

TEXAS AGRICULTURAL EXPERIMENT STATIONS

BULLETIN No. 149

JULY, 1912

Division of Chemistry

Commercial Fertilizers In 1911-1912

BY

G. S. FRAPS, Chemist



POSTOFFICE

COLLEGE STATION, BRAZOS COUNTY, TEXAS



AUSTIN PRINTING COMPANY

AUSTIN, TEXAS

1912

TEXAS AGRICULTURAL EXPERIMENT STATIONS

GOVERNING BOARD.

(Board of Directors A. & M. College.)

WALTON PETEET, President.....	Fort Worth
JOHN I. GUION, Vice-President.....	Ballinger
CHAS. DAVIS.....	Steele's Store
L. J. HART.....	San Antonio
J. ALLEN KYLE.....	Houston
R. L. BENNETT.....	Paris
D. W. KEMPNER.....	Galveston
ED. R. KONE.....	Austin

PRESIDENT OF COLLEGE.

R. T. MILNER.....	College Station
-------------------	-----------------

STATION STAFF.

B. YOUNGBLOOD, M. S.....	Director
M. FRANCIS, D. V. S.....	Veterinarian
G. S. FRAPS, PH. D.....	Chemist
H. NESS, M. S.....	Horticulturist
J. C. BURNS, B. S.....	Animal Husbandman
WILMON NEWELL, M. S.....	Entomologist
A. B. CONNER, B. S.....	Agronomist
F. H. BLODGETT, PH. D.....	Plant Pathologist and Physiologist
J. M. JOHNSON, M. S.....	Farm Management Expert
W. L. BOYETT.....	State Feed Inspector
HARPER DEAN, B. S.....	Assistant Entomologist
J. B. RATHER, M. S.....	Assistant Chemist
J. B. KELLY, A. B.....	Assistant Chemist
L. C. LUDLUM.....	Assistant Chemist
F. B. PADDOCK, B. S.....	Assistant Entomologist
H. H. JOYSON, B. S.....	Assistant Agronomist
CHAS. A. FELKER.....	Chief Clerk
A. S. WARE.....	Secretary
J. M. SCHAEDEL.....	Stenographer
R. L. SPILLER.....	Mailing Clerk

STATE AGRICULTURAL EXPERIMENT STATIONS.

GOVERNING BOARD.

HIS EXCELLENCY GOVERNOR O. B. COLQUITT.....	Austin
LIEUTENANT-GOVERNOR A. B. DAVIDSON.....	Cuero
COMMISSIONER OF AGRICULTURE HON. ED. R. KONE.....	Austin

DIRECTOR OF STATIONS.

B. YOUNGBLOOD, M. S.....	College Station
--------------------------	-----------------

SUPERINTENDENTS OF SUB-STATIONS.

E. E. BINFORD, Beeville Sub-Station.....	Beeville, Bee County
W. S. HOTCHKISS, Troup Sub-Station.....	Troup, Smith County
E. M. JOHNSTON, Cooperative Rice Station.....	Beaumont, Jefferson County
I. S. YORK, Spur Sub-Station.....	Spur, Dickens County
T. W. BUELL, Denton Sub-Station.....	Denton, Denton County
A. K. SHORT, Temple Sub-Station.....	Temple, Bell County
A. L. PASCHALL, Lubbock Sub-Station.....	Lubbock, Lubbock County
P. D. PERKINS, Angleton Sub-Station.....	Angleton, Brazoria County
H. C. STEWART, Pecos Sub-Station.....	Pecos, Reeves County
G. T. MCNESS, Nacogdoches Sub-Station.....	Nacogdoches, Nacogdoches County
H. C. HOLMES, Feeding and Breeding Station.....	College Station, Brazos County

NOTE.—The main station is located on the grounds of the Agricultural and Mechanical College, in Brazos County. The postoffice address is College Station, Texas. Reports and bulletins are sent upon application to the Director. A postal card will bring these publications.

BULLETINS AVAILABLE FOR FREE DISTRIBUTION.

The following is a list of the Bulletins of the Texas Agricultural Experiment Stations, available for free distribution. Any of these publications will be sent free upon application to Director B. Youngblood, College Station, Texas. Bulletins not shown on this list are out of print, and can not be supplied.

- No.
- 96 Commercial Fertilizers and Poisonous Insecticides in 1906-07.
 - 98 Summary of all Bulletins from 1 to 94, inclusive.
 - 100 Chemical Composition of Some Texas Soils.
 - 105 Notes on Forest and Ornamental Trees.
 - 107 Commercial Fertilizers and Poisonous Insecticides in 1907-08.
 - 108 Winter Burr Clover.
 - 109 Alfalfa.
 - 112 Nature and Use of Commercial Fertilizers.
 - 113 Spray Calendar.
 - 114 Composition of White Lead and Paints.
 - 115 Fertilizer Test With Onions at Beeville, Texas.
 - 119 Infectious Anemia of the Horse.
 - 124 The Pecan Case Borer.
 - 126 Active Phosphoric Acid and its Relation to the Needs of the Soil for Phosphoric Acid in Pot Experiments.
 - 127 Commercial Feeding Stuffs.
 - 128 Cottonseed Meal as Human Food.
 - 129 Studies of the Ammonia-soluble Organic Matter of the Soil.
 - 132 Co-operative Forage Crop Work.
 - 134 Report of the Director on the Establishment of the New State Stations.
 - 136 Organic Phosphoric Acid of the Soil.
 - 138 Co-operative Fertilizer Experiments, 1908, 1909, and 1910.
 - 139 Electrolysis of Human Solutions. An improved method for the Estimation of Humus.
 - 140 Commercial Fertilizers.
 - 141 Commercial Feeding Stuffs.
 - 143 Observations on European Agriculture.
 - 144 The Culture of Cigar Leaf Tobacco in Texas.
 - 145 Active Potash of the Soil and Its Relation to the Pot Experiments.
 - 146 Forms of Phosphorus in Cottonseed Meal.
 - 147 Digestion Experiments with Texas Hays and Fodders.
 - 148 Report on Experiments with Citrus Fruits at Beeville.

A postal card will bring any of the Bulletins. Be sure to write your name and address plainly. In asking for bulletins, the number of the bulletin is all that is necessary to give.

Requests for change of address should show the *old* address, as well as the *new*.

All requests should be directed to "Director of Experiment Stations, College Station, Texas."

Please request Bulletins by number, and thus aid us to send you only such Bulletins as those in which you are interested.

COMMERCIAL FERTILIZERS IN 1911-12.

G. S. FRAPS, STATE CHEMIST, AND CHEMIST TO EXPERIMENT STATION.

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

On account of the wet spring there was a decrease in sales of fertilizers for the period September 1, 1911, to June 1, 1912, compared with the previous season. 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.....	44,766 tons.

NEW FERTILIZER LAW.

The fertilizer law enacted by the Legislature of 1911 went into effect September 1, 1911. This Bulletin is, therefore, the first report under the new law. The law has proved very satisfactory. No more manufacturer's samples are subjected to analysis, and in their place a larger number of inspection samples have been taken and subjected to analysis.

INFORMATION ON THE BAG.

The guaranteed analysis of the fertilizer must be printed by the manufacturer, either on the bag or on a tag attached to the bag. Consumers of fertilizers can easily examine the bag or tag and ascertain the guaranteed composition of the fertilizer. 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.

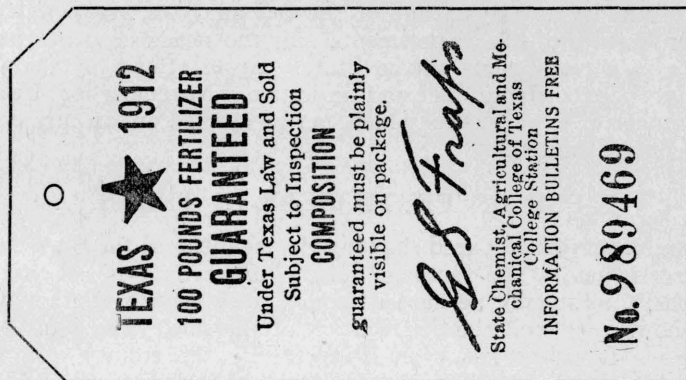
Total phosphoric acid may be guaranteed in place of available in bone or tannage.

The guaranteed analysis has thus been simplified as much as possible, and the farmer should become familiar with these terms.

FORM OF TAGS.

Every package of fertilizer sold or delivered in this State must have an official tag attached, as evidence that said fertilizer is regis-

tered under the law and subject to State Inspection. The following is one of the tags used for the season ending September 1, 1912:



FREE ANALYSES.

Samples of fertilizers sent in for free analysis must be taken as provided by the law. 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. Samples not taken as required by the law can not be accepted for analysis.

INVESTIGATIONS UNDER THE FERTILIZER LAW.

The State Chemist is required by the fertilizer law to "investigate the composition, properties, and agricultural values of fertilizers, or of fertilizer material, or ingredients of fertilizers, sold or offered for sale within the State of Texas, and shall publish his results as he may find." Investigations of this kind have been begun, and the results will be published from time to time as the experiments are completed.

RELATION TO STATION WORK.

The work of the State Chemist is closely related to the chemical work of the Experiment Station. In his capacity as Chemist to the Experiment Station, the State Chemist is carrying out extensive investigations of the chemical composition and properties of Texas soils. He is also making investigations into the fundamental properties of soils, especially with respect to their content of plant food. This work is clearly 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 these vary in their effect upon different soils.

CO-OPERATIVE FERTILIZER EXPERIMENTS.

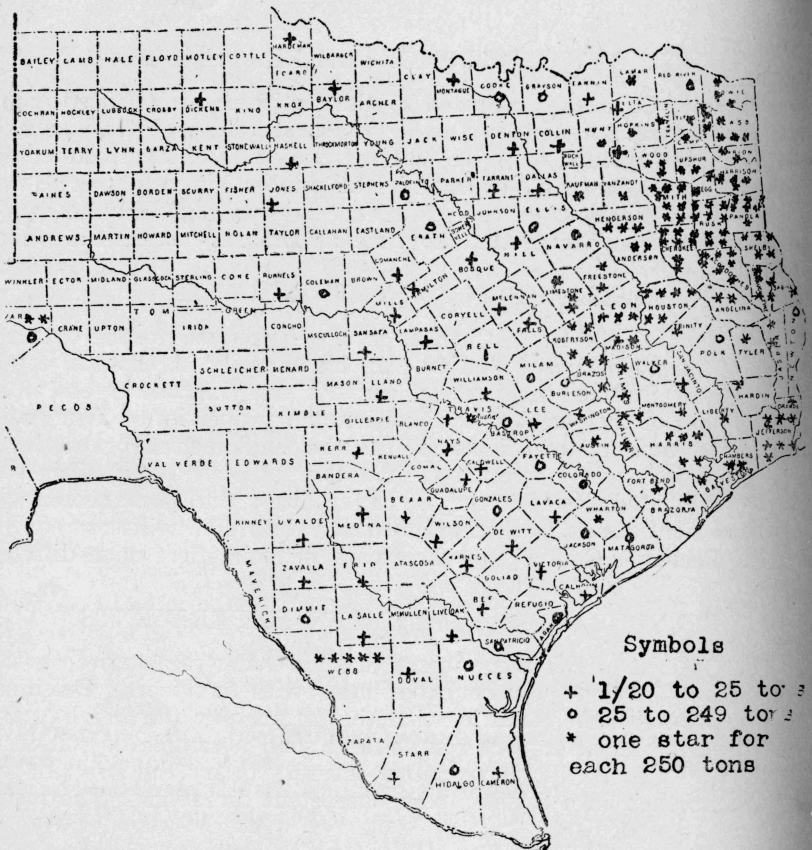
The Chemist of the Experiment Station each year carries out one hundred or more co-operative experiments with fertilizers. Fertilizers are furnished on the condition that the farmer pay the freight, carry out the experiment, report results, and send a sample of soil if requested. Farmers thus have an opportunity to try the effect of fertilizers on their own farms, under competent directions. The results.

of the experiments are published from time to time, and are valuable, not only to the farmers concerned, but also to other farmers, and to the State at large. By means of the soil analyses, relation is traced between results of the experiments and the needs of different types of soils in various parts of the State. Applications to take part in the experiments should be sent in during November or December. The number of experiments which can be carried out in any one year is, of course, limited.

USE OF FERTILIZERS IN TEXAS.

A map has been prepared showing the localities of the State in which fertilizer is sold. The fertilizer sold in one county is not necessarily used there, as it may be hauled from one county to another, but the map shows very well the distribution of the sale. The sign + shows that some fertilizer has been shipped into the county. It may be one sack or it may be 25 tons. The symbol O represents a sale of 25 to 249 tons. Each asterisk represents 250 tons. If the sale was more than 250 tons, but less than 375 tons, only one asterisk was placed, but if it was in excess of 375 tons two stars were placed, and so on.

The sales of fertilizers are greatest in northeast Texas. Rusk County leads. Webb County and Ward County used a considerable amount, the former for onions, the latter probably for alfalfa.



