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W. B. BIZZELL, President

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DIVISION OF CHEMISTRY

COMMERCIAL FERTILIZERS IN 1922-23

AGRICULTURAL & MECHANICAL
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†As of October 1, 1923.

*In cooperation with School of Veterinary Medicine, A. and M. College of Texas.

**In cooperation with United States Department of Agriculture.

‡On leave.

COMMERCIAL FERTILIZERS IN 1922-23

G. S. FRAPS AND S. E. ASBURY

A great increase in fertilizer sold in Texas occurred in 1922-23, but the total amount did not reach that sold in 1913-14.

The quantities of commercial fertilizers sold in Texas for several seasons are as follows:

1905-06.....	13,500 tons.
1910-11.....	52,985 tons.
1913-14.....	77,400 tons.
1914-15.....	17,500 tons.
1915-16.....	21,500 tons.
1916-17.....	42,000 tons.
1917-18.....	58,000 tons.
1918-19.....	46,000 tons.
1919-20.....	56,700 tons.
1920-21.....	14,850 tons.
1921-22.....	33,000 tons.
1922-23.....	73,300 tons.

ANALYSIS BELOW GUARANTEE

Whenever any lot of fertilizer is 4 per cent. or more below guarantee all persons who have sold this lot of fertilizer must make good the deficiency to all purchasers. The rebate is paid by the manufacturer to the dealer and by the dealer to the customer. This provision of the law is strictly enforced.

INVESTIGATIONS UNDER THE FERTILIZER LAW

The State Chemist is required by the fertilizer law to "investigate the composition, properties and agricultural values of fertilizers, or of fertilizer materials, or ingredients of fertilizer sold, offered for sale within the State of Texas, and shall publish his results as he may find".

RELATION TO STATION WORK

The work of the State Chemist is closely related to the chemical work of the Experiment Station. In his capacity as chemist to the Experiment Station, the State Chemist is carrying out extensive investigations into the fundamental properties of soils, especially with respect to their content of plant food. This work is related closely to the use of fertilizers, and is connected with investigations as to the agricultural values of fertilizers required by the fertilizer control, for fertilizers vary in effect upon the different soils.

SULPHUR AND SULPHUR COMPOUNDS AS FERTILIZER

Sulphur in the free state, and sulphur in the form of gypsum, have been used to a small extent for application to the soil. Where the soil is deficient in phosphoric acid, nitrogen, or potash, as is the case in those parts of Texas using fertilizer, it is not likely that sulphur would be of any advantage.

Texas soils are much more likely to need phosphoric acid, nitrogen, or potash, than they are to need sulphur. The use of sulphur will not take care of any deficiency in phosphoric acid, nitrogen, or potash. When phosphoric acid is supplied, in the form of acid phosphate, it is accompanied by an abundant supply of sulphur. There may possibly be some soils in Texas rich in plant food which will respond to the use of sulphur as a fertilizer, and there may be some crops, such as alfalfa, upon which the sulphur would be of benefit, but the fact has not yet been demonstrated. The application of commercial fertilizers containing phosphoric acid, nitrogen, or potash is more likely to yield profitable results than the use of sulphur, which does not carry with it any of the forms of plant food likely to be deficient in Texas soils. In many sections of the State it is certain that the use of sulphur alone as a fertilizer would be of no benefit whatever. We advise those who wish to try the use of sulphur or sulphur fertilizer to do so experimentally, on one-half acre or less, at the rate of 100 to 200 pounds to the acre, in order to see what results will be secured.

INFORMATION ON THE BAG

The manufacturer must print the guaranteed analysis of the fertilizer either on the bag or on a tag attached to the bag. The information required to be printed on the bag, is as follows:

Net weight.

Name of fertilizer in full.

Name and address of manufacturer.

Guaranteed analysis:

Available phosphoric acid, per cent.

Nitrogen, per cent.

Potash, per cent.

Total phosphoric acid may be guaranteed in place of the available in bone or tankage.

FREE ANALYSIS

Fertilizer samples, if taken in accordance with the requirements of the law, will be analyzed free of charge. Those who desire a free analysis of a fertilizer should write for a blank "Application for Free Fertilizer Analysis", to the State Chemist, College Station, Texas. Samples not taken as required by the law cannot be accepted for analysis.

BULK SALES

Fertilizers may be sold in bulk by manufacturers direct to consumers for their own use; the tax must, in such case, be paid by the manufacturer. Fertilizer purchased in bulk and then sold or distributed, must be bagged, and must have a tax tag attached to each sack; also a

tag showing the guaranteed analysis of the fertilizer. Considerable saving, both in freight and in purchase price, may be made by purchasing fertilizer in bulk. For further information as to the law concerning bulk sales, address the State Chemist at College Station, Texas.

STANDARD FORMULAS OF FERTILIZER

In 1922-23, 167 different fertilizer mixtures were registered for sale in Texas. This does not include nitrate of soda, acid phosphate, or similar materials. This great number of mixtures increases the cost of plant food by increasing the manufacturers' operating expenses, and in other ways, and renders more difficult recommendation and selection of fertilizer for different uses.

At a meeting on June 28, 1923, of Fertilizer Officials, Experiment Station and Extension Service representatives, and fertilizer manufacturers and their advisers of Louisiana, Texas, and Arkansas, the following eleven formulas of mixed fertilizers were unanimously adopted for recommendation whenever possible. Their adoption does not exclude the recommendation of unmixed materials such as nitrate of soda, sulphate of ammonia, 16 per cent., 18 per cent., or 20 per cent. acid phosphate, kainit, muriate or sulphate of potash, tankage, or bone meal. Their adoption is not intended to interfere with the registration of other mixed fertilizers or the recommendation of other formulas when necessary, but preference is to be given to recommending these formulas as far as possible. It is also agreed to print these formulas as part of the name as far as practicable. The percentage of phosphoric acid is stated first, the percentage of nitrogen second, and the percentage of potash third.

12-3-0, 10-4-0, 8-4-4, 7-5-5, 8-7-0, 12-2-2, 12-3-3, 12-4-4, 10-4-2, 8-4-6, 12-0-4.

It is believed that these formulas will meet practically all needs of fertilizer mixtures in Texas. Their general adoption should reduce the number of mixtures now offered for sale, simplify the recommendations of Experiment Station and Extension workers, classify the problems of fertilization to some extent, and above all reduce the cost of plant food to Texas farmers. A ton of 12-3-3 fertilizer will contain as much plant food as $1\frac{1}{2}$ tons of 8-2-2, and will of course cost more per ton, but not as much as $1\frac{1}{2}$ tons of 8-2-2 fertilizer and the purchaser of a ton of 12-3-3 fertilizer will not pay for the transportation, handling, and other expenses of the extra thousand pounds included in $1\frac{1}{2}$ tons of 8-2-2. This would result in the plant food costing less to the purchaser of the 12-3-3 fertilizer than to the purchaser of the 8-2-2, and plant food, not mere weight, is what is being bought in a fertilizer. All the recommended mixtures are high-grade, and their use will reduce the handling of unnecessary material to a minimum and therefore their general use will result in lower cost of plant food to Texas farmers.

PLANT FOOD IN HIGH-GRADE FERTILIZER COSTS LESS

Plant food costs less per pound in high grade fertilizer than in standard grade. A study of average selling prices in Table 1 in Fertilizer Bulletin 298 (1921-1922), shows that a pound of plant food will cost 11 per cent. more in standard-grade phosphate and nitrogen,

and 13 per cent. more in standard-grade complete fertilizers, than in high-grade fertilizer.

This would mean a saving of \$3.30 to \$3.90 on fertilizer costing \$30.00 a ton, and \$4.40 to \$5.20 in fertilizer costing \$40.00 a ton. A ton of high-grade fertilizer costs more, but contains more value for the money.

USE OF FERTILIZERS

Fertilizers supply the three forms of plant food most necessary for growing crops, namely, phosphoric acid, nitrogen, and potash. For best results, other conditions should be favorable, such as a soil in good physical condition, a well prepared seed bed, good seed, good cultivation, and a good legume rotation. Nitrogen is the most expensive plant food, and for this reason, the amount of fertilizers used generally does not supply all the nitrogen required by the crop. A cropping system which includes the regular growing of legumes, such as clover, cowpeas, or peanuts, to be turned under or grazed off should be followed for the purpose of securing nitrogen from the air. Such a system also adds humus to the soil, utilizes time and labor to better advantage, aids in destroying insect pests and plant diseases, and has other favorable effects.

What fertilizers to use depends upon the kind of soil, the climate, the crop, how long the soil has been in cultivation, whether or not it has grown legumes to be turned under or grazed off, what the soil will produce without fertilizer and other conditions.

Old soils, or sandy soils, generally need more nitrogen than new soils or clay soils. Soils having a legume rotation need less nitrogen than those cropped constantly to non-legumes.

Clay soils and soils with clay or loam subsoils need little potash in Texas for ordinary farm crops, but light sandy soils with sandy subsoils may need potash. Larger amounts of fertilizer may be profitably used on crops with a high acre value, such as fruit or truck crops, than on ordinary farm crops. The fertilizer on cotton may profitably be twice as much as that used on corn.

SUGGESTED USES OF THE FORMULAS FOR CROPS

The following suggestions for the use of the recommended formulas in Texas was adopted at a meeting on July 25, 1923, of Agronomists of the Experiment Station and Extension Service, County Agents, the Chemist to the Experiment Station, representatives of the Agricultural press, representatives of fertilizer manufacturers, and others interested. The formula listed first is probably the one most generally needed in those parts of the State now using fertilizers largely, chiefly in East Texas. It is best for those not experienced in the use of fertilizers to begin with moderate applications and increase the quantity as experience is gained and fertilizers are found profitable.

The recommendations given below represent the best present information and will be modified from time to time, as more experimental data are accumulated, and further practical experience is secured.

COTTON

Loam soils with clay or sandy clay subsoils, such as Susquehanna, Lufkin, Orangeburg, or similar soils. If 200 to 400 pounds are used, 12-3-0 or 10-4-0 or 10-4-2; if over 400 pounds are to be used, 10-4-2 or 12-3-3.

Deep sandy soil, such as Norfolk sand. If 200 to 300 pounds are to be used, 12-2-2 or 12-3-3 or 12-4-4; if 300 to 400 pounds or more are to be used, 12-3-3 or 12-4-4 or 8-4-4. However, these are not good cotton and corn soils and are better adapted to vegetables.

Land which produces an excessive stalk and does not fruit well, chiefly bottom land: use 200 to 400 pounds of 18 per cent. or 16 per cent. acid phosphate.

Black waxy land, such as Houston black clay or other heavy black limestone soils of Central Texas. A legume rotation is needed most of all. Fertilizers are uncertain. A trial may be made of 200 to 300 pounds of 10-4-0 or 12-4-4 or 100 to 200 pounds nitrate of soda or 100 pounds acid phosphate and 100 pounds nitrate of soda.

CORN

Loam or clay soils with clay or sandy clay subsoils, such as Susquehanna, Orangeburg, or similar soils with legume rotation: use 200 to 300 pounds of 18 per cent. or 16 per cent. acid phosphate, or 200 to 300 pounds 12-3-0.

Loam or clay soils with clay or sandy clay subsoils, no legume rotation, in cultivation ten years or less: use 200 to 300 pounds 12-3-0 or 10-4-0 or 10-4-2.

Loam or clay soils with clay or sandy clay subsoils, no legume rotation, in cultivation eleven years or more: use 200 to 300 pounds 12-3-0 or 10-4-0 or 10-4-2 or 12-3-3.

Deep sandy soil: use 200 to 300 pounds 12-2-2 or 12-3-3. This is not a good corn soil.

Land which produces a heavy stalk but does not fruit well: use 200 to 400 pounds 18 per cent. or 16 per cent. acid phosphate.

Black waxy land, (Houston black clay) or heavy limestone land of Central Texas. A legume rotation is needed first. Fertilizers are uncertain. A trial may be made of 200 pounds of 12-3-0 or 10-4-0 or 12-4-4.

RICE

Land which produces a heavy straw, rice straw ashes returned to soil: use 200 to 300 pounds acid phosphate 18 per cent. or 16 per cent.

Land which produces heavy straw, rice straw ashes wasted: use 200 to 300 pounds 12-0-4.

Land in cultivation several years, yields decreasing and straw short: Apply 150 to 250 pounds sulphate of ammonia when rice is half grown; or 100 to 200 pounds acid phosphate 18 per cent. or 16 per cent. before planting, supplemented by 150 to 250 pounds sulphate of ammonia

when rice is half grown; or if rice straw ashes have been wasted, apply 200 to 300 pounds 12-0-4 at time of planting, supplemented by 150 to 250 pounds sulphate of ammonia when rice is half grown.

ALFALFA

Soil recently put in alfalfa: use 200 to 600 pounds acid phosphate.

Soil in cultivation six years or longer, (best to rotate): use 200 to 600 pounds acid phosphate or 200 to 800 pounds 12-0-4.

Soils poor in lime should receive lime.

TOMATOES

Loam soils with clay or sandy clay subsoils, such as Susquehanna, or Orangeburg: if 300 to 500 pounds are applied, use 10-4-2 or 12-3-3 or 12-4-4 or 8-4-4; if 500 to 1000 pounds, 8-4-4 or 7-5-5 or 10-4-2. Less than 500 pounds of fertilizer may be supplemented by 100 to 200 pounds nitrate of soda if there is a tendency to excessive growth of vine.

Deep sandy soil, such as Norfolk sand: if 200 to 500 pounds are applied, use 8-4-4, or 8-4-6; if 500 to 1,000 pounds are applied, use 7-5-5 or 8-4-6. Less than 500 pounds of fertilizer may be supplemented by 100 to 200 pounds nitrate of soda if there is no tendency to excessive growth of vine.

Land which produces an excessive vine: use 200 to 400 pounds acid phosphate 18 per cent. or 16 per cent.

SWEET POTATOES

Loam or sandy loam soils with clay or sandy clay subsoils: if 200 to 300 pounds are applied, use 12-3-3 or 12-3-0. If 200 to 500 pounds are applied, use 12-3-3 or 8-4-4.

Deep sandy soil: if 200 to 300 pounds are applied, use 12-3-3 or 12-4-4. If over 300 pounds, use 8-4-4 or 8-4-6.

IRISH POTATOES

On loam or sandy loam soils: if 200 to 300 pounds are applied, use 12-3-3 or 8-4-4. If 300 to 500 pounds, use 8-4-4 or 12-4-4 or 8-4-6.

MELONS

On sandy loam soils: if 200 to 300 pounds are applied, use 12-3-3 or 8-4-4 or 12-3-0. If 300 to 500 pounds, use 8-4-4 or 7-5-5 or 8-4-6.

ONIONS

Use 400 to 800 pounds of 8-4-4 or 10-4-2 and supplement with one to three dressings of 100 pounds nitrate of soda or sulphate of ammonia at intervals of 10 to 15 days.

LETTUCE, CABBAGE, SPINACH, CARROTS, AND BEETS

Apply 500 to 1,000 pounds 8-4-4 or 12-4-4 and supplement by three top dressings of 50 to 100 pounds nitrate of soda or sulphate of am-

monia, ten days to two weeks apart, beginning when the plants have begun to make a good growth.

PEACH TREES

Loam soils with clay or sandy clay subsoils such as Orangeburg, Susquehanna, or similar types: use 200 to 600 pounds per acre of 10-4-0 or 10-4-2.

When trees bear, use in addition, 200 pounds or more 7-5-5 or 8-4-4 increasing the quantity as the trees grow older.

Deep sandy soil, such as Norfolk sand: use 200 to 600 pounds of 12-4-4 or 8-4-6. When trees bear, use in addition 200 pounds or more 7-5-5 or 8-4-6, increasing the quantity as the trees grow older.

SUGAR CANE OR RIBBON CANE

On loam soils with clay or sandy clay foundation, use 200 to 600 pounds of 10-4-0 or 12-4-4 or 8-7-0. On clay soils, bottom lands, use 200 to 600 pounds of 8-7-0 or 10-4-0.

POTASH IN FERTILIZERS

A number of cooperative fertilizer experiments have been conducted by the chemical division of the Experiment Station, and it has been found that phosphoric acid and nitrogen are much more likely to give results than potash. In 68 out of 114 experiments described in Bulletin 184, potash had no effect. The chances are, therefore, that the potash will have no effect when generally used in complete fertilizers on Texas soils. Other cooperative fertilizer experiments are reported in Bulletin 235.

