



Bulletin No. 38.

July, 1892.

Agricultural Experiment Station

—OF THE—

AGRICULTURAL AND MECHANICAL COLLEGE,
AUBURN, : : ALABAMA.

∞ FERTILIZERS. ∞

N. T. LUPTON, STATE CHEMIST.

The Bulletins of this Station will be sent free to any citizen of the State on application to the Agricultural Experiment Station, Auburn, Ala.

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FERTILIZERS.

N. T. LUPTON, State Chemist.

THEIR USE AND VALUATION.

The importance of commercial, or manufactured fertilizers, is recognized by all intelligent farmers, and their use is well nigh universal.

The number of tons sold in Alabama during the past five years, according to the record kept in the office of the Commisssioner of Agriculture, is as follows :

Season of 1887-88.....	62,575 tons.
" 1888-89.....	71,605 "
" 1889-90.....	99,818 "
" 1890-91.....	115,735 "
" 1891-92.....	83,323 "

The decrease of about 28 per cent. in sales during the present season, as shown in the above statement, is not attributable to a lack of appreciation of the value of fertilizers, so much as to the depreciation in the price of cotton and reduction in the acreage placed under cultivation. In Georgia, over three hundred thousand tons were sold last year, while during the season now closing, the sales have not much exceeded two hundred thousand tons. A similar decrease has prevailed generally in the cotton-growing States.

The market value of manufactured fertilizers has undergone very little, if any, change since last year, and in determining values this year the same figures are used. The law requires the Commissioner to publish annually, an estimate of the commercial value of all fertilizers offered for sale within the State, basing his calculations on the lowest per cent. of each constituent guaranteed by the manufacturer.

The following values have been used in making these calculations:

Water-Soluble Phosphoric Acid.....	$7\frac{1}{2}$	cents per pound.
Citrate. " " "	$7\frac{1}{2}$	" "
Nitrogen.....	$19\frac{1}{2}$	" "
Potash.....	5	" "

As stated in a former bulletin, while these figures are only approximate, they will be found useful to the farmer by showing him the relative value of different goods and enabling him to make selections of brands best suited to his wants.

The calculations are easily made, as follows: Multiply the percentage of Water-soluble and Citrate soluble Phosphoric Acid by \$1.50; the per-cent-age of Nitrogen by \$3.90 ; the Potash by \$1.00, and add these products together. The sum will be the commercial value of one ton of the goods. Take, as an example, a fertilizer which shows the following composition :

Water soluble Phosphoric Acid.....	7	per cent.
Citrate. " " "	2	" "
Nitrogen.....	2	" "
Potash.....	$1\frac{1}{2}$	" "

Then, \$1.50 multiplied by 9 = \$13.50

3.90 " 2 =	7.80
1.00 " $1\frac{1}{2}$ =	1.50

Total value.....\$22.80

The valuations adopted by the Commissioner of Georgia are much less than the above, but represent not what the farmer has to pay for his purchases delivered at his nearest depot, but in the language of the Commissioner, "the wholesale cash value in those cities where the goods enter the State or where they are manufactured. Any one buying at a distance from Savannah should add the freight to that point, to obtain its local wholesale price." These goods are as cheap in Alabama as in Georgia.

The schedules of valuations adopted by other States do not differ materially from the valuations in Alabama. A difference is made in values in some States depending on the source from which the important constituents are derived.

Bulletin No. 29, recently issued by the Vermont Agricultural Experiment Station, gives the following trade values for 1892:

Phosphoric Acid, Soluble in Water.....	7½ cts. per lb.
" " Ammonium Citrate....	7 " "
" " Found in Ground fish, bone, etc..	7 " "
Nitrogen, in Ammonia Salts.....	17½ " "
" Nitrates.....	15 " "
" Fish, Blood and Meat.....	16 " "
" Cotton Seed.....	15 " "
Potash as High Grade Sulphate.....	5½ " "
" Kainite.....	4½ " "
" Muriate.....	4½ " "

"The above trade values," says the bulletin, "are the average figures at which in the six months preceding March 1st, the respective ingredients could be bought at retail for cash in the larger markets, *in the raw materials*, unmixed."

NATURAL PHOSPHATES.

The rapidly increasing use of commercial fertilizers, especially of Phosphates, caused serious apprehensions, a few years ago, that the supply of raw material would become exhausted or entirely inadequate to meet the demand. Fortunately for Southern agriculture, new and extensive phosphate deposits have been discovered in Florida in which the supply seems to be practically inexhaustible. A recent work on "Phosphates of America," by Dr. Francis Wyatt, gives an interesting and reliable account of these deposits.

Speaking of several counties in Southwestern Florida, he says, "this section of Florida is virtually underlaid with a nodular phosphate stratum of a thickness varying from a few inches to thirty feet, and covered by an overburden that may be fairly averaged at about eight feet." A large number of companies have been formed to work these deposits, but their development is yet in its infancy. A visit was made to some of these localities during the past winter and samples collected near Lacoochee, where the Southern Peninsular and Orange Belt Railroads intersect, and from a deposit on the Withlacoochee river some thirty miles from the town of Lacoochee. These were analyzed with the following results:

*Analyses of Natural Phosphates from Florida, recently Made in
the Alabama State Laboratory.*

FROM LACOCHEE.	Moisture.	Insoluble Matter	Phosphoric Acid	Iron and Aluminum Oxides	Equivalent to Bone Phosphate
Pit No. 1 (hard).....	0.25	3.65	37.45	1.95	81.64
Pit No. 2 (hard).....	1.45	8.99	34.57	4.01	75.36
Pit No. 3 (hard).....	1.27	2.64	38.02	2.62	82.91
 FROM WITHLACOCHEE.					
Pit No. 1 (soft).....	2.11	38.67	22.14	4.37	48.26
Pit No. 2 (soft)	2.27	13.32	31.89	5.56	69.52
Pit No. 3 (soft)	3.45	8.39	33.86	9.17	73.81
Pit No. 4 (soft)	2.27	35.77	22.03	4.36	48.02

The Pits mentioned, were sunk to determine the presence and character of phosphates and samples were taken from the sides and bottom of these openings for analysis. No mining, except to a limited extent at Lacoochee, had been done on the property visited. The overburden, or superincumbent mass of sand and earth, is from one to ten or twelve feet thick and the phosphate deposit from a few feet to twenty or even thirty.

The importance of these deposits is so great that speculation has run wild and many companies have been formed with capital stock reaching up into the millions.

The following table from Dr. Wyatt's work on phosphates, above mentioned, gives the average composition of a large number of samples from Florida and is of much interest :

Dr. Wyatt's Table of Analyses of Florida Phosphates.

