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Mississippi Agricultural Experiment Station.

BULLETIN No. 85.

INSPECTION AND ANALYSES
OF COMMERCIAL FERTILIZERS
ON SALE IN THE STATE.

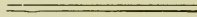


CHEMICAL LABORATORY.

AGRICULTURAL COLLEGE, MISS.

OCTOBER, 1904.

MISSISSIPPI FERTILIZER CONTROL.



INSPECTION AND ANALYSES OF FERTILIZERS

BY THE CHEMICAL DEPARTMENT OF THE

Mississippi Agricultural & Mechanical College.



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INSPECTION AND ANALYSES OF COMMERCIAL FERTILIZERS ON SALE IN THE STATE.

Introduction.—The following tables of analyses summarize the results of the inspection of commercial fertilizers for the season of 1903-1904. This is the fourth publication of analyses of samples collected during the season, and every purchaser in the State has had an opportunity of keeping himself accurately informed in regard to the composition of the goods supplied by the various manufacturers doing business in this territory.

As a general rule, these samples were drawn by the inspectors of fertilizers sent out by this office, though a few analyses of samples sent by dealers and farmers are included. The fertilizer inspectors are very careful to secure *representative* samples of the goods on the market. Portions are drawn from twelve to twenty bags, and carefully mixed and forwarded to the laboratory for analysis. When the analysis has been completed, it is reported to the purchaser, a copy being sent to the manufacturer. In this way prompt information in regard to any irregularities that may occur is brought to the attention of the dealers as well as the manufacturers.

Buying on Analysis.—Those who intend to purchase fertilizers during the fall and winter should examine these analyses carefully; there is more in an analysis than in a name. Other things being equal, the best fertilizers give the best analyses and high analyses have built up reputations of worth for a number of brands. The more important brands have received especial attention. The average of all analyses made is given over the guaranteed analysis, that comparison may be made at a glance.

Results of the Inspection.—This bulletin contains the analyses of 280 samples, and, of this number 15 per cent. will be found below the guarantee in one or more of the essential elements and also in the relative commercial value. Nine per cent. of all analyses made are as much as or more than two per cent. below in relative value, and six per cent. are deficient more than 50c per ton.

Of 262 analyses published last season (1902-1903) 28 or 10.68% were found below the manufacturer's guarantee. The increase of deficient samples this season may be due, in some measure perhaps, to the rush of the factories to supply the greatly increased demand. While it is true that errors may be made in almost any business, it should be gratifying to the trade in our State to note that some of our fertilizer manufacturers are so careful in the manipulation of their goods that they rarely if ever have an analysis below the guarantee. This is a high standard of excellence when we consider the difficulties of manufacture, irregular raw materials, inefficient labor, etc., so well known to the manufacturers themselves.

There seems to be little excuse, however, for the marked deficiency shown in a few of the analyses. In one or two cases, it was found necessary for the Department to require the manufacturer to withdraw questionable shipments and to supply

fresh goods of undoubted value. In other cases, the rapid sales prevented the attachment of low grade goods, but, in each case, the purchasers were notified, and a very careful inspection was maintained of the brands supplying samples giving low analyses. It is the object of the Fertilizer Control to search out irregularities and to make them public for the protection of the consumers and the careful manufacturers. In carrying out this object, we invite the co-operation of all concerned in the fertilizer trade. Only reliable goods must be placed on the Mississippi markets.

Tables of Analysis.—Table I contains all analyses made during the season, and also the *average* and the guaranteed analysis of each brand.

Table II contains the analyses of all samples found as much as or more than two per cent. below the guaranteed commercial value. Greater care is necessary in the manipulation of the goods sold under certain brand names. It not infrequently happens that an analysis will show a total commercial value above that guaranteed, while a marked deficiency will exist in one and sometimes in two essential elements. This should not be the case; the goods should conform reasonably well with the guarantee. This matter will receive especial attention during the coming season.

Fertilizer Valuations.—The following schedule of prices is used in calculating the relative commercial values given in this bulletin:

For Nitrogen	16½c per pound
For Water-Soluble Phosphoric Acid in mixed goods.....	5½c per pound
For Citrate-Soluble Phosphoric Acid in mixed goods.....	5c per pound
For Water-Soluble Phosphoric Acid in plain Acid Phosphate	5c per pound
For Citrate-Soluble Phosphoric Acid in plain Acid Phosphate.....	4½c per pound
For Total Phosphoric Acid in fine bone	3c per pound
For Total Phosphoric Acid in medium and coarse bone.....	2½c per pound
For Potash.....	5c per pound

Amendment to the Law.—The last Legislature amended the Fertilizer Law and this amendment is here published in full for the information of the trade.

LAWS OF MISSISSIPPI, 1904.

CHAPTER 111.

HOUSE BILL No. 399.

An act to require manufacturers or dealers of commercial fertilizers offered for sale in this State to so brand such fertilizers as to indicate the constituent elements of available plant food contained therein.

SECTION 1. Be it enacted by the Legislature of the State of Mississippi, That all commercial fertilizers offered for sale in this State shall have branded on the bags or other packages containing the same either the words "high grade," the word "standard," or the words "off grade."

SECTION 2. The words "high grade" shall not appear on any bag or other package of any complete fertilizer which contains by its guaranteed analysis less than ten per cent. of available phosphoric acid, one and sixty-five-hundredths per cent. of nitrogen (equivalent to two per cent. of ammonia), and two per cent. of potash, or a grade of analysis of equal total commercial value; nor shall the words "high grade" appear upon any bag or other package of any acid phosphate and potash which shall contain by its guaranteed analysis less than thirteen per cent. of available phosphoric acid and one per cent. of potash; nor shall the words "high grade" appear upon any bag or other package of any plain acid phosphate which shall contain by its guaranteed analysis less than fourteen per cent. of available phosphoric acid.

SECTION 3. The word "standard" shall not appear on any bag or other package of complete fertilizer which contains by its guaranteed analysis less than eight per cent. of available phosphoric acid, one and sixty-five-hundredths per cent. of nitrogen (equivalent to two per cent. ammonia), and two per cent. of potash, or a grade of analysis of equal total commercial value; nor shall the word "standard" appear upon any bag or other package of any acid phosphate with potash which shall contain by its guaranteed analysis less than eleven per cent. of available phosphoric acid and one per cent. of potash; nor shall the word "standard" appear upon any bag or other package of any plain acid phosphate which shall contain by its guaranteed analysis less than twelve per cent. of available phosphoric acid.

SECTION 4. No complete fertilizer, acid phosphate with potash and nitrogen, or a fertilizer carrying acid phosphate with nitrogen or acid phosphate with potash, or plain acid phosphate, shall be offered for sale in this State, which contains less than twelve per cent. of total available plant food, viz: available phosphoric acid, nitrogen and potash, either singly or in combination.

SECTION 5. Cotton seed products are hereby exempted from the operation of this Act

SECTION 6. This Act shall take effect and be in force from and after September 1, 1904.

Approved March 22, 1904.

TABLE I—Analyses of Commercial Fertilizers

Laboratory Number.	Name of Brand and Manufacturer.	Where and From Whom Collected.
	A. D. ADAIR & McCARTY BROS., Atlanta, Ga.	
3637	Farish Furman Formula	W. L. Bourland, Amory
3669	Farish Furman Formula	H. S. Massey & Sons, Iuka
3781	Farish Furman Formula	H. S. Massey & Sons, Iuka
		Average
		Guarantee
3668	Furman's H. G. Dis. Bone ...	H. S. Massey & Sons, Iuka
3780	Furman's H. G. Dis. Bone ...	H. S. Massey & Sons, Iuka
		Average
		Guarantee
	AMERICAN GUANO CO., Nashville, Tenn.	
3670	Mule Brand Blood and Bone..	Quillin & Son, Nettleton
		Guarantee.....
3671	Mule Brand Cotton, Corn, and Wheat Grower	Quillin & Son, Nettleton
		Guarantee.....
	ARMOUR FERTIL'ER WORKS, Atlanta, Ga.	
3638	Armour's King Cotton.....	W. L. Bourland, Amory
		Guarantee.....
3672	Fertilizer No. 921	C. W. Young, Ripley
		Guarantee.....
	BIRMINGHAM FERTIL'R CO., Birmingham Ala.	
3639	Birmingham H. G. Acid Phosphate	Gilmore & May Co., Amory.....
		Guarantee
3640	Birmingham H. G. Fertilizer	Myers & Mehaffy, Steenston.....
3848	Birmingham H. G. Fertilizer	Gilmore & May Co., Amory.....
		Average
		Guarantee.....
	BROOKHAVEN PROGRESSIVE COTTON OIL CO., Brookhaven, Miss.	
3485	New South	Brookhaven Progressive Cotton Oil Co., Brookhaven.....
		Guarantee.....
	Sold by BLUMENFELD & FRIED, Ackerman, Miss.	
3557	B. & F.'s Own Mixture	Blumenfeld & Fried, Ackerman.....
		Guarantee
	CAPITAL FERTILIZER AND MANUFACTURING CO., Jackson, Miss.	
3498	H. G. Acid Phosphate	Moore Bros., Morton.....
3569	H. G. Acid Phosphate	B. M. Brown, Kosciusko