ANALYSES BELOW GUARANTEE.

Whenever any lot of fertilizer is below guarantee 4 per cent or more, all persons who have sold this lot of fertilizer must make good the deficiency to all purchasers.

A number of rebates have been made under this provision of the law, and some few are in process of adjustment. All analyses may be seen in the tables of analysis. Most of the manufacturers have paid the rebates, but some of the dealers have not yet settled with their customers.

EXPLANATION OF TERMS.

Available Acid Phosphate 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.

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

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

Potash is the potash soluble in water. A great many Texas soils contain a sufficient quantity of potash, so that its use in fertilizers in such soils is a useless expense. Potash, like nitrogen, is needed by all parts of the plant, but especially by stalk and leaves, and 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 cost of mixing, sacks, transportation, and manufacturers' and dealers' profits.

FERTILIZER VALUATIONS, 1911-12.

The following valuations were adopted for the plant food in commercial fertilizers sold in Texas for the season 1911-12:

	Per cent.
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

ANALYSIS OF FERTILIZERS, 1911-12.

Table 1 contains a list of all samples of fertilizers subjected to analysis in the season September 1, 1911, to date. The table gives the name and address of the manufacturer, the name of the brand, the guaran-

ted analysis, the analysis found, and the place where sampled. Analyses below guarantee are brought out in heavy type. Practically all the samples were collected by inspectors of this Department. Analyses and inspection were made by Messrs. S. E. Asbury, T. L. Ogier, J. B. Kelly, W. E. Stokes, J. T. Auten and W. Levin.

REGISTRATION 1911-12.

A list of brands registered for sale in the season 1911-12 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 1911-1912.

Laboratory Number	Manufacturer, Place of Business, and Brand.	Available Phosphoric Acid—Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation
Arkansas Fertilizer Co., Little Rock, Ark.—					
	White Diamond East Texas High Grade Trucker—				
14358	Guarantee	10.00	2.47	1.00	\$23.08
	Marshall	10.87	1.85	2.02	22.86
	White Diamond High Grade Acid Phosphate—				
14054	Guarantee	14.00			16.80
14210	Naples	16.52			19.82
	Kirbyville	14.04			16.85
	White Diamond High Grade Corn Fertilizer—				
14356	Guarantee	9.00	2.00	3.00	22.40
	Atlanta	8.67	1.77	3.67	21.83
14355	White Diamond High Grade Corn Grower—				
	Guarantee	8.00	1.65	3.00	19.80
	Atlanta	8.62	1.68	3.12	20.80
14053	White Diamond High Grade Early Potato and Trucker—Guarantee	8.00	2.47	4.00	24.28
	Naples	10.74	1.68	2.95	23.15
14485	White Diamond Nitrate of Soda—				
	Guarantee		15.00		60.00
	Mineola		15.05		60.20
14284	White Diamond Standard Grade Southern Special—Guarantee	10.00	1.65	1.50	20.40
14360	New Boston	10.74	1.58	1.70	21.25
	Marshall	10.84	1.50	1.77	21.13
14212	White Diamond Standard Grade Texas Special—Guarantee	10.00	1.65	1.00	19.80
14271	Kirbyville	9.99	1.67	1.26	20.18
14359	Lufkin	10.87	1.37	1.33	20.12
	Marshall	10.83	1.55	1.34	20.81
14211	White Diamond Twentieth Century Fertilizer—				
14357	Guarantee	9.00	1.65	2.00	19.80
	Kirbyville	10.38	1.46	1.93	20.62
	Atlanta	10.54	1.65	2.13	21.81
Armour Fertilizer Works, Chicago, Ill., New Orleans, La., and Fort Worth, Texas—					
14475	Armour's African Cotton Grower—				
	Guarantee	9.00	2.47	3.00	24.28
	Fort Worth	7.82	2.36	2.66	22.01
14042	Armour's Cottonseed Meal Special—				
14088	Guarantee	10.00	1.65	1.00	19.80
14016	Frankston	10.94	1.80	1.26	21.84
13995	Troup	10.69	1.75	1.60	21.75
14101	Mt. Enterprise	11.25	1.58	1.36	21.45
14470	Waller	10.49	1.68	1.31	20.88
14492	Jacksonville	10.01	1.77	1.22	20.55
13998	Hughes Springs	9.35	1.74	1.29	19.73
14433	Tenaha	10.25	1.88	1.12	21.16
	Armour's Corn Special—Guarantee	6.00	1.65	1.00	15.00
	Waller	6.80	1.28	.97	14.44
	Armour's Cotton Special—Guarantee	10.00	1.65	1.00	19.80
	Pine Hill	11.04	1.77	1.06	21.60
14013	Armour's Cotton and Corn Grower—				
14041	Guarantee	8.00	.82	1.00	14.08
14087	Mt. Enterprise	9.33	.82	1.36	16.01
14100	Frankston	7.85	.82	1.26	14.21
13939	Troup	8.49	.99	1.27	15.67
13996	Jacksonville	9.02	.94	1.14	15.95
14045	Armour's King Cotton—Guarantee	8.00	1.65	2.00	18.60
14043	Dickinson	9.10	1.69	1.92	19.89
14159	Waller	9.79	1.85	1.64	21.12
14432	Mt. Enterprise	8.77	1.70	1.99	19.71
14056	Frankston	8.80	1.48	1.99	18.87
14160	Bryan	8.14	1.77	2.07	19.33
14162	Pine Hill	11.00	1.63	1.93	22.04
14187	Sulphur Springs	8.67	1.62	2.00	19.28
14491	Thornton	8.36	1.57	2.10	18.83
	Mexia	8.61	1.87	2.19	20.44
	Bryan	7.55	1.55	2.45	18.20
	Tenaha	9.13	1.68	2.34	20.49

Table I—Analysis of Commercial Fertilizers, Season of 1911-1912.

Laboratory Number	Manufacturer, Place of Business, and Brand.	Available Phosphoric Acid—Per Cent.	Nitrogen—Per Cent	Potash—Per Cent	Valuation
	Armour Fertilizer Works, Chicago, Ill., New Orleans, La., and Fort Worth, Texas—continued.				
	Armour's Kainit—Guarantee			12.00	14.40
13999	Waller			11.78	14.14
	Armour's Muriate of Potash—Guarantee			50.00	60.00
14002	Waller			49.70	59.64
	Armour's Phosphate and Potash—Guarantee	12.00		2.00	16.80
13940	Dickinson	13.28		1.94	18.27
	Armour's Potato Grower—Guarantee	10.00	2.47	6.00	29.08
14014	Mt. Enterprise	11.17	1.89	4.13	25.92
13941	Dickinson	9.97	2.44	5.45	28.26
14163	Mexia	11.60	2.21	6.20	30.20
	Armour's Raw Bone Superphosphate—Guarantee	9.50	1.65	1.50	19.80
14001	Waller	9.53	1.63	1.77	20.03
	Armour's Raw Bone Meal—Guarantee	*22.00	3.70		31.66
13958	Alvin	*22.63	4.07		33.57
	Armour's Soluble Bone and Potash—Guarantee	10.00		4.00	16.80
14017	Mt. Enterprise	10.96		4.07	18.02
14102	Jacksonville	11.34		3.92	18.31
	Armour's Shield Phosphate—Guarantee	14.00			16.80
13994	Waller	13.49			16.19
14055	Naples	14.97			17.96
14086	Troup	14.66			17.69
14161	Mexia	14.70			17.64
	Armour's Star Phosphate—Guarantee	16.00			19.20
14476	Fort Worth	17.48			20.98
14370	Farmer's sample	17.36			20.83
	Armour's Strawberry Grower—Guarantee	6.00	1.65	5.00	19.80
14000	Waller	7.67	1.19	5.96	21.11
	Armour's Sandy High Land Special—Guarantee	10.00	1.65	1.00	19.80
14019	Mt. Enterprise	9.53	1.29	1.72	18.66
	Armour's Special Cabbage Grower—Guarantee	8.00	1.65	3.00	19.80
13938	Dickinson	7.83	1.98	2.96	20.87
	Armour's Truck Special—Guarantee	7.00	4.11	6.00	32.04
13937	Dickinson	6.95	3.84	5.61	30.43
	Armour's Truck Special, No. 2—Guarantee	8.00	1.65	3.00	19.80
13942	Dickinson	7.80	1.78	3.82	20.30
13997	Waller	9.26	1.70	2.83	21.31
14057	Naples	8.84	1.63	2.07	19.61
14094	Troup	8.55	1.45	2.33	18.86
14434	Pinehill	8.62	1.64	3.04	20.55
	Armour's Tankage—Guarantee	*4.60	4.94		22.30
13993	Waller	*8.21	4.68		24.31
	Armour's Vegetable Grower—Guarantee	9.00	2.05	3.00	22.60
13943	Dickinson	9.85	2.05	2.93	23.54
14044	Frankston	9.56	1.83	2.87	22.23
14477	Fort Worth	9.38	2.65	2.80	25.22
	Geo. L. Barber, Jacksonville, Texas—				
	Barber's 14 Per Cent Acid Phosphate—Guarantee	14.00			16.80
14045	Jacksonville	14.62			17.54
	Barber's 16 Per Cent Acid Phosphate—Guarantee	16.00			19.20
14004	Flint	16.38			19.66
14371	Jacksonville	† 14.98			17.58
	The Bowie County Cotton Oil Co., New Boston, Texas—				
	Bowie Acid Phosphate—Guarantee	14.00			16.80
14292	New Boston	15.76			18.91
	Bowie Cottonseed Meal—Guarantee		7.00		28.00
14291	New Boston	2.59	7.42	1.59	34.70
14290	Bowie Kainit—Guarantee			12.00	14.40
	New Boston			12.76	15.31

*Total.

†Affidavit furnished that this was sweepings, not to be sold.

Table I—Analysis of Commercial Fertilizers, Season of 1911-1912.

Laboratory Number	Manufacturer, Place of Business, and Brand.	Available Phosphoric Acid—Per Cent.	Nitrogen—Per Cent	Potash—Per Cent	Valuation
Bryan Cotton Oil and Fertilizer Co., Bryan, Texas—					
	Star Brand Acid Phosphate—Guarantee.....	14.00			16.80
14003	College Station.....	16.18			19.42
14029	Bryan.....	15.70			18.84
14157	Bryan.....	15.79			18.95
Star Brand Cotton and Corn Fertilizer—					
	Guarantee.....	11.50	1.80		21.00
14031	Bryan.....	12.23	1.96		22.52
14158	Calvert.....	12.65	2.09		23.59
14188	Bryan.....	13.00	1.81		22.84
14154	Bryan.....	12.84	1.74		22.37
14486	Marquez.....	11.93	2.15		22.92
Star Brand Cotton Fertilizer—Guarantee.....					
	Bryan.....	10.00	1.80	2.00	21.60
14027	Bryan.....	11.31	1.36	1.64	20.98
14155	Bryan.....	11.01	1.88	2.00	23.13
Star Brand Kainit—Guarantee.....					
	Bryan.....			12.00	14.40
14028	Bryan.....			13.02	15.62
14153	Bryan.....			12.86	15.43
Star Brand Phospho Special—Guarantee.....					
	Bryan.....	10.00	2.00		20.00
14407	Bryan.....	11.37	2.78		24.76
Star Brand Potato Fertilizer—Guarantee.....					
	Bryan.....	8.00	3.50		23.60
14030	Bryan.....	9.09	3.94		26.67
14156	Bryan.....	10.55	3.19		25.42
The Clarksville Cotton Oil Co., Clarksville, Texas—					
	Acid Phosphate—Guarantee.....	16.00			19.20
14286	Clarksville.....	15.62			18.74
Cottonseed Meal—Guarantee.....					
	Clarksville.....	2.52	6.00		24.00
14287	Clarksville.....		7.08	1.50	33.14
Kainit—Guarantee.....					
	Clarksville.....			12.00	14.40
14285	Clarksville.....			13.14	15.77
Consumer's Fertilizer Co., Shreveport, La.—					
	Harrell's Corn—Guarantee.....	6.50	2.50	1.00	19.00
14279	Lufkin.....	6.32	2.10	1.00	17.18
Three States Acid Phosphate—Guarantee.....					
	Atlanta.....	14.00			16.80
14351	Atlanta.....	12.68	.83		18.54
14478	Lindale.....	16.02			19.22
14234	Tenaha.....	14.08			16.90
Three States Cotton "A"—Guarantee.....					
	Joaquin.....	10.00	1.65	1.00	19.80
4233	Tenaha.....	10.07	1.51	1.21	19.57
4235	Tenaha.....	10.14	1.49	1.21	19.58
4278	Lufkin.....	10.00	1.46	1.27	19.36
Tri-State Acid Phosphate.....					
	Winnsboro.....	16.00			19.20
4058	Lindale.....	17.09			20.51
4479	Lindale.....	17.56			21.07
Tri-State Corn—Guarantee.....					
	Frankston.....	7.50	2.90	1.00	21.80
4032	Frankston.....	6.67	2.80	1.13	20.56
Tri-State Cotton—Guarantee.....					
	Kilgore.....	9.50	1.85	1.00	20.00
4033	Winnsboro.....	9.94	1.71	1.25	20.27
4059	Winnsboro.....	9.55	2.07	1.18	21.16
4350	Atlanta.....	10.20	1.53	1.16	19.75
Tri-State Special—Guarantee.....					
	Alto.....	11.00	2.67	1.00	25.08
4005	Alto.....	11.49	2.76	1.05	26.09
Daingerfield Cotton Oil and Fertilizer Co., Daingerfield, Texas—					
	14 Per Cent Acid Phosphate—Guarantee.....	14.00			16.80
4372	Daingerfield.....	14.50			17.40
East Texas Fertilizer Co., Tyler, Texas—					
	14 Per Cent Acid Phosphate—Guarantee.....	14.00			16.80
4386	Tyler.....	14.64			17.57
4010	Tyler.....	13.81			16.57
4079	Troup.....	14.69			17.63
16 Per Cent Acid Phosphate—Guarantee.....					
	Tyler.....	16.00			19.20
4008	Tyler.....	16.18			19.42
4383	Tyler.....	16.39			19.67
East Texas Crop Grower—Guarantee.....					
	Tyler.....	8.00	3.00	3.00	25.20
4384	Tyler.....	8.82	2.68	3.62	25.64
4009	Tyler.....	9.66	3.35	2.71	28.29

Table I—Analysis of Commercial Fertilizers, Season of 1911-1912.