	Phosphate of Lime.	Oxides of Iron and Alumina.	Silica & Silicates	Carbonic Acid.
Bowlders (carefully selected, 120 samples)	80.49	2.25	4.20	2.19
Bowlders and debris (237 samples)	74.90	4.18	9.25	1.90
Soft white phosphate (148 samples)	65.15	9.20	5.47	4.27
Pebble from Peace river (84 samples).	61.75	2.90	14.20	3.60
Pebble from drift-beds, Polk Co. (92 samples)	67.25	3.00	10.40	1.70

These analyses show *high grade* phosphates. Some, especially foreign, manufacturers object to buying phosphates which contain more than three per cent. of Iron and Alumina, and hence a large quantity of this material has not found a market. A few manufacturers, aware of the agricultural value of South Carolina floats, have established mills in Florida for pulverizing these aluminous deposits which are generally soft, and selling them to farmers for use without being converted into acid phosphate. They are very cheap and their use has proved valuable. Experiments are now in progress on the Alabama Experiment Station, under control of the Chemist, to determine by analysis and experiment the agricultural value of these soft Florida phosphates when used alone, with cotton seed, and with cotton seed meal, and the results will be reported in due time.

If decomposing organic matter, as is believed, renders insoluble phosphates available as plant food to any considerable extent, the question of cheap phosphates will be solved and the farmer enabled to purchase fertilizers at a much less cost than at present.

STATE LABORATORY,
AGRICULTURAL AND MECHANICAL COLLEGE,
AUBURN, ALA., July 1st, 1892.

HON. H. D. LANE,

Commissioner of Agriculture,

Montgomery, Ala.

Dear Sir: Enclosed please find tabulated results of Analyses of Commercial Fertilizers, materials used in their manufacture, Natural Phosphates, etc., made in the State Laboratory from April 1st, 1891, the date of my last published report, to July 1st, 1892.

A few of the materials reported were sent directly to this office and may not appear on your books. In such cases, where the results are of general interest, they are included in the list for publication.

Very respectfully,

N. T. LUPTON,
State Chemist.

Analyses Reported by N. T. Lupton, State Chemist, from April 1, 1891, to October 1, 1892.

ACID PHOSPHATES WITH NITROGEN AND POTASH.

Station No.	NAME OF FERTILIZER.	BY WHOM SENT.	Phosphoric Acid.			Commercial Value.			
			Water Soluble	Citrate Sol'ble	Acid Soluble.				
1963	Potent Pacific Guano.....	Southern Phosphate Co., Atlanta, Ga..	9.77	0.92	0.69	1.68	1.50	24.08	
1965	Potato Fertilizer.....	J. C. Coleman, Citronville, Ala.....	4.41	1.81	2.40	3.04	9.32	30.50	
1966	Trucker's Delight.....	J. W. Clarke, LaFayette, Ala.	6.09	0.24	1.56	4.16	3.77	28.70	
1968	Waverly Fertilizer.....	W. & P. Hoffman, Waverly, Ala	4.24	3.15	2.30	4.84	1.28	29.85	
1971	Soluble Sea Island Guano.....	Howle Bros., Edwardsville, Ala.....	8.10	2.08	2.70	1.89	1.75	24.39	
1972	Meryman's A. D. Bone.....	" " "	9.25	3.79	1.30	1.82	2.52	29.17	
1973	Kennesaw H. G. Amd. Fertilizer.....	" " "	5.76	3.69	4.45	1.61	1.26	21.10	
1974	Kennesaw Blood and Bone	" " "	7.54	4.31	1.99	1.00	1.10	22.77	
1973(b)	Ammoniated Dissolved Bone.....	J. C. Johnston, Hanceville, Ala.....	9.29	2.90	1.90	0.56	1.17	21.63	
1974(b)	Rock City Guano.....	" " "	8.33	5.26	0.21	1.40	1.33	27.17	
1975(b)	Complete Cotton Fertilizer.....	J. C. Lee, Midland City,	"	6.62	2.14	3.16	1.61	2.23	21.6-
1976	Aurora Ammoniated Phospho.....	W. J. N. Taylor, Warrior.	"	7.39	1.81	0.72	1.89	3.20	24.31

1978	Home Mixture.....	J. D. Thomas, Columbus, Ga	6.70	0.71	2.38	1.68	1.92	16.69
1979	Fertilizer.....	J. S. Wooton, Cox's Mill, Ala.....	9.00	4.95	0.23	1.50	2.16	28.93
1980	Gossypium Phospho.....	L. L. Rebman, Courtland, Ala.....	7.25	1.68	1.74	3.78	1.74	29.87
1984	Alliance Dissolved Bone Guano.....	W. M. Calhoun, Dothan, Ala.....	7.31	3.64	1.47	1.96	2.61	26.67
1985	Blood and Bone.....	" " "	7.53	3.22	2.47	1.40	1.93	23.50
1987	W. & A. No. 520.....	J. C. Cheney, Montgomery, Ala.....	8.14	4.09	0.26	0.28	1.12	20.55
1988	Furman's H. G. Guano	W. J. Beverly, Rosewood, Ala.....	6.41	2.57	3.05	2.03	1.14	22.52
1984(b)	Guano.....	N. D. Meharg, Ohatchie, Ala.....	2.86	4.47	3.60	0.84	9.65	23.91
1989	W. O. C. Blood Guano.....	W. J. Beverly, Rosewood, Ala.....	6.47	3.49	0.27	2.24	2.09	25.76
1990	Aurora Ammoniated Phospho	" " "	7.13	0.77	1.22	1.61	2.39	20.51
1991	Buffalo Bone Guano.....	W. N. Johns, Jemison, Ala.....	6.98	6.56	0.26	1.96	1.97	29.92
1992	Fertilizer.....	W. S. Hilburn, Hightogy, Ala	7.14	2.55	0.17	1.26	1.93	21.37
1995	Guano.....	J. A. Burgess, Edwardsville, Ala	7.33	2.16	2.24	1.61	1.62	21.12
1996	Guano.....	" " "	6.45	1.19	2.80	1.75	1.48	19.76
1998	Coweta High Grade.....	E. R. Wood, Bluff Springs, Ala	8.14	2.44	0.74	1.82	2.90	26.80
1999	Blood and Bone.....	C. O. Beasley, Cohassett, Ala	7.23	2.87	3.24	1.82	2.41	23.40
2000(a)	Georgia State Grange Fertilizer.	J. C. Killebrew, Newton, Ala	6.85	1.95	3.37	1.98	1.73	22.65
2001(a)	Fertilizer No. 3.....	" " "	7.48	2.60	0.26	2.19	2.10	25.76
2003(b)	Buffalo Bone Guano.....	R. M. Williams, Arab, Ala.....	6.50	3.51	3.80	1.68	1.28	22.84

Analyses Reported by N. T. Lupton, State Chemist, from April 1, 1891, to October 1, 1892.

ACID PHOSPHATES WITH NITROGEN AND POTASH.