Laboratory Number.	Moisture—Per Cent.	Phosphoric Acid.				Nitrogen—Per Cent.	Potash—Per Cent.	Relative Value Per Ton.
		Water Soluble Per Cent.	Citrate Soluble Per Cent.	Available Per Cent.	Insoluble Per Cent.			
3637	10.12	6.78	2.24	9.02	1.56		2.34	12.04
3669	10.42	8.38	2.22	10.60	.68		2.20	13.64
3781	5.50	5.42	4.08	9.50	2.58		2.94	12.98
	8.68	6.86	2.85	9.71	1.61		2.49	12.89
		7.00	3.00	10.00	2.00		2.00	12.70
3668	10.27	11.97	2.32	14.29	.26			14.06
3780	4.91	11.73	3.91	15.64	1.36			15.25
	8.09	11.85	3.11	14.96	.81			14.65
		9.00	3.00	12.00	2.00			11.70
3670	9.26	6.59	3.21	9.80	6.95	1.18	1.14	15.44
		4.00	5.00	9.00	1.00	1.65	1.00	15.76
3671	12.01	7.91	2.40	10.31	2.62	1.64	2.38	18.81
		4.00	4.00	8.00	1.00	1.65	2.00	15.76
3638	8.12	5.76	3.80	9.56	3.19	1.75	2.12	17.94
		5.50	2.50	8.00	1.50	1.65	2.00	15.91
3672	7.94	6.43	3.42	9.85	2.99	1.61	1.29	17.01
		6.50	2.50	9.00	1.50	1.65	1.00	16.01
3639	10.55	9.24	4.59	13.83	1.08			13.37
		12.00	2.00	14.00	2.00			13.80
3640	10.02	6.90	2.37	9.27	1.07	1.69	1.32	16.77
3848	13.40	7.09	2.39	9.48	1.43	1.79	2.80	18.81
	11.71	6.99	2.38	9.37	1.25	1.74	2.60	17.79
		7.00	2.00	9.00	2.00	1.65	1.00	16.06
3485	6.76	8.49	1.21	9.70	1.36	1.77	2.99	19.29
		7.00	2.00	9.00	1.00	1.65	1.80	16.86
3557	9.83	7.85	4.20	12.05	.87	1.66	2.20	20.43
		8.00	1.00	9.00	1.00	1.64	1.50	16.63
3498	9.00	8.11	3.37	11.48	1.41			11.14
3569	10.00	9.94	2.93	12.87	.93			12.58

TABLE I—Analyses of Commercial Fertilizers

Laboratory Number.	Name of Brand and Manufacturer.	Where and From Whom Collected.
3631	H. G. Acid Phosphate	Kelley & Woods, Kosciusko
3630	H. G. Acid Phosphate	Holmes Bros., McComb City
3849	H. G. Acid Phosphate	H. A. Brown, Weathersby
3850	H. G. Acid Phosphate	M. O. Bingham, Newton.....
		Average.....
		Guarantee.....
3496	Cotton Elevator	B. M. Brown, Kosciusko
3570	Cotton Elevator	R. C. Cooper, Morton
		Average.....
		Guarantee.....
3589	Mississippi Guano	Max Priebatsch, Brookhaven
		Guarantee.....
3495	Nonpareil	H. K. Farmer, Westville
3503	Nonpareil	M. J. L. Hoyes' Sons, Newton
3571	Nonpareil	Moore Bros., Morton.....
3598	Nonpareil	J. H. Collins, Wesson
3332	Nonpareil	Holmes Bros., McComb City
3633	Nonpareil	Kelley & Woods, Kosciusko.....
3641	Nonpareil	Lann & Carter Hard'e Co., Aberdeen.
3663	Nonpareil	Holmes Bros., McComb City
3673	Nonpareil	Hoye & Loper, Lake
3851	Nonpareil	D'Lo Mercantile Co , D'Lo
3852	Nonpareil	Turner & Co., Hattiesburg
3853	Nonpareil	W. H. Gillaspay, Hickory
		Average.....
		Guarantee.....
2674	Our Vegetable Grower.....	E. F. Nunn & Co., Shuqualak
		Guarantee.....
3482	Red Star Brand Guano.....	S. Alcus, Summit.....
		Guarantee.....
3497	German Kainit	Capital Fert. & M'fg Co., Jackson ...
3602	German Kainit	J. W. Ray, Canton
3635	German Kainit	Capital Fert. & M'fg Co., Jackson ...
		Average.....
		Guarantee.....
	CONTINENTAL FERTIL'R CO., Nashville, Tenn.	
3642	Sunny South Acid Phos.	Myers & Mehaffy, Steenston.....
		Guarantee.....
	CRESCENT CITY STOCK YARD & SLAUGATER HOUSE CO., New Orleans, La.	
3675	Pure Raw Bone	White-Brumfield Co., McComb City..
		Guarantee
	EAGLE COTTON OIL CO., Meridian, Miss.	
3580	Eagle H. G. Acid Phos.....	Eagle Cotton Oil Co., Meridian
		Guarantee
3579	Farm Mixture	Eagle Cotton Oil Co., Meridian.....
		Guarantee

Laboratory Number.	Moisture—Per Cent.	Phosphoric Acid.				Nitrogen—Per Cent.	Potash—Per Cent.	Relative Value Per Ton.
		Water Soluble Per Cent.	Citrate Soluble Per Cent.	Available Per Cent.	Insoluble Per Cent.			
3631	10.66	9.94	3.34	13.28	1.98		\$ 12.95	
3630	10.79	9.81	3.23	13.04	2.16		12.72	
3849	9.60	9.56	6.06	15.62	1.02		15.01	
3850	10.90	10.95	3.25	14.20	1.41		13.88	
	10.16	9.72	3.70	13.42	1.49		13.05	
		<i>10.00</i>	<i>2.00</i>	<i>12.00</i>	<i>1.00</i>		<i>11.80</i>	
3496	9.31	6.29	2.24	8.53	2.44	1.93	2.48	
3570	9.29	6.55	2.25	8.80	2.30	1.67	2.65	
	9.30	6.42	2.25	8.67	2.37	1.80	2.56	
		<i>7.50</i>	<i>2.00</i>	<i>9.50</i>	<i>1.00</i>	<i>1.65</i>	<i>2.25</i>	
3589	8.53	5.87	2.14	8.01	1.75	1.70	2.85	
		<i>7.00</i>	<i>2.00</i>	<i>9.00</i>		<i>1.50</i>	<i>2.00</i>	
3495	9.31	6.14	2.26	8.40	1.88	1.74	3.00	
3503	10.43	6.29	2.58	8.87	.81	1.84	3.46	
3571	8.94	6.27	1.81	8.08	2.28	1.78	3.02	
3598	9.99	6.72	2.32	9.04	2.16	1.65	2.62	
3632	8.95	5.24	2.30	7.54	1.07	1.71	3.45	
3633	9.57	5.93	2.69	8.62	1.09	1.50	3.43	
3641	9.34	6.22	3.17	9.39	1.25	1.59	3.08	
3663	9.82	6.70	2.53	9.23	1.24	1.67	2.27	
3673	10.12	7.18	2.91	10.09	.99	1.53	2.08	
3851	11.38	5.93	2.76	8.69	1.83	1.76	2.82	
3852	11.03	6.03	3.21	9.24	.61	1.45	2.80	
3853	10.63	7.07	2.98	10.05	.52	1.75	2.34	
	9.96	6.31	2.63	8.94	1.31	1.66	2.86	
		<i>7.50</i>	<i>2.00</i>	<i>9.50</i>	<i>1.00</i>	<i>1.65</i>	<i>2.25</i>	
3674	8.98	4.71	2.35	7.06	1.65	3.00	7.21	
		<i>5.00</i>	<i>2.00</i>	<i>7.00</i>	<i>1.00</i>	<i>2.50</i>	<i>5.00</i>	
3482	9.38	6.14	2.39	8.53	.65	1.88	3.36	
		<i>7.50</i>	<i>2.00</i>	<i>9.50</i>	<i>1.00</i>	<i>1.65</i>	<i>2.25</i>	
3497	.54						10.65	
3602	3.14						11.54	
3635	2.27						11.83	
	1.98						11.34	
							<i>12.00</i>	
3642	8.84	9.15	4.17	13.32	1.74		12.90	
		<i>10.00</i>	<i>3.00</i>	<i>13.00</i>	<i>1.00</i>		<i>12.70</i>	
3675	7.57				24.15	3.98	25.02	
					<i>22.31</i>	<i>3.92</i>	<i>23.90</i>	
3580	12.09	11.67	2.34	14.01	2.00		13.78	
		<i>10.00</i>	<i>3.00</i>	<i>13.00</i>	<i>1.00</i>		<i>12.70</i>	
3579	10.47	7.24	2.79	10.03	1.09	2.13	1.39	
		<i>7.00</i>	<i>2.50</i>	<i>9.50</i>		<i>1.65</i>	<i>1.50</i>	

