

TEXAS AGRICULTURAL EXPERIMENT STATION

BULLETIN NO. 176

JULY, 1915

DIVISION OF CHEMISTRY

A. & M. COLLEGE
OF
TEXAS

Commercial Fertilizers in 1914-15



POSTOFFICE:
COLLEGE STATION, BRAZOS COUNTY, TEXAS

VON BOECKMANN-JONES CO., PRINTERS, AUSTIN, TEXAS

1915

[Blank Page in Original Bulletin]

TEXAS AGRICULTURAL EXPERIMENT STATION

BULLETIN NO. 176

JULY, 1915

DIVISION OF CHEMISTRY

Commercial Fertilizers in 1914-15

BY

G. S. FRAPS, Ph. D.,
CHEMIST IN CHARGE; STATE CHEMIST



POSTOFFICE:
COLLEGE STATION, BRAZOS COUNTY, TEXAS



VON BOECKMANN-JONES CO., PRINTERS, AUSTIN, TEXAS

1915

AGRICULTURAL AND MECHANICAL COLLEGE OF TEXAS

W. B. BIZZELL, A. M., D. C. L., *President*

TEXAS AGRICULTURAL EXPERIMENT STATION BOARD OF DIRECTORS

JOHN I. GUION, <i>President</i> , Ballinger.....	Term expires 1919
L. J. HART, San Antonio.....	Term expires 1919
E. H. ASTIN, Bryan.....	Term expires 1919
J. S. WILLIAMS, Paris.....	Term expires 1917
T. E. BATTLE, Marlin.....	Term expires 1917
W. C. BREIHAN, Bartlett.....	Term expires 1917
J. F. KUBENA, Fayetteville.....	Term expires 1921
W. A. MILLER, JR., Amarillo.....	Term expires 1921
A. B. DAVIDSON, Cuero.....	Term expires 1921

MAIN STATION COMMITTEE, BOARD OF DIRECTORS

L. J. HART, *Chairman* J. S. WILLIAMS W. A. MILLER, JR.

GOVERNING BOARD, STATE SUBSTATIONS

P. L. DOWNS, <i>President</i> , Temple.....	Term expires 1919
CHARLES ROGAN, <i>Vice President</i> , Austin.....	Term expires 1917
W. P. HOBBY, Beaumont.....	Term expires 1917
J. E. BOOG-SCOTT, Coleman.....	Term expires 1921

STATION STAFF†

ADMINISTRATION

B. YOUNGBLOOD, M. S., *Director*
A. B. CONNER, B. S., *Assistant Director*
CHAS. A. FELKER, *Chief Clerk*
A. S. WARE, *Secretary*

DIVISION OF VETERINARY SCIENCE

M. FRANCIS, D. V. S., *Veterinarian in Charge*
H. SCHMIDT, D. V. M., *Assistant Veterinarian*

DIVISION OF CHEMISTRY

G. S. FRAPS, Ph. D., *Chemist in Charge; State Chemist*
J. W. CHEWNING, B. S., *Assistant Chemist*
R. H. RIDGELL, B. S., *Assistant Chemist*
FRANK HODGES, B. S., *Assistant Chemist*

DIVISION OF HORTICULTURE

H. NESS, M. S., *Horticulturist in Charge*
W. S. HOTCHKISS, *Horticulturist*

DIVISION OF ANIMAL HUSBANDRY

J. C. BURNS, B. S., *Animal Husbandman, Feeding Investigations*
J. M. JONES, M. S., *Animal Husbandman, Breeding Investigations*

DIVISION OF ENTOMOLOGY

WILMON NEWELL, M. S., *Entomologist in Charge; State Entomologist*
F. B. PADDOCK, B. S. E., *Entomologist*

DIVISION OF AGRONOMY

A. B. CONNER, B. S., *Agronomist in Charge*
A. H. LEIDIGH, B. S., *Agronomist in Charge of Soil Improvement*
H. H. JOHNSON, B. S., *Assistant Agronomist, Assistant Agronomist*

DIVISION OF PLANT PATHOLOGY AND PHYSIOLOGY

F. H. BLODGETT, Ph. D., *Plant Pathologist and Physiologist in Charge*

*DIVISION OF FARM MANAGEMENT

REX E. WILLARD, M. S., *Farm Management Expert in Charge.*

DIVISION OF POULTRY HUSBANDRY

T. J. CONWAY, B. S., *Poultryman in Charge*

DIVISION OF FEED CONTROL SERVICE

JAMES SULLIVAN, *Executive Secretary*
CHAS. A. FELKER, *Chief Clerk*
J. H. ROGERS, *Inspector*
W. H. WOOD, *Inspector*
T. H. WOLTERS, *Inspector*
S. D. PEARCE, *Inspector*
J. M. SCHAEDEL, *Inspector*
W. M. WICKES, *Inspector*

SUBSTATION NO. 1: Beeville, Bee County

E. E. BINFORD, B. S., *Superintendent*

SUBSTATION NO. 2: Troup, Smith County

W. S. HOTCHKISS, *Superintendent*

SUBSTATION NO. 3: Angleton, Brazoria County

N. E. WINTERS, B. S., *Superintendent*

SUBSTATION NO. 4: Beaumont, Jefferson County

H. H. LAUDE, B. S., *Superintendent*

SUBSTATION NO. 5: Temple, Bell County

A. K. SHORT, B. S., *Superintendent*

SUBSTATION NO. 6: Denton, Denton County

T. W. BUELL, B. S., *Superintendent*

SUBSTATION NO. 7: Spur, Dickens County

R. E. DICKSON, B. S., *Superintendent*

SUBSTATION NO. 8: Lubbock, Lubbock County

V. L. CORY, B. S., *Superintendent*

SUBSTATION NO. 9: Pecos, Reeves County

J. W. JACKSON, B. S., *Acting Superintendent*

SUBSTATION NO. 10: (Feeding and Breeding Substation) College Station, Brazos County

T. M. REDDELL, *Superintendent*

SUBSTATION NO. 11: Nacogdoches, Nacogdoches County

G. T. McNESS, *Superintendent*
D. T. KILLOUGH, B. S., *Scientific Assistant*

CLERICAL ASSISTANTS

STATION

C. A. CASE, *Stenographer*
F. R. McMAHON, *Stenographer*
E. S. FARRELL, *Stenographer*
C. L. DURST, *Mailing Clerk*

FEED CONTROL SERVICE

DAISY LEE, *Registration Clerk*
WILLIE JOHNSON, *Tag Clerk*
MATTIE THOMAS, *Stenographer*

*In Cooperation with the United States Department of Agriculture.

†As of July 1, 1915.

5
117
E2.2

COMMERCIAL FERTILIZERS IN 1914-15.

G. S. FRAPS, PH. D., STATE CHEMIST; CHEMIST IN CHARGE.

This Bulletin deals with the State control of commercial fertilizers. Information concerning the nature and use of fertilizers is to be found in Bulletin 167, copies of which will be sent free on application.

The quantity of commercial fertilizers sold in Texas for the last several seasons is as follows:

1905-06.....	13,500 tons.
1906-07.....	19,200 tons.
1907-08.....	21,850 tons.
1908-09.....	23,800 tons.
1909-10.....	34,000 tons.
1910-11.....	52,985 tons.
1911-12.....	46,000 tons.
1912-13.....	75,500 tons.
1913-14.....	77,400 tons.
1914-15.....	17,500 tons.

FERTILIZER LAW.

The present fertilizer law went into effect September 1, 1911. The law has proved very satisfactory. Copies of the law, and information how to comply with it will be sent on application.

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, or tag, 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 available in bone or tankage.

FREE ANALYSES.

Fertilizer samples in accordance with the requirements of the law, will be analyzed free of charge. Those who desire a free analysis of a

8 Jan 1921

14139

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.

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 material, or ingredients of fertilizers, sold or offered for sale within the State of Texas, and shall publish his results as he may find." Investigations of this kind have been begun, and the results will be published from time to time as the experiments are completed.

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 of the chemical composition and properties of Texas soils. He is also making 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 the investigations as to the agricultural values of fertilizers required by the Fertilizer Control, for fertilizers vary in their effect upon different soils.

POTASH IN FERTILIZERS.

Potash is now scarce and high, and it is well to consider to what extent it is needed.

Texas soils are, as a general rule, well supplied with potash, and are much more likely to be deficient in phosphoric acid or in nitrogen than they are to be deficient in potash. This fact is clearly established by numerous analyses of soils and pot experiments made at the Texas Experiment Station. In pot experiments the plants are grown in the soil with different fertilizers, and their effects observed upon the growth of the crops.

A number of co-operative fertilizer experiments has 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 two out of three experiments described in Bulletin 138, the potash had no effect. The chances are, therefore, against the potash having any effect if generally used in complete fertilizer on Texas soils.

The quantity of potash in the ordinary corn and cotton fertilizer is so small that it is very doubtful if the quantity is sufficient to be of advantage even where potash is needed. It would be better to increase the quantity of phosphoric acid or nitrogen, in such event. Of course, there are soils and crops on which potash is of advantage. Light sandy soils may be deficient in potash, but it is a question if corn or cotton should be raised at all on such soils, as often the yield is not sufficient.

Tobacco, cabbage, potatoes, onions, and certain other truck crops, grown on light sandy soils, may give favorable returns for potash. On heavier soils they may, or may not, give returns for the potash. A great deal depends upon the possible yield, as the greater the possible yield allowed by soils and climatic conditions (including soil moisture), the greater the possibility of returns for potash.

From these considerations it is evident that 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 fertilizers under all conditions should be discontinued. In the majority of cases the potash is not needed, is supplied by the soil in sufficient quantity, and no returns are secured on the investment. Potash should be used only when it is *known* to be needed for the soil, and the crop to be grown on it, and even then one may not desire to pay the price now *required*. If potash is not *known* to be needed, then the chances are there will be no return on the money expended for it. Texas soils can get on much better without any addition of potash than without phosphoric acid or nitrogen. There has been, in the past, wastes of potash.

HOME MIXING.

It is often possible for consumers of fertilizers to save money by purchasing acid phosphate, cottonseed meal, or other fertilizing ingredients, and make their own mixtures. Information concerning this topic is given in bulletins of the Texas Experiment Station, free on application. (See especially Bulletin 167.)

BULK SALES.

Fertilizer 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 purchase price, may be made by purchasing fertilizer in bulk. For further instructions as to the law concerning bulk sales, address the State Chemist at College Station.

LOW GRADE FERTILIZERS.

Purchasers are advised not to buy low grade fertilizers. The words "Low Grade" appear on the sack. The plant food in such fertilizer usually costs much more per pound than in standard grade or high grade goods, although the price per ton or per sack may be a little lower.

COTTONSEED PRODUCTS.

Cottonseed meal sold for fertilizer purposes comes under the fertilizer law. Cottonseed products 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.

ANALYSES BELOW GUARANTEE.

Whenever any lot of fertilizer is below guarantee 4 per cent or more, 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 consumer.

A number of rebates have been paid under this provision of the law.

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 is 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 growth of stalk and leaves at expense of fruit. Nitrogen is needed by many Texas soils.

Potash is the potash soluble in water. A great many Texas soils contain a sufficient quantity of potash, so that its use in fertilizers 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 stalk and leaves at the expense of 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.

FERTILIZER VALUATIONS, 1914-1915.

The following valuations were adopted for the plant food in commercial fertilizers sold in Texas for the season 1914-1915:

	Cents per pound.
Available Phosphoric Acid.....	6
Total Phosphoric Acid in tankage and bone.....	4
Nitrogen in mixed fertilizers, bat guano.....	20
Nitrogen in bone and tankage.....	19
Potash	6

The valuation of potash was established before the effects of the war

on the price of potash was felt. Potash salts are now scarce (July, 1915).