Station No.	NAME OF FERTILIZER.	BY WHOM SENT.	Phosphoric Acid.			Nitrogen.	Potash.	Commercial Value.
			Water Sol'ble.	Citrate Sol'ble	Acid Soluble.			
2004	Fertilizer.....	C. H. Crane, Monterey, Ala.....	1.01	0.16	0.19	...	0.42	2.17
2011	Fertilizer.....	M. F. Brooks, Brewton, Ala.....	....	....	1.45	0.98	0.31	4.13
2032	Fertilizer.....	G. A. Thornton, Fayette Court House, Ala	8.62	1.06	0.82	2.52	0.89	25.23
2035	Fertilizer A.....	J. M. Granberry, Brewton, Ala.....	1.11	1.14	1.68	1.82	0.63	11.09
2036	Fertilizer.....	" " "	....	0.75	1.24	1.82	0.50	8.71
2038	Guano.....	W. S. King, Savannah, Ga.....	2.23	8.25	1.38	2.17	1.51	25.69

Analyses Reported by N. T. Lupton, State Chemist, from April 1, 1891, to October 1, 1892.

ACID PHOSPHATES.

Station No.	NAME OF FERTILIZER.	BY WHOM SENT.	Phosphoric Acid.			Commercial Value.
			Water Soluble	Citrate Sol'ble	Acid Soluble	
1964	Acid Phosphate	C. A. Williamson, Tuskegee, Ala	7.68	2.03	0.46	14.56
1967	Acid Phosphate	Montgomery Fertilizer Co., Montgomery, Ala.	13.63	1.05	5.24	22.02
1969	English Acid Phosphate	McQueen Smith, Prattville, Ala	10.21	4.52	2.22	22.12
1970	XX. Phosphate	" " "	11.44	4.38	1.32	23.73
1975	Kennesaw High Grade Acid Phosphate	Howle Bros., Edwardsville, Ala	8.08	3.61	4.47	17.53
1983	High Grade English Acid Phosphate	G. B. Langford, Dillards, Ala	10.90	3.05	2.88	20.92
1986	Kennesaw High Grade Acid Phosphate	J. W. Beverly, Rosewood, Ala	8.81	6.40	1.51	22.90
2003(a)	Acid Phosphate	Montgomery Fertilizer Co., Montgomery, Ala.	11.21	1.95	5.54	19.74
2000(b)	Acid Phosphate	C. O. Beasley, Cohassett, Ala	11.30	4.25	2.95	23.32
2007	Acid Phosphate	Imperial Fertilizer Co., Charleston, S. C.	12.23	1.50	1.93	20.59
2012	Acid Phosphate	W. P. Barrow, Tuskegee, Ala	6.83	5.78	3.49	18.91
2131	Acid Phosphate	G. A. Thornton, Fayette Court House, Ala ...	11.53	1.34	0.86	19.30

Analyses Reported by N. T. Lupton, State Chemist, from April 1, 1891, to October 1, 1892.

MISCELLANEOUS FERTILIZERS.

Sta. No.	NAME OF FERTILIZER.	BY WHOM SENT.	PHOSPHORIC ACID.			Nitro ^g	Pofash.	Equiv'lent to Bone Phosph'e
			Water Soluble.	Citrate Soluble	Acid Soluble.			
1977	Natural Phosphate	P. H. Mell, Auburn, Ala . . . . .	.....	.....	.....	40.44		
1981	Boulder Phos. Rock	Troy Fertilizer Co., Troy, Ala . . . . .	.....	.....	.....	26.95		
1982	Black Creek pebble phos. rock.	" " " " "	.....	.....	.....	22.63		
1993	Swan Island Guano	A. Adams, Mobile, Ala . . . . .	.....	.....	2.71	16.58		
1994	Swan Island Phosphate Rock.	" " "	.....	.....	.....	25.03		
1997	Swan Island Guano . . . . .	" " "	.....	.....	2.92	15.12		
2002 (a)	" " " . . . . .	" " "	.....	.....	2.21	17.16		
2001 (b)	Natural Phosphate	F. D. Tinsley, Selma, Ala . . . . .	.....	.....	.....	4.39		
2002 (b)	" " . . . . .	" " "	.....	.....	.....	1.42		
2005	Phosphate Rock	H. S. Doster, Prattville, Ala . . . . .	.....	.....	.....	0.99		
2008	" "	B. S. Burton, Valdosta, Ga . . . . .	.....	.....	.....	38.30		
2009	" " . . . . .	" " " " "	.....	.....	.....	31.39		
2010	" " . . . . .	" " " " "	.....	.....	.....	36.80		
2013	Cerealite	J. S. Newman, Auburn, Ala . . . . .	.....	.....	.....	7.77	1.10	

2014	Cerealite	J. S. Newman, Auburn, Ala				8 33	6.58
2015 (a)	"	" " "				8.54	3.30
2015 (b)	12 samples "Nat. Phosphates"	John S. Collins, Geneva, Ala			00-2.15		
2028	Swan Island Guano	A. Adams, Mobile, Ala		4.72	12 21		
2029	Tankage.....	W. C. Tuite, Mobile Ala			9.15	6.44	
2033	Swan Island Guano	A. Adams, Mobile, Ala.....		3.37	13.73		
2039	Phosphate Rock	Troy Fertilizer Co., Troy, Ala.....			21.13		
2040	Cotton Seed Meal	Southern Cotton Oil Co., Montgomery, Ala.		2.70	7.00	1.47	

Analyses Reported by N. T. Lupton, State Chemist, from October 1, 1891, to July 1, 1892.

ACID PHOSPHATES CONTAINING NITROGEN AND POTASH.

Station No.	NAME OF FERTILIZER.	BY WHOM SENT.	Phosphoric Acid.			Nitrogen.	Potash.	Commercial Value.
			Water Soluble	Citrate Soluble.	Acid Soluble.			
2041	Amd. Raw Bone Super-phosphate...	E. A. Thompson, Clayhatchee, Ala.	5.89	2.12	1.32	1.89	2.20	\$21.58
2043	Planters' Soluble Guano	Adair Bros. & Co., Atlanta, Ga.....	7.54	2.74	2.20	2.73	2.59	28.65
2044	Buffalo Bone Guano	Adair Bros. & Co., Atlanta, Ga	7.45	3.53	1.86	2.80	3.11	30.50
2045	Furman High Grade Guano	Adair Bros. & Co., Atlanta, Ga	7.46	2.95	1.47	2.80	3.22	29.75
2046	Furman Soluble Bone.....	Adair Bros. & Co., Atlanta, Ga.....	7.16	3.44	2.18	1.47	1.59	23.22
2047	Adair's Ammoniated Dissolved Bone.	Adair Bros. & Co., Atlanta, Ga	7.27	3.09	1.90	2.52	1.67	22.03
2057	Mobile Standard Guano	Mobile Phos. & Chem. Co., Mobile, Ala. ...	8.14	1.87	5.81	1.82	1.19	23.29
2058	Eclipse Soluble Guano	Mobile Phos. & Chem. Co., Mobile, Ala...	8.14	1.89	5.73	1.82	1.11	23.24
2062	Rome C. & C. Guano	Rome Chemical Co., Rome Ga.....	10.95	0.36	2.14	2.03	1.75	26.62
2063	Rome Dis. Bone with Potash & Am.	Rome Chemical Co., Rome, Ga....	10.06	0.88	3.05	1.54	1.79	22.80
2067	Ammoniated Guano	Rasin Fertilizer Co., Baltimore, Md.	6.41	2.33	3.62	2.24	1.65	23.49
2069	Soluble Specific Guano	Rasin Fertilizer Co., Baltimore, Md	7.35	2.94	1.82	2.31	1.89	26.39
2071	Fertilizer.....	W. D. Rowell, Loachapoka, Ala	8.62	2.22	4.30	2.03	1.22	23.39

