

TEXAS AGRICULTURAL EXPERIMENT STATION

BULLETIN NO. 193

AUGUST, 1916

DIVISION OF CHEMISTRY

Commercial Fertilizers in 1915-16



POSTOFFICE:
COLLEGE STATION, BRAZOS COUNTY, TEXAS.


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

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



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*As of September 1, 1916.

**In cooperation with the United States Department of Agriculture.

COMMERCIAL FERTILIZERS IN 1915-1916.

BY

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

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.
1915-16.....	21,500 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 as to 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 ANALYSIS.

Fertilizer samples, 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.

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 fertilizers, sold or offered for sale within the State of Texas, and shall publish his results as he may find." The results of such investigations 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 effect upon different soils.

POTASH IN FERTILIZERS.

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 by pot experiments made at the Texas Experiment Station, as well as by cooperative field experiments.

A number of cooperative 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 sixty-eight out of one hundred and fourteen experiments described in Bulletin 184, potash had no effect. The chances are, therefore, against the potash having any effect if generally used in complete fertilizers 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, and leave out the potash. 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 grown at all on such soils, as often the yield is not sufficient to pay. Tobacco, cabbages, 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 permitted by soil and climatic condi-

tions (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 fertilizer under all conditions should be discontinued. In the majority of cases, potash is not needed, being 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 for the crop to be grown on it. 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 have been, in the past, wastes of potash.

The present prices of potash are much too high to warrant its use as a fertilizer.

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. A cottonseed product containing less than 7.04 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 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 consumer.

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

LIMESTONE FILLER.

Some manufacturers of acid phosphate make a high grade phosphate and reduce it to 16 or 14 per cent. grade by means of limestone, or carbonate of lime. The use of limestone dries out the fertilizer and permits it to be drilled very easily, but the use of more than small amounts is likely to cause reversion of the acid phosphate and throw it below the guaranteed analysis. The reversion does not occur all at once, so that an early analysis may show the goods up to guarantee and a later analysis show them below guarantee.

This Bulletin contains two analyses of acid phosphate guaranteed at 16 per cent., but found to contain 13 per cent. available phosphoric acid associated with over 5 per cent. insoluble and 18 per cent. total phosphoric acid; examination showed the samples to contain carbonate of lime. The deficiency is clearly due to the reversion of the acid phosphate due to the use of a quantity of limestone as a filler.

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 required to be 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 the fruit.

Valuation per ton represents the cost of the plant food in the unmixed 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. On account of the variations in prices which have occurred since the war broke out, valuations do not represent closely the cost of the plant food.

FERTILIZER VALUATIONS, 1915-1916.

	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

These valuations are not closely related to the prices of fertilizer, on account of the decided variations and changes due to the war. For example, the demand for sulphuric acid to be used in making explosives, increased the price of sulphuric acid and of sulphur or pyrites, and as these are used in making acid phosphates, it resulted in an increase in the cost of acid phosphate.

The valuations are decided on about September 1, and the prices may change before the active fertilizer season, from February to April.

ANALYSIS OF FERTILIZERS, 1915-1916.

Table 1 contains a list of all samples of fertilizers subjected to analysis in the season beginning September 1, 1915, 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 our inspectors. Analyses and inspection were made by Messrs. S. E. Asbury, A. J. Weaver, Frank Hodges, and J. W. Enochs.

REGISTRATION, 1915-1916.

A list of brands registered for sale in the season of 1915-1916 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.—Analysis of Commercial Fertilizers, Season of 1915-1916.

Laboratory Number.	Manufacturer, Place of Business and Brand.	Phosphoric Acid Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
26503	Arkansas Fertilizer Co., Little Rock, Ark.— White Diamond 20th Century Fertilizer Without Potash —Guarantee.....	11.00	1.65	.....	\$19.80
	Analysis.....	10.14	1.84	.....	19.53
26322	Armour Fertilizer Works, New Orleans, La.— Guarantee.....	10.00	2.47	.....	21.88
	Armour's Blood and Bone Mixture—Guarantee.....	10.67	2.38	.....	22.32
26408	Armour's Blood and Bone No. 102 Without Potash— Guarantee.....	10.00	1.65	.....	18.60
26394	Analysis.....	11.41	1.70	.....	20.49
26266	Analysis.....	10.50	1.55	.....	18.80
26295	Armour's Bone Meal—Guarantee.....	*22.00	2.00	.....	25.20
26303	Analysis.....	*30.77	1.71	.....	31.12
	Analysis.....	*29.89	1.74	.....	30.52
26277	Analysis.....	*28.68	2.18	.....	31.66
26436	Armour's Fertilizer No. 1031—Guarantee.....	10.00	2.47	1.00	23.08
26473	Analysis.....	9.56	2.76	1.13	23.86
26511	Analysis.....	10.00	1.65	1.00	19.80
26526	Analysis.....	9.37	1.84	1.03	19.84
26539	Analysis.....	11.06	1.84	1.21	22.08
26276	Armour's Fertilizer No. 361—Guarantee.....	11.22	1.72	1.01	21.55
26282	Analysis.....	9.67	1.95	0.96	20.55
	Analysis.....	11.25	1.63	0.80	20.98
26304	Armour's 14 Per Cent Acid Phosphate—Guarantee.....	3.00	4.94	1.00	24.56
26380	Analysis.....	3.62	4.96	1.09	25.49
26395	Analysis.....	3.37	4.81	1.21	24.73
26407	Analysis.....	14.00	.....	.....	16.80
26444	Analysis.....	13.78	.....	.....	16.54
	Armour's King Cotton No. 2 Without Potash—	13.69	.....	.....	16.43
26538	Guarantee.....	10.00	1.65	.....	18.60
26306	Analysis.....	10.58	1.80	.....	19.90
26311	Analysis.....	10.65	1.82	.....	20.06
26314	Analysis.....	10.52	1.66	.....	19.28
26368	Analysis.....	9.65	1.72	.....	18.46
26378	Analysis.....	9.87	1.86	.....	19.28
26379	Analysis.....	9.95	1.78	.....	19.06
26410	Analysis.....	9.71	1.72	.....	18.53
26438	Analysis.....	9.98	1.86	.....	19.42
26442	Analysis.....	10.15	1.74	.....	19.14
26472	Analysis.....	10.78	1.63	.....	19.46
26487	Analysis.....	10.42	1.76	.....	19.54
26488	Analysis.....	10.59	1.54	.....	18.87
26507	Analysis.....	10.65	1.78	.....	19.90
26508	Analysis.....	10.35	1.18	.....	17.14
26509	Analysis.....	11.46	1.81	.....	21.19
26519	Analysis.....	10.09	1.57	.....	18.39
	Armour's Meal Mixture No. 103 Without Potash—	10.28	1.70	.....	19.14
26325	Guarantee.....	10.00	2.47	.....	21.88
	Analysis.....	10.41	2.75	.....	23.49
26275	Armour's Nitrate of Soda—Guarantee.....	14.81	.....	.....	59.24
26278	Analysis.....	15.12	.....	.....	60.48
26281	Analysis.....	15.18	.....	.....	60.72
26369	Analysis.....	15.52	.....	.....	62.08
	Armour's Onion Fertilizer No. 252—Guarantee.....	15.46	.....	.....	61.84
26273	Analysis.....	2.00	4.11	2.00	21.24
26283	Analysis.....	2.44	3.93	1.82	20.82
	Armour's Onion Fertilizer No. 261—Guarantee.....	2.58	3.81	2.04	20.77
26264	Analysis.....	2.00	4.94	1.00	23.36
	Analysis.....	2.37	4.45	1.33	22.23
26265	Armour's Onion Fertilizer No. 13—Guarantee.....	1.00	4.94	1.00	22.16
26271	Analysis.....	1.29	4.96	1.31	22.96
26272	Analysis.....	1.49	4.68	1.00	21.70
	Analysis.....	1.43	4.77	1.03	22.02

*Total Phosphoric Acid.

Table I.—Analysis of Commercial Fertilizers, Season of 1915-1916.