ANALYSIS OF FERTILIZERS, 1914-1915.

Table 1 contains a list of all samples of fertilizers subjected to analysis in the season September 1, 1914, to date. The table gives the name and address of the manufacturer, the name of the brand, the guaranteed analysis, and the analysis found. Analyses below guarantee are brought out in heavy type. Practically all the samples were collected by inspectors of this department. Analyses and inspection were made by Messrs. S. E. Asbury, T. L. Ogier, L. A. Hudgins, E. R. Gilmore and A. J. Weaver.

REGISTRATION, 1914-1915.

A list of brands registered for sale in the season of 1914-1915 is given in Table 2. Many of the brands so registered were sold only in lots of a few sacks, or were not sold at all in the State.

Table I.—Analyses of Commercial Fertilizers, Season of 1914-1915.

Laboratory Number.	Manufacturer, Place of Business and Brand.	Phosphoric Acid Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
	Arkansas Fertilizer Co., Little Rock, Ark.—				
26112	White Diamond Cotton Fertilizer—Guarantee.....	10.00	2.00	3.00	\$23.60
	Analysis.....	7.85	2.09	2.52	20.80
26195	White Diamond Peanut Fertilizer—Guarantee.....	9.10	1.00	4.00	19.70
	Analysis.....	9.66	1.26	4.13	21.59
26111	White Diamond Southern Queen Fertilizer—Guarantee.....	10.00	1.65	2.00	21.00
	Analysis.....	9.40	1.75	1.83	20.48
	Armour Fertilizer Works, New Orleans, La., Houston, Texas and Fort Worth, Texas—				
25987	Armour's Bone Meal—Guarantee.....	22.00	2.00		25.20
	Analysis.....	21.20	2.64		26.99
26091	Analysis.....	24.50	2.32		28.42
26095	Analysis.....	28.93	2.10		31.12
	Armour's Cottonseed Meal Special—Guarantee.....	10.00	1.65	1.50	19.40
25917	Analysis.....	10.12	1.70	1.54	20.79
25977	Analysis.....	10.70	1.87	2.05	22.78
26005	Analysis.....	10.44	1.98	1.63	22.41
26024	Analysis.....	10.11	1.92	1.85	22.03
26201	Analysis.....	9.66	2.15	1.59	22.10
	Armour's 14 Per Cent Acid Phosphate—Guarantee.....	14.00			16.80
25976	Analysis.....	14.92			17.90
25984	Analysis.....	13.29			15.95
	Armour's Kainit—Guarantee.....			12.00	14.40
25960	Analysis.....			11.76	14.01
	Armour's King Cotton—Guarantee.....	8.00	1.65		18.60
26093	Analysis.....	7.61	1.88	2.13	19.21
26145	Analysis.....	10.12	1.92	1.76	21.93
	Armour's Nitrate of Soda—Guarantee.....		14.80		59.20
25918	Analysis.....		15.40		61.60
	Armour's Onion Fertilizer No. 2—Guarantee.....	8.00	2.47	4.00	24.28
25919	Analysis.....	7.99	2.43	3.59	23.62
25920	Analysis.....	8.12	2.49	3.49	23.89
	Armour's Onion Fertilizer No. 5—Guarantee.....	3.00	4.94	3.00	26.96
25921	Analysis.....	4.39	4.56	2.87	26.95
25922	Analysis.....	2.99	5.00	3.12	27.33
25923	Analysis.....	3.20	5.03	3.00	27.56
25924	Analysis.....	3.45	5.10	2.84	27.95
25925	Analysis.....	3.45	5.04	3.15	28.08
25926	Analysis.....	3.25	4.94	2.88	27.12
25927	Analysis.....	3.30	5.17	2.98	28.21
	Armour's Onion Fertilizer No. 13—Guarantee.....	1.00	4.94	1.00	22.16
25928	Analysis.....	1.97	4.32	1.65	21.62
	Armour's Onion Fertilizer No. 14—Guarantee.....	7.00	4.94	2.00	30.56
25929	Analysis.....	7.60	4.47	2.19	29.63
	Armour's Phosphate and Potash No. 1208—Guarantee.....	12.00		8.00	24.00
25930	Analysis.....	12.71		8.21	25.10
	Armour's Potato Grower—Guarantee.....	10.00	2.47	6.00	29.08
26094	Analysis.....	7.86	3.15	6.65	30.01
	Armour's Raw Bone Meal—Guarantee.....	22.00	3.70		31.66
25982	Analysis.....	22.65	3.78		32.48
25993	Analysis.....	20.24	1.66		22.50
	Armour's Raw Bone Superphosphate with Potash—Guarantee.....	9.50	1.65	1.50	19.80
25990	Analysis.....	10.64	1.70	1.55	21.43
26006	Analysis.....	10.03	2.15	1.24	22.13
	Armour's Rice Grower—Guarantee.....	12.00		2.00	16.80
26211	Analysis.....	12.03		1.66	16.43
	Armour's Sandy High Land Special—Guarantee.....	10.00	1.65	1.50	20.40
26000	Analysis.....	10.49	1.98	1.66	22.50
26200	Analysis.....	10.29	1.80	1.57	21.43
	Armour's 16 Per Cent Acid Phosphate—Guarantee.....	16.00			19.20
26002	Analysis.....	17.83			21.40
	Armour's Special Cabbage Grower—Guarantee.....	8.00	1.65	3.00	19.80
26008	Analysis.....	8.97	1.97	2.95	22.18
	Armour's Special Texas Formula—Guarantee.....	10.00	1.65	2.00	21.00
26025	Analysis.....	10.15	1.86	2.38	22.48
	Armour's Strawberry Grower—Guarantee.....	6.00	1.65	5.00	19.80
26004	Analysis.....	8.65	1.90	3.69	22.41
	Armour's Truck Special No. 2—Guarantee.....	8.00	1.65	3.00	19.80
25983	Analysis.....	8.65	2.39	2.69	23.17
26007	Analysis.....	7.93	2.14	1.13	19.44

Table I.—Analyses of Commercial Fertilizers, Season of 1914-1915.

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, New Orleans, La., Houston, Texas, and Fort Worth, Texas—Continued.				
	Armour's Vegetable Grower—Guarantee.....	9.00	2.05	3.00	22.60
25952	Analysis.....	8.64	2.14	2.66	22.12
25994	Analysis.....	11.98	1.60	2.21	23.43
26026	Analysis.....	9.26	2.12	3.42	23.69
26092	Analysis.....	7.98	2.53	3.33	23.70
	Geo. L. Barber, Jacksonville, Texas—				
	Barber's 16 Per Cent Phosphate—Guarantee.....	16.00			19.20
25942	Analysis.....	16.66			19.99
26187	Analysis.....	16.31			19.57
	The Bowie County Cotton Oil Co., New Boston, Texas—				
	Bowie Cottonseed Meal—Guarantee.....	2.25	7.00	1.25	33.20
26109	Analysis.....	2.60	7.37	1.43	34.32
	Bowie 16 Per Cent Acid Phosphate—Guarantee.....	16.00			19.20
26110	Analysis.....	18.06			21.67
	Bryan Cotton Oil and Fertilizer Co., Bryan, Texas—				
	Star Brand Acid Phosphate—Guarantee.....	14.00			16.80
26060	Analysis.....	16.43			19.72
26133	Analysis.....	16.41			19.69
	Star Brand Cotton and Corn Fertilizer—Guarantee.....	11.50	1.80		21.20
26058	Analysis.....	12.67	1.88		22.72
26131	Analysis.....	13.43	1.71		23.00
	Star Brand Potato Fertilizer—Guarantee.....	8.00	3.50		23.60
26061	Analysis.....	9.15	3.61		25.42
26132	Analysis.....	9.79	3.64		26.31
	Star Brand Phospho Special Fertilizer—Guarantee.....	11.00	2.00		21.20
26059	Analysis.....	11.64	2.65		24.57
	Carthage Fertilizer Co., Carthage, Texas—				
	Carthage Cotton and Corn Grower—Guarantee.....	10.00	1.65	1.00	19.80
26165	Analysis.....	10.03	1.94	.98	20.97
	Carthage Cotton Grower—Guarantee.....	10.00	1.65	1.00	19.80
26251	Analysis.....	11.22	1.38	.66	19.77
	The Clarksville Cotton Oil Co., Clarksville, Texas—				
	Acid Phosphate—Guarantee.....	16.00			19.20
26101	Analysis.....	17.25			20.70
	Kainit—Guarantee.....			12.00	14.40
26102	Analysis.....			11.52	13.81
	Dallas Fertilizer and Reduction Co., Dallas, Texas—				
	Beaver Cotton and Corn Grower—Guarantee.....	10.00	1.65	2.00	21.00
26089	Analysis.....	10.51	2.34	2.00	24.37
	Beaver Vegetable Grower—Guarantee.....	9.00	2.47	3.00	24.28
26088	Analysis.....	9.43	2.96	2.88	26.62
	East Texas Fertilizer Co., Tyler, Texas—				
	Bull Corn and Cotton—Guarantee.....	10.00	2.00	1.00	21.20
25943	Analysis.....	11.24	1.53	1.40	21.29
26053	Analysis.....	10.02	2.00	1.41	21.71
26179	Analysis.....	11.62	1.51	1.36	21.61
26226	Analysis.....	11.14	1.62	1.43	21.57
	East Texas Crop Grower—Guarantee.....	8.00	3.00	3.00	25.20
25947	Analysis.....	10.11	2.77	3.00	26.81
26181	Analysis.....	10.20	2.72	3.12	26.86
26224	Analysis.....	11.20	2.41	2.28	25.82
	16 Per Cent Phosphate—Guarantee.....	16.00			19.20
25946	Analysis.....	16.00			19.20
25951	Analysis.....	16.74			20.09
26178	Analysis.....	16.28			19.54
26225	Analysis.....	16.35			19.62
	Wiley's Tomato Special—Guarantee.....	9.00		2.80	22.00
25948	Analysis.....	11.17		2.19	22.16
25950	Analysis.....	10.68		2.51	22.86
26054	Analysis.....	10.62		2.60	23.14
26180	Analysis.....	11.24		2.50	23.49
26227	Analysis.....	12.92		1.66	22.14

Table I.—Analyses of Commercial Fertilizers, Season of 1914-1915.