2073	Orange Fruit Tree Fertilizer.....	Stand. Guano & Chem. Mfg Co. New Orleans	0.38	3.10	14.66	3.22	8.49	26	26
2076	Stern's Amd. Raw Bone Super-phos	" " " " " " "	7.85	0.75	1.40	1.89	2.56	22	72
2077	Champion Farmers' Choice	" " " " " " "	7.25	2.18	0.82	2.10	2.59	24	92
2079	Standard Amd. Soluble Guano....	" " " " " " "	8.33	1.48	1.28	1.79	1.97	23	50
2080	Vegetable Super-phosphate	" " " " " " "	7.58	0.26	0.74	3.50	5.34	26	83
2083	Goulding's Bone Compond.....	C. R. McReary, Opelika, Ala	5.64	2.33	1.70	1.96	1.15	20	74
2084	Reliance Ammoniated Super-phos.	Walton Whann & Co., Charleston, S. C	6.20	2.82	4.49	1.96	1.33	22	50
2085	Plow Brand Raw Bone Super-phos.	Walton Whann & Co., Charleston, S. C	6.27	5.00	2.80	2.31	2.26	28	14
2087	Etiwan Ammoniated Dis. Bone....	Etiwan Phos. Co., Charleston, S. C	6.16	4.77	4.01	1.47	1.78	23	90
2088	Ammoniated Dissolved Bone.....	Walton Whann & Co., Charleston, S. C	5.79	5.68	3.64	1.54	2.05	25	25
2090	Etiwan Guano	Etiwan Phosphate Co., Charleston, S. C ...	7.27	3.31	2.76	2.03	1.47	25	52
2093	Etiwan Amd. Super-phosphate....	" " " " "	5.35	5.12	3.91	2.10	1.11	26	00
2095	Imperial Fertilizer	Imperial Fertilizer Co., Charleston, S. C ...	9.12	0.64	2.16	2.10	1.06	28	89
2096	Imperial Soluble Guano	Imperial Fertilizer Co., Charleston, S. C	6.96	2.16	2.89	1.68	1.42	21	65
2099	Vandiver's Ammoniated Dis. Bone.	W. F. Vandiver & Co., Montgomery, Ala....	10.27	2.02	4.99	1.40	1.28	25	31
2101	Mobile Standard Guano.....	Mobile Phos. & Chem. Co., Mobile, Ala	11.21	0.49	2.09	2.38	1.44	28	13
2102	Georgia State Grange Fertilizer....	Baldwin Fertilizer Co., Port Royal, S. C	7.05	2.93	2.76	1.89	2.11	24	45
2103	Baldwin's Ammoniated Dis. Bone..	Baldwin Fertilizer Co., Port Royal, S. C....	8.04	3.02	2.47	2.03	1.80	26	30
2105	Ammoniated Dissolved Bone.....	Montgomery Fert. Co., Montgomery, Ala....	8.48	4.01	4.32	1.68	1.22	26	50

Analyses Reported by N. T. Lupton, State Chemist, from October 1, 1891, to July 1, 1892.

ACID PHOSPHATES CONTAINING NITROGEN AND POTASH—Continued.

Station No.	NAME OF FERTILIZER.	BY WHOM SENT.	Phosphoric Acid.			Nitrogen.	Potash.	Commercial Value.
			Water Soluble.	Citrate Soluble.	Acid Soluble.			
2109	Royal Soluble Guano.....	Royal Fertilizer Co., Charleston, S. C.....	8.75	1.52	2.99	1.82	1.26	23.75
2110	Royal Ammoniated Fertilizer.....	" " " "	7.91	3.04	1.47	2.80	1.68	29.02
2112	Troy Perfect Guano	Troy Fertilizer Co., Troy, Ala.....	8.04	0.89	0.74	2.66	1.83	25.59
2119	Eutaw Fertilizer.....	Ashepoo Phosphate Co., Charleston, S. C..	7.73	2.47	2.64	2.24	1.64	26.67
2120	Ashepoo Fertilizer	" " " "	7.83	1.78	2.77	2.17	1.93	24.30
2124	Ammoniated Dissolved Bone.....	N. W. Fertilizer Co., Chicago, Ill.....	4.97	4.44	3.72	1.82	1.48	22.68
2125	Pelican Cotton & Corn Grower	N. W. Fertilizer Co., Chicago, Ill.....	4.55	5.24	4.11	1.82	1.37	23.14
2126	Old Dominion Guano.....	Southern Phosphate Co., Atlanta, Ga.....	8.08	1.23	0.55	2.10	2.44	24.59
2127	Potent Pacific Guano.....	Southern Phosphate Co., Atlanta, Ga.....	8.04	1.54	0.61	2.00	1.61	23.78
2128	Southern Ammoniated Dis. Bone....	Southern Phosphate Co., Atlanta Ga.....	8.39	1.00	0.76	2.03	1.53	25.52
2129	Etowah Super-phosphate.....	Southern Phosphate Co., Atlanta, Ga.....	9.38	2.45	1.68	1.10	0.91	22.94
2130	Ammoniated Guano	Raisin Fertilizer Co., Baltimore, Md	7.56	2.46	2.05	2.24	2.03	25.79
2131	Soluble Specific Guano.....	Raisin Fertilizer Co., Baltimore, Md	8.33	2.27	2.45	3.01	2.73	30.36