TABLE I—Analyses of Commercial Fertilizers

Laboratory Number.	Name of Brand and Manufacturer.	Where and From Whom Collected.
	FEDERAL CHEMICAL CO., Louisville, Ky.	
3609	Daybreak H. G. Acid Phos...	Abney & Travis, Heidelberg.....
3647	Daybreak H. G. Acid Phos...	E. M. & W. R. Cain, Caledonia.....
3731	Daybreak H. G. Acid Phos...	Rumbel & Wensel, Natchez
3732	Daybreak H. G. Acid Phos...	H. C. Weems, Ellisville.....
3773	Daybreak H. G. Acid Phos...	Abney & Travis, Heidelberg.....
		Average.....
		Guarantee.....
3645	Daybreak Standard Acid Phos., with Potash No. 2.	E. M. & W. R. Cain, Caledonia
		Guarantee
3644	Daybreak Fertilizer	E. M. & W. R. Cain, Caledonia.....
3676	Daybreak Fertilizer	R. D. Hopper & Co., Tiplersville
3779	Daybreak Fertilizer	Rumbel & Wensel, Natchez
3854	Daybreak Fertilizer	C. V. Akin, DeSoto
		Average.....
		Guarantee.....
3646	Daybreak Fertilizer Special..	E. M. & W. R. Cain, Caledonia
		Guarantee.....
3844	The Complete Fertilizer	L. L. Price, Toomsaba
		Guarantee.....
	HAZLEHURST OIL MILL & FERTILIZER CO., Hazlehurst, Miss.	
3493	H. G. Acid Phosphate	H'hurst Oil Mill & Fert. Co., H'hurst
3592	H. G. Acid Phosphate	J. R. Gillaspay, Crystal Springs.....
		Average.....
		Guarantee.....
3494	Imperial Fertilizer.....	H'hurst Oil Mill & Fert. Co., H'hurst
3594	Imperial Fertilizer	Parson, May, Oberschmidt Co., B'khn
3855	Imperial Fertilizer.....	Grenada Cotton Oil Co., Grenada
3856	Imperial Fertilizer	Hyman Mercantile Co., Summit
		Average.....
		Guarantee.....
3492	German Kainit	H'hurst Oil Mill & Fert. Co., H'hurst
		Guarantee.....
	JACKSON FERTILIZER CO., Jackson, Miss.	
3476	H. G. Acid Phosphate	Centreville Mer. Co., Centreville.....
3558	H. G. Acid Phosphate	Dr. James McGovern, Ackerman
3677	H. G. Acid Phosphate	R. F. Everett, Braxton.....
3857	H. G. Acid Phosphate	M. D. Graham & Co., Forest
3858	H. G. Acid Phosphate	Barney-John Co., Gloster
3859	H. G. Acid Phosphate	Johnson-Woodward Co., Mt. Olive ..
3860	H. G. Acid Phosphate	The Lampton Co., Columbia
3861	H. G. Acid Phosphate	T. M. Heidelberg, Heidelberg.....
		Average.....
		Guarantee.....
3603	Chicago R. B. Superphosph'e	W. J. Granham Co., Terry
		Guarantee

Laboratory Number.	Moisture—Per Cent.	Phosphoric Acid.				Nitrogen—Per Cent.	Potash—Per Cent.	Relative Value Per Ton.
		Water Soluble Per Cent.	Citrate Soluble Per Cent.	Available Per Cent.	Insoluble Per Cent.			
3609	11.36	9.29	4.21	13.50	.87		\$ 13.08	
3647	12.54	8.92	4.46	13.38	.86		12.93	
3731	13.14	10.62	3.16	13.78	1.09		13.46	
3732	13.30	9.74	4.68	14.42	1.00		13.95	
3773	8.88	11.72	2.81	14.53	2.10		14.25	
	11.84	10.06	3.86	13.92	1.18		13.53	
		10.00	4.00	14.00	1.00		13.60	
3645	10.30	6.08	4.26	10.34	.73		13.06	
		8.00	2.00	10.00	1.00	2.11	12.80	
3644	9.42	6.55	2.89	9.44	1.13	1.40	16.09	
3676	6.56	5.83	3.47	9.30	.83	1.68	16.62	
3779	8.84	5.68	3.89	9.57	1.25	1.77	18.78	
3854	10.59	5.10	4.02	9.12	.42	1.40	16.52	
	8.85	5.79	3.57	9.36	.91	1.56	17.00	
		5.33	2.67	8.00	1.00	1.65	15.90	
3646	8.87	7.42	2.65	10.07	1.02	1.85	18.51	
		6.00	3.00	9.00	1.00	1.65	15.96	
3844	8.85	7.40	2.92	10.32	1.04	1.55	18.27	
		6.67	3.33	10.00	1.00	1.65	18.03	
3493	12.83	12.59	3.41	16.00	2.03		15.66	
3592	12.28	12.46	3.18	15.64	2.19		15.32	
	12.55	12.53	3.29	15.82	2.11		15.49	
		12.00	2.00	14.00	1.00		13.80	
3494	8.89	7.34	2.81	10.15	1.01	2.19	20.02	
3594	10.39	8.05	2.83	10.88	1.09	1.93	20.16	
3855	13.45	6.56	2.69	9.25	1.25	1.84	18.31	
3856	12.22	6.90	2.76	9.66	.84	1.99	18.96	
	11.24	7.21	2.77	9.98	1.05	1.99	19.36	
		7.00	2.00	9.00	1.00	1.65	16.56	
3492	8.07						12.58	
						12.00	12.60	
3476	12.71	13.18	3.20	16.38	1.66		16.06	
3558	13.87	12.55	3.04	15.59	1.71		15.29	
3677	15.25	12.51	2.66	15.17	1.33		14.90	
3857	24.58	11.31	5.50	16.81	1.27		16.26	
3858	14.42	12.37	3.43	15.80	.73		15.46	
3859	15.05	11.51	3.92	15.43	2.06		15.04	
3860	17.50	11.88	3.23	15.11	1.37		14.79	
3861	20.57	11.96	2.80	14.76	1.79		14.48	
	16.74	12.16	3.47	15.63	1.49		15.29	
		12.00	2.00	14.00	1.00		13.80	
3603	12.16	6.61	3.13	9.74	3.40	1.86	18.05	
		7.50	2.00	9.50	1.00	1.65	17.11	

Laboratory Number.	Name of Brand and Manufacturer.	Where and From Whom Collected.
3489	Fruit and Vegetable	Lotterhos & Huber, Crystal Springs... Guarantee.....
3559	Gulf States Guano	The Potts-Jackson Co., Kosciusko..... Guarantee.....
3478	Lampton's R. B. Superpho'e	Lampton Mer. Co., Magnolia
3610	Lampton's R. B. Superpho'e	The Lampton Co., Columbia
		Average
		Guarantee.....
3584	L. & H.'s Special Fertilizer ..	Lotterhos & Huber, Crystal Springs... Guarantee.....
3504	Royal C Brand	A. C. Seavy & Son, Brookhaven
3505	Royal C Brand	J. A. Spann & Co., Pelahatchie
3560	Royal C Brand	Irving & Torbert, Wiers.....
3599	Royal C Brand	Lotterhos & Huber, Crystal Springs... ..
3651	Royal C Brand	Barney-Johns Co., Gloster
3678	Royal C Brand	J. P. Myer Mer. Co., Taylorsville.....
3679	Royal C Brand	T. W. Pylant & Bro., Purvis
3862	Royal C Brand	J. P. Myer, Ellisville.....
3863	Royal C Brand	The Gaddis Slay Co., Magee
3864	Royal C Brand	J. M. Stephenson, Morton
3865	Royal C Brand	H. A. Busick, Brandon
3866	Royal C Brand	Buckley Bros., Enterprise
3867	Royal C Brand	Story & Co., Forest.....
3868	Royal C Brand	L. Bridgeforth, Pickens.....
		Average
		Guarantee.....
3490	German Kainit.....	Lotterhos & Huber, Crystal Springs... ..
3869	German Kainit.....	Mullen & Owen, Durant
		Average
		Guarantee.....
	JEFFERSON GIN & OIL MILL, Harriston, Miss.	
3870	Fortuna	Jefferson Gin & Oil Mill, Harriston ... Guarantee
	LAUREL OIL & FERTI'R CO., Laurel, Miss.	
3506	Laurel H. G. Acid Phos.....	Kervin Bros., Collins.....
3572	Laurel H. G. Acid Phos.....	Donald Bros., Magee
3611	Laurel H. G. Acid Phos.....	Travis & Satcher, Heidelberg
3871	Laurel H. G. Acid Phos.....	O. W. Connor & Co., South Seminary .. Average
		Guarantee
3507	Plow Brand	Laurel Mer. Co., Laurel
3508	Plow Brand	Taylor Bros. & Nelson, Magee
3613	Plow Brand	J. P. Myer, Ellisville
3680	Plow Brand	J. P. Cox & Son, Braxton
3872	Plow Brand	W. T. Day, Mt. Olive
3873	Plow Brand	J. P. Cox & Son, Braxton
		Average
		Guarantee

Laboratory Number.	Moisture—Per Cent.	Phosphoric Acid.				Nitrogen—Per Cent.	Potash—Per Cent.	Relative Value Per Ton.
		Water Soluble Per Cent.	Citrate Soluble Per Cent.	Available Per Cent.	Insoluble Per Cent.			
3489	9.14	5.42	1.66	7.08	.75	3.02	4.27	\$ 21.71
		3.00	3.00	6.00	1.00	3.00	4.00	20.05
3559	10.81	8.60	2.63	11.23	.70	1.90	2.18	20.45
		7.50	2.00	9.50	1.00	1.65	1.80	17.41
3478	10.94	6.45	3.37	9.82	3.48	1.76	1.50	17.69
3610	10.02	7.43	3.91	11.34	2.90	1.72	1.72	19.39
	10.48	6.94	3.64	10.58	3.19	1.74	1.61	18.54
		7.50	2.00	9.50	1.00	1.65	1.50	17.11
3584	11.18	6.93	1.94	8.87	1.36	2.20	2.89	19.60
		6.50	2.00	8.50		2.00	3.00	18.65
3504	9.76	7.80	2.89	10.69	1.06	1.91	2.45	20.13
3505	10.98	8.15	2.01	10.16	1.00	1.84	1.90	18.86
3560	11.18	8.10	2.03	10.13	1.37	1.99	2.21	19.62
3599	12.23	7.96	2.05	10.01	1.70	1.94	1.82	18.93
3651	11.52	8.30	2.33	10.63	1.33	1.66	1.76	18.62
3678	14.72	6.61	2.38	8.99	1.18	1.76	2.06	17.43
3679	12.98	8.03	2.45	10.48	1.15	1.84	1.89	19.15
3862	14.83	8.00	2.04	10.04	1.79	1.72	2.03	18.46
3863	14.70	8.72	.92	9.64	1.18	1.76	1.93	18.16
3864	12.94	8.23	1.26	9.49	1.20	2.05	1.85	18.82
3865	13.35	7.94	2.73	10.67	1.10	1.62	1.71	18.44
3866	13.01	9.12	1.68	10.80	1.20	2.07	2.01	20.45
3867	13.92	7.92	1.44	9.36	.63	2.19	2.18	19.45
3868	14.25	8.83	.98	9.81	1.23	1.94	2.09	19.09
	12.88	8.12	1.94	10.06	1.22	1.88	1.99	18.97
		7.50	2.00	9.50	1.00	1.65	1.80	17.41
3490	4.07						12.72	12.72
3869	1.45						12.54	12.54
	2.76						12.63	12.63
							12.00	12.00
3870	10.40	7.61	1.85	9.46	.60	2.19	1.56	18.90
		6.75	2.50	9.25		1.98	1.25	17.62
3506	11.22	11.13	2.62	13.75	1.61			13.49
3572	11.23	11.46	2.03	13.49	2.03			13.29
3611	10.82	10.78	2.88	13.66	1.85			13.37
3871	13.37	11.53	2.79	14.32	.75			14.04
	11.66	11.23	2.58	13.81	1.56			13.55
		11.00	2.50	13.50	2.00			13.25
3507	11.27	6.05	3.50	9.55	1.16	2.01	1.67	18.36
3508	9.82	6.68	3.36	10.04	1.19	1.97	2.18	19.29
3613	9.03	6.82	3.12	9.94	.81	1.87	1.62	18.32
3680	9.21	7.00	2.86	9.86	.95	2.02	1.67	18.80
3872	14.59	9.06	1.02	10.08	1.22	1.81	1.71	18.58
3873	12.23	9.51	.90	10.41	1.00	1.74	1.52	18.54
	10.69	7.52	2.46	9.98	1.05	1.90	1.73	18.65
		7.00	2.00	9.00	1.00	1.80	1.50	17.05