Laboratory Number.	Manufacturer, Place of Business and Brand.	Phosphoric Acid—Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
	Farmers Oil and Fertilizer Co., Texarkana, Texas—				
	Farmer's Acid Phosphate—Guarantee	14.00			16.80
26106	Analysis	14.49			17.39
26141	Analysis	14.41			17.29
	Farmer's High Grade Acid Phosphate—Guarantee	16.00			19.20
26107	Analysis	17.16			20.59
26140	Analysis	17.29			20.75
	Farmer's Potato Fertilizer—Guarantee	10.00	0.83	2.00	17.72
26108	Analysis	9.49	1.49	2.33	20.15
26139	Analysis	10.24	1.44	2.25	20.75
	Fidelity Chemical Corporation, Houston, Texas—				
	Fidelity Acid Phosphate 14 Per Cent—Guarantee	14.00			16.80
25255	Analysis	14.33			17.20
	Fidelity Acid Phosphate 16 Per Cent—Guarantee	16.00			19.20
25962	Analysis	17.87			21.44
	Fidelity Bone Meal Fertilizer—Guarantee	27.00	1.00		25.40
25963	Analysis	31.70	1.12		29.62
	Fidelity Cereal Cultivator Fertilizer—Guarantee	6.50	2.47	1.00	18.88
25964	Analysis	7.22	2.60	1.20	20.50
	Fidelity Cotton Special No. 2 Fertilizer—Guarantee	10.00	1.65	1.50	20.40
25966	Analysis	9.88	1.76	1.54	20.75
	Fidelity Orange Special Fertilizer—Guarantee	7.00	2.88	5.00	25.90
26029	Analysis	8.26	2.57	5.24	26.48
	Fidelity Regal Compound Fertilizer—Guarantee	10.00		4.00	16.80
25970	Analysis	8.60		3.61	14.65
	Fidelity Strawberry Special Fertilizer—Guarantee	6.00	2.47	5.00	23.08
25965	Analysis	7.04	2.21	5.97	24.45
	Fidelity Sulphate of Ammonia—Guarantee		20.50		82.00
26116	Analysis		20.11		80.44
	Galveston Packing Co., Galveston, Texas—				
	Blood and Bone—Guarantee	2.52	7.17		31.70
25986	Analysis	2.07	7.47		32.36
	Gate City Fertilizer Co., Texarkana, Texas—				
	Red Ball Complete Fertilizer—Guarantee	10.00	1.65	1.00	19.80
26105	Analysis	10.46	1.78	1.49	21.46
26197	Analysis	10.28	1.82	1.37	21.26
	Red Ball Cotton and Corn Fertilizer—Guarantee	10.00	2.00	3.00	23.60
26194	Analysis	8.68	1.98	3.53	22.58
	Red Ball Cotton Grower—Guarantee	9.00	1.65	2.00	19.80
26142	Analysis	10.53	1.83	2.33	22.76
	Red Ball Early Trucker—Guarantee	8.00	2.50	4.00	24.40
26103	Analysis	6.39	2.55	3.39	21.94
26142	Analysis	6.80	2.68	3.54	23.13
	Red Ball Extra Acid Phosphate—Guarantee	16.00			19.20
26198	Analysis	18.44			22.13
	Red Ball Southern Corn Grower—Guarantee	8.00	1.65	3.00	19.80
26104	Analysis	9.35	1.82	3.15	22.28
26196	Analysis	9.07	1.72	3.02	21.38
	Red Ball Spanish Peanut Fertilizer—Guarantee	9.10	1.00	4.00	19.72
26113	Analysis	8.99	1.26	4.17	20.83
	Henderson Cotton Oil and Gin Co., Henderson, Texas—				
	Henderson Acid Phosphate—Guarantee	16.00			19.20
26073	Analysis	16.85			20.23
26077	Analysis	16.69			20.03
	Henderson Corn Maker—Guarantee	8.00	3.00	2.00	24.00
26071	Analysis	8.59	2.99	2.89	25.74
26076	Analysis	8.69	3.19	2.38	26.05
26233	Analysis	8.31	3.10	2.62	25.51
	Henderson Half and Half—Guarantee	7.00	4.00		24.40
26074	Analysis	9.76	3.82		26.99
26231	Analysis	9.64	3.63		26.09
	Henderson Cotton Maker—Guarantee	9.00	2.00	2.00	22.20
26072	Analysis	9.83	2.04	2.80	23.32
26232	Analysis	9.66	2.12	2.47	23.03
	Hope Fertilizer Co., Hope, Ark.—				
	Dixie Belle—Guarantee	10.00	1.25	1.00	18.20
26135	Analysis	9.65	1.50	0.71	18.44
	Hope Hustler—Guarantee	8.00	1.65	2.00	18.60
26137	Analysis	8.06	1.61	1.87	18.35

Table I.—Analyses of Commercial Fertilizers, Season of 1914-1915.

Laboratory Number.	Manufacturer, Place of Business and Brand.	Phosphoric Acid Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
Hope Fertilizer Co., Hope, Ark.—Continued.					
	Our Corn Grower—Guarantee.....	9.00	2.00	2.00	21.20
26136	Analysis.....	10.29	2.19	0.81	22.08
	Stork Brand 16 Per Cent Acid Phosphate—Guarantee.....	16.00			19.20
26138	Analysis.....	14.36			17.23
Hopkins County Fertilizer Co., Sulphur Springs, Texas—					
	Acid Phosphate—Guarantee.....	16.00			19.20
26097	Analysis.....	16.33			19.60
Houston County Oil Mill and Manufacturing Co., Crockett, Texas—					
	Crockett Cereal Standard—Guarantee.....	8.25	2.25	2.25	21.58
26204	Analysis.....	8.74	2.24	1.99	21.84
	Crockett Compound—Guarantee.....	9.00	3.25	1.25	25.30
26048	Analysis.....	9.12	3.30	1.40	25.82
26207	Analysis.....	9.38	3.27	1.29	25.93
	Crockett Cotton Standard—Guarantee.....	10.25	2.00	2.00	22.70
26203	Analysis.....	10.99	1.74	2.09	22.66
	Crockett Kainit—Guarantee.....			12.00	14.40
26205	Analysis.....			8.40	11.08
	Crockett Onion Grower—Guarantee.....	5.50	5.75	5.30	35.96
26049	Analysis.....	5.61	4.49	3.33	28.69
26193	Analysis.....	5.63	4.36	3.31	28.17
	Crockett Planter's Triumph—Guarantee.....	9.00	2.00	2.25	21.50
26046	Analysis.....	8.20	2.32	2.64	22.29
	Crockett 16 Per Cent Acid Phosphate—Guarantee.....	16.00			19.20
26050	Analysis.....	14.06			16.87
26202	Analysis.....	14.50			17.40
	Crockett Vegetable Producer—Guarantee.....	7.50	3.00	3.50	27.60
26047	Analysis.....	7.66	3.20	5.49	28.58
Houston Packing Co., Houston, Texas—					
	Blood and Bone—Guarantee.....	14.50	5.60		32.88
25972	Analysis.....	18.46	5.09		34.11
26019	Analysis.....	18.24	5.30		34.73
Huntsville Cotton Oil Co., Huntsville, Texas—					
	Acid Phosphate—Guarantee.....	16.00			19.20
26041	Analysis.....	16.49			19.79
Industrial Cotton Oil Properties, Houston, Texas—					
	Industrial Cotton Grower Fertilizer, Longhorn Brand—Guarantee.....	10.00	1.65	2.00	21.00
25939	Analysis.....	10.69	1.98	2.09	23.26
	Industrial Special Vegetable Grower—Guarantee.....	10.00	2.00	3.00	23.60
25938	Analysis.....	10.97	2.10	3.52	25.78
	Industrial Vegetable Grower Fertilizer, Longhorn Brand—Guarantee.....	7.00	2.00	4.00	21.20
26017	Analysis.....	7.40	2.22	4.13	22.71
Jacksonville Cotton Oil Co., Jacksonville, Texas—					
	Cottonseed Meal with Hulls Fertilizer—Guarantee.....	1.06	6.00	1.66	27.26
25931	Analysis.....	2.35	7.35	1.73	34.30
Longview Cotton Oil Co., Longview, Texas—					
	Longview Acid Phosphate—Guarantee.....	16.00			19.20
26079	Analysis.....	16.99			20.39
	Longview Corn Special—Guarantee.....	8.00	3.00	2.00	24.00
26078	Analysis.....	9.51	2.74	2.45	25.31
	Longview Cotton Special—Guarantee.....	9.00	2.00	2.00	21.20
26248	Analysis.....	8.30	3.48	2.08	26.38
	Longview Cotton Hustler—Guarantee.....	10.00	2.00	1.00	21.20
26247	Analysis.....	10.76	2.22	1.29	23.34
Marshall Fertilizer Factory, Marshall, Texas—					
	Cotton and Corn Grower—Guarantee.....	10.00	1.65	1.00	19.80
26070	Analysis.....	10.32	1.86	1.07	21.10
26163	Analysis.....	9.71	1.99	1.01	20.82
26171	Analysis.....	9.38	1.66	1.00	19.10
	Cotton Special—Guarantee.....	10.00	1.65		18.60
26170	Analysis.....	9.09	1.70		17.71
26234	Analysis.....	10.83	1.90		20.60

Table I.—Analyses of Commercial Fertilizers, Season of 1914-1915.

Laboratory Number.	Manufacturer, Place of Business and Brand.	Phosphoric Acid—Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Cent.
Marshall Fertilizer Factory, Marshall, Texas—Continued.					
	High Grade Acid Phosphate—Guarantee.....	16.00			19.20
26069	Analysis.....	14.73			17.68
26172	Analysis.....	16.64			19.97
	Red Diamond Acid Phosphate—Guarantee.....	14.00			16.80
26192	Analysis.....	13.25			15.90
Meridian Fertilizer Factory, Shreveport, La.—					
	Caddo Cotton—Guarantee.....	9.25	1.88	1.00	19.82
26144	Analysis.....	10.89	2.30	1.09	23.58
	Meridian Blood and Bone—Guarantee.....	10.00	1.65	1.00	19.80
25949	Analysis.....	13.81	2.40	1.54	25.26
26191	Analysis.....	11.45	1.51	1.04	21.03
	Meridian Corn Special No. 1—Guarantee.....	4.00	5.35		26.20
26128	Analysis.....	4.54	4.91		25.09
	Meridian Home Mixture—Guarantee.....	10.00	1.65	1.00	19.80
26075	Analysis.....	10.50	1.98	1.32	22.10
26086	Analysis.....	10.73	1.81	1.09	21.43
26126	Analysis.....	10.82	1.88	1.12	21.84
26134	Analysis.....	11.16	1.91	1.20	22.43
26146	Analysis.....	10.46	1.89	1.04	21.36
26177	Analysis.....	10.06	2.07	1.27	21.87
26221	Analysis.....	10.83	2.39	1.38	24.22
26228	Analysis.....	11.25	1.99	1.03	22.70
26241	Analysis.....	11.53	1.82	1.23	22.60
	Meridian Meal Mixture—Guarantee.....	10.00	1.65	1.00	19.80
26152	Analysis.....	11.75	1.80	1.09	22.61
	Meridian Special Corn Formula—Guarantee.....	7.50	2.47		18.88
26167	Analysis.....	9.29	2.60		21.55
26249	Analysis.....	8.45	3.00		22.14
	Meridian Special Cotton Formula—Guarantee.....	10.00	1.65		18.60
26166	Analysis.....	11.34	2.13		22.13
26250	Analysis.....	9.43	2.44		21.08
	Meridian Tomato Special—Guarantee.....	10.00	2.47	1.00	23.08
26147	Analysis.....	11.74	2.40	1.12	25.03
26175	Analysis.....	9.73	3.10	1.32	25.66
26188	Analysis.....	10.56	2.49	1.17	24.03
	Meridian Truckers Special—Guarantee.....	9.00	1.65	2.00	19.80
26176	Analysis.....	9.98	1.84	2.24	22.03
26222	Analysis.....	10.16	2.03	2.16	22.90
	Meridian Vegetable Grower—Guarantee.....	8.00	2.47	5.00	25.48
26127	Analysis.....	9.04	2.94	4.37	27.85
	Union Special Acid Phosphate—Guarantee.....	16.00			19.20
26087	Analysis.....	17.50			21.00
26129	Analysis.....	16.50			19.80
26151	Analysis.....	16.88			20.26
26240	Analysis.....	16.22			19.46
	Weevil Beater Guano—Guarantee.....	10.00	1.65	1.00	19.80
26153	Analysis.....	10.59	2.00	1.34	22.32
Nacogdoches Oil Mill, Nacogdoches, Texas—					
	Cariso Corn Grower—Guarantee.....	7.00	3.29	1.00	22.76
26067	Analysis.....	7.76	3.50	1.83	25.51
Nitrate Agencies Co. of Texas, Houston, Texas—					
	Basic Slag (Thomas Phosphate Powder) H. A. Brand—Guarantee.....	17.00			
26013	Analysis.....	18.13			
	Ground Bone—Guarantee.....	22.83	2.46		27.65
26018	Analysis.....	23.12	2.68		28.68
26117	Analysis.....	23.25	2.87		29.51
	High Grade Chemical Fertilizer—Guarantee.....	8.00	4.90	6.00	36.40
26258	Analysis.....	9.07	5.19	6.53	39.48
	High Grade Raw Bone—Guarantee.....	23.00	3.70		32.46
26217	Analysis.....	24.29	3.70		33.49
	High Grade 16 Per Cent Acid Phosphate—Guarantee.....	16.00			19.20
25934	Analysis.....	18.34			22.01
25945	Analysis.....	17.68			21.22
25955	Analysis.....	18.05			21.66
25975	Analysis.....	17.72			21.28
26010	Analysis.....	17.09			20.51
26043	Analysis.....	16.88			20.26
26065	Analysis.....	18.40			22.08
26214	Analysis.....	16.69			20.03

Table I.—Analyses of Commercial Fertilizers, Season of 1914-1915.