Texas farmers can well afford to eliminate potash from general fertilizers, especially for cotton and corn. Potash should be used only in exceptional cases, where soil conditions and special crops promise returns on the investment. The haphazard use of potash in fertilizer under all conditions should be discontinued. Texas soils can get on much better without fertilizer potash than without phosphoric acid or nitrogen. There has been in the past much waste of potash.

American potash is equally as good as European potash.

COTTONSEED PRODUCTS

Cottonseed meal sold for fertilizer purposes comes under the fertilizer law. A cottonseed product containing less than 6.88 per cent. nitrogen, may not be sold as cottonseed meal, but must be termed cottonseed fertilizer, cottonseed meal and hulls, or given some other name to indicate that it is below the requirements for cottonseed meal. It is an economic error to use cottonseed hulls as a fertilizer. Their feed value is greater than their fertilizer value. It is a pity that good sound cottonseed meal should be used as a fertilizer. Off-grade cottonseed meal, damaged, by heating or otherwise, is all right for fertilizer. It must rot in the soil before plants can take it up.

EXPLANATION OF TERMS

Available phosphoric acid is the phosphoric acid which can be taken up immediately by plants. Phosphoric acid promotes the fruiting of plants, though it is necessary for the development of all parts of the plant.

Total phosphoric acid is the entire quantity of the phosphoric acid present, whether available or not. A guarantee of "total phosphoric acid" in place of "available" is made in bone, tankage, rock phosphate, and Thomas phosphate.

Nitrogen refers to the total nitrogen in the fertilizer. It is necessary for the development of all parts of the plant, but an excess of nitrogen delays maturity and is liable to promote the growth of stalk and leaves at expense of fruit. Nitrogen is needed by many Texas soils.

Potash is required to be soluble in water. A great many Texas soils contain a sufficient quantity of potash, so that its use in fertilizer on such soils is a useless expense. Potash, like nitrogen, is needed by all parts of the plant, but especially by stalk and leaves. An excess of potash delays maturity and is liable to promote growth of the stalk and leaves at the expense of the fruit.

Valuation per ton represents the cost of the plant food in the un-mixed raw material, at retail, in large markets. It is not the price at which the fertilizer is sold. The selling price includes also cost of mixing, sacks, transportation, and manufacturers' and dealers' profits. The valuations are decided on about September 1, and the prices may change before the active fertilizer season, from February to April.

FERTILIZER VALUATIONS, 1922-23

	Cents per Pound.
Available phosphoric acid.....	6
Total phosphoric acid in Thomas phosphate, tankage and bone meal.....	4
Nitrogen	25
Potash	6

Sulphur in sulphur compounds is valued at three cents a pound; as sulphur trioxide in gypsum, at one cent.

The relation between the valuation and the retail selling price by merchants is given in Table 1.

Table 2 contains the average guaranteed valuation, and the average valuation found by our analyses, for all manufacturers doing business in Texas. In the preparation of the table, all analyses made are averaged even though several were made of each brand.

ANALYSIS OF FERTILIZERS, 1922-23

Table 3 contains a list of all samples of fertilizer subjected to analysis in the season beginning September 1, 1922, to date. The table gives the name and address of the manufacturer, and name of the brand, the guaranteed analysis, and the analysis. Analyses below guarantee are brought out in heavy type. Practically all the samples were collected

by our inspectors. Analyses and inspection were made by S. E. Asbury, Waldo Walker, W. C. Mitchell, A. Peterson, and H. B. Smith.

Talation 1.—Relation of Guaranteed Valuation to Selling Price,

	Number Averaged.	Average Valuation Per Ton.	Average Selling Price Per Ton.
Acid Phosphate, 18 Per Cent.	5	\$ 21.60	\$ 26.29
Acid Phosphate, 16 Per Cent.	119	19.20	23.36
Complete Fertilizer, Standard Grade.	88	21.43	33.37
Complete Fertilizer, High Grade.	265	26.81	38.06
Kainit.	8	15.95	23.56
Nitrate of Soda.	26	74.80	76.90
Phosphate and Nitrogen, Standard Grade.	9	20.38	33.75
Phosphate and Nitrogen, High Grade.	27	25.64	36.73
Phosphate and Potash.	3	18.40	28.67
Sulphur Compound.	2	7.10	35.00

REGISTRATIONS, 1922-23

A list of brands registered for sale in the season 1922-23 is given in Table 4. Many of the brands so registered were sold in lots of a few sacks, or were not sold at all in the State.

Table 2.—Guaranteed and delivered fertilizers.

	Number Averaged.	Valuation of Guarantee.	Valuation Found.
American Cotton Oil Company.	13	\$ 22.82	\$ 23.82
Arkansas Fertilizer Company.	15	36.57	36.29
Armour Fertilizer Works.	99	29.99	30.03
Bryan Cotton Oil & Fertilizer Company.	4	23.08	24.90
Douglas Fertilizer Company.	3	28.50	28.34
Fidelity Chemical Corporation.	12	21.58	22.55
Gate City Fertilizer Company.	10	28.10	28.46
Hope Fertilizer Company.	29	28.44	28.43
Houston Packing Company.	2	39.60	40.12
Jefferson Oil Company.	1	19.20	21.17
Kelly Weber & Company, Ltd.	2	16.80	17.59
Longview Cotton Oil Company.	18	24.27	25.27
Marshall Cotton Oil Company.	18	30.46	31.93
Meridian Fertilizer Factory.	116	24.29	27.00
Nitrate Agencies Company.	1	75.00	76.00
Palestine Oil & Manufacturing Company.	40	24.59	25.02
Pate Brothers.	11	22.63	27.38
Pelican Fertilizer Works.	13	26.80	30.29
Planters' Fertilizer and Chemical Company.	24	27.44	27.59
Shreveport Fertilizer Works.	1	19.20	20.95
Swift and Company.	146	24.61	25.47
Tennessee Coal, Iron and Railroad Company.	1	14.40	14.93
Van Zandt Cotton Oil Company.	4	22.64	22.22
Virginia-Carolina Chemical Company.	69	26.22	28.14

BULLETINS ON RELATED TOPICS

Any of the bulletins named below will be sent free on application to the Director of the Experiment Station, College Station, Texas:

No. 167—Commercial Fertilizers and Their Use.

No. 178—Effects of Additions on Availability of Soil Phosphates.

No. 184—Cooperative Fertilizer Experiments with Corn, 1908-14.

No. 190—Effect of Additions on Soil Potash.

- No. 192—Soils of Grayson, Lee, McLennan, Titus, and Tyler Counties.
No. 212—Availability of Phosphoric Acid in Rock Phosphate.
No. 243—The Needs of Texas Soils for Lime.
No. 244—Composition of the Soils of Archer, Franklin, and Harrison Counties.
No. 247—Chemical Composition of the Cotton Plant.
No. 259—Nitrification in Texas Soils.
No. 283—Relation of the Soil Nitrogen, Nitrification and Ammonification, to Pot Experiments.
No. 284—Availability of Potash in Some Soil-Forming Minerals.
No. 287—Availability of Some Nitrogenous and Phosphatic Materials.
No. 289—The Effect of Rock Phosphate Upon the Corn Possibility of the Phosphoric Acid of the Soil.
No. 300—Organic Constituents of the Soil.
No. 301—Soils of Bell, Jefferson, Smith, Taylor, and Webb Counties.
No. 302—The Needs of the Soils of Brazos and Jefferson Counties for Sulphur.

Table 3.—Analysis of commercial fertilizers, season 1922-1923.

Laboratory Number.	Manufacturer, Place of Business and Brand.	Phosphoric Acid—Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
American Cotton Oil Company, New Orleans, La.—					
	Aco Special No. 1022—Guaranteee.....	10.00	1.65	2.00	22.65
29171	Analysis.....	11.14	1.64	2.18	24.19
	Aco Special No. 1024—Guaranteee.....	10.00	1.65	4.00	25.05
29148	Analysis.....	9.77	1.64	4.20	24.96
	Blood, Bone and Potash—Guaranteee.....	10.00	1.65	1.00	21.45
29431	Analysis.....	10.53	1.88	.80	23.00
	Bull Dog Acid Phosphate—Guaranteee.....	16.00			19.20
29127	Analysis.....	16.49			19.79
28285	Analysis.....	15.44			18.53
29392	Analysis.....	16.78			20.14
29455	Analysis.....	17.17			20.60
	Economizer—Guaranteee.....	10.00	1.65	2.00	22.65
29170	Analysis.....	12.68	1.38	1.73	23.76
29291	Analysis.....	11.25	1.36	2.47	23.26
	Excelsior—Guaranteee.....	10.00	1.65	2.00	22.65
29169	Analysis.....	11.24	1.49	2.08	23.44
	Goldsmith's Improved Mixture—Guaranteee.....	10.00	1.65	1.00	21.45
29393	Analysis.....	10.11	1.92	1.33	23.33
	Nonpariel—Guaranteee.....	10.00	2.47	3.00	27.95
29168	Analysis.....	10.92	2.21	2.87	27.59
	Special Sugar Cane Grower No. 67—Guaranteee.....	7.00	5.00		35.40
29639	Analysis.....	7.23	5.65		36.93
Arkansas Fertilizer Company, Little Rock, Ark.—					
	White Diamond Arkansas Standard Fertilizer—Guaranteee.....	10.00	1.65	1.00	21.45
29380	Analysis.....	10.22	2.09	1.06	23.98
	White Diamond Brand 'Bove All Acid Phosphate—Guaranteee.....	18.00			21.60
29211	Analysis.....	17.55			21.06
	White Diamond Brand Nitrate of Soda—Guaranteee.....	15.60			78.00
29347	Analysis.....	15.64			78.20
29378	Analysis.....	15.74			78.70
	White Diamond Crop Getter—Guaranteee.....	12.00	4.00	4.00	39.20
29335	Analysis.....	10.92	4.07	3.16	37.24
	White Diamond Early Boll—Guaranteee.....	10.00	3.00	3.00	30.60
29497	Analysis.....	9.86	2.94	2.40	29.41
	White Diamond Brand Farmers' Choice—Guaranteee.....	10.00	4.00	4.00	36.80
29210	Analysis.....	10.55	3.94	3.57	36.55
29336	Analysis.....	10.04	4.25	3.63	37.66
29346	Analysis.....	10.21	3.80	3.94	35.98
29381	Analysis.....	9.56	3.23	3.83	32.20
29498	Analysis.....	9.69	4.34	3.73	37.81
	White Diamond Kainit—Guaranteee.....			14.00	16.80
29379	Analysis.....			14.16	16.99
	White Diamond Prize Winner—Guaranteee.....	10.00	2.50	3.00	28.10
29209	Analysis.....	10.20	2.29	2.89	27.16
29310	Analysis.....	10.14	2.35	3.06	27.59
	White Diamond Southern Queen Fertilizer—Guaranteee.....	10.00	1.65	2.00	22.65
29311	Analysis.....	10.67	1.70	2.00	23.70
Armour Fertilizer Works, Houston, Fort Worth, Texas, New Orleans, La.—					
	Armour's Ammoniated Truck Grower—Guaranteee.....	10.00	2.47		24.35
29036	Analysis.....	9.40	2.52		23.88
29188	Analysis.....	9.51	2.27		22.76
29620	Analysis.....	8.86	2.80		24.63
	Armour's Big Crop Best Acid Phosphate—Guaranteee.....	18.00			21.60
29017	Analysis.....	19.17			23.00
29190	Analysis.....	18.20			21.84
29616	Analysis.....	19.50			25.40
	Armour's Big Crop African Cotton Grower—Guaranteee.....	9.00	2.47	3.00	26.75
29074	Analysis.....	7.64	4.75	4.24	38.01
29227	Analysis.....	7.95	2.28	3.00	24.54
29242	Analysis.....	8.42	2.40	3.13	25.86
29449	Analysis.....	8.23	2.46	2.27	24.90
29477	Analysis.....	8.64	2.47	2.61	25.85
29595	Analysis.....	7.68	2.62	2.84	25.73
	Armour's Corn King—Guaranteee.....	8.00	2.47	2.00	24.35
29073	Analysis.....	7.45	2.09	1.76	21.50
29179	Analysis.....	7.26	2.27	2.15	22.64
29419	Analysis.....	7.94	2.53	2.20	24.82
29564	Analysis.....	7.34	1.83	2.11	20.49

Table 3.—Analysis of commercial fertilizers, season 1922-1923.

Laboratory Number.	Manufacturer, Place of Business and Brand.	Phosphoric Acid—	Nitrogen—Per	Potash—Per	Valuation—Per
		Available Per Cent.	Cent.	Cent.	Ton.
	Armour Fertilizer Works, Houston, Fort Worth, Texas, and New Orleans, La.—Continued.—				
	Armour's Cotton Fertilizer No. 1020—Guarantee.	10.00	1.65	.....	20.25
29530	Analysis.	8.85	1.85	.....	19.87
	Armour's Big Crop Farmers Favorite—Guarantee.	10.00	1.65	2.00	22.65
29191	Analysis.	9.04	1.80	2.56	22.92
29204	Analysis.	9.06	1.82	2.03	22.41
29247	Analysis.	9.89	1.55	2.39	22.49
29409	Analysis.	9.17	1.66	1.75	21.40
29420	Analysis.	8.99	1.53	1.58	20.34
29578	Analysis.	7.96	1.74	2.27	20.97
29655	Analysis.	9.68	1.70	1.61	22.05
	Armour's Big Crop Fertilizer No. 844—Guarantee.	8.00	3.29	4.00	30.85
29011	Analysis.	7.51	3.29	4.45	30.80
	Armour's Big Crop Fertilizer No. 1033—Guarantee.	10.00	2.47	3.00	27.95
29025	Analysis.	9.84	2.50	3.98	29.09
29072	Analysis.	10.42	2.57	3.00	28.95
29187	Analysis.	8.37	2.36	3.61	26.41
29203	Analysis.	9.31	2.48	3.33	27.57
29279	Analysis.	9.83	2.50	3.39	28.37
29307	Analysis.	10.06	2.52	3.06	28.34
29408	Analysis.	9.40	2.51	2.70	27.07
29478	Analysis.	9.68	2.47	3.62	28.31
	Armour's Big Crop Fertilizer No. 1044—Guarantee.	10.00	3.30	4.00	33.30
29140	Analysis.	8.80	2.85	3.60	29.13
	Armour's Big Crop Fertilizer No. 1244—Guarantee.	12.00	3.30	4.00	35.70
29071	Analysis.	12.55	3.08	3.73	34.94
29228	Analysis.	12.54	2.98	3.84	34.56
	Armour's Kainit—Guarantee. . . . .	.....	.....	12.40	14.88
29348	Analysis. . . . .	.....	.....	11.23	13.48
	Armour's Big Crop Manure Salts—Guarantee. . . . .	.....	.....	20.00	24.00
29087	Analysis. . . . .	.....	.....	20.00	24.00
	Armour's Big Crop Onion Fertilizer No. 846— Guarantee.	8.00	3.29	6.00	33.25
29015	Analysis.	7.72	3.30	7.19	34.39
29016	Analysis.	8.27	3.26	7.06	34.69
29020	Analysis.	7.53	3.20	6.24	32.53
29021	Analysis.	7.64	3.22	6.66	33.26
29022	Analysis.	7.35	3.32	6.28	32.96
29154	Analysis.	7.22	3.12	6.44	31.99
29155	Analysis.	6.93	3.11	6.36	31.50
29159	Analysis.	7.82	3.31	6.02	33.15
29165	Analysis.	7.02	3.44	6.45	33.36
	Armour's Big Crop Onion Fertilizer No. 860—Guarantee	8.00	4.94	.....	34.30
29153	Analysis.	6.72	4.66	.....	31.36
	Armour's Big Crop Phosphate and Potash No. 124— Guarantee.	12.00	.....	4.00	19.20
29305	Analysis.	12.59	.....	4.05	19.97
	Armour's Big Crop Star Phosphate—Guarantee.	16.00	.....	.....	19.20
29064	Analysis.	17.10	.....	.....	20.52
29075	Analysis.	17.53	.....	.....	21.04
29089	Analysis.	16.70	.....	.....	20.04
29174	Analysis.	16.06	.....	.....	19.27
29183	Analysis.	16.27	.....	.....	19.52
29189	Analysis.	16.27	.....	.....	19.52
29202	Analysis.	17.05	.....	.....	20.46
29226	Analysis.	16.32	.....	.....	19.58
29230	Analysis.	16.99	.....	.....	20.39
29306	Analysis.	17.29	.....	.....	20.75
29421	Analysis.	18.08	.....	.....	21.70
29447	Analysis.	16.74	.....	.....	20.09
29519	Analysis.	15.56	.....	.....	18.67
29526	Analysis.	15.76	.....	.....	18.91
29527	Analysis.	16.01	.....	.....	19.21
29528	Analysis.	17.78	.....	.....	21.34
29532	Analysis.	17.30	.....	.....	20.76
29566	Analysis.	16.12	.....	.....	19.34
29580	Analysis.	16.33	.....	.....	19.60
29617	Analysis.	16.01	.....	.....	19.21
	Armour's Big Crop Texas Trucker—Guarantee.	8.00	2.47	3.00	25.55
29181	Analysis.	7.72	2.28	3.22	24.52
29476	Analysis.	8.22	2.47	2.98	25.79
29534	Analysis.	7.57	2.50	2.86	25.01

Table 3.—Analysis of commercial fertilizers, season 1922-1923.