Laboratory Number.	Manufacturer, Place of Business, and Brand.	Available Phosphoric Acid—Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation
East Texas Fertilizer Co., Tyler, Texas—continued.					
East Texas Corn and Cotton Grower—					
	Guarantee	8.00	2.00	2.00	20.00
14388	Tyler	8.54	1.88	2.88	21.23
14474	Lindale	8.87	2.86	1.32	23.66
14388	Tyler	8.54	1.88	2.88	21.23
14077	Troup	8.25	2.00	2.60	21.06
	Muriate of Potash—Guarantee			48.00	57.60
14387	Tyler			49.64	59.57
	Wiley's Tomato Special—Guarantee	9.00	2.80		22.00
14007	Tyler	9.38	2.76		22.30
14078	Troup	9.65	2.88		23.10
14385	Tyler	9.62	2.71		22.38
Farmers & Ginners Cotton Oil Co., Sulphur Springs, Texas—					
	Acid Phosphate—Guarantee	14.00			16.80
14052	Sulphur Springs	14.93			17.92
14374	Sulphur Springs	14.26			17.11
	Cottonseed Meal—Guarantee	2.00	7.00	1.80	32.56
14375	Sulphur Springs	2.35	7.43	1.53	34.38
Farmer's Oil and Fertilizer Co., Texarkana, Texas—					
	Farmer's Acid Phosphate—Guarantee	14.00			16.80
14298	Texarkana	14.90			17.88
14466	Texarkana	15.12			18.14
	Farmer's Corn Fertilizer—Guarantee	8.00	1.65	3.00	19.80
14467	Texarkana	8.70	1.55	3.23	20.52
14296	Texarkana	9.01	1.67	3.23	21.37
	Farmer's Cotton Fertilizer—Guarantee	9.00	1.65	2.00	19.80
14295	Texarkana	9.55	1.59	2.78	21.16
14378	Omaha	9.21	1.47	2.06	19.40
14465	Texarkana	9.70	1.50	2.21	20.29
	Farmer's Cotton Fruiter—Guarantee	10.00	.82	1.00	16.48
14469	Texarkana	11.14	.86	1.16	18.20
14294	Texarkana	10.62	.86	.90	17.26
14379	Omaha	9.78	.92	1.45	17.16
	Farmer's Fruit Maker—Guarantee	10.00		4.00	16.80
14293	Texarkana	10.71		3.28	16.78
14464	Texarkana	10.65		3.92	17.48
	Farmer's Truck Fertilizer—Guarantee	8.00	2.47	4.00	24.28
14297	Texarkana	9.25	2.24	3.77	24.58
14468	Texarkana	8.37	2.37	4.24	24.21
Federal Chemical Co., Columbia, Tenn., and Louisville, Ky.—					
	Tennessee Brown Phosphate Rock—				
	Guarantee	*28.00			
14183	Franklin	*31.05			
14336	Alvin	*31.29			
Fidelity Chemical Corporation, Houston, Texas—					
	Fidelity Acid Phosphate—Guarantee	14.00			16.80
14095	Mineola	15.01			18.01
14109	Lovelady	15.65			18.78
14173	Houston	14.59			17.51
14182	Harwood	13.05	.56		17.90
14190	Rock Island	14.92			17.90
14258	Houston	14.91			17.89
14281	Lufkin	16.64			19.97
14309	Lovelady	14.93			17.92
	Fidelity Ammoniated Superphosphate With				
	Potash—Guarantee	10.00	1.65	1.00	19.80
14181	Houston	10.48	1.64	1.78	21.28
14260	Houston	11.84	1.57	1.07	21.77
	Fidelity Cereal Cultivator—Guarantee	6.50	2.47	1.00	18.88
14110	Lovelady	7.20	2.48	1.25	20.06
14180	Houston	8.01	2.35	1.17	20.41
14192	Nome	7.30	2.42	1.23	19.92
14195	Orange	7.00	2.54	1.12	19.90
14265	Houston	7.22	2.45	1.20	19.90
14308	Lovelady	8.57	2.01	1.35	19.94

*Total.

Table I—Analysis of Commercial Fertilizers, Season of 1911-1912.

Laboratory Number	Manufacturer, Place of Business, and Brand.	Available Phos- phoric Acid— Per Cent.	Nitrogen—Per Cent	Potash—Per Cent	Valuation
Fidelity Chemical Corporation, Houston, Texas—continued.					
Fidelity Cereal Cultivator—continued.					
14408	Orange	6.23	2.62	1.23	19.30
14495	Houston	6.92	2.40	1.23	19.38
Fidelity Cotton Special—Guarantee.					
14409	Orange	10.00	1.65	2.00	21.00
14176	Houston	9.72	1.61	1.95	20.64
14283	Lufkin	11.28	1.60	2.16	22.53
14259	Houston	9.95	1.87	2.41	22.31
14194	Eagle Lake	9.64	1.79	2.02	21.15
Fidelity Cotton Special, No. 2—Guarantee.					
14107	Lovelady	10.50	1.76	2.02	22.06
14493	Houston	10.00	1.65	1.50	20.40
14193	Nome	11.01	1.55	1.63	21.37
14255	Houston	10.85	1.50	1.48	20.80
14310	Lovelady	10.71	1.61	1.58	21.19
Fidelity Cotton Standard—Guarantee.					
14108	Lovelady	10.78	1.67	1.75	21.72
14146	Kosse	10.41	1.89	1.94	22.38
14147	Calvert	8.00	2.06	1.50	19.64
14148	Bryan	8.85	2.00	1.61	20.55
14186	Bryan	9.06	2.15	1.69	21.45
14256	Houston	8.67	2.20	1.99	21.59
14320	Lovelady	8.73	2.25	1.79	21.63
14494	Houston	8.40	2.16	1.95	21.06
14262	Houston	8.81	2.01	1.77	20.73
14177	Houston	8.16	2.14	1.87	20.59
14257	Houston	8.54	1.75	1.64	19.22
14257	Houston	10.00	1.65	6.00	25.80
14266	Houston	10.40	1.73	6.54	27.25
14266	Houston	5.00	3.87	8.00	31.08
14266	Houston	5.90	3.66	8.44	31.85
14266	Houston	5.84	3.69	8.47	31.93
14266	Houston	5.53	3.64	8.81	31.77
14515	San Augustine		15.00		60.00
14179	Houston	7.00	15.13		60.52
14266	Houston	7.79	2.88	5.00	25.92
14174	Houston	7.52	2.79	4.84	26.52
14267	Houston	7.52	2.54	5.19	25.41
14174	Houston	8.00	2.47	5.00	25.48
14267	Houston	7.86	2.34	5.32	25.17
14497	Houston	8.18	2.69	6.12	27.85
14175	Houston	8.14	2.35	5.05	25.23
14175	Houston	7.00	2.06	3.00	20.24
14191	Rock Island	7.31	2.09	2.98	20.71
14263	Houston	7.84	2.21	2.85	21.67
14282	Lufkin	7.53	2.13	3.31	21.53
14431	Appleby	7.73	2.17	3.93	22.68
14496	Houston	7.95	1.97	3.18	21.24
14178	Houston	7.62	2.24	3.65	22.48
14280	Lufkin	10.00		4.00	16.80
13959	Alvin	10.63		4.71	18.41
14261	Houston	10.70		4.80	18.68
14342	Jefferson	6.00	2.47	5.00	23.08
14498	Houston	6.30	2.30	4.23	22.56
14264	Houston	6.67	2.47	5.12	24.02
14264	Houston	6.29	2.49	5.45	24.05
14343	Jefferson	5.73	2.64	4.28	22.58
Fidelity Tomato Fertilizer—					
14264	Houston	10.00	2.47	1.00	23.08
14254	Houston	10.92	2.40	1.28	24.24
14343	Jefferson	8.00	2.47	8.00	29.08
Fidelity Truck Grower—Guarantee.					
14164	Weimar	9.35	2.34	6.38	28.24
14051	Weimar	8.49	2.55	7.99	29.98
Hilje Bros., Weimar, Texas—					
Weimar Cotton Producer—Guarantee.					
14164	Weimar	10.25	2.75		23.30
14051	Weimar	11.36	2.94		25.39
14051	Weimar	10.27	3.47	.83	27.03
Houston Packing Co., Houston, Texas—					
Tankage—Guarantee					
13930	Houston	*10.40	5.54		29.37
13980	Houston	*16.07	5.45		33.57
14490	Houston	*17.81	5.26		34.24
14490	Houston	*14.42	5.79		33.54

*Total.

Table I—Analysis of Commercial Fertilizers, Season of 1911-1912.

Laboratory Number	Manufacturer, Place of Business, and Brand.	Available Phosphoric Acid—Per Cent.	Nitrogen—Per Cent	Potash—Per Cent	Valuation
Huntsville Cotton Oil Co., Huntsville, Texas—					
	Acid Phosphate—Guarantee.....	14.00			16.80
14312	Huntsville.....	14.53			17.56
	Huntsville High Grade—Guarantee.....	8.70	2.80	2.80	25.00
14313	Huntsville.....	8.85	2.93	3.24	26.23
	Phosphate and Meal—Guarantee.....	8.50	3.50		24.20
14311	Huntsville.....	8.30	3.69		24.72
Houston County Oil Mill & Mfg. Co., Crockett, Texas—					
	Crockett Acid Phosphate, 16 per cent—Guarantee.....	16.00			19.20
14113	Crockett.....	15.89			19.07
14327	Crockett.....	16.83			20.20
14512	Crockett.....	17.13			20.56
	Crockett, 14 Per Cent Acid Phosphate—Guarantee.....	14.00			16.80
14114	Crockett.....	15.46			18.55
14331	Crockett.....	15.36			18.43
	Crockett Compound—Guarantee.....	8.00	2.87	1.25	22.58
14111	Crockett.....	9.70	2.94	1.32	24.98
14120	Lovelady.....	9.30	2.58	1.28	23.02
14124	Grapeland.....	9.31	2.72	1.33	23.75
14329	Crockett.....	10.27	1.92	1.00	21.20
	Crockett Cereal Standard—Guarantee.....	8.00	2.26	2.00	21.04
14119	Crockett.....	8.77	2.06	2.21	21.41
14123	Lovelady.....	9.09	2.04	2.17	21.67
14126	Grapeland.....	10.23	2.52	2.75	23.26
14330	Crockett.....	8.46	1.77	2.12	22.17
14513	Crockett.....	9.32	2.00	2.46	22.13
	Crockett Cotton Standard—Guarantee.....	10.00	2.05	1.75	22.30
14112	Crockett.....	10.76	2.15	2.16	24.10
14317	Crockett.....	10.23	1.72	2.01	21.57
	Crockett Grower—Guarantee.....	5.00	3.90	2.50	24.60
14116	Crockett.....	5.72	3.92	2.36	25.35
14133	Palestine.....	5.94	3.96	2.55	26.03
14326	Crockett.....	5.50	3.82	2.49	24.87
	Crockett Imperial Fruiter—Guarantee.....	10.00	1.15	2.00	19.00
14117	Crockett.....	10.65	.94	1.93	18.86
14314	Crockett.....	9.63	1.10	2.52	18.93
14511	Crockett.....	10.28	1.41	2.03	20.42
	Crockett Phosphate Special—Guarantee.....	10.50	1.23	1.00	18.72
14115	Crockett.....	11.36	1.22	1.14	19.88
14121	Lovelady.....	12.47	1.31	1.33	21.80
14328	Crockett.....	12.13	1.23	1.03	20.72
14510	Crockett.....	12.01	1.48	1.04	21.58
	Crockett Special Mixture—Guarantee.....	10.60	1.76	1.10	21.08
14315	Crockett.....	11.49	1.77	1.60	22.26
14118	Crockett.....	11.02	1.67	1.40	21.63
14122	Lovelady.....	11.87	1.43	.84	20.97
14125	Grapeland.....	11.60	1.68	1.07	21.92
	Crockett Vegetable Producer—Guarantee.....	7.25	2.87	5.50	26.84
14134	Palestine.....	7.99	2.87	4.70	26.79
14316	Crockett.....	7.54	3.03	5.49	27.76
Industrial Cotton Oil Co., Hearne, Texas—					
	Fertilizer Cottonseed Meal—Guarantee.....	2.00	7.00	1.00	31.60
14253	Hearne.....	2.59	6.76	1.53	31.99
Jacksonville Cotton Oil Co., Jacksonville, Texas—					
	Jacksonville 14 per cent Acid Phosphate—Guarantee.....	14.00			16.80
14106	Jacksonville.....	13.06			15.67
Longview Cotton Oil Co., Longview, Texas—					
	Longview Cotton Special—Guarantee.....	9.00	2.00	2.00	21.20
14288	Longview.....	10.89	1.58	2.50	22.39
14389	Longview.....	10.04	1.86	2.16	22.08
14508	Longview.....	10.18	1.92	2.08	22.40
	Longview Corn Special—Guarantee.....	8.00	3.00	2.00	24.00
14289	Longview.....	10.12	2.29	2.26	24.01
14390	Longview.....	8.57	2.86	2.40	24.60
14509	Longview.....	8.47	2.57	2.36	23.27

Table I—Analysis of Commercial Fertilizers, Season of 1911-1912.