Laboratory Number.	Manufacturer, Place of Business and Brand.	Phosphoric Acid Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
	Nitrate Agencies Co. of Texas, Houston, Texas—Cont'd.				
	Kainit—Guarantee.....			12.00	14.40
25974	Analysis.....			12.50	15.00
26011	Analysis.....			13.52	16.22
	Muriate of Potash—Guarantee.....			48.00	57.60
25932	Analysis.....			50.98	61.17
26114	Analysis.....			53.63	64.36
	Nitrate of Soda—Guarantee.....		15.00		60.00
25933	Analysis.....		13.96		55.84
25973	Analysis.....		16.07		64.28
26012	Analysis.....		15.52		62.08
26216	Analysis.....		15.33		61.32
26220	Analysis.....		15.60		62.40
	Peruvian Guano—Guarantee.....	10.00	10.69	2.00	57.16
26115	Analysis.....	11.40	10.87	2.04	59.65
26215	Analysis.....	11.06	10.66	2.39	58.78
26219	Analysis.....	10.96	10.58	2.35	58.29
	Frank Peacock, 502 Foster Bldg., Houston, Texas—				
	Peacock Ironite Fertilizer—Guarantee.....	3.00	3.00	1.50	17.60
26218	Analysis.....	2.90	3.07	1.62	17.70
	Pelican Fertilizer Works, Shreveport, La.—				
	Pelican Cotton and Corn—Guarantee.....	8.00	2.00	2.00	20.00
26206	Analysis.....	9.61	2.12	1.59	21.92
	Pelican Fish Formula—Guarantee.....	10.00	1.65	1.00	19.80
25944	Analysis.....	11.40	2.01	1.37	23.36
26199	Analysis.....	11.80	1.62	1.09	21.95
	Pelican Tomato Special—Guarantee.....	10.00	2.47	1.00	23.08
25941	Analysis.....	9.97	2.89	1.51	25.13
	Planters Fertilizer and Chemical Co., New Orleans La., Houston, Texas, and Fort Worth, Texas—				
	Planter's Golden Mixture—Guarantee.....	9.50	1.65	1.50	19.80
26003	Analysis.....	9.61	2.28	1.57	22.53
26009	Planter's Vegetable Grower—Guarantee.....	7.00	2.47	3.50	22.48
	Analysis.....	7.44	2.56	3.46	23.32
	Pittsburg Cotton Oil Co., Pittsburg, Texas—				
	Acid Phosphate, Swift & Co.—Guarantee.....	16.00			19.20
26085	Analysis.....	16.10			19.32
	Rockdale Oil Co., Rockdale, Texas—				
	Superior Brand Acid Phosphate—Guarantee.....	14.00			16.80
26023	Analysis.....	14.27			17.12
	Superior Brand Corn and Cotton Fertilizer—Guarantee.....	11.00		1.90	20.80
26022	Analysis.....	11.45		2.05	21.94
26210	Analysis.....	12.67		1.58	21.52
	San Augustine Fertilizer Co., San Augustine, Texas—				
	Augustine Acid Phosphate—Guarantee.....	16.00			19.20
26068	Analysis.....	17.65			21.18
	Shreveport Fertilizer Works, Shreveport, La.—				
	Lion Blood and Bone—Non-Potassic—Guarantee.....	10.00	1.65		18.60
25956	Analysis.....	12.87	1.27		20.46
26156	Analysis.....	10.11	1.81		19.37
	Lion Corn Food—Non-Potassic—Guarantee.....	9.00	2.50		20.80
26157	Analysis.....	9.78	2.50		21.74
	Lion Cotton Seed Meal Mixture—Non-Potassic—Guarantee.....	10.00	1.65		18.60
25954	Analysis.....	11.32	2.31		22.82
25959	Analysis.....	10.87	1.91		20.68
26154	Analysis.....	11.12	1.90		20.94
26190	Analysis.....	10.31	2.02		20.45
	Lion Success Mixture—Non-Potassic—Guarantee.....	10.00	1.65		18.60
25957	Analysis.....	11.16	1.93		21.11
	Lion Tomato Special—Non-Potassic—Guarantee.....	10.00	2.50		22.00
25940	Analysis.....	11.55	2.50		23.86
25958	Analysis.....	10.29	2.26		21.39
26051	Analysis.....	9.39	2.76		22.31
26052	Analysis.....	10.71	2.57		23.13
26189	Analysis.....	10.34	2.72		23.29
	Lion Xtra Good Phosphate—Guarantee.....	16.00			19.20
25953	Analysis.....	16.28			19.54
26155	Analysis.....	18.20			21.84

Table I.—Analyses of Commercial Fertilizers, Season of 1914-1915.

Laboratory Number.	Manufacturer, Place of Business and Brand.	Phosphoric Acid Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
	Swift & Co., Fort Worth, Texas, Harvey, La., and Shreveport, La.—				
	Swift's Ammoniated Raw Bone Superphosphate—Guarantee	9.50	1.65	1.50	19.80
25999	Analysis	10.47	2.25	1.30	23.12
26028	Analysis	8.92	2.00	1.91	20.99
26033	Analysis	9.50	1.74	1.69	20.39
26035	Analysis	9.56	1.85	1.73	20.95
26037	Analysis	8.34	1.91	2.15	20.23
26212	Analysis	9.35	1.66	1.59	19.77
26239	Analysis	9.02	1.56	1.33	18.66
	Swift's Champion Vegetable Grower—Guarantee	8.00	3.29	3.00	26.36
26038	Analysis	8.29	3.18	3.01	26.28
	Swift's Diamond "D" Fertilizer—Guarantee	10.00	1.65	1.00	19.80
25979	Analysis	8.34	2.01	2.18	20.67
26045	Analysis	9.99	1.94	1.56	21.62
	Swift's Diamond "I" Fertilizer—Guarantee	7.00	3.70	4.00	28.00
25937	Analysis	7.75	3.32	4.03	27.42
	Swift's Eagle Guano—Guarantee	10.00	1.65	2.00	21.00
26238	Analysis	10.31	1.64	2.30	21.69
26257	Analysis	9.71	1.77	2.04	21.18
	Swift's Early Truck Grower—Guarantee	6.00	2.47	6.00	23.58
25997	Analysis	4.93	2.46	6.56	23.63
26213	Analysis	6.33	2.49	3.26	21.47
	Swift's East Texas Trucker Fertilizer—Guarantee	8.00	2.47	3.00	23.04
25980	Analysis	9.06	2.07	2.33	21.95
25992	Analysis	6.48	2.63	3.06	21.97
26039	Analysis	10.43	1.88	2.70	23.08
26042	Analysis	8.41	2.30	2.79	22.64
26044	Analysis	8.03	2.36	2.86	22.51
26186	Analysis	8.06	2.46	3.12	23.25
	Swift's Garden City Phosphate—Guarantee	14.00			16.80
25989	Analysis	14.09			16.91
25996	Analysis	14.57			17.48
	Swift's Golden Harvest Cottonseed Meal Compound—Guarantee	8.00	1.65	2.00	18.60
26031	Analysis	8.74	2.02	2.32	21.35
	Swift's Good Luck Cottonseed Meal Compound—Guarantee	10.00	1.65	2.00	21.00
26256	Analysis	10.19	1.77	2.29	22.06
	Swift's High Grade Acid Phosphate—Guarantee	16.00			19.20
26066	Analysis	16.73			20.08
26125	Analysis	16.49			19.79
	Swift's Farmer's Home High Grade Phosphate and Potash—Guarantee	12.00		4.00	19.20
26130	Analysis	11.35		3.92	18.32
	Swift's Nitrate of Soda—Guarantee		14.82		59.28
25995	Analysis		15.42		61.68
26055	Analysis		15.26		61.04
26184	Analysis		15.61		62.44
	Swift's Planter's Special Cottonseed Meal Compound—Guarantee	10.00	1.65	1.00	19.80
26057	Analysis	9.98	1.85	1.25	20.88
	Swift's Pure Bone Meal—Guarantee	24.00	2.47		28.58
26090	Analysis	26.95	2.76		32.05
	Swift's Special Grain Fertilizer—Guarantee	10.00	1.65	2.00	21.00
26027	Analysis	10.08	1.99	2.47	23.40
	Swift's Special Phosphate and Potash—Guarantee	10.00		2.00	14.00
25991	Analysis	9.81		2.14	14.34
	Swift's Special Vegetable Fertilizer—Guarantee	8.00	2.05	6.00	25.00
25988	Analysis	9.31	1.92	5.48	25.43
26030	Analysis	6.93	2.33	6.35	25.26
26124	Analysis	8.83	2.40	5.52	26.82
	Swift's Standard Grade Cottonseed Meal Compound—Guarantee	9.50	1.65	1.50	19.80
26032	Analysis	9.05	2.25	1.98	22.24
26034	Analysis	10.44	2.21	1.69	23.40
26036	Analysis	9.12	2.42	2.09	23.02
26162	Analysis	10.14	1.95	1.51	21.78
	Swift's Standard Grade Early Vegetable and Fruit Grower—Guarantee	8.00	1.65	3.00	19.80
25998	Analysis	6.83	1.66	3.05	18.51

Table I.—Analyses of Commercial Fertilizers, Season of 1914-1915.

