	11.85
Hinshaw Feed Co., Columbia. . . . .	2.97	94.3	----	.72	13.06	12.18
Average Analysis. . . . .	2.92	93.2	----	.66	12.66	11.78
Guaranteed Analysis. . . . .	3.00	----	----	----	12.00	12.00
<u>Darling's Field Marshal</u>						
King City Elevator, King City. . . . .	3.76	92.3	----	.65	12.18	5.28

Deficiencies are underlined.

TABLE 3. FERTILIZER ANALYSES AND GUARANTEES; FALL 1949 (Cont'd)

MANUFACTURER BRANDS, and DEALER OR PURCHASER	NITROGEN		PHOSPHORIC ACID (P <sub>2</sub> O <sub>5</sub> )			Water Soluble Potash (K <sub>2</sub> O) %
	Total %	Water Soluble to Total %	Total in Bone %	Insoluble %	Available %	
(Darling's Field Marshal cont'd.)						
Summer's Elevator Co., Fayette . . . . .	<u>3.80</u>	93.2	----	.84	11.99	5.11
Sloop Produce, Queen City . . . . .	<u>3.37</u>	92.6	----	.76	12.99	5.97
Farmers Elevator & Supply Co., Clinton.	<u>3.47</u>	91.9	----	.68	12.72	5.47
Redal's Feed Store, Vienna . . . . .	<u>3.87</u>	93.8	----	.81	11.99	4.96
Alton Feed & Grain Co., Alton . . . . .	<u>3.90</u>	94.1	----	1.11	11.87	5.18
Maysville Produce, Maysville. . . . .	<u>3.70</u>	94.0	----	.96	11.37	5.91
Adams Feed & Produce, Iberia . . . . .	<u>3.84</u>	93.8	----	.73	12.07	4.81
Saline County Seed House, Marshall . . .	<u>4.00</u>	93.8	----	.87	12.06	4.85
Warsaw Produce, Warsaw . . . . .	<u>3.98</u>	94.7	----	1.23	11.60	4.94
Reed's Farm Supply Co., Trenton . . . . .	<u>3.95</u>	93.7	----	1.11	11.92	5.18
Farmers Cash Store, Poplar Bluff. . . . .	<u>3.97</u>	94.7	----	1.24	<u>11.36</u>	4.72
Roy's Feed Store, Potosi. . . . .	<u>3.84</u>	95.8	----	1.12	12.03	5.41
Wellsville Grain & Feed Co., Wellsville. .	<u>3.69</u>	95.7	----	1.01	12.37	5.68
Worley Implement Co., Dexter . . . . .	<u>3.98</u>	95.2	----	1.33	11.92	5.29
Lackamp Feed & Seed Co., Arcadia . . . .	<u>3.93</u>	94.9	----	1.24	<u>11.74</u>	4.86
Farmers Elevator & Supply Co., Troy . . .	<u>3.70</u>	94.9	----	.88	12.32	5.25
Dickerson Feed Store, Doniphan . . . . .	<u>3.81</u>	94.2	----	.98	12.19	5.30
St. Marys Cash Hardware, St. Marys . . .	<u>3.73</u>	94.1	----	1.08	<u>11.59</u>	5.75
Hinshaw Feed Co., Columbia . . . . .	<u>3.84</u>	90.1	----	1.05	12.23	5.34
Average Analysis. . . . .	<u>3.81</u>	93.9	----	.98	12.03	5.26
Guaranteed Analysis. . . . .	4.00	----	----	----	12.00	4.00
<u>Darling's 4-24-12</u>						
Saline County Seed House, Marshall. . . .	<u>3.52</u>	92.0	----	.67	23.15	12.60
Green's Feed & Grain Co., Salem . . . . .	<u>3.34</u>	91.9	----	.64	<u>24.06</u>	12.40
Redal's Feed Store, Vienna . . . . .	<u>3.32</u>	92.8	----	.68	23.77	12.09
Alton Feed & Grain Co., Alton . . . . .	<u>3.17</u>	90.0	----	.73	22.60	12.80
Adams Feed & Produce, Iberia . . . . .	<u>3.31</u>	91.2	----	1.07	<u>22.65</u>	13.50
Hawkins Milling Co., Springfield. . . . .	<u>3.24</u>	91.4	----	.67	<u>23.68</u>	12.30
Hinshaw Feed Co., Columbia . . . . .	<u>3.42</u>	88.6	----	1.07	<u>23.48</u>	12.00
Wellsville Grain & Feed Co., Wellsville. .	<u>3.36</u>	89.0	----	.90	<u>23.83</u>	12.12
Average Analysis. . . . .	<u>3.34</u>	91.0	----	.80	<u>23.40</u>	12.48
Guaranteed Analysis. . . . .	4.00	----	----	----	24.00	12.00
<b>DAVISON CHEMICAL CORP.</b>						
BALTIMORE, MD., NASHVILLE, TENN. AND PERRY, IOWA						
<u>Davco Granulated Superphosphate 20%</u>						
Farmers Elevator, El Dorado Springs . . .	----	----	----	.80	20.80	----
King City Elevator, King City (D) . . . . .	----	----	----	.98	20.47	----
Mansfield Farmers Exchange, Mansfield . .	----	----	----	.45	21.20	----
H. H. Green Mill & Elevator, Hamilton (D) . .	----	----	----	1.72	20.13	----
Lebanon Machine & Implement Co., Lebanon .	----	----	----	.50	21.05	----
Pollard Produce, Polo . . . . .	----	----	----	1.10	22.10	----
Thrasher Feed Store, Galt. . . . .	----	----	----	1.79	20.01	----
Dallas County Farmers Exchange, Buffalo .	----	----	----	.60	21.30	----
H. H. Green Mill & Elevator, Pattonsburg (D) . . . . .	----	----	----	1.26	20.74	----
Average Analysis. . . . .	----	----	----	1.02	20.87	----
Guaranteed Analysis. . . . .	----	----	----	----	20.00	----
<u>Davco Superphosphate 45%</u>						
H. H. Green Mill & Elevator, Pattonsburg .	----	----	----	.81	45.59	----
Pollard Produce, Polo. . . . .	----	----	----	.86	44.99	----
Average Analysis. . . . .	----	----	----	.84	45.29	----
Guaranteed Analysis. . . . .	----	----	----	----	45.00	----
<u>Davco 0-12-12</u>						
Eagle Mill & Elevator Co., Higgensville . .	----	----	----	.77	<u>11.77</u>	13.18
Guaranteed Analysis. . . . .	----	----	----	----	12.00	12.00
<u>Davco Red Diamond 0-14-7</u>						
Cooper's Store, Stover . . . . .	----	----	----	.92	<u>13.33</u>	<u>6.37</u>

(D) Registration tags not attached.

Deficiencies are underlined.

TABLE 3. FERTILIZER ANALYSES AND GUARANTEES; FALL 1949 (Cont'd)

MANUFACTURER BRANDS, and DEALER OR PURCHASER	NITROGEN		PHOSPHORIC ACID (P <sub>2</sub> O <sub>5</sub> )			Water Soluble Potash (K <sub>2</sub> O) %
	Total %	Water Soluble to Total %	Total in Bone %	Insoluble %	Available %	
(Davco Red Diamond 0-14-7 cont'd.)						
Guaranteed Analysis. . . . .	----	----	----	----	14.00	7.00
<u>Davco Red Diamond 2-12-6</u>						
Cooper's Store, Stover . . . . .	2.31	93.5	----	.94	<u>11.81</u>	6.47
Pollard Produce, Polo. . . . .	2.43	95.5	----	1.37	<u>12.13</u>	6.54
Average Analysis. . . . .	2.37	94.5	----	1.16	11.97	6.51
Guaranteed Analysis. . . . .	2.00	----	----	----	12.00	6.00
<u>Davco Red Diamond 4-12-4</u>						
Lebanon Machine & Implement Co., Lebanon	4.14	96.8	----	1.12	12.18	4.56
Cooper's Store, Stover . . . . .	4.30	97.0	----	.81	12.27	4.65
Farmers Exchange, Houston. . . . .	4.00	96.0	----	1.28	12.10	4.28
Farmers Feed & Produce, Gallatin. . . . .	3.21	94.7	----	1.68	11.82	5.21
Lexington Milling Co., Lexington. . . . .	4.13	95.9	----	1.14	12.29	4.40
Farmers Exchange, Willow Springs. . . . .	4.20	97.6	----	1.23	12.32	4.29
Thrasher Feed Store, Galt. . . . .	4.43	97.3	----	1.12	11.96	4.13
Average Analysis. . . . .	4.06	96.5	----	1.20	12.13	4.50
Guaranteed Analysis. . . . .	4.00	----	----	----	12.00	4.00
EXCELL LABORATORIES CHICAGO, ILL.						
<u>New Plant Life</u>						
Kresges Store, St. Louis (D) (H) . . . . .	2.62	97.7	----	.30	.99	2.73
Guaranteed Analysis. . . . .	2.00	----	----	----	1.00	2.00
FARM BELT FERTILIZER & CHEMICAL CO. KANSAS CITY, MO.						
<u>Farm Belt 0-20-0</u>						
Vogt & Son, Urich. . . . .	----	----	----	1.35	20.00	----
Asbell Feed Store, Burlington Junction. . . . .	----	----	----	2.15	19.90	----
Levasy Elevator, Levasy (D) . . . . .	----	----	----	.90	20.45	----
Average Analysis. . . . .	----	----	----	1.47	20.12	----
Guaranteed Analysis. . . . .	----	----	----	----	20.00	----
<u>Farm Belt 0-45-0</u>						
Braymer Feed & Grain Co., Braymer . . . . .	----	----	----	.87	45.63	----
Guaranteed Analysis. . . . .	----	----	----	----	45.00	----
<u>Farm Belt 0-46-0</u>						
Evans Bros. Feed Store, Laclede . . . . .	----	----	----	.68	46.37	----
Clark Produce, Appleton City. . . . .	----	----	----	.53	45.32	----
Peterson Feed & Seed Co., Fairfax . . . . .	----	----	----	.52	47.41	----
Peterson Feed & Seed Co., Tarkio. . . . .	----	----	----	.58	46.72	----
Vogt & Son, Urich . . . . .	----	----	----	.62	46.33	----
Average Analysis. . . . .	----	----	----	.59	46.43	----
Guaranteed Analysis. . . . .	----	----	----	----	46.00	----
<u>Farm Belt 0-20-10</u>						
Bryan Produce, Princeton . . . . .	----	----	----	1.51	21.89	10.23
Lafayette Elevator Co., Lexington (D) . . . . .	----	----	----	1.76	21.55	10.50
Average Analysis. . . . .	----	----	----	1.64	21.72	10.37
Guaranteed Analysis. . . . .	----	----	----	----	20.00	10.00
<u>Farm Belt 2-12-6</u>						
LaMonte Elevator Co., LaMonte . . . . .	2.13	87.3	----	1.38	12.12	<u>5.47</u>
Guaranteed Analysis. . . . .	2.00	----	----	----	12.00	6.00
<u>Farm Belt 3-12-12</u>						
Fiddick & Sons, Cameron. . . . .	3.41	97.9	----	1.59	12.06	11.87
Guaranteed Analysis. . . . .	3.00	----	----	----	12.00	12.00
<u>Farm Belt 4-12-4</u>						
Glasgow Cooperative Ass'n, Glasgow . . . . .	4.30	93.7	----	1.55	12.03	4.05
Vogt & Son, Urich. . . . .	4.07	94.1	----	1.52	12.01	4.03
Feeders Supply Co., Tina (D) . . . . .	3.99	98.2	----	1.48	12.07	4.23
Polo Elevator, Polo (D) . . . . .	4.00	98.0	----	1.47	12.03	4.04

(D) Registration tags not attached.

(H) Sample drawn from less than five containers.

Deficiencies are underlined.

TABLE 3. FERTILIZER ANALYSES AND GUARANTEES; FALL 1949 (Cont'd)

MANUFACTURER BRANDS, and DEALER OR PURCHASER	NITROGEN		PHOSPHORIC ACID (P <sub>2</sub> O <sub>5</sub> )			Water Soluble Potash (K <sub>2</sub> O) %
	Total %	Water Soluble to Total %	Total in Bone %	Insoluble %	Available %	
(Farm Belt 4-12-4 cont'd.)						
Kearney Grain & Supply Co., Kearney (D)	3.80	97.9	----	.95	12.90	3.90
Farmers Feed & Supply Co., Lawson (D)	4.01	97.5	----	1.53	12.02	4.18
The Old Mill Grain & Seed Co., Lee's Summit. . . . .	4.04	98.0	----	1.45	12.50	4.58
Brock Produce, Maysville . . . . .	4.24	96.2	----	1.76	11.46	4.30
Average Analysis. . . . .	4.06	96.7	----	1.46	12.13	4.16
Guaranteed Analysis. . . . .	4.00	----	----	----	12.00	4.00
Farm Belt 4-16-0						
Vogt & Son, Ulrich . . . . .	4.18	93.3	----	2.11	17.59	----
King City Elevator, King City . . . . .	4.47	95.1	----	2.91	16.84	----
Average Analysis. . . . .	4.33	94.2	----	2.51	17.22	----
Guaranteed Analysis. . . . .	4.00	----	----	----	16.00	----
Farm Belt 10-20-0						
Sandy Moody Feed Store, Mound City. . .	10.01	97.2	----	1.85	20.75	----
Glasgow Cooperative Ass'n., Glasgow . .	9.15	97.0	----	1.83	19.97	----
Average Analysis. . . . .	9.58	97.1	----	1.84	20.36	----
Guaranteed Analysis. . . . .	10.00	----	----	----	20.00	----
Farm Belt 0-0-60						
Summers Elevator Co., Fayette . . . . .	----	----	----	----	----	56.44
Guaranteed Analysis. . . . .	----	----	----	----	----	60.00
FARM BUREAU SERVICE CO. OF MISSOURI JEFFERSON CITY, MO.						
Green Diamond 0-20-0						
Bollinger County Farm Bureau Service Co., Lutesville. . . . .	----	----	----	1.49	19.39	----
Guaranteed Analysis. . . . .	----	----	----	----	20.00	----
GOULARD & OLENA, INC. SKILLMAN, N. J.						
G. & O. Ground Bone						
St. Louis Seed Co., St. Louis (D) . . . .	3.50	42.9	16.65	----	----	----
Guaranteed Analysis. . . . .	2.40	----	22.75	----	----	----
G. & O. Lawn Fertilizer						
St. Louis Seed Co., St. Louis (D) . . . .	9.66	87.1	----	.58	7.32	9.85
Guaranteed Analysis. . . . .	10.00	----	----	----	6.00	4.00
J. HARRIS MANURE CO. EAST ST. LOUIS, ILL.						
Hampton Park Brand Cattle Manure						
Julius Peterson Co., St. Louis (D) . . . .	2.03	27.6	----	.25	1.73	1.39
Guaranteed Analysis. . . . .	2.00	----	----	----	1.00	2.00
A. H. HOFFMAN, INC. LANDISVILLE, PA.						
Hoffman Sheep Manure						
Niesner Bros. Store, St. Louis (H) . . . .	1.83	24.6	----	.34	1.32	2.28
Guaranteed Analysis. . . . .	1.50	----	----	----	1.00	2.00
HYDROPONIC CHEMICAL CO. COPLEY, OHIO						
Hyponex						
Earl May Store No. 22, St. Joseph (B) (H)	7.43	98.7	----	.28	7.48	20.47
Julius Peterson Co., St. Louis (H) . . . .	7.22	99.4	----	.31	7.07	20.50
Average Analysis. . . . .	7.33	99.1	----	.30	7.28	20.49
Guaranteed Analysis. . . . .	7.00	----	----	----	6.00	19.00

(B) Registration tags out-dated.

(D) Registration tags not attached.

(H) Sample drawn from less than five containers.

Deficiencies are underlined.

TABLE 3. FERTILIZER ANALYSES AND GUARANTEES; FALL 1949 (Cont'd)

MANUFACTURER BRANDS, and DEALER OR PURCHASER	NITROGEN		PHOSPHORIC ACID (P <sub>2</sub> O <sub>5</sub> )			Water Soluble Potash (K <sub>2</sub> O) %
	Total %	Water Soluble to Total %	Total in Bone %	Insoluble %	Available %	
<b>INDIANA FARM BUREAU COOPERATIVE ASS'N., INC.</b>						
<b>INDIANAPOLIS, IND.</b>						
<u>Farm Bureau 0-20-0</u>						
Boone County M. F. A. Exchange,						
Columbia (D), . . . . .	----	----	----	.37	21.68	----
Guaranteed Analysis. . . . .	----	----	----	----	20.00	----
<b>INTERSTATE FERTILIZER CO.</b>						
<b>CAIRO, ILL.</b>						
<u>Interstate Superphosphate 20%</u>						
Farm Bureau Service Co., New Madrid. .	----	----	----	.10	20.55	----
Guaranteed Analysis. . . . .	----	----	----	----	20.00	----
<u>Interstate 3-12-12</u>						
Farm Bureau Service Co., Sikeston. . . .	2.97	97.6	----	.27	12.43	12.00
Farm Bureau Service Co., Benton. . . . .	2.98	97.7	----	.33	12.10	12.18
Farm Bureau Service Co., New Madrid. .	2.99	97.0	----	.40	11.88	12.59
Average Analysis. . . . .	2.98	97.4	----	.33	12.14	12.26
Guaranteed Analysis. . . . .	3.00	----	----	----	12.00	12.00
<u>Interstate 4-12-4</u>						
Farm Bureau Service Co., Sikeston. . . .	3.79	97.6	----	.44	11.54	5.26
Farm Bureau Service Co., Benton. . . . .	3.91	97.2	----	.43	11.78	5.28
Average Analysis. . . . .	3.85	97.4	----	.44	11.66	5.27
Guaranteed Analysis. . . . .	4.00	----	----	----	12.00	4.00
<u>Interstate 8-8-8</u>						
Farm Bureau Service Co., Sikeston. . . .	8.00	99.1	----	.23	8.03	8.22
Guaranteed Analysis. . . . .	8.00	----	----	----	8.00	8.00
<u>Interstate Muriate of Potash</u>						
Reeves Feed Mill, Charleston (H). . . .	----	----	----	----	----	60.40
Guaranteed Analysis. . . . .	----	----	----	----	----	60.00
<b>LANGE BROTHERS, INC.</b>						
<b>ST. LOUIS, MO.</b>						
<u>L. B. 0-45-0</u>						
Howard County Implement Co., Fayette .	----	----	----	3.18	45.12	----
Cole County Farm Bureau Service Co., Jefferson City . . . . .	----	----	----	.68	46.87	----
Beumel Bros., Westphalia . . . . .	----	----	----	.71	45.04	----
Farm Bureau Service Co., Perryville. . .	----	----	----	3.01	42.64	----
Average Analysis. . . . .	----	----	----	1.90	44.92	----
Guaranteed Analysis. . . . .	----	----	----	----	45.00	----
<u>L. B. 0-9-27</u>						
Northern Feed Co., Springfield. . . . .	----	----	----	.97	9.58	26.60
Guaranteed Analysis. . . . .	----	----	----	----	9.00	27.00
<u>L. B. 0-12-12</u>						
Farm Bureau Service Co., Farmington. .	----	----	----	.93	11.62	12.35
Guaranteed Analysis. . . . .	----	----	----	----	12.00	12.00
<u>L. B. 0-20-10</u>						
Farm Bureau Service Co., Perryville . .	----	----	----	1.39	20.26	10.03
Guaranteed Analysis. . . . .	----	----	----	----	20.00	10.00
<u>L. B. 2-12-6</u>						
Farm Bureau Service Co., Perryville . .	2.08	95.7	----	1.62	11.75	5.54
Farm Bureau Service Co., Advance. . . .	2.19	93.6	----	1.97	11.66	6.13
Farm Bureau Service Co., Farmington. .	2.14	87.9	----	1.79	12.07	5.57
Average Analysis. . . . .	2.14	92.4	----	1.79	11.83	5.75
Guaranteed Analysis. . . . .	2.00	----	----	----	12.00	6.00
<u>L. B. 3-9-18</u>						
Farm Bureau Service Co., Perryville . .	3.02	97.7	----	1.29	8.71	18.50
Guaranteed Analysis. . . . .	3.00	----	----	----	9.00	18.00

(D) Registration tags not attached.

(H) Sample drawn from less than five containers.

Deficiencies are underlined.