Laboratory Number	Manufacturer, Place of Business, and Brand.	phoric Acid—Per Cent, Available Phos.	Nitrogen—Per Cent	Potash—Per Cent	Valuation
	R. F. Marbach, Bracken, Texas—				
	Compost of Bat Guano—Guarantee.....	3.89	4.53	1.00	23.99
14189	Sealy	2.92	4.22	.39	21.45
	Marshall Fertilizer Factory, Marshall, Texas—				
	High Grade Acid Phosphate—Guarantee.....	16.00			19.20
14365	Jefferson	15.59			18.71
14405	Jonesville	15.72			18.86
14451	Henderson	14.89			17.87
14068	Marshall	15.06			18.07
14404	Jonesville	14.55			17.46
	High Grade Red Diamond Acid Phosphate—Guarantee	14.00			16.80
14067	Marshall	15.46			18.55
14345	Marshall	14.26			17.11
14364	Elysian Fields	13.38			16.06
14402	Marshall	14.44			17.33
14452	Henderson	13.99			16.79
	Nitrate of Soda—Guarantee.....		15.25		61.00
14344	Marshall		14.98		59.92
	Standard Corn & Cotton Grower—Guarantee.....	10.00	1.65	1.50	20.40
14070	Marshall	10.76	1.39	1.91	20.76
14076	Gilmer	10.98	1.46	2.07	21.50
14346	Marshall	10.71	1.36	2.10	20.81
14347	Elysian Fields	10.55	1.30	1.85	20.08
14363	Jefferson	10.72	1.36	1.76	20.41
14453	Henderson	8.57	1.65	1.51	18.69
14406	Jonesville	10.02	1.45	2.14	20.39
14403	Marshall	10.15	1.43	1.75	20.00
	Kainit—Guarantee			12.00	14.40
14069	Marshall			12.82	15.38
	Meridian Fertilizer Factory, Shreveport, La.—				
	Caddo Cotton—Guarantee	9.00	1.85	1.00	19.40
14460	Carthage	9.86	1.72	1.19	20.14
14062	Mt. Pleasant	10.31	1.96	1.34	21.82
	Caddo Special—Guarantee	6.00	2.47	7.00	25.48
13955	Laredo	7.99	2.90	7.26	29.90
	Corn Grower—Guarantee	7.50	2.88	1.00	21.72
14060	Mt. Pleasant	8.00	3.11	1.33	23.64
14066	Carthage	8.33	2.46	1.68	21.86
14097	Lovelady	8.51	2.95	1.23	23.49
14276	Lufkin	8.81	2.89	1.44	23.86
14352	Atlanta	8.67	2.38	1.17	21.32
14462	Carthage	8.08	2.65	1.26	21.81
	Meridian Bone and Potash—Guarantee	12.00		2.00	16.80
14200	Beaumont	10.76		1.80	15.07
14229	Hampshire	12.92		1.61	17.43
14420	Beaumont	12.66		1.99	17.58
	Meridian Blood and Bone—Guarantee.....	10.00	1.65	1.00	19.80
14099	Dialville	11.35	1.52	1.40	21.38
14226	Center	8.86	1.30	1.68	17.85
14354	Atlanta	9.43	1.59	1.27	19.20
13990	Jacksonville	10.78	1.70	1.15	21.12
14463	Farmer's sample	10.33	1.59	1.20	20.20
	Meridian Cane Special No. 2—Guarantee.....	7.00	5.00		28.40
14417	Beaumont	8.64	4.05		26.57
	Meridian Cane Special No. 3—Guarantee.....	4.00	6.58		31.12
14198	Beaumont	5.94	5.45	1.12	30.27
	Meridian German Kainit—Guarantee.....			12.00	14.40
14438	Nacogdoches			13.18	15.82
	Meridian Home Mixture—Guarantee	10.00	1.65	1.00	19.80
13989	Jacksonville	11.31	1.60	1.26	21.48
13992	Lovelady	10.98	1.68	1.26	21.41
14048	Nacogdoches	10.87	1.66	1.36	21.31
14050	Kilgore	10.70	1.66	1.70	20.92
14065	Carthage	11.15	1.54	1.29	21.09
14096	Lovelady	11.30	1.61	1.44	21.73
14098	Dialville	11.32	1.73	1.27	22.02
14150	Mexia	10.77	1.76	1.31	21.53
14151	Kosse	10.20	1.70	1.26	20.55
14197	Beaumont	10.66	1.75	1.02	21.01
14275	Lufkin	10.31	1.83	1.56	21.56
14307	Lovelady	10.91	1.68	1.33	21.41
14419	Beaumont	11.74	1.45	1.17	21.29

Table I—Analysis of Commercial Fertilizers, Season of 1911-1912.

Laboratory Number	Manufacturer, Place of Business, and Brand.	Available Phosphoric Acid—Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation
Meridian Fertilizer Factory, Shreveport, La.—continued.					
	Meridian Home Mixture—continued.				
14306	Crockett	11.22	1.71	1.29	21.85
14184	Franklin	10.95	1.60	1.14	20.91
	Meridian Meal Mixture—Guarantee	10.00	1.65	1.00	19.80
14138	Palestine	10.90	1.65	1.03	20.92
14325	Palestine	10.62	1.72	1.10	20.94
14520	Palestine	10.32	1.66	1.11	20.42
	Meridian Onion Special No. 1—Guarantee	7.00	3.75	5.00	29.40
13956	Laredo	8.50	3.57	5.13	30.62
13964	Laredo	7.53	3.15	5.81	28.73
13979	Laredo	8.19	3.07	5.14	28.28
13966	Laredo	7.61	3.69	5.61	30.62
13974	Laredo	7.37	3.55	5.84	30.04
13976	Laredo	6.98	3.58	5.58	29.40
13977	Laredo	7.12	3.79	5.74	30.59
13978	Laredo	8.37	3.00	4.33	27.24
	Meridian Onion Special No. 2—Guarantee	5.00	4.94	5.00	31.76
13954	Laredo	7.14	4.50	5.91	33.66
13973	Laredo	5.08	4.59	5.84	31.47
	Meridian Potash Compound—Guarantee	10.00	.....	4.00	16.80
14201	Beaumont	10.47	.....	3.53	16.80
14228	Hampshire	11.43	.....	2.91	17.21
	Meridian Potato Special—Guarantee	8.00	3.30	2.00	25.20
14047	Nacogdoches	8.99	2.90	2.31	25.16
14136	Palestine	9.60	3.17	1.91	26.49
14321	Palestine	9.57	2.98	2.07	25.88
14437	Nacogdoches	8.18	2.96	2.47	24.61
	Meridian Southern Acid Phosphate—Guarantee	14.00	.....	.....	16.80
14083	Troupe	12.82	.....	.....	15.33
14135	Palestine	15.42	.....	.....	18.50
14225	San Augustine	14.65	.....	.....	17.58
14248	Timpson	15.90	.....	.....	19.08
14249	Timpson	16.07	.....	.....	19.28
14322	Palestine	15.60	.....	.....	18.72
14459	Henderson	15.69	.....	.....	18.83
14519	Palestine	13.70	.....	.....	16.44
	Meridian Tomato Special—Guarantee	10.00	2.47	1.00	23.08
13991	Jacksonville	11.40	2.02	1.24	23.25
14082	Troup	10.67	2.28	1.46	23.67
14084	Gilmer	10.86	2.33	1.05	23.61
14137	Palestine	10.42	2.51	1.22	24.00
14277	Lufkin	10.72	2.49	1.40	24.50
14323	Palestine	10.89	2.45	1.41	24.56
	Meridian Vegetable Grower—Guarantee	8.00	2.47	5.00	25.48
13975	Laredo	8.82	2.58	4.94	26.83
14049	Nacogdoches	9.53	2.23	4.92	26.26
14063	Naples	8.62	2.41	4.53	25.42
14199	Beaumont	10.00	2.88	4.22	26.18
14227	Hampshire	9.28	2.46	5.02	27.00
14247	Timpson	10.24	2.12	4.15	25.75
14324	Palestine	9.93	2.45	4.85	27.54
14418	Beaumont	8.52	2.12	4.89	24.57
	Nitrate of Soda—Guarantee	.....	15.00	.....	60.00
13970	Laredo	.....	15.22	.....	60.88
13967	Laredo	.....	15.16	.....	60.64
13957	Laredo	.....	15.37	.....	61.48
13965	Laredo	.....	15.01	.....	60.04
	Pelican High Grade Guano—Guarantee	9.00	2.47	3.00	24.28
14064	Carthage	9.73	2.15	2.82	23.66
14461	Carthage	9.84	2.21	3.25	23.90
	Sulphate of Potash—Guarantee	.....	.....	48.50	58.20
13969	Laredo	.....	.....	50.61	60.73
	Special Formula No. 4—Guarantee	3.00	4.94	7.00	31.76
13971	Laredo	4.75	4.78	8.06	34.49
	Star—Guarantee	10.00	1.65	1.00	19.80
14152	Timpson	11.39	1.59	1.17	21.43
14246	Tenaha	11.23	1.58	1.22	21.26
14251	Timpson	11.26	1.65	1.34	21.72
14435	Pinehill	11.15	1.85	1.21	22.23
	Texas Special—Guarantee	10.00	2.72	.....	22.88
14018	Tyler	9.96	3.00	.....	23.95
14149	Mexia	10.41	2.85	.....	23.89
	Union Special Acid Phosphate—Guarantee	16.00	.....	.....	19.20
13968	Laredo	17.67	.....	.....	21.20

Table I—Analysis of Commercial Fertilizers, Season of 1911-1912.

