

TEXAS AGRICULTURAL EXPERIMENT STATION

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DIVISION OF CHEMISTRY

Commercial Fertilizers in 1917-1918



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COMMERCIAL FERTILIZERS IN 1917-18.

G. S. FRAPS, 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 quantities of commercial fertilizers sold in Texas for the last several seasons are as follows:

1905-06	13,500 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.
1916-17	42,000 tons.
1917-18	58,000 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 that which is available in bone or tankage.

FREE ANALYSIS

Fertilizer samples, if taken in accordance with the requirements of the law, will be analyzed free of charge. Those who desire a free analysis of a fertilizer should write for a blank "Application for Free Fer-

tizer Analysis" to the State Chemist, College Station, Texas. Samples not taken as required by the law cannot be accepted for analysis.

INVESTIGATION 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 into the fundamental properties of soils, especially with respect to their content of plant food. This work is related closely to the use of the 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 co-operative field experiments.

A number of co-operative fertilizer experiments have been conducted by the chemical division of the Experiment Station, and it has been found that phosphoric acid and nitrogen are much more likely to give results than potash. In sixty-eight out of 114 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. Other co-operative fertilizer experiments are reported in Bulletin 235.

The quantity of potash in 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 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 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 crops 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.

There is no doubt that the advertisements of the German potash syndicate have induced the use of much potash really not needed.

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 fertilizers usually costs much more per pound than in standard grade or high grade goods, although the price per ton or 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 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 requirement for cottonseed meal.

ANALYSIS BELOW GUARANTEE

Whenever any lot of fertilizer is four 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 sixteen or fourteen 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 matter is discussed in Bulletin 223.

In the bulletin for 1915-16 are printed two analyses of acid phosphate guaranteed at sixteen per cent., but found to contain thirteen per cent. available phosphoric acid associated with over five per cent. insoluble and eighteen per cent. total phosphoric acid. Examination showed the samples to contain carbonate of lime. The deficiency was clearly due to the reversion of the acid phosphate due to the use of a quantity of limestone as a filler.

ARTIFICIAL COLORING

A concern in Georgia is offering yellow clay for sale to fertilizer manufacturers, for the purpose of making fertilizers appear to contain cottonseed meal. In a letter, they say, "We understand that as a partial substitute for cottonseed, which is just now a very costly article, our oxide gives about the same shade to certain fertilizers that cottonseed (meal) gives."

Any fertilizer containing this substance is *adulterated* under the Texas law. Its use is clearly for the purpose of deceiving the purchaser. Fertilizer containing it is liable to seizure and the manufacturer of such fertilizer is liable to a fine.

EXPLANATION OF TERMS

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

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

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

Potash is required to be soluble in water. A great many Texas soils contain a sufficient quantity of potash, so that its use in fertilizers on such soils is a useless expense. Potash, like nitrogen, is needed by all parts of the plants, 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. On account of the variations in prices which have occurred since the war broke out, valuations given in this bulletin do not represent closely the cost of the plant food.

FERTILIZER VALUATIONS, 1917-1918

	Cents per pound
Available Phosphoric Acid.....	7½
Total Phosphoric Acid in Tankage and Bone.....	5
Nitrogen	35
Potash	25

These valuations are not closely related to the prices of fertilizer, on account of the decided variations and changes due to the war.

RELATION OF VALUATION AND SELLING PRICE, 1917-1918

	Number averaged.	Average valuation.	Average sell- ing price.
Acid Phosphate 14 per cent.....	3	\$21.00	\$23.67
Acid Phosphate 16 per cent.....	55	24.00	25.05
Standard Grade Phosphate and Nitrogen...	169	27.12	37.46
High Grade Phosphate and Nitrogen.....	46	35.08	44.79
Standard Grade Complete Fertilizer.....	36	33.09	46.29
High Grade Complete Fertilizer.....	13	40.67	53.19

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, 1917-1918

Table 1 contains a list of all samples of fertilizer subjected to analysis in the season beginning September 1, 1917, 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 S. E. Asbury, T. L. Ogier, H. B. Smith and Ada Smith.

REGISTRATION, 1917-1918

A list of brands registered for sale in the season of 1917-1918 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 1.—Analysis of commercial fertilizers, season 1917-1918.

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.—					
27388	White Diamond Corn Grower Without Potash—Guarantee.....	11.00	1.65		\$28.05
	Analysis.....	9.84	1.41		24.63
27272	White Diamond Early Boll Fertilizer Without Potash—Guarantee.....	11.00	1.65		28.05
	Analysis.....	11.05	1.67		28.27
26963	White Diamond Early Potato and Truck Without Potash—Guarantee.....	12.00	2.50		35.50
	Analysis.....	12.70	2.37		35.64
27368	Analysis.....	11.81	1.79		30.25
27386	Analysis.....	12.55	1.71		30.80
27298	White Diamond East Texas Truck Fertilizer—Guarantee.....	10.00	2.47	1.00	37.29
	Analysis.....	10.48	1.98	.33	31.23
27369	White Diamond Grofast Fertilizer Without Potash—Guarantee.....	10.00	1.65		26.55
	Analysis.....	7.98	1.39		21.70
27296	White Diamond New South—Guarantee.....	10.00	1.65		26.55
	Analysis.....	9.56	1.52		24.98
27396	Analysis.....	10.03	1.26		23.87
27297	White Diamond Special Acid Phosphate—Guarantee.....	16.00			24.00
	Analysis.....	16.91			25.37
27387	White Diamond 20th Century Fertilizer Without Potash—Guarantee.....	11.00	1.65		28.05
	Analysis.....	10.26	1.22		23.93
27370	White Diamond Texas Special—Guarantee.....	10.00	1.65	1.00	31.55
	Analysis.....	10.64	1.32	1.05	30.45
Armour's Fertilizer Works, New Orleans, La.—					
27327	Armour's Best Phosphate 18 Per Cent—Guarantee.....	18.00			27.00
	Analysis.....	18.34			27.51
27355	Armour's Champion Meal Mixture Without Potash—Guarantee.....	12.00	1.65		29.55
	Analysis.....	11.75	1.73		29.74
26964	Armour's Onion Fertilizer No. 18—Guarantee.....	4.00	4.94		40.58
	Analysis.....	3.78	4.51		37.24
26976	Analysis.....	3.43	4.47		36.44
27222	Analysis.....	3.24	4.96		39.58
27223	Analysis.....	4.32	4.97		41.27
27224	Analysis.....	2.97	4.00		32.46
27225	Analysis.....	3.51	3.96		32.99
27226	Analysis.....	3.31	4.62		37.31
27275	Analysis.....	4.37	4.89		40.79
27202	Armour's Royal Mixture With Potash—Guarantee.....	10.00	1.65	1.00	31.55
	Analysis.....	8.90	1.72	.99	30.34
26999	Armour's Tomato Grower—Guarantee.....	10.00	2.47		32.29
	Analysis.....	9.79	2.43		31.70
27122	Analysis.....	10.14	2.55		33.06
27167	Analysis.....	10.05	3.32		38.32
27303	Armour's Texas Trucker—Guarantee.....	10.00	2.47		32.29
	Analysis.....	9.45	2.74		33.36
27115	Analysis.....	9.31	2.38		30.63
27116	Armour's Vegetable Grower—Guarantee.....	9.00	2.05	3.00	42.85
	Analysis.....	8.95	2.24	3.43	46.26
27199	Analysis.....	8.86	2.14	2.39	40.22
27314	Analysis.....	7.77	2.18	2.65	40.17
27382	Analysis.....	9.14	2.35	2.33	41.81
27121	Blood and Bone Special Without Potash—Guarantee.....	10.00	1.65		26.55
	Analysis.....	10.17	1.82		28.00
27165	Analysis.....	9.46	1.77		26.58
27173	Analysis.....	9.34	1.82		26.75
27236	Analysis.....	9.65	1.76		26.80
27346	Analysis.....	10.04	1.90		28.36
27347	Analysis.....	9.66	1.70		26.39
27434	Analysis.....	8.30	1.97		26.24
27443	Analysis.....	9.15	1.62		25.07
27201	Farmers' Choice With Potash—Guarantee.....	10.00	1.65	1.00	31.55
	Analysis.....	10.65	1.76	1.00	33.30
27271	Analysis.....	9.24	1.82	.83	30.75
27410	Analysis.....	10.27	1.86	.77	32.28
27403	Farmers' Choice Without Potash—Guarantee.....	10.00	1.95		28.65
	Analysis.....	10.20	2.06		29.72
27174	King Cotton—Guarantee.....	8.00	1.65	2.00	33.55
	Analysis.....	7.95	2.02	1.18	31.97
27235	Analysis.....	7.25	1.67	1.82	31.77
27237	Analysis.....	8.12	1.81	1.58	32.75

Table 1.—Analysis of commercial fertilizers, season 1917-1918.