TABLE 3. FERTILIZER ANALYSES AND GUARANTEES; FALL 1949 (Cont'd)

MANUFACTURER BRANDS, and DEALER OR PURCHASER	NITROGEN		PHOSPHORIC ACID (P <sub>2</sub> O <sub>5</sub> )			Water Soluble Potash (K <sub>2</sub> O) %
	Total %	Water Soluble to Total %	Total in Bone %	Insoluble %	Available %	
<u>L. B. 3-12-12</u>						
Farm Bureau Service Co., Farmington.	3.03	96.4	----	1.91	11.54	12.79
Guaranteed Analysis . . . . .	3.00	----	----	----	12.00	12.00
<u>L. B. 4-12-4</u>						
M. F. A. Central Coop., Novelty . . . . .	4.07	97.8	----	1.49	12.06	4.62
Farm Bureau Service Co., Farmington .	4.14	97.6	----	2.14	<u>11.28</u>	4.38
Arvel S. Kennedy, Coldwater. . . . .	4.19	98.8	----	2.45	<u>11.76</u>	4.27
Beumel Bros., Westphalia . . . . .	4.14	96.1	----	2.36	<u>11.39</u>	4.37
Farm Bureau Service Co., Perryville. .	4.16	96.9	----	2.49	<u>11.73</u>	4.03
Average Analysis . . . . .	4.14	97.4	----	2.19	<u>11.64</u>	4.33
Guaranteed Analysis . . . . .	4.00	----	----	----	12.00	4.00
<u>L. B. 4-12-8</u>						
Howard County Implement Co., Fayette.	4.41	98.2	----	1.67	11.88	8.23
Guaranteed Analysis . . . . .	4.00	----	----	----	12.00	8.00
<u>L. B. 4-24-12</u>						
Farm Bureau Service Co., Advance . . .	3.98	97.5	----	1.38	24.02	12.43
Madison County Farmers Whse., Fredericktown . . . . .	3.98	97.7	----	2.14	<u>22.86</u>	11.86
Average Analysis . . . . .	3.98	97.6	----	1.76	<u>23.44</u>	12.15
Guaranteed Analysis . . . . .	4.00	----	----	----	24.00	12.00
<u>L. B. Muriate of Potash</u>						
Farm Bureau Service Co., Perryville. .	----	----	----	----	----	59.56
Guaranteed Analysis . . . . .	----	----	----	----	----	60.00
MILWAUKEE SEWERAGE COMMISSION						
MILWAUKEE, WIS.						
<u>Milorganite</u>						
Goetz Nursery, St. Louis . . . . .	6.00	8.7	----	.66	2.90	----
A. H. Hummert Seed Co., St. Louis . . .	5.96	9.1	----	.78	2.66	----
Antoine Seed Co., Independence . . . . .	6.04	11.1	----	.84	3.06	----
Average Analysis . . . . .	6.00	9.6	----	.76	2.87	----
Guaranteed Analysis . . . . .	6.00	----	----	----	2.00	----
MISSOURI FARMERS ASS'N.						
COLUMBIA, MO.						
<u>M. F. A. 0-20-0</u>						
Producers Exchange No. 280, Freeburg.	----	----	----	.83	21.07	----
M. F. A. Central Coop., Ste. Genevieve.	----	----	----	1.48	20.57	----
M. F. A. Central Coop., Moberly . . . . .	----	----	----	1.55	20.05	----
M. F. A. Central Coop., Keytesville . . .	----	----	----	.83	22.07	----
Farmers Exchange, Ozark . . . . .	----	----	----	1.86	19.99	----
M. F. A. Produce, Ravenwood . . . . .	----	----	----	1.29	20.01	----
Farmers Exchange, Kirksville . . . . .	----	----	----	1.02	20.58	----
Farmers Elevator & Supply Co., Clinton	----	----	----	1.93	20.22	----
Average Analysis . . . . .	----	----	----	1.35	20.87	----
Guaranteed Analysis . . . . .	----	----	----	----	20.00	----
<u>M. F. A. Triple Superphosphate 46%</u>						
Farmers Elevator Co., Jonesburg . . . .	----	----	----	.67	<u>38.70</u>	----
Guaranteed Analysis . . . . .	----	----	----	----	46.00	----
<u>M. F. A. 0-14-7</u>						
M. F. A. Cooperative Ass'n., California.	----	----	----	1.11	14.24	8.15
Guaranteed Analysis . . . . .	----	----	----	----	14.00	7.00
<u>M. F. A. 0-16-8</u>						
Putnam County M. F. A. Exchange, Unionville . . . . .	----	----	----	.70	18.05	8.76
Farmers Exchange, Birch Tree . . . . .	----	----	----	1.29	17.56	9.94
Farmers Exchange, Macon . . . . .	----	----	----	1.06	17.79	11.59
Bolivar Farmers Exchange, Bolivar. . .	----	----	----	1.22	17.53	9.86
M. F. A. Central Coop., Pattonsburg . .	----	----	----	.54	18.21	8.87
M. F. A. Central Coop., Keytesville . .	----	----	----	.76	18.04	8.68
Monett Farmers Exchange, Monett. . . .	----	----	----	.76	16.49	8.42

Deficiencies are underlined.

TABLE 3. FERTILIZER ANALYSES AND GUARANTEES; FALL 1949 (Cont'd)

MANUFACTURER BRANDS, and DEALER OR PURCHASER	NITROGEN		PHOSPHORIC ACID (P <sub>2</sub> O <sub>5</sub> )			Water Soluble Potash (K <sub>2</sub> O) %
	Total %	Water Soluble to Total %	Total in Bone %	Insoluble %	Available %	
(M. F. A. 0-16-8 cont'd.)						
Average Analysis. . . . .	----	----	----	.90	17.67	9.45
Guaranteed Analysis. . . . .	----	----	----	----	16.00	8.00
M. F. A. 0-20-20						
M. F. A. Central Coop., Ste. Genevieve .	----	----	----	.66	21.34	21.96
Farmers Feed & Produce, Steelville . .	----	----	----	1.31	20.04	22.88
M. F. A. Central Coop., Bernie. . . . .	----	----	----	.59	19.88	19.87
Farmers Produce & Exchange Co., Chillicothe . . . . .	----	----	----	1.42	20.43	23.06
Farmers Produce Exchange, Lebanon . .	----	----	----	1.18	19.82	21.29
Farmers Exchange, Ozark. . . . .	----	----	----	.74	21.06	21.86
M. F. A. Central Coop., Green City. . . .	----	----	----	1.10	20.90	22.98
Dallas County Farmers Exchange, Buffalo	----	----	----	.75	20.45	16.44
M. F. A. Central Coop., Marshall . . . .	----	----	----	.65	21.90	19.18
Farmers Exchange, Crane. . . . .	----	----	----	1.15	20.60	19.15
Farmers Exchange, Ava . . . . .	----	----	----	.73	20.17	21.42
Mansfield Farmers Exchange, Mansfield	----	----	----	.90	19.90	21.84
M. F. A. Central Coop., Moberly. . . . .	----	----	----	.58	20.27	19.61
Bolivar Farmers Exchange, Bolivar . . .	----	----	----	.89	20.71	22.21
Farmers Exchange, Willow Springs . . . .	----	----	----	1.18	20.52	23.51
M. F. A. Central Coop., Gallatin. . . . .	----	----	----	1.08	20.82	20.57
Producers Exchange, Marshfield. . . . .	----	----	----	1.04	20.16	20.36
Farmers Exchange, Macon. . . . .	----	----	----	1.34	21.71	21.02
Farmers Exchange, Republic. . . . .	----	----	----	.70	21.05	22.03
Farmers Elevator, El Dorado Springs . .	----	----	----	1.02	20.08	19.78
Farmers Exchange, Neosho . . . . .	----	----	----	1.03	20.12	20.22
Farmers Elevator & Supply Co., Clinton.	----	----	----	1.09	20.81	18.05
Farmers Exchange, Carthage. . . . .	----	----	----	1.00	20.40	20.17
Lamar Farmers Exchange, Lamar . . . . .	----	----	----	1.46	20.44	21.60
M. F. A. Cooperative Ass'n., California .	----	----	----	1.23	20.27	22.21
Average Analysis. . . . .	----	----	----	.99	20.55	20.93
Guaranteed Analysis. . . . .	----	----	----	----	20.00	20.00
M. F. A. 2-12-6						
M. F. A. Central Coop., Ste. Genevieve .	2.32	97.3	----	1.92	11.88	7.26
Hermann Produce Exchange, Hermann (F)	2.25	96.0	----	1.83	12.00	6.92
Farmers Elevator, Wright City. . . . .	2.23	95.1	----	1.94	11.94	6.58
Farmers Feed & Produce, Steelville . .	2.37	95.8	----	.54	12.74	7.54
Producers Exchange, Truesdale . . . . .	2.32	96.5	----	2.05	12.23	6.69
Farmers Exchange, Clark . . . . .	1.77	96.0	----	1.03	13.92	6.79
Producers Exchange, Marshfield. . . . .	2.17	95.4	----	.97	12.51	8.45
Farmers Exchange, Flemington . . . . .	1.93	94.3	----	.75	12.03	7.29
Wallace Feed Store, Alton . . . . .	<u>1.89</u>	96.8	----	.81	12.42	6.68
Farmers Exchange, Houston. . . . .	2.12	95.8	----	.93	12.30	7.33
Farmers Exchange, Ava . . . . .	2.12	94.3	----	.98	12.17	8.02
Farmers Exchange, Republic . . . . .	2.00	97.0	----	.87	12.66	7.31
Farmers Exchange, Birch Tree . . . . .	2.07	95.7	----	.89	12.39	5.57
Underwood Feed & Grocery Co., Thayer.	2.00	97.5	----	1.03	12.75	8.53
Mansfield Farmers Exchange, Mansfield	2.06	96.6	----	1.36	12.47	5.40
Farmers Exchange, Ozark. . . . .	2.17	96.8	----	1.14	11.94	7.55
Producers Exchange No. 85, Warsaw . .	1.99	96.0	----	.81	12.24	7.84
Thayer Milling Co., Thayer . . . . .	2.01	96.5	----	1.19	12.06	8.42
M. F. A. Central Coop., Eldon . . . . .	2.28	96.1	----	1.48	11.87	7.14
Farmers Elevator, El Dorado Springs . .	2.11	97.6	----	.81	12.84	7.28
Farmers Exchange, Ravenwood. . . . .	2.15	94.9	----	.82	12.03	7.46
Monett Farmers Exchange, Monett . . . .	2.00	96.0	----	.65	12.15	7.68
Lamar Farmers Exchange, Lamar . . . . .	2.15	94.9	----	.70	12.28	6.96
M. F. A. Cooperative Ass'n., California .	2.12	95.3	----	.66	12.19	7.09

(F) Labels partly wrong.

Deficiencies are underlined.

TABLE 3. FERTILIZER ANALYSES AND GUARANTEES, FALL 1949 (Cont'd)

MANUFACTURER BRANDS, and DEALER OR PURCHASER	NITROGEN		PHOSPHORIC ACID (P <sub>2</sub> O <sub>5</sub> )			Water Soluble Potash (K <sub>2</sub> O) %
	Total %	Water Soluble to Total %	Total in Bone %	Insoluble %	Available %	
(M. F. A. 2-12-6 cont'd.)						
Average Analysis. . . . .	2.11	96.0	----	1.09	12.33	7.24
Guaranteed Analysis. . . . .	2.00	----	----	----	12.00	6.00
<u>M. F. A. 2 1/2-15-7 1/2</u>						
M. F. A. Central Coop., Moberly. . . . .	2.45	96.3	----	.65	16.55	8.36
Guaranteed Analysis. . . . .	2.50	----	----	----	15.00	7.50
<u>M. F. A. 3-9-18</u>						
Producers Exchange No. 280, Freeburg. . . . .	3.16	96.8	----	.98	9.55	18.18
Guaranteed Analysis. . . . .	3.00	----	----	----	9.00	18.00
<u>M. F. A. 3-12-12</u>						
Farmers Feed & Produce, Steelville . . . . .	3.84	98.4	----	1.68	12.95	12.76
M. F. A. Central Coop., Bernie. . . . .	3.40	97.6	----	2.13	<u>11.72</u>	12.97
Farmers Exchange, Marshfield. . . . .	3.08	96.1	----	.70	<u>12.83</u>	12.06
Bolivar Farmers Exchange, Bolivar . . . . .	3.03	97.7	----	1.01	12.12	13.30
Farmers Exchange, Clark . . . . .	2.99	96.7	----	1.01	12.64	12.34
Farmers Exchange No. 231, Brookfield . . . . .	3.58	97.2	----	1.11	13.47	14.29
Mansfield M. F. A. Coop., Mansfield . . . . .	3.05	94.8	----	.76	12.67	12.04
Thayer Milling Co., Thayer . . . . .	3.47	98.3	----	1.30	13.98	12.96
Farmers Elevator, El Dorado Springs . . . . .	3.02	98.1	----	.76	12.18	15.06
M. F. A. Central Coop., Kahoka . . . . .	3.65	96.4	----	1.75	12.50	13.16
M. F. A. Central Coop., Warrensburg . . . . .	2.99	96.0	----	.96	12.17	12.80
Farmers Exchange, Neosho . . . . .	3.25	96.3	----	1.39	12.36	12.81
M. F. A. Central Coop., Perry . . . . .	3.55	98.0	----	1.01	12.29	15.27
M. F. A. Central Coop., Sedalia . . . . .	3.38	97.0	----	1.24	12.21	12.59
Monett Farmers Exchange, Monett . . . . .	3.07	95.8	----	1.24	12.36	12.89
Farmers Exchange, Kirksville . . . . .	3.71	95.1	----	1.25	13.35	15.64
Average Analysis. . . . .	3.32	96.8	----	1.21	12.61	13.31
Guaranteed Analysis. . . . .	3.00	----	----	----	12.00	12.00
<u>M. F. A. 4-12-4</u>						
M. F. A. Central Coop., Bernie . . . . .	4.56	98.5	----	1.07	11.88	5.25
Producers Exchange No. 280, Freeburg. . . . .	4.74	97.9	----	3.54	<u>11.29</u>	5.47
Farmers Elevator Co., Jonesburg . . . . .	4.76	98.5	----	1.26	12.32	5.03
Hermann Producers Exchange, Hermann (F) . . . . .	4.66	98.3	----	1.57	12.26	5.14
Farmers Elevator, Wright City (F) . . . . .	4.59	97.8	----	1.34	12.94	5.42
M. F. A. Central Coop., Ste. Genevieve . . . . .	4.61	98.1	----	1.67	12.86	5.26
M. F. A. Farmers Exchange, Ravenwood . . . . .	4.62	98.3	----	1.22	12.96	5.56
Producers Exchange, Truesdale (F) . . . . .	4.79	97.5	----	2.08	12.80	4.98
Producers Grain Co., Centralia . . . . .	4.03	97.8	----	1.33	13.65	6.85
M. F. A. Central Coop., Moberly . . . . .	4.11	98.3	----	.30	12.68	5.30
M. F. A. Central Coop., Browning . . . . .	3.97	97.5	----	.56	13.37	5.46
Farmers Exchange, Birch Tree . . . . .	<u>3.60</u>	97.5	----	1.66	11.89	4.42
Farmers Cooperative Ass'n., Brunswick . . . . .	3.98	96.5	----	.47	13.16	5.54
M. F. A. Central Coop., Green City. . . . .	4.08	98.5	----	.47	13.11	5.69
Farmers Exchange No. 231, Brookfield . . . . .	4.19	97.9	----	.44	13.24	4.79
Putnam County M. F. A. Exchange, Unionville. . . . .	4.39	98.4	----	2.93	11.37	5.15
Farmers Exchange, Flemington . . . . .	4.25	98.4	----	.64	<u>12.59</u>	4.99
Farmers Produce Exchange, Lebanon . . . . .	3.98	97.0	----	.94	12.41	4.95
Farmers Produce Co., Sheridan . . . . .	4.07	97.5	----	.67	12.86	5.36
Producers Exchange, Marshfield. . . . .	4.32	98.6	----	1.29	12.84	4.79
Mansfield Farmers Exchange, Mansfield. . . . .	3.98	96.7	----	.77	12.46	5.25
Farmers Exchange, Ozark. . . . .	3.98	98.7	----	1.16	12.89	4.69
Farmers Exchange, Ava . . . . .	4.00	98.5	----	.84	12.64	5.14
Farmers Exchange, Clark . . . . .	<u>3.34</u>	98.2	----	1.54	11.89	4.07
M. F. A. Coop., Green Castle. . . . .	4.15	98.3	----	.70	13.20	5.18
Farmers Elevator, El Dorado Springs . . . . .	4.09	97.3	----	.93	11.87	4.80
M. F. A. Farmers Exchange, Clarence. . . . .	4.04	97.0	----	.60	12.55	5.15
M. F. A. Central Coop., Fulton . . . . .	4.31	98.1	----	.81	12.77	5.28
Monett Farmers Exchange, Monett . . . . .	4.05	97.5	----	1.34	12.31	5.10

(F) Labels partly wrong.

Deficiencies are underlined.

TABLE 3. FERTILIZER ANALYSES AND GUARANTEES; FALL 1949 (Cont'd)

MANUFACTURER BRANDS, and DEALER OR PURCHASER	NITROGEN		PHOSPHORIC ACID (P <sub>2</sub> O <sub>5</sub> )			Water Soluble Potash (K <sub>2</sub> O) %
	Total %	Water Soluble to Total %	Total in Bone %	Insoluble %	Available %	
(M. F. A. 4-12-4 cont'd.)						
M. F. A. Central Coop., Laddonia . . . . .	4.20	96.4	----	.79	12.56	5.42
Lamar Farmers Exchange, Lamar . . . . .	4.08	98.0	----	1.38	12.12	4.84
Average Analysis. . . . .	4.21	97.9	----	1.17	12.57	5.17
Guaranteed Analysis. . . . .	4.00	----	----	----	12.00	4.00
M. F. A. 4-24-12						
Producers Exchange, Freeburg. . . . .	4.48	96.9	----	1.35	24.90	12.70
M. F. A. Central Coop., Ste. Genevieve . . . . .	4.71	96.4	----	1.22	24.38	12.48
Farmers Elevator Co., Jonesburg. . . . .	4.52	96.7	----	.64	24.21	12.78
M. F. A. Central Coop., Crocker. . . . .	4.13	97.6	----	.97	25.93	13.22
Farmers Produce & Exchange, Chillicothe . . . . .	4.41	97.7	----	1.33	24.12	13.46
Farmers Produce Exchange, Lebanon . . . . .	3.76	95.7	----	1.09	26.83	11.92
M. F. A. Central Coop., Marshall. . . . .	4.42	97.1	----	1.35	25.35	11.41
Farmers Exchange, Willow Springs. . . . .	4.27	97.4	----	1.47	24.03	12.63
Farmers Exchange, Macon. . . . .	4.34	96.5	----	1.08	24.67	11.97
Farmers Exchange, Republic. . . . .	3.81	97.9	----	1.37	25.51	12.35
Farmers Exchange, Crane. . . . .	4.25	96.9	----	.87	24.23	13.58
M. F. A. Central Coop., Grant City. . . . .	4.26	97.2	----	1.04	24.51	12.08
Producers Exchange, Marshfield. . . . .	4.10	95.9	----	1.12	23.33	13.26
Producers Exchange, Vienna. . . . .	4.20	98.1	----	1.93	26.27	12.05
Farmers Exchange, Houston. . . . .	4.31	97.9	----	1.46	23.79	12.95
M. F. A. Central Coop., Moberly. . . . .	4.41	97.7	----	1.82	24.83	13.03
Producers Exchange No. 85, Warsaw. . . . .	4.03	98.3	----	1.48	25.22	12.96
Farmers Exchange No. 206, Laredo. . . . .	4.24	97.4	----	.95	25.45	12.30
M. F. A. Central Coop., Pattonsburg. . . . .	4.39	95.9	----	1.06	24.99	12.68
Mansfield Farmers Exchange, Mansfield. . . . .	4.11	95.4	----	.97	24.43	14.18
M. F. A. Central Coop., Eldon. . . . .	4.44	97.5	----	1.58	24.37	12.34
M. F. A. Central Coop., Green City. . . . .	4.29	98.1	----	1.71	23.79	12.82
Underwood Feed & Grocery Co., Thayer. . . . .	4.41	97.3	----	1.63	24.17	11.93
M. F. A. Central Coop., Warrensburg. . . . .	4.26	98.1	----	.93	25.37	13.12
Farmers Exchange, Carthage. . . . .	3.99	97.7	----	1.23	25.32	12.40
M. F. A. Central Coop., Novelty. . . . .	4.34	95.2	----	.88	25.12	12.42
Farmers Exchange, Kirksville. . . . .	4.51	97.8	----	1.87	24.18	12.49
M. F. A. Central Coop., Sedalia. . . . .	4.14	98.3	----	1.32	24.73	12.37
Lamar Farmers Exchange, Lamar. . . . .	4.26	97.7	----	1.34	24.31	13.12
M. F. A. Farmers Exchange, Clarence. . . . .	4.45	99.6	----	1.29	24.36	12.99
Farmers Elevator & Produce Co., Memphis . . . . .	4.19	96.9	----	1.28	24.82	12.35
M. F. A. Central Coop., Fulton. . . . .	4.09	98.0	----	1.73	23.92	12.14
Farmers Elevator, El Dorado Springs. . . . .	4.22	97.9	----	1.25	25.05	11.65
Monett Farmers Exchange, Monett. . . . .	4.10	97.3	----	1.32	24.68	12.78
M. F. A. Central Coop., Canton. . . . .	4.32	96.9	----	1.45	24.55	12.49
M. F. A. Central Coop., Laddonia. . . . .	4.26	98.1	----	.88	23.89	10.68
Average Analysis. . . . .	4.26	97.3	----	1.29	24.71	12.56
Guaranteed Analysis. . . . .	4.00	----	----	----	24.00	12.00
M. F. A. 6-18-6						
M. F. A. Central Coop., Ste. Genevieve . . . . .	6.23	97.6	----	1.02	19.33	6.54
M. F. A. Central Coop., Bernie. . . . .	6.65	98.0	----	1.21	21.04	7.18
Producers Exchange No. 280, Freeburg. . . . .	6.74	97.5	----	1.34	20.31	7.16
Hermann Produce, Hermann. . . . .	6.41	97.5	----	.80	18.95	6.58
M. F. A. Central Coop., Browning. . . . .	6.48	98.6	----	1.01	19.74	7.34
Mansfield Farmers Exchange, Mansfield . . . . .	6.22	98.2	----	1.32	19.43	7.32
Farmers Exchange No. 206, Laredo. . . . .	6.33	96.5	----	1.80	18.10	6.42
Farmers Exchange, Cole Camp. . . . .	6.42	98.1	----	1.34	20.71	7.26
M. F. A. Central Coop., Moberly. . . . .	6.69	97.2	----	1.75	18.75	7.05
M. F. A. Central Coop., Bethany. . . . .	6.49	97.4	----	1.86	18.24	7.16
M. F. A. Central Coop., Marshall. . . . .	6.30	98.7	----	1.36	19.84	7.10
Putnam County M. F. A. Exchange, Unionville. . . . .	6.71	97.3	----	1.23	18.82	6.78
Producers Exchange, Marshfield. . . . .	6.26	98.1	----	1.07	19.13	7.49

Deficiencies are underlined.