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.—Continue d.				
	Armour's Raw Bone Superphosphate With Potash—Guarantee.	9.50	1.65	1.50	\$19.80
26294	Analysis.	9.83	1.99	1.22	21.22
26409	Analysis.	10.03	1.68	1.35	20.38
	Armour's 16 Per Cent Acid Phosphate—Guarantee.	16.00			
26274	Analysis.	16.03			19.23
26280	Analysis.	16.23			19.47
26292	Analysis.	15.64			18.77
26307	Analysis.	16.55			19.86
26312	Analysis.	16.52			19.82
26367	Analysis.	16.28			19.54
26437	Analysis.	16.16			19.39
26459	Analysis.	16.74			20.09
26474	Analysis.	16.97			20.36
26506	Analysis.	16.77			20.12
26510	Analysis.	17.27			20.72
26525	Analysis.	16.66			19.99
26549	Analysis.	16.53			19.84
26293	Armour's Special Texas Formula—Guarantee.	10.00	1.65	2.00	21.00
	Analysis.	9.74	1.89	1.20	20.69
26443	Armour's No. 1220 Without Potash—Guarantee.	12.00	1.65		21.00
	Analysis.	12.26	1.56		20.95
	Bowie County Cotton Oil Co., New Boston, Texas—				
	Bowie Acid Phosphate—Guarantee.	16.00			19.20
26537	Analysis.	17.05			20.46
	Bryan Cotton Oil and Fertilizer Co., Bryan, Texas—				
	Star Brand Cotton and Corn Fertilizer—Guarantee.	11.50	1.80		21.00
26309	Analysis.	12.04	2.08		22.77
26310	Star Brand Phospho Special—Guarantee.	11.00	2.00		21.20
	Analysis.	11.25	2.46		23.35
	Dallas Fertilizer and Reduction Co., Dallas, Texas—				
	Beaver Brand Cotton and Corn Grower—Guarantee.	10.00	1.65	2.00	21.00
26547	Analysis.	10.72	2.33	1.54	24.03
	Beaver Brand Steamed Bone Meal—Guarantee.	*22.00	2.00		30.90
26550	Analysis.	*28.09	2.52		32.55
	Beaver Brand Vegetable Grower—Guarantee.	9.00	2.47	3.00	24.28
26548	Analysis.	8.61	3.03	1.33	24.05
	East Texas Fertilizer Co., Tyler, Texas—				
	Bull Corn and Cotton—Guarantee.	10.00	2.00	1.00	21.20
26332	Analysis.	11.06	1.67	1.43	21.67
26346	Analysis.	12.24	1.80	1.41	23.58
26427	Analysis.	12.18	1.26	1.06	20.93
	16 Per Cent Acid Phosphate—Guarantee.	16.00			19.20
26342	Analysis.	16.43			19.72
26351	Analysis.	16.12			19.32
26432	Analysis.	16.28			19.54
	Southland Dark Cotton Seed Fertilizer—Guarantee.	1.00	6.00	1.00	26.40
26433	Analysis.	1.84	5.11	1.25	24.15
	Tomato Grower—Guarantee.	10.00	2.47		21.88
26316	Analysis.	10.34	2.16		21.05
26349	Analysis.	11.23	2.17		22.16
	Wiley's Farm Mixture—Guarantee.	10.00	1.65		18.60
26315	Analysis.	11.79	1.28		19.27
26347	Analysis.	11.55	1.25		18.86
26431	Analysis.	11.53	1.65		20.44
	Wiley's High Mixture Half and Half—Guarantee.	8.00	4.00		25.60
26430	Analysis.	10.41	3.25		25.49
	Wiley's Premium Cotton and Corn—Guarantee.	10.00	2.00		20.00
26337	Analysis.	11.42	1.77		20.78
26338	Analysis.	11.23	1.63		20.00
26348	Analysis.	11.86	1.38		19.75
26428	Analysis.	11.69	1.86		21.47
	Wiley's Tomato Special—Guarantee.	9.00	2.80		22.00
26328	Analysis.	10.41	1.97		20.37
26334	Analysis.	10.56	2.18		21.39
26350	Analysis.	10.79	2.61		23.39
26429	Analysis.	10.57	2.03		20.80

*Total Phosphoric Acid.

Table I.—Analysis of Commercial Fertilizers, Season of 1915-1916.

Laboratory Number.	Manufacturer, Place of Business and Brand.	Phosphoric Acid—Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.	
26366	Fidelity Chemical Corporation, Houston, Texas— Fidelity .16 Per Cent Acid Phosphate—Guarantee.....	16.00				\$19.20
	Analysis.....	17.37				20.84
26532	Gate City Fertilizer Co., Texarkana, Ark.— Red Ball High Grade Extra Acid Phosphate—Guarantee.....	16.00				19.20
	Analysis.....	16.32				19.58
26536	Red Ball Grand High Grade Early Trucker Without Potash—Guarantee.....	12.00	2.50			24.40
	Analysis.....	11.83	2.31			23.44
26535	Red Ball Brand Standard Grade Southern Corn Grower Without Potash—Guarantee.....	11.00	1.65			19.80
	Analysis.....	11.46	1.66			20.39
26534	Red Ball Standard Grade Cotton Grower Without Potash—Guarantee.....	11.00	1.65			19.80
	Analysis.....	11.24	1.70			20.29
26261	Greenville Cotton Oil Co., Greenville, Texas— Cotton Seed Meal—Guarantee.....		7.41			29.64
	Analysis.....	2.16	7.41	1.27		33.75
26449	Henderson Cotton Oil and Gin Co., Henderson, Texas— Henderson Acid Phosphate—Guarantee.....	16.00				19.20
26465	Analysis.....	18.36				22.03
26448	Analysis.....	17.99				21.59
26467	Henderson Half and Half—Guarantee.....	7.00	4.00			24.40
	Analysis.....	10.08	3.53			26.22
26466	Analysis.....	9.80	3.66			26.40
26468	Henderson Staple—Guarantee.....	10.00	2.00			20.00
	Analysis.....	13.17	2.37			25.28
	Analysis.....	12.23	2.41			24.32
26504	Hope Fertilizer Co., Hope, Arkansas— Hope Hustler Without Potash—Guarantee.....	10.00	1.65			18.60
	Analysis.....	10.65	1.76			19.82
26505	Stork Brand 16 Per Cent Acid Phosphate—Guarantee.....	16.00				19.20
26530	Analysis.....	12.82				15.38
	Analysis.....	13.64				16.37
26415	Houston County Oil Mill and Manufacturing Co., Crockett, Texas— Crockett Compound—Guarantee.....	9.00	3.50	1.00		26.05
	Analysis.....	10.30	3.21	0.95		26.34
26417	Crockett 14 Per Cent Acid Phosphate—Guarantee.....	14.00				16.80
	Analysis.....	15.28				18.34
26413	Crockett Grower—Guarantee.....	6.50	4.50	1.00		27.05
	Analysis.....	7.57	4.27	1.03		27.40
26414	Crockett Phosphate Meal Mixture—Guarantee.....	11.00	1.65			19.80
	Analysis.....	11.05	1.65			19.86
26416	Crockett 16 Per Cent Acid Phosphate—Guarantee.....	16.00				19.20
	Analysis.....	17.07				20.48
26418	Crockett Special Mixture High Grade—Guarantee.....	10.90	1.70	1.00		21.15
	Analysis.....	9.32	1.90	1.91		21.07
26434	Analysis.....	10.70	1.84	1.07		21.48
26393	Houston Packing Co., Houston, Texas— Blood and Bone—Guarantee.....	*14.50	5.60			32.88
26296	Analysis.....	*14.52	6.47			36.21
26298	Analysis.....	*16.51	5.48			35.13
26302	Analysis.....	*17.32	5.66			36.54
	Analysis.....	*16.25	5.40			34.60
26399	Industrial Cotton Oil Properties, Houston, Texas— Industrial 14 Per Cent Acid Phosphate—Guarantee.....	14.00				16.80
	Analysis.....	14.43				17.32
26382	Industrial Special Corn and Cotton Grower Fertilizer—Guarantee.....	10.00	2.00			20.00
	Analysis.....	11.54	2.16			22.49
26396	Analysis.....	10.72	2.14			21.42
26397	Analysis.....	10.47	2.08			20.88

*Total Phosphoric Acid.

Table I.—Analysis of Commercial Fertilizers, Season of 1915-1916.