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.—Continued.				
	King Cotton Without Potash—Guarantee	10.00	1.65		\$26.55
27172	Analysis.....	9.26	1.86		26.91
27196	Analysis.....	10.74	1.98		29.97
27213	Analysis.....	9.75	2.10		29.33
27256	Analysis.....	9.10	1.93		27.16
27270	Analysis.....	9.68	1.53		25.23
27279	Analysis.....	10.01	2.31		31.17
27281	Analysis.....	10.08	1.63		26.55
27299	Analysis.....	10.26	1.56		26.31
27302	Analysis.....	9.22	1.74		26.01
27384	Analysis.....	9.99	1.81		27.66
27401	Analysis.....	10.33	1.80		28.10
27444	Analysis.....	10.00	2.56		32.92
27456	Analysis.....	10.14	2.04		29.49
27457	Analysis.....	8.50	1.95		26.40
	Raw Bone Meal—Guarantee	*22.00	3.70		47.90
27321	Analysis.....	*22.15	3.90		49.45
27442	Analysis.....	*22.07	3.89		49.30
	Royal Mixture With Potash—Guarantee	10.00	1.65	1.00	31.55
27170	Analysis.....	9.78	1.99	1.08	34.00
27197	Analysis.....	9.28	1.91	1.10	32.79
27257	Analysis.....	10.65	1.79	.98	33.41
27268	Analysis.....	9.77	1.58	.82	29.82
27301	Analysis.....	9.91	2.04	1.26	35.45
27404	Analysis.....	9.24	1.78	1.10	31.82
27409	Analysis.....	8.42	1.59	1.00	28.76
	Special Blood Mixture Without Potash—Guarantee	11.00	1.65		28.05
27200	Analysis.....	*10.29	1.89		28.67
27407	Analysis.....	10.48	1.65		27.27
	Special Farm Mixture Without Potash—Guarantee	10.00	1.65		26.55
27117	Analysis.....	8.86	1.66		24.91
27118	Analysis.....	10.05	2.22		30.62
27168	Analysis.....	10.35	1.99		29.46
27171	Analysis.....	9.58	1.95		28.02
27198	Analysis.....	9.66	1.78		26.95
27212	Analysis.....	9.56	1.74		26.52
27269	Analysis.....	10.40	1.97		29.39
27348	Analysis.....	9.53	1.92		27.74
27354	Analysis.....	10.35	1.77		27.92
27383	Analysis.....	10.39	1.90		28.82
27406	Analysis.....	9.89	2.06		29.26
27408	Analysis.....	9.23	1.82		26.59
27459	Analysis.....	9.71	1.87		27.66
	Special Formula 84—Guarantee	8.00	3.29		35.03
26965	Analysis.....	8.09	3.05		33.49
	Star Phosphate, 16 Per Cent—Guarantee	16.00			24.00
27001	Analysis.....	16.10			24.15
27119	Analysis.....	16.11			24.17
27166	Analysis.....	16.07			24.11
27203	Analysis.....	16.37			24.56
27204	Analysis.....	16.32			24.48
27280	Analysis.....	16.12			24.18
27300	Analysis.....	16.31			24.47
27322	Analysis.....	16.73			25.10
27356	Analysis.....	16.65			24.98
27357	Analysis.....	16.76			25.14
27402	Analysis.....	16.52			24.78
27432	Analysis.....	15.24			22.36
27433	Analysis.....	16.45			24.68
27435	Analysis.....	15.94			23.91
27436	Analysis.....	15.99			23.99
27445	Analysis.....	16.70			25.05
27446	Analysis.....	16.17			24.26
27447	Analysis.....	17.27			25.91
27448	Analysis.....	16.28			24.42
27385	Analysis.....	16.80			25.20
	Truck and Berry Special—Guarantee	10.00	1.65	3.00	41.55
27234	Analysis.....	9.45	1.88	1.80	36.34
	Truck Special No. 2—Guarantee	8.00	1.65	3.00	38.55
27000	Analysis.....	7.19	2.28	2.96	41.55
27120	Analysis.....	7.87	1.72	3.16	39.65

*Total Phosphoric Acid.

Table 1.—Analysis of commercial fertilizers, season 1917-1918.

Laboratory Number.	Manufacturer, Place of Business and Brand.	Phosphoric Acid Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
27329	Bryan Cotton Oil and Fertilizer Co., Bryan, Texas.— Star Brand Cotton and Corn Fertilizer—Guarantee . . .	11.5	1.8		\$29.85
	Analysis	12.61	2.03	0.49	35.57
27102	Dr. Chas. R. Campbell, San Antonio, Texas.— Bat Roost Guano—Guarantee	3.00	10.00		74.50
	Analysis	4.52	15.76		117.10
27320	Dallas Fertilizer and Reduction Co., Dallas, Texas.— Beaver Brand Cotton and Corn Grower Non-Potassic— Guarantee	10.00	2.47		32.29
	Analysis	10.97	2.53		34.17
27319	Beaver Brand Stearn Bone Meal—Guarantee	*22.00	2.00		36.00
	Analysis	*23.84	1.76		36.16
27318	Beaver Brand Vegetable Grower—Guarantee	9.00	2.47	3.00	45.79
	Analysis	9.62	2.81	2.59	47.05
27359	East Texas Fertilizer Co., Tyler, Texas.— Tomato Grower—Guarantee	10.00	2.47		32.29
	Analysis	10.59	1.99		29.82
27360	Analysis	11.30	1.91		30.32
26992	Analysis	11.26	2.15		31.94
27149	Analysis	10.83	2.06		30.67
26993	Wiley's Farm Mixture—Guarantee	10.00	1.65		26.55
	Analysis	11.06	1.64		28.07
27141	Analysis	10.94	1.73		28.52
27142	Analysis	12.76	1.56		30.06
27147	Analysis	11.56	1.56		28.26
27241	Analysis	10.62	1.54		26.71
27277	Analysis	10.55	1.71		27.80
27334	Analysis	11.19	1.35		26.24
27419	Analysis	10.44	1.43		25.67
27420	Analysis	10.17	1.45		25.91
27462	Analysis	9.33	1.37		23.59
27143	Wiley's Tomato Special—Guarantee	9.00	2.80		33.10
	Analysis	11.28	2.61		35.19
27148	Analysis	10.63	2.44		33.03
27150	Analysis	11.59	2.73		36.50
27276	Analysis	11.73	2.64		36.08
27358	Wiley's 1035-190 Farm Mixture—Guarantee	10.35	1.90		28.82
	Analysis	10.79	1.99		30.12
26991	16 Per Cent Acid Phosphate—Guarantee	16.00			24.00
	Analysis	16.84			25.26
27131	Analysis	16.58			24.87
27132	Analysis	17.00			25.50
27146	Analysis	16.66			24.99
27274	Analysis	16.58			24.87
27391	Gate City Fertilizer Co., Texarkana, Ark.— Red Boll Cotton Grower Without Potash—Guarantee . .	11.00	1.65		28.05
	Analysis	11.51	1.34		26.65
27389	Red Boll Diversified Cropper—Guarantee	10.00	1.65	2.00	36.55
	Analysis	8.92	1.55	2.33	35.83
27273	Red Boll Extra Acid Phosphate—Guarantee	16.00			24.00
	Analysis	14.54			21.81
27392	Analysis	16.67			25.01
27393	Red Boll Old Reliable Fertilizer Without Potash— Guarantee	10.00	1.65		26.55
	Analysis	10.59	1.43		25.90
27394	Red Boll Old Time Vegetable Grower Without Potash— Guarantee	10.50	2.00		29.75
	Analysis	10.86	1.89		29.52
27390	Red Boll Soluble Bone Fertilizer Without Potash— Guarantee	10.00	1.65		26.55
	Analysis	10.37	1.45		25.71
27398	Hope Fertilizer Co., Hope, Arkansas.— Hope Hustler Without Potash—Guarantee	10.00	1.65		26.55
	Analysis	10.36	1.84		28.42
27295	Stork Brand 16 Per Cent Acid Phosphate—Guarantee . .	16.00			24.00
	Analysis	16.15			24.23
27397	Analysis	17.17			25.76

*Total Phosphoric Acid.

Table 1.—Analysis of commercial fertilizers, season 1917-1918.

Laboratory Number.	Manufacturer, Place of Business and Brand.	Phosphoric Acid Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
	Henderson Cottonseed and Gin Co., Henderson, Texas.—				
	Henderson Half and Half—Guarantee.....	8.70	3.50		\$37.55
27195	Analysis.....	9.46	3.94		41.77
27455	Analysis.....	8.91	3.93		40.88
	Henderson Staple—Guarantee.....	10.00	2.00		29.00
27194	Analysis.....	11.96	2.82		37.68
	Houston County Oil Mill and Manufacturing Co., Crockett, Texas.—				
	Crockett Compound—Guarantee.....	9.00	3.50	1.00	43.00
27342	Analysis.....	9.95	2.89	.72	38.76
	Crockett 16 Per Cent Acid Phosphate—Guarantee.....	16.00			24.00
27339	Analysis.....	16.46			24.69
	Crockett Phosphate Meal Mixture—Guarantee.....	11.00	1.65		28.05
27340	Analysis.....	13.72	1.78		33.04
27341	Analysis.....	12.00	1.91		31.37
27343	Analysis.....	11.35	1.77		29.42
27344	Analysis.....	11.07	2.04		30.89
27345	Analysis.....	11.09	1.84		29.52
	Houston Packing Co., Houston, Texas—				
	Blood and Bone—Guarantee.....	*14.50	5.60		53.70
26975	Analysis.....	*14.63	6.28		58.59
26978	Analysis.....	*15.91	5.77		56.30
27151	Analysis.....	*15.42	6.25		59.19
27152	Analysis.....	*14.53	5.94		56.11
27153	Analysis.....	*15.67	5.90		56.97
	Johnson, Sharp & Campbell, Uvalde, Texas—				
	Bat Guano—Guarantee.....	* 9.00	4.50		34.20
26979	Analysis.....	*10.44	2.27		19.02
26981	Analysis.....	* 9.19	2.84		22.64
26980	Analysis.....	*10.43	1.62		14.47
27206	Analysis.....	* 4.17	1.35		13.52
27207	Analysis.....	14.02	2.93		24.71
	Longview Cotton Oil Co., Longview, Texas—				
	Longview Cotton Grower—Guarantee.....	11.50	2.00		31.25
27374	Analysis.....	11.00	2.23		32.11
	Longview Corn and Potato Special—Guarantee.....	10.00	3.00		36.00
27463	Analysis.....	10.07	2.91		35.48
27373	Analysis.....	11.81	2.57		35.71
	Marshall Fertilizer Factory, Marshall, Texas—				
	High Grade Acid Phosphate—Guarantee.....	16.00			24.00
27416	Analysis.....	14.78			22.17
27460	Analysis.....	17.28			25.92
27465	Analysis.....	14.85			22.28
27175	Analysis.....	16.55			24.83
	Potato Special—Guarantee.....	7.50	2.47		28.54
27250	Analysis.....	7.62	2.16		26.55
27418	Analysis.....	7.45	2.58		29.24
	Standard Grade Cotton and Corn Special—Guarantee.....	10.00	1.65		26.55
27176	Analysis.....	10.49	1.99		29.67
27249	Analysis.....	10.13	1.93		28.71
27381	Analysis.....	10.38	1.76		27.89
27415	Analysis.....	9.63	1.78		26.91
27417	Analysis.....	10.62	1.78		28.39
	John Marbach, Bracken, Texas—				
	Bat Guano—Guarantee.....	3.50	8.40		64.05
26961	Analysis.....	3.88	9.66		73.44
26967	Analysis.....	3.68	10.87		81.61
	Meridian Fertilizer Factory, Shreveport, La.—				
	Caddo Cotton—Guarantee.....	9.35	1.90	1.00	32.33
27140	Analysis.....	11.43	1.98	.93	35.66
	Caddo Cotton Non-Potassic—Guarantee.....	10.35	1.90		28.83
27134	Analysis.....	12.15	1.58		29.29
27427	Analysis.....	10.52	1.90		29.08
	Meridian Blood and Bone Non-Potassic—Guarantee.....	11.00	1.65		28.05
26983	Analysis.....	12.59	1.68		30.65

*Total Phosphoric Acid.