Laboratory Number.	Manufacturer, Place of Business and Brand.	Phosphoric Acid Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
	Swift & Co., Fort Worth, Texas, Harvey, La., and Shreveport, La.—Continued.				
	Swift's Superphosphate (Potash Ammoniated)—Guarantee.	8.00	1.65	2.00	18.60
25978	Analysis.	8.47	1.84	2.46	20.47
25985	Analysis.	8.39	1.92	2.64	20.92
26040	Analysis.	8.48	1.80	1.95	19.71
26056	Analysis.	8.74	1.70	2.12	19.83
26185	Analysis.	8.06	1.87	2.21	19.80
	Swift's Tankage Formula—Guarantee.	6.87	7.41		33.65
25936	Analysis.	11.10	5.79		30.88
	Union Seed and Fertilizer Co. (Gretna Plant) New Orleans, La.—				
	Ammoniated Raw Bone Superphosphate and Potash—Guarantee.	10.00	1.65	1.00	19.80
26161	Analysis.	10.74	2.12	0.87	22.41
	Bull Dog Acid Phosphate—Guarantee.	16.00			19.20
26160	Analysis.	16.14			19.37
	Economizer—Guarantee.	10.00	1.65	2.00	21.00
26246	Analysis.	10.34	1.78	2.14	22.10
	Goldsmith's Improved Mixture—Guarantee.	10.00	1.65	1.00	19.80
26159	Analysis.	10.92	1.68	1.03	21.06
	Well's Cotton and Corn Grower—Guarantee.	10.00	1.65	2.00	21.00
26158	Analysis.	10.93	1.84	2.04	22.93
	Virginia-Carolina Chemical Co., Shreveport, La.—				
	B. B. B. Beef, Blood and Bone—Guarantee.	10.00	1.65	1.00	19.80
26016	Analysis.	11.75	1.61	1.48	22.32
	Eureka Complete Fertilizer—Guarantee.	10.00	1.65	4.00	23.40
26245	Analysis.	10.62	1.85	3.66	24.53
	Georgia State Grange—Guarantee.	10.00	1.65	1.00	19.80
26062	Analysis.	11.49	1.81	1.11	22.36
26122	Analysis.	10.80	1.80	1.03	21.40
26150	Analysis.	11.09	1.73	1.05	21.49
26182	Analysis.	10.96	1.87	1.25	22.13
26223	Analysis.	11.31	1.59	1.14	21.30
26230	Analysis.	10.27	1.68	1.14	20.41
	Mobile Double Eagle Guano—Guarantee.	10.00	1.65	1.50	20.40
26149	Analysis.	10.99	1.71	1.46	21.78
	Nitrate of Soda—Guarantee.		14.80		59.20
26237	Analysis.		15.23		60.92
	Royal Blood, Bone and Potash—Guarantee.	10.00	1.65	1.50	20.40
26168	Analysis.	11.67	1.71	1.43	22.56
26236	Analysis.	11.82	1.61	1.27	22.14
26253	Analysis.	11.03	1.67	1.70	21.96
	Royal High Grade Guano—Guarantee.	10.00	1.65	2.00	21.00
26243	Analysis.	10.82	1.46	2.37	21.66
	Royal Potash Compound—Guarantee.	10.00		4.00	16.80
26122	Analysis.	10.72		4.18	17.88
	Royal Tomato Formula—Guarantee.	10.00	2.47	1.00	23.08
26064	Analysis.	10.52	2.29	1.20	23.22
	Scott's Gossypium Phospho—Guarantee.	10.00	1.65	1.50	20.40
25968	Analysis.	11.01	1.95	1.33	22.61
26099	Analysis.	10.84	1.87	1.54	22.34
26169	Analysis.	10.64	1.79	1.37	21.57
26173	Analysis.	10.69	2.30	1.70	24.05
26229	Analysis.	10.23	1.65	1.18	20.30
26235	Analysis.	11.08	1.65	1.49	21.69
26244	Analysis.	10.13	1.83	1.63	21.44
26252	Analysis.	10.41	1.93	1.38	21.87
	Scott's Gossypium Phospho Special—Guarantee.	10.00	1.65	2.00	21.00
26063	Analysis.	10.63	1.58	2.02	21.50
	Scott's High Grade Phosphate—Guarantee.	14.00			16.80
25981	Analysis.	14.29			17.15
26254	Analysis.	14.26			17.11
	Scott's Potasso Phospho—Guarantee.	12.00		2.00	16.80
26118	Analysis.	12.89		1.97	17.83
26119	Analysis.	13.73		1.91	18.77
26120	Analysis.	13.43		2.11	18.65
26123	Analysis.	13.03		2.15	18.22
	V. C. C. Co's 16 Per Cent Acid Phosphate—Guarantee.	16.00			19.20
26100	Analysis.	16.19			19.43
26148	Analysis.	16.56			19.87
26242	Analysis.	17.03			20.44

Table I.—Analyses of Commercial Fertilizers, Season of 1914-1915.

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 Co., Shreveport, La.—Cont'd.				
	V. 3 C. Fruit and Truck Special—Guarantee.....	6.00	3.30	8.00	30.00
26174	Analysis.....	8.39	2.87	4.47	26.91
	V. C. Tomato Special—Guarantee.....	10.00	2.47	1.50	23.68
26098	Analysis.....	10.78	2.04	1.73	23.18
26183	High Grade V. C. Co's Truck Grower—Guarantee.....	8.00	2.33	1.78	24.34
25969	Analysis.....	9.08	1.98	6.00	25.04
	Geo. A. Wright, Palestine, Texas—				
	Wright's 14 Per Cent Acid Phosphate—Guarantee.....	14.00	.....	.....	16.80
26208	Analysis.....	14.15	.....	.....	16.98
	Wright's 16 Per Cent Acid Phosphate—Guarantee.....	16.00	.....	.....	19.20
26209	Analysis.....	16.10	.....	.....	19.32
	The Wills Point Cotton Oil Co., Wills Point, Texas—				
	Fertilizer Cottonseed Meal—Guarantee.....	1.00	7.00	1.00	30.40
26082	Analysis.....	2.43	7.08	1.55	33.10
	Semper-Fidelis Acid Phosphate—Guarantee.....	16.00	.....	.....	19.20
26084	Analysis.....	17.20	.....	.....	20.64
	Semper-Fidelis Cotton Grower—Guarantee.....	10.00	1.80	2.00	21.60
26080	Analysis.....	11.10	1.54	2.41	22.37
	Semper-Fidelis Kainit—Guarantee.....	.....	.....	12.00	14.40
26083	Analysis.....	.....	.....	13.12	15.74
	Semper-Fidelis Phospho Meal—Guarantee.....	8.50	3.50	1.00	25.40
26081	Analysis.....	10.21	3.52	0.79	27.28

Table II.—Registration of Commercial Fertilizers, Season of 1914-1915.

Manufacturer, Place of Business and Brand.	Phosphoric Acid Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
Arkansas Fertilizer Co., Little Rock, Ark.—				
White Diamond Acid Phosphate	14.00	.....	.....	\$16.80
White Diamond Ammoniated Bone Superphosphate	9.00	1.65	2.00	19.80
White Diamond Blood, Bone and Potash	12.00	2.00	1.50	24.20
White Diamond Corn Fertilizer	9.50	2.00	3.50	23.60
White Diamond Corn Grower	8.00	1.65	3.00	19.80
White Diamond Corn and Wheat Fertilizer	10.00	1.70	4.00	23.60
White Diamond Cotton Fertilizer	10.00	2.00	3.00	23.60
White Diamond Early Potato and Truck Fertilizer	8.00	2.50	4.00	24.40
White Diamond East Texas High Grade Trucker	10.00	2.47	1.00	23.08
White Diamond Farmer's Choice	10.00	2.00	3.00	23.60
White Diamond Gro-fast Fertilizer	8.00	1.65	2.00	18.60
White Diamond Kainit . . . . .	.....	.....	12.00	14.40
White Diamond Kali-Superphosphate	11.00	.....	3.00	16.80
White Diamond Meal Base Fertilizer	9.00	1.65	2.00	19.80
White Diamond Muriate of Potash . . . . .	.....	.....	50.00	60.00
White Diamond Nitrate of Soda . . . . .	.....	15.60	.....	62.40
White Diamond Nitrated Superphosphate	8.00	2.50	4.00	24.40
White Diamond Orchard Fertilizer	8.00	1.65	7.00	24.60
White Diamond Parlier's Special Fertilizer	10.00	3.30	4.00	30.00
White Diamond Peanut Fertilizer	9.10	1.00	4.00	19.70
White Diamond Phospho-Kainit	11.50	.....	4.00	18.60
White Diamond Potash Special	9.00	2.00	5.00	24.80
White Diamond Prize Winner	8.50	1.65	2.50	19.80
White Diamond Soluble Bone and Blood	8.00	1.65	2.00	18.60
White Diamond Special Acid Phosphate	16.00	.....	.....	19.20
White Diamond Standard Grade Texas Special	10.00	1.65	1.00	19.80
White Diamond Southern Queen Fertilizer	10.00	1.65	2.00	21.00
White Diamond Southern Standard Fertilizer	10.00	1.65	1.50	20.40
White Diamond 20th Century Fertilizer	9.00	1.65	2.00	19.80
White Diamond Vegetable Fertilizer	7.00	2.00	3.00	20.60
White Diamond Young's High Grade Special	7.00	2.50	5.00	24.40
Armour & Co., Houston, Texas, Fort Worth, Texas, and New Orleans, La.—				
Armour's African Cotton Grower	9.00	2.47	3.00	24.28
Armour's Bone Meal	*22.00	2.00	.....	25.20
Armour's Cottonseed Meal Special	10.00	1.65	1.50	20.40
Armour's Cotton Special	10.00	1.65	1.50	20.40
Armour's 14 Per Cent Acid Phosphate	14.00	.....	.....	16.80
Armour's Kainit . . . . .	.....	.....	12.00	14.40
Armour's King Cotton	8.00	1.65	2.00	18.60
Armour's Muriate of Potash . . . . .	.....	.....	50.00	60.00
Armour's Nitrate of Soda . . . . .	.....	14.80	.....	59.20
Armour's Onion Fertilizer No. 1	8.00	3.29	8.00	32.36
Armour's Onion Fertilizer No. 2	8.00	2.47	4.00	24.28
Armour's Onion Fertilizer No. 3	8.00	3.29	6.00	29.96
Armour's Onion Fertilizer No. 4	3.00	4.11	5.00	26.04
Armour's Onion Fertilizer No. 5	3.00	4.94	3.00	26.96
Armour's Onion Fertilizer No. 6	4.00	4.94	7.00	32.96
Armour's Onion Fertilizer No. 7	6.00	3.29	3.00	23.96
Armour's Onion Fertilizer No. 8	6.00	3.29	6.00	27.56
Armour's Onion Fertilizer No. 9	10.00	2.47	6.00	29.08
Armour's Onion Fertilizer No. 10	3.00	4.95	5.00	29.36
Armour's Onion Fertilizer No. 11	5.00	4.11	3.00	26.04
Armour's Onion Fertilizer No. 12	6.00	3.29	4.00	25.16
Armour's Onion Fertilizer No. 13	1.00	4.94	1.00	22.16
Armour's Onion Fertilizer No. 14	7.00	4.94	2.00	30.56
Armour's Onion Fertilizer No. 15	5.00	4.11	5.00	28.44
Armour's Onion Fertilizer No. 252	2.00	4.11	2.00	21.24
Armour's Orange Grower No. 1	7.00	2.47	5.00	24.28
Armour's Orange Grower No. 2	8.00	1.65	2.00	18.60
Armour's Phosphate and Potash No. 102	10.00	.....	2.00	14.40
Armour's Phosphate and Potash No. 104	10.00	.....	4.00	16.80
Armour's Phosphate and Potash No. 1208	12.00	.....	8.00	24.00
Armour's Phosphate and Potash No. 1402	14.00	.....	2.00	19.20
Armour's Potato Grower	10.00	2.47	6.00	29.08
Armour's Raw Bone Meal	*22.00	3.70	.....	31.66
Armour's Raw Bone Superphosphate with Potash	9.50	1.65	1.50	19.80
Armour's Rice Grower	12.00	.....	2.00	16.80
Armour's Sandy High Land Special	10.00	1.65	1.50	20.40
Armour's 16 Per Cent Acid Phosphate	16.00	.....	.....	19.20
Armour's Special Blood and Bone Mixture	9.50	1.65	1.50	19.80
Armour's Special Cabbage Grower	8.00	1.65	3.00	19.80

*Total Phosphoric Acid.

Table II.—Registration of Commercial Fertilizers, Season of 1914-1915.