Laboratory Number	Manufacturer, Place of Business, and Brand.	Available Phosphoric Acid—Per Cent.	Nitrogen—Per Cent	Potash—Per Cent	Valuation
	Meridian Fertilizer Factory, Shreveport, La.—				
	continued.				
	Union Special Acid Phosphate—continued.				
13972	Laredo	18.58	.....	.....	22.30
14046	Nacogdoches	17.68	.....	.....	21.22
14061	Mt. Pleasant	17.44	.....	.....	20.93
14085	Naples	17.55	.....	.....	21.06
14250	Timpson	17.95	.....	.....	21.54
14252	Timpson	17.11	.....	.....	20.53
14436	Nacogdoches	16.90	.....	.....	20.28
14340	Jefferson	16.46	.....	.....	19.75
	Weevil Beater Guano—Guarantee.....	10.00	1.65	1.00	19.80
14224	Center	10.77	1.71	1.40	21.44
14353	Atlanta	10.85	1.65	1.15	21.00
14421	Center	10.60	1.67	1.31	20.97
	V. P. Monkress, Jacksonville, Texas—				
	Cherokee Acid Phosphate—Guarantee.....	14.00	.....	.....	16.80
13983	Jacksonville	13.65	.....	.....	16.38
14382	Jacksonville	13.85	.....	.....	16.62
	New Orleans Acid & Fertilizer Co., New Orleans, La.				
	Ammoniated Raw Bone Super Phosphate—				
	Guarantee	9.00	1.65	1.50	19.20
14221	Kirbyville	7.64	1.84	1.99	19.02
14455	Carthage	9.90	1.53	1.30	19.56
	Black Diamond Acid Phosphate—Guarantee.....	12.00	.....	.....	14.40
14232	Timpson	12.72	.....	.....	15.26
	Bull Dog Acid Phosphate—Guarantee.....	16.00	.....	.....	19.20
13986	Jacksonville	17.05	.....	.....	20.46
14090	Troup	16.26	.....	.....	19.51
14092	Troup	15.72	.....	.....	18.86
14230	Timpson	16.91	.....	.....	20.29
14489	Carthage	16.53	.....	.....	19.84
	Crescent City Acid Phosphate—Guarantee.....	12.00	.....	.....	14.40
13987	Jacksonville	13.21	.....	.....	15.85
	Dissolved Bone and Potash, 12-2—Guarantee.....	12.00	.....	2.00	16.80
14222	Center	13.36	.....	1.80	18.19
14412	Center	11.97	.....	2.00	16.76
	Economizer—Guarantee	10.00	1.65	2.00	21.00
14223	Center	9.69	1.90	2.36	22.06
14361	Atlanta	10.14	1.23	2.45	20.03
14472	Lindale	10.92	1.48	2.12	21.56
	Goldsmith's Improved Mixture—Guarantee.....	9.00	1.65	1.50	19.20
14091	Troup	10.39	1.40	1.23	19.55
14132	Teague	9.42	1.66	1.56	19.81
14220	Center	8.58	2.00	2.07	20.78
14231	Timpson	9.76	1.64	1.88	20.53
14272	Lufkin	9.46	1.87	1.88	21.08
14413	San Augustine	9.65	1.55	1.88	20.04
	Golden Guano—Guarantee	9.00	1.65	1.50	19.20
14457	Carthage	9.65	1.71	1.88	20.68
	New Orleans Acid Phosphate—Guarantee.....	14.00	.....	.....	16.80
13988	Jacksonville	15.54	.....	.....	18.65
14362	Atlanta	15.02	.....	.....	18.02
14456	Carthage	14.78	.....	.....	17.74
	Texas Onion Grower—Guarantee.....	6.00	3.30	6.00	27.60
13953	Laredo	7.54	3.09	5.52	28.11
	Vegetable Grower—Guarantee.....	6.00	2.47	4.00	21.88
14093	Troup	5.34	2.55	4.35	21.83
14131	Teague	7.13	2.38	3.51	22.20
	New Orleans Export Co., Ltd., Galveston, Texas—				
	Cottonseed Meal Fertilizer—Guarantee.....	2.00	7.41	1.25	33.54
14268	Sugarland	2.82	7.65	1.53	35.82
	Nitrate Agencies Co., New Orleans, La.—				
	Acid Phosphate 16 Per Cent—Guarantee.....	16.00	.....	.....	19.20
14450	Henderson	15.34	.....	.....	18.41
14196	Rock Island	16.44	.....	.....	19.73
14089	Troup	16.42	.....	.....	19.70
	Nitrate of Soda—Guarantee.....	.....	15.00	.....	60.00
14381	Tyler .....	.....	15.06	.....	60.24
	Muriate of Potash—Guarantee.....	.....	.....	50.00	60.00
14348	Farmer's sample .....	.....	.....	47.19	56.63

Table I—Analysis of Commercial Fertilizers, Season of 1911-1912.

Laboratory Number	Manufacturer, Place of Business, and Brand.	Available Phosphoric Acid—Per Cent.	Nitrogen—Per Cent	Potash—Per Cent	Valuation
Planter's Fertilizer & Chemical Co., New Orleans, La., and Fort Worth, Texas—					
	Planter's Acid Phosphate, 16 Per Cent—				
	Guarantee	16.00			19.20
14454	Carthage	16.04			19.25
	Planter's Cotton & Corn No. 1—Guarantee...	9.50	1.65	1.50	19.80
14144	Kosse	10.27	1.88	1.69	21.87
14270	Lufkin	10.99	1.77	1.72	22.32
	Planter's Golden Mixture—Guarantee.....	9.50	1.65	1.50	19.80
14127	Teague	10.36	1.86	1.86	22.10
14145	Kosse	10.23	1.95	1.66	22.07
	Planter's Special Farm Mixture—Guarantee.	10.00	1.65	1.50	20.40
14269	Lufkin	11.37	1.79	1.82	22.98
	Planter's Vegetable Grower—Guarantee.....	7.00	2.47	3.50	22.48
14128	Teague	7.37	2.63	3.62	23.70
	Stubbs Formula for Cotton and Corn—				
	Guarantee	8.00	1.65	2.00	18.60
14430	Appleby	7.77	2.15	2.17	20.52
Rockdale Oil Co., Rockdale, Texas—					
	Superior Brand Acid Phosphate—				
	Guarantee	14.00			16.80
14141	Rockdale	14.54			17.45
	Superior Brand Corn and Cotton Fertilizer—				
	Guarantee	11.00	1.90		20.80
14142	Rockdale	11.61	1.47		19.81
14391	Rockdale	11.70	1.56		20.28
	Superior Brand Special Fertilizer—Guarantee	8.50	1.90	3.30	21.76
14140	Rockdale	8.63	1.62	3.04	20.49
14393	Rockdale	8.30	1.64	3.12	20.26
	Superior Brand Vegetable Fertilizer—				
	Guarantee	8.50	3.50		24.24
14139	Rockdale	9.36	3.45		25.03
14392	Rockdale	9.33	3.26		24.24
San Augustine Fertilizer Co., San Augustine, Texas—					
	Augustine Acid Phosphate—Guarantee.....	14.00			16.80
14215	Center	16.32			19.58
14242	San Augustine.....	16.34			19.61
14426	San Augustine.....	14.10			16.92
14427	Center	12.87			15.34
14517	San Augustine	11.26			13.51
	Augustine High Grade Fertilizer—Guarantee.	10.00	1.65	2.00	21.00
14213	Center	10.63	1.76	2.38	22.66
14243	San Augustine	5.67	2.05	2.06	17.46
14425	San Augustine.....	10.00	1.65	2.29	21.47
14429	Center	10.45	1.81	1.87	22.02
14514	San Augustine	9.03	1.76	2.37	20.72
	Augustine Phosphate & Potash—Guarantee.....	10.00		4.00	16.80
	Center	9.89		4.79	17.61
14244	San Augustine.....	10.91		5.58	17.39
14423	San Augustine.....	9.94		3.81	16.49
	Augustine Standard Grade—Guarantee.....	8.00	2.06	1.50	19.64
14240	Tenaha	10.94	1.68	1.73	21.93
14245	San Augustine	5.50	2.15	1.96	17.55
14422	San Augustine	8.68	2.17	1.63	21.06
14428	Center	8.27	2.19	1.92	20.98
14518	San Augustine	8.21	1.88	1.69	19.40
	Augustine Vegetable Special—Guarantee.....	6.00	2.47	5.00	23.08
14241	San Augustine	7.50	2.22	4.65	23.46
14424	San Augustine	6.25	2.53	5.48	24.19
14516	San Augustine	6.14	2.58	5.21	23.94
The Southern Cotton Oil Co., Little Rock, Ark.—					
	Brer Rabbit High Grade—Guarantee.....	10.00	1.65	2.00	21.00
14349	Jefferson	11.93	.99	1.94	20.61
	SCO-Co. Cotton Hustler—Guarantee.....	8.00	1.65	2.00	18.60
14373	Gilmer	8.22	1.58	2.09	18.69

Table I—Analysis of Commercial Fertilizers, Season of 1911-1912.

Laboratory Number	Manufacturer, Place of Business, and Brand.	Available Phosphoric Acid—Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation
	Standard Guano & Chemical Mfg. Co., New Orleans, La.—				
14218	Acid Phosphate—Guarantee	16.00			19.20
14410	Center	18.26			21.91
	Center	18.22			21.86
14217	Farmer's Choice Fertilizer—Guarantee	9.50	1.65	1.50	19.80
	Jasper	11.13	1.71	1.94	22.52
14505	Kainit—Guarantee			12.00	14.40
14168	Houston			12.30	14.76
	Houston			13.39	16.07
14219	Mississippi Home Guano—Guarantee	9.50	1.65	1.50	19.80
14411	Center	10.73	1.70	2.08	22.13
	Center	9.82	1.91	1.67	21.42
13932	Muriate of Potash—Guarantee			45.00	54.00
14503	Houston			57.14	68.00
	Houston			50.82	60.98
13935	Nitrate of Soda—Guarantee		15.00		60.00
14166	Houston		15.67		62.68
	Houston		15.00		60.00
	Pure Animal Bone Vegetable Fertilizer—				
	Guarantee	6.00	2.50	5.00	23.20
13934	Houston	8.05	2.78	5.82	27.76
13961	Alvin	7.68	2.62	5.93	26.82
13963	Laredo	7.42	3.00	5.61	27.63
14169	Houston	7.22	2.88	5.45	26.72
14501	Houston	7.65	2.24	7.00	26.54
	Pure Raw Ground Bone—Guarantee	*18.50	2.50		24.30
13960	Houston	*16.56	3.65		27.12
14500	Houston	*21.25	3.27		29.43
	Standard High Grade Truck Grower—				
	Guarantee	8.00	3.50	7.00	32.00
13951	Laredo	8.97	3.90	9.77	38.08
13962	Laredo	9.81	3.51	7.06	34.28
	Stern's Acid Phosphate—Guarantee	14.00			16.80
13936	Houston	15.51			18.61
14167	Houston	15.81			18.97
14502	Houston	13.39			16.07
	Stern's Ammoniated Raw Bone Superphosphate—Guarantee	9.50	1.65	1.50	19.80
13933	Houston	10.69	2.18	2.15	24.13
14216	Jasper	9.95	2.18	1.85	22.86
14504	Houston	9.01	2.67	1.87	23.73
	Sulphate of Potash—Guarantee			47.00	56.40
14499	Houston			49.83	59.80
	Swift & Co., Chicago, Ill., and Fort Worth, Texas—				
	Swift's Diamond "I"—Guarantee	7.00	3.70	4.00	28.00
13952	Laredo	7.65	3.21	3.30	25.93
	Swift's East Texas Trucker—Guarantee	8.00	2.46	3.00	23.04
14012	Alto	7.37	2.25	3.18	21.64
14035	Jacksonville	7.47	2.44	3.14	22.49
14103	Jacksonville	8.10	2.25	3.36	22.75
14204	Beaumont	7.56	2.16	3.48	21.89
14376	Jacksonville	8.76	1.88	3.74	22.52
14416	Beaumont	7.16	2.08	3.41	21.10
14455	Carthage	9.12	1.01	3.95	19.72
	Swift's Garden City Phosphate—Guarantee	14.00			16.80
14203	Beaumont	16.08			19.30
14415	Beaumont	14.55			17.46
	Swift's High Grade Phosphate and Potash—				
	Guarantee	10.00		4.00	16.80
14202	Nome	10.79		4.17	17.95
	Swift's Pulverized Cattle Manure—				
	Guarantee	*1.50	2.47	1.50	12.88
14483	Fort Worth	*1.93	1.96	2.34	12.19
	Swift's Pulverized Sheep Manure—				
	Guarantee	*2.00	2.47	2.00	14.48
14484	Fort Worth	*2.55	1.92	2.57	12.70
	Swift's Pure Bone Meal—Guarantee	*25.00	2.50		29.50
14482	Fort Worth	*26.87	3.03		33.01
	Swift's Special Phosphate and Potash—				
	Guarantee	10.00		2.00	14.40
14205	Beaumont	10.18		3.96	16.97

*Total.

Table I—Analysis of Commercial Fertilizers, Season of 1911-1912.