Table 1.—Analysis of commercial fertilizers, season 1917-1918.

Laboratory Number.	Manufacturer, Place of Business and Brand.	Phosphoric Acid Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
Meridian Fertilizer Factory, Shreveport, La.—Continued.					
	Meridian Corn Club Special Non-Potassic—Guarantee.	8.50	2.47		\$30.04
27286	Analysis	9.01	2.60		31.71
	Meridian Farm Special—Guarantee.	10.00	1.65		26.55
26985	Analysis	12.32	1.65		30.03
27156	Analysis	12.07	1.71		30.08
27245	Analysis	10.74	1.87		29.20
27371	Analysis	10.89	1.68		28.10
	Meridian Home Mixture Non-Potassic—Guarantee.	11.00	1.65		28.05
26982	Analysis	12.42	1.90		31.93
27110	Analysis	11.81	1.78		30.18
27155	Analysis	12.19	1.65		29.84
27183	Analysis	11.91	1.99		31.80
27184	Analysis	11.55	1.85		30.28
27185	Analysis	12.48	1.70		30.62
27186	Analysis	12.06	1.72		30.13
27208	Analysis	11.30	1.72		28.99
27209	Analysis	11.64	1.76		29.78
27305	Analysis	12.05	1.90		31.38
27330	Analysis	12.42	1.85		31.58
27351	Analysis	11.47	1.86		30.25
27367	Analysis	11.96	1.90		31.24
27400	Analysis	11.00	1.88		29.66
27453	Analysis	10.72	1.75		28.33
27454	Analysis	10.89	1.75		28.59
27461	Analysis	11.24	1.94		30.44
	Meridian Meal Mixture Non-Potassic—Guarantee.	11.00	1.65		28.05
27238	Analysis	12.34	1.78		30.97
27287	Analysis	11.98	1.78		30.43
	Meridian Melon Grower—Guarantee.	8.50	2.47		30.04
27154	Analysis	8.82	2.48		30.59
	Meridian Southern Acid Phosphate—Guarantee.	14.00			21.00
27157	Analysis	15.46			23.19
	Meridian Standard Cotton and Corn Non-Potassic—Guarantee.	10.35	1.90		28.83
27135	Analysis	12.31	1.81		31.14
	Meridian Tomato Special—Guarantee.	10.00	2.47	1.00	37.29
27136	Analysis	12.80	2.40	1.13	41.65
	Meridian Tomato Special Non-Potassic—Guarantee.	11.00	2.47		33.79
26984	Analysis	12.40	2.46		35.82
27123	Analysis	11.17	2.23		32.47
27244	Analysis	11.89	2.51		35.41
27331	Analysis	11.80	2.47		34.99
27426	Analysis	11.02	2.38		33.19
	Meridian Trucker Special Non-Potassic—Guarantee.	11.00	1.65		28.05
27133	Analysis	12.55	1.66		30.45
27365	Analysis	12.29	1.84		31.32
27412	Analysis	9.91	1.90		28.17
	Special Cotton Formula—Guarantee.	10.00	1.65		26.55
27246	Analysis	11.46	1.75		29.44
27248	Analysis	10.05	1.82		27.82
27288	Analysis	10.47	1.77		28.10
27307	Analysis	10.43	1.76		27.97
27372	Analysis	11.01	1.68		28.28
27413	Analysis	10.61	1.72		27.96
27414	Analysis	10.79	1.88		29.35
	Union Special Acid Phosphate—Guarantee.	16.00			24.00
27158	Analysis	17.34			26.01
27187	Analysis	16.13			24.20
27243	Analysis	16.55			24.83
27247	Analysis	16.31			24.47
27306	Analysis	16.47			24.71
27328	Analysis	17.37			26.05
27366	Analysis	16.05			24.08
27399	Analysis	14.52			21.78
27411	Analysis	16.53			24.80
27425	Analysis	16.01			24.02
Nitrate Agencies Co. of Texas, Houston, Texas.—					
	High Grade 16 Per Cent Acid Phosphate—Guarantee.	16.00			24.00
26973	Analysis	16.90			25.35
27468	Analysis	16.87			25.31
	Nitrate of Soda—Guarantee.		15.00		105.00
26974	Analysis		15.31		107.17

Table 1.—Analysis of commercial fertilizers, season 1916-1917.

Laboratory Number.	Manufacturer, Place of Business and Brand.	Phosphoric Acid Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
Pelican Fertilizer Works, Shreveport, La.—					
	Pelican Cotton Grower—Guarantee	10.00	1.65		\$26.55
27124	Analysis	11.20	1.71		28.77
27193	Analysis	11.41	1.70		29.01
	Pelican Fish Formula—Guarantee	10.00	1.65	1.00	31.55
27125	Analysis	12.19	1.51	1.24	35.06
27253	Analysis	9.90	2.02		32.99
	Pelican Fish Formula Non-Potassic—Guarantee	11.00	1.65		28.05
27127	Analysis	11.78	1.69		29.50
	Pelican Meal Compound Non-Potassic—Guarantee	11.00	1.65		28.05
27294	Analysis	11.17	1.74		28.94
	Pelican Special Formula—Guarantee	10.00	1.65		26.55
27254	Analysis	10.58	1.89		29.10
	Pelican Special Phosphate—Guarantee	16.00			24.00
27192	Analysis	16.11			24.17
27278	Analysis	16.12			24.18
	Pelican Truck Grower—Guarantee	10.00	2.47		32.29
27126	Analysis	10.49	2.02		29.88
Planters' Fertilizer and Chemical Co., Houston, Texas—					
	Planters' Corn Fertilizer—Guarantee	8.00	2.47	2.00	39.29
27338	Analysis	8.78	2.86	1.95	42.94
	Planters' Farmer's Champion With Potash—Guarantee	10.00	1.65	1.00	31.55
27337	Analysis	10.56	1.66	.94	32.16
27362	Analysis	10.15	1.64	1.08	32.11
	Planters' Fruit and Vegetable Formula—Guarantee	8.00	1.65	3.00	38.55
27361	Analysis	7.82	1.70	2.82	37.73
	Planters' Imperial Cotton Mixture Without Potash—Guarantee	10.00	1.65		26.55
27218	Analysis	9.45	1.65		25.73
27219	Analysis	9.61	1.69		26.25
27220	Analysis	9.32	1.61		25.25
27233	Analysis	9.68	1.65		26.07
27315	Analysis	10.52	1.76		28.10
27316	Analysis	9.27	1.64		25.35
27335	Analysis	10.64	1.48		26.32
	Planters' Farm Special Without Potash—Guarantee	10.00	1.65		26.55
27221	Analysis	10.01	1.87		28.11
27336	Analysis	9.36	1.77		26.23
27363	Analysis	10.73	1.75		28.35
	Planters' Tomato Grower—Guarantee	10.00	2.47		32.29
26990	Analysis	9.88	2.84		34.70
27293	Analysis	9.02	2.35		29.98
27364	Analysis	10.27	2.74		34.59
	Planters' Texas Trucker—Guarantee	10.00	2.47		32.29
26989	Analysis	9.58	2.30		30.47
	Planters' 16 Per Cent Acid Phosphate—Guarantee	16.00			24.00
26988	Analysis	16.50			24.75
27317	Analysis	15.86			23.79
27452	Analysis	15.95			23.93
Shreveport Fertilizer Works, Shreveport, La.—					
	Lion Acid Phosphate and Limestone—Guarantee	16.00			24.00
27428	Analysis	15.32			22.96
	Lion Success Mixture—Guarantee	11.00	1.65		28.05
27310	Analysis	11.40	1.98		39.06
Swift & Co., Harvey, La.—					
	Swift's Ammoniated Raw Bone Superphosphate—Guarantee	9.50	1.65	1.50	33.30
27106	Analysis	9.64	1.78	1.39	33.87
27108	Analysis	10.00	1.70	1.36	33.70
27111	Analysis	8.43	1.68	1.47	31.76
27161	Analysis	10.49	1.80	1.63	36.49
27164	Analysis	10.77	1.40	.82	30.06
27450	Analysis	9.25	1.50	1.41	31.43
	Swift's High Grade Acid Phosphate, 16 Per Cent—Guarantee	16.00			24.00
27107	Analysis	18.33			27.50
	Swift's Blood and Bone Special—Guarantee	10.00	2.47		32.29
27215	Analysis	9.45	2.46		31.40
27262	Analysis	10.11	2.68		33.93
27380	Analysis	8.71	2.80		32.67
	Swift's Diamond "S" Compound—Guarantee	10.00	2.47		32.29
27112	Analysis	11.06	2.58		34.65

Table 1.—Analysis of commercial fertilizers, season 1917-1918.