Laboratory Number.	Manufacturer, Place of Business and Brand.	Phosphoric Acid—Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
	Industrial Cotton Oil Properties, Houston, Texas—Cont.				
26373	Industrial 16 Per Cent Acid Phosphate—Guarantee.	16.00			\$19.20
26286	Analysis.....	16.62			19.94
	Analysis.....	15.86			19.03
	Jacksonville Cotton Oil Co., Jacksonville, Texas—				
26385	Cotton Seed Meal and Hulls—Guarantee.....		6.64		26.56
	Analysis.....		5.48		21.92
	Longview Cotton Oil Co., Longview, Texas—				
26463	Longview Corn Hustler Without Potash—Guarantee.....	8.00	3.00		21.60
26440	Analysis.....	9.13	2.89		22.52
	Analysis.....	9.62	2.90		23.14
	Longview Cotton Grower High Grade Without Potash—Guarantee.....				
26441	Analysis.....	10.00	2.00		20.00
26445	Analysis.....	10.31	2.12		20.85
	Analysis.....	10.57	1.97		20.56
	John Marbach, New Braunfels, Texas—				
26290	Bat Guano—Guarantee.....	4.15	8.25		37.98
26372	Analysis.....	3.23	8.67		38.56
	Analysis.....	3.46	10.41		45.79
	Marshall Fertilizer Factory, Marshall, Texas—				
26471	Cotton Special—Guarantee.....	10.00	1.65		18.60
26541	Analysis.....	10.47	1.84		19.92
	Analysis.....	9.62	1.86		18.98
26360	High Grade Acid Phosphate—Guarantee.....	16.00			19.20
26543	Analysis.....	17.22			20.26
	Analysis.....	16.11			19.33
26542	Truck Special—Guarantee.....	7.00	2.47	2.00	20.68
	Analysis.....	7.85	2.12	2.03	20.34
	Meridian Fertilizer Factory, Shreveport, La.—				
26352	Caddo Cotton Non-Potassic—Guarantee.....	10.00	2.00		20.00
26457	Analysis.....	11.91	2.43		24.01
26545	Analysis.....	10.07	2.38		21.60
	Analysis.....	11.02	2.20		22.02
26388	Corn Grower Non-Potassic—Guarantee.....	8.00	3.03		21.72
	Analysis.....	11.18	3.33		26.74
26330	Meridian Blood and Bone—Guarantee.....	10.00	1.65	1.00	19.80
26423	Analysis.....	10.72	1.88	1.18	21.80
	Analysis.....	11.13	1.86	1.00	22.00
26513	Meridian Home Mixture Non-Potassic—Guarantee.....	11.00	1.65		19.80
26340	Analysis.....	13.12	1.84		23.10
26370	Analysis.....	12.49	2.11		23.43
26371	Analysis.....	12.91	1.78		22.61
26384	Analysis.....	12.88	2.15		24.06
26387	Analysis.....	12.18	1.87		22.10
26390	Analysis.....	12.90	1.92		23.16
26398	Analysis.....	12.59	1.94		22.87
26422	Analysis.....	12.05	1.90		22.06
26439	Analysis.....	11.86	1.76		21.27
26446	Analysis.....	11.78	2.06		22.38
26469	Analysis.....	12.09	1.94		22.27
26470	Analysis.....	11.44	1.74		20.69
26475	Analysis.....	13.29	2.09		24.31
26486	Analysis.....	13.15	1.76		22.82
26502	Analysis.....	10.91	2.07		21.37
	Meridian Raw Bone Mixture—Guarantee.....	11.43	1.87		21.20
26464	Analysis.....	11.00	1.65		19.80
	Meridian Special Cotton Formula—Guarantee.....	12.84	1.38		20.93
26540	Analysis.....	10.00	1.65		18.60
26546	Analysis.....	10.76	1.84		20.27
	Meridian Tomato Special—Guarantee.....	12.11	1.83		21.86
26344	Analysis.....	10.00	2.47	1.00	23.08
	Meridian Tomato Special Non-Potassic—Guarantee.....	10.59	3.08	1.51	26.84
26326	Analysis.....	11.00	2.47		23.08
26335	Analysis.....	13.32	2.64		26.54
26353	Analysis.....	13.54	2.50		26.26
	Meridian Truckers' Special—Guarantee.....	12.93	2.80		26.72
2632	Analysis.....	9.00	1.65	2.00	19.80
	Analysis.....	10.35	1.94	2.03	22.62

Table I.—Analysis of Commercial Fertilizers, Season of 1915-1916.

Laboratory Number.	Manufacturer, Place of Business and Brand.	Phosphoric Acid—Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
26355	Meridian Fertilizer Factory, Shreveport, La.—Continued. Meridian Truckers' Special Without Potash—Guarantee	11.00	1.65		\$19.80
	Analysis.....	12.80	2.00		23.36
26421	Nitrate of Soda—Guarantee		15.00		60.00
	Analysis.....		15.72		62.88
26527	Star Non-Potassic—Guarantee	11.00	1.65		19.80
	Analysis.....	11.09	1.76		20.35
26345	Union Special Acid Phosphate—Guarantee	16.00			19.20
26354	Analysis.....	17.70			21.24
26359	Analysis.....	17.42			20.90
26383	Analysis.....	17.41			20.89
26450	Analysis.....	17.32			20.78
26485	Analysis.....	17.87			21.44
26301	Analysis.....	16.74			20.01
26544	Weevil Beater Guano Non-Potassic—Guarantee	18.18			21.82
	Analysis.....	11.00	1.65		19.80
	Analysis.....	11.81	1.80		21.37
26269	Nitrate Agencies Co. of Texas, Houston, Texas—				
26270	Acid Phosphate—Guarantee	16.00			19.20
26403	Analysis.....	18.60			22.32
26435	Analysis.....	18.46			22.15
26297	Analysis.....	17.87			21.44
22668	Ground Bone Meal—Guarantee	16.89			20.27
	Analysis.....	*22.88	2.46		27.65
	Analysis.....	*21.63	4.23		34.22
26301	Nitrate of Soda—Guarantee		15.00		60.00
	Analysis.....		15.54		62.16
26425	High Grade Raw Bone—Buarante	*23.00	3.70		32.46
26327	Analysis.....	*24.87	3.86		35.34
26317	Pelican Fertilizer Works, New Orleans, La.—				
26324	Pelican Fish Formula—Guarantee	10.00	1.65	1.00	19.80
	Analysis.....	10.91	1.88	1.20	22.05
26523	Pelican Meal Compound—Guarantee	10.00	1.65	1.00	19.80
	Analysis.....	11.36	2.12	1.02	23.33
26517	Pelican Meal Compound Non-Potassic—Guarantee	11.00	1.65		19.80
26522	Analysis.....	11.33	1.84		20.96
26425	Analysis.....	12.81	1.74		22.33
26327	Pelican Special Formula—Guarantee	10.00	1.65		18.60
	Analysis.....	10.42	1.84		19.86
26315	Analysis.....	11.82	2.09		22.54
26317	Pelican Special Phosphate—Guarantee	16.00			19.20
26339	Analysis.....	17.81			21.37
26426	Analysis.....	16.87			20.24
26484	Analysis.....	17.59			21.11
26493	Analysis.....	16.67			20.00
26315	Analysis.....	17.46			20.95
26323	Pelican Truck Grower—Guarantee	17.03			20.44
26341	Analysis.....	10.00	2.47		21.88
26424	Analysis.....	11.84	2.66		24.85
	Analysis.....	12.40	2.58		25.20
	Analysis.....	10.88	2.52		23.14
26375	Planters Fertilizer and Chemical Co., Houston, Texas—				
26376	Planter's Ammoniated Phosphate Without Potash—Guarantee	10.00	1.65		18.60
	Analysis.....	9.51	1.75		18.41
	Analysis.....	10.10	1.88		19.64
26412	Planter's Ammoniated Phosphate No. 122 Without Potash—Guarantee	12.00	1.65		21.00
	Analysis.....	11.54	1.99		21.81
26299	Planter's 14 Per Cent Acid Phosphate—Guarantee	14.00			16.80
	Analysis.....	12.90			15.48
26300	Planter's Raw Bone Superphosphate With Potash—Guarantee	9.50	1.65	1.50	19.80
	Analysis.....	8.59	2.01	1.06	19.62
26321	Planter's 16 Per Cent Acid Phosphate—Guarantee	16.00			19.20
26377	Analysis.....	16.85			20.22
26520	Analysis.....	16.73			20.08
	Analysis.....	16.48			19.78

*Total Phosphoric Acid.

COMMERCIAL FERTILIZERS IN 1915-1916.

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Table I.—Analysis of Commercial Fertilizers, Season of 1915-1916.