2136	Guano.....	Eufaula Oil & Fertilizer Co., Eufaula, Ala.	6.31	2.67	2.13	2.27	2.13	24.45
2148	Soluble Guano	Imperial Fertilizer Co., Charleston, S. C ..	7.92	2.26	2.49	1.96	1.05	24.11
2151	Guano	J. A. Brown & Co., Kellyton, Ala	0.55	11.35	0.96	2.10	1.52	27.56
2150	Fertilizer.....	Columbus Oil Mill, Columbus, Miss.....	7.79	2.81	1.38	2.48	2.78	28.20
2154	Atlantic Fertilizer.....	Atlantic Phosphate Co., Charleston, S. C..	9.10	0.71	1.72	2.17	2.11	25.28
2156	Lister's Amd. Dissolved Bone.....	Lister's Ag. & Chem. Works, Newark, N. J	6.89	1.82	3.84	2.24	1.38	23.17
2157	"Etowah"	Southern Phosphate Co., Atlanta, Ga.....	9.10	2.86	1.74	1.68	1.68	26.18
2160	Soluble Guano	Ashley Phosphate Co., Charleston, S. C...	5.06	4.44	2.13	2.38	1.46	24.99
2161	Cotton and Corn Compound.....	Ashley Phosphate Co., Charleston, S. C...	5.24	3.70	2.09	2.10	1.68	23.28
2166	Our Cotton King Guano.....	Montgomery Fert. Co., Montgomery, Ala..	6.23	2.94	3.84	1.82	1.67	27.01
2167	Capital City Standard Fertilizer.....	Montgomery Fert. Co., Montgomery, Ala..	9.30	2.56	4.47	2.10	2.42	28.40
2168	Sea Gull Soluble Guano.....	Montgomery Fert. Co., Montgomery, Ala..	7.85	3.47	3.82	2.48	2.44	29.09
2169	Montgomery Blood and Bone	Montgomery Fert. Co., Montgomery, Ala..	8.23	2.43	5.06	2.03	2.42	26.32
2170	Monogram Cotton Special.....	Larentz & Rittler, Baltimore, Md	6.43	2.51	3.32	0.98	1.45	18.68
2171 (a)	L. & R. Ammoniated Guano	Larentz & Rittler, Baltimore, Md	7.86	2.57	1.28	1.75	1.42	23.88
2172 (b)	Farmers' Friend Fertilizer	Reed Fertilizer Co., Charleston, S. C.....	7.20	1.57	1.61	2.10	1.27	22.61
2176	Sub-treasury Guano.....	Reed Fertilizer Co., Charleston, S. C.....	6.41	2.07	1.86	1.61	1.05	21.04
2177	Matchless Cotton Grower.....	Reed Fertilizer Co., Charleston, S. C.....	6.31	3.38	1.33	1.65	1.14	22.10
2183	Reese's Pacific Guano.....	C. A. Doolittle, Augusta, Ga.....	2.28	8.63	1.09	1.96	1.75	25.75

Analyses Reported by N. T. Lupton, State Chemist, from October 1, 1891, to July 1, 1892.

ACID PHOSPHATES CONTAINING NITROGEN AND POTASH—Continued.

Station No.	NAME OF FERTILIZER.	BY WHOM SENT.	Phosphoric Acid.			Potash.	Nitrogen.	Commercial Value.
			Water Soluble	Citrate Soluble.	Acid Soluble.			
2184	Alliance Soluble Guano	Montgomery Fert. Co., Montgomery, Ala..	9.44	0.95	4.01	1.92	2.47	\$25.53
2185	Dowlings Alkaline Guano	Montgomery Fert. Co., Montgomery, Ala..	8.85	2.29	3.91	1.96	2.36	26.71
2186	East Alabama Fertilizer.....	East Alabama Fertilizer Co., Clayton, Ala.	6.89	2.90	2.38	2.45	2.20	26.43
2190	Alabama Fertilizer.....	Alabama Fert. Co., Montgomery, Ala.....	8.48	2.33	1.70	2.43	2.03	27.71
2191	Kennesaw Amd. Dissolved Bone....	Kennesaw Guano Co., Atlanta, Ga...	8.50	3.86	1.97	2.59	2.45	31.09
2192	Kennesaw High Grade Amd. Guano.	Kennesaw Guano Co., Atlanta, Ga	6.97	4.66	1.63	3.22	2.25	32.24
2194	Kennesaw Blood & Bone Compound.	Kennesaw Guano Co., Atlanta, Ga	7.08	2.93	3.60	2.03	1.61	24.53
2195	Fertilizer.....	South Ala. Oil & Fert. Co., Ozark, Ala.....	10.63	1.50	0.94	1.54	1.13	25.32
2196	Golden Rod Guano No. 2.....	South Ala. Oil & Fert. Co., Ozark, Ala....	9.29	1.10	0.88	2.31	2.35	26.93
2197	" " " 3.....	South Ala. Oil & Fert. Co., Ozark, Ala....	8.92	1.35	0.94	2.38	2.61	27.29
2199	Elephant Guano	Albany Fert., Farm & Imp. Co., Albany, Ga	7.28	3.24	0.96	2.59	2.11	27.99
2200	Standard Guano	Albany Fert., Farm & Imp. Co., Albany, Ga	7.94	1.97	1.47	2.10	2.32	25.37
2202	Dixie Soluble Guano.....	Troy Fertilizer Co., Troy, Ala	8.33	1.02	1.61	1.82	6.43	22.54

2203	Farmers Alliance Guano.....	Troy Fertilizer Co., Troy Ala.....	9.40	1.44	0.61	1.82	1.76	25.11
2205	Stono Soluble Guano.....	E. H. Frost & Co., Charleston, S. C.	8.26	1.28	3.13	1.82	1.21	23.15
2208	Amono Alkaline.....	Chesapeake Guano Co., Baltimore, Md. ...	7.39	1.08	1.68	1.96	1.34	21.68
2209	Southern Standard Amd. Bone.....	C. L. Montague, Savannah, Ga	7.73	1.87	2.66	2.76	1.41	25.45
2210	State Alliance Favorite.....	C. L. Montague, Savannah, Ga	9.52	2.83	0.84	0.98	1.25	23.59
2211	Fertilizer No. 1.....	Savannah Guano Co., Savannah, Ga	9.23	1.15	2.31	2.45	1.64	26.76
2212	Fertilizer No. 2.....	Savannah Guano Co., Savannah, Ga	9.33	1.13	1.92	0.98	1.23	20.74
2216	Ammoniated Dissolved Bone.....	Bradley Fertilizer Co., Boston, Mass	6.49	3.25	2.72	2.10	1.10	23.80
2217	Carolina Fertilizer.....	Bradley Fertilizer Co., Boston, Mass	6.73	3.10	2.82	2.31	1.23	24.97
2218	Eagle Ammoniated Bone Super-phos.	Bradley Fertilizer Co., Boston, Mass	6.95	1.73	3.18	2.31	1.10	23.12
2219	"Sea Fowl".....	Bradley Fertilizer Co., Boston, Mass	7.73	1.72	3.74	2.38	1.75	25.20
2220	"B. Patent".....	Bradley Fertilizer Co., Boston, Mass	6.93	2.44	3.45	2.24	1.25	24.03
2222	Home Mixture Guano..	Meridian Fertilizer Co., Meridian, Miss....	9.50	1.29	1.76	2.03	2.42	26.51
2223	Southern Soluble Guano	Meridian Fertilizer Co., Meridian, Miss ...	7.98	2.77	1.74	1.82	2.94	26.15
2225	Edistone Soluble Guano.....	Jno. M. Greene, Atlanta, Ga.....	8.02	1.16	2.74	2.03	1.59	23.27
2226	Rainbow Soluble Guano	Jno. M. Greene, Atlanta, Ga.....	8.21	3.97	3.00	0.91	2.43	23.24
2229	"W. & C. Americus".....	Americus Guano Co., Americus, Ga	6.85	2.94	1.05	2.31	1.26	24.93
2230	Southern Amd. Bone Super-phos ...	Crocker Fert. & Chem. Co., Buffalo, N. Y.	6.41	2.55	2.90	2.03	1.63	22.99
2231	Southern Dis. Bone Super-phosphate..	Crocker Fert. & Chem. Co., Buffalo, N. Y.	7.21	1.12	3.57	1.82	1.62	21.20