Laboratory Number.	Name of Brand and Manufacturer.	Where and From Whom Collected.
3612	K. C. Mixture	Abney & Travis, Heidelberg
		Guarantee.....
3681	Laurel Special.....	R. E. Wilkinson, Poplarville
		Guarantee.....
	Sold by MARBACH & EAGAN. Crystal Springs, Miss.	
3585	Bat Guano	Lotterhos & Huber, Crystal Springs ..
		Guarantee.....
	MERIDIAN FERT. FACTORY, Meridian, Miss.	
3488	Meridian South'n Acid Phos.	W. B. Richardson, Newton.....
3561	Meridian South'n Acid Phos.	G. R. Edwards, McCool
3682	Meridian South'n Acid Phos.	J. K. Kirkland, Quitman.....
3683	Meridian South'n Acid Phos.	Mathews & Cotton, Iuka
3874	Meridian South'n Acid Phos.	S. H. Floyd Mer. Co., Shubuta.....
3875	Meridian South'n Acid Phos.	T. B. Gaddis, Morton
3876	Meridian South'n Acid Phos.	L. L. Anderson, Shuqualak
		Average.....
		Guarantee.....
3509	Meridian Blood & Bone	M. D. Graham & Co., Forest.....
3595	Meridian Blood & Bone	Hubbard-McGrath Co., Hazlehurst...
		Average.....
		Guarantee.....
3484	Meridian Home Mixture	John McGrath & Sons, Brookhaven...
3486	Meridian Home Mixture	W. H. Gallaspy, Hickory.....
3562	Meridian Home Mixture	Seward & Gaston, Ackerman.....
3600	Meridian Home Mixture	The T. J. Hubbard Co., Magee
3614	Meridian Home Mixture	Sumrall Mercantile Co., Sumrall
3684	Meridian Home Mixture	A. E. Dalrymple & Co., Amory
3685	Meridian Home Mixture	W. S. Johnson & Sons, Verona.....
3877	Meridian Home Mixture	L. B. Tillson, Mize.....
3878	Meridian Home Mixture	J. H. Rogers, Pachuta.....
3879	Meridian Home Mixture	Phillips, Hinds & Co., Booneville
3880	Meridian Home Mixture	Mathews & Cotton, Iuka
3881	Meridian Home Mixture	M. J. L. Hoyes' Son, Newton
3882	Meridian Home Mixture	J. H. Williams & Sons, Prentiss
3883	Meridian Home Mixture	McLeod & Co., Purvis
3884	Meridian Home Mixture	Hawkins-McRaney Co., Bassfield.....
3885	Meridian Home Mixture	W. L. Weems, Shubuta
		Average.....
		Guarantee.....
3510	Meridian Soluble Guano	M. D. Graham & Co., Forest
3591	Meridian Soluble Guano	Hubbard-McGrath Co., Hazlehurst...
		Average.....
		Guarantee.....
3487	Meridian Vegetable Grower..	W. H. Barron & Co., Crystal Springs-
		Guarantee.....
3511	Hattiesburg Am. Mix. with Bone.....	M. D. Graham & Co., Forest.....
		Guarantee

Laboratory Number.	Moisture—Per Cent.	Phosphoric Acid.				Nitrogen—Per Cent.	Potash—Per Cent.	Relative Value Per Ton.
		Water Soluble Per Cent.	Citrate Soluble Per Cent.	Available Per Cent.	Insoluble Per Cent.			
3612	8.76	7.61	3.38	10.99	1.29	1.52	1.61	\$ 18.30
		7.00	2.00	9.00	1.00	1.65	1.50	16.56
3681	9.87	5.59	1.92	7.51	1.18	3.11	4.59	22.77
		4.00	2.00	6.00	1.00	3.00	4.00	20.15
3585	25.12				8.32	4.66	.66	19.97
					5.00	4.25	.65	16.96
3488	16.48	12.10	2.86	14.96	.43			14.67
3561	16.28	11.60	3.07	14.67	.58			14.36
3682	17.10	10.29	4.18	14.47	.59			14.05
3683	16.00	11.01	3.31	14.32	.56			13.99
3874	17.86	11.26	3.43	14.69	.60			14.35
3875	16.23	11.71	3.85	15.56	.33			15.18
3876	13.86	10.09	4.20	14.29	.46			13.87
	16.26	11.15	3.56	14.71	.51			14.35
		12.00	2.00	14.00	1.00			13.80
3509	14.23	8.53	2.05	10.58	2.75	1.97	1.94	19.78
3595	14.41	7.70	2.53	10.23	2.89	1.94	2.02	19.33
	14.32	8.11	2.29	10.40	2.82	1.96	1.98	19.56
		8.00	1.00	9.00	1.00	1.65	1.50	16.66
3484	11.59	7.92	2.98	10.90	1.30	1.92	2.07	20.00
3486	12.28	7.07	4.61	11.68	.63	2.01	1.70	20.62
3562	12.83	7.16	3.27	10.43	2.12	1.98	2.35	19.93
3600	13.47	7.78	1.59	9.37	.56	2.34	2.63	20.38
3614	9.39	7.77	3.08	10.85	.95	2.08	1.45	19.84
3684	13.43	9.15	2.07	11.22	.83	1.81	2.37	20.39
3685	14.30	7.64	1.96	9.60	2.32	1.89	1.74	18.24
3877	11.02	7.88	3.25	11.13	.88	1.95	1.55	19.81
3878	15.53	8.20	2.80	11.00	.86	1.60	1.80	18.82
3879	12.42	8.58	3.06	11.64	.97	1.87	1.90	20.48
3880	19.88	8.01	2.89	10.90	1.27	1.87	2.51	20.29
3881	13.43	8.35	2.58	10.93	.75	1.84	1.96	19.71
3882	11.76	7.70	3.60	11.30	.74	2.00	1.68	20.25
3883	7.38	7.70	2.88	10.58	1.41	1.80	1.73	18.93
3884	11.32	8.17	2.57	10.74	1.75	1.85	1.65	19.22
3885	14.00	8.39	1.65	10.04	1.56	1.87	2.40	19.36
	12.75	7.97	2.80	10.77	1.18	1.92	1.97	19.77
		8.00	1.00	9.00	1.00	1.65	1.50	16.66
3510	13.36	8.43	2.36	10.79	2.03	2.17	1.70	20.39
3591	11.66	7.23	3.36	10.59	2.56	1.99	1.85	19.63
	12.51	7.83	2.86	10.69	2.29	2.08	1.78	20.01
		8.00	1.00	9.00	1.00	1.65	1.50	16.66
3487	11.67	6.63	1.89	8.52	1.15	2.35	7.62	24.44
		5.00	1.00	6.00	1.00	2.50	6.00	20.63
3511	13.06	8.14	2.39	10.53	1.96	2.12	1.34	19.57
		8.00	2.00	10.00	1.00	1.65	1.00	17.16