Laboratory Number.	Manufacturer, Place of Business and Brand.	Phosphoric Acid—Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
	Rockdale Oil Co., Rockdale, Texas—				
26392	Superior Brand Acid Phosphate—Guarantee.....	14.00			\$16.80
	Analysis.....	15.70			18.84
26391	Superior Brand Corn and Cotton Fertilizer—Guarantee.....	11.00	1.90		20.80
	Analysis.....	12.83	1.59		21.76
	Shreveport Fertilizer Works, Shreveport, La.—				
26386	Lion Double B—Guarantee.....	10.00	1.65		18.60
	Analysis.....	10.85	1.21		17.86
26319	Lion Double S—Guarantee.....	9.00	2.00		18.80
	Analysis.....	8.41	2.15		18.69
26318	Lion Extra Good Phosphate—Guarantee.....	16.00			19.20
26490	Analysis.....	14.77			17.72
	Analysis.....	16.87			20.24
26489	Lion Meal Formula—Guarantee.....	10.00	1.65		18.60
26492	Analysis.....	11.00	1.74		20.16
	Analysis.....	10.79	1.72		19.83
26518	Lion Success Mixture—Guarantee.....	11.00	1.65		19.80
	Analysis.....	10.68	1.72		19.70
26320	Lion Tomato Fertilizer—Guarantee.....	10.00	2.50		22.00
	Analysis.....	9.80	2.98		23.68
	Sulphur Springs Acid and Fertilizer Co., Sulphur Springs, Texas—				
26478	Acid Phosphate—Guarantee.....	16.00			19.20
	Analysis.....	15.94			19.13
26481	High Grade Cotton and Corn Fertilizer—Guarantee.....	9.50	2.65		22.00
	Analysis.....	10.02	2.45		21.82
26479	Planter's Special Fertilizer—Guarantee.....	8.00	3.00		21.60
	Analysis.....	8.99	3.24		23.75
26480	Standard Cotton Fertilizer—Guarantee.....	10.00	2.00		20.00
	Analysis.....	10.61	2.44		22.49
	Swift & Co., Harvey, La., Houston, Texas, Fort Worth, Texas—				
26531	Swift's Ammoniated Phosphate—Guarantee.....	12.00	1.65		21.00
	Analysis.....	10.98	1.93		20.90
26333	Swift's Blood and Bone Special—Guarantee.....	10.00	2.47		21.88
26343	Analysis.....	9.40	2.60		21.68
26483	Analysis.....	10.54	2.37		22.13
26494	Analysis.....	9.49	1.80		18.59
	Swift's Champion Corn and Wheat Grower—Guarantee.....	9.24	1.90		18.69
26400	Analysis.....	12.00	1.65	2.00	23.40
	Swift's Diamond C Fertilizer—Guarantee.....	8.83	1.72	1.01	18.69
26262	Analysis.....	8.00	2.46	2.00	21.84
	Swift's Diamond S Fertilizer—Guarantee.....	6.74	2.29	1.91	19.53
26496	Analysis.....	10.00	2.47		21.88
	Swift's Garden City Acid Phosphate—Guarantee.....	9.91	2.28		21.01
26284	Analysis.....	14.00			16.80
26405	Analysis.....	14.47			17.36
	Swift's High Grade Acid Phosphate—Guarantee.....	15.05			18.06
26287	Analysis.....	16.00			19.20
26291	Analysis.....	16.72			20.06
26331	Analysis.....	16.90			20.28
26336	Analysis.....	16.92			20.30
26401	Analysis.....	16.14			19.37
26420	Analysis.....	16.87			20.24
26455	Analysis.....	16.74			20.09
26456	Analysis.....	17.49			20.99
	Swift's Nitrate of Soda—Guarantee.....	17.24			20.69
26263	Analysis.....		14.81		59.24
	Swift's Plantation Mixed Cotton Seed Meal Compound—Guarantee.....		15.16		60.64
26497	Analysis.....	10.00	1.65	1.00	19.80
	Analysis.....	9.79	1.68	1.22	19.93
26279	Swift's Pure Bone Meal—Guarantee.....	*24.00	2.47		28.58
	Analysis.....	*24.53	3.64		33.46
26406	Analysis.....	*27.83	2.61		32.70
	Swift's Special Mixture—Guarantee.....	10.00	1.65		18.60
26404	Analysis.....	10.15	1.68		18.90
26451	Analysis.....	11.52	1.86		21.26
26454	Analysis.....	9.46	1.66		17.99

*Total Phosphoric Acid.

Table I.—Analysis of Commercial Fertilizers, Season of 1915-1916.

Laboratory Number.	Manufacturer, Place of Business and Brand.	Phosphoric Acid Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
	Swift & Co. Harvey, La., Houston, Fort Worth—Cont.				
	Swift's Special Mixture—Guarantee—Continued.				
26458	Analysis.....	9.77	2.14		\$20.28
26482	Analysis.....	9.69	1.84		18.99
26491	Analysis.....	10.05	1.70		18.86
26498	Analysis.....	9.34	1.53		17.33
26514	Analysis.....	10.62	1.54		18.90
26516	Analysis.....	10.03	1.66		18.68
26495	Analysis.....	8.85	1.88		18.14
	Swift's Special Mixture Cotton Seed Meal Compound—Guarantee.				
26381	Analysis.....	10.00	1.65		18.60
26512	Analysis.....	10.15	1.82		19.46
26521	Analysis.....	10.35	1.59		18.78
26524	Analysis.....	10.82	1.80		20.18
26533	Analysis.....	10.38	1.89		20.02
	Swift's Tankage Mixture—Guarantee.				
26260	Analysis.....	10.00	3.29		23.96
26267	Analysis.....	8.37	3.42		23.72
26551	Analysis.....	7.27	3.29		21.88
26552	Analysis.....	7.97	3.44	0.43	23.84
	Swift's Trucker's Favorite—Guarantee.				
26288	Analysis.....	7.23	3.47		22.56
26402	Analysis.....	8.00	2.47	1.00	20.68
	Swift's Trucker's Favorite Cotton Seed Meal Compound—Guarantee.				
26289	Analysis.....	6.97	2.59	0.95	19.86
26361	Analysis.....	8.25	2.05	0.78	19.04
	Union Seed and Fertilizer Co., New Orleans, La.—				
	Bull Dog Acid Phosphate—Guarantee.				
26357	Analysis.....	16.00			19.20
26358	Analysis.....	15.28			18.34
26453	Analysis.....	16.02			19.22
26513	Analysis.....	16.77			20.12
	Blood and Bone—Guarantee.				
26452	Analysis.....	16.89			20.27
	Goldsmith's Improved Mixture—Guarantee.				
26356	Analysis.....	11.00	1.65		19.80
	Supreme Acid Phosphate—Guarantee.				
26374	Analysis.....	10.72	1.67		19.54
	Goldsmith's Improved Mixture—Guarantee.				
	Analysis.....	11.00	1.65		19.80
	Analysis.....	11.29	1.76		20.59
	Royal Cotton Boll Guano Non-Potassic—Guarantee.				
	Royal Compound—Guarantee.				
26477	Analysis.....	18.00			21.60
	Scott's High Grade Acid Phosphate—Guarantee.				
26305	Analysis.....	18.00			21.60
26419	Analysis.....	15.85			19.02
26500	Analysis.....	10.00	1.65		18.60
	Scott's State Standard Guano Non-Potassic—Guarantee.				
26528	Analysis.....	10.32	1.80		19.58
	V. C. C. Co. 16 Per Cent Acid Phosphate—Guarantee.				
26460	Analysis.....	16.00			19.20
26476	Analysis.....	16.90			20.28
26529	Analysis.....	15.45			18.54
	V. C. XXX Special Non-Potassic—Guarantee.				
26499	Analysis.....	16.64			19.97
	Geo. A. Wright, Palestine, Texas—				
26411	Wright's 14 Per Cent Acid Phosphate—Guarantee.....	9.00	2.47		20.68
	Analysis.....	10.02	2.38		21.54
	Wills Point Cotton Oil Co., Wills Point, Texas—				
26365	Semper Fidelis Acid Phosphate—Guarantee.....	16.00			19.20
	Analysis.....	16.95			20.34

Table I.—Analysis of Commercial Fertilizers, Season of 1915-1916.

Laboratory Number.	Manufacturer, Place of Business and Brand.	Phosphoric Acid Available Per Cent.		Nitrogen—Per Cent.		Potash—Per Cent.		Valuation—Per Ton.
Wills Point Cotton Oil Co., Wills Point, Texas—Cont.								
26362	Semper Fidelis Cotton Grower Fertilizer—Guarantee Analysis	10.00 10.42	1.80 2.31	2.00 2.24	\$21.60 24.43			
26364	Semper Fidelis Kainit—Guarantee Analysis			12.00	14.40			
26363	Semper Fidelis Phospho Meal—Guarantee Analysis	8.50 9.84	3.50 3.66	1.00 1.25	25.40 27.95			

Table II.—Registration of Commercial Fertilizers, Season of 1915-1916.