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.—Continued.					
	Swift's Diamond "S" Compound—Guarantee	10.00	2.47		\$32.29
27255	Analysis	10.81	2.31		32.39
27263	Analysis	10.19	2.65		33.34
27264	Analysis	11.04	2.15		31.61
	Swift's Excelsior Cro Producer—Guarantee	10.00	1.65		26.55
26994	Analysis	11.01	1.70		28.42
27109	Analysis	12.51	1.58		29.83
27191	Analysis	10.13	1.76		27.52
27137	Analysis	11.88	1.77		29.16
27216	Analysis	10.88	1.70		28.22
27227	Analysis	10.86	1.75		28.54
27258	Analysis	10.72	1.77		28.47
27259	Analysis	10.76	1.82		28.88
27261	Analysis	10.66	1.76		28.31
27284	Analysis	10.33	1.77		27.89
27308	Analysis	10.51	1.74		27.95
27312	Analysis	10.82	1.76		28.55
27349	Analysis	10.30	1.78		27.91
	Swift's Favorite Crop Producer—Guarantee	12.00	1.65		29.55
27326	Analysis	5.86	3.05		30.14
27350	Analysis	11.78	1.83		30.48
	Swift's Garden City Acid Phosphate, 14 Per Cent—Guarantee	14.00			21.00
27324	Analysis	14.27			21.41
	Swift's Plow Boy Compound—Guarantee	8.00	2.47	3.00	44.29
27378	Analysis	6.63	1.97	3.45	40.99
	Swift's High Grade Acid Phosphate, 16 Per Cent—Guarantee	16.00			24.00
26966	Analysis	17.57			26.36
27103	Analysis	18.12			27.18
27188	Analysis	18.70			28.05
27228	Analysis	17.67			26.51
27283	Analysis	15.82			23.73
27323	Analysis	16.95			25.43
27325	Analysis	17.11			25.67
27375	Analysis	17.89			26.84
27437	Analysis	17.25			25.88
27449	Analysis	17.02			25.53
27451	Analysis	16.05			24.08
	Swift's High Grade Mixture—Guarantee	4.00	7.40		57.80
26962	Analysis	3.53	7.62		58.64
	Swift's Laredo Mixture—Guarantee	8.00	3.29		35.03
26977	Analysis	7.47	3.39		34.94
	Swift's Nitrate of Soda—Guarantee		14.81		13.67
26969	Analysis		11.06		77.42
26971	Analysis		12.47		87.29
	Swift's Non-Potassic Cotton and Corn Grower—Guarantee	11.00	1.65		28.05
27282	Analysis	11.40	1.78		29.56
	Swift's Special Cotton and Corn Grower—Guarantee	10.00	1.65	1.00	31.55
27104	Analysis	10.30	1.74	1.07	32.98
27162	Analysis	10.28	1.76	1.05	32.99
27309	Analysis	9.95	1.70	.87	31.18
	Swift's Special Mixture—Guarantee	10.00	1.65		26.55
27138	Analysis	11.07	1.76		28.93
27139	Analysis	11.05	1.76		28.90
27189	Analysis	11.31	1.64		28.55
27214	Analysis	9.05	1.71		25.55
27217	Analysis	9.20	2.05		28.15
27260	Analysis	10.55	1.81		28.50
27285	Analysis	9.91	1.83		27.68
27376	Analysis	10.76	2.05		30.49
27438	Analysis	7.62	2.31		27.60
	Swift's Special Tankage Fertilizer—Guarantee	4.80	5.27		44.09
26968	Analysis	4.52	5.42		44.72
26970	Analysis	4.44	5.05		42.01
26972	Analysis	4.44	5.12		42.50
	Swift's Truckers' Favorite—Guarantee	8.00	2.47	1.00	34.29
27105	Analysis	8.98	2.29	.93	34.15
27159	Analysis	8.07	2.43	1.46	36.42
27163	Analysis	7.82	3.63	.87	41.47
27190	Analysis	8.25	2.56	.91	34.85
27377	Analysis	7.88	2.32	1.23	34.21
27379	Analysis	8.60	2.30	1.03	34.15
27467	Analysis	8.84	1.82	1.14	31.70

Table 1.—Analysis of commercial fertilizers, season 1917-1918.

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.—Continued.					
27160	Swift's Early Vegetable and Fruit Fertilizer—Guarantee.	10.00	3.29	.....	\$38.03
	Analysis.....	9.17	3.29	.....	36.79
Tennessee Coal, Iron and Railroad Co., Birmingham, Ala.					
27464	Duplex Basic Phosphate—Guarantee.	*18.00	.....	.....	18.00
	Analysis.....	*17.62	.....	.....	17.62
Union Seed and Fertilizer Co., New Orleans, La.—					
27205	Bull Dog Acid Phosphate—Guarantee.	16.00	.....	.....	24.00
27332	Analysis.....	16.27	.....	.....	24.41
	Analysis.....	18.37	.....	.....	27.56
27395	Goldsmith's Improved Mixture Without Potash—Guarantee.	11.00	1.65	.....	28.05
	Analysis.....	8.21	1.78	.....	24.78
27289	Texas Guano—Guarantee.	10.00	1.65	.....	26.55
	Analysis.....	10.62	1.77	.....	28.32
Virginia-Carolina Chemical Co., Shreveport, La.—					
26995	B. B. B. Beef, Blood and Bone Non-Potassic—Guarantee	11.00	1.65	.....	28.05
27114	Analysis.....	12.91	2.15	.....	34.42
27352	Analysis.....	10.82	1.64	.....	27.71
	Analysis.....	11.72	1.51	.....	28.15
27353	Georgia State Grange—Guarantee.....	10.00	1.65	1.00	31.55
27421	Analysis.....	10.91	1.63	.99	32.73
	Analysis.....	10.74	1.70	1.24	34.21
	Analysis.....	11.00	1.65	.....	28.05
27113	Georgia State Grange Non-Potassic—Guarantee.....	11.55	1.58	.....	28.39
27181	Analysis.....	11.12	1.65	.....	28.23
27211	Analysis.....	11.58	1.63	.....	28.78
27240	Analysis.....	11.89	1.74	.....	30.02
27439	Analysis.....	12.05	1.68	.....	29.84
27458	Analysis.....	11.79	1.39	.....	27.42
27429	Mobile Raw Bone Ammoniated Superphosphate Non-Potassic—Guarantee.....	11.50	1.65	.....	28.80
27431	Analysis.....	12.18	2.00	.....	32.27
	Analysis.....	12.12	1.96	.....	31.90
27252	Royal Cotton Boll Guano Non-Potassic—Guarantee.....	10.00	1.65	.....	26.55
27265	Analysis.....	10.43	1.84	.....	28.53
27266	Analysis.....	10.56	1.81	.....	28.51
	Analysis.....	10.47	1.91	.....	29.08
27180	Royal High Grade Guano—Guarantee.....	10.00	1.65	2.00	36.55
	Analysis.....	10.59	1.61	2.11	37.71
27177	Royal Tomato Formula Non-Potassic—Guarantee.....	11.00	2.47	.....	33.79
	Analysis.....	13.12	2.07	.....	34.17
26996	Royal Vegetable Fertilizer Non-Potassic—Guarantee.....	12.00	2.47	.....	35.29
27128	Analysis.....	12.64	2.32	.....	35.20
27144	Analysis.....	12.51	2.32	.....	35.01
	Analysis.....	13.20	2.80	.....	39.40
27423	Scott's Gossypium Phospho—Guarantee.....	10.00	1.65	1.50	34.05
	Analysis.....	11.29	1.78	1.76	38.20
26998	Scott's State Standard Guano Non-Potassic—Guarantee.....	10.00	1.65	.....	26.55
27129	Analysis.....	11.32	2.00	.....	30.98
27145	Analysis.....	11.55	2.05	.....	31.68
27178	Analysis.....	11.38	1.91	.....	30.44
27182	Analysis.....	10.50	1.77	.....	28.14
27290	Analysis.....	10.77	1.75	.....	28.40
27292	Analysis.....	10.95	1.97	.....	30.22
27304	Analysis.....	10.45	1.76	.....	28.00
27422	Analysis.....	10.96	1.66	.....	26.71
	Analysis.....	11.07	1.75	.....	30.21
27130	V. C. C. Co.'s 16 Per Cent Acid Phospho e—Guarantee	16.00	.....	.....	24.00
27179	Analysis.....	17.04	.....	.....	25.56
27239	Analysis.....	16.69	.....	.....	25.04
27267	Analysis.....	16.57	.....	.....	24.86
27291	Analysis.....	15.45	.....	.....	23.18
27405	Analysis.....	16.80	.....	.....	25.20
27424	Analysis.....	15.75	.....	.....	23.63
27430	Analysis.....	17.14	.....	.....	25.71
27440	Analysis.....	16.23	.....	.....	24.35
27441	Analysis.....	16.82	.....	.....	25.23
27466	Analysis.....	16.45	.....	.....	24.68
	Analysis.....	16.85	.....	.....	25.28

*Total Phosphoric Acid.

Table 1.—Analysis of commercial fertilizers, season 1917-1918.

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.—					
Continued.					
	V. C. High Grade Dixie Special Non-Potassic—Guarantee	8.00	3.00	.....	\$33.00
27210	Analysis	8.37	2.51	.....	30.13
	V. C. High Grade Guano Non-Potassic—Guarantee	12.00	1.65	.....	29.55
27169	Analysis	12.62	1.80	.....	31.53
	V. C. Meal Formula Non-Potassic—Guarantee	10.00	1.65	.....	26.55
27242	Analysis	9.81	1.78	.....	27.18
27333	Analysis	10.63	1.52	.....	26.59
	V. C. XXX Special Non-Potassic—Guarantee	9.00	2.47	.....	30.79
26997	Analysis	10.36	2.28	.....	31.50
27251	Analysis	9.57	1.89	.....	27.59
27313	Analysis	10.52	1.88	.....	28.94
Wills Point Cottonseed Co., Wills Point, Texas—					
	Semper Fidelis Phospho Meal—Guarantee	9.00	3.50	1.00	43.00
27232	Analysis	8.00	3.82	.94	43.44
	Semper-Fidelis Standard Acid Phosphate—Guarantee	14.00	.....	.....	21.00
27230	Analysis	13.93	.....	.....	20.90
	Semper-Fidelis Special Fertilizer—Guarantee	11.00	1.65	1.00	33.05
27229	Analysis	9.78	2.25	.98	35.32
	Semper-Fidelis Royal Fertilizer—Guarantee	10.00	1.65	.....	26.55
27231	Analysis	11.13	1.88	.....	29.86

Table 2.—Registration of commercial fertilizers, season 1917-1918.