Laboratory Number.	Name of Brand and Manufacturer.	Where and From Whom Collected.
3654	Meridian German Kainit	W. L. Weems, Shubuta
3886	Meridian German Kainit	M. D. Graham & Co., Forest
		Average
		Guarantee
	NEW ORLEANS ACID AND FERTILIZER CO., New Orleans, La.	
3587	Black Diamond Acid Phos.....	S. Cohn & Son, Magnolia
3650	Black Diamond Acid Phos.....	Robinson Mercantile Co., Centreville..
3887	Black Diamond Acid Phos....	E. E. Bonner, Sandersville
3888	Black Diamond Acid Phos.....	W. B. Richardson, Newton
3889	Black Diamond Acid Phos....	K. Greene, Shuqualak
3890	Black Diamond Acid Phos....	W. M. McGough, Morton
3891	Black Diamond Acid Phos....	Lann & Carter Hardw'e Co., Aberdeen
		Average
		Guarantee
3615	Crescent City Acid Phos.....	W. A. Morrison, Heidelberg
3666	Crescent City Acid Phos.....	H. A. James, Heidelberg
		Average
		Guarantee
3686	Blood, Bone, and Beef	J. L. Moyse & Bro., Summit
		Guarantee
3480	Blood, Bone, and Potash.....	McComb City Mer. Co., McComb City
3593	Blood, Bone, and Potash	Magnolia Oil M. and M'fg Co., Mag'a
3616	Blood, Bone, and Potash	Patterson, Tyrone & Co., Prentiss.....
3892	Blood, Bone, and Potash.....	E. E. Bonner, Sandersville.....
3893	Blood, Bone, and Potash	J. M. Graham, South Seminary
3894	Blood, Bone, and Potash.....	Robinson Mer. Co., Centreville
3895	Blood, Bone, and Potash.....	Louis Cohn & Bros, Brookhaven.....
		Average
		Guarantee
3687	Dissolved Bone and Potash....	T. L. Cotton, Summit
		Guarantee
3483	Economizer	Louis Cohn & Bros., Brookhaven
		Guarantee
3512	Gold Dust.....	W. M. McGough, Morton
3617	Gold Dust.....	W. A. Morrison, Heidelberg.....
3667	Gold Dust	H. A. James, Heidelberg
		Average
		Guarantee
3479	Goldsmith's Imp. Mixture.....	McComb City Mer. Co., McComb City
3513	Goldsmith's Imp. Mixture.....	W. E. Payne, Collins
3573	Goldsmith's Imp. Mixture....	Wm. Atkinson & McDonald, Wesson
3596	Goldsmith's Imp. Mixture.....	Wm. Atkinson-Bacot Co., Osyka
3688	Goldsmith's Imp. Mixture.....	McHenry Mer. Co., McHenry
3689	Goldsmith's Imp. Mixture.....	W. B. Richardson, Newton
3896	Goldsmith's Imp. Mixture....	Howie Bros., Morton
3897	Goldsmith's Imp. Mixture.....	W. A. Morrison, Heidelberg
3898	Goldsmith's Imp. Mixture.....	J. M. Graham, South Seminary
3899	Goldsmith's Imp. Mixture.....	W. M. Hyde & Co., Poplarville
3900	Goldsmith's Imp. Mixture.....	A. J. McKay, Braxton

Laboratory Number.	Moisture—Per Cent.	Phosphoric Acid.				Nitrogen—Per Cent.	Potash—Per Cent.	Relative Value Per Ton.
		Water Soluble Per Cent.	Citrate Soluble Per Cent.	Available Per Cent.	Insoluble Per Cent.			
3654	4.66						12.14	12.14
3886	6.47						12.04	12.04
	5.57						12.09	12.09
							12.00	12.00
3587	12.04	9.93	3.31	13.24	1.52			12.91
3650	12.35	9.61	3.22	12.83	2.47			12.51
3887	13.55	6.12	6.64	12.76	2.20			12.10
3888	13.93	8.66	5.26	13.92	.95			13.39
3889	13.99	7.69	5.72	13.41	1.15			12.84
3890	14.26	8.93	4.48	13.41	.47			12.96
3891	16.02	12.93	5.61	18.54	1.52			17.98
	13.73	9.13	4.89	14.02	1.47			13.53
		10.00	2.00	12.00	2.00			11.80
3615	12.76	7.75	3.77	11.52	3.70			11.14
3666	12.90	9.01	3.36	12.37	3.22			12.04
	12.83	8.38	3.57	11.95	3.46			11.59
		10.00	2.00	12.00	2.00			11.80
3686	13.31	7.51	2.09	9.60	2.17	1.64	.93	16.61
		7.00	2.00	9.00	2.00	1.65	1.00	16.06
3480	10.70	8.99	1.79	10.78	.61	2.05	1.40	19.74
3593	7.92	5.95	3.62	9.57	3.21	2.46	1.39	19.55
3616	11.24	7.89	2.88	10.77	1.88	1.57	1.35	18.01
3892	11.47	7.38	3.19	10.57	3.11	1.43	1.60	17.56
3893	12.38	7.87	2.43	10.30	1.97	1.67	1.23	17.75
3894	13.36	7.41	2.06	9.47	2.02	1.73	1.76	17.59
3895	12.20	7.24	2.76	10.00	1.83	1.76	1.71	18.15
	11.34	7.53	2.68	10.21	2.09	1.81	1.49	18.34
		7.00	2.00	9.00	2.00	1.65	1.00	16.06
3687	12.45	6.67	4.22	10.89	3.43		2.31	13.87
		8.00	2.00	10.00	2.00		2.00	12.80
3483	9.84	8.35	1.87	10.22	1.23	2.11	2.78	20.69
		8.00	2.00	10.00	2.00	1.65	2.00	18.16
3512	15.13	5.73	4.07	9.80	1.78	1.73	2.04	18.04
3617	8.87	6.63	2.74	9.37	3.42	1.69	1.24	16.77
3667	10.98	6.64	3.05	9.69	2.87	1.55	1.17	16.56
	11.66	6.33	3.29	9.62	2.69	1.66	1.48	17.13
		7.00	2.00	9.00	2.00	1.65	1.00	16.06
3479	10.76	8.14	2.14	10.28	.99	2.01	1.98	19.61
3513	10.74	7.55	2.64	10.19	.97	2.25	1.87	20.13
3573	14.58	5.31	3.38	8.69	1.77	1.75	2.25	17.16
3596	10.43	8.33	2.10	10.43	.90	1.71	1.62	18.44
3688	10.65	8.99	2.36	11.35	2.30	1.44	1.10	18.03
3689	14.15	7.47	1.85	9.32	1.02	1.90	1.33	17.58
3896	12.70	6.20	3.28	9.48	3.70	1.42	1.83	16.55
3897	12.15	5.96	3.82	9.78	2.41	1.71	1.51	17.45
3898	12.58	7.07	2.42	9.49	1.33	1.84	1.37	17.55
3899	33.85	7.87	1.98	9.85	.51	1.86	1.50	18.19
3900	26.61	5.60	3.49	9.09	3.75	1.10	1.80	15.03

Laboratory Number.	Name of Brand and Manufacturer.	Where and From Whom Collected.
3901	Goldsmith's Imp. Mixture.....	Florence Mer. Co., Florence Average Guarantee.....
3690	Vegetable Grower	S. Cohn & Son, Magnolia Guarantee.....
3634	German Kainit	W. C. Wilkinson, Crystal Springs
3902	German Kainit	B. McClanahan & Co., Pelahatchie ... Average..... Guarantee.....
	PLANTERS' FERT. AND M'F'G Co., New Orleans, La.	
3618	Vegetable Fertilizer, "Stubbs' Formula"	Davis Bros., Ocean Springs..... Guarantee.....
	SOUTHERN OIL & FERT. CO., Meridian, Miss.	
3581	Southern S. G. Acid Phos.	Southern Oil & Fert. Co., Meridian...
3656	Southern S. G. Acid Phos.	Southern Oil & Fert. Co., Meridian...
3714	Southern S. G. Acid Phos.	Southern Oil & Fert. Co., Meridian... Average..... Guarantee.....
3655	Southern 20th Century H. G. Acid Phosphate	Southern Oil & Fert. Co., Meridian...
3777	Southern 20th Century H. G. Acid Phosphate	Southern Oil & Fert. Co., Meridian...
3778	Southern 20th Century H. G. Acid Phosphate	Southern Oil & Fert. Co., Meridian... Average Guarantee.....
3582	Southern St'd Cotton Grower	Southern Oil & Fert. Co., Meridian...
3715	Southern St'd Cotton Grower	Southern Oil & Fert. Co., Meridian... Average..... Guarantee.....
3657	Southern Superior.....	Southern Oil & Fert. Co., Meridian...
3843	Southern Superior.....	L. L. Price, Toomsba..... Average..... Guarantee.....
	STANDARD GUANO AND CHEMICAL M'F'G CO., New Orleans, La.	
3514	Stern's Acid Phosphate.....	The W. C. Ellis Co., Magee.....
3563	Stern's Acid Phosphate.....	Grunewald & Loewenberg, McCool ...
3619	Stern's Acid Phosphate.....	Burkett-Burrow Co., Columbia.....
3903	Stern's Acid Phosphate.....	Hyman Mer. Co., Summit
3904	Stern's Acid Phosphate.....	M. W. Buckley & Son, Enterprise
3905	Stern's Acid Phosphate.....	Gayden & Co., Brandon
3906	Stern's Acid Phosphate.....	W. A. Turner & Co., Forest
		Average Guarantee