TABLE 3. FERTILIZER ANALYSES AND GUARANTEES, FALL 1949 (Cont'd)

MANUFACTURER BRANDS, and DEALER OR PURCHASER	NITROGEN		PHOSPHORIC ACID (P <sub>2</sub> O <sub>5</sub> )			Water Soluble Potash (K <sub>2</sub> O) %
	Total %	Water Soluble to Total %	Total in Bone %	Insoluble %	Available %	
(M. F. A. 6-18-6 cont'd.)						
Farmers Exchange, Carthage . . . . .	5.99	98.2	----	2.93	17.85	7.22
M. F. A. Cooperative Ass'n., California . . . . .	5.99	98.5	----	.88	19.27	6.41
M. F. A. Central Coop., Laddonia . . . . .	6.43	98.3	----	1.32	19.38	6.79
M. F. A. Central Coop., Canton . . . . .	6.05	97.2	----	1.05	18.60	6.38
M. F. A. Central Coop., Perry . . . . .	6.33	98.4	----	1.36	19.49	7.06
Average Analysis . . . . .	6.37	97.9	----	1.37	19.28	6.96
Guaranteed Analysis . . . . .	6.00	----	----	----	18.00	6.00
<u>M. F. A. 8-8-8</u>						
Putnam County M. F. A. Exchange, Unionville . . . . .	6.75	98.7	----	.52	9.63	8.19
Guaranteed Analysis . . . . .	8.00	----	----	----	8.00	8.00
<u>M. F. A. 0-0-60</u>						
Farm Club, Owensville (F) . . . . .	----	----	----	----	----	60.80
Producers Grain Co., Montgomery City (H) . . . . .	----	----	----	----	----	58.80
Mansfield Farmers Exchange, Mansfield . . . . .	----	----	----	----	----	61.56
Farmers Exchange, Crane . . . . .	----	----	----	----	----	53.40
Farmers Exchange, Cole Camp . . . . .	----	----	----	----	----	61.46
Farmers Exchange, Branson . . . . .	----	----	----	----	----	60.44
Farmers Produce Exchange, Lebanon . . . . .	----	----	----	----	----	60.66
M. F. A. Central Coop., Moberly . . . . .	----	----	----	----	----	60.72
Farmers Exchange, Kirksville . . . . .	----	----	----	----	----	60.78
M. F. A. Central Coop., Warrensburg . . . . .	----	----	----	----	----	60.60
Average Analysis . . . . .	----	----	----	----	----	59.92
Guaranteed Analysis . . . . .	----	----	----	----	----	60.00
MISSOURI VALLEY ORGANIC FERTILIZER MIX INC., UNION STAR, MO.						
<u>Fertilo</u>						
Missouri Valley Organic Fertilizer Mix, Inc., Union Star . . . . .	.15	73.3	----	.17	.49	.26
Missouri Valley Organic Fertilizer Mix, Inc., Union Star . . . . .	.17	70.6	----	.25	.70	.31
Average Analysis . . . . .	.16	72.0	----	.21	.60	.29
Guaranteed Analysis . . . . .	1.30	----	----	----	1.30	.50
NATIONAL FERTILIZER CO. DES MOINES, IOWA						
<u>Green Top 0-0-60</u>						
Langfitt Seed Farms & Elevator, Bethany (A) (D) . . . . .	----	----	----	----	----	58.39
Guaranteed Analysis . . . . .	----	----	----	----	----	60.00
NEBRASKA FERTILIZER CO. OMAHA, NEB.,						
<u>Sheepo</u>						
Earl Mays Store No. 22 (A) (D) . . . . .	1.50	19.9	----	.29	1.63	2.78
Guaranteed Analysis . . . . .	2.00	----	----	----	1.00	2.00
OWENS AGRICULTURAL PHOSPHATE CO. CENTERVILLE, TENN.						
<u>Ground Rock Phosphate</u>						
Green Feed & Grain Co., Salem (D)(E)(A) . . . . .	----	----	----	26.50	3.30	----
Guaranteed Analysis . . . . .	----	----	----	----	None	----
PULVERIZED MANURE CO. EAST ST. LOUIS, ILL.						
<u>Wizard Brand Cow Manure</u>						
St. Louis Seed Co., St. Louis . . . . .	1.98	24.2	----	.27	1.79	2.82
Guaranteed Analysis . . . . .	2.00	----	----	----	1.00	1.00

(A) Not registered.

(D) Registration tags not attached.

(E) Incomplete labels.

(F) Labels partly wrong.

(H) Sample drawn from less than five containers.  
Deficiencies are underlined.

TABLE 3. FERTILIZER ANALYSES AND GUARANTEES; FALL 1949 (Cont'd)

MANUFACTURER BRANDS, and DEALER OR PURCHASER	NITROGEN		PHOSPHORIC ACID (P <sub>2</sub> O <sub>5</sub> )			Water Soluble Potash (K <sub>2</sub> O) %
	Total %	Water Soluble to Total %	Total in Bone %	Insoluble %	Available %	
<b>RA-PID-GRO CORP.</b>						
DANSVILLE, N. Y.						
<u>Ra-Pid-Gro</u>						
Earl Mays Store No. 22, St. Joseph (D) (H)	22.80	99.9	----	.02	23.18	15.50
Guaranteed Analysis. . . . .	23.00	----	----	----	21.00	17.00
<b>ROSE MANUFACTURING CO.</b>						
BEACON, N. Y.						
<u>Triogen Rose Food</u>						
St. Louis Seed Co., St. Louis . . . . .	5.08	91.3	----	.46	11.67	5.72
Guaranteed Analysis. . . . .	5.00	----	----	----	10.00	5.00
<b>RUHM PHOSPHATE &amp; CHEMICAL CO.</b>						
MT. PLEASANT, TENN.						
<u>Red Seal Brand Phosphate Rock 30%</u>						
Paul McCullough Trucking Co., Hurdand (E)	----	----	----	29.40	.95	----
Julius Peterson Co., St. Louis . . . . .	----	----	----	28.50	2.15	----
Average Analysis. . . . .	----	----	----	28.95	1.55	----
Guaranteed Analysis. . . . .	----	----	----	----	3.00	----
<b>SAN FRANCISCO CHEMICAL CO.</b>						
MONTPELIER, IDAHO						
<u>Mountain Phosphate Rock</u>						
Farm Bureau Service Co., Mexico. . . . .	----	----	----	30.30	2.50	----
Farmers Exchange, Kirksville . . . . .	----	----	----	30.33	2.49	----
Cole County Farm Bureau Service Co., Jefferson City . . . . .	----	----	----	28.70	4.40	----
Farm Bureau Service Co., Princeton (G)	----	----	----	28.50	4.55	----
Farm Bureau Service Co., St. Charles . .	----	----	----	29.02	2.51	----
M. F. A. Central Coop., Louisiana . . . .	----	----	----	28.15	3.50	----
Average Analysis. . . . .	----	----	----	29.17	3.33	----
Guaranteed Analysis. . . . .	----	----	----	----	3.00	----
<u>Rock Phosphate</u>						
Langfitt Seed Farms & Elevator, Bethany (D) (G) . . . . .	----	----	----	29.40	4.20	----
Guaranteed Analysis. . . . .	----	----	----	----	None	----
<b>SCHROCK FERTILIZER SERVICE</b>						
CONGERVILLE, ILL.						
<u>Schrock Hi-Test Natural Phosphate 31%</u>						
Stover Milling Co., Stover . . . . .	----	----	----	30.50	4.95	----
Maysville Produce, Maysville. . . . .	----	----	----	30.80	4.65	----
N. H. Schnakenburg, Concordia . . . . .	----	----	----	30.90	4.35	----
Average Analysis. . . . .	----	----	----	30.73	4.65	----
Guaranteed Analysis. . . . .	----	----	----	----	3.00	----
<u>Schrock Hi-Test Natural Phosphate 34%</u>						
Mansfield Farmers Exchange, Mansfield(D)	----	----	----	31.00	5.15	----
Guaranteed Analysis. . . . .	----	----	----	----	3.00	----
<u>Schrock Hi-Test Natural Phosphate 33%</u>						
Callao Feed & Produce, Callao (D) . . . .	----	----	----	32.10	4.30	----
Guaranteed Analysis. . . . .	----	----	----	----	3.00	----
<b>SEARS ROEBUCK AND CO.</b>						
CHICAGO, ILL.						
<u>Cross County Bulb Food</u>						
Sears Roebuck & Co., St. Louis (D) (H) .	2.09	67.9	----	1.10	12.85	8.14
Guaranteed Analysis. . . . .	4.00	----	----	----	12.00	8.00

(D) Registration tags not attached.

(E) Incomplete labels.

(G) Labels missing entirely.

(H) Sample drawn from less than five containers.  
Deficiencies are underlined.

TABLE 3. FERTILIZER ANALYSES AND GUARANTEES, FALL 1949 (Cont'd)

MANUFACTURER BRANDS, and DEALER OR PURCHASER	NITROGEN		PHOSPHORIC ACID (P <sub>2</sub> O <sub>5</sub> )			Water Soluble Potash (K <sub>2</sub> O) %
	Total %	Water Soluble to Total %	Total in Bone %	Insoluble %	Available %	
<u>Cross County Sulphate of Ammonia</u>						
Sears Roebuck & Co., St. Louis (D) (H)	20.77	99.9	----	----	----	----
Guaranteed Analysis . . . . .	20.00	----	----	----	----	----
<u>Cross Country Sheep Manure</u>						
Sears Roebuck & Co., St. Louis (D) (H)	1.43	23.0	----	.34	1.22	3.38
Guaranteed Analysis . . . . .	1.50	----	----	----	1.00	2.00
<u>Cross Country Cattle Manure</u>						
Sears Roebuck & Co., St. Louis (D) (H)	1.60	9.4	----	.20	1.04	3.08
Guaranteed Analysis . . . . .	1.50	----	----	----	1.00	2.00
SMITH-DOUGLASS CO., INC STREATOR, ILL.						
<u>Sr-D Big Yield</u>						
Farmers Elevator Co., Monroe City (B)	2.99	94.0	----	1.48	17.92	10.32
Guaranteed Analysis . . . . .	3.00	----	----	----	18.00	9.00
SOILTONE COMPANY OF IOWA DES MOINES, IOWA						
<u>Soiltone</u>						
Earl Mays Store No. 22, St. Joseph (A)(D)	6.43	87.6	----	.21	1.20	----
*Guaranteed Analysis . . . . .	6.00	----	----	----	2.00	----
SPENCER CHEMICAL CO. KANSAS CITY, MO.						
<u>Spencer's Ammonium Nitrate</u>						
Armstrong Elevator, Harrisonville . . .	34.19	I	----	----	----	----
Lamar Farmers Exchange, Lamar . . .	33.63	I	----	----	----	----
Asbell Feed Store, Burlington Junction .	33.83	I	----	----	----	----
Farmers Elevator Co., Vandalia . . . .	33.58	I	----	----	----	----
Farmers Elevator & Supply Co., Clinton	33.28	I	----	----	----	----
Nichols Bros., Southwest City . . . . .	34.06	I	----	----	----	----
Sandy Moody Feed Store, Mound City (D)	33.30	I	----	----	----	----
Glasgow Cooperative Ass'n., Glasgow . .	33.60	I	----	----	----	----
Greenfield Milling Co., Greenfield . . .	34.49	I	----	----	----	----
Farmers Supply Co., LaBelle (D) . . . .	33.88	I	----	----	----	----
Burns Feed Store, Savannah (D) . . . .	33.55	I	----	----	----	----
Howard County Implement Co., Fayette .	33.53	I	----	----	----	----
M. F. A. Central Coop., Grant City . . .	33.87	I	----	----	----	----
Farmers Produce Exchange, Lebanon . .	34.34	I	----	----	----	----
Cole County Farm Bureau Service Co., Jefferson City . . . . .	34.27	I	----	----	----	----
Green's Feed & Grain Co., Salem . . .	33.64	I	----	----	----	----
Farm Bureau Service Co., Carrollton . .	34.04	I	----	----	----	----
Old Mill Grain & Seed Co., Lee's Summit	34.77	I	----	----	----	----
Rolla Milling Co., Rolla . . . . .	34.34	I	----	----	----	----
Milbank Mills, Chillicothe . . . . .	34.22	I	----	----	----	----
Tevebaugh Feed Store, Gainesville . . .	33.87	I	----	----	----	----
Farmers Cooperative Ass'n., Brunswick	34.37	I	----	----	----	----
Dallas County Farmers Exchange, Buffalo	33.76	I	----	----	----	----
Corn Grocery, Willow Springs . . . . .	34.47	I	----	----	----	----
M. F. A. Central Coop., Keytesville . .	34.62	I	----	----	----	----
Concordia Farmers Coop., Concordia . .	34.19	I	----	----	----	----
Reed's Farm Supply Co., Trenton . . . .	33.82	I	----	----	----	----
Braymer Feed & Grain Co., Braymar (D)	34.62	I	----	----	----	----
Producers Exchange, Marshfield . . . .	33.92	I	----	----	----	----
Farmers Produce Exchange, Weaubleau	33.99	I	----	----	----	----
Farmers Exchange, Birch Tree . . . . .	34.04	I	----	----	----	----
Farmers Exchange, Hardin (D) . . . . .	34.29	I	----	----	----	----
Farmers Exchange, Crane . . . . .	34.22	I	----	----	----	----
Farmers Feed & Produce, Steelville . .	32.71	I	----	----	----	----
Cape Egg & Feed Co., Cape Girardeau .	34.43	I	----	----	----	----

(B) Registration tags out-dated.  
 (D) Registration tags not attached.  
 (H) Sample drawn from less than five containers

(I) Not determined; all H<sub>2</sub>O Soluble.  
 Deficiencies are underlined.

TABLE 3. FERTILIZER ANALYSES AND GUARANTEES, FALL 1949 (Cont'd)

MANUFACTURER BRANDS, and DEALER OR PURCHASER	NITROGEN		PHOSPHORIC ACID (P <sub>2</sub> O <sub>5</sub> )			Water Soluble Potash (K <sub>2</sub> O) %
	Total %	Water Soluble to Total %	Total in Bone %	Insoluble %	Available %	
(Spencer's Ammonium Nitrate cont'd.)						
Boone County Farm Bureau Service Co., Columbia . . . . .	33.90	I	----	----	----	----
M. F. A. Central Coop., Louisiana. . . . .	33.23	I	----	----	----	----
Lopez Store Co., Ironton . . . . .	33.42	I	----	----	----	----
Farm Bureau Service Co., Benton. . . . .	33.22	I	----	----	----	----
Hinshaw Feed Co., Columbia . . . . .	33.65	I	----	----	----	----
Farmers Elevator Co., Jonesburg. . . . .	33.52	I	----	----	----	----
Reeve's Feed Mill, Charleston . . . . .	33.42	I	----	----	----	----
Farmers Elevator & Supply Co., Troy . . . . .	34.23	I	----	----	----	----
Producers Grain Co., Centralia . . . . .	33.50	I	----	----	----	----
Average Analysis. . . . .	33.91	I	----	----	----	----
Guaranteed Analysis. . . . .	33.50	----	----	----	----	----
STOCKDALE FERTILIZER CO.						
MORRIS, ILL.						
<u>Ovene</u>						
Kresge's Store, St. Louis (H) . . . . .	2.13	20.7	----	.21	1.65	3.20
Guaranteed Analysis. . . . .	2.00	----	----	----	1.00	2.00
SWIFT AND CO.						
NATIONAL STOCK YARDS, ILL.						
<u>Swift's Ground Raw Phosphate</u>						
B. F. Broughton, Shelbina (G) . . . . .	----	----	----	27.70	6.15	----
Guaranteed Analysis. . . . .	----	----	----	----	2.50	----
<u>Red Steer 0-20-0</u>						
Kern Morgan Feed Store, Unionville . . . . .	----	----	----	.85	20.40	----
Halbrook Feed Store, Salem . . . . .	----	----	----	.74	21.01	----
Macon Elevator, Macon. . . . .	----	----	----	.99	19.76	----
Burn's Feed Store, Savannah . . . . .	----	----	----	.96	22.44	----
Sunshine Feed Co., Hannibal . . . . .	----	----	----	.67	20.73	----
Norris Grain Co., Nevada . . . . .	----	----	----	.89	20.26	----
Washburn Produce, King City . . . . .	----	----	----	.89	20.21	----
H. H. George, Pierce City . . . . .	----	----	----	.94	17.21	----
James Young & Son, Paris . . . . .	----	----	----	1.62	19.78	----
Average Analysis. . . . .	----	----	----	.95	20.20	----
Guaranteed Analysis. . . . .	----	----	----	----	20.00	----
<u>Red Steer 0-43-0</u>						
Rolla Milling Co., Rolla (D) . . . . .	----	----	----	.77	44.58	----
Guaranteed Analysis. . . . .	----	----	----	----	43.00	----
<u>Red Steer 0-12-12</u>						
Schmelz Feed & Supply Co., Fenton (D) . . . . .	----	----	----	.58	12.57	11.02
Guaranteed Analysis. . . . .	----	----	----	----	12.00	12.00
<u>Red Steer 0-14-7</u>						
Lopez Store Co., Ironton . . . . .	----	----	----	1.00	13.76	7.16
Rolla Milling Co., Rolla (D) . . . . .	----	----	----	.88	15.42	7.05
Washburn Produce, King City . . . . .	----	----	----	.84	14.84	6.70
H. H. George, Pierce City . . . . .	----	----	----	.96	13.99	7.34
Porter Seed & Feed Store, Canton . . . . .	----	----	----	1.51	13.79	7.22
Average Analysis. . . . .	----	----	----	1.04	14.36	7.09
Guaranteed Analysis. . . . .	----	----	----	----	14.00	7.00
<u>Red Steer 0-20-20</u>						
Norris Grain Co., Nevada . . . . .	----	----	----	.76	18.44	19.92
James Young & Son, Paris . . . . .	----	----	----	.86	19.76	19.34
Roy Webb, Jasper. . . . .	----	----	----	.73	18.67	19.70
Porter Seed & Feed Store, Canton (D) . . . . .	----	----	----	.75	18.35	18.49
Average Analysis. . . . .	----	----	----	.78	18.81	19.36
Guaranteed Analysis. . . . .	----	----	----	----	20.00	20.00

(D) Registration tags not attached.

(G) Labels missing entirely.

(H) Sample drawn from less than five containers.

(I) Not determined; all H<sup>2</sup>O Soluble. Deficiencies are underlined.