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			\$21.00
White Diamond	Ammoniated Bone Superphosphate		9.00	1.65	2.00	35.05
White Diamond	Ammoniated Bone Superphosphate Without Potash		11.00	1.65		28.05
White Diamond	Blood and Bone Fertilizer Without Potash		12.50	1.50		29.25
White Diamond	Blood and Bone Fertilizer		11.00	1.50	1.50	34.50
White Diamond	Corn and Wheat Fertilizer		11.00	1.70	4.00	48.40
White Diamond	Corn Fertilizer		9.50	2.00	3.50	45.75
White Diamond	Corn Fertilizer Without Potash		13.00	2.00		33.50
White Diamond	Corn Grower		8.00	1.65	3.00	38.55
White Diamond	Corn Grower Without Potash		11.00	1.65		28.05
White Diamond	Cotton Fertilizer		10.00	2.00	3.00	44.00
White Diamond	Cotton Fertilizer Without Potash		13.00	2.00		33.50
White Diamond	Early Boll Fertilizer Without Potash		11.00	1.65		28.05
White Diamond	Early Potato and Truck		8.00	2.50	4.00	49.50
White Diamond	Early Potato and Truck Without Potash		12.00	2.50		35.50
White Diamond	East Texas Truck Fertilizer		10.00	2.47	1.00	37.29
White Diamond	Farmer's Choice		10.00	2.00	3.00	44.00
White Diamond	Gro-fast Fertilizer		8.00	1.65	2.00	33.55
White Diamond	Gro-fast Fertilizer Without Potash		10.00	1.65		26.55
White Diamond	Kali Superphosphate		11.00		3.00	31.50
White Diamond	Meal Base Fertilizer		9.00	1.65	2.00	35.05
White Diamond	Meal Base Fertilizer Without Potash		11.00	1.65		28.05
White Diamond	New South		10.00	1.65		26.55
White Diamond	Nitrated Superphosphate		8.00	2.50	4.00	49.50
White Diamond	Orchard Fertilizer		8.00	1.65	7.00	58.55
White Diamond	Phospho Kainit Mixture		11.50		4.00	37.25
White Diamond	Peanut Fertilizer		9.10	1.00	4.00	40.65
White Diamond	Parlier's Special		10.00	3.30	4.00	58.10
White Diamond	Potash Special		9.00	2.00	5.00	52.50
White Diamond	Prize Winner		8.50	1.65	2.50	36.80
White Diamond	Queen of the South		12.00	1.65		29.55
White Diamond	Special Acid Phosphate		16.00			24.00
White Diamond	Soluble Bone and Blood Fertilizer Without Potash		10.00	1.65		26.55
White Diamond	Southern Queen Fertilizer		10.00	1.65	2.00	36.55
White Diamond	Southern Queen Fertilizer Without Potash		12.00	1.65		29.55
White Diamond	Southern Standard Fertilizer Without Potash		11.50	1.65		28.80
White Diamond	Southern Standard Fertilizer		10.00	1.65	1.50	34.05
White Diamond	20th Century Fertilizer		9.00	1.65	2.00	35.05
White Diamond	20th Century Fertilizer Without Potash		11.00	1.65		28.05
White Diamond	Texas Special		10.00	1.65	1.00	31.55
White Diamond	Texas Special Without Potash		11.00	1.65		28.05
White Diamond	Vegetable Fertilizer		7.50	2.00	3.00	40.25
White Diamond	Vegetable Fertilizer Without Potash		10.50	2.00		29.75
Nitrate of Soda	White Diamond			15.60		109.20
White Diamond	Young's High Grade Special		7.00	2.58	5.00	53.00
Armour Fertilizer Works, Houston, Fort Worth, Texas; New Orleans, La.—						
African	Cotton Grower		9.00	2.47	3.00	45.79
Armour's	Best Phosphate 18 Per Cent.		18.00			27.00
Armour's	Grain Grower		8.00	1.65	2.00	33.55
Armour's	Grain Grower Without Potash		10.00	1.65		26.55
Armour's	Onion Fertilizer No. 1		8.00	3.29	8.00	75.03
Armour's	Onion Fertilizer No. 2		8.00	2.47	4.00	49.29
Armour's	Onion Fertilizer No. 3		8.00	3.29	6.00	65.03
Armour's	Onion Fertilizer No. 4		3.00	4.11	5.00	58.27
Armour's	Onion Fertilizer No. 5		5.00	4.94	3.00	57.08
Armour's	Onion Fertilizer No. 6		4.00	4.94	7.00	75.58
Armour's	Onion Fertilizer No. 7		6.00	3.29	3.00	47.03
Armour's	Onion Fertilizer No. 8		6.00	3.29	6.00	62.03
Armour's	Onion Fertilizer No. 9		10.00	2.47	6.00	62.29
Armour's	Onion Fertilizer No. 10		3.00	4.94	5.00	64.08
Armour's	Onion Fertilizer No. 11		5.00	4.11	3.00	51.27
Armour's	Onion Fertilizer No. 12		6.00	3.29	4.00	52.03
Armour's	Onion Fertilizer No. 13		1.00	4.94	1.00	41.08
Armour's	Onion Fertilizer No. 14		7.00	4.94		45.08
Armour's	Onion Fertilizer No. 15		10.00	2.47	1.00	37.29
Armour's	Onion Fertilizer No. 16		8.00	2.47		29.29
Armour's	Onion Fertilizer No. 17		10.00	3.29		38.03
Armour's	Onion Fertilizer No. 18		4.00	4.94		40.58
Armour's	Onion Fertilizer No. 19		6.00	3.29		32.03
Armour's	Onion Fertilizer No. 20		7.00	4.11		39.27

Table 2.—Registration of commercial fertilizers, season 1917-1918.

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 Onion Fertilizer No. 21	8.00	4.11		\$40.77
Armour's Texas Trucker	10.00	2.47		32.29
Armour's Tomato Grower	10.00	2.47		32.29
Armour's Vegetable Grower	9.00	2.05	3.00	42.85
Blood and Bone Special Without Potash	10.00	1.65		26.55
Champion Meal Mixture	10.00	1.65	2.00	36.55
Champion Meal Mixture Without Potash	12.00	1.65		29.55
Corn King	8.00	2.47	2.00	39.29
Cottonseed Meal Special	10.00	1.65	1.50	34.05
Dried Blood		13.16		92.12
Delta Special	6.00	4.11	2.00	47.77
Farmer's Choice With Potash	10.00	1.65	1.00	31.55
Farmer's Choice Without Potash	10.00	1.95		28.65
Farmer's Favorite	10.00	1.65	2.00	36.55
Farmer's Favorite Without Potash	12.00	1.65		29.55
Ground Bone Meal	*22.00	1.65		33.55
Gold Medal	9.50	1.65	1.50	33.30
Gold Medal Without Potash	11.00	1.65		28.05
Helmet Phosphate 12 Per Cent.	12.00			18.00
King Cotton	8.00	1.65	2.00	33.55
King Cotton Without Potash	10.00	1.65		26.55
Nitrate of Soda		14.81		103.67
Raw Bone Meal	*22.00	3.70		47.90
Rice King	8.00	1.65	2.00	33.55
Royal Mixture With Potash	10.00	1.65	1.00	31.55
Royal Mixture Without Potash	10.00	1.95		28.65
Sandy Highland Special	10.00	1.65	1.50	34.05
Shield Phosphate 14 Per Cent.	14.00			21.00
Special Blood and Bone Mixture	9.50	1.65	1.50	33.30
Special Blood Mixture Without Potash	11.00	1.65		28.05
Special Farm Mixture	8.00	1.65	2.00	33.55
Special Farm Mixture Without Potash	10.00	1.65		*26.55
Special Formula No. 84	8.00	3.29		35.03
Star Phosphate 16 Per Cent.	16.00			24.00
Strawberry Grower	8.00	1.65	3.00	38.55
Strawberry King	10.00	2.47	4.00	52.29
Sulphate of Ammonia		20.58		144.06
Tankage No. 1	** 6.87	6.58		52.93
Tankage No. 2	** 6.87	7.40		58.67
Tankage No. 3	* 4.58	8.23		62.19
Texas Berry King	8.00	2.47	4.00	49.29
Truck and Berry Special	10.00	1.65	3.00	41.55
Truck Special No. 1	7.00	4.11	6.00	69.27
Truck Special No. 2	8.00	1.65	3.00	38.55
The Barrett Co., 17 Battery Place, New York, N. Y.—				
Arcadian Sulphate of Ammonia		20.75		145.25
Bowie Cotton Oil Co., New Boston, Texas.—				
Bowie Acid Phosphate	16.00			19.20
Bryan Cotton Oil and Fertilizer Co., Bryan, Texas.—				
Star Brand Acid Phosphate	16.00			19.20
Star Brand Cotton and Corn Fertilizer	11.5	1.8		29.85
Star Brand Phospho Special Fertilizer	11.00	2.00		30.50
Charles A. R. Campbell, M. D., San Antonio, Texas.—				
Bat Roost Guano	3.00	10.00		74.50
Dallas Fertilizer and Reduction Co., Dallas, Texas.—				
Beaver Brand Acid Phosphate	16.00			24.00
Beaver Brand Cotton and Corn Grower	10.00	1.65	2.00	36.55
Beaver Brand Cotton and Corn Grower "Non-Potassic"	10.00	2.47		32.29
Beaver Brand Lawn Grower	*15.00	3.00		36.00
Beaver Brand Plant Food	*15.00	3.00		36.00
Beaver Brand Steam Bone Meal	*22.00	2.00		36.00
Beaver Brand Special	12.00	1.65		29.55
Beaver Brand Tomato Grower	10.00	2.47		32.29
Beaver Brand Vegetable Grower	9.00	2.47	3.00	45.79

*Total Phosphoric Acid.