Manufacturer, Place of Business and Brand.	Phosphoric Acid— Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
Armour & Co., Houston, Fort Worth, Texas, and New Orleans, La.—Continued.				
Armour's Special Texas Formula.....	10.00	1.65	2.00	21.00
Armour's Strawberry Grower.....	6.00	1.65	5.00	19.80
Armour's Sulphate of Potash.....			48.00	57.60
Armour's Tobacco Special No. 244.....	2.00	4.00	4.00	23.20
Armour's Truck Special No. 1.....	7.00	4.11	6.00	32.04
Armour's Truck Special No. 2.....	8.00	1.65	3.00	19.80
Armour's Vegetable Grower.....	9.00	2.05	3.00	22.60
Nitragin—Bacteria Culture for Legumes.....				
George Armistead, Houston, Texas—				
Acid Phosphate.....	16.00			19.20
Muriate of Potash.....			48.00	57.60
Nitrate of Soda.....		15.00		60.00
Sulphate of Potash.....			47.00	56.40
George L. Barber, Jacksonville, Texas—				
Barber's 16 Per Cent Acid Phosphate.....	16.00			19.20
The Bowie County Cotton Oil Co., New Boston, Texas—				
Bowie Cottonseed Meal.....	2.25	7.00	1.25	33.20
Bowie Kainit.....			12.00	14.40
Bowie 16 Per Cent Acid Phosphate.....	16.00			19.20
Bryan Cotton Oil and Fertilizer Co., Bryan, Texas—				
Star Brand Acid Phosphate.....	14.00			16.80
Star Brand Cotton and Corn Fertilizer.....	11.50	1.80		21.00
Star Brand Potato Fertilizer.....	8.00	3.50		23.60
Star Brand Phospho Special Fertilizer.....	11.00	2.00		21.20
Charles A. R. Campbell, San Antonio, Texas—				
Bat Roost Guano.....	3.00	10.00		43.60
Carthage Fertilizer Co., Carthage, Texas—				
Carthage Corn Specia.....	9.00	2.00	1.75	20.90
Carthage Cotton and Corn Grower.....	10.00	1.65	1.00	19.80
Carthage Cotton Grower.....	10.00	1.65	1.00	19.80
The Clarksville Cotton Oil Co., Clarksville, Texas—				
Acid Phosphate.....	16.00			19.20
Cottonseed Meal.....	2.50	7.00	1.50	32.80
Kainit.....			12.00	14.40
Corpus Christi Cotton Oil Co., Corpus Christi, Texas—				
Cottonseed Fertilizer.....	2.00	6.00	1.00	27.60
Dallas Fertilizer and Reduction Co., Dallas, Texas—				
Beaver Acid Phosphate.....	16.00			19.20
Beaver Bone Meal.....	*22.00	3.50		30.90
Beaver Cotton Grower.....	8.00	1.65	2.00	18.60
Beaver Cotton and Corn Grower.....	10.00	1.65	2.00	21.00
Beaver Nitrate of Soda.....		14.00		56.00
Beaver Potato Grower.....	10.00	2.47	6.00	29.08
Beaver Strawberry Grower.....	8.00	1.65	5.00	22.20
Beaver Tankage.....	4.00	4.00		19.20
Beaver Tankage and Phosphate.....	9.00	2.47		20.68
Beaver Trucker.....	8.00	1.65	3.00	19.80
Beaver Truck Grower.....	8.00	2.47	3.00	23.08
Beaver Vegetable Grower.....	9.00	2.47	3.00	24.28
Earp-Thomas Farmogerm Co., Glen Ridge, N. J.—				
Farmogerm—High Bred Nitrogen Gathering Bacteria.....				
Bacteria Culture for Legumes.....				
East Texas Fertilizer Co., Tyler, Texas—				
Bull Corn and Cotton.....	10.00	2.00	1.00	21.20
East Texas Corn and Cotton Grower.....	8.00	2.00	2.00	20.00
East Texas Crop Grower.....	8.00	3.00	3.00	25.20
Kainit.....			12.00	14.40
Muriate of Potash.....			48.00	57.60
16 Per Cent Acid Phosphate.....	16.00			19.20
Wiley's Corn and Cotton.....	10.00	2.00	2.00	22.40
Wiley's Tomato Special.....	9.00	2.80		22.00

*Total Phosphoric Acid.

Table II.—Registration of Commercial Fertilizers, Season of 1914-1915.

Manufacturer, Place of Business and Brand.	Phosphoric Acid Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
Farmer's Oil and Fertilizer Co., Texarkana, Texas—				
Farmer's Acid Phosphate.....	14.00			16.80
Farmer's Cotton Fertilizer.....	9.00	1.65	2.00	19.80
Farmer's Cotton Fruiter.....	10.00	0.82	1.00	16.52
Farmer's High Grade Acid Phosphate.....	16.00			19.20
Farmer's Muriate of Potash.....			48.00	57.60
Farmer's Potato Fertilizer.....	10.00	0.83	2.00	17.72
Federal Chemical Co., Columbia, Tenn.—				
Daybreak Tennessee Brown Phosphate Rock.....	*29.75			
Fidelity Chemical Corporation, Houston, Texas—				
Fidelity Acid Phosphate 14 Per Cent.....	14.00			16.80
Fidelity Acid Phosphate 16 Per Cent.....	16.00			19.20
Fidelity Ammoniated Rice Fertilizer.....	12.00	1.65	2.00	23.40
Fidelity Ammoniated Superphosphate with Potash.....	10.00	1.65	1.00	19.80
Fidelity Bone Meal Fertilizer.....	*27.00	1.00		25.40
Fidelity Cereal Cultivator Fertilizer.....	6.50	2.47	1.00	18.88
Fidelity Citrous Grower Fertilizer.....	7.00	2.88	8.00	29.52
Fidelity Special Fertilizer.....	10.00	1.65	2.00	21.00
Fidelity Cotton Special No. 2 Fertilizer.....	10.00	1.65	1.50	20.40
Fidelity Cotton Standard Fertilizer.....	8.00	2.06	1.50	19.66
Fidelity Kainit.....			12.00	14.40
Fidelity Laredo Special Fertilizer.....	5.00	3.87	8.00	31.08
Fidelity Lone Star Special Fertilizer.....	10.00	1.65	6.00	25.80
Fidelity Orange Special Fertilizer.....	7.00	2.88	5.00	25.92
Fidelity Muriate of Potash.....			50.00	60.00
Fidelity Nitrate of Soda.....		15.00		60.00
Fidelity Peerless Trucker Fertilizer.....	8.00	2.47	5.00	25.48
Fidelity Potato Special Fertilizer.....	7.00	2.06	3.00	20.24
Fidelity Regal Compound Fertilizer.....	10.00		4.00	16.80
Fidelity Rice Planter Fertilizer.....	12.00		2.00	16.80
Fidelity Strawberry Special Fertilizer.....	6.00	2.47	5.00	23.08
Fidelity Sulphate of Ammonia.....		20.50		82.00
Fidelity Sulphate of Potash.....			48.00	57.60
Fidelity Truck Grower Fertilizer.....	8.00	2.47	8.00	29.08
Non-Potassic Fidelity Laredo Trucker.....	5.00	3.87		21.48
Non-Potassic Fidelity Cotton Grower Fertilizer.....	10.00	2.00		20.00
Non-Potassic Fidelity Cotton Fertilizer.....	8.00	2.63		20.12
Galveston Packing Co., Galveston, Texas—				
Blood and Bone.....	2.52	7.17		31.70
Gate City Fertilizer Co., Texarkana, Texas—				
Red Ball Acid Phosphate.....	14.00			16.80
Red Ball Complete Fertilizer.....	10.00	1.65	1.00	19.80
Red Ball Cotton and Corn Fertilizer.....	10.00	2.00	3.00	23.60
Red Ball Cotton Grower.....	9.00	1.65	2.00	19.80
Red Ball Early Trucker.....	8.00	2.50	4.00	24.40
Red Ball Extra Acid Phosphate.....	16.00			19.20
Red Ball Four States' Standard.....	8.50	1.65	2.50	19.80
Red Ball Kainit.....			12.00	14.40
Red Ball Muriate of Potash.....			50.00	60.00
Red Ball Nitrate of Soda.....		15.60		62.40
Red Ball Old Reliable Fertilizer.....	8.00	1.65	2.00	18.60
Red Ball Old Time Vegetable Grower.....	7.50	2.00	3.00	20.60
Red Ball Phosphate and Potash.....	11.00		3.00	16.80
Red Ball Potash-Acid.....	11.50		4.00	18.60
Red Ball Soluble Bone Fertilizer.....	8.00	1.65	2.00	18.60
Red Ball Southern Corn Grower.....	8.00	1.65	3.00	19.80
Red Ball Spanish Peanut Fertilizer.....	9.10	1.00	4.00	19.72
Red Ball Sulphate of Potash.....			48.00	57.60
German Kali Works, Inc., New York and New Orleans, La.—				
Kainit.....			12.00	14.40
Muriate of Potash.....			48.00	57.60
Sulphate of Potash.....			47.00	56.40
Henderson Cotton Oil and Gin Co., Henderson, Texas—				
Henderson Acid Phosphate.....	16.00			19.20
Henderson Corn Maker.....	8.00	3.00	2.00	24.00
Henderson Half and Half.....	7.00	4.00		24.40
Henderson Staple.....	10.00	1.65	1.00	19.80
Henderson Cotton Maker.....	9.00	2.00	2.00	22.20

*Total Phosphoric Acid.

Table II.—Registration of Commercial Fertilizers, Season of 1914-1915.

Manufacturer, Place of Business and Brand.	Phosphoric Acid Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
Hope Fertilizer Co., Hope, Ark.—				
Blue Ribbon.....	7.50	3.30	2.00	24.60
Cottophos.....	8.50	3.30	1.00	24.60
Dixie Belle.....	10.00	1.25	1.00	18.20
Foster's Favorite Formula.....	8.00	4.00	6.00	32.80
Hope Hustler.....	8.00	1.65	2.00	18.60
Hope Potato Mixture.....	7.50	2.00	6.00	26.20
Hope Standard.....	9.00	1.65	2.00	19.80
Our Corn Grower.....	9.00	2.00	2.00	21.20
Our Cotton Grower.....	10.00	1.65	1.00	19.80
Our Cottonseed Meal Fertilizer.....	1.00	6.25	1.00	27.40
Our Early Fruiter.....	12.00	.....	2.00	16.80
Our Extra Cotton Grower.....	10.00	1.65	2.00	21.00
Our Potato Grower.....	8.00	2.55	6.00	27.00
Our Truck Grower.....	10.00	3.30	3.00	28.80
Stork Brand Nitrate of Soda.....	.....	15.00	.....	60.00
Stork Brand 16 Per Cent Acid Phosphate.....	16.00	.....	.....	19.20
Hopkins County Fertilizer Co., Sulphur Springs, Texas—				
Acid Phosphate.....	16.00	.....	.....	19.20
Hopkins County Corn and Cotton.....	8.00	1.65	2.00	18.60
Houston County Oil Mill and Manufacturing Co., Crockett, Texas—				
Crockett Cereal Standard.....	8.25	2.25	2.25	21.58
Crockett Compound.....	9.00	3.25	1.25	25.30
Crockett Cotton Standard.....	10.25	2.00	2.00	22.70
Crockett 14 Per Cent Acid Phosphate.....	14.00	.....	.....	16.80
Crockett Grower.....	5.00	4.25	2.50	26.00
Crockett Imperial Fruiter.....	10.10	1.10	2.10	19.04
Crockett Kainit.....	.....	.....	12.00	14.40
Crockett Muriate of Potash.....	.....	.....	50.00	60.00
Crockett Onion Grower.....	5.50	5.75	5.30	35.96
Crockett Planter's Triumph.....	9.00	2.00	2.25	21.50
Crockett Phosphate Special.....	11.00	1.50	1.00	20.40
Crockett Poor Land Special.....	10.00	3.00	3.25	27.90
Crockett 16 Per Cent Acid Phosphate.....	16.00	.....	.....	19.20
Crockett Special Mixture.....	10.90	1.70	1.00	21.15
Crockett Sulphate of Potash.....	.....	.....	48.00	57.60
Crockett Vegetable Producer.....	7.50	3.00	5.50	27.60
Houston Packing Co., Houston, Texas—				
Blood and Bone.....	*14.50	5.60	.....	32.88
Kainit.....	.....	.....	12.00	14.40
Muriate of Potash.....	.....	.....	48.00	57.60
Huntsville Cotton Oil Co., Huntsville, Texas—				
Acid Phosphate.....	16.00	.....	.....	19.20
Industrial Cotton Oil Properties, Houston, Texas—				
Industrial Corn Grower Fertilizer.....	10.00	1.65	2.00	21.00
Industrial Cotton Grower Fertilizer.....	10.00	1.65	2.00	21.00
Industrial Rice Grower Fertilizer.....	12.00	.....	2.00	16.80
Industrial Special Corn Grower.....	8.00	3.00	1.00	22.80
Industrial Special Cotton Grower.....	10.00	2.00	1.00	21.20
Industrial Special Vegetable Grower.....	10.00	2.00	3.00	23.60
Industrial Vegetable Grower Fertilizer.....	7.00	2.00	4.00	21.20
Jackson Fertilizer Co., Jackson, Miss.—				
Red Band 16 Per Cent Acid Phosphate.....	16.00	.....	.....	19.20
Royal C Brand.....	10.00	1.65	1.50	20.40
Jacksonville Cotton Oil Co., Jacksonville, Texas—				
Cottonseed Meal with Hulls Fertilizer.....	1.06	6.00	1.66	27.26
Lavaca Oil Company, Hallettsville, Texas—				
Cottonseed Meal Fertilizer.....	2.00	6.90	1.50	31.80
Longview Cotton Oil Company, Longview, Texas—				
Longview Acid Phosphate.....	16.00	.....	.....	19.20
Longview Corn Special.....	8.00	3.00	2.00	24.00
Longview Cotton Special.....	9.00	2.00	2.00	21.20
Longview Cotton Hustler.....	10.00	2.00	1.00	21.20

*Total Phosphoric Acid.