Laboratory Number.	Manufacturer, Place of Business and Brand.	Phosphoric Acid—Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
	Armour Fertilizer Works, Houston, Ft. Worth, Texas and New Orleans, La.—Continued.				
	Armour's Big Crop Truck Special—Guarantee.	7.00	4.11	6.00	36.15
29023	Analysis.	7.88	3.41	8.14	36.27
29024	Analysis.	7.38	3.81	7.72	37.17
29035	Analysis.	8.37	3.69	6.03	35.73
29157	Analysis.	6.48	4.08	6.30	35.74
29158	Analysis.	6.55	4.02	6.19	35.39
29193	Analysis.	6.26	3.54	5.55	31.87
29479	Analysis.	6.81	3.78	5.85	34.09
29533	Analysis.	6.71	3.43	4.51	30.61
	Armour's King Cotton—Guarantee.	8.00	1.65	2.00	20.25
29182	Analysis.	6.74	1.82	2.06	19.66
29192	Analysis.	7.85	1.81	2.48	21.45
29280	Analysis.	9.45	1.31	1.75	19.99
29410	Analysis.	8.31	1.92	1.84	21.78
29579	Analysis.	6.03	1.66	1.45	17.28
	Armour's Onion Fertilizer No. 533—Guarantee.	5.33	4.38	.....	28.3C
29009	Analysis.	5.52	4.39	.....	28.57
	Armour's Royal Mixture—Guarantee.	10.00	1.65	1.00	21.45
29180	Analysis.	8.81	1.74	1.37	20.91
29448	Analysis.	9.97	1.79	1.08	22.21
29565	Analysis.	9.67	1.76	.45	20.94
	Armour's Special Farm Mixture—Guarantee.	9.50	1.65	1.50	21.45
29175	Analysis.	9.41	1.62	1.62	21.35
	Nitrate of Soda—Guarantee.	14.81	.....	.....	74.05
29018	Analysis.	15.52	.....	.....	77.60
29037	Analysis.	14.84	.....	.....	74.20
29088	Analysis.	15.30	.....	.....	76.50
29167	Analysis.	15.12	.....	.....	75.60
29194	Analysis.	15.53	.....	.....	77.65
29450	Analysis.	15.66	.....	.....	78.30
29531	Analysis.	15.58	.....	.....	77.90
29596	Analysis.	15.56	.....	.....	77.80
29618	Analysis.	14.96	.....	.....	74.80
	Bryan Cotton Oil & Fertilizer Company, Bryan, Texas.—				
	Star Brand Acid Phosphate—Guarantee.	16.00	.....	.....	19.20
29493	Analysis.	15.80	.....	.....	18.96
	Star Brand Cotton and Corn Fertilizer—Guarantee.	11.50	1.80	.....	22.80
29490	Analysis.	12.84	1.78	.....	24.31
	Star Brand Phospho Special Fertilizer—Guarantee.	11.00	2.00	.....	23.20
29491	Analysis.	12.38	2.62	.....	27.96
	Star Brand Potato Fertilizer—Guarantee.	8.00	3.50	.....	27.10
29492	Analysis.	9.89	3.30	.....	28.37
	Douglas Fertilizer Company, Little Rock, Ark.—				
	4 Brand Early Boll—Guarantee.	10.00	3.00	3.00	30.60
29106	Analysis.	10.95	2.80	2.52	30.16
	4 Brand Prize Winner—Guarantee.	10.00	2.50	3.00	28.10
29105	Analysis.	10.92	2.28	2.71	27.75
	4 Brand Southern King—Guarantee.	12.00	2.00	2.00	26.80
29107	Analysis.	12.16	2.02	2.01	27.10
	Fidelity Chemical Corporation, Houston, Texas.—				
	Fidelity Ammoniated Superphosphate with Potash—Guarantee.	10.00	1.65	1.00	21.45
29516	Analysis.	11.05	1.62	.95	22.50
	Fidelity Cotton Special Fertilizer—Guarantee.	10.00	1.65	2.00	22.65
29510	Analysis.	10.40	1.92	1.95	24.42
29581	Analysis.	10.23	1.84	1.42	23.18
	Fidelity Cotton Special No. 2—Guarantee.	10.00	1.65	1.50	22.05
29512	Analysis.	10.54	1.78	1.54	23.40
	Fidelity Cotton Standard Fertilizer—Guarantee.	8.00	2.06	1.50	21.70
29513	Analysis.	9.40	2.24	1.61	24.41
	Fidelity Kainit—Guarantee. . . . .	.....	.....	12.00	14.40
29249	Analysis. . . . .	.....	.....	11.80	14.16
	Fidelity Peerless Trucker Fertilizer—Guarantee.	8.00	2.47	5.00	27.95
29509	Analysis.	7.98	2.22	4.08	25.58
	Fidelity Potato Special Fertilizer—Guarantee.	7.00	2.06	3.00	22.30
29515	Analysis.	10.15	2.08	1.64	24.55
	Fidelity 16 Per Cent Acid Phosphate—Guarantee.	16.00	.....	.....	19.20
29511	Analysis.	16.31	.....	.....	19.57
29248	Analysis.	16.52	.....	.....	19.82
29582	Analysis.	17.65	.....	.....	21.18
	Fidelity Tomato Special Fertilizer—Guarantee.	10.00	2.47	1.50	26.15
29514	Analysis.	11.16	2.55	1.45	27.88

Table 3.—Analysis of commercial fertilizers, season 1922-1923.

Laboratory Number.	Manufacturer, Place of Business and Brand.	Phosphoric Acid—Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
	Gate City Fertilizer Company, Texarkana, Ark.—				
	Red Ball Acid Phosphate—Guarantee.....	16.00			19.20
29324	Analysis.....	17.40			20.88
29383	Analysis.....	16.04			19.25
29611	Analysis.....	16.74			20.09
29613	Analysis.....	16.56			19.87
	Red Ball 'Bove All Acid Phosphate—Guarantee.....	18.00			21.60
29612	Analysis.....	18.88			22.66
	Red Ball Brand Special Mixture—Guarantee.....	8.00	4.00		29.60
29614	Analysis.....	8.23	4.00		29.88
	Red Ball Cotton Grower—Guarantee.....	9.00	1.65	2.00	21.45
29325	Analysis.....	11.48	1.81	1.28	24.37
	Red Ball Farmers Choice—Guarantee.....	10.00	4.00	4.00	36.80
29384	Analysis.....	10.19	3.13	3.61	32.21
	Red Ball Kainit—Guarantee.....			14.00	16.80
29385	Analysis.....			13.97	16.76
	Red Ball Nitrate of Soda—Guarantee.....		15.60		78.00
29615	Analysis.....		15.72		78.66
	J. H. Healy, San Antonio, Texas.—				
	Guano—Guarantee.....		3.12		15.60
29276	Analysis.....		3.84		19.20
	Hope Fertilizer Company, Hope, Ark.—				
	Hope Fertilizer No. 10 (Without Potash)—Guarantee.....	11.00	1.65		21.45
29345	Analysis.....	7.43	1.98		18.82
	Hope Fertilizer No. 40—Guarantee.....	10.00	3.00	3.00	30.60
29334	Analysis.....	9.38	3.24	2.43	30.38
29388	Analysis.....	9.99	3.24	2.78	31.53
29407	Analysis.....	9.91	3.36	3.40	32.77
29495	Analysis.....	7.48	3.36	2.30	28.54
29499	Analysis.....	11.02	2.82	3.69	31.75
	Hope Fertilizer No. 44—Guarantee.....	12.00	2.00	2.00	26.80
29329	Analysis.....	11.88	2.20	1.72	27.32
29332	Analysis.....	11.87	2.24	1.35	27.06
29333	Analysis.....	11.12	2.04	1.84	25.75
29338	Analysis.....	12.39	2.16	1.61	27.60
	Hope Fertilizer No. 45—Guarantee.....	8.00	4.00	4.00	34.40
29331	Analysis.....	8.21	3.61	3.79	32.45
	Hope Fertilizer No. 46—Guarantee.....	12.00	3.00	3.00	33.00
29328	Analysis.....	12.36	3.03	2.65	33.16
29330	Analysis.....	11.93	3.01	2.49	32.36
29343	Analysis.....	8.89	2.95	2.48	28.40
	Hope Fertilizer No. 50—Guarantee.....	10.00	4.00	3.00	35.60
29387	Analysis.....	10.14	4.02	3.78	36.81
	Hope Fertilizer No. 55—Guarantee.....	10.00	3.00	2.00	29.40
29500	Analysis.....	10.17	3.04	2.18	30.02
	Our Extra Cotton Grower.....	10.00	1.65	2.00	22.65
29292	Analysis.....	8.30	1.74	1.95	21.00
29342	Analysis.....	8.72	1.67	1.83	21.01
29452	Analysis.....	9.67	1.72	1.72	22.26
29606	Analysis.....	10.78	1.86	2.06	24.71
29621	Analysis.....	11.16	1.62	1.90	23.77
29622	Analysis.....	10.01	2.57	.41	25.35
29640	Analysis.....	7.41	1.90	1.95	20.73
	Our Potato Grower—Guarantee.....	8.00	2.00	6.00	26.80
29344	Analysis.....	8.63	1.87	5.10	25.83
29641	Analysis.....	7.35	2.51	5.83	28.37
	Stork Brand Nitrate of Soda—Guarantee.....		15.00		75.00
29623	Analysis.....		15.44		77.20
	Stork Brand 16 Per Cent Acid Phosphate—Guarantee.....	16.00			19.20
29406	Analysis.....	16.28			19.54
29496	Analysis.....	16.39			19.67
29642	Analysis.....	16.89			20.27
	Houston Packing Company, Houston, Texas.—				
	Blood and Bone—Guarantee.....	*14.50	5.60		39.66
29166	Analysis.....	*18.33	4.95		39.41
29494	Analysis.....	*15.85	5.63		40.83
	Jefferson Oil Company, Jefferson, Texas.—				
	Jefferson Acid Phosphate—Guarantee.....	16.00			19.20
29323	Analysis.....	17.64			21.17

*Total Phosphoric Acid.

Table 3.—Analysis of commercial fertilizers, season 1922-1923.

Laboratory Number.	Manufacturer, Place of Business and Brand.	Phosphoric Acid Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
	Kelly, Weber & Company, Ltd., Lake Charles, La.—				
	Special Rice Growers' Fertilizer—Guarantee.....	10.00		4.00	16.80
29521	Analysis.....	10.22		3.88	16.92
29536	Analysis.....	11.11		4.10	18.25
	Longview Cotton Oil Company, Longview, Texas.—				
	Longview Acid Phosphate—Guarantee.....	16.00			19.20
29207	Analysis.....	17.87			21.43
29281	Analysis.....	18.34			22.01
29416	Analysis.....	17.59			21.11
29432	Analysis.....	17.92			21.50
29568	Analysis.....	16.62			19.94
	Longview Corn and Potato Special—Guarantee.....	8.00	3.00	3.00	28.20
29205	Analysis.....	10.09	2.72	3.24	29.60
29283	Analysis.....	10.02	2.63	3.10	28.89
29415	Analysis.....	9.48	2.63	3.40	28.61
29569	Analysis.....	11.40	2.42	.92	26.89
	Longview Cotton Fertilizer—Guarantee.....	12.00	1.65	1.50	24.45
29208	Analysis.....	13.97	1.24	1.98	25.34
29284	Analysis.....	14.18	1.17	1.88	25.13
	Longview Supreme Cotton Grower—Guarantee.....	11.00	2.00	2.00	25.60
29206	Analysis.....	12.70	1.58	2.33	25.94
29282	Analysis.....	11.89	1.57	2.45	25.06
29287	Analysis.....	12.43	1.68	2.59	26.43
29414	Analysis.....	11.14	2.25	2.96	28.17
29428	Analysis.....	10.65	1.98	2.59	25.79
29567	Analysis.....	11.92	2.13	1.24	26.44
29659	Analysis.....	13.39	2.02	.35	26.59
	Marshall Cotton Oil Company, Marshall, Texas.—				
	Farmer's Potash Compound—Guarantee.....	12.00		4.00	19.20
29322	Analysis.....	12.73		3.94	20.01
	Harrison County Special—Guarantee.....	12.00	1.65	1.00	23.85
29053	Analysis.....	14.35	1.38	1.48	25.90
29316	Analysis.....	13.62	1.68	1.97	27.10
29602	Analysis.....	12.16	1.64	1.10	25.31
	Marshall Acid Phosphate—Guarantee.....	16.00			19.20
29054	Analysis.....	18.70			22.44
29603	Analysis.....	17.17			20.60
	Marshall Corn and Potato Special—Guarantee.....	8.00	3.00	3.00	28.20
29052	Analysis.....	10.18	2.64	3.68	29.84
29317	Analysis.....	10.38	2.81	3.30	30.47
29601	Analysis.....	9.50	2.76	3.28	28.60
	Marshall Cotton Grower Special—Guarantee.....	11.00	2.00	2.00	25.60
29051	Analysis.....	13.64	2.07	1.64	28.12
29319	Analysis.....	11.88	2.00	2.48	27.24
29600	Analysis.....	11.36	1.84	2.54	25.88
29604	Analysis.....	11.32	1.83	2.58	25.83
29644	Analysis.....	11.90	1.90	2.87	27.22
29645	Analysis.....	10.44	1.94	2.12	24.77
	Marshall Peerless Mixture—Guarantee.....	8.00	4.00	2.00	32.00
29321	Analysis.....	9.55	3.99	2.62	34.55
	Nitrate of Soda.....		15.00		75.00
29318	Analysis.....		15.00		75.00
29605	Analysis.....		15.18		75.90
	Meridian Fertilizer Factory, Shreveport, La.—				
	Kainit—Guarantee.....			14.00	16.80
29265	Analysis.....			13.46	16.15
	Kainit—Guarantee.....			12.00	14.40
29113	Analysis.....			13.14	15.77
	Meridian Blood and Bone—Guarantee.....	10.00	1.65	1.00	21.45
29139	Analysis.....	9.82	1.74	1.29	22.03
29274	Analysis.....	13.28	1.04	1.18	22.56
29418	Analysis.....	11.88	1.86	1.60	25.48
29485	Analysis.....	13.47	1.60	1.08	25.46
	Meridian Caddo Cotton—Guarantee.....	9.00	2.00	1.00	22.00
29085	Analysis.....	11.73	2.00	1.32	25.66
	Meridian Corn Club Special—Guarantee.....	7.50	2.50	1.00	22.70
29084	Analysis.....	10.46	2.84	1.09	28.06
29302	Analysis.....	10.43	1.97	.88	23.43
	Meridian Cotton and Corn Special—Guarantee.....	9.00	2.50	3.00	26.90
29635	Analysis.....	10.79	2.80	2.96	30.50
	Meridian Golden Harvester—Guarantee.....	10.00	3.30	4.00	33.30
29397	Analysis.....	12.77	2.47	4.20	32.71

Table 3.—Analysis of commercial fertilizers, season 1922-1923.