Table 2.—Registration of commercial fertilizers, season 1917-1918.

Manufacturer, Place of Business and Brand.	Phosphoric Acid— Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
East Texas Fertilizer Co., Tyler, Texas—				
16 Per Cent Acid Phosphate.....	16.00			\$24.00
East Texas Corn and Cotton Grower.....	8.00	2.00	2.00	36.00
Tomato Grower.....	10.00	2.47		32.29
Wiley's 9.35-1.90-1 Farm Mixture.....	9.35	1.90	1.00	32.32
Wiley's 10.35-1.90 Farm Mixture.....	10.35	1.90		28.82
Wiley's 10-2.47-1 Farm Mixture.....	10.00	2.47	1.00	37.29
Wiley's 10-1.65-1 Farm Mixture.....	10.00	1.65	1.00	31.55
Wiley's 11-1.65 Farm Mixture.....	11.00	1.65		28.05
Wiley's 12-1.65 Farm Mixture.....	12.00	1.65		29.55
Wiley's Farm Mixture.....	10.00	1.65		26.55
Wiley's High Mixture Half and Half.....	8.00	4.00		40.00
Wiley's Tomato Special.....	9.00	2.80		33.10
Federal Chemical Co., Nashville, Tennessee—				
Daybreak Tennessee Brown Phosphate Rock.....	*32.00			9.60
Fidelity Chemical Corporation, Houston, Texas.—				
Fidelity Lone Star Special Fertilizer.....	10.00	1.65	6.00	56.55
Fidelity Nitrate of Soda.....		15.00		105.00
Fidelity 14 Per Cent Acid Phosphate.....	14.00			21.00
Fidelity 16 Per Cent Acid Phosphate.....	16.00			24.00
Fidelity Regal Compound Fertilizer.....	10.00		4.00	35.00
Fidelity War Special Fertilizer.....	8.00	1.65	3.00	38.55
Non-Potassic Fidelity Cotton Fertilizer.....	8.00	2.63		30.41
Non-Potassic Fidelity Cotton Grower Fertilizer.....	10.00	2.00		29.00
Non-Potassic Fidelity Laredo Trucker Fertilizer.....	5.00	3.87		34.59
Gate City Fertilizer Co., Texarkana, Arkansas—				
Red Ball Acid Phosphate.....	14.00			21.00
Red Ball Complete Fertilizer.....	10.00	1.65	1.00	31.55
Red Ball Cotton and Corn Grower.....	10.00	2.00	3.00	44.00
Red Ball Cotton and Corn Fertilizer Without Potash.....	13.00	2.00		33.50
Red Ball Cotton Grower.....	9.00	1.65	2.00	35.05
Red Ball Cotton Grower Without Potash.....	11.00	1.65		28.05
Red Ball Diversified Cropper.....	10.00	1.65	2.00	36.55
Red Ball Diversified Cropper Without Potash.....	12.00	1.65		29.55
Red Ball Early Trucker.....	8.00	2.50	4.00	49.50
Red Ball Early Trucker Without Potash.....	12.00	2.50		35.50
Red Ball Extra Acid Phosphate.....	16.00			24.00
Red Ball Four States' Standard.....	8.50	1.65	2.50	35.80
Red Ball Four States' Standard Without Potash.....	11.00	1.65		28.05
Red Ball "Garrison's Special".....	10.00	1.03	3.00	37.21
Red Ball Old Reliable Fertilizer.....	8.00	1.65	2.00	33.55
Red Ball Old Reliable Fertilizer Without Potash.....	10.00	1.65		26.55
Red Ball Old Time Vegetable Grower.....	7.50	2.00	3.00	40.25
Red Ball Old Time Vegetable Grower Without Potash.....	10.50	2.00		29.75
Red Ball Phosphate and Potash.....	11.00		3.00	31.50
Red Ball Potash Acid.....	11.50		4.00	37.25
Red Ball Soluble Bone Fertilizer.....	8.00	1.65	2.00	33.55
Red Ball Soluble Bone Fertilizer Without Potash.....	10.00	1.65		26.55
Red Ball Southern Corn Grower.....	8.00	1.65	3.00	38.55
Red Ball Southern Corn Grower Without Potash.....	11.00	1.65		28.05
Henderson Cotton Oil and Gin Co., Henderson, Texas—				
Henderson Acid Phosphate.....	16.00			24.00
Henderson Half and Half.....	8.7	3.5		37.55
Henderson Staple.....	10.00	2.00		29.00
Hope Fertilizer Co., Hope, Arkansas.—				
Cotto Phos.....	8.50	3.30	1.00	40.85
Hope Crop Producer.....	8.00	1.65	2.00	33.55
Hope Hustler Without Potash.....	10.00	1.65		26.55
Hope Standard Without Potash.....	11.00	1.65		28.05
Our Cottonseed Meal Fertilizer.....	1.00	6.25	1.00	49.25
Our Cotton Grower.....	10.00	1.65	1.00	31.55
Our Corn Grower Without Potash.....	12.00	1.70		29.90
Our Extra Cotton Grower.....	10.00	1.65	2.00	36.55
Our Early Fruiter.....	10.00	.90	1.00	26.30
Stork Brand 16 Per Cent Acid Phosphate.....	16.00			24.00
Stork Brand Nitrate of Soda.....		15.00		105.00
Westbrook's Trucker.....	8.00	3.00	1.00	38.00

*Total Phosphoric Acid.

Table 2.—Registration of commercial fertilizers, season 1917-1918.

Manufacturer, Place of Business and Brand.	Phosphoric Acid Available Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation—Per Ton.
Houston County Oil and Manufacturing Co., Crockett, Texas—				
Crockett Compound	9.00	3.50	1.00	\$43.00
Crockett 14 Per Cent Acid Phosphate	14.00			21.00
Crockett 16 Per Cent Acid Phosphate	16.00			24.00
Crockett Grower	6.50	4.50	1.00	46.25
Crockett General Cropper	11.00	2.47		
Crockett Phosphate Meal Mixture	11.00	1.65		28.05
Houston Packing Co., Houston, Texas—				
Acid Phosphate	14.00			21.00
Blood and Bone	*14.50	5.6		53.70
Ground Raw Bone	*23.00	3.7		48.90
Nitrate of Soda		15.00		
Steam Bone Meal	*27.00	2.00		41.00
Johnson, Sharp & Campbell, Uvalde, Texas—				
Bat Guano	* 9.00	4.5		34.20
Patterson Cave Bat Guano	* 4.00	5.00		41.00
Longview Cotton Oil Co., Longview, Texas—				
Longview Acid Phosphate	16.00			24.00
Longview Corn and Potato Spe.	10.0	3.00		36.00
Longview Cotton Grower	11.50	2.00		31.25
Longview Peanut Special	10.50	1.65		26.80
John Marbach, New Braunfels, Texas—				
Bat Guano	3.50	8.40		64.05
Marshall Fertilizer Factory, a				
Coulter's High Grade Half and	8.00	3.30		35.10
High Grade Acid Phosphate	16.00			24.00
Potato Special	7.50	2.47		28.54
Standard Grade Cotton and Cor.	10.00	1.65		26.55
Standard Grade Red Diamond A	14.00			21.00
Meridian Fertilizer Factory, Shreve				
Caddo Cotton	9.35	1.90	1.00	32.33
Caddo Cotton Non-Potassic	10.35	1.90		28.83
Caddo Queen Non-Potassic	12.00	1.65		29.55
Caddo Special	6.00	2.47	7.00	61.29
Caddo Vegetable	8.00	3.30	4.00	55.10
Meridian Blood and Bone	10.00	1.65	1.00	31.55
Meridian Blood and Bone Non-Potassic	11.00	1.65		28.05
Meridian Bone and Potash	12.00		2.00	28.00
Meridian Cane Special No. 1	4.00	5.35		43.45
Meridian Corn Club Special	7.50	2.47	1.00	33.54
Meridian Corn Club Special Non-Potassic	8.50	2.47		30.04
Meridian Corn Grower	7.50	2.88	1.00	36.41
Meridian Corn Grower Non-Potassic	8.50	2.88		32.91
Meridian Cotton and Corn Special	9.00	2.47	3.00	45.79
Meridian Easy Driller Phosphate	16.00			24.00
Meridian English Acid Phosphate	12.00			18.00
Meridian Farm Special	10.00	1.65		26.55
Meridian Golden Harvester	10.00	3.30	4.00	58.10
Meridian Ham Bone Guano	10.00	1.65	1.50	34.05
Meridian Home Mixture	10.00	1.65	1.00	31.55
Meridian Home Mixture Non-Potassic	11.00	1.65		28.05
Meridian Improved Meal Compound	8.50	2.88		32.91
Meridian Meal Mixture	10.00	1.65	1.00	31.55
Meridian Meal Mixture Non-Potassic	11.00	1.65		28.05
Meridian Melon Grower	8.50	2.47		30.04
Meridian Nitrated Bone and Potash	10.00	1.65	2.00	36.55
Meridian Perfection Acid Phosphate	18.00			27.00
Meridian Perfection Blood Compound	10.00	2.47	3.00	47.29
Meridian Perfection Cotton and Corn	12.00	2.47		35.29
Meridian Perfection Cotton Formula	11.00	2.47		33.79
Meridian Perfection Potash Formula	12.00		4.00	38.00
Meridian Perfection Meal Compound	10.00	2.47	3.00	47.29
Meridian Potash Compound	10.00		4.00	35.00
Meridian Potato Special	8.00	3.30	2.00	45.10
Meridian Prolific Wonder	9.25	2.63	1.00	37.29
Meridian Raw Bone Mixture	10.00	1.65	1.00	31.55
Meridian Raw Bone Mixture Non-Potassic	11.00	1.65		28.05

*Total Phosphoric Acid.