TABLE 3. FERTILIZER ANALYSES AND GUARANTEES, FALL 1949 (Cont'd)

MANUFACTURER BRANDS, and DEALER OR PURCHASER	NITROGEN		PHOSPHORIC ACID (P <sub>2</sub> O <sub>5</sub> )			Water Soluble Potash (K <sub>2</sub> O) %
	Total %	Water Soluble to Total %	Total in Bone %	Insoluble %	Available %	
<b>Red Steer 2-12-6</b>						
Madison County Farmers Whse., Fredericktown . . . . .	1.86	94.0	----	.40	11.90	5.95
Farmington Milling Co., Farmington . . .	1.98	91.9	----	.55	11.93	6.18
Valier & Spies Milling Co., Marthasville	1.87	90.9	----	.55	11.95	5.99
Lopez Store Co., Ironton . . . . .	2.19	94.5	----	.29	12.14	5.97
Shell & Son, Lutesville . . . . .	2.01	94.5	----	.50	12.30	6.34
Farmers Equity Exchange, Bowling Green	2.15	92.1	----	.44	13.09	6.70
Bess Feed Store, Bonne Terre (D) . . . .	1.91	90.2	----	.50	12.05	6.12
Eggmann Feed & Produce, Cape Girardeau . . . . .	2.24	94.2	----	.30	11.93	6.03
Schmelz Feed Store, Fenton (D) . . . . .	2.04	91.7	----	.49	12.31	6.12
Yates Produce, Ava . . . . .	2.09	96.2	----	.44	12.81	5.95
Hicks General Merchandise, Montreal . .	2.11	95.3	----	1.10	12.08	5.34
Macon Elevator, Macon . . . . .	1.91	96.3	----	.43	12.72	6.05
Lebanon Packing Co., Lebanon . . . . .	2.06	96.7	----	.42	12.58	5.98
Halbrook Feed Store, Salem . . . . .	2.00	97.5	----	.44	12.44	6.17
Griders Elevator, Appleton City . . . . .	1.99	96.5	----	.45	13.03	6.35
H. H. George, Pierce City . . . . .	2.29	96.5	----	.41	12.77	5.92
Norris Grain Co., Nevada . . . . .	2.16	97.2	----	.50	13.25	6.31
Sunshine Feed Co., Hannibal . . . . .	2.01	94.0	----	.68	12.22	6.10
Roy Webb, Jasper . . . . .	1.73	95.4	----	.37	12.53	6.07
Farm Bureau Service Co., New London (D)	1.87	96.8	----	1.51	11.82	6.18
Average Analysis . . . . .	2.02	94.6	----	.54	12.39	6.09
Guaranteed Analysis . . . . .	2.00	----	----	----	12.00	6.00
<b>Red Steer 3-9-18</b>						
Farm Bureau Service Co., Advance . . . .	2.99	96.0	----	.29	9.46	17.62
Guaranteed Analysis . . . . .	3.00	----	----	----	9.00	18.00
<b>Red Steer 3-12-6</b>						
H. H. George, Pierce City . . . . .	2.80	97.1	----	1.36	11.94	6.91
Guaranteed Analysis . . . . .	3.00	----	----	----	12.00	6.00
<b>Red Steer 3-12-12</b>						
Lincoln County Farm Bureau Service Co., Troy . . . . .	3.15	93.0	----	.30	12.18	11.21
Farmers Equity Exchange, Bowling Green	3.11	94.5	----	.79	11.96	11.90
Farmington Milling Co., Farmington . . .	3.11	93.6	----	.39	11.70	12.38
Hawkin Milling Co., Springfield . . . . .	2.91	96.2	----	.76	12.79	11.89
Producers Exchange No. 84, Lincoln (D)	3.02	96.0	----	.73	13.10	11.87
Rolla Milling Co., Rolla (D) . . . . .	3.05	97.0	----	.38	12.30	11.61
Average Analysis . . . . .	3.06	95.1	----	.56	12.34	11.81
Guaranteed Analysis . . . . .	3.00	----	----	----	12.00	12.00
<b>Blenn 3-12-12</b>						
Roy Webb, Jasper . . . . .	3.06	98.4	----	.84	12.96	12.98
Hummert Seed Co., St. Louis . . . . .	3.16	94.3	----	.72	12.08	9.16
Kern Morgan Feed Store, Unionville . . .	2.99	97.0	----	.74	12.61	11.94
Rolla Milling Co., Rolla (D) . . . . .	3.00	92.7	----	.25	12.30	12.02
Average Analysis . . . . .	3.05	95.6	----	.64	12.49	11.53
Guaranteed Analysis . . . . .	3.00	----	----	----	12.00	12.00
<b>Red Steer 4-12-4</b>						
Madison County Farmers Whse., Fredericktown . . . . .	3.91	94.6	----	.49	12.29	4.48
Shell & Son, Lutesville . . . . .	3.88	94.6	----	.48	12.25	4.59
Schmelz Feed & Supply Co., Fenton (D) . .	3.91	95.4	----	.83	11.95	4.49
Farmington Milling Co., Farmington . . .	3.87	95.6	----	.61	12.74	4.98
Eggmann Feed & Produce, Cape Girardeau	3.89	95.4	----	.72	12.03	4.40
Washington Flour Mill, Washington . . . .	3.86	92.3	----	.58	12.35	5.46
Valier & Spies Milling Co., Marthasville	3.99	95.0	----	.69	12.24	4.36
Hawkin Milling Co., Springfield . . . . .	4.00	96.0	----	.41	12.59	4.82

(D) Registration tags not attached.

Deficiencies are underlined.

TABLE 3. FERTILIZER ANALYSES AND GUARANTEES; FALL 1949 (Cont'd)

MANUFACTURER BRANDS, and DEALER OR PURCHASER	NITROGEN		PHOSPHORIC ACID (P <sub>2</sub> O <sub>5</sub> )			Water Soluble Potash (K <sub>2</sub> O) %
	Total %	Water Soluble to Total %	Total in Bone %	Insoluble %	Available %	
<b>(Red Steer 4-12-4 cont'd)</b>						
Rolla Milling Co., Rolla (D) . . . . .	3.80	97.1	----	.47	13.06	4.59
Yates Produce, Ava . . . . .	4.08	97.5	----	.37	12.38	4.28
Halbrook Feed Store, Salem . . . . .	4.07	98.0	----	.49	12.84	4.00
Kern Morgan Feed Store, Unionville . . . . .	4.00	95.3	----	.47	12.53	4.48
Lebanon Packing Co., Lebanon . . . . .	4.07	97.8	----	.38	12.72	4.31
Griders Elevator, Appleton City . . . . .	4.14	98.1	----	.47	12.18	4.96
Roy Webb, Jasper . . . . .	<u>3.85</u>	98.4	----	.56	13.44	4.92
Taylor Bros., Edina . . . . .	4.08	97.5	----	.65	12.45	4.21
Norris Grain Co., Nevada . . . . .	3.99	98.5	----	.55	13.23	4.42
H. H. George, Pierce City . . . . .	<u>3.55</u>	97.7	----	.68	12.47	5.70
Washburn Produce, King City . . . . .	<u>3.57</u>	96.9	----	.56	13.64	4.19
Phil Ratliff, Neosno . . . . .	<u>3.08</u>	97.4	----	.69	14.36	5.30
James Young & Son, Paris . . . . .	<u>3.95</u>	98.0	----	.62	12.31	4.81
Average Analysis . . . . .	<u>3.87</u>	96.5	----	.56	12.67	4.65
Guaranteed Analysis . . . . .	4.00	----	----	----	12.00	4.00
<b>Vigoro 4-12-4</b>						
Producers Exchange, Washington (D) . . . . .	4.20	95.2	----	1.18	12.05	4.20
St. Louis Seed Co., St. Louis (D) . . . . .	4.00	96.3	----	1.04	11.99	<u>3.94</u>
Mississippi County Grain Co., East Prairie (D) . . . . .	4.15	97.1	----	.88	12.22	4.38
K & S Hardware, Caruthersville (H) . . . . .	4.10	95.6	----	1.17	12.11	4.25
Farmers Cash Store, Poplar Bluff . . . . .	4.13	95.6	----	3.97	<u>11.43</u>	4.55
Eggmann Feed & Produce, Cape Girardeau . . . . .	4.25	97.6	----	.91	<u>11.97</u>	4.25
Stanfill Hardware, Caruthersville (H) . . . . .	4.41	95.0	----	1.67	12.41	4.22
Flottman Hardware, Versailles (H) . . . . .	4.10	95.4	----	1.51	13.52	4.72
Rolla Milling Co., Rolla (D) . . . . .	4.15	96.4	----	.94	12.19	4.02
Weston Milling Co., Weston . . . . .	<u>3.88</u>	98.2	----	.91	12.44	5.53
Antoine Seed Co., Independence . . . . .	4.05	95.8	----	.80	12.43	4.54
Sunshine Feed Store, Hannibal . . . . .	3.99	97.7	----	.76	12.07	5.39
Roy Webb, Jasper . . . . .	3.75	98.1	----	.86	12.49	4.04
Average Analysis . . . . .	4.09	96.5	----	1.28	12.26	4.46
Guaranteed Analysis . . . . .	4.00	----	----	----	12.00	4.00
<b>Brimm 4-12-8</b>						
Producers Exchange No. 2, Washington . . . . .	<u>3.87</u>	97.4	----	1.36	12.07	<u>7.05</u>
Farmers Equity Exchange, Bowling Green (D) . . . . .	3.98	97.0	----	.75	11.88	8.71
Average Analysis . . . . .	<u>3.93</u>	97.2	----	1.06	11.98	7.88
Guaranteed Analysis . . . . .	4.00	----	----	----	12.00	8.00
<b>Red Steer 8-8-8</b>						
Farmers Equity Exchange, Bowling Green Guaranteed Analysis . . . . .	7.98 8.00	98.2 ----	----	.98 ----	7.95 8.00	<u>7.71</u> <u>8.00</u>
<b>Red Steer 8-24-8</b>						
Farm Bureau Service Co., Advance . . . . .	<u>7.41</u>	98.0	----	.93	23.72	<u>7.22</u>
Northwest Missouri Feed Distributors, Chillicothe . . . . .	7.99	98.6	----	1.45	26.60	5.53
Producers Exchange No. 84, Lincoln . . . . .	<u>7.42</u>	99.5	----	.67	23.68	8.18
Producers Exchange No. 84, Lincoln (D) . . . . .	8.06	98.8	----	1.17	24.98	<u>6.81</u>
Griders Elevator, Appleton City . . . . .	<u>7.51</u>	98.5	----	1.37	<u>21.86</u>	<u>8.06</u>
Taylor Bros., Edina . . . . .	7.99	98.9	----	1.44	<u>23.38</u>	7.96
Average Analysis . . . . .	<u>7.73</u>	98.7	----	1.17	<u>24.04</u>	<u>7.29</u>
Guaranteed Analysis . . . . .	8.00	----	----	----	24.00	<u>8.00</u>
<b>TENNESSEE CORP.</b>						
<b>CINCINNATI, OHIO</b>						
<b>Loma 5-10-5</b>						
St. Louis Seed Co., St. Louis . . . . .	5.21	95.8	----	.64	10.29	5.54
Guaranteed Analysis . . . . .	5.00	----	----	----	10.00	5.00

(D) Registration tags not attached.

(H) Sample drawn from less than five containers

Deficiencies are underlined.

TABLE 3. FERTILIZER ANALYSES AND GUARANTEES, FALL 1949 (Cont'd)

MANUFACTURER BRANDS, and DEALER OR PURCHASER	NITROGEN		PHOSPHORIC ACID (P <sub>2</sub> O <sub>5</sub> )			Water Soluble Potash (K <sub>2</sub> O) %
	Total %	Water Soluble to Total %	Total in Bone %	Insoluble %	Available %	
THOMSON PHOSPHATE CO. CHICAGO, ILL.						
<u>Four Leaf Powdered Rock Phosphate 30%</u>						
Gastler Elevator, Wellsville. . . . .	----	----	----	27.25	3.60	----
University of Missouri, Weldon Springs (D) (G) . . . . .	----	----	----	30.10	.70	----
Average Analysis. . . . .	----	----	----	----	2.15	----
Guaranteed Analysis. . . . .	----	----	----	----	2.00	----
<u>Four Leaf Powdered Rock Phosphate 31%</u>						
Farmers Exchange, Neosho (D) . . . . .	----	----	----	29.00	3.05	----
Guaranteed Analysis. . . . .	----	----	----	----	2.00	----
<u>Four Leaf Powdered Rock Phos</u>						
Nichols Bros., Southwest City (E) . . . . .	----	----	----	28.10	.70	----
Guaranteed Analysis. . . . .	----	----	----	----	None	----
THOMPSON SALES CO. MONTGOMERY, ALA.						
<u>Calphos</u>						
Madison County Farmers Whse., Fredericktown . . . . .						
Perry County Milling Co., Perryville . . . . .	----	----	----	18.60	3.05	----
E. V. Snodgrass Feed Store, Doniphan . . . . .	----	----	----	15.30	4.05	----
Wentzville Feed & Grain Co., Wentzville . . . . .	----	----	----	18.23	2.47	----
Average Analysis. . . . .	----	----	----	18.12	1.88	----
Guaranteed Analysis. . . . .	----	----	----	17.56	2.86	----
Guaranteed Analysis. . . . .	----	----	----	----	2.00	----
TRI-STATE CHEMICAL CO. WEBB, CITY, MO.						
<u>Rock Phosphate</u>						
Cameron Wilcock, Aurora (A) (D) (E) . . . . .	----	----	----	30.53	4.97	----
Guaranteed Analysis. . . . .	----	----	----	----	None	----
THURSTON CHEMICAL CO. JOPLIN, MO.						
<u>BEM 0-20-0</u>						
Arrow Seed & Feed Co., Malden . . . . .	----	----	----	.57	20.73	----
Ray's Feed Store, Potosi. . . . .	----	----	----	.44	20.96	----
Farm Bureau Service Co., Poplar Bluff . . . . .	----	----	----	.32	20.53	----
Farm Bureau Service Co., Perryville . . . . .	----	----	----	.27	20.63	----
Farm Bureau Service Co., Farmington. . . . .	----	----	----	.47	20.88	----
Producers Exchange, Marshfield. . . . .	----	----	----	.87	20.68	----
Farmers Exchange, Hardin . . . . .	----	----	----	.74	21.51	----
Ernest Klindworth, Hermitage . . . . .	----	----	----	.77	20.88	----
Dannen Elevator, Maryville . . . . .	----	----	----	.53	22.02	----
McVeigh & Co., Holden. . . . .	----	----	----	2.64	20.26	----
Kelso Milling Co., Mt. Vernon . . . . .	----	----	----	.57	22.13	----
Phil Ratliff, Neosho . . . . .	----	----	----	.42	21.98	----
Arnolds Elevator Mill, Butler. . . . .	----	----	----	.61	20.74	----
C. L. Decker, Arcola . . . . .	----	----	----	.40	21.90	----
Allman Produce, Wheaton . . . . .	----	----	----	.48	21.17	----
Peoples Elevator Co., Rich Hill . . . . .	----	----	----	.59	21.56	----
Average Analysis. . . . .	----	----	----	.67	21.16	----
Guaranteed Analysis. . . . .	----	----	----	----	20.00	----
<u>BEM C S O 20% Superphosphate</u>						
Nichols Bros., Southwest City (D) (A) . . . . .	----	----	----	.25	21.70	----
Wymore & Sons, Liberty . . . . .	----	----	----	.76	21.99	----
Richard Bros., West Plains . . . . .	----	----	----	.54	21.06	----
Average Analysis. . . . .	----	----	----	.52	21.58	----
Guaranteed Analysis. . . . .	----	----	----	----	20.00	----

(A) Not registered.  
(D) Registration tags not attached.  
(E) Incomplete labels.

(G) Labels missing entirely.  
Deficiencies are underlined.

TABLE 3. FERTILIZER ANALYSES AND GUARANTEES, FALL 1949 (Cont'd)

MANUFACTURER BRANDS, and DEALER OR PURCHASER	NITROGEN		PHOSPHORIC ACID (P <sub>2</sub> O <sub>5</sub> )			Water Soluble Potash (K <sub>2</sub> O) %
	Total %	Water Soluble to Total %	Total in Bone %	Insoluble %	Available %	
<b>BEM 0-14-7</b>						
Spark-0-Life Trading Post, Fredericktown	----	----	----	1.37	14.03	7.35
Farm Bureau Service Co., Jackson	----	----	----	.92	14.23	7.34
Farm Bureau Service Co., Farmington	----	----	----	1.45	14.05	7.32
M. F. A. Central Coop., Louisiana	----	----	----	1.39	13.91	7.54
George Ward, Ava	----	----	----	1.50	16.10	7.10
Farmers Feed & Produce, Gallatin	----	----	----	1.62	14.28	7.34
Richard Bros., West Plains	----	----	----	1.55	15.05	7.66
Phil Ratliff, Neosho	----	----	----	1.61	14.39	7.15
McVeigh & Co., Holden	----	----	----	1.32	14.33	7.76
Arnolds Elevator Mill, Butler	----	----	----	1.36	14.64	7.16
Average Analysis	----	----	----	1.42	14.47	7.38
Guaranteed Analysis	----	----	----	----	14.00	7.00
<b>BEM 0-20-20</b>						
Farm Bureau Service Co., Poplar Bluff	----	----	----	.71	<u>18.64</u>	21.20
Boone County Farm Bureau Service Co., Columbia	----	----	----	.70	20.35	20.06
Corns Feed Store, Rolla	----	----	----	1.08	21.42	19.18
Northern Feed Co., Springfield	----	----	----	.96	20.54	19.97
Strickland Recreation Palace, Houston	----	----	----	.95	20.45	20.69
Humphrey's Produce, Monticello	----	----	----	.93	20.22	19.19
Allman Produce, Wheaton	----	----	----	.95	20.05	19.70
C. L. Decker, Arcola	----	----	----	.73	19.97	20.38
Average Analysis	----	----	----	.88	20.21	20.05
Guaranteed Analysis	----	----	----	----	20.00	20.00
<b>BEM 2-12-6</b>						
E. V. Snodgrass Feed Store, Doniphan	2.10	95.7	----	1.88	11.91	6.34
Farm Bureau Service Co., Perryville	2.06	94.7	----	.52	<u>11.67</u>	6.09
Farm Bureau Service Co., Lutesville	2.15	96.7	----	.71	12.37	6.19
Arrow Seed & Feed Co., Malden	2.04	95.1	----	1.04	12.49	6.29
Farm Bureau Service Co., Jackson (C)	1.99	95.5	----	2.06	11.94	6.26
Richard Bros., West Plains	2.05	95.1	----	1.24	12.31	6.10
C & R Grain Co., Kearney	2.04	87.3	----	1.02	12.03	6.48
Louisburg Farm Supply Co., Louisburg	2.02	96.0	----	.92	11.92	6.18
Heade's Elevator, Crocker	2.08	90.0	----	1.16	12.19	6.34
Strickland Recreation Palace, Houston	2.01	96.0	----	1.25	13.45	6.18
Clark Produce, Appleton City	2.11	94.8	----	1.06	11.94	6.51
Armstrong Elevator, Harrisonville	2.19	95.9	----	1.00	12.43	6.24
Glasgow Cooperative Ass'n., Glasgow	2.07	96.6	----	.84	12.51	6.67
McVeigh & Co., Holden	1.99	96.0	----	.95	12.08	6.44
Allman Produce, Wheaton	2.07	96.1	----	.92	12.88	6.30
LaMonte Elevator Co., LaMonte	2.02	96.5	----	1.05	11.83	6.07
Kelso Milling Co., Mt. Vernon	2.19	96.1	----	1.47	11.93	6.39
Lipscomb Grain & Seed Co., Irwin	2.04	95.6	----	.85	12.63	6.23
Johnson's Produce, Sheldon	1.99	96.0	----	.93	12.10	6.43
C. L. Decker, Arcola	1.99	97.0	----	.88	12.35	6.28
Average Analysis	2.06	95.2	----	1.09	12.25	6.30
Guaranteed Analysis	2.00	----	----	----	12.00	6.00
<b>BEM 3-9-18</b>						
Farm Bureau Service Co., Benton (D)	3.13	95.7	----	1.35	8.98	18.08
Beacon Milling Co., Bolivar	2.91	97.6	----	.88	9.22	18.18
Allman Produce, Wheaton	3.02	96.0	----	1.19	9.59	<u>17.72</u>
Average Analysis	3.02	96.4	----	1.14	9.26	<u>17.99</u>
Guaranteed Analysis	3.00	----	----	----	9.00	18.00
<b>BEM 3-12-12</b>						
Farm Bureau Service Co., Lutesville	3.10	97.1	----	.75	13.65	12.06
Farm Bureau Service Co., Poplar Bluff	2.91	95.9	----	.74	<u>10.71</u>	12.24
Farmers Feed & Produce Co., Gallatin	3.04	96.7	----	1.68	12.42	<u>11.78</u>
Richard Bros., West Plains	3.02	97.0	----	1.61	12.29	<u>11.57</u>

(C) Registration tags from another state.  
(D) Registration tags not attached.

Deficiencies are underlined.