Laboratory Number.	Manufacturer, Place of Business and Brand.	Phosphoric Acid—Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
	Meridian Fertilizer Factory, Shreveport, La.—Cont'd.—				
	Meridian Golden West—Guarantee.....	10.00	2.00	2.00	24.40
29405	Analysis.....	11.54	3.64	2.42	34.95
29487	Analysis.....	10.89	1.90	2.87	26.01
	Meridian Home Mixture—Guarantee.....	10.00	1.65	1.00	21.45
29093	Analysis.....	11.23	1.73	1.16	23.52
29110	Analysis.....	11.54	1.77	1.10	24.02
29114	Analysis.....	10.86	1.84	1.55	24.09
29118	Analysis.....	11.09	1.72	1.72	23.97
29149	Analysis.....	11.76	2.06	.90	25.49
29178	Analysis.....	12.96	2.78	1.53	31.29
29200	Analysis.....	13.29	2.31	1.43	29.22
29224	Analysis.....	13.98	2.06	1.21	28.53
29263	Analysis.....	12.12	1.88	1.44	25.67
29264	Analysis.....	12.14	1.56	1.58	24.27
29298	Analysis.....	13.15	1.25	1.38	24.69
29299	Analysis.....	12.52	1.82	1.35	25.74
29309	Analysis.....	9.97	1.75	1.30	22.27
29389	Analysis.....	11.33	1.74	1.14	23.67
29404	Analysis.....	12.11	2.54	2.66	30.42
29424	Analysis.....	11.49	1.86	1.43	24.81
29427	Analysis.....	12.13	2.00	1.19	25.99
29433	Analysis.....	11.44	2.64	1.75	29.03
29437	Analysis.....	11.87	2.08	1.01	25.85
29443	Analysis.....	11.67	2.13	1.49	26.44
29445	Analysis.....	11.89	2.00	1.38	25.93
29472	Analysis.....	12.22	1.78	1.27	25.08
29570	Analysis.....	11.93	1.92	1.65	25.90
29573	Analysis.....	12.79	2.12	1.36	27.58
29593	Analysis.....	13.64	2.10	1.01	28.08
29653	Analysis.....	13.01	1.48	1.53	24.85
	Meridian 10-3-3—Guarantee.....	10.00	3.00	3.00	30.60
29367	Analysis.....	10.54	3.06	3.23	31.83
29634	Analysis.....	11.11	2.09	2.52	26.80
	Meridian Kainit—Guarantee.....			12.00	14.40
29425	Analysis.....			13.40	16.08
	Meridian 12-4-4—Guarantee.....	12.00	4.00	4.00	39.20
29337	Analysis.....	11.86	3.49	2.75	34.98
	Meridian Meal Mixture—Guarantee.....	10.00	1.65	1.00	21.45
29098	Analysis.....	11.24	1.72	1.11	23.42
29184	Analysis.....	12.57	2.42	1.72	29.24
29577	Analysis.....	11.02	1.99	1.33	24.77
	Meridian Nitrated Bone and Potash—Guarantee.....	10.00	1.65	2.00	22.65
29044	Analysis.....	10.43	1.86	1.71	23.87
29057	Analysis.....	11.35	1.96	1.34	25.03
29094	Analysis.....	12.70	1.17	1.68	23.11
29097	Analysis.....	10.83	2.15	1.83	25.95
29293	Analysis.....	12.36	1.59	1.88	25.04
29308	Analysis.....	11.94	1.56	2.26	24.84
29609	Analysis.....	11.47	1.96	1.98	25.94
29651	Analysis.....	12.29	1.84	2.14	26.52
	Meridian Perfection Blood Compound—Guarantee.....	10.00	2.50	3.00	28.10
29039	Analysis.....	11.61	2.43	3.22	29.94
29390	Analysis.....	10.50	2.74	4.95	32.24
	Meridian Perfection Cotton Formula—Guarantee.....	11.00	2.50	.....	25.70
29069	Analysis.....	13.40	2.33	.....	27.73
	Meridian Perfection Meal Compound—Guarantee.....	10.00	2.50	3.00	28.10
29042	Analysis.....	11.44	2.26	2.13	27.59
29095	Analysis.....	12.04	1.81	2.39	26.37
29112	Analysis.....	11.01	1.73	3.09	25.57
29116	Analysis.....	11.87	2.44	3.46	30.59
29272	Analysis.....	10.97	1.54	1.91	23.15
29398	Analysis.....	12.82	1.97	3.16	29.02
29417	Analysis.....	12.39	2.20	1.87	28.11
29571	Analysis.....	14.39	1.74	1.94	28.30
29574	Analysis.....	12.21	3.02	3.11	33.48
	Meridian Raw Bone Mixture—Guarantee.....	10.00	1.65	1.00	21.45
29558	Analysis.....	14.69	2.19	1.45	30.32
	Meridian Special Cotton Formula—Guarantee.....	10.00	1.65	.....	20.25
29070	Analysis.....	11.75	1.94	.....	23.86
29300	Analysis.....	13.60	1.48	.....	23.72
	Meridian Southern Standard—Guarantee.....	10.00	3.00	2.00	29.40
29386	Analysis.....	11.85	3.03	2.47	32.33
	Meridian Standard Cotton and Corn—Guarantee.....	9.00	2.00	1.00	22.00
29068	Analysis.....	11.50	1.88	1.57	25.08

Table 3.—Analysis of commercial fertilizers, season 1922-1923.

Laboratory Number.	Manufacturer, Place of Business and Brand.	Phosphoric Acid—Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
Meridian Fertilizer Factory, Shreveport, La.—Continued.					
	Meridian Tankage Compound—Guarantee	8.50	2.50		22.70
29038	Analysis	10.41	3.06		27.79
	Meridian Texas Special—Guarantee	10.00	2.72		25.60
29557	Analysis	9.79	2.97		26.60
	Meridian Tomato Special—Guarantee	10.00	2.50	1.00	25.70
29040	Analysis	9.52	3.00	1.16	27.81
29150	Analysis	11.56	2.88	.98	29.45
29176	Analysis	13.31	2.61	1.43	30.74
29636	Analysis	13.49	1.49	2.06	26.01
	Meridian Truck Grower—Guarantee	8.00	3.00	3.00	28.20
29099	Analysis	9.91	3.43	2.97	32.60
	Meridian Trucker's Special—Guarantee	8.00	4.00	6.00	36.80
29041	Analysis	9.38	2.77	6.10	32.43
	Meridian Union Special Acid Phosphate—Guarantee	16.00			19.20
29043	Analysis	17.22			20.66
29056	Analysis	17.84			21.41
29086	Analysis	18.27			21.92
29096	Analysis	15.42			18.50
29100	Analysis	17.32			20.78
29115	Analysis	16.83			20.20
29117	Analysis	16.78			20.14
29141	Analysis	17.76			21.31
29177	Analysis	17.90			21.48
29185	Analysis	18.00			21.60
29201	Analysis	18.19			21.83
29225	Analysis	18.10			21.72
29262	Analysis	18.31			21.97
29273	Analysis	16.90			20.28
29286	Analysis	18.39			22.07
29294	Analysis	18.24			21.89
29301	Analysis	17.85			21.42
29382	Analysis	17.19			20.63
29391	Analysis	18.32			21.68
29423	Analysis	17.41			20.89
29426	Analysis	18.67			22.40
29429	Analysis	18.46			22.15
29438	Analysis	18.41			22.09
29442	Analysis	18.72			22.46
29446	Analysis	18.50			22.20
29475	Analysis	17.30			20.76
29486	Analysis	17.81			21.37
29575	Analysis	17.59			21.11
29610	Analysis	18.92			22.70
29632	Analysis	17.96			21.55
29652	Analysis	18.09			21.71
29658	Analysis	17.57			21.08
	Meridian Vegetable Grower—Guarantee	8.00	2.50	5.00	28.10
29172	Analysis	12.54	2.86	2.66	32.54
	Nitrate of Soda—Guarantee		15.00		75.00
29055	Analysis		14.96		74.80
29111	Analysis		15.04		75.20
29372	Analysis		15.42		77.10
29637	Analysis		16.26		81.30
Nitrate Agencies Company, New Orleans, La.—					
	Nitrate of Soda—Guarantee		15.00		75.00
29135	Analysis		15.20		76.00
Palestine Oil and Manufacturing Company, Palestine, Texas.—					
	Acid Phosphate—Guarantee	16.00			19.20
29119	Analysis	16.71			20.05
29223	Analysis	16.79			20.15
29270	Analysis	17.48			20.98
29466	Analysis	16.62			19.94
29587	Analysis	16.72			20.06
	Garden Special Fertilizer—Guarantee	8.00	2.00	4.00	24.40
29221	Analysis	8.88	1.90	2.02	22.58
29592	Analysis	8.50	2.08	3.40	24.68
	Palestine Corn Maker—Guarantee	7.00	4.00	2.00	30.60
29591	Analysis	7.71	3.82	1.58	30.25
	Palestine Cotton Grower—Guarantee	11.00	1.65	1.00	22.65
29218	Analysis	10.98	1.80	1.13	23.54

Table 3.—Analysis of commercial fertilizers, season 1922-1923.

Laboratory Number.	Manufacturer, Place of Business and Brand.	Phosphoric Acid Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
Palestine Oil and Manufacturing Company, Palestine, Texas—Continued.					
	Palestine Cotton Producer—Guarantee.....	10.00	1.65	1.00	21.45
29120	Analysis.....	9.74	1.88	1.69	23.12
29215	Analysis.....	10.54	1.77	1.41	23.19
29258	Analysis.....	10.16	1.64	1.22	21.85
29259	Analysis.....	9.92	1.67	1.48	22.03
29267	Analysis.....	10.07	1.72	1.53	22.52
29268	Analysis.....	10.79	1.64	1.99	22.94
29463	Analysis.....	10.41	1.70	2.12	23.53
29583	Analysis.....	9.03	1.92	1.04	21.69
	Palestine Cotton Queen—Guarantee.....	10.00	2.50	3.00	28.10
29121	Analysis.....	10.27	2.40	3.60	28.64
29217	Analysis.....	10.37	2.24	2.92	27.14
29260	Analysis.....	10.39	2.60	2.58	28.57
29261	Analysis.....	10.20	2.50	3.06	28.41
29266	Analysis.....	10.32	2.41	2.55	27.49
29269	Analysis.....	11.05	2.37	3.49	29.30
29464	Analysis.....	9.94	2.50	2.99	28.02
29465	Analysis.....	10.47	2.45	2.86	28.34
29572	Analysis.....	9.46	2.48	2.71	27.00
29584	Analysis.....	10.12	2.36	3.17	27.74
29586	Analysis.....	9.52	2.49	2.85	27.29
	Palestine Cotton Wonder—Guarantee.....	10.00	1.65	2.00	22.65
29128	Analysis.....	9.68	1.89	1.79	23.22
29216	Analysis.....	10.60	1.70	1.85	23.44
	Palestine Kainit—Guarantee.....			15.00	18.00
29467	Analysis.....			15.06	18.07
29588	Analysis.....			14.71	17.65
29654	Analysis.....			15.21	18.25
	Palestine Red Land Fertilizer—Guarantee.....	11.00	2.00	2.00	25.60
29220	Analysis.....	10.58	2.47	3.11	28.78
29590	Analysis.....	10.80	2.40	2.37	27.80
	Palestine Sandy Land Fertilizer—Guarantee.....	10.00	3.00	3.00	30.60
29122	Analysis.....	10.34	3.02	3.59	31.82
29585	Analysis.....	10.27	3.00	2.90	30.80
	Palestine Tomato Special—Guarantee.....	8.00	4.00	4.00	34.40
29222	Analysis.....	8.81	3.54	4.00	33.07
29589	Analysis.....	8.70	3.47	3.13	31.55
	Phillips Special—Guarantee.....	10.00	2.00	2.00	24.40
29219	Analysis.....	9.56	1.92	1.98	23.45
Pate Brothers, Sulphur Springs, Texas.—					
	Acid Phosphate—Guarantee.....	16.00			19.20
29077	Analysis.....	18.67			22.40
29356	Analysis.....	18.11			21.73
	Pate's Cotton and Corn—Guarantee.....	10.00	2.00	1.50	23.80
29624	Analysis.....	11.81	2.40	4.36	31.40
	Pate's Cotton Grower—Guarantee.....	10.00	1.65	2.00	22.65
29625	Analysis.....	12.01	2.25	4.07	30.54
	Pate's Farm Mixture—Guarantee.....	11.00	1.65		21.45
29353	Analysis.....	13.84	1.69		25.06
	Pate's Home Mixture—Guarantee.....	10.00	1.65	1.00	21.45
29352	Analysis.....	12.24	2.14	2.04	27.84
	Pate's Meal and Phosphate—Guarantee.....	11.00	2.00		23.20
29354	Analysis.....	12.98	2.02		25.68
	Pate's Perfection—Guarantee.....	8.00	2.00	2.00	22.00
29076	Analysis.....	9.40	1.98	3.27	25.10
29351	Analysis.....	9.95	2.24	3.02	26.76
	Pate's Special—Guarantee.....	8.00	3.00		24.60
29355	Analysis.....	10.62	3.25		28.99
	Pate's Truck Grower—Guarantee.....	9.00	3.00	3.00	29.40
29626	Analysis.....	10.43	3.45	4.99	35.66
Pelican Fertilizer Works, Shreveport, La.					
	Nitrate of Soda—Guarantee.....		15.00		75.00
29124	Analysis.....		15.16		75.80
	Pelican Blood and Bone—Guarantee.....	10.00	1.65	1.00	22.45
29027	Analysis.....	11.97	1.72	1.87	25.20
29126	Analysis.....	9.73	1.90	1.59	23.09
29173	Analysis.....	12.42	2.00	.67	25.70
	Pelican Cotton Grower—Guarantee.....	10.00	1.65		20.25
29152	Analysis.....	11.56	2.06		24.17

Table 3.—Analysis of commercial fertilizers, season 1922-1923.