Table 2.—Registration of commercial fertilizers, season 1917-1918.

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 Rice Grower	10.00		2.00	\$25.00
Meridian Special Top Dressing	5.00	4.25	2.00	47.25
Meridian Special Truck Formula	6.00	3.00	4.00	50.00
Meridian Soluble Guano	10.00	1.65	1.50	34.05
Meridian Southern Acid Phosphate	14.00			21.00
Meridian Special Meal Compound	12.00	2.00		32.00
Meridian Standard Cotton and Corn	9.35	1.90	1.00	32.33
Meridian Standard Cotton and Corn Non-Potassic	10.35	1.90		28.83
Meridian Tankage Compound	8.50	2.47		30.04
Meridian Tomato Special	10.00	2.47	1.00	37.29
Meridian Tomato Special Non-Potassic	11.00	2.47		33.79
Meridian Truckers' Special	9.00	1.65	2.00	35.05
Meridian Truckers' Special Non-Potassic	11.00	1.65		28.05
Meridian Truck Grower	10.00	2.47		32.29
Meridian Vegetable Grower	8.00	2.47	5.00	54.29
Nitrate of Soda		15.00		105.00
Special Cotton Formula	10.00	1.65		26.55
Star	10.00	1.65	1.00	31.55
Star Non-Potassic	11.00	1.65		28.05
Texas Special	10.00	2.72		34.04
Union Special Acid Phosphate	16.00			24.00
Weevil Beater Guano	10.00	1.65	1.00	31.55
Weevil Beater Guano Non-Potassic	11.00	1.65		28.05
H. K. Mulford Co., Philadelphia, Pa.—				
Mulford Cultures of Legumes				
Nitrate Agencies, Houston, Texas—				
Genuine Peruvian Guano	11.00	7.00	2.50	78.00
High Grade 16 Per cent Acid Phosphate	16.00			24.00
Nitrapo		15.00	15.00	180.00
Nitrate of Soda		15.00		100.00
Pelican Fertilizer Works, Shreveport, La.—				
Pelican Corn Grower	8.00	2.47	1.00	34.29
Pelican Corn Grower Non-Potassic	9.00	2.47		30.79
Pelican Cotton and Corn	8.00	2.00	2.00	36.00
Pelican Cotton Grower	10.00	1.65		26.55
Pelican Cotton Producer	11.50	1.65		28.80
Pelican Favorite Cotton Grower	9.35	1.90	1.00	32.33
Pelican Favorite Cotton Grower Non-Potassic	10.35	1.90		28.83
Pelican Fish Bone Fertilizer	10.00	1.65	2.00	36.55
Pelican Fish Formula	10.00	1.65	1.00	31.55
Pelican Fish Formula Non-Potassic	11.00	1.65		28.05
Pelican Golden West	10.00	1.65	1.00	31.55
Pelican Golden West Non-Potassic	11.00	1.65		28.05
Pelican High Grade	9.00	2.47	3.00	45.79
Pelican High Grade Acid Phosphate	14.00			21.00
Pelican Meal Compound	10.00	1.65	1.00	31.55
Pelican Meal Compound Non-Potassic	11.00	1.65		28.05
Pelican Potash and Bone	12.00		2.00	28.00
Pelican Potash and Superphosphate	10.00		4.00	35.00
Pelican Potato Special	8.00	3.30	2.00	45.10
Pelican Special Formula	10.00	1.65		26.55
Pelican Special Phosphate	16.00			24.00
Pelican Tomato Special	10.00	2.47	1.00	37.29
Pelican Tomato Special Non-Potassic	11.00	2.47		33.79
Pelican Truck Grower	10.00	2.47		32.29
Pelican Vegetable Grower	8.00	2.47	4.00	49.29
Nitrate of Soda		15.00		105.00
Planters' Fertilizer and Chemical Co., Houston and Fort Worth, Texas; New Orleans, La.—				
Farm Special	8.00	1.65	2.00	33.55
Imperial Cotton Mixture	8.00	1.65	2.00	33.55
Imperial Rice Mixture	8.00	1.65	2.00	33.55
Planters' 14 Per Cent Acid Phosphate	14.00			21.00
Planters' 16 Per Cent Acid Phosphate	16.00			24.00
Planters' Ammoniated Superphosphate With Potash	10.00	1.65	2.00	36.55
Planters' Ammoniated Superphosphate Without Potash	12.00	1.65		29.55
Planters' Blood-Bone With Potash	10.00	1.65	1.00	31.55
Planters' Blood and Bone Without Potash	10.00	1.95		28.65
Planters' Corn Fertilizer	8.00	2.47	2.00	39.29
Planters' Crescent Acid Phosphate	12.00			18.00

Table 2.—Registrati on of commercial fertilizers, se ason 1917-1918.

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., Houston and Fort Worth, Texas; New Orleans, La.—Continued.				
Planters' Dried Blood.....		13.16		\$92.12
Planters' Farmer Champion With Potash.....	10.00	1.65	1.00	31.55
Planters' Farmers Champion Without Potash.....	10.00	1.95		28.65
Planters' Farm Special Without Potash.....	10.00	1.65		26.55
Planters' Fruit and Truck Special.....	8.00	2.47	4.00	49.29
Planters' Fruit and Vegetable Formula.....	8.00	1.65	3.00	38.55
Planters' Ground Bone Meal.....	22.00	1.65		33.55
Planters' Golden Mixture With Potash.....	9.50	1.65	1.50	33.30
Planters' Golden Mixture Without Potash.....	11.00	1.65		28.05
Planters' Imperial Cotton Mixture Without Potash.....	10.00	1.65		26.55
Planters' Magic Strawberry Producer.....	10.00	2.47	4.00	52.29
Planters' Meal Mixture Without Potash.....	12.00	1.65		29.55
Planters' Nitrate of Soda.....		14.81		103.67
Planters' Roy Bone Meal.....	*22.00	3.70		47.90
Planters' Raw Bone Superphosphate With Potash.....	9.50	1.65	1.50	33.30
Planters' Raw Bone Super Phosphate Without Potash.....	11.00	1.65		28.05
Planters' Strawberry Special With Potash.....	10.00	1.65	2.00	36.55
Planters' Sulphate of Ammonia.....		20.58		144.06
Planters' Texas Trucker.....	10.00	2.47		32.29
Planters' Tomato Grower.....	10.00	2.47		32.29
Planters' Vegetable Grower.....	7.00	2.47	3.50	45.29
Shreveport Fertilizer Works, Shreveport, La.—				
Lion Acid Phosphate and Limestone.....	16.00			24.00
Lion Corn Food.....	9.00	2.50		31.00
Lion Cotton Food.....	10.00	1.88		28.16
Lion Double "B".....	10.00	1.65		26.55
Lion Double "C".....	10.00	1.65		26.55
Lion Double "S".....	9.00	2.00		27.50
Lion Fruiter.....	10.00	2.00		29.00
Lion Gold Coin Guano.....	10.00	1.65	2.00	36.55
Lion Meal Formula.....	10.00	1.65		26.55
Lion Potash Mixture.....	10.00	1.65	1.00	31.55
Lion Red Land Cotton Grower.....	12.00	1.65		29.55
Lion Special.....	8.50	2.50		30.25
Lion Success Mixture.....	11.00	1.65		28.05
Lion Superfine Acid Phosphate.....	18.00			27.00
Lion Superior Acid Phosphate.....	17.00			25.50
Lion Superior Meal Formula.....	10.00	2.50		32.50
Lion Tomato Special.....	10.00	2.50		32.50
Lion Veribest.....	12.00	3.00		39.00
Lion Extragood Acid Phosphate.....	16.00			24.00
Nitrate of Soda.....		15.00		105.00
Swift & Co., Fort Worth, Texas; Harvey, Shreveport, La.—				
Swift's Acid Phosphate 12 Per Cent.....	12.00			18.00
Swift's Ammoniated Phosphate.....	12.00	1.65		29.55
Swift's Ammoniated Raw Bone Superphosphate.....	9.50	1.65	1.50	33.30
Swift's Bone Meal Fertilizer.....	*24.00	2.47		41.29
Swift's Blood and Bone Special.....	10.00	2.47		32.29
Swift's Blood and Bone Trucker.....	8.00	2.47		29.29
Swift's Champion Vegetable Grower.....	8.00	3.29	3.00	50.03
Swift's Diamond "A" Fertilizer.....	8.00	1.65	3.00	38.55
Swift's Diamond "C" Fertilizer.....	8.00	2.47	2.00	39.29
Swift's Diamond "G" Onion Grower.....	6.00	2.47	2.00	36.29
Swift's Diamond "H" Fertilizer.....	6.00	3.29	3.00	47.03
Swift's Diamond "S" Compound.....	10.00	2.47		32.29
Swift's Eagle Guano.....	10.00	1.65	2.00	36.55
Swift's Early Vegetable and Fruit Fertilizer.....	10.00	3.29		38.03
Swift's East Texas Trucker.....	8.00	2.47	3.00	44.29
Swift's Excelsior Crop Producer.....	10.00	1.65		26.55
Swift's Excelsior Rice Grower.....	12.00		1.00	23.00
Swift's Favorite Crop Producer.....	12.00	1.65		29.55
Swift's Fruit and Vegetable Grower.....	10.00	2.47	5.00	57.29
Swift's Garden City Phosphate 14 Per Cent.....	14.00			21.00
Swift's General Crop Producer.....	11.00	1.65		28.05
Swift's Golden Harvest Compound.....	9.00	1.65	2.00	35.05
Swift's Good Luck Compound.....	10.00	1.65	2.00	36.55
Swift's Ground Beef Bone Fertilizer.....	*27.00	2.06		41.42
Swift's Ground Dried Blood.....		13.17		92.19
Swift's High Grade Onion Fertilizer.....	7.00	4.94	2.00	55.08

*Total Phosphoric Acid.

Table 2.—Registration of commercial fertilizers, season 1917-1918.