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	1.65	2.00	\$16.80
White Diamond Ammoniated Bone Superphosphate.....	9.00	1.65	2.00	19.80
White Diamond Ammoniated Bone Superphosphate Without Potash.....	11.00	1.65	1.50	19.80
White Diamond Blood, Bone and Potash.....	12.00	2.00	1.50	24.20
White Diamond Blood and Bone Fertilizer 1916.....	12.50	1.50	2.00	21.00
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 Grower Without Potash.....	11.00	1.65	2.00	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 Cotton Fertilizer Without Potash.....	13.00	2.00	2.00	23.60
White Diamond Early Boll Fertilizer Without Potash.....	11.00	1.65	2.00	19.80
White Diamond Early Potato and Truck Fertilizer.....	8.00	2.50	4.00	24.40
White Diamond Early Potato and Truck Without Potash.....	12.00	2.50	2.00	24.40
White Diamond East Texas Truck Fertilizer.....	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 Gro-fast Fertilizer Without Potash.....	10.00	1.65	2.00	18.60
White Diamond Kali Superphosphate.....	11.00	1.65	3.00	16.80
White Diamond Meal Base Fertilizer.....	9.00	1.65	2.00	19.80
White Diamond Meal Base Fertilizer Without Potash.....	11.00	1.65	2.00	19.80
White Diamond New South.....	10.00	1.65	2.00	18.60
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	1.00	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 Queen of the South.....	12.00	1.65	2.00	21.00
White Diamond Soluble Bone and Blood.....	8.00	1.65	2.00	18.60
White Diamond Soluble Bone and Blood Fertilizer Without Potash.....	10.00	1.65	2.00	18.60
White Diamond Southern Queen Fertilizer.....	10.00	1.65	2.00	21.00
White Diamond Southern Queen Fertilizer Without Potash.....	12.00	1.65	2.00	21.00
White Diamond Southern Standard Fertilizer.....	10.00	1.65	1.50	20.40
White Diamond Southern Standard Fertilizer Without Potash.....	11.50	1.65	2.00	20.40
White Diamond Special Acid Phosphate.....	16.00	1.65	2.00	19.20
White Diamond Texas Special.....	10.00	1.65	1.00	19.80
White Diamond Texas Special Without Potash.....	11.00	1.65	2.00	19.80
White Diamond 20th Century Fertilizer.....	9.00	1.65	2.00	19.80
White Diamond 20th Century Fertilizer Without Potash.....	11.00	1.65	2.00	19.80
White Diamond Vegetable Fertilizer.....	7.50	2.00	3.00	20.60
White Diamond Vegetable Fertilizer Without Potash.....	10.50	2.00	2.00	20.60
White Diamond Young's High Grade Special.....	7.00	2.50	5.00	24.40
Armour Fertilizer Works, Houston, Fort Worth, Texas; New Orleans, La.—				
Armour's Blood and Bone Mixture.....	10.00	2.47	2.00	21.88
Armour's Blood and Bone No. 102 Without Potash.....	10.00	1.65	2.00	18.60
Armour's Bone Meal.....	*22.00	2.00	2.00	25.20
Armour's Cotton Seed Meal Special.....	10.00	1.65	1.50	20.40
Armour's Cotton Seed Mixed Fertilizer No. 2.....	.....	6.58	2.00	26.32
Armour's Dried Blood.....		13.16	2.00	52.64
Armour's Economy Mixture.....	10.00	1.65	2.00	18.60
Armour's Fertilizer No. 1031.....	10.00	2.47	1.00	23.08
Armour's Fertilizer No. 1021.....	10.00	1.65	1.00	19.80
Armour's Fertilizer No. 361.....	3.00	4.94	1.00	24.56
Armour's Fertilizer No. 261.....	2.00	4.94	1.00	23.36
Armour's Fourteen Per Cent Acid Phosphate.....	14.00	1.65	2.00	16.80
Armour's King Cotton.....	8.00	1.65	2.00	18.60
Armour's King Cotton No. 2 Without Potash.....	10.00	1.65	2.00	18.60
Armour's Meal Mixture No. 103 Without Potash.....	10.00	2.47	2.00	21.88
Armour's Nitrate of Soda.....		14.81	2.00	59.24
Armour's Onion Fertilizer No. 762.....	7.00	4.94	2.00	30.56
Armour's Onion Fertilizer No. 660.....	6.00	4.94	2.00	26.96
Armour's Onion Fertilizer No. 632.....	6.00	2.47	2.00	19.48
Armour's Onion Fertilizer No. 252.....	2.00	4.11	2.00	21.24
Armour's Onion Fertilizer No. 13.....	1.00	4.94	1.00	22.16
Armour's Onion Fertilizer No. 3-6-3.....	3.00	4.94	3.00	26.96
Armour's No. 1220 Without Potash.....	12.00	1.65	2.00	21.00

*Total Phosphoric Acid.

Table II.—Registration of Commercial Fertilizers, Season of 1915-1916.

Manufacturer, Place of Business and Brand.	Phosphoric Acid—Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
Armour Fertilizer Works, Houston, Fort Worth, Texas, New Orleans, La.—Continued.				
Armour's Phosphate and Potash No. 102.....	10.00	2.00	2.00	\$14.40
Armour's Phosphate and Potash No. 122.....	12.00	2.00	2.00	16.80
Armour's Rawbone Superphosphate With Potash.....	9.50	1.65	1.50	19.80
Armour's Sixteen Per Cent Acid Phosphate.....	16.00	.....	.....	19.20
Armour's Special Texas Formula.....	10.00	1.65	2.00	21.00
Armour's Tankage.....	*14.50	5.60	.....	32.88
Armour's Truck Special No. 2.....	8.00	1.65	3.00	19.80
Armour's 12 Per Cent Acid Phosphate.....	12.00	.....	.....	14.40
Blood and Bone No. 112 Without Potash.....	11.00	1.65	.....	19.80
Geo. 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
The Bowie County Cotton Oil Co., New Boston, Texas—				
Bowie Acid Phosphate.....	16.00	.....	.....	19.20
Bowie Cotton Seed Fertilizer.....	2.25	6.50	1.25	30.20
Bryan Cotton Oil and Fertilizer Co., Bryan, Texas—				
Star Brand Cotton and Corn Fertilizer.....	11.50	1.80	.....	21.00
Star Brand Phospho Special.....	11.00	2.00	.....	21.20
Star Brand Potato Fertilizer.....	8.00	3.50	.....	23.60
Star Brand 16 Per Cent Acid Phosphate.....	16.00	.....	.....	19.20
The Clarksville Cotton Oil Co., Clarksville, Texas—				
Acid Phosphate.....	16.00	.....	.....	19.20
Kainit.....	.....	.....	12.00	14.40
Dallas Fertilizer and Reduction Co., Dallas, Texas—				
Beaver Brand Acid Phosphate.....	16.00	.....	.....	19.20
Beaver Brand Cotton and Corn Grower.....	10.00	1.65	2.00	21.00
Beaver Brand Lawn Grower.....	15.00	3.00	.....	23.40
Beaver Brand Plant Food.....	15.00	3.00	.....	23.40
Beaver Brand Special.....	12.00	1.65	.....	21.00
Beaver Brand Steam Bone Meal.....	*22.00	2.00	.....	30.90
Beaver Brand Vegetable Grower.....	9.00	2.47	3.00	24.28
Earp-Thomas Farmogerm Co., Glen Ridge, New Jersey—				
Farmogerm—High Bred Nitrogen Gathering Bacteria.....	.....	.....	.....	.....
Humogerm—Nitrogen-Gathering Bacteria.....	.....	.....	.....	.....
East Texas Fertilizer Co., Tyler, Texas—				
Bull Cotton and Corn.....	10.00	2.00	1.00	21.20
Kainit.....	.....	.....	12.00	14.40
Muriate of Potash.....	.....	.....	48.00	57.60
16 Per Cent Acid Phosphate.....	16.00	.....	.....	19.20
Southland Dark Cotton Seed Fertilizer.....	1.00	6.00	1.00	26.40
Tomato Grower.....	10.00	2.47	.....	21.88
Wiley's Dark Cotton Seed Meal Fertilizer.....	1.00	7.00	1.00	30.40
Wiley's Farm Mixture.....	10.00	1.65	.....	18.60
Wiley's High Mixture Half and Half.....	8.00	4.00	.....	25.60
Wiley's Premium Cotton and Corn.....	10.00	2.00	.....	20.00
Wiley's Tomato Special.....	9.00	2.80	.....	22.00
Federal Chemical Co., Columbia, Tenn.—				
"Daybreak Tennessee Brown Phosphate Rock".....	*29.75	.....	.....	.....
Fidelity Chemical Corporation, Houston, Texas—				
Fidelity Ammoniated Rice Fertilizer.....	12.00	1.65	2.00	23.40
Fidelity Bone Meal Fertilizer.....	*27.00	1.00	.....	25.40
Fidelity Cereal Cultivator Fertilizer.....	6.50	2.47	1.00	18.88
Fidelity Citrus Grower Fertilizer.....	7.00	2.88	8.00	29.52
Fidelity Cotton 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	19.60
Fidelity 14 Per Cent Acid Phosphate.....	14.00	.....	.....	16.80
Fidelity Kainit.....	5.00	3.87	12.00	14.40
Fidelity Laredo Special Fertilizer.....	.....	.....	8.00	31.80

*Total Phosphoric Acid.