TABLE 3. FERTILIZER ANALYSES AND GUARANTEES, FALL 1949 (Cont'd)

MANUFACTURER BRANDS, and DEALER OR PURCHASER	NITROGEN		PHOSPHORIC ACID (P <sub>2</sub> O <sub>5</sub> )			Water Soluble Potash (K <sub>2</sub> O) %
	Total %	Water Soluble to Total %	Total in Bone %	Insoluble %	Available %	
<b>(BEM 3-12-12 cont'd.)</b>						
Farmers Coop., Brunswick . . . . .	3.02	96.4	----	1.35	12.10	11.84
George Ward, Ava . . . . .	2.99	97.0	----	1.09	12.11	11.63
Clark Produce, Appleton City . . . . .	3.01	97.3	----	.97	12.41	11.98
Phil Ratliff, Neosho . . . . .	2.99	97.7	----	1.18	12.17	12.14
Arnolds Elevator Mill, Butler . . . . .	2.99	96.7	----	.95	11.55	12.71
Lipscomb Grain & Seed Co., Irwin . . . . .	2.99	98.7	----	1.35	12.53	12.26
McVeigh & Co., Holden . . . . .	3.00	98.3	----	1.24	12.51	11.98
Long's Feed Store, Hurdland . . . . .	3.01	97.3	----	1.23	12.12	12.05
Average Analysis . . . . .	3.01	97.2	----	1.18	12.21	12.02
Guaranteed Analysis . . . . .	3.00	----	----	----	12.00	12.00
<b>BEM 4-12-4</b>						
E. V. Snodgrass Feed Store, Doniphan . . . . .	4.27	97.2	----	1.02	12.48	4.55
Producers Grain Co., Montgomery City . . . . .	3.98	98.5	----	.74	11.96	4.05
Arrow Seed & Feed Co., Malden . . . . .	3.99	98.0	----	1.91	11.97	4.59
Wingrath Feed Store, Linn . . . . .	4.26	98.4	----	.82	12.60	4.08
Farm Bureau Service Co., Poplar Bluff . . . . .	4.04	97.5	----	1.38	12.55	4.53
Farm Bureau Service Co., Lutesville . . . . .	3.99	97.7	----	.64	12.04	4.01
Farmers Exchange, Hardin . . . . .	4.19	96.2	----	1.02	12.25	4.16
Jess McCalmel, Unionville . . . . .	3.99	96.2	----	2.06	12.07	4.54
W. W. Henry, Wheatland . . . . .	4.10	97.8	----	1.67	11.47	4.10
Underwood Grocery & Feed Co., Thayer . . . . .	4.19	98.1	----	.93	11.25	4.14
Heade's Elevator, Crocker . . . . .	3.87	97.2	----	2.13	12.02	4.28
Farmers Feed & Produce, Gallatin . . . . .	4.18	97.8	----	2.16	12.54	4.12
George Ward, Ava . . . . .	3.42	97.7	----	1.28	11.87	4.00
Farmers Exchange, Republic . . . . .	4.14	98.1	----	2.03	11.87	4.02
Thayer Milling Co., Thayer . . . . .	4.23	97.6	----	.88	11.25	4.04
Corn Grocery, Willow Springs . . . . .	3.81	97.6	----	1.53	11.71	4.21
Eagle Mill & Elevator, Higginsville . . . . .	4.01	98.0	----	.75	11.35	3.99
Fiddic & Sons, Cameron . . . . .	4.12	98.3	----	.98	11.92	4.11
Cole County Farm Bureau Service Co., Jefferson City . . . . .	4.00	96.5	----	2.31	11.57	4.11
Louisburg Farm Supply Co., Louisburg . . . . .	3.95	97.7	----	1.52	11.59	4.08
Richard Bros., West Plains . . . . .	4.10	98.3	----	.91	11.54	4.09
Lebanon Machine & Implement Co., Lebanon . . . . .	4.12	98.5	----	1.96	12.49	4.06
McVeigh & Co., Holden . . . . .	4.08	98.3	----	1.51	11.94	4.34
C. L. Decker, Arcola . . . . .	4.05	97.8	----	1.91	11.02	4.16
Phil Ratliff, Neosho . . . . .	3.55	98.0	----	1.47	12.71	4.32
M. F. A. Central Coop., Lancaster . . . . .	4.20	98.1	----	1.27	12.08	4.04
Oliver Feed Store, Fulton . . . . .	3.99	98.2	----	1.62	12.06	4.53
LaMonte Elevator Co., LaMonte . . . . .	4.10	99.5	----	1.75	11.20	4.09
Peoples Elevator Co., Rich Hill . . . . .	4.01	99.0	----	1.60	11.74	4.30
Nichols Bros., Southwest City . . . . .	3.78	98.4	----	1.85	12.20	4.25
Humphrey's Produce, Monticello . . . . .	3.80	98.7	----	1.44	11.86	4.19
Dannen Elevator, Maryville . . . . .	3.90	97.7	----	1.47	12.86	4.19
Clark Produce, Appleton City . . . . .	4.05	97.8	----	1.39	12.66	5.80
Armstrong Elevator Co., Harrisonville . . . . .	4.24	97.4	----	1.52	11.88	3.94
Johnson's Produce, Sheldon . . . . .	4.11	98.3	----	1.46	12.14	4.36
Farm Bureau Service Co., Palmyra . . . . .	4.02	98.0	----	1.57	11.88	4.24
McCarty Feed & Coal Co., Stanbury . . . . .	3.79	98.7	----	1.77	12.48	4.16
Farm Bureau Service Co., Paris . . . . .	3.75	98.1	----	1.49	12.21	4.57
Arnold Elevator Mill, Butler . . . . .	4.15	95.4	----	1.77	12.56	4.33
Average Analysis . . . . .	4.01	97.9	----	1.47	12.00	4.25
Guaranteed Analysis . . . . .	4.00	----	----	----	12.00	4.00
<b>BEM Lawn &amp; Garden Fertilizer 4-12-4</b>						
Arnold Elevator Mill, Butler (A) . . . . .	4.32	93.1	----	1.81	12.92	4.18
Guaranteed Analysis . . . . .	4.00	----	----	----	12.00	4.00
<b>BEM 4-12-8</b>						
Lipscomb Grain & Seed Co., Irwin . . . . .	3.87	95.6	----	1.63	13.42	7.73
Guaranteed Analysis . . . . .	4.00	----	----	----	12.00	8.00

(A) Not registered.

Deficiencies are underlined.

TABLE 3. FERTILIZER ANALYSES AND GUARANTEES; FALL 1949 (Cont'd)

MANUFACTURER BRANDS, and DEALER OR PURCHASER	NITROGEN		PHOSPHORIC ACID (P <sub>2</sub> O <sub>5</sub> )			Water Soluble Potash (K <sub>2</sub> O) %
	Total %	Water Soluble to Total %	Total in Bone %	Insoluble %	Available %	
<b>BEM 4-16-0</b>						
M. F. A. Central Coop., Marshall . . . . .	4.09	95.6	----	2.81	<u>15.41</u>	----
McVeigh & Co., Holden . . . . .	4.03	96.8	----	2.03	<u>15.87</u>	----
Vlark Produce, Appleton City . . . . .	4.17	95.2	----	1.82	<u>15.96</u>	----
Arnold Elevator Mill, Butler. . . . .	4.34	95.6	----	1.72	<u>16.83</u>	----
Average Analysis . . . . .	4.16	95.8	----	2.10	<u>16.02</u>	----
Guaranteed Analysis . . . . .	4.00	----	----	----	<u>16.00</u>	----
<b>BEM 4-24-12</b>						
Hinshaw Feed Co., Columbia. . . . .	3.98	98.0	----	1.82	<u>23.00</u>	12.46
Farm Bureau Service Co., Jackson . . . . .	4.10	97.6	----	1.00	<u>23.30</u>	12.38
Boone County Farm Bureau Service Co., Columbia. . . . .	4.32	98.3	----	1.25	<u>22.95</u>	12.26
Beacon Milling Co., Bolivar . . . . .	<u>3.74</u>	97.1	----	1.61	<u>22.65</u>	12.58
Farm Bureau Service Co., Mexico . . . . .	4.05	98.0	----	1.34	<u>25.06</u>	12.06
Clark Produce, Appleton City . . . . .	4.17	98.3	----	1.08	<u>24.07</u>	12.39
Average Analysis . . . . .	4.06	97.9	----	1.35	<u>23.51</u>	12.36
Guaranteed Analysis . . . . .	4.00	----	----	----	<u>24.00</u>	12.00
<b>BEM 5-10-5</b>						
Producers Exchange, Marshfield. . . . .	4.97	98.4	----	2.11	10.25	5.17
Guaranteed Analysis . . . . .	5.00	----	----	----	10.00	5.00
<b>BEM 8-8-8</b>						
Spark-0-Life Trading Post, Fredericktown	8.12	97.8	----	.95	8.70	8.12
Farm Bureau Service Co., Farmington. . . . .	7.13	98.6	----	1.18	9.20	7.97
Farm Bureau Service Co., Jackson . . . . .	<u>6.85</u>	97.2	----	1.06	10.59	<u>7.49</u>
Maness & Schmidt Mill, Ste. Genevieve. . . . .	8.24	98.1	----	.87	<u>7.88</u>	8.47
Cole County Farm Bureau Service Co., Jefferson City . . . . .	<u>7.75</u>	97.9	----	1.61	8.59	8.66
Farmers Cooperative Ass'n., Brunswick	<u>7.90</u>	98.9	----	1.45	8.45	8.70
Levasy Elevator Co., Levasy . . . . .	<u>7.79</u>	98.6	----	.93	9.65	8.30
Farm Bureau Service Co., Mexico . . . . .	<u>8.27</u>	99.0	----	1.11	9.19	8.16
Dannen Elevator, Maryville . . . . .	8.02	98.9	----	1.28	9.06	7.90
Clark Produce, Appleton City . . . . .	8.11	99.8	----	.97	8.73	8.53
Farmers Supply Co., La Belle. . . . .	8.05	99.3	----	.95	9.15	8.52
Average Analysis . . . . .	7.84	98.6	----	1.12	9.02	8.26
Guaranteed Analysis . . . . .	8.00	----	----	----	8.00	8.00
<b>BEM 0-0-60</b>						
Farm Bureau Service Co., Farmington. . . . .	----	----	----	----	----	59.12
Farm Bureau Service Co., St. Charles . . . . .	----	----	----	----	----	60.76
Farm Bureau Service Co., Lutesville . . . . .	----	----	----	----	----	60.94
Farm Bureau Service Co., Poplar Bluff . . . . .	----	----	----	----	----	61.74
Farm Bureau Service Co., Perryville. . . . .	----	----	----	----	----	<u>55.44</u>
Boone County Farm Bureau Service Co., Columbia. . . . .	----	----	----	----	----	59.32
Farm Bureau Service Co., Carrollton . . . . .	----	----	----	----	----	61.22
Farm Bureau Service Co., Princeton . . . . .	----	----	----	----	----	60.00
Nichols Bros., Southwest City . . . . .	----	----	----	----	----	60.00
Glasgow Cooperative Ass'n., Glasgow. . . . .	----	----	----	----	----	60.36
Greenfield Milling Co., Greenfield. . . . .	----	----	----	----	----	59.80
Allman Produce, Wheaton. . . . .	----	----	----	----	----	61.32
McVeigh & Co., Holden . . . . .	----	----	----	----	----	61.82
Average Analysis . . . . .	----	----	----	----	----	60.17
Guaranteed Analysis . . . . .	----	----	----	----	----	60.00
<b>VIRGINIA-CAROLINA CHEMICAL CORP.</b>						
<b>EAST ST. LOUIS, ILL.</b>						
<b>V-C 20% Superphosphate</b>						
E. V. Snodgrass Feed Store, Doniphan	----	----	----	1.20	<u>18.82</u>	----
Madison County Farmers Whse., Fredericktown (D) . . . . .	----	----	----	.90	20.80	----

(D) Registration tags not attached.

Deficiencies are underlined.

TABLE 3. FERTILIZER ANALYSES AND GUARANTEES, FALL 1949 (Cont'd)

MANUFACTURER BRANDS, and DEALER OR PURCHASER	NITROGEN		PHOSPHORIC ACID (P <sub>2</sub> O <sub>5</sub> )			Water Soluble Potash (K <sub>2</sub> O) %
	Total %	Water Soluble to Total %	Total in Bone %	Insoluble %	Available %	
(V-C 20% Superphosphate cont'd.)						
Cuba Roller Mill, Cuba . . . . .	----	----	----	1.10	21.45	----
Owensville Roller Mill, Owensville . . . . .	----	----	----	1.27	21.38	----
New Hampton Mill & Elevator, New Hampton . . . . .	----	----	----	1.98	20.72	----
Average Analysis . . . . .	----	----	----	1.29	20.63	----
Guaranteed Analysis . . . . .	----	----	----	----	20.00	----
V-C 0-12-12						
Chaffee Grain & Feed Co., Chaffee . . . . .	----	----	----	.43	11.97	11.94
Guaranteed Analysis . . . . .	----	----	----	----	12.00	12.00
V-C 0-14-7						
Lon Bowles Store, Centerville . . . . .	----	----	----	1.29	13.86	6.94
Roy Fields General Store, Ellington . . . . .	----	----	----	1.22	14.13	7.25
Wm. Veulemans & Sons, Syracuse . . . . .	----	----	----	1.48	14.57	7.83
Average Analysis . . . . .	----	----	----	1.33	14.19	7.34
Guaranteed Analysis . . . . .	----	----	----	----	14.00	7.00
V-C 0-20-10						
Roy Fields General Store, Ellington . . . . .	----	----	----	.86	20.24	9.90
E. O. Earl, Ironton . . . . .	----	----	----	.78	19.40	9.69
Average Analysis . . . . .	----	----	----	.82	19.82	9.80
Guaranteed Analysis . . . . .	----	----	----	----	20.00	10.00
V-C Ammo, Phospho Tobacco 2-12-6						
H. L. Emery & Sons., Nevada . . . . .	2.13	93.9	----	2.11	12.17	7.24
Guaranteed Analysis . . . . .	2.00	----	----	----	12.00	6.00
V-C 2-12-6						
Owensville Roller Mill, Owensville . . . . .	2.00	95.5	----	1.67	12.53	6.62
Roy Fields General Store, Ellington . . . . .	2.05	93.7	----	1.34	12.46	6.14
Cuba Roller Mill, Cuba . . . . .	2.06	94.7	----	1.50	12.78	6.15
Chaffee Grain & Feed Co., Chaffee . . . . .	2.00	91.0	----	1.37	12.48	6.53
Drier Feed Store, East Bonne Terre . . . . .	1.92	90.6	----	1.26	12.59	6.79
E. O. Earl, Ironton . . . . .	2.15	94.9	----	1.06	12.32	6.21
E. V. Snodgrass Feed Store, Doniphan . . . . .	2.37	96.2	----	1.19	13.19	6.05
Paul's Feed Store, De Soto . . . . .	2.11	93.4	----	.93	13.00	5.76
Maness & Schmidt Mill, Ste. Genevieve . . . . .	2.15	90.2	----	1.27	12.13	8.14
Lon Bowles Store, Centerville . . . . .	2.15	93.0	----	1.45	12.40	6.26
Madison County Farmers Whse., Fredericktown . . . . .	2.08	94.2	----	1.34	12.71	6.74
Vaughn Bros., Maysville . . . . .	2.67	94.0	----	.87	12.56	5.97
Wm. Veulemans & Sons, Syracuse . . . . .	2.22	95.5	----	1.06	13.19	6.54
Weaubleau Mill, Weaubleau . . . . .	2.18	96.3	----	1.12	13.56	6.70
Hamacher's, Richmond . . . . .	1.98	95.5	----	1.47	12.58	6.46
Edwards & Mitchell, Preston . . . . .	2.09	94.7	----	1.16	13.17	6.35
Raymond Schaefer, Palmyra . . . . .	2.02	94.6	----	1.02	12.16	6.83
L. M. Landrum, Hunnewell . . . . .	2.01	96.0	----	1.03	12.80	6.46
Farmers Elevator & Supply Co., Clinton . . . . .	1.91	92.1	----	1.05	12.80	6.25
Lipscomb Grain & Seed Co., Irwin . . . . .	2.01	94.0	----	1.29	11.94	6.38
Farmers Elevator, El Dorado Springs . . . . .	1.96	91.8	----	1.24	12.16	6.97
Average Analysis . . . . .	2.10	93.9	----	1.22	12.64	6.49
Guaranteed Analysis . . . . .	2.00	----	----	----	12.00	6.00
V-C 3-12-12						
Eggiman Feed & Produce, Cape Girardeau . . . . .	3.07	95.8	----	1.49	12.41	6.84
Chaffee Grain & Feed Co., Chaffee . . . . .	2.89	96.2	----	.83	12.47	12.17
Roy Fields General Store, Ellington . . . . .	2.90	93.8	----	1.35	12.28	11.86
Average Analysis . . . . .	2.95	95.3	----	1.22	12.39	10.29
Guaranteed Analysis . . . . .	3.00	----	----	----	12.00	12.00
V-C 4-12-4						
Roy Fields General Store, Ellington . . . . .	3.20	94.4	----	1.53	13.25	8.21
E. V. Snodgrass Feed Store, Doniphan . . . . .	3.82	96.9	----	1.06	12.87	4.59

Deficiencies are underlined.

TABLE 3. FERTILIZER ANALYSES AND GUARANTEES; FALL 1949 (Cont'd)

MANUFACTURER BRANDS, and DEALER OR PURCHASER	NITROGEN		PHOSPHORIC ACID (P <sub>2</sub> O <sub>5</sub> )			Water Soluble Potash (K <sub>2</sub> O) %
	Total %	Water Soluble to Total %	Total in Bone %	Insoluble %	Available %	
(V-C. 4-12-4 cont'd.)						
Gastler Elevator, Wellsville. . . . .	<u>3.59</u>	96.4	----	1.82	12.63	4.02
Madison County Farmers Whse., Fredericktown. . . . .	3.98	97.0	----	.90	12.70	4.70
E. O. Earl, Ironton. . . . .	3.99	96.7	----	1.67	12.73	4.37
New Hampton Mill & Elevator, New Hampton. . . . .	3.99	97.2	----	2.18	12.22	4.76
Milbank Mills, Chillicothe . . . . .	3.95	97.0	----	1.33	13.00	4.63
Edwards & Mitchell, Preston . . . . .	<u>3.68</u>	96.7	----	1.66	12.61	5.26
Hamacher's, Richmond . . . . .	<u>3.99</u>	97.7	----	2.24	12.09	4.38
Vaughn Bros., Maysville . . . . .	4.11	97.3	----	.96	12.56	4.43
Farmers Elevator & Supply Co., Clinton.	3.60	97.2	----	1.25	12.40	4.39
LaMonte Elevator Co., LaMonte . . . . .	<u>3.87</u>	95.1	----	.96	12.49	5.04
L. M. Landrum, Hunnewell. . . . .	<u>3.86</u>	97.7	----	1.95	11.93	4.38
Average Analysis. . . . .	<u>3.82</u>	96.7	----	1.50	12.58	4.86
Guaranteed Analysis. . . . .	4.00	----	----	----	12.00	4.00
V-C 4-12-8						
Roy Fields General Store, Ellington. . . .	3.18	93.1	----	1.38	13.40	8.16
Lipscomb Grain & Seed Co., Irwin. . . . .	3.99	96.7	----	1.28	12.75	8.06
Raymond Schaefer, Palmyra. . . . .	3.63	95.3	----	1.09	13.19	7.75
Average Analysis. . . . .	<u>3.60</u>	95.0	----	1.25	13.11	7.99
Guaranteed Analysis. . . . .	4.00	----	----	----	12.00	8.00
V-C 8-8-8						
Owensville Roller Mill, Owensville . . . .	6.98	94.8	----	.79	9.51	7.73
Guaranteed Analysis. . . . .	8.00	----	----	----	8.00	8.00
WESTOVER NURSERY						
ST. LOUIS, MO.						
Westgro Cattle Manure						
Westover Nursery, St. Louis (A) (D) . .	2.10	24.8	----	.24	1.72	<u>1.51</u>
Guaranteed Analysis. . . . .	1.00	----	----	----	1.00	2.00

(A) Not registered.

(D) Registration tags not attached.

Deficiencies are underlined.



TABLE 4. FERTILIZERS, WITH GUARANTEED ANALYSES, REGISTERED AND OFFERED FOR SALE IN MISSOURI; 1950

MANUFACTURER AND BRAND NAMES	Nitrogen %	Phosphoric Acid (P <sub>2</sub> O <sub>5</sub> )			Potash (K <sub>2</sub> O) %
		Total in Bone %	Avail- able %	Insolu- ble %	
<b>ALLIED CHEMICAL &amp; DYE CORP., NEW YORK, N. Y.</b>					
Arcadian, the American Nitrate of Soda . . . . .	16.00	----	----	----	----
A-N-L Brand Fertilizer Compound . . . . .	20.50	----	----	----	----
Sulphate of Ammonia . . . . .	20.56	----	----	----	----
Standard Urea Fertilizer Compound . . . . .	42.00	----	----	----	----
<b>AMERICAN AGRICULTURAL CHEMICAL CO., NATIONAL STOCK YARDS, ILL.</b>					
AA Quality Phosphate Rock . . . . .	----	----	3.00	27.00	----
18% Normal Superphosphate 0-18-0 . . . . .	----	----	18.00	----	----
Agrico Alkaline Fertilizer 0-14-20 . . . . .	----	----	10.00	----	20.00
AA Quality Fertilizer 0-10-20 . . . . .	----	----	10.00	----	20.00
Agrico Phosphate & Potash Fertilizer 0-12-12 . . . . .	----	----	12.00	----	12.00
AA Quality Fertilizer 0-12-12 . . . . .	----	----	12.00	----	12.00
Agrico Phosphate & Potash Fertilizer 0-14-7 . . . . .	----	----	14.00	----	7.00
AA Quality Fertilizer 0-14-7 . . . . .	----	----	14.00	----	7.00
Agrico Alkaline 0-20-20 . . . . .	----	----	20.00	----	20.00
AA Quality Fertilizer 0-20-20 . . . . .	----	----	20.00	----	20.00
Agrico for Grain Fertilizer 2-12-6 . . . . .	2.00	----	12.00	----	6.00
Agrico for Wheat Fertilizer 2-14-8 . . . . .	2.00	----	14.00	----	8.00
Agrico for Corn Fertilizer 2-14-8 . . . . .	2.00	----	14.00	----	8.00
AA Quality Fertilizer 2-14-8 . . . . .	2.00	----	14.00	----	8.00
Agrico for Cotton Fertilizer 3-9-18 . . . . .	3.00	----	9.00	----	18.00
AA Quality Fertilizer 3-9-18 . . . . .	3.00	----	9.00	----	18.00
Agrico for Midwest Fertilizer 3-12-12 . . . . .	3.00	----	12.00	----	12.00
AA Quality Fertilizer 3-12-12 . . . . .	3.00	----	12.00	----	12.00
Agrico for Cereals Fertilizer 4-12-4 . . . . .	4.00	----	12.00	----	4.00
Agrico for Gardens Fertilizer 4-12-4 . . . . .	4.00	----	12.00	----	4.00
AA Quality Fertilizer 4-12-4 . . . . .	4.00	----	12.00	----	4.00
Agrico for Truck Fertilizer 4-12-8 . . . . .	4.00	----	12.00	----	8.00
Agrico for Tobacco 4-12-8 . . . . .	4.00	----	12.00	----	8.00
AA Quality Fertilizer 4-12-8 . . . . .	4.00	----	12.00	----	8.00
AA Quality Fertilizer 4-24-12 . . . . .	4.00	----	24.00	----	12.00
Agrico for Top Dressing 8-8-8 . . . . .	8.00	----	8.00	----	8.00
AA Quality Fertilizer 8-8-8 . . . . .	8.00	----	8.00	----	8.00
<b>AMERICAN CYANAMID CO., NEW YORK, N. Y.</b>					
Aero-Phos Florida Natural Phosphate . . . . .	----	----	3.00	30.00	----
20.60% Aero Cyanamid, Granular . . . . .	20.60	----	----	----	----
Aero Cyanamid, Special Grade . . . . .	21.00	----	----	----	----
Aeroprills Ammonium Nitrate Fertilizer . . . . .	33.50	----	----	----	----
<b>AMERICAN LIQUID FERTILIZER CO., INC., MARIETTA, OHIO</b>					
Liqua-Vita Plant Food . . . . .	6.00	----	9.00	----	7.00
Liqua-Vita Turf Special . . . . .	12.00	----	8.00	----	4.00
<b>ARKANSAS FERTILIZER CO., DIVISION OF MATHIESON CHEMICAL CORP., LITTLE ROCK, ARK.</b>					
White Diamond 0-20-0 . . . . .	----	----	20.00	----	----