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, Shreveport, La.—				
Continued.				
Swift's High Grade Mixture.....	4.00	7.40		\$57.80
Swift's High Grade Acid Phosphate 16 Per Cent.....	16.00			24.00
Swift's Laredo Mixture.....	8.00	3.29		35.03
Swift's Laredo Special.....	3.00	4.94	3.00	54.08
Swift's Nitrate of Soda.....		14.81		103.67
Swift's Non-Potassic Cotton and Corn Grower.....	11.00	1.65		28.05
Swift's Onion Grower.....	7.00	3.70	3.00	51.40
Swift's Onion Grower Special.....	7.00	4.94		45.08
Swift's Pioneer Rice Grower.....	10.00		1.00	20.00
Swift's Planters' Special.....	10.00	1.65	1.00	31.55
Swift's Plow Boy Compound.....	8.00	2.47	3.00	44.29
Swift's Raw Bone Meal Fertilizer.....	*22.00	3.70		47.90
Swift's Red Steer Guano.....	9.00	1.65	2.00	35.05
Swift's Special Acid Phosphate 18 Per Cent.....	18.00			27.00
Swift's Special Cotton and Corn Grower.....	10.00	1.65	1.00	31.55
Swift's Special Mixture.....	10.00	1.65		26.55
Swift's Special Onion Grower.....	6.00	3.29		32.03
Swift's Special Onion Mixture.....	4.00	4.94		40.58
Swift's Special Phosphate and Potash.....	10.00		2.00	25.00
Swift's Special Tankage Fertilizer.....	4.80	5.27		44.09
Swift's Superphosphate Compound.....	9.50	1.65	1.50	33.30
Swift's Superphosphate Potash Ammoniated.....	8.00	1.65	2.00	33.55
Swift's Truckers' Favorite.....	8.00	2.47	1.00	34.29
Swift's Tankage.....	* 3.00	6.58		49.06
Swift's Tankage Compound.....	* 3.25	7.40		55.05
Swift's Tankage Formula.....	6.87	7.40		58.67
Swift's Tankage Mixture.....	9.00	3.29		36.53
Swift's Tomato Special.....	10.00	2.47	1.00	37.29
Tennessee Coal, Iron and Railroad Co., Birmingham, Ala.—				
Duplex Basic Phosphate.....	*18.00			
Fourteen Per Cent Duplex Basic Phosphate.....	*14.00			
Texas Chemical Co., Houston, Texas—				
Raw Bone Meal.....	*22.00	3.70		45.00
Union Seed and Fertilizer Co., New Orleans, La.—				
Ammoniated Raw Bone Superphosphate.....	11.00	1.65		28.05
Ammoniated Raw Bone Superphosphate and Potash.....	10.00	1.65	1.00	31.55
Black Diamond Acid Phosphate.....	12.00			18.00
Blood and Bone.....	11.00	1.65		28.05
Blood, Bone and Beef Without Potash.....	11.00	1.65		28.05
Blood, Bone and Beef.....	10.00	1.65	1.00	31.55
Blood, Bone and Potash.....	10.00	1.65	1.00	31.55
Blue Rose Rice Grower.....	12.00		2.00	28.00
Bull Dog Acid Phosphate.....	16.00			24.00
Crescent City Acid Phosphate.....	12.00			18.00
Cyanamid.....		15.00		105.00
Dissolved Bone and Potash 10-4.....	10.00		4.00	35.00
Economizer.....	10.00	1.65	2.00	36.55
Economizer Without Potash.....	12.00	1.65		29.55
Excelsior.....	10.00	1.65	2.00	36.55
Excelsior Without Potash.....	12.00	1.65		29.55
Goldsmith's Improved Mixture.....	10.00	1.65	1.00	31.55
Goldsmith's Improved Mixture Without Potash.....	11.00	1.65		28.05
Golden Guano.....	10.00	1.65	1.00	31.55
Golden Guano Without Potash.....	11.00	1.65		28.05
Honduras Rice Grower.....	12.00		4.00	38.00
Louisiana Plant Cane Grower.....	6.00	3.30		32.10
Louisiana Rice Grower.....	10.00		2.00	25.00
Lone Star Blood Mixture.....	10.00	.82	1.00	25.74
Lone Star Meal Mixture.....	10.00	.82	1.00	25.74
Louisiana Stubble Cane Grower.....	4.00	4.94		40.58
Meal Ammoniated Superphosphate.....	11.00	1.65		28.05
Meal Ammoniated Superphosphate and Potash.....	10.00	1.65	1.00	31.55
New Orleans Acid Phosphate.....	14.00			21.00
Nitrate of Soda.....		15.00		105.00
Supreme Acid Phosphate.....	18.00			27.00
Special Sugar Cane Grower No. 67.....	7.00	5.00		45.50
Texas Guano.....	10.00	1.65		26.55
Texas Onion Grower.....	6.00	3.30	6.00	62.10

*Total Phosphoric Acid.

Table 2.—Registration of commercial fertilizers, season 1917-1918.

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.—Continued.				
Truck Grower	6.00	3.30	1.00	\$37.10
Vegetable Fertilizer Without Potash	6.00	3.30	.....	32.10
Vegetable Grower	6.00	2.47	4.00	46.29
Virginia-Carolina Chemical Co., Shreveport, La.—				
B. B. B. Beef, Blood and Bone	10.00	1.65	1.00	31.55
B. B. B. Beef, Blood and Bone Non-Potassic	11.00	1.65	.....	28.05
Eureka Complete Fertilizer	10.00	1.65	4.00	46.55
Georgia State Grange	10.00	1.65	1.00	31.55
Georgia State Grange Non-Potassic	11.00	1.65	.....	28.05
German Kainit	.....	.....	12.00	60.00
Mobile Double Eagle Guano	11.00	1.65	1.50	34.05
Mobile Double Eagle Guano Non-Potassic	11.50	1.65	.....	28.80
Mobile Raw Bone Ammoniated Superphosphate	10.00	1.65	1.50	34.05
Mobile Raw Bone Ammoniated Superphosphate Non-Potassic	11.50	1.65	.....	28.80
Muriate of Potash	.....	.....	48.00	240.00
Nitrate of Soda	.....	14.81	.....	103.67
Royal Blood, Bone, Potash	10.00	1.65	1.50	34.05
Royal Blood, Bone, Non-Potassic	11.50	1.65	.....	28.80
Royal Compound	10.00	.....	2.00	25.00
Royal Cotton Boll Guano	8.00	1.65	2.00	33.55
Royal Cotton Boll Guano Non-Potassic	10.00	1.65	.....	26.55
Royal Fruit Grower	8.00	2.47	5.00	54.29
Royal High Grade Guano	10.00	1.65	2.00	36.55
Royal High Grade Guano Non-Potassic	12.00	1.65	.....	29.55
Royal Potash Compound	10.00	.....	4.00	35.00
Royal Tomato Formula	10.00	2.47	1.00	37.29
Royal Tomato Formula Non-Potassic	11.00	2.47	.....	33.79
Royal Vegetable Fertilizer	8.00	2.47	4.00	49.29
Royal Vegetable Fertilizer Non-Potassic	12.00	2.47	.....	35.29
Scott's Gossypium Phospho	10.00	1.65	1.50	34.05
Scott's Gossypium Phospho Non-Potassic	11.50	1.65	.....	28.80
Scott's Gossypium Phospho Special	10.00	1.65	2.00	36.55
Scott's Gossypium Phospho Special Non-Potassic	12.00	1.65	.....	29.55
Scott's High Grade Acid Phosphate	14.00	.....	.....	21.00
Scott's Potasso Phospho	12.00	.....	2.00	28.00
Scott's State Standard Guano	8.00	1.65	2.00	33.55
Scott's State Standard Guano Non-Potassic	10.00	1.65	.....	26.55
Sulphate of Potash	.....	.....	48.00	240.00
Tip Top Nitrogen Compound	2.00	13.16	.....	95.12
V. C. Ammoniated Bone Non-Potassic	10.00	1.65	.....	26.55
V. C. Fruit and Truck Special	6.00	3.29	8.00	72.03
V. C. Co.'s 18 Per Cent Acid Phosphate	18.00	.....	.....	27.00
V. C. Co.'s 16 Per Cent Acid Phosphate	16.00	.....	.....	24.00
V. C. Co.'s Truck Grower	8.00	2.06	6.00	56.42
V. C. High Grade Champion Compound	9.00	3.00	3.00	49.50
V. C. High Grade Champion Compound Non-Potassic	12.00	3.00	.....	39.00
V. C. High Grade Dixie Special	7.00	3.00	1.00	36.50
V. C. High Grade Dixie Special Non-Potassic	8.00	3.00	.....	33.00
V. C. High Grade Guano	10.00	1.65	2.00	36.55
V. C. High Grade Guano Non-Potassic	12.00	1.65	.....	29.55
V. C. High Grade Potash Compound	12.00	.....	4.00	38.00
V. C. High Grade Top Dresser	4.00	6.17	2.50	61.69
V. C. High Grade Top Dresser Non-Potassic	6.50	6.17	.....	52.94
V. C. Meal Formula Non-Potassic	10.00	1.65	.....	26.55
V. C. Rice Special	10.00	1.65	2.00	36.55
V. C. Rice Special Non-Potassic	12.00	1.65	.....	29.55
V. C. XXX Special	8.00	2.47	1.00	34.29
V. C. XXX Special Non-Potassic	9.00	2.47	.....	30.79
V. C. Special Potash Compound	12.00	.....	8.00	58.00
V. C. Tomato Special	10.00	2.47	1.50	39.79
The Wills Point Cotton Oil Co., Wills Point, Texas—				
Semper-Fidelis Standard Acid Phosphate	14.00	.....	.....	21.00
Semper-Fidelis Special Fertilizer	11.00	1.65	1.00	33.05
Semper-Fidelis Phospho Meal	9.00	3.50	1.00	43.00
Semper-Fidelis Royal Fertilizer	10.00	1.65	.....	26.55