Table II.—Registration of Commercial Fertilizers, Season of 1915-1916.

Manufacturer, Place of Business and Brand.	Phosphoric Acid—Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
Fidelity Chemical Corporation, Houston, Texas—Continued.				
Fidelity Lone Star Special.....	10.00	1.65	6.00	\$25.80
Fidelity Muriate of Potash.....	.....	15.00	50.00	60.00
Fidelity Nitrate of Soda.....	.....	2.88	5.00	60.00
Fidelity Orange Special Fertilizer.....	7.00	2.47	5.00	25.92
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 16 Per Cent Acid Phosphate.....	16.00	.....	.....	19.20
Fidelity Strawberry Special Fertilizer.....	6.00	2.47	5.00	23.08
Fidelity Superphosphate With Potash Fertilizer.....	10.00	1.65	1.00	19.80
Fidelity Sulphate of Ammonia.....	.....	20.50	.....	82.00
Fidelity Sulphate of Potash.....	.....	.....	48.00	57.00
Fidelity Truck Grower Fertilizer.....	8.00	2.47	8.00	29.08
Non-Potassic Fidelity Cotton Grower Fertilizer.....	10.00	2.00	.....	20.00
Non-Potassic Fidelity Cotton Fertilizer.....	8.00	2.63	.....	20.12
Non-Potassic Fidelity Laredo Trucker Fertilizer.....	5.00	3.87	.....	21.48
Gate City Fertilizer Co., Texarkana, Texas—				
Red Ball Acid Phosphate.....	14.00	1.65	.....	16.80
Red Ball Complete Fertilizer Without Potash.....	11.00	1.65	.....	19.80
Red Ball Cotton and Corn Fertilizer.....	10.00	2.00	3.00	23.60
Red Ball Cotton and Corn Fertilizer Without Potash.....	13.00	2.00	.....	23.60
Red Ball Cotton Grower Without Potash.....	11.00	1.65	.....	19.80
Red Ball Diversified Cropper's.....	10.00	1.65	2.00	21.00
Red Ball Diversified Cropper's Without Potash.....	12.00	1.65	.....	21.00
Red Ball Early Trucker.....	8.00	2.50	4.00	24.40
Red Ball Early Trucker Without Potash.....	12.00	2.50	.....	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 Four States' Standard Without Potash.....	11.00	1.65	.....	19.80
Red Ball Garrison's Special.....	10.00	1.03	3.00	19.72
Red Ball Old Reliable Fertilizer.....	8.00	1.65	2.00	18.60
Red Ball Reliable Fertilizer Without Potash.....	10.00	1.65	.....	18.60
Red Ball Old Time Vegetable Grower.....	7.50	2.00	3.00	20.60
Red Ball Old Time Vegetable Grower Without Potash.....	10.50	2.00	.....	20.60
Red Ball Phosphate and Potash.....	11.00	.....	3.00	16.80
Red Ball Potash-Acid.....	11.50	.....	4.00	18.60
med Ball Soluble Bone Fertilizer.....	8.00	1.65	2.00	18.60
Red Ball Soluble Bone Fertilizer Without Potash.....	10.00	1.65	.....	18.60
Red Ball Southern Corn Grower.....	8.00	1.65	3.00	19.80
Red Ball Southern Corn Grower Without Potash.....	11.00	1.65	.....	19.80
Red Ball Standard Complete Fertilizer.....	10.00	1.65	1.00	19.80
Red Ball Standard Cotton Grower.....	9.00	1.65	2.00	19.80
Red Ball Spanish Peanut Fertilizer.....	9.10	1.00	4.00	19.72
Red Ball Wheat Grower.....	10.00	0.82	2.00	17.68
Henderson Cotton Oil and Gin Co., Henderson, Texas—				
Henderson Acid Phosphate.....	16.00	.....	.....	19.20
Henderson Half and Half.....	7.00	4.00	.....	24.40
Henderson Staple.....	10.00	2.00	.....	20.00
Hope Fertilizer Co., Hope, Ark.—				
Cotto Phos.....	8.50	3.30	1.00	24.60
Hope Crop Producer.....	8.00	1.65	2.00	18.60
Hope Hustler Without Potash.....	10.00	1.65	.....	18.60
Hope Standard Without Potash.....	11.00	1.65	.....	19.80
Our Cotton Grower.....	10.00	1.65	1.00	19.80
Our Cotton Seed Meal Fertilizer.....	1.00	6.25	1.00	27.40
Our Early Fruter.....	10.00	0.90	1.00	16.80
Our Extra Cotton Grower.....	10.00	1.65	2.00	21.00
Stork Brand Nitrate of Soda.....	.....	15.00	.....	60.00
Stork Brand 16 Per Cent Acid Phosphate.....	16.00	.....	.....	19.20
Houston County Oil Mill and Manufacturing Co., Crockett, Texas—				
Crockett Compound High Grade.....	9.00	3.50	1.00	26.05
Crockett Cotton Standard High.....	10.25	2.00	2.00	22.70
Crockett 14 Per Cent Acid Phosphate.....	14.00	.....	.....	16.80
Crockett Grower High Grade.....	6.50	4.50	1.00	27.05
Crockett Nitrate of Soda.....	.....	15.00	.....	60.00
Crockett Phosphate-Meal Mixture.....	11.00	1.65	.....	19.80
Crockett 16 Per Cent Acid Phosphate.....	16.00	.....	.....	19.20
Crockett Special Mixture High Grade.....	10.90	1.70	1.00	21.15

Table II.—Registration of Commercial Fertilizers, Season of 1915-1916.

Manufacturer, Place of Business and Brand.	Phosphoric Acid—Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
Houston Packing Co., Houston, Texas				
Blood and Bone.....	*14.50	5.60	.....	\$32.88
Industrial Cotton Oil Properties, Houston, Texas—				
Industrial Acid Phosphate Long Horn Brand.....	18.00	.....	21.60	
Industrial Corn Grower Long Horn Brand.....	10.00	1.65	2.00	21.00
Industrial Cotton Grower Long Horn rand.....	10.00	1.65	2.00	21.00
Industrial 14 Per Dent Acid Phosphate.....	14.00	.....	.....	16.80
Industrial Rice Grower Long Horn rand.....	12.00	.....	2.00	16.80
Industrial Special Corn and Cotton GroRer Fertilizer—Long Horn Brand.....	10.00	2.00	.....	20.00
Industrial Special Corn GroRer—Long Horn rand.....	8.00	3.00	1.00	22.80
Industrial Special Cotton Grower—Long Horn Brand.....	10.00	2.00	1.00	21.20
Industrial 16 Per Dent Acid Phosphate—Long Horn Brand.....	16.00	.....	.....	19.20
Industrial Special Vegetable Grower Fertilizer—Long Horn Brand.....	10.00	2.00	3.00	23.60
Industrial Vegetable Grower Fertilizer—Long Horn Brand.....	7.00	2.00	4.00	21.20
Longview Cotton Oil Co., Longview, Texas—				
Gcid Phosphate.....	14.00	.....	.....	16.80
Longview Cotton GroRer Without Potash.....	10.00	2.00	.....	20.00
Longview Corn Hustler.....	8.00	3.00	.....	21.60
Longview Cotton Special.....	9.00	2.00	2.00	21.20
John Marbach, New Braunfels, Texas—				
Bat Guano.....	4.15	8.25	.....	37.98
Frio Cave Bat Guano.....	2.75	8.50	.....	37.30
Marshall Fertilizer Factory, Marshall, Texas—				
Cotton Special.....	10.00	1.65	.....	18.60
High Grade Acid Phosphate.....	16.00	.....	.....	19.20
Marshall Cotton and Corn Special.....	10.00	1.65	1.00	19.80
Nitrate of Soda.....	.....	15.25	.....	61.00
Red Diamond Onion Grower.....	8.00	2.47	2.00	21.88
Standard Corn and Cotton Grower.....	10.00	1.65	1.00	19.80
Truck Special.....	7.00	2.47	2.00	20.68
Merchants and Planters Oil Co., Houston, Texas—				
Cotton Seed Fertilizer.....	1.75	6.25	1.00	28.30
Meridian Fertilizer Factory, Shreveport, La.—				
Caddo Cotton.....	9.25	1.88	1.00	19.82
Caddo Cotton Non-Potassic.....	10.00	2.00	.....	20.00
Caddo Vegetable.....	8.00	3.30	4.00	27.60
Corn Grower.....	7.50	2.88	1.00	21.72
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 Corn Club Special Non-Potassic.....	8.50	2.47	.....	20.08
Meridian Corn Grower Non-Potassic.....	8.00	3.03	.....	21.72
Meridian Cotton and Corn Special.....	9.00	2.47	3.00	24.28
Meridian Easy Driller Phosphate.....	16.00	.....	.....	19.20
Meridian English Acid Phosphate.....	12.00	.....	.....	14.40
Meridian Farmers Friend.....	10.00	1.50	1.50	19.80
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 Home Mixture Non-Potassic.....	11.00	1.65	.....	19.80
Meridian Meal Mixture.....	10.00	1.65	1.00	19.80
Meridian Meal Mixture Non-Potassic.....	11.00	1.65	.....	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 Meat 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 Prolife Wonder.....	10.00	2.47	.....	21.88
Meridian Raw Bone Mixture.....	11.00	1.65	.....	19.80
Meridian Rice Grower.....	10.00	.....	2.00	14.40
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

*Total Phosphoric Acid.