TABLE 4. FERTILIZERS, WITH GUARANTEED ANALYSES, REGISTERED AND OFFERED FOR SALE IN MISSOURI, 1950 (Cont'd)

MANUFACTURER AND BRAND NAMES	Nitrogen %	Phosphoric Acid (P <sub>2</sub> O <sub>5</sub> )			Potash (K <sub>2</sub> O) %
		Total in Bone %	Avail- able %	Insolu- ble %	
Arkansas Fertilizer Co., (cont'd.)					
White Diamond 0-45-0 . . . . .	----	----	45.00	----	----
White Diamond 0-10-20 . . . . .	----	----	10.00	----	20.00
White Diamond 0-12-12 . . . . .	----	----	12.00	----	12.00
White Diamond 0-14-7 . . . . .	----	----	14.00	----	7.00
White Diamond 2-12-6 . . . . .	2.00	----	12.00	----	6.00
White Diamond 3-9-18 . . . . .	3.00	----	9.00	----	18.00
White Diamond 3-12-12 . . . . .	3.00	----	12.00	----	12.00
White Diamond 4-12-4 . . . . .	4.00	----	12.00	----	4.00
White Diamond 4-16-0 . . . . .	4.00	----	16.00	----	----
White Diamond 5-10-5 . . . . .	5.00	----	10.00	----	5.00
White Diamond 6-8-12 . . . . .	6.00	----	8.00	----	12.00
White Diamond 6-24-24 . . . . .	6.00	----	24.00	----	24.00
White Diamond 7-30-15 . . . . .	7.00	----	30.00	----	15.00
White Diamond 8-8-8 . . . . .	8.00	----	8.00	----	8.00
White Diamond 10-30-10 . . . . .	10.00	----	30.00	----	10.00
White Diamond 11-48-0 . . . . .	11.00	----	48.00	----	----
White Diamond 12-12-12 . . . . .	12.00	----	12.00	----	12.00
White Diamond 12-24-12 . . . . .	12.00	----	24.00	----	12.00
White Diamond 13-39-0 . . . . .	13.00	----	39.00	----	----
White Diamond 16-20-0 . . . . .	16.00	----	20.00	----	----
White Diamond Sulphate of Ammonia . . . . .	20.60	----	----	----	----
Sulphate of Potash, Magnesia . . . . .	----	----	----	----	21.00
White Diamond 0-0-22 . . . . .	----	----	----	----	22.00
White Diamond 0-0-25 . . . . .	----	----	----	----	25.00
White Diamond 0-0-30 . . . . .	----	----	----	----	30.00
White Diamond 0-0-50 . . . . .	----	----	----	----	50.00
White Diamond 0-0-60 . . . . .	----	----	----	----	60.00
ARK MO PLANT FOOD CO., INC., WALNUT RIDGE, ARK.					
Arkmo 0-20-0 . . . . .	----	----	20.00	----	----
Arkmo 0-45-0 . . . . .	----	----	45.00	----	----
Arkmo 0-10-20 . . . . .	----	----	10.00	----	20.00
Arkmo 0-14-7 . . . . .	----	----	14.00	----	7.00
Arkmo 2-12-6 . . . . .	2.00	----	12.00	----	6.00
Arkmo 3-9-18 . . . . .	3.00	----	9.00	----	18.00
Arkmo 3-9-27 . . . . .	3.00	----	9.00	----	27.00
Arkmo 3-12-12 . . . . .	3.00	----	12.00	----	12.00
Arkmo 4-12-4 . . . . .	4.00	----	12.00	----	4.00
Arkmo 5-10-5 . . . . .	5.00	----	10.00	----	5.00
Arkmo 6-8-12 . . . . .	6.00	----	8.00	----	12.00
Arkmo 8-8-8 . . . . .	8.00	----	8.00	----	8.00
Arkmo 8-24-8 . . . . .	8.00	----	24.00	----	8.00
Arkmo 10-6-4 . . . . .	10.00	----	6.00	----	4.00
Arkmo 10-20-10 . . . . .	10.00	----	20.00	----	10.00
Arkmo Sul-Po-Mag (K <sub>2</sub> S0 <sub>4</sub> 40% MGO 18.50%) . . . . .	----	----	----	----	21.50
Arkmo 22% Manure Salts . . . . .	----	----	----	----	22.00
Arkmo 50% Muriate of Potash . . . . .	----	----	----	----	50.00
ARMOUR FERTILIZER WORKS EAST ST. LOUIS, ILL.					
Armour's Big Crop 20% Superphosphate . . . . .	----	----	20.00	----	----

TABLE 4. FERTILIZERS, WITH GUARANTEED ANALYSES, REGISTERED AND OFFERED FOR SALE IN MISSOURI, 1950 (Cont'd)

MANUFACTURER AND BRAND NAMES	Nitrogen %	Phosphoric Acid (P <sub>2</sub> O <sub>5</sub> )			Potash (K <sub>2</sub> O) %
		Total in Bone %	Avail- able %	Insolu- ble %	
Armour Fertilizer Works (cont'd.)					
Armour's Big Crop 45% Superphosphate . . . . .	----	----	45.00	----	----
Armour's Big Crop 0-9-27 Fertilizer . . . . .	----	----	9.00	----	27.00
Armour's Big Crop 0-12-12 Fertilizer . . . . .	----	----	12.00	----	12.00
Armour's Big Crop 0-14-7 Fertilizer . . . . .	----	----	14.00	----	7.00
Armour's Big Crop 0-20-10 Fertilizer . . . . .	----	----	20.00	----	10.00
Armour's Big Crop 0-20-20 Fertilizer . . . . .	----	----	20.00	----	20.00
Armour's Big Crop 2-12-6 Fertilizer . . . . .	2.00	----	12.00	----	6.00
Armour's Big Crop 3-9-18 Fertilizer . . . . .	3.00	----	9.00	----	18.00
Armour's Big Crop 3-12-12 Fertilizer . . . . .	3.00	----	12.00	----	12.00
Armour's Big Crop 4-12-4 Fertilizer . . . . .	4.00	----	12.00	----	4.00
Armour's Big Crop 4-16-0 Fertilizer . . . . .	4.00	----	16.00	----	----
Armour's Big Crop 4-16-16 Fertilizer . . . . .	4.00	----	16.00	----	16.00
Armour's Big Crop 4-24-12 Fertilizer . . . . .	4.00	----	24.00	----	12.00
Armour's Vertagreen 5-10-5 Fertilizer . . . . .	5.00	----	10.00	----	5.00
Armour's Big Crop 8-8-8 Fertilizer . . . . .	8.00	----	8.00	----	8.00
Armour's Big Crop 8-8-8S Fertilizer . . . . .	8.00	----	8.00	----	8.00S
Armour's Gold Bond 8-8-8 Fertilizer . . . . .	8.00	----	8.00	----	8.00
Armour's Big Crop 8-24-8 Fertilizer . . . . .	8.00	----	24.00	----	8.00
Armour's Big Crop 10-6-4 Fertilizer . . . . .	10.00	----	6.00	----	4.00
Armour's Special Ornamental 10-8-6 Fertilizer . . . . .	10.00	----	8.00	----	6.00
Armour's Big Crop 10-20-0 Fertilizer . . . . .	10.00	----	20.00	----	----
Armour's Pulverized Sheep Manure . . . . .	1.50	----	1.00	----	2.00
Armour's Steamed Bone Meal . . . . .	2.50	50.00	----	----	----
Nitrate of Soda 16% . . . . .	16.00	----	----	----	----
Cyanamid. . . . .	20.60	----	----	----	----
Sulphate of Ammonia . . . . .	20.80	----	----	----	----
Ammonium Nitrate . . . . .	33.50	----	----	----	----
Manure Salts . . . . .	----	----	----	----	25.00
Muriate of Potash 50% . . . . .	----	----	----	----	50.00
Muriate of Potash 60% . . . . .	----	----	----	----	60.00
ASSOCIATED COOPERATIVES, INC. SHEFFIELD, ALA.					
Concentrated 45% Superphosphate. . . . .	----	----	45.00	----	----
Concentrated 46% Superphosphate. . . . .	----	----	46.00	----	----
Concentrated 47% Superphosphate. . . . .	----	----	47.00	----	----
Concentrated 48% Superphosphate. . . . .	----	----	48.00	----	----
Ammonium Nitrate Fertilizer . . . . .	33.00	----	----	----	----
ATKINS & DURBROW, INC., NEW YORK, N. Y.					
Peatblend. . . . .	1.00	----	1.00	----	1.00
Driconure . . . . .	2.00	----	1.00	----	1.00
BALFOUR, GUTHRIE & CO., INC., CHICAGO, ILL.					
Elephant Brand 33.50-0-0 . . . . .	33.50	----	----	----	----
BETTER HOMES BUREAU, NEWARK, N. Y.					
Gold Medal Plant Food 23-21-17 . . . . .	23.00	----	21.00	----	17.00

TABLE 4. FERTILIZERS, WITH GUARANTEED ANALYSES, REGISTERED AND OFFERED FOR SALE IN MISSOURI; 1950 (Cont'd)

MANUFACTURER AND BRAND NAMES	Nitrogen %	Phosphoric Acid (P <sub>2</sub> O <sub>5</sub> )			Potash (K <sub>2</sub> O) %
		Total in Bone %	Avail- able %	Insolu- ble %	
<b>BLYTHEVILLE FERTILIZER CORP., BLYTHEVILLE, ARK.</b>					
BFC Fertilizer 20% Super. . . . .	----	----	20.00	----	----
BFC Fertilizer 0-12-12 . . . . .	----	----	12.00	----	12.00
BFC Fertilizer 0-14-7 . . . . .	----	----	14.00	----	7.00
BFC Fertilizer 2-12-6 . . . . .	2.00	----	12.00	----	6.00
BFC Fertilizer 3-9-18 . . . . .	3.00	----	9.00	----	18.00
BFC Fertilizer 3-12-12 . . . . .	3.00	----	12.00	----	12.00
BFC Fertilizer 4-8-6 . . . . .	4.00	----	8.00	----	6.00
BFC Fertilizer 4-12-4 . . . . .	4.00	----	12.00	----	4.00
BFC Fertilizer 5-10-5 . . . . .	5.00	----	10.00	----	5.00
BFC Fertilizer 6-8-12 . . . . .	6.00	----	8.00	----	12.00
BFC Fertilizer 6-9-27 . . . . .	6.00	----	9.00	----	27.00
BFC Fertilizer 8-8-8 . . . . .	8.00	----	8.00	----	8.00
BFC Fertilizer 10-6-4 . . . . .	10.00	----	6.00	----	4.00
<b>CARNEGIE-ILLINOIS STEEL CORP., PITTSBURG, PENN.</b>					
USS Ammonium Sulphate. . . . .	20.60	----	----	----	----
<b>CENTRAL FARMERS FERTILIZER CO., CHICAGO, ILL.</b>					
T. V. A. Concentrated Superphosphate 45%. . . . .	----	----	45.00	----	----
T. V. A. Concentrated Superphosphate 46%. . . . .	----	----	46.00	----	----
T. V. A. Concentrated Superphosphate 47%. . . . .	----	----	47.00	----	----
T. V. A. Calcium Meta-phosphate 62%. . . . .	----	----	62.00	----	----
T. V. A. Ammonium Nitrate 33% . . . . .	33.00	----	----	----	----
<b>CHILEAN NITRATE SALES CORP., NEW YORK, N. Y.</b>					
Chilean Nitrate of Soda - Champion Brand. . . . .	16.00	----	----	----	----
<b>CLOVERSET FLOWER FARM, KANSAS CITY, MO.</b>					
Cloverset Rose Grower . . . . .	5.00	----	10.00	----	5.00
<b>COLUMBIA PHOSPHATE CO., ST. LOUIS, MO.</b>					
Columbia Ground Rock Phosphate. . . . .	----	----	3.00	28.00	----
Davco Brand Ground Rock Phosphate . . . . .	----	----	3.00	28.00	----
<b>CONSUMERS COOPERATIVE ASS'N., KANSAS CITY, MO.</b>					
Co-op Brand 0-20-0 . . . . .	----	----	20.00	----	----
T. V. A. Concentrated Superphosphate 45%. . . . .	----	----	45.00	----	----
T. V. A. Concentrated Superphosphate 46%. . . . .	----	----	46.00	----	----
T. V. A. Concentrated Superphosphate 47%. . . . .	----	----	47.00	----	----
T. V. A. Concentrated Superphosphate 48%. . . . .	----	----	48.00	----	----
T. V. A. Concentrated Superphosphate 49%. . . . .	----	----	49.00	----	----
T. V. A. Concentrated Superphosphate 50%. . . . .	----	----	50.00	----	----
Co-op Brand 0-20-10 . . . . .	----	----	20.00	----	10.00

TABLE 4. FERTILIZERS, WITH GUARANTEED ANALYSES, REGISTERED AND OFFERED  
FOR SALE IN MISSOURI, 1950 (Cont'd)

MANUFACTURER AND BRAND NAMES	Nitrogen %	Phosphoric Acid (P <sub>2</sub> O <sub>5</sub> )			Potash (K <sub>2</sub> O) %
		Total in Bone %	Avail- able %	Insolu- ble %	
Consumers Cooperative Ass'n., (cont'd.)					
Co-op Brand 0-20-20 . . . . .	----	----	20.00	----	20.00
Co-op Brand 2-12-6 . . . . .	2.00	----	12.00	----	6.00
Co-op Brand 3-12-12 . . . . .	3.00	----	12.00	----	12.00
Co-op Brand 4-12-4 . . . . .	4.00	----	12.00	----	4.00
Co-op Brand 4-16-0 . . . . .	4.00	----	16.00	----	----
Co-op Brand 4-16-8 . . . . .	4.00	----	16.00	----	8.00
Co-op Brand 4-24-12 . . . . .	4.00	----	24.00	----	12.00
Co-op Brand 5-20-20 . . . . .	5.00	----	20.00	----	20.00
Co-op Brand 6-24-0 . . . . .	6.00	----	24.00	----	----
Co-op Brand 8-8-8 . . . . .	8.00	----	8.00	----	8.00
Co-op Brand 8-24-8 . . . . .	8.00	----	24.00	----	8.00
Co-op Brand 8-32-0 . . . . .	8.00	----	32.00	----	----
Co-op Brand 10-20-0 . . . . .	10.00	----	20.00	----	----
T. V. A. Ammonium Nitrate 33.50-0-0 . . . . .	33.50	----	----	----	----
Co-op Muriate of Potash 0-0-60 . . . . .	----	----	----	----	60.00
Co-op Muriate of Potash 0-0-61 . . . . .	----	----	----	----	61.00
DARLING & CO., CHICAGO AND EAST ST. LOUIS, ILL.					
Darling's 20% Superphosphate . . . . .	----	----	20.00	----	----
Darling's Nine Twenty-seven . . . . .	----	----	9.00	----	27.00
Darling's Twelve Twelve . . . . .	----	----	12.00	----	12.00
Darling's Twenty Ten . . . . .	----	----	20.00	----	10.00
Darling's Twenty Twenty . . . . .	----	----	20.00	----	20.00
Darling's Crop King . . . . .	2.00	----	12.00	----	6.00
Darling's Big Potash . . . . .	3.00	----	9.00	----	18.00
Darling's Sure Winner . . . . .	3.00	----	12.00	----	12.00
Darling's Three Eighteen Nine . . . . .	3.00	----	18.00	----	9.00
Darling's Field Marshal . . . . .	4.00	----	12.00	----	4.00
Darling's Harvest Queen . . . . .	4.00	----	12.00	----	8.00
Darling's Four Twenty-four Twelve . . . . .	4.00	----	24.00	----	12.00
Darling's Eight Eight Eight . . . . .	8.00	----	8.00	----	8.00
Darling's Eight Sixteen . . . . .	8.00	----	16.00	----	----
Darling's Eight Twenty-four Eight . . . . .	8.00	----	24.00	----	8.00
DAVISON CHEMICAL CORP., BALTIMORE, MD., & NASHVILLE, TENN.					
Davco Granulated Superphosphate 20% . . . . .	----	----	20.00	----	----
Davco Triple Superphosphate . . . . .	----	----	46.00	----	----
Davco Red Diamond Fertilizer 0-12-12 . . . . .	----	----	12.00	----	12.00
Davco Red Diamond Fertilizer 0-14-7 . . . . .	----	----	14.00	----	7.00
Davco Red Diamond Fertilizer 0-20-20 . . . . .	----	----	20.00	----	20.00
Davco Red Diamond Fertilizer 2-12-6 . . . . .	2.00	----	12.00	----	6.00
Davco Red Diamond Fertilizer 3-12-12 . . . . .	3.00	----	12.00	----	12.00
Davco Red Diamond Fertilizer 4-12-4 . . . . .	4.00	----	12.00	----	4.00
Davco Red Diamond Fertilizer 4-12-8 . . . . .	4.00	----	12.00	----	8.00
Davco Red Diamond Fertilizer 5-10-5 . . . . .	5.00	----	10.00	----	5.00
Davco Red Diamond Fertilizer 6-12-12 . . . . .	6.00	----	12.00	----	12.00
Davco Red Diamond Fertilizer 8-24-8 . . . . .	8.00	----	24.00	----	8.00
DAVISON CHEMICAL CORP., PERRY, IOWA					
Davco 0-20-0 . . . . .	----	----	20.00	----	----
Davco 0-9-27 . . . . .	----	----	9.00	----	27.00

TABLE 4. FERTILIZERS, WITH GUARANTEED ANALYSES, REGISTERED AND OFFERED FOR SALE IN MISSOURI, 1950 (Cont'd)

MANUFACTURER AND BRAND NAMES	Nitrogen %	Phosphoric Acid (P <sub>2</sub> O <sub>5</sub> )			Potash (K <sub>2</sub> O) %
		Total in Bone %	Avail- able %	Insolu- ble %	
Davison Chemical Corp., (cont'd.)					
Davco 0-20-20 . . . . .	----	----	20.00	----	20.00
Davco 2-12-6 . . . . .	2.00	----	12.00	----	6.00
Davco 3-12-12 . . . . .	3.00	----	12.00	----	12.00
Davco Granulated 3-12-12 . . . . .	3.00	----	12.00	----	12.00
Davco 3-18-9 . . . . .	3.00	----	18.00	----	9.00
Davco 4-16-0 . . . . .	4.00	----	16.00	----	----
Davco 4-24-12 . . . . .	4.00	----	24.00	----	12.00
Davco 8-32-0 . . . . .	8.00	----	32.00	----	----
Davco 10-20-0 . . . . .	10.00	----	20.00	----	----
E. I. DU PONT DE NEMOURS & CO., WILMINGTON, DEL.					
Du Pont Uramon Fertilizer Compound . . . . .	42.00	----	----	----	----
Du Pont Nu Green Fertilizer Compound . . . . .	44.00	----	----	----	----
EATON-MANN PHOSPHATE CO., JOLIET, ILL.					
Eaton-Mann Golden Glo Powdered Phosphate Rock . . . . .	----	----	3.00	27.00	----
ECONOMY NURSURY CO., LITTLE SILVER, N. J.					
Balanced Rose Food . . . . .	5.00	---	8.00	----	3.00
EXCELL LABORATORIES, INC., CHICAGO, ILL.					
New Plant Life . . . . .	2.00	----	1.00	----	2.00
FAESY & BESTHOFF, INC., NEW YORK, N. Y.					
F & B High Organic Pelletized All Purpose 6-12-6 . . . . .	6.00	----	12.00	----	6.00
Rose Food 8-10-4 . . . . .	8.00	----	10.00	----	4.00
Pure Bone Meal . . . . .	2.47	23.00	----	----	----
FARM BELT FERTILIZER & CHEMICAL CO., KANSAS CITY, MO.					
Farm Belt Phosphate Rock . . . . .	----	----	3.00	----	----
Farm Belt Fertilizer 0-20-0 . . . . .	----	----	20.00	----	----
Farm Belt Fertilizer 0-45-0 . . . . .	----	----	45.00	----	----
Farm Belt Fertilizer 0-46-0 . . . . .	----	----	46.00	----	----
Farm Belt Fertilizer 0-47-0 . . . . .	----	----	47.00	----	----
Farm Belt Fertilizer 0-20-10 . . . . .	----	----	20.00	----	10.00
Farm Belt Fertilizer 2-12-6 . . . . .	2.00	----	12.00	----	6.00
Farm Belt Fertilizer 3-12-12 . . . . .	3.00	----	12.00	----	12.00
Farm Belt Fertilizer 4-12-4 . . . . .	4.00	----	12.00	----	4.00
Minor L 4-12-4 . . . . .	4.00	----	12.00	----	4.00
Farm Belt Fertilizer 4-16-0 . . . . .	4.00	----	16.00	----	----
Farm Belt Fertilizer 6-10-4 . . . . .	6.00	----	10.00	----	4.00
Farm Belt Fertilizer 6-30-0 . . . . .	6.00	----	30.00	----	----
Farm Belt Fertilizer 8-8-8 . . . . .	8.00	----	8.00	----	8.00
Minor L 8-8-8 . . . . .	8.00	----	8.00	----	8.00