Laboratory Number	Manufacturer, Place of Business, and Brand.	Available Phosphoric Acid—Per Cent.	Nitrogen—Per Cent	Potash—Per Cent	Valuation
	Swift & Co., Chicago, Ill., and Fort Worth, Texas—continued.				
	Swift's Special Vegetable Fertilizer—				
13949	Guarantee	8.00	2.05	6.00	25.00
14105	Galveston	8.14	2.18	5.48	25.07
14011	Jacksonville	8.87	1.72	5.77	24.44
14034	Alto	9.75	2.14	4.94	26.19
14104	Jacksonville	8.91	1.76	6.11	25.06
14480	Jacksonville	9.08	1.95	5.29	25.05
	Jacksonville	8.83	2.09	5.33	25.36
	Swift's Superphosphate (Potash Ammoniated)—Guarantee	8.00	1.65	2.00	18.60
14165	Waller	8.48	1.69	2.24	19.63
14206	Beaumont	7.59	1.70	2.23	18.60
14377	Jacksonville	7.95	1.67	2.64	19.39
14414	Beaumont	8.47	1.65	2.07	19.24
14481	Fort Worth	8.78	1.93	2.26	20.97
	Texas Fertilizer Co., Marshall, Texas—				
	Standard Grade Corn and Cotton Special—				
	Guarantee	10.00	1.65	1.50	20.40
14341	Marshall	7.46	1.38	1.98	16.85
14394	Marshall	9.09	1.65	1.75	19.61
	J. F. Turner, Winnsboro, Texas—				
14380	Turner's Racket—Guarantee	10.00	1.65	1.50	20.40
	Winnsboro	11.19	1.20	1.56	20.10
	Tuscarora Fertilizer Co., New Orleans, La., and Fort Worth, Texas—				
	Tuscarora Bone and Potash—Guarantee	10.00	.....	2.00	14.40
13944	Dickinson	11.62	.....	2.01	16.35
	Tuscarora Cotton Special—Guarantee	8.00	1.65	2.00	18.60
13948	Dickinson	8.70	1.66	1.69	19.11
	Tuscarora Monarch—Guarantee	9.00	2.47	3.00	24.28
13946	Dickinson	8.98	2.47	3.24	24.54
	Tuscarora Plantation Trucker—Guarantee	10.00	1.65	6.00	25.80
13947	Dickinson	10.32	2.00	5.30	26.74
13982	Jacksonville	10.44	1.78	6.59	27.56
	Tuscarora Vegetable Special—Guarantee	8.00	3.29	7.00	31.16
13945	Dickinson	7.43	3.25	6.21	29.37
13981	Jacksonville	9.12	2.85	7.86	31.77
	Tuscarora Raw Bone Meal—Guarantee	*22.00	3.70	.....	31.66
13950	Galveston	*23.60	4.16	.....	34.69
	Virginia-Carolina Chemical Co., Shreveport, La.—				
	BBB Beef Blood and Bone—Guarantee	10.00	1.65	1.00	19.80
13985	Lovelady	11.44	1.70	1.96	22.88
14209	Jasper	9.65	2.10	2.75	23.28
14335	Palestine	9.55	1.63	.96	19.13
	Georgia State Grange—Guarantee	10.00	1.65	1.00	19.80
13984	Lovelady	10.59	1.52	1.58	20.93
14143	Kosse	9.68	1.89	1.18	20.60
14208	Jasper	10.88	1.66	1.01	20.91
14274	Lufkin	10.20	1.93	1.40	21.64
14488	Marquez	8.77	1.89	1.86	20.31
14473	Jacksonville	8.45	1.22	1.62	16.96
	German Kainit—Guarantee .....	.....	.....	12.00	14.40
14337	Jefferson .....	.....	.....	12.46	14.95
	Mobile Double Eagle Guano—Guarantee	10.00	1.65	1.50	20.40
14036	Kilgore	10.92	1.46	1.69	20.97
14073	Naples	9.69	1.27	1.66	18.70
14080	Gilmer	10.25	1.68	1.62	20.96
14305	Crockett	8.98	1.62	2.04	19.71
14442	Appleby	6.40	2.06	2.74	19.21
14446	Carthage	9.58	1.35	1.54	19.55
	Nitrate of Soda—Guarantee .....	.....	14.80	.....	59.20
14332	Palestine .....	.....	14.89	.....	59.56
	Royal Blood Bone and Potash—Guarantee	10.00	1.65	1.50	20.40
14207	Jasper	10.08	1.91	1.83	21.94
14369	Atlanta	9.69	1.01	1.48	17.45
14471	Hughes Springs	10.92	1.36	2.17	21.14

*Total.

Table I—Analysis of Commercial Fertilizers, Season of 1911-1912.

Laboratory Number	Manufacturer, Place of Business, and Brand.	Available Phosphoric Acid—Per Cent.	Nitrogen—Per Cent.	Potash—Per Cent.	Valuation
	Virginia-Carolina Chemical Co., Shreveport, La.—continued.				
	Royal Cotton Boll Guano—Guarantee.	8.00	1.65	2.00	18.60
14338	Jefferson	9.41	1.59	1.49	19.44
	Royal High Grade Guano—Guarantee.	10.00	1.65	2.00	21.00
14021	Tyler	9.41	1.31	5.26	22.84
14039	Nacogdoches	11.28	2.22	1.40	23.98
14170	Waller	9.01	1.19	3.77	20.09
14236	Timpson	10.28	1.57	1.83	20.82
14448	Henderson	10.45	1.18	2.03	19.70
	Royal Potash Compound—Guarantee.	10.00	.....	4.00	16.80
14395	Marshall	8.57	.....	3.16	14.07
	Royal Vegetable Fertilizer—Guarantee.	8.00	2.47	4.00	24.28
14025	Milano	8.78	2.04	4.14	23.67
14038	Nacogdoches	8.89	2.33	2.70	24.43
14081	Gilmer	8.37	2.31	3.23	23.16
14439	Nacogdoches	8.75	1.79	8.47	27.82
	Scott's Gossypium Phospho—Guarantee.	10.00	1.65	1.50	20.40
14022	Franklin	9.72	1.19	1.72	18.48
14037	Nacogdoches	11.77	1.36	1.70	21.60
14172	Waller	9.71	1.28	1.25	18.27
14185	Franklin	8.70	2.00	1.65	20.42
14239	Tenaha	10.34	1.49	1.82	20.56
14333	Palestine	9.20	1.89	1.05	19.87
14399	Marshall	9.40	1.96	1.50	20.92
14440	Nacogdoches	9.21	1.61	2.24	19.98
14444	Pinehill	9.77	2.01	1.10	21.08
14449	Henderson	10.52	1.54	1.81	20.95
14487	Franklin	10.74	.89	1.70	18.49
14339	Jefferson	9.21	2.04	1.45	20.95
	Scott's Gossypium Phospho Special—Guarantee.	10.00	1.65	2.00	21.00
14366	Atlanta	8.86	2.04	1.87	21.03
14397	Marshall	10.60	1.76	1.92	22.06
	Scott's High Grade Acid Phosphate—Guarantee.	14.00	.....	.....	16.80
14074	Naples	14.66	.....	.....	17.59
14238	Tenaha	15.31	.....	.....	18.37
14367	Atlanta	13.40	.....	.....	16.08
14445	Pinehill	14.38	.....	.....	17.25
	Scott's Potasso Phospho—Guarantee.	12.00	.....	2.00	16.80
14398	Marshall	11.35	.....	1.35	15.24
	Scott's State Standard Guano—Guarantee.	8.00	1.65	2.00	18.60
14075	Naples	9.27	1.32	1.84	18.61
14443	Appleby	8.96	1.89	1.21	19.76
	V. C. C. Co.'s 16 Per Cent Acid Phosphate—Guarantee.	16.00	.....	.....	19.20
14023	Milano	15.70	.....	.....	18.84
14040	Nacogdoches	16.91	.....	.....	20.29
14071	Winnsboro	17.10	.....	.....	20.52
14273	Lufkin	17.69	.....	.....	21.23
14441	Nacogdoches	16.73	.....	.....	20.08
14447	Carthage	17.07	.....	.....	20.48
14237	Timpson	16.82	.....	.....	20.18
	V. C. C. Co.'s Truck Grower—Guarantee.	8.00	2.06	6.00	25.04
14024	Milano	8.89	2.01	6.04	25.96
14072	Naples	9.67	1.92	4.82	25.66
14171	Waller	9.44	2.34	3.64	25.06
14396	Marshall	9.18	2.29	4.37	25.41
	V. C. High Grade Guano—Guarantee.	10.00	1.65	2.00	21.00
14368	Atlanta	9.70	1.06	1.47	17.64
	V. C. High Grade Top Dresser—Guarantee.	4.00	6.17	2.50	32.48
14401	Marshall	5.30	4.62	2.51	27.85
	V. C. Tomato Special—Guarantee.	10.00	2.47	1.50	23.68
14020	Tyler	9.44	2.05	1.40	21.21
14026	Milano	9.46	2.64	2.26	24.62
14334	Palestine	10.54	2.22	1.31	23.10
	V. 3-C Fruit and Truck Special—Guarantee.	6.00	3.30	8.00	30.00
14400	Marshall	8.41	2.15	4.34	23.03
	J. S. William's Fertilizer Co., Paris, Texas—				
	Black Land Fertilizer—Guarantee.	10.50	.....	3.00	16.20
14301	Brookston	11.74	.....	2.77	17.41
14304	Paris	10.75	.....	3.29	16.85

Table I—Analysis of Commercial Fertilizers, Season of 1911-1912.

Laboratory Number	Manufacturer, Place of Business, and Brand.	Available Phosphoric Acid—Per Cent.	Nitrogen—Per Cent	Potash—Per Cent	Valuation
J. S. William's Fertilizer Co., Paris, Texas—					
continued.					
	Potash Special Fertilizer—Guarantee.....	10.00	1.75	2.00	21.40
14300	Brookston	11.07	2.10	2.13	24.24
14303	Paris	10.80	2.14	2.14	24.09
	Williams' Ranch Fertilizer—Guarantee.....	10.50	1.75	.....	19.60
14299	Brookston	10.55	2.31	.....	21.90
14302	Paris	10.81	2.19	.....	21.73
Geo. A. Wright, Palestine, Texas—					
Wright's 14 Per Cent Acid Phosphate—					
	Guarantee	14.00	.....	.....	16.80
14129	Palestine	13.61	.....	.....	16.33
	Wright's Corn and Potato—Guarantee.....	6.00	3.50	2.00	23.60
14130	Palestine	6.24	3.42	2.49	24.16
14319	Palestine	5.39	3.94	2.44	25.16
14506	Palestine	5.70	3.28	2.33	22.76
	Wright's Cotton Special—Guarantee.....	10.00	2.50	2.00	24.00
14318	Palestine	8.78	1.71	1.78	19.52
14507	Palestine	7.71	1.74	2.58	19.31

Table II—Registration of Commercial Fertilizers, Season of 1911-1912.

Manufacturer, Place of Business, and Brand.			Available Phos- phoric Acid— Per Cent	Nitrogen—Per Cent	Potash—Per Cent
Arkansas Fertilizer Co., Little Rock, Ark.—					
White Diamond	Ammoniated Bone Superphosphate	9.00	1.65	2.00	
White Diamond	East Texas High Grade Trucker	10.00	2.47	1.00	
White Diamond	High Grade Acid Phosphate	14.00			
White Diamond	High Grade Bermuda Special	9.00	2.00	5.00	
White Diamond	High Grade Cotton Fertilizer	10.00	2.00	2.50	
White Diamond	High Grade Corn Fertilizer	9.00	2.00	3.00	
White Diamond	High Grade Early Potato and Trucker	8.00	2.47	4.00	
White Diamond	High Grade Kali Superphosphate	12.00		2.00	
White Diamond	High Grade Nitrated Superphosphate	8.00	2.47	4.00	
White Diamond	High Grade Orchard Fertilizer	7.00	1.65	8.00	
White Diamond	High Grade Phospho Kainit	10.00		4.00	
White Diamond	Kainit			12.00	
White Diamond	Muriate of Potash			50.00	
White Diamond	Nitrate of Soda		15.00		
White Diamond	Special High Grade Acid Phosphate	16.00			
White Diamond	Standard Grade Corn Grower	8.00	1.65	3.00	
White Diamond	Standard Grade Meal Base	9.00	1.65	2.00	
White Diamond	Standard Grade Peanut Fertilizer	9.00	.82	4.00	
White Diamond	Standard Grade Phospho Meal	11.00	1.65		
White Diamond	Standard Grade Prize Winner	8.00	1.65	2.00	
White Diamond	Standard Grade Southern Special	10.00	1.65	1.50	
White Diamond	Standard Grade Texas Special	10.00	1.65	1.00	
White Diamond	Vegetable Fertilizer	7.00	2.00	3.00	
White Diamond	Twentieth Century Fertilizer	9.00	1.65	2.00	
White Diamond	Young's High Grade Special	7.00	2.47	5.00	
Armour Fertilizer Works, Chicago, Ill., New Orleans, La., and Fort Worth, Texas—					
Armour's	African Cotton Grower	9.00	2.47	3.00	
Armour's	Bone Meal Steamed	*15.00	2.50		
Armour's	Cottonseed Meal Special	10.00	1.65	1.00	
Armour's	Cotton and Corn Grower	8.00	.82	1.00	
Armour's	Corn Special	6.00	1.65	1.00	
Armour's	Cotton Special	10.00	1.65	1.00	
Armour's	King Cotton	8.00	1.65	2.00	
Armour's	Kainit			12.00	
Armour's	Muriate of Potash			50.00	
Armour's	Nitrate of Soda		14.81		
Armour's	Onion Fertilizer No. 1	8.00	3.29	8.00	
Armour's	Onion Fertilizer No. 2	8.00	2.47	4.00	
Armour's	Onion Fertilizer No. 3	6.00	3.29	6.00	
Armour's	Orange Grower No. 1	7.00	2.47	5.00	
Armour's	Orange Grower No. 2	8.00	1.65	2.00	
Armour's	Phosphate and Potash	12.00		2.00	
Armour's	Phosphate and Potash No. 102	10.00		2.00	
Armour's	Potato Grower	10.00	2.47	6.00	
Armour's	Raw Bone Meal	*22.00	3.70		
Armour's	Raw Bone Superphosphate	9.50	1.65	1.50	
Armour's	Soluble Bone and Potash	10.00		4.00	
Armour's	Shield Phosphate	14.00			
Armour's	Star Phosphate	16.00			
Armour's	Sulphate of Potash			48.00	
Armour's	Strawberry Grower	6.00	1.65	5.00	
Armour's	Sandy High Land Special	10.00	1.65	1.00	
Armour's	Special Cabbage Grower	8.00	1.65	3.00	
Armour's	Truck Special No. 2	8.00	1.65	3.00	
Armour's	Tankage	*4.60	4.94		
Armour's	Truck Special	7.00	4.11	6.00	
Armour's	Vegetable Grower	9.00	2.05	3.00	
Geo. L. Barber, Jacksonville, Texas—					
Barber's	14 Per Cent Phosphate	14.00			
Barber's	16 Per Cent Phosphate	16.00			
The Bowie County Cotton Oil Co., New Boston, Texas—					
Bowie	Acid Phosphate 16 Per Cent	16.00			
Bowie	Acid Phosphate 14 Per Cent	14.00			
Bowie	Cottonseed Meal		7.00		
Bowie	Kainit			12.00	

*Total.