Table II.—Registration of Commercial Fertilizers, Season of 1914-1915.

Manufacturer, Place of Business and Brand.	Phosphoric Acid— Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
R. P. Marbach, Bracken, Texas—				
Bat Guano.....	4.11	8.22	.....	37.81
Magnolia Cotton Oil Co., Houston, Texas—				
Cottonseed Fertilizer.....	2.00	6.00	1.00	27.60
Marshall Fertilizer Factory, Marshall, Texas—				
Cotton and Corn Grower.....	10.00	1.65	1.00	19.80
Cottonseed Meal.....	1.00	6.88	1.00	29.92
Cotton Special.....	10.00	1.65	.....	18.60
High Grade Acid Phosphate.....	16.00	.....	.....	19.20
High Grade Big Boll Prolific.....	10.00	1.65	2.00	21.00
Marshall Cotton and Corn Special.....	10.00	1.65	1.00	19.80
Marshall Triumph.....	10.00	2.47	3.00	25.48
Nitrate of Soda.....	.....	15.25	.....	61.00
Red Diamond Acid Phosphate.....	14.00	.....	.....	16.80
Tomato Special.....	6.00	2.47	4.00	23.08
Truck Special.....	7.00	2.47	2.00	20.68
Vegetable Grower.....	7.00	2.47	4.00	23.08
Meridian Fertilizer Factory, Shreveport, La.—				
Caddo Cotton.....	9.25	1.88	1.00	19.82
Caddo Vegetable.....	8.00	3.30	4.00	27.60
Corn Grower.....	7.50	2.88	1.00	21.72
Cottonseed Meal Fertilizer.....	.....	6.58	.....	26.32
Meridian Ammoniated Rice Grower.....	10.00	1.65	2.00	21.00
Meridian Blood and Bone.....	10.00	1.65	1.00	19.80
Meridian Bone and Potash.....	12.00	.....	2.00	16.80
Meridian Cane Special No. 1.....	4.00	5.35	.....	26.20
Meridian Corn Club Special.....	7.50	2.47	1.00	20.08
Meridian Cotton and Corn Special.....	9.00	2.47	3.00	24.28
Meridian English Acid Phosphate.....	12.00	.....	.....	14.40
Meridian Golden Harvester.....	10.00	3.30	4.00	30.00
Meridian Ham Bone Guano.....	10.00	1.65	1.50	20.40
Meridian Home Mixture.....	10.00	1.65	1.00	19.80
Meridian Meal Mixture.....	10.00	1.65	1.00	19.80
Meridian Nitrated Bone and Potash.....	10.00	1.65	2.00	21.00
Meridian Perfection Acid Phosphate.....	17.00	.....	.....	20.40
Meridian Perfection Blood Compound.....	10.00	2.47	3.00	25.48
Meridian Perfection Potash Formula.....	12.00	.....	4.00	19.20
Meridian Potash Compound.....	10.00	.....	4.00	16.80
Meridian Potato Special.....	8.00	3.30	2.00	25.20
Meridian Rice Grower.....	10.00	.....	2.00	14.40
Meridian Special Corn Formula.....	7.50	2.47	.....	18.88
Meridian Special Cotton Formula.....	10.00	1.65	.....	18.60
Meridian Soluble Guano.....	10.00	1.65	1.50	20.40
Meridian Southern Acid Phosphate.....	14.00	.....	.....	16.80
Meridian Standard Cotton and Corn.....	8.00	2.00	2.00	20.00
Meridian Strawberry Special.....	10.00	1.65	5.00	24.60
Meridian Tomato Special.....	10.00	2.47	1.00	23.08
Meridian Trucker's Special.....	9.00	1.65	2.00	19.80
Meridian Vegetable Grower.....	8.00	2.47	5.00	25.48
Nitrate of Soda.....	.....	15.00	.....	60.00
Star.....	10.00	1.65	1.00	19.80
Texas Special.....	10.00	2.72	.....	22.88
Union Special Acid Phosphate.....	16.00	.....	.....	19.20
Weevil Beater Guano.....	10.00	1.65	1.00	19.80
H. K. Mulford Co., Philadelphia, Pa.—				
Mulford Cultures for Legumes.....	.....	.....	.....	.....
Nacogdoches Oil Mill, Nacogdoches, Texas—				
Cariso Corn Grower.....	7.00	3.29	1.00	22.76
Loco Cotton Grower.....	10.00	1.65	1.00	19.80
Nacogdoches 12 Per Cent German Kainit.....	.....	.....	12.00	14.40
Nacogdoches 16 per Cent Acid Phosphate.....	16.00	.....	.....	19.20
Sulphate of Potash.....	.....	.....	48.00	57.60
Tusco Cotton Phospho.....	10.00	1.65	2.00	21.00
Nitrate Agencies Company of Texas, Houston, Texas—				
Basic Slag (Thomas Phosphate Powder) H. A. Brand.....	*17.00	.....	.....	.....
Ground Bone.....	*22.88	2.46	.....	27.65
Genuine Peruvian Guano.....	10.00	10.69	2.00	57.16

*Total Phosphoric Acid.

Table II.—Registration of Commercial Fertilizers, Season of 1914-1915.

Manufacturer, Place of Business and Brand.	Phosphoric Acid— Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
Nitrate Agencies Company of Texas, Houston, Texas.				
High Grade Basic Slags (Thomas Phosphate Powder)	*17.00			
High Grade Chemical Fertilizer	8.00	4.90	6.00	36.40
High Grade 14 Per Cent Acid Phosphate	14.00			16.80
High Grade Raw Bone	*23.00	3.70		32.46
High Grade 16 Per Cent Acid Phosphate	16.00			19.20
High Grade Steamed Bone	*23.00	3.70		33.20
Kainit			12.00	14.40
Muriate of Potash			48.00	57.60
Nitrate of Soda		15.00		60.00
Peruvian Guano	10.00	10.69	2.00	57.16
Sulphate of Potash			47.00	56.40
Frank Peacock, 502 Foster Building, Houston, Texas—				
Peacock's Ironite Fertilizer	3.00	3.30	1.50	18.60
Pelican Fertilizer Works, Shreveport, La.				
Muriate of Potash			50.00	60.00
Nitrate of Soda		15.00		60.00
Pelican Corn Grower	7.00	2.47	2.00	20.68
Pelican Cotton and Corn	8.00	2.00	2.00	20.00
Pelican Cotton Special	10.00	1.65	2.00	21.00
Pelican Favorite Cotton Grower	9.00	1.90	1.00	17.80
Pelican Fish Bone Fertilizer	10.00	1.65	2.00	21.00
Pelican Fish Formula	10.00	1.65	1.00	19.80
Pelican German Kainit			12.00	14.40
Pelican Golden West	10.00	1.65	1.00	19.80
Pelican High Grade Acid Phosphate	14.00			16.80
Pelican High Grade	9.00	2.47	3.00	24.28
Pelican Meal Compound	10.00	1.65	1.00	19.80
Pelican Potato Special	8.00	3.30	2.00	25.20
Pelican Potash and Bone	12.00		2.00	16.80
Pelican Potash and Superphosphate	10.00		4.00	16.80
Pelican Rice Formula	10.00		2.00	14.40
Pelican Special Phosphate	16.00			19.20
Pelican Tomato Special	10.00	2.47	1.00	23.08
Pelican Vegetable Grower	8.00	2.47	4.00	24.28
Planters Fertilizer and Chemical Co., New Orleans, La., Houston and Fort Worth, Texas—				
Planters' Bone Meal	*22.00	2.00		25.20
Planters' Cotton Grower	10.00	1.65	1.50	20.40
Planters' Cotton and Corn No. 1	9.50	1.65	1.50	19.80
Planters' Golden Mixture	9.50	1.65	1.50	19.80
Planters' Kainit			12.00	14.40
Planters' Muriate of Potash			50.00	60.00
Planters' Nitrate of Soda		14.81		59.24
Planters' Orange Fertilizer	8.00	1.65	3.00	19.80
Planters' Phosphate and Potash No. 102	10.00		2.00	14.40
Planters' Phosphate and Potash No. 104	10.00		4.00	16.80
Planters' Potato Fertilizer No. 1	8.00	2.06	6.00	25.00
Planters' Potato Fertilizer No. 2	8.00	2.47	4.00	24.28
Planters' Raw Bone Meal	*10.50	3.70		23.20
Planters' Raw Bone Superphosphate with Potash	9.50	1.65	1.50	19.80
Planters' Special Farm Mixture	10.00	1.65	1.50	20.40
Planters' Sulphate of Potash			48.00	57.60
Planters' Vegetable Grower	7.00	2.47	3.50	22.48
Pittsburg Cotton Oil Co., Pittsburg, Texas—				
Acid Phosphate	16.00			19.20
Rockdale Oil Co., Rockdale, Texas—				
Superior Brand Acid Phosphate	14.00			16.80
Superior Brand Corn and Cotton Fertilizer	11.00	1.90		20.80
Superior Brand Cotton Special Fertilizer	8.00	1.70	3.00	20.00
Superior Brand Vegetable Fertilizer	8.50	3.50		24.20
San Augustine Fertilizer Co., San Augustine, Texas—				
Augustine Acid Phosphate	16.00			19.20
Parker's Best	8.50	3.55		24.40
Shreveport Fertilizer Works, Shreveport, La.—				
Black Hawk Acid Phosphate	12.00			14.40
B. F. Campbell's Cotton Grower	9.00	2.00		18.80

*Total Phosphoric Acid.

Table II.—Registration of Commercial Fertilizers, Season of 1914-1915.