TABLE 4. FERTILIZERS, WITH GUARANTEED ANALYSES, REGISTERED AND OFFERED FOR SALE IN MISSOURI, 1950 (Cont'd)

MANUFACTURER AND BRAND NAMES	Nitrogen %	Phosphoric Acid (P <sub>2</sub> O <sub>5</sub> )			Potash (K <sub>2</sub> O) %
		Total in Bone %	Avail- able %	Insolu- ble %	
Farm Belt Fertilizer & Chemical Co., (cont'd.)					
Farm Belt Fertilizer 8-24-8 . . . . .	8.00	----	24.00	----	8.00
Farm Belt Fertilizer 10-20-0 . . . . .	10.00	----	20.00	----	----
FARM BUREAU SERVICE CO. OF MO., INC., JEFFERSON CITY, MO.					
Green Diamond Plant Food 0-20-0 . . . . .	----	----	20.00	----	----
Green Diamond Plant Food 0-15-15 . . . . .	----	----	15.00	----	15.00
Green Diamond Plant Food 0-20-20 . . . . .	----	----	20.00	----	20.00
Green Diamond Plant Food 3-9-18 . . . . .	3.00	----	9.00	----	18.00
Green Diamond Plant Food 3-9-27 . . . . .	3.00	----	9.00	----	27.00
Green Diamond Plant Food 3-12-12 . . . . .	3.00	----	12.00	----	12.00
Green Diamond Plant Food 4-12-4 . . . . .	4.00	----	12.00	----	4.00
Green Diamond Plant Food 4-16-16 . . . . .	4.00	----	16.00	----	16.00
Green Diamond Plant Food 4-24-12 . . . . .	4.00	----	24.00	----	12.00
Green Diamond Plant Food 5-15-10 . . . . .	5.00	----	15.00	----	10.00
Green Diamond Plant Food 10-10-10 . . . . .	10.00	----	10.00	----	10.00
Green Diamond Plant Food 0-0-60 . . . . .	----	----	----	----	60.00
FARM FERTILIZERS, INC., OMAHA, NEB.					
Bumpero Fertilizer 0-20-0 . . . . .	----	----	20.00	----	----
Bumpero Fertilizer 2-12-6 . . . . .	2.00	----	12.00	----	6.00
Bumpero Fertilizer 3-12-12 . . . . .	3.00	----	12.00	----	12.00
Bumpero Fertilizer 4-16-0 . . . . .	4.00	----	16.00	----	----
Bumpero Fertilizer 4-16-8 . . . . .	4.00	----	16.00	----	8.00
Bumpero Fertilizer 8-24-8 . . . . .	8.00	----	24.00	----	8.00
Bumpero Fertilizer 8-32-0 . . . . .	8.00	----	32.00	----	----
Bumpero Fertilizer 10-20-0 . . . . .	10.00	----	20.00	----	----
FORD MOTOR CO., DEARBORN, MICH.					
Ford Ammonium Sulphate . . . . .	20.80	----	----	----	----
FORT SMITH COTTON OIL CO., FORT SMITH, ARK.					
Rais-Mor Fertilizer 0-20-0 . . . . .	----	----	20.00	----	----
Rais-Mor Fertilizer 0-14-7 . . . . .	----	----	14.00	----	7.00
Rais-Mor Fertilizer 3-9-18 . . . . .	3.00	----	9.00	----	18.00
Rais-Mor Fertilizer 4-12-4 . . . . .	4.00	----	12.00	----	4.00
Rais-Mor Fertilizer 5-10-5 . . . . .	5.00	----	10.00	----	5.00
Rais-Mor Fertilizer 8-8-8 . . . . .	8.00	----	8.00	----	8.00
GAYLORD CHEMICAL CO., KANSAS CITY, MO.					
Sup-Ro . . . . .	4.00	---	4.00	----	4.00
GOULARD & OLENEA, INC., SKILLMAN, N. J.					
G. & O. Rhodo-Azalea Food . . . . .	3.00	----	20.00	----	3.00
G. & O. Dahalia Food . . . . .	5.00	----	6.00	----	15.00
G. & O. Rose Food . . . . .	7.00	----	8.00	----	5.00

TABLE 4. FERTILIZERS, WITH GUARANTEED ANALYSES, REGISTERED AND OFFERED FOR SALE IN MISSOURI, 1950 (Cont'd)

MANUFACTURER AND BRAND NAMES	Nitrogen %	Phosphoric Acid (P <sub>2</sub> O <sub>5</sub> )			Potash (K <sub>2</sub> O) %
		Total in Bone %	Avail- able %	Insolu- ble %	
Goulard and Olene, Inc., (cont'd.)					
G. & O. Tree Food . . . . .	9.00	----	7.00	----	3.00
G. & O. Lawn Fertilizer . . . . .	10.00	----	6.00	----	4.00
G. & O. Ground Bone Fertilizer . . . . .	2.40	20.00	----	----	----
Sulphate of Ammonia. . . . .	20.00	----	----	----	----
J. HARRIS MANURE CO., EAST ST. LOUIS, ILL.					
Hampton Park Brand Dried Cattle Manure . . . . .	2.00	----	1.00	----	2.00
Hampton Park Brand Dried Sheep Manure. . . . .	2.00	----	1.00	----	2.00
HARWICK CHEMICALS BUTLER, MO.					
Ammonium Nitrate Fertilizer 32.50%. . . . .	32.50	----	----	----	----
A. H. HOFFMAN, INC., LANDISVILLE, PENN.					
Hoffman Rose Food. . . . .	5.00	----	10.00	----	5.00
Hoffman Sheep Manure (Kiln-Dried) . . . . .	1.50	----	1.00	----	2.00
Hoffman Cow Manure (Dehydrated) . . . . .	2.00	----	1.00	----	1.00
Hoffman Poultry Manure (Dehydrated). . . . .	3.00	----	1.00	----	1.50
Hoffman Bone Meal (Raw) . . . . .	3.70	20.00	----	----	----
HOOVER SOIL SERVICE GILMAN, ILL.					
Soft Phosphate With Colloidal Clay . . . . .	----	----	2.00	18.00	----
HYDROPONIC CHEMICAL CO., INC., COPLEY, OHIO					
Hyponex Plant Food 7-6-19 . . . . .	7.00	----	6.00	----	19.00
INTERSTATE FERTILIZER CO., CAIRO, ILL.					
Interstate Brand Superphosphate 20%. . . . .	----	----	20.00	----	----
T. V. A. Triple Superphosphate 45%. . . . .	----	----	45.00	----	----
T. V. A. Triple Superphosphate 46%. . . . .	----	----	46.00	----	----
T. V. A. Triple Superphosphate 47%. . . . .	----	----	47.00	----	----
T. V. A. Triple Superphosphate 48%. . . . .	----	----	48.00	----	----
T. V. A. Triple Superphosphate 49%. . . . .	----	----	49.00	----	----
T. V. A. Triple Superphosphate 50%. . . . .	----	----	50.00	----	----
Interstate Brand 0-12-12. . . . .	----	----	12.00	----	12.00
Interstate Brand 0-20-20. . . . .	----	----	20.00	----	20.00
Interstate Brand 3-9-6 . . . . .	3.00	----	9.00	----	6.00
Interstate Brand 3-9-18. . . . .	3.00	----	9.00	----	18.00
Interstate Brand 3-9-27. . . . .	3.00	----	9.00	----	27.00
Interstate Brand 3-12-12. . . . .	3.00	----	12.00	----	12.00
Interstate Brand 4-12-4. . . . .	4.00	----	12.00	----	4.00
Interstate Brand 4-12-8. . . . .	4.00	----	12.00	----	8.00
Interstate Brand 5-10-10S . . . . .	5.00	----	10.00	----	10.00S
Interstate Brand 5-20-20. . . . .	5.00	----	20.00	----	20.00
Interstate Brand 6-8-6 . . . . .	6.00	----	8.00	----	6.00
Interstate Brand 8-8-8 . . . . .	8.00	----	8.00	----	8.00



TABLE 4. FERTILIZERS, WITH GUARANTEED ANALYSES, REGISTERED AND OFFERED  
FOR SALE IN MISSOURI; 1950 (Cont'd)

MANUFACTURER AND BRAND NAMES	Nitrogen %	Phosphoric Acid (P <sub>2</sub> O <sub>5</sub> )			Potash (K <sub>2</sub> O) %
		Total in Bone %	Avail- able %	Insolu- ble %	
Interstate Fertilizer Co., (cont'd.)					
Arcadian Nitrate of Soda 16% . . . . .	16.00	----	----	----	----
Champion Nitrate of Soda 16% . . . . .	16.00	----	----	----	----
Interstate Brand Sulphate of Ammonia 20.50% . . . . .	20.50	----	----	----	----
T. V. A.'s Ammonium Nitrate 33% . . . . .	33.00	----	----	----	----
Spencer's Ammonium Nitrate 33.50% . . . . .	33.50	----	----	----	----
I.M. & C. Corp. Sul-Po-Mag 21.50% . . . . .	----	----	----	----	21.50
Interstate Brand Manure Salts 23% . . . . .	----	----	----	----	23.00
Interstate Brand Muriate of Potash 50% . . . . .	----	----	----	----	50.00
Interstate Brand Muriate of Potash 60% . . . . .	----	----	----	----	60.00
KANSAS CITY FERTILIZER CO., KANSAS CITY, MO.					
Archer Brand Cattle Manure . . . . .	2.00	----	1.00	----	1.00
Archer Brand Sheep Manure. . . . .	2.00	----	1.00	----	2.00
LANGE BROTHERS, INC., ST. LOUIS, MO.					
Lange Brothers Rock Phosphate . . . . .	----	----	2.00	----	----
Lange Brothers 0-20-0 . . . . .	----	----	20.00	----	----
Lange Brothers 0-45-0 . . . . .	----	----	45.00	----	----
Lange Brothers 0-9-27 . . . . .	----	----	9.00	----	27.00
Lange Brothers 0-12-12 . . . . .	----	----	12.00	----	12.00
Lange Brothers 0-14-7 . . . . .	----	----	14.00	----	7.00
Lange Brothers 0-20-10 . . . . .	----	----	20.00	----	10.00
Lange Brothers 0-20-20 . . . . .	----	----	20.00	----	20.00
Lange Brothers 2-12-6 . . . . .	2.00	----	12.00	----	6.00
Lange Brothers 3-9-18 . . . . .	3.00	----	9.00	----	18.00
Lange Brothers 3-12-12 . . . . .	3.00	----	12.00	----	12.00
Lange Brothers 4-12-4 . . . . .	4.00	----	12.00	----	4.00
Lange Brothers 4-12-8 . . . . .	4.00	----	12.00	----	8.00
Lange Brothers 4-16-0 . . . . .	4.00	----	16.00	----	----
Lange Brothers 4-16-16 . . . . .	4.00	----	16.00	----	16.00
Lange Brothers 4-24-12 . . . . .	4.00	----	24.00	----	12.00
Lange Brothers 5-20-10 . . . . .	5.00	----	20.00	----	10.00
Lange Brothers 8-8-8 . . . . .	8.00	----	8.00	----	8.00
Lange Brothers 8-16-16 . . . . .	8.00	----	16.00	----	16.00
Lange Brothers 8-24-8 . . . . .	8.00	----	24.00	----	8.00
Lange Brothers 10-6-4 . . . . .	10.00	----	6.00	----	4.00
Lange Brothers 0-0-25 . . . . .	----	----	----	----	25.00
Lange Brothers 0-0-50 . . . . .	----	----	----	----	50.00
Lange Brothers 0-0-60 . . . . .	----	----	----	----	60.00
LION OIL CO., EL DORADO, ARK.					
Lion Sulphate of Ammonia Fertilizer . . . . .	21.00	----	----	----	----
Lion Ammonium Nitrate Fertilizer . . . . .	33.50	----	----	----	----
MATHIESON CHEMICAL CORP., BALTIMORE, MD., & PASADENA, TEXAS					
Standard 20% Superphosphate . . . . .	----	----	20.00	----	----
Sasco-Phos Pelleted 11-48-0 Fertilizer . . . . .	11.00	----	48.00	----	----
Sasco-Phos Pelleted 13-39-0 Fertilizer . . . . .	13.00	----	39.00	----	----
Sasco-Phos Pelleted 16-20-0 Fertilizer . . . . .	16.00	----	20.00	----	----

TABLE 4. FERTILIZERS, WITH GUARANTEED ANALYSES, REGISTERED AND OFFERED FOR SALE IN MISSOURI; 1950 (Cont'd)

MANUFACTURER AND BRAND NAMES	Nitrogen %	Phosphoric Acid (P <sub>2</sub> O <sub>5</sub> )			Potash (K <sub>2</sub> O) %
		Total in Bone %	Avail- able %	Insolu- ble %	
MCCORMICK & CO., INC., BALTIMORE, MD.					
Hy-Gro. . . . .	13.00	----	26.00	----	13.00
MID-SOUTH CHEMICAL CO., INC., MEMPHIS, TENN.					
Spencer's Commercial Grade Anhydrous Ammonia (99.50% NH <sub>3</sub> ) . . . . .	82.50	----	----	----	----
MIDWEST PHOSPHATE CO., JOLIET, ILL.					
Midwest "QUALITY PHOSPHATE" (30% Total P <sub>2</sub> O <sub>5</sub> ) . . . . .	----	----	2.00	28.00	----
Midwest "QUALITY PHOSPHATE" (32% Total P <sub>2</sub> O <sub>5</sub> ) . . . . .	----	----	2.00	30.00	----
MISSISSIPPI VALLEY SUPERPHOSPHATE CO., GREENVILLE, MISS.					
Super Brand . . . . .	----	----	20.00	----	----
MISSOURI FARMERS ASS'N., INC., COLUMBIA, MO.					
M. F. A. 0-20-0 . . . . .	----	----	20.00	----	----
M. F. A. Triple Superphosphate 45% . . . . .	----	----	45.00	----	----
M. F. A. Triple Superphosphate 46% . . . . .	----	----	46.00	----	----
M. F. A. Tripel Superphosphate 47% . . . . .	----	----	47.00	----	----
M. F. A. 0-9-27 . . . . .	----	----	9.00	----	27.00
M. F. A. 0-10-20 . . . . .	----	----	10.00	----	20.00
M. F. A. 0-14-7 . . . . .	----	----	14.00	----	7.00
M. F. A. 0-14-14 . . . . .	----	----	14.00	----	14.00
M. F. A. 0-16-8 . . . . .	----	----	16.00	----	8.00
M. F. A. 0-20-20 . . . . .	----	----	20.00	----	20.00
M. F. A. 0-20-20 with Borax . . . . .	----	----	20.00	----	20.00
M. F. A. 2-12-6 . . . . .	2.00	----	12.00	----	6.00
M. F. A. 2 1/2-15-7 1/2 . . . . .	2.50	----	15.00	----	7.50
M. F. A. 3-9-18 . . . . .	3.00	----	9.00	----	18.00
M. F. A. 3-9-27 . . . . .	3.00	----	9.00	----	27.00
M. F. A. 3-12-12 . . . . .	3.00	----	12.00	----	12.00
M. F. A. 4-12-4 . . . . .	4.00	----	12.00	----	4.00
M. F. A. 4-24-12 . . . . .	4.00	----	24.00	----	12.00
M. F. A. Garden Grow with Ne-So-Min. . . . .	5.00	----	10.00	----	5.00
M. F. A. 5-10-10 . . . . .	5.00	----	10.00	----	10.00
M. F. A. 5-15-5 . . . . .	5.00	----	15.00	----	5.00
M. F. A. 5-15-30 . . . . .	5.00	----	15.00	----	30.00
M. F. A. 6-18-6 . . . . .	6.00	----	18.00	----	6.00
M. F. A. 8-8-8 . . . . .	8.00	----	8.00	----	8.00
M. F. A. 8-16-0 . . . . .	8.00	----	16.00	----	----
M. F. A. 8-24-8 . . . . .	8.00	----	24.00	----	8.00
M. F. A. 9-9-9 . . . . .	9.00	----	9.00	----	9.00
M. F. A. 10-10-10 . . . . .	10.00	----	10.00	----	10.00
M. F. A. Manure Salts 20% . . . . .	----	----	----	----	20.00
M. F. A. Manure Salts 21% . . . . .	----	----	----	----	21.00
M. F. A. Manure Salts 22% . . . . .	----	----	----	----	22.00

TABLE 4. FERTILIZERS, WITH GUARANTEED ANALYSES, REGISTERED AND OFFERED FOR SALE IN MISSOURI, 1950 (Cont'd)

MANUFACTURER AND BRAND NAMES	Nitrogen %	Phosphoric Acid (P <sub>2</sub> O <sub>5</sub> )			Potash (K <sub>2</sub> O) %
		Total in Bone %	Avail- able %	Insolu- ble %	
Missouri Farmers Ass'n., Inc., (cont'd.)					
M. F. A. Manure Salts 23% . . . . .	----	----	----	----	23.00
M. F. A. Manure Salts 24% . . . . .	----	----	----	----	24.00
M. F. A. Manure Salts 25% . . . . .	----	----	----	----	25.00
M. F. A. Manure Salts 26% . . . . .	----	----	----	----	26.00
M. F. A. Manure Salts 27% . . . . .	----	----	----	----	27.00
M. F. A. Muriate of Potash 50% . . . . .	----	----	----	----	50.00
M. F. A. Muriate of Potash 60% . . . . .	----	----	----	----	60.00
"NA-CHURS" PLANT FOOD CO., MARION, OHIO					
"Na-Churs" Liquid Fertilizer 5-10-5. . . . .	5.00	----	10.00	----	5.00
NATIONAL FERTILIZER CO., DES MOINES, IOWA					
Green Top Fertilizer 0-20-0 . . . . .	----	----	20.00	----	----
Green Top Fertilizer 0-46-0 . . . . .	----	----	46.00	----	----
Green Top Fertilizer 0-9-27 . . . . .	----	----	9.00	----	27.00
Green Top Fertilizer 0-20-20. . . . .	----	----	20.00	----	20.00
Green Top Fertilizer 3-12-12. . . . .	3.00	----	12.00	----	12.00
Green Top Fertilizer 4-16-0 . . . . .	4.00	----	16.00	----	----
Green Top Fertilizer 4-16-8 . . . . .	4.00	----	16.00	----	8.00
Green Top Fertilizer 4-24-12. . . . .	4.00	----	24.00	----	12.00
Green Top Fertilizer 5-20-20. . . . .	5.00	----	20.00	----	20.00
Green Top Fertilizer 6-24-0 . . . . .	6.00	----	24.00	----	----
Green Top Fertilizer 8-8-8 . . . . .	8.00	----	8.00	----	8.00
Green Top Fertilizer 8-16-8 . . . . .	8.00	----	16.00	----	8.00
Green Top Fertilizer 8-32-0 . . . . .	8.00	----	32.00	----	----
Green Top Fertilizer 10-20-0. . . . .	10.00	----	20.00	----	----
Green Top Fertilizer 0-0-50 . . . . .	----	----	----	----	50.00
OWENS AGRICULTURAL PHOSPHATE CORP., CENTERVILLE, TENN.					
Ground Rock Phosphate. . . . .	----	----	2.00	----	----
PEARSON-FERGUSON CHEMICAL CO., KANSAS CITY, MO.					
P-F 4-12-4. . . . .	4.00	----	12.00	----	4.00
P-F 6-10-4 Fish and Pond Fertilizer. . . . .	6.00	----	10.00	----	4.00
Pearson Ferguson Fertilizer Bone Meal. . . . .	1.00	25.20	----	----	----
Pearson Ferguson Muriate of Potash. . . . .	----	----	----	----	59.48
PHILLIPS CHEMICAL CO., BARTLESVILLE, OKLA.					
Phillips 66 Ammonium Nitrate . . . . .	33.40	----	----	----	----
Phillips 66 Prilled Ammonium Nitrate. . . . .	33.50	----	----	----	----
PIONEER PHOSPHATE CO., DES MOINES, IOWA					
Pioneer Brand 0-20-20 . . . . .	----	----	20.00	----	20.00
Pioneer Brand 3-9-18. . . . .	3.00	----	9.00	----	18.00
Pioneer Brand 3-12-12 . . . . .	3.00	----	12.00	----	12.00