Laboratory Number.	Manufacturer, Place of Business and Brand.	Phosphoric Acid Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
Pelican Fertilizer Works Shreveport, La.—Continued.—					
	Pelican High Grade—Guarantee.....	10.00	3.00	3.00	30.60
29026	Analysis.....	12.93	2.79	2.83	32.87
29235	Analysis.....	12.44	3.38	1.73	33.91
	Pelican Meal Compound—Guarantee.....	10.00	1.65	1.00	21.45
29488	Analysis.....	12.06	2.29	1.93	28.24
	Pelican Special Acid Phosphate—Guarantee.....	16.00	.....	.....	19.20
29123	Analysis.....	17.64	.....	.....	21.17
29125	Analysis.....	18.92	.....	.....	22.70
29133	Analysis.....	18.04	.....	.....	21.65
29151	Analysis.....	18.07	.....	.....	21.68
	Pelican Tomato Special—Guarantee.....	10.00	2.50	1.00	25.70
29134	Analysis.....	13.02	2.97	1.45	32.22
	Pelican Truck Grower—Guarantee.....	10.00	2.50	.....	24.50
29028	Analysis.....	13.16	3.06	.....	31.09
Planter's Fertilizer and Chemical Company, Houston, Fort Worth, Texas, New Orleans, La.—					
	Nitrate of Soda.....	.....	14.81	.....	74.05
29669	Analysis.....	.....	15.38	.....	76.90
	Planter's Kainit—Guarantee.....	.....	.....	12.40	14.88
29666	Analysis.....	.....	.....	11.57	13.88
	Planter's Plow Brand Ammoniated Superphosphate—Guarantee.....	10.00	1.65	2.00	22.65
29375	Analysis.....	9.98	1.83	2.07	23.61
29457	Analysis.....	9.60	2.01	1.95	23.91
	Planter's Plow Brand Farmers' Mixture—Guarantee.....	10.00	1.65	1.00	21.45
29462	Analysis.....	8.77	1.90	1.26	21.53
	Planter's Plow Brand Fertilizer No. 756—Guarantee.....	7.00	4.11	6.00	36.15
29143	Analysis.....	7.52	4.18	5.68	36.74
29458	Analysis.....	7.28	3.65	5.27	33.31
29665	Analysis.....	7.34	2.81	3.50	27.06
	Planter's Plow Brand Fertilizer No. 1033—Guarantee.....	10.00	2.47	3.00	27.95
29066	Analysis.....	8.75	2.23	3.28	25.59
29374	Analysis.....	9.90	2.48	3.39	28.35
29459	Analysis.....	9.03	2.60	2.94	27.37
29460	Analysis.....	9.65	2.74	2.89	28.75
29664	Analysis.....	8.78	2.28	2.71	25.19
	Planter's Plow Brand Fertilizer No. 1244—Guarantee.....	12.00	3.30	4.00	35.70
29065	Analysis.....	12.35	3.42	4.23	37.00
	Planter's Plow Brand Imperial Cotton Mixture—Guarantee.....	8.00	1.65	2.00	20.25
29067	Analysis.....	7.62	1.54	1.71	18.89
	Planter's Plow Brand Imperial Truck Mixture—Guarantee.....	8.00	2.47	3.00	25.55
29142	Analysis.....	8.28	2.44	3.14	25.91
	Planter's Plow Brand Old Standard Superphosphate—Guarantee.....	9.50	1.65	1.50	21.45
29517	Analysis.....	9.53	1.65	1.02	20.91
	Planter's Plow Brand 16 Per Cent Acid Phosphate—Guarantee.....	16.00	.....	.....	19.20
29451	Analysis.....	17.39	.....	.....	20.87
29518	Analysis.....	16.17	.....	.....	19.40
29668	Analysis.....	16.35	.....	.....	19.62
	Planter's Plow Brand Special Trucker—Guarantee.....	10.00	2.47	.....	24.35
29144	Analysis.....	9.66	2.40	.....	23.59
29667	Analysis.....	9.77	2.49	.....	24.17
	Planter's Plow Brand Strawberry Special No. 1038—Guarantee.....	10.00	2.47	8.00	33.95
29047	Analysis.....	10.30	2.48	7.58	33.86
Shreveport Fertilizer Works, Shreveport, La.—					
	Lion Xtra Good Acid Phosphate—Guarantee.....	16.00	.....	.....	19.20
29434	Analysis.....	17.46	.....	.....	20.95
Swift and Company, Harvey and Shreveport, La.—					
	Atlantic Blood and Bone—Guarantee.....	12.00	1.65	.....	22.65
29539	Analysis.....	11.97	1.80	.....	23.36
	Atlantic Nitrate of Soda—Guarantee.....	.....	14.81	.....	74.05
29199	Analysis.....	.....	15.20	.....	76.00
	Swift's Ammoniated Raw Bone Superphosphate—Guarantee.....	9.50	1.65	1.50	21.45
29399	Analysis.....	9.91	1.76	1.77	22.81
29540	Analysis.....	9.69	1.86	1.22	22.39
29547	Analysis.....	9.85	1.60	1.21	21.27
29555	Analysis.....	10.01	1.76	1.07	22.09

Table 3.—Analysis of commercial fertilizers, season 1922-1923.

Laboratory Number.	Manufacturer, Place of Business and Brand.	Phosphoric Acid Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
	Swift and Company, Harvey and Shreveport, La.—Cont.				
	Swift's Blood, Bone and Potash—Guarantee.....	9.50	3.29	7.00	36.25
29030	Analysis.....	9.87	3.08	6.95	35.58
	Swift's Eagle—Guarantee.....	10.00	1.65	2.00	22.65
29062	Analysis.....	10.25	1.72	1.85	23.12
29078	Analysis.....	10.24	1.70	2.00	23.19
29082	Analysis.....	10.04	1.88	2.32	24.23
29213	Analysis.....	9.91	1.66	2.50	23.19
29231	Analysis.....	10.22	1.76	2.21	23.71
29236	Analysis.....	10.32	1.62	2.08	22.98
29244	Analysis.....	10.23	1.74	2.38	23.84
29277	Analysis.....	10.53	1.76	1.86	23.67
29304	Analysis.....	9.80	1.72	2.18	22.98
29314	Analysis.....	10.13	1.66	2.24	23.15
29340	Analysis.....	10.64	1.66	1.95	23.41
29361	Analysis.....	10.05	1.96	1.90	24.14
29394	Analysis.....	10.64	1.81	2.08	24.32
29400	Analysis.....	9.09	1.65	2.70	22.40
29435	Analysis.....	9.92	2.44	2.34	26.91
29471	Analysis.....	10.22	1.66	2.06	23.03
29594	Analysis.....	10.72	2.05	2.11	25.64
29661	Analysis.....	11.71	1.80	1.47	24.81
29663	Analysis.....	11.12	1.92	1.44	24.67
	Swift's High Grade Acid Phosphate Fertilizer—16 Per Cent—Guarantee.....	16.00			19.20
29019	Analysis.....	17.51			21.01
29045	Analysis.....	17.07			20.48
29048	Analysis.....	16.05			19.26
29063	Analysis.....	16.69			20.03
29080	Analysis.....	17.67			21.20
29131	Analysis.....	16.38			19.66
29195	Analysis.....	17.44			20.93
29212	Analysis.....	16.47			19.76
29237	Analysis.....	17.50			21.00
29246	Analysis.....	17.70			21.24
29250	Analysis.....	17.00			20.40
29275	Analysis.....	16.77			20.12
29327	Analysis.....	16.33			19.60
29359	Analysis.....	17.97			21.56
29366	Analysis.....	16.64			19.97
29396	Analysis.....	17.91			21.49
29430	Analysis.....	16.12			19.34
29436	Analysis.....	16.82			20.18
29468	Analysis.....	16.81			20.17
29522	Analysis.....	17.09			20.51
29523	Analysis.....	17.10			20.52
29524	Analysis.....	17.35			20.82
29525	Analysis.....	17.24			20.69
29541	Analysis.....	17.75			21.30
29545	Analysis.....	17.32			20.78
29550	Analysis.....	18.04			21.65
29551	Analysis.....	17.00			20.40
29559	Analysis.....	17.94			21.53
29563	Analysis.....	17.05			20.46
29599	Analysis.....	17.52			21.02
29619	Analysis.....	16.55			19.86
29657	Analysis.....	17.44			21.53
29660	Analysis.....	17.40			20.88
	Swift's High Grade Acid Phosphate Fertilizer—18 Per Cent—Guarantee.....	18.00			21.60
29548	Analysis.....	18.32			21.98
	Swift's 10—1.65—1.00—Guarantee.....	10.00	1.65	1.00	21.45
29303	Analysis.....	11.03	1.76	.97	24.20
29339	Analysis.....	11.63	1.66	1.10	23.58
29456	Analysis.....	10.14	1.74	.90	22.05
29489	Analysis.....	10.55	1.77	1.34	23.12
29554	Analysis.....	10.95	1.64	.77	22.26
29647	Analysis.....	11.13	1.57	1.10	22.53
	Swift's 10.00—2.47—2.00—Guarantee.....	10.00	2.47	2.00	26.75
29362	Analysis.....	10.14	2.77	2.32	28.80
29627	Analysis.....	11.64	2.80	1.58	29.87
	Swift's 10.00—3.29—4.00—Guarantee.....	10.00	3.29	4.00	33.25
29461	Analysis.....	11.00	3.58	4.10	36.02

Table 3.—Analysis of commercial fertilizers, season 1922-1923.

Laboratory Number.	Manufacturer, Place of Business and Brand.	Phosphoric Acid Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
	Swift and Company, Harvey and Shreveport, La.—Cont.				
	Swift's 12.00-1.65-0.....	12.00	1.65	.....	22.65
29079	Analysis.....	12.23	1.75	.....	25.43
29109	Analysis.....	12.67	1.90	.....	24.70
29245	Analysis.....	13.27	1.74	.....	24.62
29561	Analysis.....	11.81	1.52	.....	21.77
	Swift's Nitrate of Soda—Guarantee.....	14.81	.....	.....	74.05
29313	Analysis.....	15.44	.....	.....	77.20
	Swift's Onion Grower—Guarantee.....	7.00	3.70	3.00	30.50
29013	Analysis.....	6.60	3.59	3.22	29.73
29156	Analysis.....	7.25	3.43	3.15	29.63
	Swift's Palmetto—Guarantee.....	8.00	2.47	3.00	25.55
29034	Analysis.....	9.04	2.27	2.89	25.67
29049	Analysis.....	9.36	2.50	3.05	27.39
29129	Analysis.....	8.72	2.47	2.87	26.25
29229	Analysis.....	8.15	2.25	2.96	24.58
29238	Analysis.....	8.00	2.33	2.77	24.57
29239	Analysis.....	8.67	2.32	2.57	25.08
29240	Analysis.....	7.78	2.38	3.10	24.96
29241	Analysis.....	9.11	2.37	2.72	26.04
29253	Analysis.....	8.52	2.27	2.99	25.16
29254	Analysis.....	9.36	1.74	2.58	23.03
29257	Analysis.....	8.11	2.17	2.54	23.63
29542	Analysis.....	9.05	2.47	2.92	26.71
29556	Analysis.....	8.19	2.23	2.51	23.99
29597	Analysis.....	9.41	2.70	2.42	27.69
29650	Analysis.....	9.54	2.56	2.68	27.47
	Swift's Red Steer—Guarantee.....	10.00	2.47	3.00	27.95
29046	Analysis.....	10.94	2.95	2.82	31.26
29050	Analysis.....	10.99	2.53	3.28	29.78
29061	Analysis.....	11.03	2.39	3.14	28.96
29081	Analysis.....	11.26	2.44	3.00	29.31
29092	Analysis.....	10.62	2.36	2.47	27.50
29214	Analysis.....	10.33	2.27	3.71	28.20
29243	Analysis.....	10.67	2.79	3.01	30.36
29255	Analysis.....	10.13	2.41	3.05	27.87
29256	Analysis.....	10.80	2.41	3.04	28.73
29312	Analysis.....	9.68	2.61	3.32	28.65
29341	Analysis.....	10.13	2.64	3.61	29.69
29365	Analysis.....	10.18	2.54	2.96	28.47
29395	Analysis.....	10.41	2.51	2.95	28.58
29470	Analysis.....	10.32	2.80	3.44	30.51
29549	Analysis.....	10.23	2.30	2.65	26.96
29560	Analysis.....	9.59	2.62	2.66	27.80
29598	Analysis.....	10.57	2.72	3.78	30.82
29628	Analysis.....	10.95	2.62	2.18	28.86
29648	Analysis.....	11.00	2.44	2.53	28.44
29649	Analysis.....	10.14	2.41	2.95	27.76
29662	Analysis.....	11.39	2.44	2.57	28.95
	Swift's Red Steer Cotton Grower—Guarantee.....	12.00	1.65	2.00	25.05
29090	Analysis.....	12.30	1.55	1.91	24.80
29278	Analysis.....	11.68	1.52	2.03	24.06
29315	Analysis.....	12.22	1.81	1.62	25.65
29363	Analysis.....	11.76	2.05	2.14	26.93
29562	Analysis.....	11.15	1.88	1.69	24.81
	Swift's Red Steer for Tomatoes 10-2.47-0—Guarantee.....	10.00	2.47	.....	24.35
29032	Analysis.....	10.35	2.40	.....	24.42
29130	Analysis.....	10.16	2.56	.....	24.99
29197	Analysis.....	10.06	2.46	.....	24.37
	Swift's Red Steer for Truck—Guarantee.....	8.00	3.29	.....	26.05
29364	Analysis.....	9.90	3.42	.....	28.98
	Swift's Red Steer 10-3-3—Guarantee.....	10.00	3.00	3.00	30.60
29646	Analysis.....	10.55	2.76	2.46	29.41
	Swift's Red Steer Truck Grower—Guarantee.....	8.00	3.29	4.00	30.85
29091	Analysis.....	8.52	2.91	3.85	29.39
29196	Analysis.....	8.36	3.08	3.85	30.05
29360	Analysis.....	8.79	3.22	3.81	31.22
29629	Analysis.....	9.04	2.93	3.49	29.68
	Swift's Special Mixture—Guarantee.....	10.00	1.65	.....	20.25
29033	Analysis.....	10.64	1.68	.....	20.95
29198	Analysis.....	9.84	1.72	.....	20.41
29251	Analysis.....	9.84	1.54	.....	19.51
29469	Analysis.....	9.73	1.88	.....	21.08
29656	Analysis.....	11.15	1.62	.....	21.48

Table 3.—Analysis of commercial fertilizers, season 1922-1923.

Laboratory Number.	Manufacturer, Place of Business and Brand.	Phosphoric Acid Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
Swift and Company, Harvey, and Shreveport, La.—Cont.					
	Swift's Standard Tankage Mixture—Guarantee.....	6.00	3.29	3.00	27.25
29160	Analysis.....	6.99	3.28	2.48	27.77
29161	Analysis.....	6.84	3.28	2.66	27.80
29162	Analysis.....	7.24	3.27	2.10	27.56
29163	Analysis.....	6.47	3.32	2.35	27.18
29164	Analysis.....	6.75	3.33	2.43	27.67
	Swift's Tankage Mixture—Guarantee.....	9.00	3.29	.....	27.25
29014	Analysis.....	10.36	3.37	.....	29.28
	Swift's Truckers' Favorite—Guarantee.....	8.00	2.47	1.00	23.15
29031	Analysis.....	9.65	2.88	.71	26.83
29108	Analysis.....	8.01	2.26	1.48	22.69
29357	Analysis.....	8.18	2.62	1.07	24.20
29630	Analysis.....	8.45	2.14	1.22	22.30
	Swift's Vegetable Grower—Guarantee.....	8.00	3.29	2.00	28.45
29029	Analysis.....	8.31	3.38	2.10	29.39
29083	Analysis.....	8.87	2.95	2.06	27.66
29132	Analysis.....	9.09	3.11	1.91	28.75
29358	Analysis.....	8.60	3.05	2.36	28.40
29631	Analysis.....	8.19	3.18	1.85	27.95
Tennessee Coal, Iron and Railroad Company, Birmingham, Ala.—					
	18 Per Cent Duplex Basic Phosphate—Guarantee.....	18.00	.....	.....	14.40
29520	Analysis.....	18.66	.....	.....	14.93
Toyah Valley Sulphur Company, New Orleans, La.—					
	Toyah Valley Agricultural Sulphur Compound—				
	Guarantee Sulphur Trioxide (SO ₃) 20.50				7.10
	Sulphur 5.00.....				
29186	Analysis Sulphur Trioxide (SO ₃) 16.96				
	Sulphur 8.27.....				8.35
29535	Analysis Sulphur Trioxide (SO ₃) 19.22				
	Sulphur 7.53.....				8.33
29672	Analysis Sulphur Trioxide (SO ₃) 15.93				
	Sulphur 5.43.....				6.45
Van Zandt Cotton Oil Company, Wills Point, Texas.—					
	Semper Fidelis 16 Per Cent Acid Phosphate—				
	Guarantee.....	16.00	.....	.....	19.20
29058	Analysis.....	16.36	.....	.....	19.63
29401	Analysis.....	15.24	.....	.....	18.29
	Semper Fidelis Phospho Meal—Guarantee.....	9.00	3.50	1.00	29.50
29060	Analysis.....	8.70	3.06	1.44	27.47
	Semper Fidelis Special Fertilizer—Guarantee.....	11.00	1.65	1.00	22.65
29059	Analysis.....	11.52	1.68	1.04	23.47
Virginia-Carolina Chemical Company, Shreveport, La.—					
	B B B—Beef, Blood and Bone—Guarantee.....	10.00	1.65	1.00	21.45
29538	Analysis.....	10.81	1.37	1.04	21.07
29543	Analysis.....	10.02	1.92	.98	22.80
29544	Analysis.....	10.53	1.62	.92	21.84
	Georgia State Grange—Guarantee.....	10.00	1.65	1.00	21.45
29138	Analysis.....	11.20	1.72	1.48	23.82
29290	Analysis.....	11.67	1.98	1.07	25.18
29295	Analysis.....	12.00	1.59	1.21	25.80
29371	Analysis.....	10.97	1.79	2.22	24.77
29474	Analysis.....	11.02	1.96	1.44	24.75
29482	Analysis.....	11.25	1.85	.98	23.93
	Kainit—Guarantee.....	.....	.....	12.00	14.40
29502	Analysis.....	.....	.....	11.64	13.97
	Nitrate of Soda—Guarantee.....	.....	.....	14.81	14.05
29104	Analysis.....	.....	.....	15.71	17.55
29403	Analysis.....	.....	.....	15.36	17.80
29413	Analysis.....	.....	.....	15.40	17.00
29501	Analysis.....	.....	.....	15.48	17.40
29638	Analysis.....	.....	.....	15.90	17.50
	Royal Blood, Bone and Potash—Guarantee.....	10.00	1.65	1.50	22.05
29422	Analysis.....	9.93	2.07	2.34	25.08
29440	Analysis.....	10.69	2.10	1.74	25.42
	Royal Vegetable Fertilizer—Guarantee.....	8.00	2.47	4.00	26.75
29145	Analysis.....	10.19	1.89	3.34	25.69
29552	Analysis.....	9.88	1.87	3.03	24.83

Table 3.—Analysis of commercial fertilizers, season 1922-1923.