Laboratory Number.	Moisture—Per Cent.	Phosphoric Acid.				Nitrogen—Per Cent.	Potash—Per Cent.	Relative Value Per Ton.
		Water Soluble Per Cent.	Citrate Soluble Per Cent.	Available Per Cent.	Insoluble Per Cent.			
3901	12.25	8.21	1.66	9.87	2.48	1.70	1.52	\$ 17.74
	15.12	7.73	2.59	9.82	1.84	1.72	1.64	17.79
		7.00	2.00	9.00	2.00	1.65	1.00	16.06
3690	11.13	7.13	1.57	8.70	2.33	2.44	2.21	19.55
		6.00	1.25	7.25	2.00	2.80	2.60	19.55
3634	6.13						11.84	11.84
3902	3.53						12.10	12.10
	4.83						11.97	11.97
							12.00	12.00
3618	7.83	5.80	4.31	10.11	1.84	2.59	3.87	22.98
		5.00	2.00	7.00	1.50	2.47	3.50	19.03
3581	12.88	7.59	4.39	11.98	2.66			11.54
3656	11.19	7.82	3.95	11.77	1.77			11.38
3714	13.17	10.05	2.54	12.59	1.20			12.34
	12.41	8.49	3.62	12.11	1.88			11.75
		9.00	3.00	12.00	2.00			11.70
3655	12.04	9.08	4.54	13.62	2.23			13.17
3777	11.18	8.48	5.89	14.37	2.55			13.78
3778	8.88	8.48	6.84	15.32	2.60			14.64
	10.70	8.68	5.76	14.44	2.46			13.86
		9.00	5.00	14.00	2.00			13.50
3582	11.03	6.22	2.81	9.03	1.39	1.97	1.30	17.36
3715	10.05	6.72	3.28	10.00	1.71	1.64	1.26	17.26
	10.54	6.46	3.05	9.51	1.55	1.81	1.28	17.31
		6.00	3.00	9.00	1.00	1.65	1.00	15.96
3657	9.56	5.30	3.18	8.48	1.28	1.88	2.21	17.33
3843	6.89	5.30	2.65	7.95	1.33	2.73	2.04	19.39
	8.23	5.30	2.91	8.21	1.31	2.31	2.12	18.36
		5.00	3.00	8.00	1.00	1.65	2.00	15.86
3514	11.54	10.46	5.14	15.60	2.44			15.09
3563	13.92	12.03	3.62	15.63	2.26			15.29
3619	12.42	11.51	5.33	16.84	1.16			16.31
3903	11.00	10.52	6.26	16.78	.96			16.15
3904	13.90	10.16	6.09	16.25	.99			15.64
3905	14.10	10.40	5.88	16.28	.86			15.69
3906	11.92	11.23	5.80	17.03	.83			16.45
	12.69	10.90	5.45	16.35	1.36			15.80
		10.00	2.00	12.00	1.00			11.80

Laboratory Number.	Name of Brand and Manufacturer.	Where and From Whom Collected.
3588	Blood, Bone, and Meat	Hyman Mer. Co., Summit
3620	Blood, Bone, and Meat	The Lampton Co., Columbia
		Average
		Guarantee
3564	Champion Farmers' Choice...	G. Lowenberg & Co., Kosciusko.....
3621	Champion Farmers' Choice...	Van Cleave Bros., Ocean Springs.....
		Average
		Guarantee
3516	Mississippi Home Guano	W. A. Turner & Co., Forest
3622	Mississippi Home Guano	Hudson & Co., Sumrall
3692	Mississippi Home Guano	Dr. C. C. Ewing, Aberdeen
		Average
		Guarantee
3691	Huggins' Special H. G. Fert.	M. J. L. Hoyes' Son, Newton.....
3772	Huggins' Special H. G. Fert.	J. R. Huggins, Waynesboro
3814	Huggins' Special H. G. Fert.	Wetherbee-Huggins Co., Waynesboro
3815	Huggins' Special H. G. Fert.	M. W. Buckley & Son, Enterprise
		Average
		Guarantee
3693	Standard Am. Soluble Guano	Dunn Bros., Summit.....
		Guarantee
3481	Stern's Am. R. B. Superphos.	C. Atkinson's Sons Co., Summit
3515	Stern's Am. R. B. Superphos.	Johnson-Woodward Co., Mt. Olive...
3574	Stern's Am. R. B. Superphos.	The T. B. Bonner Co., Laurel
3597	Stern's Am. R. B. Superphos.	Hyman Mer. Co., Summit.....
3623	Stern's Am. R. B. Superphos.	J. H. Williams & Sons, Prentiss.....
3694	Stern's Am. R. B. Superphos.	Gilmore & May Co., Amory.....
3695	Stern's Am. R. B. Superphos.	N. R. Hosey & Co., Soso
3907	Stern's Am. R. B. Superphos.	J. A. Moody, Poplarville
3908	Stern's Am. R. B. Superphos.	T. J. Hubbard & Co., Magee
3909	Stern's Am. R. B. Superphos.	Zollie Daniels, Brookhaven
3910	Stern's Am. R. B. Superphos.	W. A. Turner & Co., Forest.....
3911	Stern's Am. R. B. Superphos.	Hudson & Co., Sumrall
		Average
		Guarantee
3696	Vegetable Fertilizer	Fernwood Lumber Co., Fernwood.....
		Guarantee
3477	Ground Bone.....	Lampton Mer. Co., Magnolia.....
3912	Ground Bone.....	Barnes, Ruffin & Co., Columbia
		Average
		Guarantee
3590	German Kainit	C. Atkinson's Sons Co., Summit.....
3913	German Kainit	Dunagin & Whitaker, Laurel.....
		Average
		Guarantee
	SWIFT FERTILIZER WORKS. Atlanta, Ga.	
3583	Swift's Bone Meal	Wm. Atkinson & McDonald, Wesson..
		Guarantee
3624	Swift's S. G. Field and Farm	Abney & Travis, Heidelberg
		Guarantee

Laboratory Number.	Moisture—Per Cent.	Phosphoric Acid.				Nitrogen—Per Cent.	Potash—Per Cent.	Relative Value Per Ton.
		Water Soluble Per Cent.	Citrate Soluble Per Cent.	Available Per Cent.	Insoluble Per Cent.			
3588	13.86	6.23	3.73	9.96	1.22	1.92	2.32	19.14
3620	12.40	6.63	3.25	9.88	1.38	1.64	2.12	17.99
	13.13	6.43	3.49	9.92	1.30	1.78	2.22	18.57
		4.00	4.25	8.25	1.00	1.70	2.00	16.18
3564	11.15	7.66	2.16	9.82	1.80	1.73	1.75	17.96
3621	7.92	6.82	3.29	10.11	1.37	1.65	1.70	17.86
	9.53	7.24	2.73	9.97	1.58	1.69	1.73	17.91
		7.00	2.00	9.00	1.00	1.65	1.00	16.06
3516	10.96	7.69	3.25	10.94	1.32	2.06	2.35	20.75
3622	8.38	6.79	3.70	10.49	1.45	1.89	2.31	19.62
3692	11.76	6.90	3.41	10.31	.95	1.65	2.68	19.04
	10.36	7.13	3.45	10.58	1.24	1.87	2.45	19.82
		7.00	2.00	9.00	1.00	1.65	1.00	16.06
3691	13.17	7.38	3.09	10.47	1.39	2.74	3.98	24.09
3772	10.55	6.60	3.44	10.04	2.46	2.38	3.27	21.71
3814	12.05	6.35	3.31	9.66	2.35	2.54	2.65	21.20
3815	13.50	6.95	3.09	10.04	1.27	2.93	4.01	24.27
	12.32	6.82	3.23	10.05	1.87	2.65	3.48	22.82
		5.00	3.00	8.00	1.00	3.29	4.00	23.19
3693	14.23	5.64	4.48	10.12	3.48	1.82	1.73	18.33
		4.00	4.00	8.00	1.00	1.65	1.50	15.26
3481	12.22	6.13	3.78	9.91	.61	1.86	1.78	18.35
3515	12.81	6.42	3.05	9.47	1.23	2.21	1.80	19.09
3574	12.98	6.93	2.98	9.91	1.91	1.68	1.80	17.86
3597	13.44	6.73	3.11	9.84	2.19	1.53	1.70	17.19
3623	12.27	5.99	2.93	8.92	3.59	1.71	1.57	16.65
3694	14.26	6.17	4.46	10.63	2.05	1.43	1.82	17.72
3695	15.08	6.14	4.11	10.25	2.43	1.60	1.62	17.68
3907	9.82	6.23	3.88	10.11	2.30	1.26	1.34	16.17
3908	14.40	5.55	4.45	10.00	2.15	1.52	1.57	17.07
3909	15.00	6.01	3.80	9.81	2.14	1.57	1.72	17.23
3910	14.88	5.88	4.09	9.97	2.07	1.56	1.58	17.21
3911	13.50	5.85	4.06	9.91	1.73	1.54	1.63	17.14
	13.39	6.17	3.72	9.89	2.03	1.62	1.66	17.44
		4.00	5.00	9.00	1.00	1.65	1.50	16.26
3696	13.18	5.31	2.70	8.01	1.34	3.15	5.06	23.84
		4.00	2.00	6.00	1.00	3.00	5.00	21.15
3477	7.79				18.17	3.34		19.94
3912	11.03				13.14	2.57		14.92
	9.41				15.65	2.96		17.45
					18.50	2.50		17.38
3590	4.38						12.82	12.82
3913	5.56						12.54	12.54
	4.97						12.68	12.68
							12.00	12.00
3583	6.71				25.26	2.35		20.27
					25.00	2.47		20.53
3624	8.61	6.04	3.97	10.01	2.09		3.26	13.87
		7.00	3.00	10.00	1.00		2.00	12.70

Laboratory Number.	Name of Brand and Manufacturer.	Where and From Whom Collected.
3698	Swift's S. G. Cotton Plant.....	Dunn Bros., Summit..... Guarantee.....
3699	Swift's Farmers' Home	Dunn Bros., Summit..... Guarantee.....
3700	Swift's S. G. Golden Harvest.....	J. H. Wells, Hickory..... Guarantee.....
3697	Swift's S. G. Red Steer	W. M. Hyde & Co., Poplarville..... Guarantee.....
3701	TENNESSEE CHEMICAL CO., Nashville, Tenn. Ox H. G. Dissolved Bone	J. D. Anderson & Co., Mize..... Guarantee.....
3771	Ox Acid Phosphate	M. L. Hand, Lawrence..... Guarantee.....
3643	Ox Cotton Guano.....	Myers & Mehaffy, Steenston
3770	Ox Cotton Guano.....	M. L. Hand, Lawrence..... Average..... Guarantee.. ..
3708	Ox Potash Mixture.....	N. M. Collins, Meridian..... Guarantee.....
3702	TENNESSEE VALLEY FERT. Co., Florence, Ala., Dissolved Bone	J. D. Wilson, Iuka..... Guarantee
3648	Florence Fertilizer.....	W. L. Bourland, Amory
3649	King Cotton Grower	J. J. Rogers & Son, Tupelo..... Guarantee.....
3517	Sold by THREEFOOT BROS. & Co., Meridian, Miss. Threefoot's H. G. E. Acid Phos.	Threefoot Bros. & Co., Meridian
3703	Prolific Acid Phos.....	Threefoot Bros. & Co., Meridian
3518	Threefoot's Imp. Mixture	Threefoot Bros. & Co., Meridian
3625	Threefoot's Imp. Mixture	Johnson-Hand Co., Ellisville
3914	TUSCALOOSA COTTON OIL Co., Tuscaloosa, Ala. Tuscaloosa Acid Phos.....	W. W. Loftus, Steenston..... Guarantee.....
3915	Rust-Proof Guano.....	W. W. Loftus, Steenston
3916	Tuscaloosa Guano	W. W. Loftus, Steenston