Manufacturer, Place of Business and Brand.	Phosphoric Acid Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
Shreveport Fertilizer Works, Shreveport, La.—Continued.				
Lion Ammoniated Raw Bone Superphosphate—Non-Potassic	10.00	1.65		18.60
Lion Blood and Bone—Non-Potassic	10.00	1.65		18.60
Lion Cabbage Special	8.00	5.00		29.60
Lion Corn Food—Non-Potassic	9.00	2.50		20.80
Lion Cotton Food—Non-Potassic	9.50	1.88		18.92
Lion Cotton and Corn—Non-Potassic	10.00	1.65		18.60
Lion Cottonseed Meal Mixture—Non-Potassic	10.00	1.65		18.60
Lion Favorite Fertilizer—Non-Potassic	10.00	1.65		18.60
Lion High Grade Potash Mixture	12.00		4.00	19.20
Lion Nitro Rice Special	10.00	1.65	2.00	21.00
Lion Phosphate	14.00			16.80
Lion Prolific Fruiter—Non-Potassic	10.00	2.00		20.00
Lion Red Land Cotton Grower—Non-Potassic	12.00	1.65		21.00
Lion Rice Grower	10.00		2.00	14.40
Lion Sandy Soil Special—Non Potassic	9.00	2.00		18.80
Lion Success Mixture—Non-Potassic	10.00	1.65		18.60
Lion Tomato Special—Non-Potassic	10.00	2.50		22.00
Lion Superphos Potash	12.00		2.00	16.80
Lion Superior Meal Formula	10.00	2.50	3.00	25.60
Lion Veribest	10.00	3.00	4.00	28.80
Lion Extra Good Phosphate	16.00			19.20
New Oil Mill Cotton Special—Non-Potassic	9.50	1.88		18.98
Nitrate of Soda		15.00		60.00
Shalley's Rice Grower	10.00		4.00	16.80
Swift & Co., Fort Worth, Texas, Harvey and Shreveport, La.—				
Swift's Ammoniated Raw Bone Superphosphate	9.50	1.65	1.50	19.80
Swift's Champion Vegetable Grower	8.00	3.29	3.00	26.36
Swift's Clay Soil Special	12.00	1.65		21.00
Swift's Diamond "A" Fertilizer	8.00	1.65	3.00	19.80
Swift's Diamond "B" Fertilizer	3.00	4.94	6.00	30.56
Swift's Diamond "D" Fertilizer	10.00	1.65	1.00	19.80
Swift's Diamond "I" Fertilizer	7.00	3.70	4.00	28.00
Swift's Diamond "J" Cottonseed Meal Compound Fertilizer	10.00	2.47	6.00	29.08
Swift's Diamond "O" Fertilizer	10.00	3.29	6.00	27.56
Swift's Diamond "P" Fertilizer	8.00	3.29	8.00	32.36
Swift's Diamond "S" Top Dresser	4.00	4.11	3.00	24.84
Swift's Diamond "W" Fertilizer	10.00	3.29	8.00	34.76
Swift's Diamond "X" Fertilizer	3.00	4.94	6.00	30.56
Swift's Eagle Guano	10.00	1.65	2.00	21.00
Swift's Early Truck Grower	6.00	2.47	6.00	23.58
Swift's East Texas Trucker Fertilizer	8.00	2.47	3.00	23.04
Swift's Farmer's Home High Grade Phosphate and Potash	12.00		4.00	19.20
Swift's Garden City Phosphate	14.00			16.80
Swift's Golden Harvest Cottonseed Meal Compound	8.00	1.65	2.00	18.60
Swift's Good Luck Cottonseed Meal Compound	10.00	1.65	2.00	21.00
Swift's High Grade Acid Phosphate	16.00			19.20
Swift's High Grade Phosphate and Potash	10.00		4.00	16.80
Swift's High Grade Special Vegetable Fertilizer	8.00	2.05	6.00	25.00
Swift's Muriate of Potash			50.00	60.00
Swift's Nitrate of Soda		14.82		59.28
Swift's Palmetto Guano	8.00	2.47	3.00	23.08
Swift's Planter's Special Cotton Seed Meal Compound	10.00	1.65	1.00	19.80
Swift's Plow Boy Cottonseed Meal Compound	8.00	2.47	3.00	23.08
Swift's Pulverized Cattle Manure	1.50	2.06	1.50	11.84
Swift's Pulverized Sheep Manure	1.50	2.06	1.50	11.84
Swift's Pure Bone Meal	*24.00	2.47		28.58
Swift's Rice Grower	12.00		2.00	16.80
Swift's Special Cotton and Corn Fertilizer	10.00	1.65	1.00	19.80
Swift's Special Grain Fertilizer	10.00	1.65	2.00	21.00
Swift's Special Orchard Fertilizer	12.00	1.65	10.00	33.00
Swift's Special Phosphate and Potash	10.00		2.00	14.40
Swift's Special Vegetable Fertilizer	8.00	2.05	6.00	25.00
Swift's Standard Grade Cottonseed Meal Compound	9.50	1.65	1.50	19.80
Swift's Standard Grade Early Vegetable and Fruit Grower	8.00	1.65	3.00	19.80
Swift's Superphosphate Cottonseed Meal Compound	9.50	1.65	1.50	19.80
Swift's Superphosphate-Potash Ammoniated	8.00	1.65	2.00	18.60
Swift's Tankage Formula	*6.87	7.41		33.65
Tennessee Coal, Iron and Railroad Co., Birmingham, Ala.—				
Duplex Basic Phosphate A	*14.00			
Duplex Basic Phosphate AA	*18.00			

*Total Phosphoric Acid.

Table II.—Registration of Commercial Fertilizers, Season of 1914-1915.

Manufacturer, Place of Business and Brand.	Phosphoric Acid— Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
Union Seed and Fertilizer Co., New Orleans, La.—				
American Truckers' Special.	10.00	1.65	5.00	24.60
Ammoniated Raw Bone Superphosphate and Potash.	10.00	1.65	1.00	19.80
Black Diamond Acid Phosphate.	12.00	.....	.....	14.40
Blood, Bone and Beef.	10.00	1.65	1.00	19.80
Blood, Bone and Potash.	10.00	1.65	1.00	19.80
Brown's Special.	14.00	1.65	1.00	24.60
Bull Dog Acid Phosphate.	16.00	.....	.....	19.20
Corn Grower.	8.00	2.47	1.50	21.28
Crescent City Acid Phosphate.	12.00	.....	.....	14.40
Dissolved Bone and Potash 10-4.	10.00	.....	4.00	16.80
Dissolved Bone and Potash 12-2.	12.00	.....	2.00	16.80
El Salvador Sugar Cane Grower No. 675.	7.00	5.00	5.00	34.40
Economizer.	10.00	1.65	2.00	21.00
Excelsior.	10.00	1.65	2.00	21.00
Farmers' Cornucopia.	12.00	2.47	2.00	26.68
Goldsmith's Improved Mixture.	10.00	1.65	1.00	19.80
Golden Guano.	10.00	1.65	1.00	19.80
Honduras Rice Grower.	12.00	.....	4.00	19.20
Kainit.	.....	.....	12.00	14.40
Lone Star Blood Mixture.	10.00	0.82	1.00	16.48
Lone Star Meal Mixture.	10.00	0.82	1.00	16.48
Louisiana Plant Cane Grower.	6.00	3.30	.....	20.40
Louisiana Stubble Cane Grower.	4.00	4.94	.....	24.56
Louisiana Rice Grower.	10.00	.....	2.00	14.40
Muriate of Potash.	.....	.....	50.00	60.00
Meal Ammoniated Superphosphate and Potash.	10.00	1.65	1.00	19.80
Nitrate of Soda.	.....	15.00	.....	60.00
New Orleans Acid Phosphate.	14.00	.....	.....	16.80
Supreme Acid Phosphate.	18.00	.....	.....	21.60
Sulphate of Ammonia.	.....	20.00	.....	80.00
Sulphate of Potash.	.....	.....	50.00	60.00
Special Sugar Cane Grower No. 67.	7.00	5.00	.....	28.40
Texas Onion Grower.	6.00	3.30	6.00	27.60
Usafco Cotton and Corn Grower.	10.00	1.65	2.00	21.00
Vegetable Grower.	6.00	2.47	4.00	21.88
Wells' Cotton and Corn Grower.	10.00	1.65	2.00	21.00
Virginia-Carolina Chemical Co., Shreveport, La.—				
B. B. B. Beef, Blood and Bone.	10.00	1.65	1.00	19.80
Eureka Complete Fertilizer.	10.00	1.65	4.00	23.40
German Kainit.	.....	.....	12.00	14.40
Georgia State Grange.	10.00	1.65	1.00	19.80
Mobile Double Eagle Guano.	10.00	1.65	1.50	20.40
Mobile Raw Bone Ammoniated Superphosphate.	10.00	1.65	1.50	20.40
Muriate of Potash.	.....	.....	48.00	57.60
Nitrate of Soda.	.....	14.80	.....	59.20
Royal Blood, Bone and Potash.	10.00	1.65	1.50	20.40
Royal Compound.	10.00	.....	2.00	14.40
Royal Cotton Boll Guano.	8.00	1.65	2.00	18.60
Royal Fruit Grower.	8.00	2.47	5.00	25.48
Royal High Grade Guano.	10.00	1.65	2.00	21.00
Royal Potash Compound.	10.00	.....	4.00	16.80
Royal Tomato Formula.	10.00	2.47	1.00	23.08
Royal Vegetable Fertilizer.	8.00	2.47	4.00	24.28
Scott's Gossypium Phospho.	10.00	1.65	1.50	20.40
Scott's Gossypium Phospho Special.	10.00	1.65	2.00	21.00
Scott's High Grade Acid Phosphate.	14.00	.....	.....	16.80
Scott's Potasso Phospho.	12.00	.....	2.00	16.80
Scott's State Standard Guano.	8.00	1.65	2.00	18.60
Sulphate of Potash.	.....	.....	48.00	57.60
Tip Top Nitrogen Compound.	2.00	13.15	.....	55.00
V. C. C. Co's 16 Per Cent Acid Phosphate.	16.00	.....	.....	19.20
V. C. C. Fruit and Truck Special.	6.00	3.30	8.00	30.00
V. C. High Grade Champion Compound.	9.00	3.00	3.00	26.40
V. C. High Grade Dixie Special.	7.00	3.00	1.00	21.60
V. C. High Grade Guano.	10.00	1.65	2.00	21.00
V. C. High Grade Potash Compound.	12.00	.....	4.00	19.20
V. C. High Grade Top Dresser.	4.00	6.18	2.50	32.52
V. C. Rice Special.	10.00	1.65	2.00	21.00
V. C. Special Potash Compound.	12.00	.....	8.00	24.00
V. C. Tomato Special.	10.00	2.47	1.50	23.68
V. C. C. Co's Truck Grower.	8.00	2.06	6.00	25.04
V. C. XXX Special.	8.00	2.47	1.00	20.68

*Total Phosphoric Acid.

Table II.—Registration of Commercial Fertilizers, Season of 1914-1915.

Manufacturer, Place of Business and Brand.	Phosphoric Acid Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
George A. Wright, Palestine, Texas—				
Wright's 14 Per Cent Acid Phosphate.....	14.00	.....	.....	16.80
Wright's Muriate of Potash.....	.....	.....	47.00	56.40
Wright's 16 Per Cent Acid Phosphate.....	16.00	.....	.....	19.20
The Wills Point Cotton Oil Co., Wills Point, Texas—				
Fertilizer Cottonseed Meal.....	1.00	7.00	1.00	30.40
Semper-Fidelis Acid Phosphate.....	16.00	.....	.....	19.20
Semper-Fidelis Black Land Fertilizer.....	10.00	1.75	2.25	21.70
Semper-Fidelis Corn Grower.....	8.75	1.80	3.25	21.60
Semper-Fidelis Cotton Grower.....	10.00	1.80	2.00	21.60
Semper-Fidelis Fruit Grower.....	8.00	3.00	8.00	31.20
Semper-Fidelis Kainit.....	.....	.....	12.00	14.40
Semper-Fidelis Muriate of Potash.....	.....	.....	50.00	60.00
Semper-Fidelis Non-Ammoniated Fertilizer.....	12.00	.....	3.00	18.00
Semper-Fidelis Phospho Meal.....	8.50	3.50	1.00	25.40
Semper-Fidelis Special Fertilizer.....	10.00	1.75	1.50	20.80
Semper-Fidelis Truck Grower.....	9.00	3.00	6.00	30.00