Laboratory Number.	Manufacturer, Place of Business and Brand.	Phosphoric Acid Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
	Virginia-Carolina Chemical Company, Shreveport, La.—				
	Continued.—				
	Scott's Gossypium Phospho Special—Guarantee.....	10.00	1.65	2.00	22.65
29102	Analysis.....	11.41	1.78	2.09	25.10
29146	Analysis.....	10.77	1.57	2.17	23.35
29233	Analysis.....	10.23	1.55	2.17	22.63
29271	Analysis.....	11.22	1.62	2.15	24.14
29297	Analysis.....	10.79	1.66	2.32	25.23
29370	Analysis.....	10.49	1.84	2.26	24.50
29439	Analysis.....	10.54	1.98	2.40	25.43
29454	Analysis.....	10.76	1.68	1.63	23.27
29607	Analysis.....	10.39	2.22	.96	24.72
	V. C. C. Co.'s 16 Per Cent Acid Phosphate—Guarantee	16.00			19.20
29101	Analysis.....	17.62			21.14
29147	Analysis.....	16.54			19.85
29252	Analysis.....	17.93			21.52
29288	Analysis.....	18.25			21.90
29326	Analysis.....	17.75			21.30
29368	Analysis.....	17.14			20.57
29376	Analysis.....	17.39			20.87
29402	Analysis.....	17.87			21.44
29444	Analysis.....	17.92			21.50
29473	Analysis.....	17.21			20.65
29484	Analysis.....	18.00			21.60
29507	Analysis.....	17.41			20.89
29529	Analysis.....	17.83			21.40
29537	Analysis.....	18.29			21.95
29546	Analysis.....	17.61			21.13
29553	Analysis.....	18.16			21.79
29608	Analysis.....	18.71			22.45
	V. C. C. Co.'s Truck Grower—Guarantee.....	8.00	2.06	6.00	27.10
29508	Analysis.....	8.49	2.48	4.37	27.83
	V. C. High Grade Champion Compound—Guarantee..	9.00	3.00	3.00	29.40
29103	Analysis.....	10.23	2.65	2.57	28.61
29137	Analysis.....	9.84	2.55	3.49	28.75
29375	Analysis.....	11.44	2.75	2.60	30.60
29483	Analysis.....	12.14	2.21	2.27	28.34
	V. C. High Grade Guano—Guarantee.....	10.00	1.65	2.00	22.65
29232	Analysis.....	13.03	1.34	2.95	25.88
29505	Analysis.....	10.47	2.19	1.10	24.83
29506	Analysis.....	10.76	2.02	1.01	24.22
	V. C. Special 8-2-2 Fertilizer—Guarantee.....	8.00	2.00	2.00	22.00
29411	Analysis.....	8.85	2.28	2.23	24.70
	V. C. Special 10-2-2 Fertilizer—Guarantee.....	10.00	2.00	2.00	24.40
29234	Analysis.....	11.53	1.86	2.02	25.56
29289	Analysis.....	12.16	1.97	1.61	26.37
29369	Analysis.....	10.42	2.16	2.08	25.80
29377	Analysis.....	11.36	2.06	1.73	26.01
29480	Analysis.....	12.04	2.42	2.54	29.60
29481	Analysis.....	10.16	2.38	1.72	26.15
29633	Analysis.....	11.25	2.25	1.68	26.77
	V. C. Special 10-2.50-3 Fertilizer—Guarantee.....	10.00	2.50	3.00	28.10
29576	Analysis.....	10.77	2.70	1.65	28.40
	V. C. Soluble Guano—Guarantee.....	12.00	1.65		22.65
29503	Analysis.....	11.18	2.59		26.37
29504	Analysis.....	11.52	2.02		23.92
	V. C. Tomato Special—Guarantee.....	10.00	2.47	1.50	26.15
29136	Analysis.....	11.22	2.31	1.34	26.62
29296	Analysis.....	11.39	2.78	1.51	29.38
29441	Analysis.....	10.48	2.60	1.63	27.54
	V. C. XXX Special—Guarantee.....	8.00	2.47	1.00	23.15
29320	Analysis.....	10.02	2.62	1.10	26.44
29412	Analysis.....	10.31	2.54	1.12	26.41

Table 4.—Registration of commercial fertilizers, season 1922-1923.

Manufacturer, Place of Business and Brand.	Phosphoric Acid Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.
American Cotton Oil Company, New Orleans, La.—			
Aco Special No. 833.....	8.00	2.47	3.00
Aco Special No. 1022.....	10.00	1.65	2.00
Aco Special No. 1024.....	10.00	1.65	4.00
Ammoniated Raw Bone Superphosphate and Potash.....	10.00	1.65	1.00
Blood and Bone.....	11.00	1.65	.....
Blood, Bone and Beef.....	10.00	1.65	1.00
Blood, Bone and Potash.....	10.00	1.65	1.00
Blue Rose Rice Grower.....	12.00	.....	2.00
Bull Dog Acid Phosphate.....	16.00	.....	.....
Creole Sugar Cane Fertilizer No. 38.....	8.00	2.50	.....
Creole Truck Grower.....	8.00	2.50	1.00
Cyanamid 15 Per Cent.....	.....	15.00	.....
Dissolved Bone and Potash 10-4.....	10.00	.....	4.00
Economizer.....	10.00	1.65	2.00
Excelsior.....	10.00	1.65	2.00
Farmers' Cornucopia.....	12.00	2.47	2.00
Golden Guano.....	10.00	1.65	1.00
Goldsmith's Improved Mixture.....	10.00	1.65	1.00
Honduras Rice Grower.....	12.00	.....	4.00
Kainit.....	.....	.....	14.00
Lone Star Blood Mixture.....	10.00	0.82	1.00
Lone Star Meal Mixture.....	10.00	0.82	1.00
Louisiana Plant Cane Grower.....	6.00	3.30	.....
Louisiana Rice Grower.....	10.00	.....	2.00
Louisiana Stubble Cane Grower.....	4.00	4.94	.....
Manure Salts 20 Per Cent.....	.....	.....	20.00
Meal Ammoniated Superphosphate.....	11.00	1.65	.....
Meal Ammoniated Superphosphate and Potash.....	10.00	1.65	1.00
Muriate of Potash.....	.....	.....	48.00
New Orleans Acid Phosphate.....	14.00	.....	.....
Nitrate of Soda.....	.....	15.00	.....
Nonpareil.....	10.00	2.47	3.00
Special Sugar Cane Grower No. 67.....	7.00	5.00	.....
Supreme Acid Phosphate.....	18.00	.....	.....
Texas Guano.....	10.00	1.65	.....
Texas Onion Grower.....	6.00	3.30	6.00
Truck Grower.....	6.00	3.30	1.00
Vegetable Grower.....	6.00	2.47	4.00
Arkansas Fertilizer Company, Little Rock, Ark.—			
White Diamond Acid Phosphate.....	16.00	.....	.....
White Diamond Ammoniated Bone Superphosphate.....	9.00	1.65	2.00
White Diamond Arkansas Standard Fertilizer.....	10.00	1.65	1.00
White Diamond Blood and Bone Fertilizer.....	11.00	1.50	1.50
White Diamond Blood, Bone and Potash.....	12.00	2.00	1.50
White Diamond 'Bove All Acid Phosphate.....	18.00	.....	.....
White Diamond 'Bove All Complete Fertilizer.....	9.00	7.00	5.00
White Diamond "Crop Getter".....	12.00	4.00	4.00
White Diamond "Early Boll".....	10.00	3.00	3.00
White Diamond "Early Harvest".....	12.00	1.65	2.00
White Diamond Early Potato and Truck Fertilizer.....	8.00	2.50	4.00
White Diamond "Economy".....	10.00	3.00	2.00
White Diamond "Farmers' Choice".....	10.00	4.00	4.00
White Diamond "Gro-Fast Fertilizer".....	10.00	3.00	4.00
White Diamond High Grade Truck Fertilizer.....	8.00	3.20	6.00
White Diamond Kainit.....	.....	.....	14.00
White Diamond Kali Super-Phosphate.....	11.00	.....	3.00
White Diamond Muriate of Potash.....	.....	.....	50.00
White Diamond New South.....	10.00	1.65	.....
White Diamond Nitrate of Soda.....	.....	15.60	.....
White Diamond Prize Winner.....	10.00	2.50	3.00
White Diamond "Queen of the South".....	10.00	3.00	.....
White Diamond Southern King.....	12.00	2.00	2.00
White Diamond Southern Queen Fertilizer.....	10.00	1.65	2.00
White Diamond "Southern Special".....	9.00	3.00	3.00
White Diamond Southern Standard Fertilizer.....	10.00	1.65	1.50
White Diamond 20th Century Fertilizer.....	9.00	1.65	2.00
White Diamond Vegetable Fertilizer.....	7.50	2.00	3.00

Table 4.—Registration of commercial fertilizers, season 1922-1923.

Manufacturer, Place of Business and Brand.	Phosphoric Acid— Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.
Armour Fertilizer Works, Houston, Fort Worth, Texas, New Orleans, Louisiana.—			
Armour's Ammoniated Truck Grower.....	10.00	2.47	.....
Armour's Big Crop African Cotton Grower.....	9.00	2.47	3.00
Armour's Big Crop Best Phosphate.....	18.00	.....	.....
Armour's Big Crop Grower.....	12.00	1.65	.....
Armour's Big Crop Farmers' Favorite.....	10.00	1.65	2.00
Armour's Big Crop Fertilizer No. 836.....	8.00	2.47	6.00
Armour's Big Crop Fertilizer No. 844.....	8.00	3.29	4.00
Armour's Big Crop Fertilizer No. 1033.....	10.00	2.47	3.00
Armour's Big Crop Fertilizer No. 1035.....	10.00	2.47	5.00
Armour's Big Crop Fertilizer No. 1044.....	10.00	3.30	4.00
Armour's Big Crop Fertilizer No. 1222.....	12.00	1.65	2.00
Armour's Big Crop Fertilizer No. 1244.....	12.00	3.30	4.00
Armour's Big Crop Lower Valley Special.....	8.00	2.47	8.00
Armour's Big Crop Manure Salts.....	.....	.....	20.00
Armour's Big Crop Muriate of Potash.....	.....	.....	50.00
Armour's Big Crop Phosphate and Potash No. 104.....	10.00	.....	4.00
Armour's Big Crop Phosphate and Potash No. 122.....	12.00	.....	2.00
Armour's Big Crop Phosphate and Potash No. 124.....	12.00	.....	4.00
Armour's Big Crop Onion Fertilizer No. 644.....	6.00	3.29	4.00
Armour's Big Crop Onion Fertilizer No. 834.....	8.00	2.47	4.00
Armour's Big Crop Onion Fertilizer No. 846.....	8.00	3.29	6.00
Armour's Big Crop Onion Fertilizer No. 860.....	8.00	4.94	.....
Armour's Big Crop Onion Fertilizer No. 1034.....	10.00	2.47	4.00
Armour's Big Crop Onion Fertilizer No. 1040.....	10.00	32.9	.....
Armour's Big Crop Onion Fertilizer No. 1042.....	10.00	3.29	2.00
Armour's Big Crop Onion Fertilizer No. 1044.....	10.00	3.29	4.00
Armour's Big Crop River Farm Mixture.....	10.00	2.00	4.00
Armour's Big Crop Shield Phosphate.....	14.00	.....	.....
Armour's Big Crop Star Phosphate.....	16.00	.....	.....
Armour's Big Crop Strawberry King.....	10.00	2.47	4.00
Armour's Big Crop Strawberry Special No. 1038.....	10.00	2.47	8.00
Armour's Big Crop Sulphate of Ammonia.....	.....	20.58	.....
Armour's Big Crop Texas Trucker.....	8.00	2.47	3.00
Armour's Big Crop Texas Vegetable Grower.....	9.00	2.05	3.00
Armour's Big Crop Truck Special.....	7.00	4.11	6.00
Armour's Corn King.....	8.00	2.47	2.00
Armour's Cotton Fertilizer No. 1020.....	10.00	1.65	.....
Armour's Fertilizer No. 1120.....	11.00	1.65	.....
Armour's Grain Grower.....	8.00	1.65	2.00
Armour's Kainit.....	.....	.....	12.40
Armour's King Cotton.....	8.00	1.65	2.00
Armour's Phosphate and Potash No. 102.....	10.00	.....	2.00
Armour's Onion Fertilizer No. 533.....	5.33	4.38	.....
Armour's Onion Fertilizer No. 632.....	6.00	2.47	2.00
Armour's Onion Fertilizer No. 642.....	6.00	3.29	2.00
Armour's Onion Fertilizer No. 643.....	6.00	3.29	3.00
Armour's Raw Bone Meal.....	*22.00	3.70	.....
Armour's Rice Grower No. 1020.....	10.00	1.65	.....
Armour's Rice King.....	8.00	1.65	2.00
Armour's Royal Mixture.....	10.00	1.65	1.00
Armour's Special Farm Mixture.....	9.50	1.65	1.50
Armour's Syrup Cane Grower.....	7.00	4.94	.....
Nitrate of Soda.....	.....	14.81	.....
Atlantic Fertilizer Works, Harvey and Shreveport, La.—			
Atlantic for Onions.....	7.00	3.70	.....
Atlantic High Grade Acid Phosphate Fertilizer 16 Per Cent.....	16.00	.....	.....
Atlantic Onion Grower.....	7.00	3.70	3.00
Atlantic Special.....	8.00	3.29	6.00
Atlantic Special Tankage Fertilizer.....	9.00	3.29	3.00
Atlantic Standard Tankage Mixture.....	6.00	3.29	3.00
Atlantic Truckers' Favorite.....	8.00	2.47	1.00
The Barrett Company, New York, New York.—			
Arcadian Sulphate of Ammonia.....	.....	20.75	.....
Bryan Cotton Oil and Fertilizer Company, Bryan, Texas.—			
Star Brand Cotton and Corn Fertilizer.....	11.50	1.80	.....
Star Brand Phospho Special Fertilizer.....	11.00	2.00	.....
Star Brand Potato Fertilizer.....	8.00	3.50	.....
Star Brand 16 Per Cent Acid Phosphate.....	16.00	.....	.....

*Total Phosphoric Acid.

Table 4.—Registration of commercial fertilizers, season 1922-1923.