Analyses Reported by N. T. Lupton, State Chemist, from October 1, 1891, to July 1, 1892.
ACID PHOSPHATES CONTAINING NITROGEN AND POTASH—Continued.

Station No.	NAME OF FERTILIZER.	BY WHOM SENT.	Phosphoric Acid.			Nitrogen.	Potash.	Commercial Value.
			Water Soluble.	Citrate Soluble.	Acid Soluble.			
2232	Jno. M. Green's Formula.....	Americus Guano Co., Americus, Ga.....	6.48	3.91	1.13	2.03	1.82	\$25.21
2234	"Edistone"	Americus Guano Co., Americus, Ga.....	9.17	0.22	1.82	1.68	1.52	22.15
2235	Americus Guano	Americus Guano Co., Americus, Ga.....	8.42	2.20	1.33	1.75	1.79	24.54
2237	Wando Amd. Dissolved Bone.....	Wando Phosphate Co., Charleston, S. C...	8.44	2.73	5.45	0.98	1.46	22.08
2243	Wando Soluble Guano.....	Wando Phosphate Co., Charleston, S. C ..	7.27	1.99	4.41	1.96	1.56	23.08
2259	Buffalo Bone Guano.....	Joseph Smith, Guntersville, Ala.....	6.31	2.79	2.80	2.03	1.66	23.22
2265	Soluble Guano.....	E. H. Frost & Co., Charleston, S. C.....	8.40	2.33	3.24	2.03	1.83	25.83
2269	Pollard's Pacific Guano.....	Bradley Fertilizer Co., Augusta, Ga	6.91	0.72	4.37	1.89	1.33	20.24
2270	Cumberland Bone Super-phosphate....	Bradley Fertilizer Co., Augusta, Ga.....	7.85	2.61	2.57	2.03	1.27	24.85
2271	Ammoniated Dissolved Bone	Royal Fertilizer Co., Charleston, S. C....	8.20	2.89	1.76	2.10	1.62	26.44
2272	Adair's Ammoniated Bone.....	W. S. Webb, Columbia, Ala.....	7.06	0.21	3.39	2.10	1.46	20.55
2273	Planter's Soluble Guano	W. S. Webb, Columbia, Ala.....	6.77	2.81	2.57	1.68	1.62	22.54
2274	Pure Ani. Bone H. G. Veg. Fertilizer..	Comer, Hull & Co., Savannah, Ga	6.27	1.16	1.92	5.63	5.08	37.78
2277	South Carolina Amd. Dis. Bone.....	Comer, Hull & Co., Savannah, Ga.....	8.54	0.44	1.90	1.96	0.98	22.09

2278	Georgia State Stand. Amd. Super-phos.	Comer, Hull & Co., Savannah, Ga.....	7.29	2.39	3.14	1.82	3.05	24.66
2279	Farmers' Amd. Dissolved Bone.....	Comer, Hull & Co., Savannah, Ga.....	10.84	0.09	1.68	1.82	2.89	26.37
2276	B. Patent.....	Bradley Fertilizer Co., Boston, Mass	6.87	3.82	2.23	2.31	1.48	26.51
2280	Pollard's Pacific Guano.....	Pacific Guano Co., Boston, Mass.....	6.47	3.13	2.34	2.24	1.53	24.66
2281	Tuscaloosa Guano	D. H. Caswell, Tuscaloosa, Ala.....	10.15	1.10	2.20	1.68	1.85	25.37
2284	Buffalo Bone Guano.....	Hill, Jones & Co., Roanoke, Ala.....	7.89	2.65	2.70	2.03	1.54	25.26
2285	Furman's High Grade Guano.	Hill, Jones & Co., Roanoke, Ala	7.87	1.08	4.14	2.17	1.57	23.46
2286	Furman's Soluble Guano.....	Hill, Jones & Co., Roanoke, Ala	7.91	4.15	1.76	1.40	1.33	24.88
2287	Eutaw Fertilizer.....	Hill, Jones & Co., Roanoke, Ala	6.00	2.89	1.70	1.89	1.40	22.00
2290 (a)	Complete Cotton Fertilizer.....	Hill, Jones & Co., Roanoke, Ala	6.31	1.91	5.22	2.17	1.49	22.38
2290 (b)	Rome Dis. Bone with Am. and Potash.	W. H. Simpson, Rome, Ga.....	11.38	0.74	3.24	1.33	1.73	25.09
2291 (b)	Rome C. & C. Guano.....	W. H. Simpson, Rome, Ga.....	8.23	1.73	4.49	2.08	2.00	24.85
2297	Crown Guano.....	Treadwell, Abbott & Co., Atlanta, Ga.....	9.52	0.20	1.70	1.75	2.00	23.40
2299	Guano.....	J. B. Wilder, Coalting, Ala.....	7.21	1.79	1.15	2.33	1.81	2.31
2303	Georgia State Grange Fertilizer.....	O. W. Cooper & Co., Oxford, Ala.....	9.13	1.36	2.93	1.75	2.22	24.77
2304	Fertilizer.....	Montgomery Fert. Co., Montgomery, Ala..	4.80	5.47	2.03	2.16	2.44	26.03
2308	Ashepoo Fertilizer.....	J. B. McMillan & Co., Talladega, Ala.....	7.39	2.27	1.97	2.24	1.81	25.03
2310	Edisto Soluble Guano.....	J. B. McMillan & Co., Talladega, Ala.....	8.33	1.65	1.96	1.94	1.59	24.12
2311	Soluble Sea Island Guano'.....	J. B. McMillan & Co., Talladega, Ala	8.25	1.16	2.45	2.03	1.79	23.81

Analyses Reported by N. T. Lupton, State Chemist, from October 1, 1891, to July 1, 1892.
ACID PHOSPHATES CONTAINING NITROGEN AND POTASH—Continued.