Table II—Registration of Commercial Fertilizers, Season of 1911-1912.

Manufacturer, Place of Business, and Brand.	Available Phos- phoric Acid— Per Cent	Nitrogen—Per Cent	Potash—Per Cent
Bryan Cotton Oil & Fertilizer Co., Bryan, Texas—			
Star Brand Acid Phosphate.....	16.00	.....	.....
Star Brand Acid Phosphate.....	14.00	.....	.....
Star Brand Cotton and Corn.....	11.50	1.80	.....
Star Brand Cotton Fertilizer.....	10.00	1.80	2.00
Star Brand Kainit.....	.....	.....	12.00
Star Brand Phospho Special.....	10.00	2.00	.....
Star Brand Potato Fertilizer.....	8.00	3.50	.....
The Clarksville Cotton Oil Co., Clarksville, Texas—			
Acid Phosphate.....	16.00	.....	.....
Cottonseed Meal.....	.....	6.00	.....
Kainit.....	.....	.....	12.00
Consumers Fertilizer Co., Shreveport, La.—			
Hull's Potash Mixture.....	10.00	.....	4.00
Harrell's Corn.....	6.50	2.50	1.00
Three States Acid Phosphate.....	14.00	.....	.....
Three States "C".....	8.00	1.65	2.00
Three States Cotton "A".....	10.00	1.65	1.00
Three States Vegetable.....	8.00	2.50	5.00
Tri-State Acid Phosphate.....	16.00	.....	.....
Tri-State Cotton.....	9.50	1.85	1.00
Tri-State Corn.....	7.50	2.90	1.00
Tri-State Special.....	11.00	2.67	1.00
Tri-State Vegetable.....	10.00	2.47	1.00
Daingerfield Cotton Oil Co., Daingerfield, Texas—			
14 Per Cent Acid Phosphate.....	14.00	.....	.....
16 Per Cent Acid Phosphate.....	16.00	.....	.....
Kainit.....	.....	.....	12.00
Lindsay Crop Grower.....	8.00	3.00	3.00
Lindsay Corn and Cotton.....	10.00	2.00	2.00
Morris County Corn and Cotton.....	8.00	2.00	2.00
C. H. Duffy, Bandera Co., Texas—			
Bat Guano.....	7.00	8.99	3.00
East Texas Fertilizer Co., Tyler, Texas—			
14 Per Cent Acid Phosphate.....	14.00	.....	.....
16 Per Cent Acid Phosphate.....	16.00	.....	.....
East Texas Crop Grower.....	8.00	3.00	3.00
East Texas Corn and Cotton Grower.....	8.00	2.00	2.00
Kainit.....	.....	.....	12.00
Muriate of Potash.....	.....	.....	48.00
Wiley's Corn and Cotton Grower.....	10.00	2.00	2.00
Wiley's Tomato Special.....	9.00	2.80	.....
Farmers & Ginners Cotton Oil Co., Sulphur Springs, Texas—			
Acid Phosphate.....	14.00	.....	.....
Cottonseed Meal.....	2.00	7.00	1.80
Farmers Oil & Fertilizer Co., Texarkana, Texas—			
Farmer's Acid Phosphate.....	14.00	.....	.....
Farmer's Cotton Fruiter.....	10.00	1.82	1.00
Farmer's Corn Fertilizer.....	8.00	1.65	3.00
Farmer's Cotton Fertilizer.....	9.00	1.65	2.00
Farmer's Fruit Maker.....	10.00	.....	4.00
Farmer's Truck Fertilizer.....	8.00	2.47	4.00
Federal Chemical Co., Columbia, Tenn., and Louisville, Ky.—			
Tennessee Brown Phosphate Rock.....	*28.00	.....	.....
Fidelity Chemical Corporation, Houston, Texas—			
Fidelity Acid Phosphate.....	16.00	.....	.....
Fidelity Acid Phosphate.....	14.00	.....	.....
Fidelity Ammoniated Bone Meal.....	*20.50	3.70	.....
Fidelity Ammoniated Superphosphate and Potash.....	10.00	1.65	1.00
Fidelity Bone Meal Fertilizer.....	*27.00	1.00	.....
Fidelity Cotton Standard.....	8.00	2.06	1.50
Fidelity Cotton Special.....	10.00	1.65	2.00
Fidelity Cotton Special No. 2.....	10.00	1.65	1.50
Fidelity Cereal Cultivator.....	6.50	2.47	1.00
Fidelity Citrus Grower.....	7.00	2.88	8.00
Fidelity Kainit.....	.....	.....	12.00

*Total.

Table II—Registration of Commercial Fertilizers, Season of 1911-1912.

Manufacturer, Place of Business, and Brand.	Available Phos- phoric Acid— Per Cent	Nitrogen—Per Cent	Potash—Per Cent
Fidelity Chemical Corporation, Houston, Texas—continued.			
Fidelity Laredo Special.....	5.00	3.87	8.00
Fidelity Lone Star Special.....	10.00	1.65	6.00
Fidelity Muriate of Potash.....	.....	.....	50.00
Fidelity Nitrate of Soda.....	.....	15.00	.....
Fidelity Orange Special.....	7.00	2.88	5.00
Fidelity Potato Special.....	7.00	2.06	3.00
Fidelity Peerless Trucker.....	8.00	2.47	5.00
Fidelity Regal Compound.....	10.00	.....	4.00
Fidelity Rice Planter.....	12.00	.....	2.00
Fidelity Sulphate of Ammonia.....	.....	20.50	.....
Fidelity Sulphate of Potash.....	.....	.....	48.00
Fidelity Strawberry Special.....	6.00	2.47	5.00
Fidelity Tomato Fertilizer.....	10.00	2.47	1.00
Fidelity Truck Grower.....	8.00	2.47	8.00
Gate City Fertilizer Co., Texarkana, Ark.—			
Red Ball Extra High Grade Acid Phosphate.....	16.00	.....	.....
Red Ball High Grade Acid Phosphate.....	14.00	.....	.....
Red Ball High Grade Cotton and Corn Fertilizer.....	10.00	2.00	2.50
Red Ball High Grade Early Trucker.....	8.00	2.47	4.00
Red Ball High Grade Orangeburg Trucker.....	9.00	3.00	1.00
Red Ball High Grade Potash Acid Fertilizer.....	10.00	.....	4.00
Red Ball Kainit.....	.....	.....	12.00
Red Ball Muriate of Potash.....	.....	.....	50.00
Red Ball Nitrate of Soda.....	.....	15.00	.....
Red Ball Standard Grade Complete Fertilizer.....	10.00	1.65	1.00
Red Ball Standard Grade Cotton Grower.....	9.00	1.65	2.00
Red Ball Standard Grade Four State Fertilizer.....	8.00	1.65	2.00
Red Ball Standard Grade Soluble Bone.....	8.00	1.65	2.00
Red Ball Southern Corn Grower.....	8.00	1.65	3.00
Red Ball Sulphate of Potash.....	.....	.....	48.00
Red Ball Spanish Peanut Fertilizer.....	9.00	.82	4.00
German Kali Works, Baltimore, Maryland—			
Kainit.....	.....	.....	12.00
Muriate of Potash.....	.....	.....	50.00
Sulphate of Potash.....	.....	.....	48.00
Hilje Bros., Weimar, Texas—			
Weimar Cotton Producer.....	10.25	2.75	.....
Houston Packing Co., Houston, Texas—			
Tankage.....	*10.40	5.54	.....
Huntsville Cotton Oil Co., Huntsville, Texas—			
Acid Phosphate.....	14.00	.....	.....
Huntsville High Grade.....	8.70	2.80	2.80
Phosphate and Meal.....	8.50	3.50	.....
Houston County Oil Mill & Mfg. Co., Crockett, Texas—			
Crockett Bl-Mixture.....	9.00	.....	4.00
Crockett Compound.....	8.00	2.87	1.25
Crockett Cotton Standard.....	10.00	2.05	1.75
Crockett Cereal Standard.....	8.00	2.26	2.00
Crockett Grower.....	5.00	3.90	2.50
Crockett Imperial Fruiter.....	10.00	1.15	2.00
Kainit.....	.....	.....	12.00
Crockett Muriate of Potash.....	.....	.....	50.00
Crockett Phosphate Special.....	10.50	1.23	1.00
Crockett Planter's Triumph.....	8.60	2.04	2.10
Crockett Special Mixture.....	10.60	1.76	1.10
Fourteen per cent Acid Phosphate.....	14.00	.....	.....
Sixteen per cent Acid Phosphate.....	16.00	.....	.....
Crockett Rice Special.....	12.00	.....	2.00
Crockett Vegetable Producer.....	7.25	2.87	5.50
Houston Rendering & Fertilizer Co., Houston, Texas—			
Tankage.....	*3.66	6.29	.....
Industrial Cotton Oil Co., Hearne, Texas—			
Fertilizer Cottonseed Meal.....	2.00	7.00	1.00

*Total.

Table II—Registration of Commercial Fertilizers, Season of 1911-1912.

Manufacturer, Place of Business, and Brand.	Available Phos- phoric Acid— Per Cent	Nitrogen—Per Cent	Potash—Per Cent
Jacksonville Cotton Oil Co., Jacksonville, Texas— Jacksonville 14 per cent Phosphate.....	14.00		
Longview Cotton Oil Co., Longview, Texas— Longview Cotton Special	9.00	2.00	2.00
Longview Corn Special	8.00	3.00	2.00
Robert P. Marbach, Bracken, Comal County, Texas— Bat Guano	4.40	8.80	
Compost of Bat Guano	3.89	4.53	1.00
Marshall Fertilizer Factory, Marshall, Texas— High Grade Acid Phosphate.....	16.00		
High Grade Red Diamond Acid Phosphate.....	14.00		
High Grade Vegetable Grower.....	7.00	2.47	4.00
Nitrate of Soda.....		15.25	
Standard Cotton and Corn Grower.....	10.00	1.65	1.50
Standard Corn and Cotton Special.....	9.00	1.65	1.00
Standard Kainit			12.00
Meridian Fertilizer Factory, Shreveport, La.— Caddo Cotton	9.00	1.85	1.00
Caddo Special	6.00	2.47	7.00
Corn Grower	7.50	2.88	1.00
Meridian Bone and Potash.....	12.00		2.00
Meridian Blood and Bone.....	10.00	1.65	1.00
Meridian Cane Special No. 2.....	7.00	5.00	
Meridian Cane Special No. 3.....	4.00	6.58	
Meridian Farmer's Friend	9.00	1.65	1.00
Meridian Ham Bone Guano.....	10.00	1.65	1.50
Meridian Home Mixture.....	10.00	1.65	1.00
Meridian Meal Mixture	10.00	1.65	1.00
Meridian Onion Special No. 1.....	7.00	3.75	5.00
Meridian Onion Special No. 2.....	5.00	4.94	5.00
Meridian Potash Compound.....	10.00		4.00
Meridian Potato Special	8.00	3.30	2.00
Meridian Soluble Guano	10.00	1.65	1.50
Meridian Southern Acid Phosphate.....	14.00		
Meridian Trucker Special.....	9.00	1.65	2.00
Meridian Tomato Special.....	10.00	2.47	1.00
Meridian Vegetable Grower.....	8.00	2.47	5.00
Muriate of Potash.....			50.00
Nitrate of Soda.....		15.00	
Pelican High Grade Guano.....	9.00	2.47	3.00
Sulphate of Potash.....			48.50
Special Formula No. 1.....	6.00	3.75	6.00
Special Formula No. 3.....	4.00	6.00	4.00
Special Formula No. 2.....	5.00	3.75	5.00
Special Formula No. 4.....	3.00	4.94	7.00
Special Formula No. 5.....	4.00	2.47	7.00
Special Formula No. 6.....	5.00	4.12	9.00
Special Formula No. 7.....	5.00	4.12	8.00
Star	10.00	1.65	1.00
Tankage	*3.00	8.23	
Texas Special	10.00	2.72	
Union Special Acid Phosphate.....	16.00		
Weevil Beater Guano.....	10.00	1.65	1.00
Mission Cotton Oil Co., Mission, Texas— Cottonseed Meal	2.00	7.00	1.00
V. P. Monkress, Jacksonville, Texas— Cherokee Acid Phosphate.....	14.00		
New Orleans Acid & Fertilizer Co., New Orleans, La.— Ammoniated Raw Bone Superphosphate.....	9.00	1.65	1.50
Blood Bone and Beef.....	9.00	1.65	1.50
Blood, Bone and Potash.....	9.00	1.65	1.50
Black Diamond Acid Phosphate.....	12.00		
Bull Dog Acid Phosphate.....	16.00		
Crescent City Acid Phosphate.....	12.00		
Dissolved Bone and Potash, 12-2.....	12.00		2.00
Dissolved Bone and Potash, 10-4.....	10.00		4.00
El Salvador Sugar Cane Grower, No. 675.....	7.00	5.00	5.00

Table II—Registration of Commercial Fertilizers, Season of 1911-1912.