Manufacturer, Place of Business and Brand.	Phosphoric Acid— Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.
Charles A. R. Campbell, M. D., San Antonio, Texas.—			
Bat Roost Guano.....	4.00	10.00	.71
Commercial Fertilizer Company, North Little Rock, Ark.—			
Commercial Brand Acid Phosphate.....	16.00		
Commercial Brand All Crop Fertilizer.....	9.00	1.65	2.00
Commercial Brand Arkahoma Special.....	9.00	1.65	2.00
Commercial Brand, Arkansas Complete.....	10.00	1.65	1.50
Commercial Brand, Arkansas Standard.....	10.00	1.65	1.00
Commercial Brand Blood and Bone Fertilizer.....	11.00	1.50	1.50
Commercial Brand Blood, Bone and Potash.....	12.00	2.00	1.50
Commercial Brand 'Bove All Acid Phosphate.....	18.00		
Commercial Brand 'Bove All Complete.....	9.00	7.00	5.00
Commercial Brand 'Bove All Cotton Grower.....	10.00	3.00	4.00
Commercial Brand Crop Getter.....	12.00	4.00	4.00
Commercial Brand Early Boll.....	10.00	3.00	3.00
Commercial Brand Early Harvest.....	12.00	1.65	2.00
Commercial Brand Early Potato and Truck.....	8.00	2.50	4.00
Commercial Brand Economy.....	10.00	3.00	2.00
Commercial Brand Farmers Choice.....	10.00	4.00	4.00
Commercial Brand High Grade Truck Fertilizer.....	8.00	3.20	6.00
Commercial Brand Kainit.....			14.00
Commercial Brand Kali Superphosphate.....	11.00		3.00
Commercial Brand Muriate of Potash.....			50.00
Commercial Brand Nitrate of Soda.....		15.60	
Commercial Brand Prize Winner.....	10.00	2.50	3.00
Commercial Brand Queen of the South.....	10.00	3.00	
Commercial Brand Southern King.....	12.00	2.00	2.00
Commercial Brand Southern Special.....	9.00	3.00	3.00
Commercial Brand Special Cotton Grower.....	10.00	1.65	2.00
Commercial Brand Vegetable Fertilizer.....	7.50	2.00	3.00
The Cudahy Packing Company, Chicago, Ill.—			
Blue Ribbon Fertilizer (Half and Half) 1-1-2-20.....	13.00	1.23	
Blue Ribbon Fertilizer (Steamed Bone Meal).....	*24.00	2.47	
Douglas Fertilizer Company, Little Rock, Ark.—			
4 Brand Acid Phosphate.....	16.00		
4 Brand Arkahoma Special.....	9.00	1.65	2.00
4 Brand Blood and Bone Fertilizer.....	11.00	1.50	1.50
4 Brand Blood, Bone and Potash.....	12.00	2.00	1.50
4 Brand 'Bove All Acid Phosphate.....	18.00		
4 Brand 'Bove All Complete.....	9.00	7.00	5.00
4 Brand Complete.....	10.00	3.00	4.00
4 Brand Cotton Grower.....	9.00	1.65	2.00
4 Brand Crop Getter.....	12.00	4.00	4.00
4 Brand Douglass Complete.....	10.00	1.65	1.00
4 Brand Douglass Preferred.....	10.00	3.00	
4 Brand Douglass Superior Fertilizer.....	10.00	1.65	2.00
4 Brand Douglass Vegetable Fertilizer.....	7.50	2.00	3.00
4 Brand Early Boll.....	10.00	3.00	3.00
4 Brand Early Harvest.....	12.00	1.65	2.00
4 Brand Early Potato and Truck.....	8.00	2.50	4.00
4 Brand Economy.....	10.00	3.00	2.00
4 Brand Farmers Choice.....	10.00	4.00	4.00
4 Brand High Grade Truck Fertilizer.....	8.00	3.20	6.00
4 Brand Prize Winner.....	10.00	2.50	3.00
4 Brand Phosphate and Potash.....	11.00		3.00
4 Brand Southern King.....	12.00	2.00	2.00
4 Brand Southern Special.....	9.00	3.00	3.00
4 Brand Southern Standard.....	10.00	1.65	1.50
Earp-Thomas Cultures Corporation, New York, New York.—			
Stimulant Tablets.....	11.71	11.00	15.00
Fidelity Chemical Corporation, Houston, Texas.—			
Fidelity Ammoniated Superphosphate with Potash Fertilizer.....	10.00	1.65	1.00
Fidelity Cotton Special Fertilizer.....	10.00	1.65	2.00
Fidelity Cotton Special No. 2.....	10.00	1.65	1.50
Fidelity Cotton Standard Fertilizer.....	8.00	2.06	1.50
Fidelity Fall Special Fertilizer.....	6.00	2.47	4.26
Fidelity 14 Per Cent Acid Phosphate.....	14.00		
Fidelity Kainit.....			12.00
Fidelity Manure Salts.....			20.00

*Total Phosphoric Acid.

Table 4.—Registration of commercial fertilizers, season 1922-1923.

Manufacturer, Place of Business and Brand.	Phosphoric Acid— Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.
Fidelity Chemical Corporation, Houston, Texas—Cont.			
Fidelity Nitrate of Soda.....		15.00	.....
Fidelity Non-Potassic Cotton Grower Fertilizer.....	10.00	2.00	.....
Fidelity Peerless Trucker Fertilizer.....	8.00	2.47	5.00
Fidelity Potato Special Fertilizer.....	7.00	2.06	3.00
Fidelity Regal Compound Fertilizer.....	10.00	.....	4.00
Fidelity Rice Planter Fertilizer.....	12.00	.....	2.00
Fidelity 16 Per Cent Acid Phosphate.....	16.00	.....	.....
Fidelity Strawberry Special Fertilizer.....	6.00	2.47	5.00
Fidelity Sugarland Trucker Fertilizer.....	8.00	2.47	6.00
Fidelity Tomato Special Fertilizer.....	10.00	2.47	1.50
Fidelity Tomato Special No. 2 Fertilizer.....	8.00	3.30	5.00
Fidelity Trona Potash.....			58.00
Ford Motor Company, Detroit, Mich.—			
Ford Ammonium Sulphate.....		20.80	.....
Gate City Fertilizer Company, Texarkana, Ark.—			
Red Ball Acid Phosphate.....	16.00	.....	.....
Red Ball Ammoniated Superphosphate.....	10.00	3.00	.....
Red Ball Arkahoma Special.....	9.00	1.65	2.00
Red Ball Blood and Bone.....	11.00	1.50	1.50
Red Ball Blood, Bone and Potash.....	12.00	2.00	1.50
Red Ball 'Bove All*Acid Phosphate.....	18.00	.....	.....
Red Ball 'Bove All Complete.....	9.00	7.00	5.00
Red Ball Complete Fertilizer.....	10.00	1.65	1.00
Red Ball Cotton Grower.....	9.00	1.65	2.00
Red Ball Crop Getter.....	12.00	4.00	4.00
Red Ball Diversified Cropper's.....	10.00	1.65	2.00
Red Ball Early Boll.....	10.00	3.00	3.00
Red Ball Early Harvest.....	12.00	1.65	2.00
Red Ball Early Potato and Truck.....	8.00	2.50	4.00
Red Ball Economy.....	10.00	3.00	2.00
Red Ball Farmers' Choice.....	10.00	4.00	4.00
Red Ball Four States Standard.....	11.00	1.65	.....
Red Ball High Grade Truck Fertilizer.....	8.00	3.20	6.00
Red Ball Kainit.....			14.00
Red Ball Muriate of Potash.....			50.00
Red Ball Nitrate of Soda.....		15.60	.....
Red Ball Old Reliable Fertilizer.....	10.00	3.00	4.00
Red Ball Old Time Vegetable Grower.....	7.50	2.00	3.00
Red Ball Phosphate and Potash.....	11.00	.....	3.00
Red Ball Prize Winner.....	10.00	2.50	3.00
Red Ball Soluble Bone Fertilizer.....	10.00	1.65	.....
Red Ball Southern King.....	12.00	2.00	2.00
Red Ball Southern Special.....	9.00	3.00	3.00
Red Ball Southern Standard.....	10.00	1.65	1.50
Red Ball Special Mixture.....	8.00	4.00	.....
J. Hopkins Healy, San Antonio, Texas.—			
Healy Guano Fertilizer.....		3.12	.....
Henderson Cotton Oil and Gin Company Henderson Texas.—			
Henderson Acid Phosphate.....	16.00	.....	.....
Henderson Half and Half.....	8.70	3.50	.....
Henderson Staple.....	10.00	2.00	.....
Hope Fertilizer Company, Hope, Ark.—			
Cotto Phos.....	8.50	3.30	1.00
Foster's Favorite Formula.....	8.00	4.00	6.00
Hope Fertilizer No. 10 Without Potash.....	11.00	1.65	.....
Hope Fertilizer No. 14.....	8.00	3.00	4.00
Hope Fertilizer No. 15.....	10.00	.....	2.00
Hope Fertilizer No. 16.....	10.00	.....	4.00
Hope Fertilizer No. 36.....	9.00	3.00	3.00
Hope Fertilizer No. 40.....	10.00	3.00	3.00
Hope Fertilizer No. 44.....	12.00	2.00	2.00
Hope Fertilizer No. 45.....	8.00	4.00	4.00
Hope Fertilizer No. 46.....	12.00	3.00	3.00
Hope Fertilizer No. 47.....	10.00	1.65	3.00
Hope Fertilizer No. 50.....	10.00	4.00	3.00

Table 4.—Registration of commercial fertilizers, season 1922-1923.

Manufacturer, Place of Business and Brand.	Phosphoric Acid Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.
Hope Fertilizer Company Hope, Arkansas—Continued.			
Hope Fertilizer No. 51	10.00	4.00	4.00
Hope Fertilizer No. 55	10.00	3.00	2.00
Our Cotton Grower	10.00	1.65	1.00
Our Early Fruiter	10.00	1.00	1.00
Our Extra Cotton Grower	10.00	1.65	2.00
Our Potato Grower	8.00	2.00	6.00
Six Six Two	6.00	6.00	2.00
Stork Brand Acid Phosphate 18 Per Cent.	18.00		
Stork Brand Kainit.			12.50
Stork Brand Muriate of Potash			50.00
Stork Brand Nitrate of Soda		15.00	
Stork Brand 16 Per Cent Acid Phosphate	16.00		
Trucker No. 25	8.00	3.00	3.00
Houston Packing Company, Houston, Texas.—			
Blood and Bone	*14.50	5.60	
Ground Raw Bone	23.00	3.70	
Steam Bone Meal	27.00	2.00	
Jefferson Oil Company, Jefferson, Texas.—			
Jefferson Acid Phosphate	16.00		
Kelly, Weber and Company, Lts., Lake Charles, La.—			
Special Rice Growers' Fertilizer	10.00		4.00
Longview Cotton Oil Company, Longview, Texas.—			
Longview Acid Phosphate	16.00		
Longview Corn and Potato Special	8.00	3.00	3.00
Longview Cotton Fertilizer	12.00	1.65	1.50
Longview Supreme Cotton Grower	11.00	2.00	2.00
John Marbach, Bracken and Sabinal, Texas.—			
Bat Guano	3.50	9.00	
Marshall Cotton Oil Company, Marshall, Texas.—			
Farmers' Potash Compound	12.00		4.00
Harrison County Special	12.00	1.65	1.00
Marshall Acid Phosphate	16.00		
Marshall Corn and Potato Special	8.00	3.00	3.00
Marshall Cotton Grower Special	11.00	2.00	2.00
Marshall Kainit.			14.00
Marshall Peerless Mixture	8.00	4.00	2.00
Nitrate of Soda		15.00	
Red River Special	10.00	4.00	4.00
Supreme Acid Phosphate	18.00		
Meridian Fertilizer Factory, Shreveport, La.—			
Kainit			14.00
Kainit			12.00
Meridian Ammoniated Bone and Potash	12.00	1.65	2.00
Meridian Blood and Bone	10.00	1.65	1.00
Meridian Caddo Cotton	9.00	2.00	1.00
Meridian Caddo Queen	12.00	1.65	
Meridian Caddo Special	6.00	2.50	7.00
Meridian Caddo Vegetable	8.00	3.30	4.00
Meridian Cane Special No. 1	4.00	5.35	
Meridian Cantaloupe Special	8.00	2.50	1.00
Meridian Corn Club Special	7.50	2.50	1.00
Meridian Corn Grower	7.50	2.88	1.00
Meridian Cotton and Corn Special	9.00	2.50	3.00
Meridian Easy Driller Acid Phosphate	16.00		
Meridian Farm Special	10.00	1.65	
Meridian Golden Harvester	10.00	3.30	4.00
Meridian Golden West	10.00	2.00	2.00
Meridian Great Western	12.00	1.65	2.00
Meridian Ham Bone Guano	10.00	1.65	1.50
Meridian Home Mixture	10.00	1.65	1.00
Meridian Improved Meal Compound	8.50	2.88	
Meridian Meal Mixture	10.00	1.65	1.00
Meridian Melon Grower	8.50	2.50	
Meridian Nitrated Bone and Potash	10.00	1.65	2.00
Meridian Orchard Mixture	8.00	5.00	3.00

*Total Phosphoric Acid.

Table 4.—Registration of commercial fertilizers, season 1922-1923.

Manufacturer, Place of Business and Brand.	Phosphoric Acid— Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.
Meridian Fertilizer Factory, Shreveport, La.—Continued.			
Meridian Perfection Acid Phosphate.....	18.00		
Meridian Perfection Blood Compound.....	10.00	2.50	3.00
Meridian Perfection Cotton and Corn.....	12.00	2.50	
Meridian Perfection Cotton Formulas.....	11.00	2.50	
Meridian Perfection Meal Compound.....	10.00	2.50	3.00
Meridian Perfection Potash Formula.....	12.00		4.00
Meridian Potash Compound.....	10.00		4.00
Meridian Potash Mixture.....	12.00		2.00
Meridian Potato Special.....	8.00	3.30	2.00
Meridian Prolific Wonder.....	12.00	2.00	2.00
Meridian Rawbone Mixture.....	10.00	1.65	1.00
Meridian Rice Grower.....	10.00		2.00
Meridian Soluble Guano.....	10.00	1.65	1.50
Meridian Southern Acid Phosphate.....	14.00		
Meridian Southern Standard.....	10.00	3.00	2.00
Meridian Special Cotton Formula.....	10.00	1.65	
Meridian Special Meal Compound.....	12.00	2.00	
Meridian Special Mixture.....	14.00	2.00	
Meridian Special Top Dressing.....	5.00	4.25	2.00
Meridian Special Truck Formula.....	6.00	3.00	4.00
Meridian Standard Cotton and Corn.....	9.00	2.00	1.00
Meridian Star.....	10.00	1.65	1.00
Tankage Compound.....	8.50	2.50	
Meridian Texas Special.....	10.00	2.72	
Meridian Tomato Special.....	10.00	2.50	1.00
Meridian Truck Compound.....	8.00	4.00	5.00
Meridian Truck Grower.....	8.00	3.00	3.00
Meridian Truck Producer.....	9.00	2.00	4.00
Meridian Truckers' Special.....	8.00	4.00	6.00
Meridian Union Special Acid Phosphate.....	16.00		
Meridian Vegetable Grower.....	8.00	2.50	5.00
Meridian Weevil Beater Guano.....	10.00	1.65	1.00
Meridian 12-4-4.....	12.00	4.00	4.00
Meridian 10-4-0.....	10.00	4.00	
Meridian 10-3-3.....	10.00	3.00	3.00
Meridian 9-2-6.....	9.00	2.00	6.00
Muriate of Potash.....			50.00
Nitrate of Soda.....		15.00	
H. K. Mulford Company, Philadelphia, U. S. A.—			
Mulford Cultures for Legumes.....			
Nitrate Agencies Company, New Orleans, La.—			
Nitrate of Soda.....		15.00	
Palestine Oil and Manufacturing Company, Palestine, Texas.—			
Acid Phosphate.....	14.00		
Acid Phosphate.....	16.00		
Cotton Seed Meal Fertilizer.....	1.00	6.88	1.00
Garden Special Fertilizer.....	8.00	2.00	4.00
Palestine Corn Maker.....	7.00	4.00	2.00
Palestine Corn and Vegetable Fertilizer.....	8.00	3.50	1.00
Palestine Cotton Grower.....	11.00	1.65	1.00
Palestine Cotton Producer.....	10.00	1.65	1.00
Palestine Cotton Queen.....	10.00	2.50	3.00
Palestine Cotton Wonder.....	10.00	1.65	2.00
Palestine Kainit.....			15.00
Palestine Machac Special.....	3.00	9.00	
Palestine Nitrate of Soda.....		15.00	
Palestine Red Land Fertilizer.....	11.00	2.00	2.00
Palestine Sandy Land Fertilizer.....	10.00	3.00	3.00
Palestine Tomato Special.....	8.00	4.00	4.00
Phillips Special.....	10.00	2.00	2.00
Sandy Land Vegetable Fertilizer.....	8.00	2.75	2.00
Water Melon Special.....	9.00	5.00	6.00
Pate Brothers, Sulphur Springs, Texas.—			
Acid Phosphate.....	16.00		
Pate's Cotton and Corn.....	10.00	2.00	1.50
Pate's Cotton Grower.....	10.00	1.65	2.00
Pate's Farm Mixture.....	11.00	1.65	
Pate's Heavy Fruiter.....	10.00	2.00	1.50
Pate's Home Mixture.....	10.00	1.65	1.00

Table 4.—Registration of commercial fertilizers, season 1922-1923.