Laboratory Number.	Moisture—Per Cent.	Phosphoric Acid.				Nitrogen—Per Cent.	Potash—Per Cent.	Relative Value Per Ton.	
		Water Soluble Per Cent.	Citrate Soluble Per Cent.	Available Per Cent.	Insoluble Per Cent.				
3698	8.65	6.00 6.00	3.72 3.00	9.72 9.00	1.01 1.00	1.57 1.65	2.04 1.00	\$ 17.46 15.96	
3699	11.21	6.95 7.00	4.73 3.00	11.68 10.00	.96 1.00		4.20 4.00	16.58 13.70	
3700	9.59	4.99 5.00	5.40 3.00	10.39 8.00	1.52 1.00	1.60 1.65	2.10 2.00	18.19 15.86	
3697	6.57	3.90 5.00	3.81 3.00	7.71 8.00	2.12 1.00	1.91 1.65	2.77 2.00	17.08 15.86	
3701	9.90	5.37 10.00	8.93 4.00	14.30 14.00	3.67 1.00			13.41 13.60	
3771	10.36	5.21 8.00	5.56 4.00	10.77 12.00	5.23 1.00			10.21 11.60	
3643	9.14	6.80	3.28	10.08	1.93	1.63	1.25	17.31	
3770	9.88	5.01	3.03	8.04	2.02	2.30	1.94	17.96	
		9.51	3.15	9.06	1.97	1.97	1.59	17.64	
		6.00	4.00	10.00	1.00	1.65	1.00	16.96	
3708	9.50	2.17 6.00	7.43 4.00	9.60 10.00	2.47 1.00		1.66 2.00	11.48 12.60	
								13.76 11.80	
3702	10.00	7.83 10.00	6.59 2.00	14.42 12.00	3.11 1.00				
3648	12.00	7.28 7.00	3.21 3.00	10.49 10.00	4.04 1.00	1.29 1.64	2.68 2.00	18.09 18.03	
3649	11.55	7.48 6.00	3.07 3.00	10.55 9.00	3.65 1.00	1.37 1.64	1.10 1.00	16.85 15.93	
3517	13.26	11.73 13.00	3.95 2.00	15.68 15.00	1.04 2.00			15.29 14.80	
3703	10.00	10.17 11.00	5.27 2.00	15.44 13.00	.69 2.00			14.91 12.80	
3518	13.08	8.25	2.19	10.44	2.01	1.98	2.11	19.81	
3625	12.16	9.25	2.30	11.55	.91	1.65	1.95	19.79	
		12.62	8.75	2.25	11.00	1.46	1.82	2.03	19.82
		8.00	2.00	10.00	1.00	1.65	2.00	18.16	
3914	14.43	7.61 12.00	6.47 2.00	14.08 14.00	.81 2.00			13.43 13.80	
3915	8.37	4.25 3.00	1.76 2.00	6.01 5.00	.40 2.00	1.83 1.65	5.79 5.00	18.18 15.66	
3916	6.85	6.68 6.00	3.09 2.00	9.77 8.00	.59 2.00	1.83 1.65	2.38 2.00	18.77 15.96	

Laboratory Number.	Name of Brand and Manufacturer.	Where and From Whom Collected.
3917	Warrior Guano	W. W. Loftus, Steenston
	VIRGINIA-CAROLINA CHEMICAL CO., Memphis, Tenn.	Guarantee.....
3565	Royal Acid Phosphate.....	J. Niles Boyd, Kosciusko
3918	Royal Acid Phosphate.....	Smith Bros., Learned.....
3919	Royal Acid Phosphate.....	Biloxi Milling Co., Biloxi.....
		Average.....
		Guarantee.....
3519	I X L Acid Phosphate	Winner & Meyer, Meridian.....
3626	I X L Acid Phosphate	J. P. Myer, Ellisville.....
3920	I X L Acid Phosphate	Barnett-Davis Supply Co., Booneville.....
3921	I X L Acid Phosphate	L. N. Knobles, State Line
		Average.....
		Guarantee.....
3566	Scott's H. G. Acid Phos.	Seward & Fancher, McCool.....
3922	Scott's H. G. Acid Phos.	Rew & McClinton, Newton.....
3923	Scott's H. G. Acid Phos.	S. M. Dean, Iuka
		Average.....
		Guarantee.....
3521	Royal Blood, Bone, and Pot- ash	Donald Bros., Magee
		Guarantee
3705	Royal Animal Bone Guano....	W. J. Hubbard & Son, Shuqualak....
		Guarantee
3704	Royal Cotton Boll Guano	Donnell & Burnham, D'Lo
3924	Royal Cotton Boll Guano	D. V. Edwards, Summerland.....
		Average.....
		Guarantee.....
3653	Royal H. G. Guano.....	M. D. Graham & Co., Forest
		Guarantee
3567	Scott's Gossypium Phospho....	Seward & Fancher, McCool.....
3706	Scott's Gossypium Phospho....	F. M. Clark & Son, Verona.....
3925	Scott's Gossypium Phospho....	D. F. Vaughn, Magnolia.....
3926	Scott's Gossypium Phospho....	Mullins & Green, Amory.....
3927	Scott's Gossypium Phospho....	Donald Bros., Magee
3928	Scott's Gossypium Phospho....	B. B. Davis, Buckatunna.....
3929	Scott's Gossypium Phospho....	J. L. Buffin & Co., Vossburg.....
3930	Scott's Gossypium Phospho....	Grenada Mercantile Co., Grenada
		Average.....
		Guarantee.....
3568	Scott's Potasso Phospho.....	J. Niles Boyd, Kosciusko
		Guarantee.....
3707	Scott's State Standard Guano	D. V. Edwards, Summerland.....
		Guarantee.....
3652	Mobile Double Eagle	J. P. Wetherbee, Waynesboro
3785	Mobile Double Eagle	T. J. Cole & Co., Ripley
		Average.....
		Guarantee

Laboratory Number.	Moisture—Per Cent.	Phosphoric Acid.				Nitrogen—Per Cent.	Potash—Per Cent.	Relative Value Per Ton.
		Water Soluble Per Cent.	Citrate Soluble Per Cent.	Available Per Cent.	Insoluble Per Cent.			
3917	9.45	8.03	3.81	11.84	1.18	.93	1.20	\$ 16.87
		8.00	2.00	10.00	2.00	.83	1.00	15.50
3565	11.48	12.28	2.35	14.63	.45			14.40
3918	10.85	8.61	3.95	12.56	.82			12.17
3919	13.11	10.32	4.49	14.81	.96			14.36
		11.81	10.40	3.60	14.00	.74		
		12.00	2.00	14.00	2.00			13.80
3519	12.20	12.04	1.77	13.81	1.97			13.63
3626	12.60	11.77	3.19	14.96	1.15			14.64
3920	12.17	10.39	4.24	14.63	.95			14.21
3921	11.68	10.45	3.58	14.03	1.82			13.67
		12.16	11.16	3.20	14.36	1.47		
		12.00	2.00	14.00	2.00			13.80
3566	12.34	11.48	3.68	15.16	.72			14.79
3922	15.03	7.47	4.69	12.16	2.07			11.69
3923	15.50	9.03	4.65	13.68	.67			13.22
		14.29	9.33	4.34	13.67	1.15		
		12.00	2.00	14.00	2.00			13.80
3521	10.31	8.30	3.07	11.37	2.72	1.00	1.00	16.45
		7.00	2.00	9.00	2.00	1.65	1.00	16.06
3705	9.43	6.53	2.48	9.01	1.71	1.94	1.53	17.50
		7.00	2.00	9.00	2.00	1.65	1.00	16.06
3704	8.07	6.36	3.12	9.48	1.36	1.75	1.97	17.78
3924	10.15	5.53	2.54	8.07	2.37	1.71	2.28	16.46
		9.11	5.95	2.83	8.78	1.86	1.73	2.13
		6.00	2.00	8.00	2.00	1.65	2.00	15.96
3653	12.53	6.75	3.94	10.69	2.15	1.58	1.93	18.43
		8.00	2.00	10.00	2.00	1.65	1.50	17.66
3567	9.87	9.47	3.00	12.47	.72	1.76	1.66	20.80
3706	10.69	7.96	2.67	10.63	.63	1.84	1.69	19.10
3925	13.75	7.98	2.56	10.54	.77	1.63	1.61	18.25
3926	10.15	6.20	3.52	9.72	.74	1.68	1.75	17.55
3927	11.95	6.62	3.69	10.31	1.40	1.69	1.67	18.13
3928	12.88	7.29	4.82	12.11	.49	1.06	1.31	17.59
3929	12.45	7.96	3.42	11.38	.24	1.73	1.77	19.57
3930	11.40	7.22	4.27	11.49	.88	1.56	2.06	19.34
		11.64	7.58	3.37	10.95	.71	1.62	1.69
		8.00	2.00	10.00	2.00	1.65	1.50	17.66
3568	10.20	10.41	2.47	12.88	.63		2.03	15.95
		9.00	3.00	12.00	2.00		2.00	14.90
3707	9.45	5.65	2.85	8.50	.44	1.89	2.20	17.41
		6.00	2.00	8.00	2.00	1.65	2.00	15.96
3652	11.76	8.84	2.31	11.15	.82	1.59	1.58	18.78
3785	9.51	6.98	3.11	10.09	.87	1.76	1.99	18.50
		10.63	7.91	2.71	10.62	.84	1.8	1.78
		8.00	2.00	10.00	2.00	1.65	1.50	17.66