Station No.	NAME OF FERTILIZER.	BY WHOM SENT.	Phosphoric Acid.				Commercial Value.	
			Water Soluble.	Citrate Soluble.	Acid Soluble.	Nitrogen.		
2312	Cotton King Guano.....	Noah Carroll, Ozark, Ala.....	5 56	3 73	4.11	1.82	2 29	23.11
2315	Crocker's Dis. Bone Super-phosphate.....	Hill, Jones & Co., Roanoke, Ala	4 57	3.88	2.76	1.47	1.61	20 01
2316	Home Mixture.....	D. Gillis, Jr., Abbeville, Ala.....	7.88	2.05	2.05	2.38	1.78	25.96
2319	Guano.....	H. I. Steed, Haw Ridge, Ala.....	11.38	0.30	1.76	1.12	1.98	23.80
2321	Crocker's Sou. Dis. Bone Super-phosphate	F. M. Merritt, Abbeville, Ala	7.30	2.51	0.99	1.54	2.22	22.95
2322	Sea Fowl Guano.....	Bradley Fertilizer Co., Boston, Mass...	6.68	3 99	1.84	2 31	1.89	26.89
2325	Blood & Bone Fertilizer	B. J. Lunday, Andalusia, Ala	7.91	3 44	3.22	2.17	2 62	28.10
2331	Guano No. 1.....	W. W. Morris, Daleville, Ala	5.81	3.19	2.80	1.47	2.09	22.74
2332	Guano No. 2.....	W. W. Morris, Daleville, Ala	2.15	7.33	3.11	1 61	2.80	23 29
2335	Blood & Bone Compound.....	W. J. Beverly, Rosewood, Ala	6.20	4 99	1.92	1.68	1.04	24.36
2339	Ammoniated Dissolved Bone	J. C. Akin & Son, Notasulga, Ala	7.10	2.08	2.61	1.40	1.40	20.63
2340	Soluble Sea Island.....	J. C. Akin & Son, Notasulga, Ala	7.71	2.01	2.18	2.24	2 28	25.59
2341	Patapsico Guano.....	J. C. Akin & Son, Notasulga, Ala	8 14	1.94	1.67	2 17	1.53	25.11
2342	Fertilizer.....	J. R. McLendon, Naftel, Ala	7.25	3.16	1 55	1.82	2 40	25.10

Analyses Reported by N. T. Lupton, State Chemist, from October 1, 1891, to July 1, 1892.
ACID PHOSPHATES CONTAINING POTASH.

Station No.	NAME OF FERTILIZER.	BY WHOM SENT.	Phosphoric Acid.			Potash.	Commercial Value.
			Water Soluble	Citrate Sol'ble	Acid Soluble.		
2048	Farish Furman Formula.....	Adair Bros. & Co., Atlanta, Ga	9.29	4.61	1.70	3 10	\$23 95
2089	Etiwan Acid Phosphate.....	Etiwan Phos. Co., Charleston, S. C....	9 86	4 06	0.94	3.54	24.33
2098	Imperial Acid Phosphate with Potash	Imperial Fertilizer Co., Charleston, S. C	8 60	3 57	1.30	2.15	20.40
2109	Royal Acid Phosphate with Potash.....	Royal Fertilizer Co., Charleston, S. C .	11 31	2.73	1.32	1 19	22.25
2123	Ashepoo Bone Ash.....	Ashepoo Phos. Co., Charleston, S. C....	11.21	3 52	1.80	2.95	25.08
2152	Atlantic Acid Phosphate.....	Atlantic Phos. Co., Charleston, S. C....	9.67	2.06	1.51	1 20	18.89
2162	Acid Phosphate.....	Ashley Phos. Co., Charleston, S. C	6.24	5.99	2.51	2.58	20.92
2171	Potash Acid Phosphate.....	Lorentz & Ritter, Baltimore, Md	7.64	4 44	1.82	2 37	20.49
2206	Stono Acid Phosphate.....	E. H. Frost & Co., Charleston, S. C....	9 19	2 96	1 90	1 19	19 41
2224	Adair's Formula.....	Adair & McCarty Bros., Atlanta, Ga ..	10 08	2.91	3 82	3.30	22 78
2236	Americus Bone and Potash	Americus Guano Co., Americus Ga ...	5 23	4.44	4 4	1 69	16.19
2244	Wando Acid Phosphate with Potash.....	Wando Phosphate Co., Charleston, S. C.	8 12	2 49	3 84	1.17	17 08
2296	"Fertilizer".....	J. Wesley Brown, Gravilla, Ala.....	9.27	1.87	2.30	1 61	18 32

Analyses Reported by N. T. Lupton, State Chemist, from October 1, 1891, to July 1, 1892.

ACID PHOSPHATES.

Station No.	NAME OF FERTILIZER.	BY WHOM SENT.	Phosphoric Acid.			
			Water Sol'ble.	Citrate Sol'ble	Acid Soluble.	Commercial Value.
2049	Dissolved Bone.....	Adair & McCarty Bros., Atlanta, Ga.	12.03	4 26	1.25	\$24.43
2050	Furman Acid Phosphate.....	Adair & McCarty Bros., Atlanta, Ga.	11.88	3 57	0.88	23.17
2051	Adair's Acid Phosphate.....	Adair & McCarty Bros., Atlanta, Ga.	12.13	3 90	0.55	24.04
2054	I. X. L. Acid Phosphate.....	Mobile Phosphate & Chem. Co., Mobile, Ala..	11.96	0.99	3.47	19 42
2056	Mobile Standard Acid Phosphate.....	Mobile Phosphate & Chem. Co., Mobile, Ala.	12.70	1 16	2 82	20.88
2059	Edisto Acid Phosphate.....	J. S. Newman, Auburn, Ala.	9.10	2 94	2.32	18 06
2061	Rome Acid Phosphate	Rome Chemical Co., Rome, Ga.	11.69	5.46	0 36	25.78
2068	Acid Phosphate.....	Raisin Fertilizer Co., Baltimore, Md.	9.46	4.77	1.11	21 34
2075	Acid Phosphate.....	Stand. Guano & Chem. M'f'g Co., New Orleans	13.82	2 79	0.03	24.91
2078	Pure Dissolved Bone.....	Stand. Guano & Chem. M'f'g Co., New Orleans	14.93	0 49	0.4:	23 13
2081	Acid Phosphate No. 1.....	McMillan & Harrison, Mobile, Ala.	14 51	1 83	1.32	24 51