Manufacturer, Place of Business and Brand.	Phosphoric Acid— Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.
Pate Brothers, Sulphur Spains, Texas—Continued.			
Pate's Meal and Phosphate.....	11.00	2.00	.....
Pate's New Perfection.....	8.00	2.47	3.00
Pate's Perfection.....	8.00	2.00	2.00
Pate's Special.....	8.00	3.00	.....
Pate's Truck Grower.....	9.00	3.00	3.00
Pelican Fertilizer Works, Shreveport, La.—			
Kainit.....	.....	.....	12.00
Muriate of Potash.....	.....	.....	50.00
Nitrate of Soda.....	.....	15.00	.....
Pelican Blood and Bone.....	10.00	1.65	1.00
Pelican Corn Grower.....	8.00	2.50	1.00
Pelican Cotton and Corn.....	8.00	2.00	2.00
Pelican Cotton Grower.....	10.00	1.65	.....
Pelican Cotton Producer.....	12.00	1.65	.....
Pelican Cotton Special.....	10.00	1.65	2.00
Pelican Favorite Cotton Grower.....	9.00	2.00	1.0
Pelican Fish Bone Fertilizer.....	10.00	1.65	2.00
Pelican Fish Formula.....	10.00	1.65	1.00
Pelican Golden West.....	10.00	1.65	1.00
Pelican High Grade.....	10.00	3.00	3.00
Pelican Meal Compound.....	10.00	1.65	1.00
Pelican Perfection Formula.....	10.00	2.50	4.00
Pelican Potash and Bone.....	12.00	.....	2.00
Pelican Potash Mixture.....	12.00	.....	2.00
Pelican Potash and Superphosphate.....	10.00	.....	4.00
Pelican Potato Grower.....	8.00	3.30	.....
Pelican Potato Special.....	8.00	3.30	2.00
Pelican Rice Formula.....	10.00	.....	2.00
Pelican Rice Phosphate.....	16.00	.....	.....
Pelican Special Acid Phosphate.....	16.00	.....	.....
Pelican Special Formula.....	10.00	1.65	.....
Pelican Southern Compound.....	10.00	2.00	2.00
Pelican Standard Grade Phosphate.....	14.00	.....	.....
Pelican Tomato Special.....	10.00	2.50	1.00
Pelican Truck Grower.....	10.00	2.50	.....
Pelican Vegetable Grower.....	8.00	2.50	4.00
Planters Fertilizer and Chemical Company, Houston, Fort Worth, Texas, New Orleans, La.—			
Nitrate of Soda.....	.....	14.81	.....
Planters' Plow Brand Ammoniated Superphosphate.....	10.00	1.65	2.00
Planters' Plow Brand Corn Fertilizer.....	8.00	2.47	2.00
Planters' Plow Brand Cotton Fertilizer No. 1020.....	10.00	1.65	.....
Planters' Plow Brand Crop Grower.....	12.00	1.65	.....
Planters' Plow Brand 18 Per Cent Acid Phosphate.....	18.00	.....	.....
Planters' Plow Brand Farmers' Mixture.....	10.00	1.65	1.00
Planters' Plow Brand Fertilizer No. 756.....	7.00	4.11	6.00
Planters' Plow Brand Fertilizer No. 846.....	8.00	3.29	6.00
Planters' Plow Brand Fertilizer No. 1024.....	10.00	1.65	4.00
Planters' Plow Brand Fertilizer No. 1033.....	10.00	2.47	3.00
Planters' Plow Brand Fertilizer No. 1035.....	10.00	2.47	5.00
Planters' Plow Brand Fertilizer No. 1044.....	10.00	3.30	4.00
Planters' Plow Brand Fertilizer No. 1120.....	11.00	1.65	.....
Planters' Plow Brand Fertilizer No. 1244.....	12.00	3.30	4.00
Planters' Plow Brand 14 Per Cent Acid Phosphate.....	14.00	.....	.....
Planters' Plow Brand Imperial Cotton Mixture.....	8.00	1.65	2.00
Planters' Plow Brand Imperial Grain Grower.....	8.00	1.65	2.00
Planters' Plow Brand Imperial Rice Mixture.....	8.00	1.65	2.00
Planters' Plow Brand Imperial Truck Mixture.....	8.00	2.47	3.00
Planters' Plow Brand Kainit.....	.....	.....	12.40
Planters' Plow Brand Magic Strawberry Producer.....	10.00	2.47	4.00
Planters' Plow Brand Old Standard Superphosphate.....	9.50	1.65	1.50
Planters' Plow Brand Phosphate and Potash No. 102.....	10.00	.....	2.00
Planters' Plow Brand Phosphate and Potash No. 104.....	10.00	.....	4.00
Planters' Plow Brand Phosphate and Potash No. 122.....	12.00	.....	2.00
Planters' Plow Brand Phosphate and Potash No. 124.....	12.00	.....	4.00
Planters' Plow Brand Rice Grower No. 1020.....	10.00	1.65	.....
Planters' Plow Brand 16 Per Cent Acid Phosphate.....	16.00	.....	.....
Planters' Plow Brand Special Truckee.....	10.00	2.47	.....
Planters' Plow Brand Strawberry Special No. 1038.....	10.00	2.47	8.00
Planters' Plow Brand Sulphate of Ammonia.....	.....	20.58	.....
Planters' Plow Brand Syrup Cane Grower.....	7.00	4.94	.....

Table 4.—Registration of commercial fertilizers, season 1922-1923.

Manufacturer, Place of Business and Brand.	Phosphoric Acid Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.
Planters Fertilizer and Chemical Company, Houston, Fort Worth, Texas, New Orleans, La.—Continued.—			
Planters' Plow Brand Texas Vegetable Grower	7.00	2.47	3.50
Planters' Raw Bone Meal	*22.00	3.70	.....
Louis Rosenthal Packing Corporation, Galveston, Texas.—			
Blood and Bone Tankage	*9.00	7.25	.....
Shreveport Fertilizer Works, Shreveport, La.—			
Lion Acid Phosphate and Limestone	16.00	.....	.....
Lion Blood and Bone	10.00	1.65	1.00
Lion Corn Food	8.00	2.50	1.00
Lion Cotton Seed Meal Mixture	10.00	1.65	1.00
Lion Georgia Special	8.00	3.00	3.00
Lion Gold Coin Guano	10.00	1.65	2.00
Lion Meal Formula	10.00	1.65	.....
Lion Potato Producer	8.00	4.00	4.00
Lion Prolific Fruiter	9.00	2.00	1.00
Lion Success Mixture	11.00	1.65	.....
Lion Superfine Acid Phosphate	18.00	.....	.....
Lion Superfine Mixture	10.00	3.00	3.00
Lion Tomato Special	9.00	2.50	1.00
Lion Truck Grower	8.00	2.00	4.00
Lion Veribest	11.00	3.00	2.00
Lion Xtragood Acid Phosphate	16.00	.....	.....
Nitrate of Soda .....	.....	14.50	.....
Stauffer Chemical Company of Texas, Houston, Texas.—			
Toro Brand Specially Prepared Agricultural Compound— Guaranteed 80 Per Cent Elemental Sulphur and 1 Per Cent Combined Sulphur .....	.....	.....	.....
Swift and Company Fertilizer Works, Harvey and Shreveport, La.—			
Atlantic Blood and Bone	12.00	1.65	.....
Atlantic Nitrate of Soda .....	.....	14.81	.....
Atlantic Tankage Mixture	9.00	3.29	.....
Atlantic 10-2.47-3	10.00	2.47	3.00
Atlantic 10-2.47-0	10.00	2.47	.....
Atlantic 10-1.56-2	10.00	1.65	2.00
Swift's Acid Phosphate Fertilizer 14 Per Cent	14.00	.....	.....
Swift's Ammoniated Raw Bone Superphosphate	9.50	1.65	1.50
Swift's Bone Meal Fertilizer	*29.00	1.86	.....
Swift's Blood, Bone and Potash	9.50	3.29	7.00
Swift's Eagle	10.00	1.65	2.00
Swift's High Grade Acid Phosphate Fertilizer, 18 Per Cent	18.00	.....	.....
Swift's High Grade Acid Phosphate Fertilizer, 16 Per Cent	16.00	.....	.....
Swift's High Grade Cane Grower	6.00	6.58	.....
Swift's Kainit .....	.....	.....	12.40
Swift's Laredo Mixture	8.00	4.94	.....
Swift's Manure Salts .....	.....	.....	20.00
Swift's Muriate of Potash .....	.....	.....	50.00
Swift's Nitrate of Soda .....	.....	14.81	.....
Swift's Onion Grower	7.00	3.70	3.00
Swift's Palmetto	8.00	2.47	3.00
Swift's Raw Bone Meal	*22.90	3.70	.....
Swift's Red Steer 10-4-4	10.00	4.00	4.00
Swift's Red Steer 10-2-2	10.00	2.00	2.00
Swift's Red Steer 8-4-5	8.00	4.00	5.00
Swift's Red Steer 8-4-4	8.00	4.00	4.00
Swift's Red Steer 10-3.29-4	10.00	3.29	4.00
Swift's Red Steer 10-3-3	10.00	3.00	3.00
Swift's Red Steer	10.00	2.47	3.00
Swift's Red Steer Cotton Grower	12.00	1.65	2.00
Swift's Red Steer for Onions	7.00	3.70	.....
Swift's Red Steer for Rice	10.00	.....	2.00
Swift's Red Steer for Strawberries	10.00	2.47	5.00
Swift's Red Steer for Tomatoes, 10-2.47-0	10.00	2.47	.....
Swift's Red Steer for Truck	8.00	3.29	.....
Swift's Red Steer Lawn Special	7.00	4.94	2.00
Swift's Red Steer Tomato Grower	7.00	4.10	5.00

*Total Phosphoric Acid.

Table 4.—Registration of commercial fertilizers, season 1922-1923.

Manufacturer, Place of Business and Brand.	Phosphoric Acid Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.
Swift and Company Fertilizer Works, Harvey and Shreveport, La.—			
Continued.—			
Swift's Red Steer Tomato Special.....	10.00	2.47	1.00
Swift's Red Steer Truck Grower.....	8.00	3.29	4.00
Swift's Red Steer Valley Special.....	8.00	2.47	8.00
Swift's Rio Grande Special.....	8.00	.....	6.00
Swift's Special Mixture.....	10.00	1.65	.....
Swift's Special Tankage Fertilizer.....	9.00	3.29	3.00
Swift's Standard Tankage Mixture.....	6.00	3.29	3.00
Sulphate of Ammonia.....	.....	20.56	.....
Swift's Sulphate of Potash.....	.....	.....	49.00
Swift's Tankage Mixture.....	9.00	3.29	.....
Swift's Trucker's Favorite.....	8.00	2.47	1.00
Swift's 24-2.47-0 Raw Bone Meal.....	*24.00	2.47	.....
Swift's Vegetable Grower.....	8.00	3.29	2.00
Swift's 12-1.65-0.....	12.00	1.65	.....
Swift's 12-0-4.....	12.00	.....	4.00
Swift's 11-1.65-0.....	11.00	1.65	.....
Swift's 10-3.29-0.....	10.00	3.29	.....
Swift's 10-2.47-2.....	10.00	2.47	2.00
Swift's 10-1.65-1.....	10.00	1.65	1.00
Swift's 10-0-4.....	10.00	.....	4.00
Swift's 9-1.65-2.....	9.00	1.65	2.00
Tennessee Coal, Iron and Railroad Company, Birmingham, Ala.—			
18 Per Cent Duplex Basic Phosphate.....	*18.00	.....	.....
Texas Chemical Company, Houston, Texas.—			
T. C. C. Brand Raw Bone Meal.....	*22.18	3.70	.....
Texas Sulphur Company, Inc., Orla, Texas.—			
Agricultural Sulphur Compound Sulphur 5.00%, Sulphur Trioxide 20%, Sulphur Trioxide Uncombined 0.5%.....	.....	.....	.....
Toyah Valley Sulphur Company, New Orleans, La.—			
Toyah Valley Agricultural Sulphur Compound Sulphur 5%, Sulphur Trioxide 20%, Sulphur Trioxide Uncombined 0.5%.....	.....	.....	.....
Van Zandt Cotton Oil Company, Wills Point, Texas.—			
Semper Fidelis Phospho Meal Fertilizer.....	9.00	3.50	1.00
Semper Royal Fertilizer.....	10.00	1.65	.....
Semper Fidelis Special Fertilizer.....	11.00	1.65	1.00
Semper Fidelis 16 Per Cent Acid Phosphate.....	16.00	.....	.....
Virginia-Carolina Chemical Company of Delaware, Shreveport, La.—			
BBB Beef, Blood and Bone.....	10.00	1.65	1.00
Capital Meal Formula.....	10.00	1.65	.....
Eureka Complete Fertilizer.....	10.00	1.65	4.00
Georgia State Grange.....	10.00	1.65	1.00
IXL Ammoniated Fertilizer.....	10.00	1.65	.....
Kainit.....	.....	.....	12.00
Mobile Double Eagle Guano.....	10.00	1.65	1.50
Mobile Raw Bone Ammoniated Superphosphate.....	10.00	1.65	1.50
Mobile Soluble Guano.....	12.00	1.65	.....
Muriate of Potash.....	.....	.....	48.00
Nitrate of Soda.....	.....	14.81	.....
Royal Blood, Bone and Potash.....	10.00	1.65	1.50
Royal Compound.....	10.00	.....	2.00
Royal Cotton Boll Guano.....	8.00	1.65	2.00
Royal Fruit Grower.....	8.00	2.47	5.00
Royal High Grade Guano.....	10.00	1.65	2.00
Royal Potash Compound.....	10.00	.....	4.00
Royal Tomato Formula.....	10.00	2.47	1.00
Royal Vegetable Fertilizer.....	8.00	2.47	4.00
Scott's Gossypium Phospho.....	10.00	1.65	1.50
Scott's Gossypium Phospho Special.....	10.00	1.65	2.00
Scott's High Grade Acid Phosphate.....	14.00	.....	.....
Scott's Meal Formula.....	11.00	1.65	.....
Scott's Potasso Phospho.....	12.00	.....	2.00
Scott's Soluble Guano.....	11.50	1.65	.....
Scott's State Standard Guano.....	8.00	1.65	2.00
Sulphate of Potash.....	.....	.....	48.00
Tip Top Nitrogen Compound.....	2.00	13.16	.....
V-C Ammoniated Fertilizer.....	11.50	1.65	.....

*Total Phosphoric Acid.

Table 4.—Registration of commercial fertilizers, season 1922-1923.

Manufacturer, Place of Business and Brand.	Phosphoric Acid— Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.
Virginia-Carolina Chemical Company of Delaware, Shreveport, La.—			
Continued.—			
V. C. C. Co.'s 18 Per Cent Acid Phosphate.....	18.00	.....	.....
V. C. C. Co.'s 16 Per Cent Acid Phosphate.....	16.00	.....	.....
V. C. C. Co.'s Truck Grower.....	8.00	2.06	6.00
V. C. High Grade Champion Compound.....	9.00	3.00	3.00
V. C. High Grade Dixie Special.....	7.00	3.00	1.00
V. C. Grade Guano.....	10.00	1.65	2.00
V. C. High Grade Potash Compound.....	12.00	.....	4.00
V. C. High Grade Top Dresser.....	4.00	6.17	2.50
V. C. Plant Food (for Vegetables, Lawns and Flowers).....	8.00	4.92	3.00
V. C. Rice Special.....	10.00	1.65	2.00
V. C. Soluble Guano.....	12.00	1.65	.....
V. C. Special Fertilizer.....	11.00	2.47	.....
V. C. Special 8-3-3 Fertilizer.....	8.00	3.00	3.00
V. C. Special 8-2-2 Fertilizer.....	8.00	2.00	2.00
V. C. Special 9-2-2 Fertilizer.....	9.00	2.00	2.00
V. C. Special 10-4-4 Fertilizer.....	10.00	4.00	4.00
V. C. Special 10-3-3 Fertilizer.....	10.00	3.00	3.00
V. C. Special 10-2.50-3 Fertilizer.....	10.00	2.50	3.00
V. C. Special 10-2-2 Fertilizer.....	10.00	2.00	2.00
V. C. Tomato Special.....	10.00	2.47	1.50
V. C. XXX Special.....	8.00	2.47	1.00
Victor Ammoniated Fertilizer.....	9.00	2.47	.....
Victor Soluble Guano.....	11.00	1.65	.....
V. C. C. Fruit and Truck Special.....	6.00	3.29	8.00