TABLE I—Analyses of Commercial Fertilizers

Laboratory Number.	Name of Brand and Manufacturer.	Where and From Whom Collected.
3520	Mobile Standard Guano.....	Winner & Meyer, Meridian.....
3775	Mobile Standard Guano.....	J. J. Prince, Shuqualak
3776	Mobile Standard Guano.....	W. J. Hubbard & Son, Shuqualak
3931	Mobile Standard Guano.....	Dr. James McGovern, Ackerman
3932	Mobile Standard Guano.....	J. J. Prince & Co., Golson
		Average.....
		Guarantee.....
3522	Genuine German Kainit.....	Winner & Meyer, Meridian.....
3933	Genuine German Kainit.....	Refuge Cotton Oil Co., Columbus
		Average.....
		Guarantee.....
	WESSON COTTON OIL AND FERTILIZER CO., Wesson, Miss.	
3491	Mutual Friend Mixture.....	Wesson Cotton Oil & Fert. Co., Wesson
3586	Mutual Friend Mixture.....	J. R. Brown, Crystal Springs.....
		Average
		Guarantee.....

Laboratory Number.	Moisture—Per Cent.	Phosphoric Acid.				Nitrogen—Per Cent.	Potash—Per Cent.	Relative Value Per Ton.
		Water Soluble Per Cent.	Citrate Soluble Per Cent.	Available Per Cent.	Insoluble Per Cent.			
3520	10.14	6.74	1.83	8.57	1.32	1.44	2.06	15.98
3775	11.19	6.62	4.20	10.82	1.40	1.11	2.04	17.13
3776	11.70	6.75	2.83	9.58	1.48	1.26	3.06	17.41
3931	10.41	3.52	4.88	8.40	2.65	1.48	1.95	15.51
3932	11.45	5.40	3.83	9.23	4.71	1.57	2.01	16.88
	10.98	5.71	3.47	9.18	2.42	1.37	2.22	16.43
		6.00	2.00	8.00	2.00	1.65	2.00	15.96
3522	5.38						12.62	12.62
3933	5.15						12.16	12.16
	5.26						12.39	12.39
							12.00	12.00
3491	6.84	7.09	3.91	11.00	1.45	2.14	2.17	20.83
3586	6.72	7.47	3.32	10.79	1.34	2.11	2.07	20.47
	6.78	7.28	3.62	10.90	1.39	2.12	2.12	20.65
		7.00	2.50	9.50		1.80	1.60	17.65

TABLE II—Analyses of Commercial Fertilizers
Samples Found Two Per Cent. or More Below

Laboratory Number.	Name of Brand and Manufacturer.	Where and From Whom Collected.
	A. D. ADAIR & McCARTY BROS., Atlanta, Ga.	
3637	Farish Furman Formula	W. L. Bourland, Amory
		Guarantee
	BIRMINGHAM FERT. CO., Birmingham, Ala.	
3639	B'ham H. G. Acid Phos.....	Gilmore & May Co., Amory.....
		Guarantee.....
	CAPITAL FERT. & M'F'G CO., Jackson, Miss.	
3498	H. G. Acid Phosphate	Moore Bros., Morton
		Guarantee.....
3632	Nonpareil	Holmes Bros., McComb City
3852	Nonpareil	Turner & Co., Hattiesburg
		Guarantee
3492	German Kainit	Capital Fert. and M'f'g Co., Jackson..
3602	German Kainit	J. W. Ray, Canton.....
		Guarantee
	FEDERAL CHEMICAL CO., Louisville, Ky.	
3609	Daybreak H. G. Acid Phos..	Abney & Travis, Heidelberg
3647	Daybreak H. G. Acid Phos..	E. M. & W. R. Cain, Caledonia
		Guarantee.....
	NEW ORLEANS ACID AND FERTILIZER CO., New Orleans, La.	
3615	Crescent City Acid Phos.....	W. A. Morrison, Heidelberg.....
		Guarantee.....
3900	Goldsmith's Imp. Mixture.....	A. J. McKay, Braxton
		Guarantee.....
	SOUTHERN OIL & FERT. CO., Meridian, Miss.	
3581	Southern S. G. Acid Phos....	Southern Oil & Fert. Co., Meridian...
3656	Southern S. G. Acid Phos....	Southern Oil & Fert. Co., Meridian ...
		Guarantee.....
3655	Southern 20th Century H. G. Acid Phosphate	Southern Oil & Fert. Co., Meridian...
		Guarantee
	STANDARD GUANO & CHEM- ICAL M'F'G CO., New Orleans, La.	
3772	Huggins' Special H. G. Fert.	J. R. Huggins, Waynesboro
3814	Huggins' Special H. G. Fert.	Wetherbee-Huggins Co., Waynesboro
		Guarantee.....
3912	Ground Bone	Barnes-Ruffin & Co., Columbia.....
		Guarantee.....
	TENNESSEE CHEMICAL CO., Nashville, Tenn.	
3771	Ox Acid Phosphate	M. L. Hand, Lawrence.....
		Guarantee.....

Laboratory Number.	Moisture—Per Cent.	Phosphoric Acid.				Nitrogen—Per Cent.	Potash—Per Cent.	Relative Value Per Ton.
		Water Soluble Per Cent.	Citrate Soluble Per Cent.	Available Per Cent.	Insoluble Per Cent.			
3637	10.12	6.78 7.00	2.24 3.00	9.02 10.00	1.56 2.00		2.34 2.00	12.04 12.70
3639	10.55	9.24 12.00	4.59 2.00	13.83 14.00	1.08 2.00			13.37 13.80
3498	9.00	8.11 10.00	3.37 2.00	11.48 12.00	1.41 1.00			11.14 11.80
3632	8.95	5.24	2.30	7.54	1.07	1.71	3.45	17.07
3852	11.03	6.03 7.50	3.21 2.00	9.24 9.50	.61 1.00	1.45 1.65	2.80 2.25	17.35 17.86
3497	.54						10.65	10.65
3602	3.14						11.54 12.00	11.54 12.00
3609	11.36	9.29	4.21	13.50	.87			13.08
3647	12.54	8.92 10.00	4.46 4.00	13.38 14.00	.86 1.00			12.93 13.60
3615	12.76	7.75 10.00	3.77 2.00	11.52 12.00	3.70 2.00			11.14 11.80
3900	26.61	5.60 7.00	3.49 2.00	9.09 9.00	3.75 2.00	1.10 1.65	1.80 1.00	15.03 16.06
3581	12.88	7.59	4.39	11.98	2.66			11.54
3656	11.19	7.82 9.00	3.95 3.00	11.77 12.00	1.77 2.00			11.38 11.70
3655	12.04	9.08 9.00	4.54 5.00	13.62 14.00	2.23 2.00			13.17 13.50
3772	10.55	6.60	3.44	10.04	2.46	2.38	3.27	21.71
3814	12.05	6.35 5.00	3.31 3.00	9.66 8.00	2.35 1.00	2.54 3.29	2.65 4.00	21.20 23.19
3912	11.03				13.14 18.50	2.57 2.50		14.92 17.38
3771	10.36	5.21 8.00	5.56 4.00	10.77 12.00	5.23 1.00			10.21 11.60

TABLE II—Analyses of Commercial Fertilizers
Samples Found Two Per Cent. or More Below

Laboratory Number.	Name of Brand and Manufacturer.	Where and From Whom Collected.
3708	Ox Potash Mixture .. TUSCALOOSA COTTON OIL Co.. Tuscaloosa, Ala.	N. M. Collins, Meridian Guarantee.....
3914	Tuscaloosa Acid Phos..... VIRGINIA-CAROLINA CHEM- ICAL Co.. Memphis, Tenn.	W. W. Loftus, Steenston..... Guarantee.....
3918	Royal Acid Phos.....	Smith Bros., Learned..... Guarantee
3922	Scott's H. G. Acid Phos.....	Rew & McClinton, Newton
3923	Scott's H. G. Acid Phos.	S. M. Dean, Iuka Guarantee
3931	Mobile Standard Guano	Dr. James McGovern, Ackerman Guarantee

the Guaranteed Relative Commercial Value.

Laboratory Number,	Moisture—Per Cent.	Phosphoric Acid.				Nitrogen—Per Cent.	Potash—Per Cent.	Relative Value Per Ton.
		Water Soluble Per Cent.	Citrate Soluble Per Cent.	Available Per Cent.	Insoluble Per Cent.			
3708	9.50	2.17	7.43	9.60	2.47		1.66	11.48
		6.00	4.00	10.00	1.00			
3914	14.43	7.61	6.47	14.08	.81			13.43
		12.00	2.00	14.00	2.00			
3918	10.85	8.61	3.95	12.56	.82			12.17
		12.00	2.00	14.00	2.00			
3922	15.03	7.47	4.69	12.16	2.07			11.69
3923	15.50	9.03	4.65	13.68	.67			13.22
		12.00	2.00	14.00	2.00			
3931	10.41	3.52	4.88	8.40	2.65	1.48	1.95	15.51
		6.00	2.00	8.00	2.00	1.65	2.00	15.96