Manufacturer, Place of Business, and Brand.	Available Phos- phoric Acid— Per Cent	Nitrogen—Per Cent	Potash—Per Cent
New Orleans Acid & Fertilizer Co., New Orleans, La.— continued.			
Economizer	10.00	16.5	2.00
Farmers' Cornucopia	12.00	2.47	2.00
Goldsmith's Improved Mixture	9.00	1.65	1.50
Golden Guano	9.00	1.65	1.50
Honduras Rice Grower.....	12.00	.....	4.00
Johnson's Special	7.00	4.12	9.00
Kainit .....	.....	.....	12.00
Louisiana Plant Cane Grower.....	6.00	3.30	.....
Louisiana Rice Grower.....	10.00	2.00	.....
Louisiana Stubble Cane Grower.....	4.00	4.94	.....
Meal Ammoniated Super-Phosphate and Potash.....	9.00	1.65	1.50
Muriate of Potash .....	.....	.....	50.00
New Orleans Acid Phosphate.....	14.00	.....	.....
Nitrate of Soda .....	.....	15.00	.....
Roberts' Cotton and Corn Grower.....	8.00	1.65	2.00
Special Sugar Cane Grower No. 67.....	7.00	5.00	.....
Sulphate of Ammonia .....	.....	20.00	.....
Sulphate of Potash .....	.....	.....	50.00
Texas Onion Grower.....	6.00	3.30	6.00
Vegetable Grower	6.00	2.47	4.00
Well's Cotton and Corn Grower.....	10.00	1.65	2.00
New Orleans Export Co., Ltd., Galveston, Texas—			
Cottonseed Meal Fertilizer.....	2.00	7.41	1.25
Pittsburg Cotton Oil Co., Pittsburg, Texas—			
Acid Phosphate	16.00	.....	.....
Nitrate Agencies Co., New Orleans, La.—			
Acid Phosphate, 16 per cent.....	16.00	.....	.....
Basic Slag (Thomas Phosphate Powder).....	*17.00	.....	.....
Kainit .....	.....	.....	12.00
Muriate of Potash .....	.....	.....	50.00
Nitrate of Soda.....	.....	15.00	.....
Sulphate of Potash .....	.....	.....	48.00
Planters' Fertilizer & Chemical Co., New Orleans, La., and Fort Worth, Texas—			
Planters' Acid Phosphate, 12 per cent.....	12.00	.....	.....
Planters' Acid Phosphate, 14 per cent.....	14.00	.....	.....
Planters' Acid Phosphate, 16 per cent.....	16.00	.....	.....
Planters' Bone Meal	*20.00	1.65	.....
Planters' Cotton and Corn No. 1.....	9.50	1.65	1.50
Planters' Cotton Grower.....	10.00	1.65	1.50
Planters' Dissolved Bone and Potash.....	12.00	.....	2.00
Planters' Golden Mixture.....	9.50	1.65	1.50
Planters' Kainit .....	.....	.....	12.00
Planters' Muriate of Potash.....	.....	.....	50.00
Planters' Magic Fertilizer.....	9.50	1.65	1.50
Planters' Onion Grower No. 1.....	8.00	3.29	8.00
Planters' Onion Grower No. 2.....	8.00	2.47	4.00
Planters' Onion Grower No. 3.....	6.00	3.29	6.00
Planters' Orange Fertilizer.....	8.00	1.65	3.00
Planters' Potato Fertilizer No. 1.....	8.00	2.05	6.00
Planters' Potato Fertilizer No. 2.....	8.00	2.47	4.00
Planters' Raw Bone Superphosphate.....	9.50	1.65	1.50
Planters' Special Farm Mixture	10.00	1.65	1.50
Planters' Strawberry Fertilizer.....	6.00	1.65	4.00
Planters' Sulphate of Potash.....	.....	.....	48.00
Planters' Vegetable Grower.....	7.00	2.47	3.50
Stubbs' Formula for Cotton and Corn.....	8.00	1.65	2.00
Rockdale Oil Co., Rockdale, Texas—			
Superior Brand Acid Phosphate.....	14.00	.....	.....
Superior Brand Corn and Cotton Fertilizer.....	11.00	1.90	.....
Superior Brand Special Fertilizer.....	8.50	1.90	3.30
Superior Brand Vegetable Fertilizer.....	8.50	3.50	.....

*Total.

Table II—Registration of Commercial Fertilizers, Season of 1911-1912.

Manufacturer, Place of Business, and Brand.	Available Phosphoric Acid— Per Cent	Nitrogen—Per Cent	Potash—Per Cent
San Augustine Fertilizer Co., San Augustine, Texas—			
Augustine Acid Phosphate.....	14.00	.....	.....
Augustine High Grade.....	10.00	1.65	2.00
Augustine Phosphate and Potash.....	10.00	.....	4.00
Augustine Standard Grade.....	8.00	2.06	1.50
Augustine Vegetable Special.....	6.00	2.47	5.00
The Southern Cotton Oil Co., Little Rock, Ark.—			
Brer Rabbit High Grade.....	10.00	1.65	2.00
SCO-CO. Corn Special.....	10.00	1.65	1.50
SCO-CO. Cotton Hustler.....	8.00	1.65	2.00
SCO-CO. Fruit Grower.....	8.00	2.47	5.00
SCO-CO. High Grade Acid Phosphate.....	14.00	.....	.....
SCO-CO. Money Maker.....	10.00	1.65	1.00
SCO-CO. Superior Acid Phosphate.....	16.00	.....	.....
SCO-CO. Truck Grower.....	8.00	2.07	6.00
SCO-CO. Vegetable Fertilizer.....	8.00	2.47	4.00
Standard Guano & Chemical Mfg. Co., New Orleans, La.—			
Acid Phosphate.....	16.00	.....	.....
Acid Phosphate and Potash.....	10.00	.....	4.00
Farmer's Choice Fertilizer.....	9.50	1.65	1.50
High Grade Sugar.....	10.00	2.50	2.00
Kalnit.....	.....	.....	12.00
Mississippi Home Guano.....	9.50	1.65	1.50
Muriate of Potash.....	.....	.....	45.00
Nitrate of Soda.....	.....	15.00	.....
Pure Raw Ground Bone.....	*18.50	2.50	.....
Pure Animal Bone Vegetable Fertilizer.....	6.00	2.50	5.00
Sulphate of Potash.....	.....	.....	47.00
Stern's Acid Phosphate and Potash.....	10.00	.....	2.00
Stern's Acid Phosphate.....	14.00	.....	.....
Stern's Ammoniated Raw Bone Superphosphate.....	9.50	1.65	1.50
Stern's High Grade Acid Phosphate and Potash.....	12.00	.....	2.00
Standard Blood Bone and Meal Fertilizer.....	9.50	1.65	1.50
Standard High Grade Truck Grower.....	8.00	3.50	7.00
Standard Raw Bone Rice Fertilizer.....	9.50	1.65	1.50
Swift & Co., Chicago, Ill., and Fort Worth, Texas—			
Swift's Champion Vegetable Grower.....	8.00	3.29	3.00
Swift's Diamond "I" Fertilizer.....	7.00	3.70	4.00
Swift's Diamond "S" Top Dresser.....	4.00	4.11	3.00
Swift's East Texas Trucker.....	8.00	2.46	3.00
Swift's Garden City Phosphate.....	14.00	.....	.....
Swift's High Grade Acid Phosphate.....	16.00	.....	.....
Swift's High Grade Phosphate and Potash.....	10.00	.....	4.00
Swift's Pure Bone Meal.....	*25.00	2.50	.....
Swift's Pulverized Cattle Manure.....	*1.50	2.47	1.50
Swift's Pulverized Sheep Manure.....	*2.00	2.47	2.00
Swift's Special Grain Fertilizer.....	10.00	1.65	2.00
Swift's Special Phosphate and Potash.....	10.00	.....	2.00
Swift's Special Vegetable Fertilizer.....	8.00	2.05	6.00
Swift's Superphosphate (Potash Ammoniated).....	8.00	1.65	2.00
Swift's Tankage Formula.....	*6.87	7.41	.....
Texas Fertilizer Co., Marshall, Texas—			
Standard Grade Corn and Cotton Special.....	10.00	1.65	1.50
J. F. Turner, Winnsboro, Texas—			
Standard Grade Turner's Racket.....	10.00	1.65	1.50
Tuscarora Fertilizer Co., New Orleans, La., and Fort Worth, Texas—			
Tuscarora Bone and Potash.....	10.30	.....	2.00
Tuscarora Dissolved Bone.....	14.00	.....	.....
Tuscarora Cotton Special.....	8.00	1.65	2.00
Tuscarora Monarch.....	9.00	2.47	3.00
Tuscarora Onion King No. 1.....	8.00	3.29	8.00
Tuscarora Onion King No. 2.....	8.00	2.47	4.00
Tuscarora Onion King No. 3.....	6.00	3.29	6.00
Tuscarora Plantation Trucker.....	10.00	1.65	6.00
Tuscarora Raw Bone Meal.....	*22.00	3.70	.....
Tuscarora Vegetable Special.....	8.00	3.29	7.00

*Total.

Table II—Registration of Commercial Fertilizers, Season of 1911-1912.

Manufacturer, Place of Business, and Brand.	Available Phos- phoric Acid— Per Cent	Nitrogen—Per Cent	Potash—Per Cent
Virginia-Carolina Chemical Co., Shreveport, La.—			
BBB Beef, Blood and Bone.....	10.00	1.65	1.00
Eureka Complete Fertilizer.....	10.00	1.65	4.00
German Kainit (Imported).....			12.00
Georgia State Grange.....	10.00	1.65	1.00
Mobile Double Eagle Guano.....	10.00	1.65	1.50
Muriate of Potash.....			48.00
Nitrate of Soda.....		14.80	
Royal Blood, Bone and Potash.....	10.00	1.65	1.50
Royal Cotton Boll Guano.....	8.00	1.65	2.00
Royal Compound.....	10.00		2.00
Royal Fruit Grower.....	8.00	2.47	5.00
Royal High Grade Guano.....	10.00	1.65	2.00
Royal Potash Compound.....	10.00		4.00
Royal Tomato Formula.....	10.00	2.47	
Royal Vegetable Fertilizer.....	8.00	2.47	4.00
Sulphate of Potash.....			48.00
Scott's Gossypium Phospho.....	10.00	1.65	1.50
Scott's Gossypium Phospho Special.....	10.00	1.65	2.00
Scott's High Grade Acid Phosphate.....	14.00		
Scott's Potasso Phospho.....	12.00		2.00
Scott's State Standard Guano.....	8.00	1.65	2.00
V. C. C. Co.'s 16 Per Cent Acid Phosphate.....	16.00		
V. C. C. Co.'s Truck Grower.....	8.00	2.06	6.00
V. C. High Grade Guano.....	10.00	1.65	2.00
V. C. High Grade Top Dresser.....	4.00	6.17	2.50
V. C. Tomato Special.....	10.00	2.47	1.50
V. 3C Fruit and Truck Special.....	6.00	3.30	8.00
The Wills Point Cotton Oil Co., Wills Point, Texas—			
Fertilizer Cottonseed Meal.....	1.00	7.00	1.00
J. S. Williams Fertilizer Co., Paris, Texas—			
Black Land Fertilizer.....	10.50		3.00
Potash Special Fertilizer.....	10.00	1.75	2.00
Williams Ranch Fertilizer.....	10.50	1.75	
Winnsboro Cotton Oil Co., Winnsboro, Texas—			
Cottonseed Meal.....	2.00	7.00	1.00
Geo. A. Wright, Palestine, Texas—			
Wright's Acid Phosphate.....	14.00		
Wright's Corn and Potato.....	6.00	3.50	2.00
Wright's Cotton Special.....	10.00	2.50	2.00
Wright's Fertilizer Cottonseed Meal.....	1.50	6.50	1.50