Table II.—Registration of Commercial Fertilizers, Season of 1915-1916.

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 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 Tomato Special Non-Potassic.....	11.00	2.47	.....	23.08
Meridian Truckers Special.....	9.00	1.65	2.00	19.80
Meridian Vegetable Grower.....	11.00	1.65	.....	19.80
Nitrate of Soda.....	8.00	2.47	5.00	25.48
Star.....	10.00	1.65	1.00	19.80
Star Non-Potassic.....	11.00	1.65	.....	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
Weevil Beater Guano Non-Potassic.....	11.00	1.65	.....	19.80
H. K. Mulford Co., Philadelphia, Pa.—				
Mulford Cultures for Legumes.....	.....	.....	.....	.....
Nitrate Agencies Co. of Texas, Houston, Texas—				
Acid Phosphate.....	16.00	.....	.....	19.20
Basic Slag (Thomas Phosphate Powder).....	*17.00	.....	.....	.....
Ground Bone.....	*22.88	2.46	.....	27.65
Genuine Peruvian Guano.....	10.00	10.69	2.00	57.16
High Grade Basic Slag.....	*17.00	.....	.....	.....
High Grade Chemical Fertilizer.....	8.00	4.90	6.00	36.40
High Grade Raw Bone.....	*23.00	3.70	.....	32.46
High Grade Steamed Bone.....	*23.00	3.70	.....	32.46
Kainit.....	.....	.....	12.00	14.40
Muriate of Potash.....	.....	.....	48.00	57.60
Nitrate of Soda.....	.....	15.00	.....	60.00
Sulphate of Potash.....	.....	.....	47.00	56.40
Pelican Fertilizer Works, Shreveport, La.—				
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 Grower No 1.....	10.00	1.65	.....	18.60
Pelican Cotton Prodycer.....	11.50	1.65	.....	20.40
Pelican Cotton Special.....	10.00	1.65	2.00	21.00
Pelican Favorite Cotton Grower.....	9.00	1.90	1.00	19.60
Pelican Favorite Cotton Grower Non-Potassic.....	10.00	2.00	.....	20.00
Pelican Fish Bone Fertilizer.....	10.00	1.65	2.00	21.00
Pelican Fish Formula.....	10.00	1.65	1.00	19.80
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 Meal Compound—Non-Potassic.....	11.00	1.65	.....	19.80
Pelican Potash and Bone.....	12.00	.....	2.00	16.80
Pelican Potato Special.....	8.00	3.30	2.00	25.20
Pelican Potash and Superphosphate.....	10.00	.....	4.00	16.80
Pelican Rice Formula.....	10.00	.....	2.00	14.40
Pelican Rice Phosphate.....	16.00	.....	.....	19.20
Pelican Special Formula.....	10.00	1.65	.....	18.60
Pelican Special Phosphate.....	16.00	.....	.....	19.20
Pelican Tomato Special.....	10.00	2.47	1.00	23.08
Pelican Truck Grower.....	10.00	2.47	.....	21.88
Pelican Vegetable Grower.....	8.00	2.47	4.00	24.28
Planters' Fertilizer and Chemical Co., New Orleans, La., Houston, Texas; Fort Worth, Texas—				
Planters' Ammoniated Phosphate No. 103 Without Potash.....	10.00	2.47	.....	21.88
Planters' Ammoniated Phosphate No. 122 Without Potash.....	12.00	1.65	.....	21.00
Planters' Ammoniated Phosphate Without Potash.....	10.00	1.65	.....	18.60
Planters' Fertilizer No. 122 Without Potash.....	11.00	1.65	.....	19.80
Planters' Fertilizer No. 1021.....	10.00	1.65	1.00	19.80
Planters' 14 Per Cent Phosphate.....	14.00	.....	.....	16.80
Planters' Golden Mixture.....	9.50	1.65	1.50	19.80
Planters' Golden Mixture No. 112 Without Potash.....	11.00	1.65	.....	19.80
Planters' Meal Mixture No. 102 Without Potash.....	10.00	1.65	.....	18.60

*Total Phosphoric Acid.

Table II.—Registration of Commercial Fertilizers, Season of 1915-1916.

Manufacturer, Place of Business and Brand.

		Phosphoric Acid Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
Planters Fertilizer and Chemical Co., New Orleans, La., Houston, Texas, Fort Worth, Texas—Continued.					
Planters' Rawbone Superphosphate With Potash.....	9.50	1.65	1.50	\$19.80	
Planters' 16 Per Cent Acid Phosphate.....	16.00	.....	.....	19.20	
Planters' Stubbs' Formula for Cotton and Corn.....	8.00	1.65	2.00	19.80	
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 Vegetable Fertilizer.....	8.50	3.50	.....	24.20	
San Augustine Fertilizer Co., San Augustine, Texas—					
Augustine Acid Phosphate.....	16.00	.....	.....	19.20	
Shreveport Fertilizer Works, Shreveport, La.—					
Lion Corn Food—Non-Potassic.....	9.00	2.50	.....	20.80	
Lion Cotton Elevator.....	9.50	1.88	.....	18.92	
Lion Double B.....	10.00	1.65	.....	18.60	
Lion Double C.....	10.00	1.65	.....	18.60	
Lion Double S.....	9.00	2.00	.....	18.80	
Lion Extra Good Phosphate.....	16.00	.....	.....	19.20	
Lion Fruiter.....	10.00	2.00	.....	20.00	
Lion Meal Formula.....	10.00	1.65	.....	18.60	
Lion Special.....	8.00	2.50	.....	19.60	
Lion Success Mixture.....	11.00	1.65	.....	19.80	
Lion Tomato Fertilizer.....	10.00	2.50	.....	22.00	
Nitrate of Soda.....	.....	15.00	.....	60.00	
Special Formula.....	8.00	4.12	.....	26.08	
Sulphur Springs Acid and Fertilizer Co., Sulphur Springs, Texas—					
Acid Phosphate 16 Per Cent.....	16.00	.....	.....	19.20	
High Grade Corn and Cotton Fertilizer.....	9.50	2.65	.....	22.00	
Planters' Special Fertilizer.....	8.00	3.00	.....	21.60	
Standard Cotton Fertilizer.....	10.00	2.00	.....	20.00	
Swift, & Co., Harvey, La.—					
Swift's Acid Phosphate 12 Per Cent.....	12.00	1.65	.....	14.40	
Swift's Ammoniated Phosphate.....	12.00	1.65	.....	21.00	
Swift's Ammoniated Phosphate Cotton Seed Meal Compound.....	12.00	1.65	.....	21.00	
Swift's Ammoniated Raw Bone Superphosphate.....	9.50	1.65	1.50	19.80	
Swift's Blood and Bone Special.....	10.00	2.47	.....	21.88	
Swift's Blood and Bone Truckler.....	8.00	2.47	.....	19.48	
Swift's Champion Corn and Wheat Grower.....	12.00	1.65	2.00	23.40	
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 "C" Fertilizer.....	8.00	2.47	2.00	21.88	
Swift's Diamond "C" Vegetable Fertilizer.....	8.00	2.47	2.00	21.88	
Swift's Diamond "D" Fertilizer.....	10.00	1.65	1.00	19.80	
Swift's Diamond "G" Onion Grower.....	6.00	2.47	2.00	19.48	
Swift's Diamond "H" Fertilizer.....	6.00	3.29	3.00	23.96	
Swift's Diamond "S" Cotton Seed Meal Compound.....	10.00	2.47	.....	21.88	
Swift's Dried Blood.....	.....	13.17	.....	52.68	
Swift's Eagle Guano.....	10.00	1.65	2.00	21.00	
Swift's Early Vegetable and Fruit Fertilizer.....	10.00	3.29	.....	25.16	
Swift's East Texas Truckler.....	8.00	2.47	3.00	23.04	
Swift's Excelsior Rice Grower.....	12.00	.....	1.00	15.60	
Swift's Garden City Phosphate.....	14.00	.....	.....	16.80	
Swift's Golden Harvest Cotton Seed Meal Compound.....	8.00	1.65	2.00	18.60	
Swift's Good Luck Cotton Seed Meal Compound.....	10.00	1.65	2.00	21.00	
Swift's High Grade Acid Phosphate.....	16.00	.....	.....	19.20	
Swift's High Grade Onion Fertilizer.....	7.00	4.94	2.00	30.56	
Swift's Laredo Special.....	3.00	4.94	3.00	26.96	
Swift's Nitrate of Soda.....	.....	14.81	.....	59.24	
Swift's Onion Grower.....	7.00	3.70	3.00	26.80	
Swift's Pioneer Rice Grower.....	10.00	.....	1.00	13.20	
Swift's Plantation Mixed Cotton Seed Meal Compound.....	10.00	1.65	1.00	19.80	
Swift's Planters' Special Cotton Seed Meal Compound.....	10.00	1.65	1.00	19.80	

Table II.—Registration of Commercial Fertilizers, Season of 1915-1916.