**TABLE 4. FERTILIZERS, WITH GUARANTEED ANALYSES, REGISTERED AND OFFERED FOR SALE IN MISSOURI; 1950 (Cont'd)**

MANUFACTURER AND BRAND NAMES	Nitrogen %	Phosphoric Acid (P <sub>2</sub> O <sub>5</sub> )			Potash (K <sub>2</sub> O) %
		Total in Bone %	Avail- able %	Insolu- ble %	
Pioneer Phosphate Co., (cont'd.)					
Pioneer Brand 4-16-0. . . . .	4.00	----	16.00	----	----
Pioneer Brand 10-6-4. . . . .	10.00	----	6.00	----	4.00
Pioneer Brand 10-20-0. . . . .	10.00	----	20.00	----	----
PLANTABBS CORP., BALTIMORE, MD.					
Fulton's Plantabbs 11-15-20. . . . .	11.00	----	15.00	----	20.00
PLANT-CHEM, INC., SAN FRANCISCO, CALIF.					
Plant-Chem Salts. . . . .	4.00	----	7.00	----	10.00
Plant-Chem Salts for Acid Tolerant Plants. . . . .	9.00	----	14.00	----	2.00
Plant-Chem Salts for Orchids. . . . .	10.00	----	14.00	----	----
Lawn-Chem Salts. . . . .	14.00	----	9.00	----	7.00
PREMIER PEAT MOSS CORP., NEW YORK, N. Y.					
Premier-Nure. . . . .	2.00	----	1.00	----	1.00
PULVERIZED MANURE CO., CHICAGO & EAST ST. LOUIS, ILL.					
Wizard Brand Cow Manure. . . . .	2.00	----	1.00	----	1.00
Wizard Brand Pulverized Sheep Manure. . . . .	2.00	----	1.00	----	2.00
RA-PID-GRO CORP., DANSVILLE, N. Y.					
Ra-Pid-Gro. . . . .	23.00	----	21.00	----	17.00
C. M. REED & SON, CARTHAGE, MO.					
Kalosecta 4-12-4. . . . .	4.00	----	12.00	1.00	4.00
ROBIN JONES PHOSPHATE CO., NASHVILLE, TENN.					
Arrow Phosphate (Tenn. Phos. Rock) . . . . .	----	----	2.00	28.00	----
ROSE MANUFACTURING CO., BEACON, N. Y.					
Triogen Rose Food. . . . .	5.00	----	10.00	----	5.00
RUHM PHOSPHATE & CHEMICAL CO., CHICAGO, ILL.					
Red Seal Brand Ruhm's Phosphate Rock. . . . .	----	----	3.00	27.00	----
SAN FRANCISCO CHEMICAL CO., MONTPELIER, IDAHO					
Western Natural Phosphate Rock. . . . .	----	----	2.50	28.50	----

TABLE 4. FERTILIZERS, WITH GUARANTEED ANALYSES, REGISTERED AND OFFERED  
FOR SALE IN MISSOURI, 1950 (Cont'd)

MANUFACTURER AND BRAND NAMES	Nitrogen %	Phosphoric Acid (P <sub>2</sub> O <sub>5</sub> )			Potash (K <sub>2</sub> O) %
		Total in Bone %	Avail- able %	Insolu- ble %	
SARATOGA LABORATORIES, INC., SARATOGA SPRINGS, N. Y.					
Trace L . . . . .	8.00	----	16.00	----	7.00
SCHROCK FERTILIZER SERVICE, CONGERVILLE, ILL.					
Schrock Natural Phosphate 32%. . . . .	----	----	3.00	29.00	----
Schrock Natural Phosphate 33%. . . . .	----	----	3.50	29.50	----
Schrock Superphosphate. . . . .	----	----	20.00	----	----
Muriate of Potash. . . . .	----	----	----	----	60.00
O. M. SCOTT & SONS CO., MARYSVILLE, OHIO					
Scotts Weed & Feed . . . . .	7.00	----	7.00	----	5.00
Scotts Turf Builder. . . . .	9.00	----	9.00	----	4.00
SEARS ROEBUCK & CO., CHICAGO, ILL.					
Cross Country Plant Food . . . . .	4.00	----	12.00	----	4.00
Cross Country Bulb Food. . . . .	4.00	----	12.00	----	8.00
Cross Country Rose Food . . . . .	5.00	----	10.00	----	5.00
Cross Country Lawn Food and Weed Killer. . . . .	5.00	----	10.00	----	5.00
Cross Country Evergreen Food. . . . .	8.00	----	6.00	----	4.00
Cross Country Liquid Plant Food . . . . .	10.00	----	5.00	----	5.00
Cross Country Berry Food. . . . .	10.00	----	6.00	----	4.00
Cross Country Cattle Manure 1.50-.75-2 . . . . .	1.50	----	.75	----	2.00
Cross Country Cattle Manure 1.50-1-2. . . . .	1.50	----	1.00	----	2.00
Cross Country Cattle Manure 1.75-.75-3 . . . . .	1.75	----	.75	----	3.00
Cross Country Sheep Manure 1.50-.75-2 . . . . .	1.50	----	.75	----	2.00
Cross Country Sheep Manure 1.50-1-2. . . . .	1.50	----	1.00	----	2.00
Cross Country Sheep Manure 1.75-.75-3. . . . .	1.75	----	.75	----	3.00
Cross Country Peat Manure. . . . .	2.00	----	1.00	----	1.00
Cross Country Bone Meal . . . . .	2.00	20.00	----	----	----
SEWERAGE COMMISSION OF THE CITY OF MILWAUKE MILWAUKE, WISC.					
Milorganite. . . . .	6.00	----	2.00	.75	----
SMITH-DOUGLASS CO., INC., STREATOR, ILL.					
S-D Superphosphate . . . . .	----	----	20.00	----	----
S-D Hi Potash . . . . .	----	----	9.00	----	27.00
S-D Big Shot . . . . .	----	----	10.00	----	20.00
S-D Gro Grain. . . . .	----	----	20.00	----	10.00
S-D Shur Shot . . . . .	----	----	20.00	----	20.00
S-D Old Standby. . . . .	2.00	----	12.00	----	6.00
S-D Heavy Weight. . . . .	3.00	----	9.00	----	18.00
S-D Big Buy . . . . .	3.00	----	9.00	----	27.00
S-D Corn Grower. . . . .	3.00	----	12.00	----	12.00
S-D Big Yield . . . . .	3.00	----	18.00	----	9.00
S-D Money Maker. . . . .	4.00	----	12.00	----	8.00

TABLE 4. FERTILIZERS, WITH GUARANTEED ANALYSES, REGISTERED AND OFFERED FOR SALE IN MISSOURI; 1950 (Cont'd)

MANUFACTURER AND BRAND NAMES	Nitrogen %	Phosphoric Acid (P <sub>2</sub> O <sub>5</sub> )			Potash (K <sub>2</sub> O) %
		Total in Bone %	Avail- able %	Insolu- ble %	
Smith-Douglass Co., Inc., (cont'd.)					
S-D Soil Saver . . . . .	8.00	----	8.00	----	8.00
S-D Crop Raiser . . . . .	8.00	----	16.00	----	----
SNYDER CHEMICAL CO., INC., TOPEKA, KAN.					
Fervite 8-24-8 . . . . .	8.00	----	24.00	----	8.00
Fervite 10-20-0 . . . . .	10.00	----	20.00	----	----
SOIL NUTRIENTS CO., JEFFERSON CITY, MO.					
Soil Nutrient . . . . .		Secondary and Minor Elements Only			
SPENCER CHEMICAL CO., KANSAS CITY, MO.					
Ammonium Nitrate Fertilizer . . . . .	33.50	----	----	----	----
Anhydrous Ammonia, Commercial . . . . .	82.00	----	----	----	----
STIMUPLANT LABORATORIES CO., COLUMBUS, OHIO					
Stim-U-Plant Plant Food Tablets . . . . .	11.00	----	12.00	----	15.00
STOCKDALE FERTILIZER CO., MORRIS, ILL.					
Ovene . . . . .	2.00	----	1.00	----	2.00
STUMPP & WALTER CO., NEW YORK, N. Y.					
NJ Brand Bone Fertilizer . . . . .	2.47	22.00	----	----	----
SWIFT & CO., PLANT FOOD DIVISION, NATIONAL STOCK YARDS, ILL.					
Swift's Ground Raw Phosphate Bulk . . . . .	----	----	2.50	----	----
Swift's Ground Raw Phosphate Bulk . . . . .	----	----	3.00	----	----
Red Steer 0-20-0 . . . . .	----	----	20.00	----	----
Red Steer 0-45-0 . . . . .	----	----	45.00	----	----
Red Steer 0-12-12 . . . . .	----	----	12.00	----	12.00
Red Steer 0-14-7 . . . . .	----	----	14.00	----	7.00
Red Steer 0-20-10 . . . . .	----	----	20.00	----	10.00
Red Steer 0-20-20 . . . . .	----	----	20.00	----	20.00
Red Steer 2-12-6 . . . . .	2.00	----	12.00	----	6.00
Red Steer 3-9-18 . . . . .	3.00	----	9.00	----	18.00
Red Steer 3-12-6 . . . . .	3.00	----	12.00	----	6.00
Red Steer 3-12-8 . . . . .	3.00	----	12.00	----	8.00
Red Steer 3-12-12 . . . . .	3.00	----	12.00	----	12.00
Blenn 3-12-12 . . . . .	3.00	----	12.00	----	12.00
Red Steer 4-12-4 . . . . .	4.00	----	12.00	----	4.00
Vigoro 4-12-4 . . . . .	4.00	----	12.00	----	4.00
Red Steer 4-12-8 . . . . .	4.00	----	12.00	----	8.00
Brimm 4-12-8 . . . . .	4.00	----	12.00	----	8.00
Vigoro Commercial Grower 4-12-8 . . . . .	4.00	----	12.00	----	8.00

TABLE 4. FERTILIZERS, WITH GUARANTEED ANALYSES, REGISTERED AND OFFERED  
FOR SALE IN MISSOURI, 1950 (Cont'd)

MANUFACTURER AND BRAND NAMES	Nitrogen %	Phosphoric Acid (P <sub>2</sub> O <sub>5</sub> )			Potash (K <sub>2</sub> O) %
		Total in Bone %	Avail- able %	Insolu- ble %	
Swift and Co. Plant Food Div. (cont'd.)					
Red Steer 4-16-0 . . . . .	4.00	----	16.00	----	----
Red Steer 4-16-8 . . . . .	4.00	----	16.00	----	8.00
Red Steer 4-24-12 . . . . .	4.00	----	24.00	----	12.00
Red Steer 5-10-5 . . . . .	5.00	----	10.00	----	5.00
Blenn (All Sulp Potash) 6-8-6 . . . . .	6.00	----	8.00	----	6.00
Brimm 6-8-8 . . . . .	6.00	----	8.00	----	8.00
Vigoro Azalea & Camellia Special 6-8-8 . . . . .	6.00	----	8.00	----	8.00
Vigoro 6-10-4 . . . . .	6.00	----	10.00	----	4.00
Red Steer 8-8-8 . . . . .	8.00	----	8.00	----	8.00
Vigoro Commercial Grower 8-8-8 . . . . .	8.00	----	8.00	----	8.00
Red Steer 8-24-8 . . . . .	8.00	----	24.00	----	8.00
Red Steer 8-32-0 . . . . .	8.00	----	32.00	----	----
Red Steer 10-20-0 . . . . .	10.00	----	20.00	----	----
Bonro . . . . .	10.00	----	52.00	----	17.00
Nitrate of Soda . . . . .	16.00	----	----	----	----
Cyanamid . . . . .	21.00	----	----	----	----
Ammonium Nitrate . . . . .	33.50	----	----	----	----
Pulverized Sheep & Cattle Manure . . . . .	1.50	----	1.00	----	1.75
Bone Meal . . . . .	2.00	20.00	----	----	----
TEMPLE COTTON OIL CO., NORTH LITTLE ROCK, ARK.					
Superphosphate . . . . .	----	----	20.00	----	----
Quapaw 0-10-20 . . . . .	----	----	10.00	----	20.00
Quapaw 0-14-7 . . . . .	----	----	14.00	----	7.00
Quapaw 3-9-18 . . . . .	3.00	----	9.00	----	18.00
Quapaw 4-12-4 . . . . .	4.00	----	12.00	----	4.00
Quapaw 5-10-5 . . . . .	5.00	----	10.00	----	5.00
Quapaw 6-8-12 . . . . .	6.00	----	8.00	----	12.00
Nitrate of Soda . . . . .	16.00	----	----	----	----
Ammonium Nitrate . . . . .	33.50	----	----	----	----
Sulphate of Potash Magnesium . . . . .	----	----	----	----	21.00
Manure Salts . . . . .	----	----	----	----	22.00
Muriate of Potash . . . . .	----	----	----	----	50.00
TENNESSEE CORP., ATLANTA, GA. & CINCINNATI, OHIO					
Nu-Z Nutritional Zinc . . . . .	Secondary and Minor Elements Only				
Spray of Dust Es-Min-El . . . . .	Secondary and Minor Elements Only				
Es-Min-El . . . . .	Secondary and Minor Elements Only				
Loma 8-8-8 Mineralized . . . . .	8.00	----	8.00	----	8.00
Loma 5-10-5 . . . . .	5.00	----	10.00	----	5.00
THOMPSON-HAYWARD CHEMICAL CO., KANSAS CITY, MO.					
Thom-Ward Phosphate Rock . . . . .	----	----	3.00	29.00	----
Special Fish Fertilizer . . . . .	8.00	----	8.00	----	4.00
Thompson-Hayward Potash Muriate 60% . . . . .	----	----	----	----	60.00
THOMPSON SALES CO., MONTGOMERY, ALA.					
Calphos . . . . .	----	----	2.00	16.00	----

TABLE 4. FERTILIZERS, WITH GUARANTEED ANALYSES, REGISTERED AND OFFERED FOR SALE IN MISSOURI, 1950 (Cont'd)

MANUFACTURER AND BRAND NAMES	Nitrogen %	Phosphoric Acid (P <sub>2</sub> O <sub>5</sub> )			Potash (K <sub>2</sub> O) %
		Total in Bone %	Avail- able %	Insolu- ble %	
<b>THOMSON PHOSPHATE CO., CHICAGO, ILL.</b>					
Four Leaf Powdered Rock Phosphate 30% . . . . .	----	----	2.00	28.00	----
Four Leaf Powdered Rock Phosphate 31% (Florida) .	----	----	2.00	29.00	----
Four Leaf Powdered Rock Phosphate 33% (Florida) .	----	----	3.00	30.00	----
<b>THURSTON CHEMICAL CO., JOPLIN, MO.</b>					
Bem Brand 0-20-0 . . . . .	----	----	20.00	----	----
Bem Brand CSO 20% Superphosphate . . . . .	----	----	20.00	----	----
Bem Brand 0-45-0 . . . . .	----	----	45.00	----	----
Bem Brand 0-46-0 . . . . .	----	----	46.00	----	----
Bem Brand 0-12-12 . . . . .	----	----	12.00	----	12.00
Bem Brand 0-14-7 . . . . .	----	----	14.00	----	7.00
Bem Brand 0-20-10 . . . . .	----	----	20.00	----	10.00
Bem Brand 0-20-20 . . . . .	----	----	20.00	----	20.00
Bem Brand 2-12-6 . . . . .	2.00	----	12.00	----	6.00
Bem Brand 3-9-18 . . . . .	3.00	----	9.00	----	18.00
Bem Brand 3-12-12 . . . . .	3.00	----	12.00	----	12.00
Bem Brand 4-12-4 . . . . .	4.00	----	12.00	----	4.00
Bem Brand Lawn & Garden 4-12-4 . . . . .	4.00	----	12.00	----	4.00
Bem Brand 4-12-8 . . . . .	4.00	----	12.00	----	8.00
Bem Brand 4-16-0 . . . . .	4.00	----	16.00	----	----
Bem Brand 4-16-8 . . . . .	4.00	----	16.00	----	8.00
Bem Brand 4-24-12 . . . . .	4.00	----	24.00	----	12.00
Bem Brand 5-10-5 . . . . .	5.00	----	10.00	----	5.00
Bem Brand 5-10-10 . . . . .	5.00	----	10.00	----	10.00
Bem Brand 8-8-8 . . . . .	8.00	----	8.00	----	8.00
Bem Brand 8-24-8 . . . . .	8.00	----	24.00	----	8.00
Bem Brand 8-32-0 . . . . .	8.00	----	32.00	----	----
Bem Brand 10-20-0 . . . . .	10.00	----	20.00	----	----
Bem Brand 0-0-25 . . . . .	----	----	----	----	25.00
Bem Brand 0-0-50 . . . . .	----	----	----	----	50.00
Bem Brand 0-0-60 . . . . .	----	----	----	----	60.00
<b>TRI-STATE CHEMICAL CO., WEBB CITY, MO.</b>					
Rock Phosphate . . . . .	----	----	2.00	32.00	----
Gro-Mor Fertilizer 0-20-0 . . . . .	----	----	20.00	----	----
Gro-Mor Fertilizer 0-45-0 . . . . .	----	----	45.00	----	----
Gro-Mor Fertilizer 0-7-14 . . . . .	----	----	7.00	----	14.00
Gro-Mor Fertilizer 0-14-7 . . . . .	----	----	14.00	----	7.00
Gro-Mor Fertilizer 0-15-15 . . . . .	----	----	15.00	----	15.00
Gro-Mor Fertilizer 0-20-10 . . . . .	----	----	20.00	----	10.00
Gro-Mor Fertilizer 0-20-20 . . . . .	----	----	20.00	----	20.00
Gro-Mor Fertilizer 2-12-6 . . . . .	2.00	----	12.00	----	6.00
Gro-Mor Fertilizer 3-9-18 . . . . .	3.00	----	9.00	----	18.00
Gro-Mor Fertilizer 3-12-8 . . . . .	3.00	----	12.00	----	8.00
Gro-Mor Fertilizer 3-12-12 . . . . .	3.00	----	12.00	----	12.00
Gro-Mor Fertilizer 4-12-4 . . . . .	4.00	----	12.00	----	4.00
Gro-Mor Fertilizer 4-16-0 . . . . .	4.00	----	16.00	----	----
Gro-Mor Fertilizer 4-24-12 . . . . .	4.00	----	24.00	----	12.00
Gro-Mor Fertilizer 0-0-26 . . . . .	----	----	----	----	26.00
Gro-Mor Fertilizer 0-0-60 . . . . .	----	----	----	----	60.00



TABLE 4. FERTILIZERS, WITH GUARANTEED ANALYSES, REGISTERED AND OFFERED FOR SALE IN MISSOURI, 1950 (Cont'd)

MANUFACTURER AND BRAND NAMES	Nitrogen %	Phosphoric Acid (P <sub>2</sub> O <sub>5</sub> )			Potash (K <sub>2</sub> O) %
		Total in Bone %	Avail- able %	Insolu- ble %	
U.S. PHOSPHORIC PRODUCTS, DIVISION OF TENNESSEE CORP., TAMPA, FLA.					
Florida Triple Phosphate . . . . .	----	----	46.00	.50	----
VICTOR CHEMICAL WORKS, CHICAGO, ILL.					
Take-Hold . . . . .	10.00	----	52.00	----	17.00
VIRGINIA-CAROLINA CHEMICAL CORP., EAST ST. LOUIS, ILL.					
V-C 20% Superphosphate 0-20-0 . . . . .	----	----	20.00	.50	----
V-C 47% Superphosphate 0-47-0 . . . . .	----	----	47.00	.50	----
V-C Fertilizer 0-9-27 . . . . .	----	----	9.00	.50	27.00
V-C Fertilizer 0-10-20 . . . . .	----	----	10.00	.50	20.00
V-C Potash Phospho Tobacco Fertilizer 0-12-12 . . . . .	----	----	12.00	.50	12.00
V-C Fertilizer 0-20-10 . . . . .	----	----	20.00	.50	10.00
V-C Fertilizer 0-20-20 . . . . .	----	----	20.00	.50	20.00
V-C Fertilizer 2-12-6 . . . . .	2.00	----	12.00	.50	6.00
V-C Ammoniated Phospho Tobacco Fertilizer 2-12-6 . . . . .	2.00	----	12.00	.50	6.00
V-C Fertilizer 3-9-18 . . . . .	3.00	----	9.00	.50	18.00
V-C Fertilizer 3-12-12 . . . . .	3.00	----	12.00	.50	12.00
V-C Fertilizer Ammoniated Phospho Tobaboo 3-12-12 . . . . .	3.00	----	12.00	.50	12.00
V-C Fertilizer 4-12-4 . . . . .	4.00	----	12.00	.50	4.00
V-C Fertilizer 4-12-8 . . . . .	4.00	----	12.00	.50	8.00
V-C Ammoniated Phospho Tobacco Fertilizer 4-12-8 . . . . .	4.00	----	12.00	.50	8.00
V-C Fertilizer 4-16-0 . . . . .	4.00	----	16.00	.50	----
V-C Fertilizer 4-24-12 . . . . .	4.00	----	24.00	.50	12.00
V-C Fertilizer 5-10-5 . . . . .	5.00	----	10.00	.50	5.00
V-C Plant Food 6-8-6 . . . . .	6.00	----	8.00	.50	6.00
V-C Fertilizer 8-8-8 . . . . .	8.00	----	8.00	.50	8.00
V-C Fertilizer 8-24-8 . . . . .	8.00	----	24.00	.50	8.00
V-C Fertilizer 10-6-4 . . . . .	10.00	----	6.00	.50	4.00
V-C Good Luck Fish Pond Fertilizer 10-6-4 . . . . .	10.00	----	6.00	.50	4.00
V-C Fertilizer 10-20-0 . . . . .	10.00	----	20.00	.50	----
V-C Muriate Potash 0-0-60 . . . . .	----	----	----	----	60.00
WESTOVER NURSERY CO., INC., ST. LOUIS, MO.					
Westgro Cattle Manure . . . . .	1.00	----	1.00	----	1.00
Rosegro . . . . .	3.00	23.00	----	----	----
F. H. WOODRUFF & SONS, INC., MILFORD, CONN.					
Gro-Sod Lawn Food . . . . .	10.00	----	6.00	----	4.00
ZIRCON PRODUCTS CO., INC., INDIANAPOLIS, IND.					
Nutri-Plant Liquid Fertilizer 5-10-5 . . . . .	5.00	----	10.00	----	5.00