Manufacturer, Place of Business and Brand.	Phosphoric Acid Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
Swift & Co., Harvey, La.—Continued.				
Swift's Plow Boy Cotton Seed 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 Acid Phosphate 18 Per Cent.....	18.00			21.60
Swift's Pure Bone Meal.....	*24.00	2.47		28.58
Swift's Pure Raw Bone Meal.....	*22.00	3.70		31.66
Swift's Red Steer Guano.....	9.00	1.65	2.00	19.80
Swift's Special Cotton and Corn Grower.....	10.00	1.65	1.00	19.80
Swift's Special Grain Fertilized.....	10.00	1.65	2.00	21.00
Swift's Special Mixture.....	10.00	1.65		18.60
Swift's Special Mixture Cotton Seed Meal Compound.....	10.00	1.65		18.60
Swift's Special Tankage Fertilizer.....	4.80	5.27		25.79
Swift's Superphosphate Cotton Seed 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 Special Wheat Grower.....	12.00	1.65	1.00	22.20
Swift's Tankage.....	*3.00	6.58		27.40
Swift's Tankage Formula.....	*6.87	7.41		33.65
Swift's Tankage Mixture.....	9.00	3.29		23.96
Swift's Truckers' Favorite.....	8.00	2.47	1.00	20.68
Swift's Truckers' Favorite Cotton Seed Meal Compound.....	8.00	2.47	1.00	20.68
Swift's Tomato Special Cotton Seed Meal Compound.....	10.00	2.47	1.00	23.08
Union Seed and Fertilizer Co., New Orleans, La.—				
American Truckers' Special.....	10.00	1.65	5.00	24.60
Ammoniated Raw Bone Superphosphate.....	11.00	1.65		19.80
Ammoniated Raw Bone Superphosphate and Potash.....	10.00	1.65	1.00	19.80
Black Diamond Acid Phosphate.....	12.00			14.40
Blood and Bone.....	11.00	1.65		19.80
Blood, Bone and Beef.....	10.00	1.65	1.00	19.80
Blood, Bone and Beef Without Potash.....	11.00	1.65		19.80
Blood, Bone and Potash.....	10.00	1.65	1.00	19.80
Blue Rose Rice Grower.....	12.00		2.00	16.80
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
Cynamid.....		18.09		72.38
Dissolved Bone and Potash 10-4.....	10.00		4.00	16.80
Economizer.....	10.00	1.65	2.00	21.00
Economizer Without Potash.....	12.00	1.65		21.00
Excelsior.....	10.00	1.65	2.00	21.00
Excelsior Without Potash.....	12.00	1.65		21.00
Farmers' Cornucopia.....	12.00	2.47	2.00	26.68
Golden Guano.....	10.00	1.65	1.00	19.80
Golden Guano Without Potash.....	11.00	1.65		19.80
Goldsmith's Improved Mixture.....	10.00	1.65	1.00	19.80
Goldsmith's Improved Mixture Without Potash.....	11.00	1.65		19.80
Honduras Rice Grower.....	12.00		4.00	19.20
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 Rice Grower.....	10.00		2.00	14.40
Louisiana Stubble Cane Grower.....	4.00	4.94		24.56
Meal Ammoniated Superphosphate.....	11.00	1.65		19.80
Meal Ammoniated Superphosphate and Potash.....	10.00	1.65	1.00	19.80
New Orleans Acid Phosphate.....	14.00			16.80
Nitrate of Soda.....		15.00		60.00
Supreme Acid Phosphate.....	18.00			21.60
Sulphate of Ammonia.....		20.00		80.00
Special Sugar Cane Grower No. 67.....	7.00	5.00		28.40
Texas Guano.....	10.00	1.65		18.60
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
Virginia-Carolina Chemical Co., Shreveport, La.—				
BBB Beef Blood and Bone.....	10.00	1.65	1.00	19.80
BBB Beef, Blood and Bone Non-Potassic.....	11.00	1.65		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

*Total Phosphoric Acid.

Table II.—Registration of Commercial Fertilizers, Season of 1915-1916.

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.—Continued.				
Georgia State Grange Non-Potassic.....	11.00	1.65	1.50	\$19.80
Mobile Double Eagle Guano.....	10.00	1.65	1.50	20.40
Mobile Double Eagle Guano Non-Potassic.....	11.50	1.65	1.50	20.40
Mobile Raw Bone Ammoniated Superphosphate.....	10.00	1.65	1.50	20.40
Mobile Raw Bone Ammoniated Superphosphate Non-Potassic.....	11.50	1.65	1.50	20.40
Muriate of Potash.....			48.00	57.60
Nitrate of Soda.....		14.80	1.50	59.20
Royal Blood Bone and Potash.....	10.00	1.65	1.50	20.40
Royal Blood Bone Non-Potassic.....	11.50	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 Cotton Boll Guano Non-Potassic.....	10.00	1.65	1.50	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 High Grade Guano Non-Potassic.....	12.00	1.65	1.50	21.00
Royal Potash Compound.....	10.00		4.00	16.80
Royal Tomato Formula.....	10.00	2.47	1.00	23.08
Royal Tomato Formula Non-Potassic.....	11.00	2.47	1.00	23.08
Royal Vegetable Fertilizer.....	8.00	2.47	4.00	24.28
Royal Vegetable Non-Potassic.....	12.00	2.47	1.50	24.28
Scott's Gossypium Phospho.....	10.00	1.65	1.50	20.40
Scott's Gossypium Phospho Non-Potassic.....	11.50	1.65	1.50	20.40
Scott's Gossypium Phospho Special.....	10.00	1.65	2.00	21.00
Scott's Gossypium Phospho Special Non-Potassic.....	12.00	1.65	1.50	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
Scott's State Standard Guano Non-Potassic.....	10.00	1.65	1.50	18.60
Sulphate of Potash.....			48.00	57.60
Tip Top Nitrogen Compound.....	2.00	13.15	1.50	55.00
V. C. C. Co.'s 16 Per Cent Acid Phosphate.....	16.00			19.20
V. C. Fruit and Truck Special.....	6.00	3.30	8.00	30.00
V. V. V. Co.'s Truck Grower.....	8.00	2.06	6.00	25.04
V. C. High Grade Champion Compound.....	9.00	3.00	3.00	26.40
V. C. High Grade Champion Non-Potassic.....	12.00	3.00	3.00	26.40
V. C. High Grade Dixie Special.....	7.00	3.00	1.00	21.60
V. C. High Grade Dixie Special Non-Potassic.....	8.00	3.00	1.00	21.60
V. C. High Grade Guano.....	10.00	1.65	2.00	21.00
V. C. High Grade Guano Non-Potassic.....	12.00	1.65	1.50	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. High Grade Top Dresser Non-Potassic.....	6.50	6.18	2.50	32.52
V. C. Rice Special.....	10.00	1.65	2.00	21.00
V. C. Rice Special—Non-Potassic.....	12.00	1.65	1.50	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. XXX Special.....	8.00	2.47	1.00	20.68
V. C. XXX Special Non-Potassic.....	9.00	2.47	1.00	20.68
George A. Wright, Palestine, Texas—				
Wright 14 Per Cent Acid Phosphate.....	14.00			16.80
Wills Point Cotton Oil Co., Wills Point, Texas—				
Semper Fidelis Acid Phosphate.....	16.00			19.20
Semper Fidelis Cotton Grower.....	10.00	1.80	2.00	21.60
Semper Fidelis Kainit.....			12.00	14.40
Semper Fidelis Phospho Meal.....	8.50	3.50	1.00	25.40