2082	Acid Phosphate No. 2	McMillan & Harrison, Mobile, Ala	9.45	4.83	0.81	21.57
2086	Etiwan Dissolved Bone	Etiwan Phos. Co., Charleston, S. C.....	10 13	3 85	2 03	20.97
2091	Diamond Soluble Bone.....	Walton Whann & Co., Charleston, S. C	10 73	5.10	1 13	23.74
2092	XX Acid Phosphate	Walton Whann & Co., Charleston, S. C	11.0	4.11	1.07	22.69
2094	Georgia State Grange Acid Phosphate	Baldwin Fertilizer Co., Port Royal, S. C.....	11 38	3 98	1 49	23 04
2097	Imperial Dissolved Bone.....	Imperial Fertilizer Co., Charleston, S. C.....	13.29	2 08	2 01	22.98
2100	High Grade English Acid Phosphate	W. F. Vandiver & Co., Montgomery, Ala.....	13 47	2 87	4.22	24.51
2104	High Grade Acid Phosphate.....	Montgomery Fert. Co., Montgomery, Ala.....	13 67	1.40	4 24	22.60
2106	Acid Phosphate.....	A. P. Richardson, Forney, Ala	13.61	5 54	1.51	25.72
2108	Royal Dissolved Bone	Royal Fertilizer Co., Charleston, S. C	14 09	2 52	1 6	24 01
2113	Acid Phosphate	Troy Fertilizer Co., Troy Ala.....	13 5	1.47	1 22	22.47
2121	Eutaw Acid Phosphate	Ashepoo Phosphate Co., Charleston, S. C....	10 09	5 19	2.40	22.92
2122	Ashepoo Acid Phosphate.....	Ashepoo Phosphate Co., Charleston, S. C.....	11.21	3.96	2 51	23.95
2132	Southern Acid Phosphate	Southern Phosphate Co., Atlanta, Ga.....	11 61	4 43	0 98	24 06
2133	Acid Phosphate	Capital Fertilizer & M'f'g Co., Jackson, Miss..	14 88	1 75	1 72	24.94

Analyses Reported by N. T. Lupton, State Chemist, from October 1, 1891, to July 1, 1892.

ACID PHOSPHATES—Continued.

Station No.	NAME OF FERTILIZER.	BY WHOM SENT.	Phosphoric Acid.			Commercial Value.
			Water Sol'ble.	Citrate Sol'ble	Acid Soluble.	
2137	Acid Phosphate	Eufaula Oil and Fertilizer Co., Eufaula, Ala..	7.36	4.96	3.30	18.48
2153	Atlantic Dissolved Bone.....	Atlantic Phosphate Co., Charleston, S. C.....	10.50	3.21	1.61	20.56
2155	Acid Phosphate.....	L. G. Patterson, Starkesville, Miss	11.67	2.16	1.05	20.74
2158	Acid Phosphate.....	Davis, Marshall & Co., Mobile, Ala	10.19	3.28	4.72	20.20
2159	Magnet Acid Phosphate.....	Davis, Marshall & Co., Mobile, Ala.....	14.20	2.29	0.85	24.73
2163	Dissolved Bone.....	Ashley Phosphate Co., Charleston, S. C.....	10.59	2.53	1.70	19.68
2165	High Grade English Acid Phosphate	Montgomery Fertilizer Co., Montgomery, Ala..	13.03	3.37	2.87	24.60
2173	High Grade Acid Phosphate.....	Reed Fertilizer Co., Charleston, S. C.....	13.51	1.75	0.69	22.89
2175	New York Soluble Bone.....	Reed Fertilizer Co., Charleston, S. C.....	14.71	0.43	1.15	22.71
2178	Leader Acid Phosphate.....	Reed Fertilizer Co., Charleston, S. C.....	14.51	0.51	2.14	22.53
2179	Florida Acid Phosphate.....	Troy Fertilizer Co., Troy, Ala.....	14.26	0.33	0.65	21.88
2180	Acid Phosphate	Marks & Gayle, Montgomery, Ala	12.65	1.87	4.37	21.78
2187	East Alabama Dissolved Bone....	East Alabama Fertilizer Co., Clayton, Ala	10.06	3.77	2.95	20.74

2193	Kennesaw High Grade Acid Phosphate.....	Kennesaw Guano Co., Atlanta, Ga	16.26	1.28	0.71	26.31
2198	Acid Phosphate.....	South Ala. Oil & Fertilizer Co., Ozark, Ala....	11.90	2.33	0.64	24.34
2201	Acid Phosphate	Albany Fert., Farm & Imp. Co., Albany, Ga..	11.88	3.71	1.61	23.28
2207	Stono Dissolved Bone	E. H. Frost & Co., Charleston, S. C.....	10.94	5.12	0.26	24.09
2221	Palmetto Acid Phosphate	Bradley Fertilizer Co., Boston, Mass	12.74	1.26	3.20	21.00
2227	Atlanta Soluble Bone	John M. Greene, Atlanta, Ga	12.67	0.15	3.20	19.23
2233	Americus Dissolved Bone	Americus Guano Co., Americns, Ga	10.21	2.89	0.97	19.65
2238	Wando Dissolved Bone.....	Wando Phosphate Co., Charleston, S. C.	9.84	1.18	5.89	16.53
2239	Wando Acid Phosphate.....	" " " "	9.13	2.20	5.71	16.99
2245	Steiner's High Grade English Acid Phosphate.	J. Steiner & Sons, Greenville, Ala	8.81	6.24	3.01	22.57
2246	Standard Acid Phosphate	Tinsley Fertilizer Co., Selma, Ala	14.22	2.56	0.96	25.17
2258	Wappoo High Grade Acid Phosphate.....	J. N. Leary, Montgomery, Ala	11.76	2.61	1.95	21.55
2263	Acid Phosphate	D. W. Caswell, Tuscaloosa, Ala.	13.80	1.70	2.22	23.25
2267	Wando Dissolved Bone	Wando Phosphate Co., Charleston, S. C	12.84	0.41	3.18	19.87
2268	Wando Acid Phosphate.....	" " " "	12.15	1.09	3.65	19.86
2275	Georgia State Standard Acid Phosphate.....	Comer, Hull & Co., Savannah, Ga	10.11	1.01	1.99	16.68
2288	Eutaw Acid Phosphate.....	Hill, Jones & Co., Roanoke, Ala	12.28	0.91	3.22	19.88
2291 (a)	Our Dissolved Bone	" " " "	10.92	1.83	6.96	19.12
2292	Rome Acid Phosphate	Rome Chem. Co., Rome, Ga.....	12.28	1.62	3.74	20.85

Analyses Reported by N. T. Lupton, State Chemist, from October 1, 1891, to July 1, 1892.
ACID PHOSPHATES—Continued.

Station No.	NAME OF FERTILIZER.	BY WHOM SENT.	Phosphoric Acid.			Commercial Value.
			Water Soluble	Citrate Soluble.	Acid Soluble	
2294	No. 1 Acid Phosphate.....	J. M. Ellis & Sons, Union Springs, Ala.....	10.79	4.84	1.65	\$23.44
2295	No. 2 Acid Phosphate.....	J. M. Ellis & Sons, Union Springs, Ala.....	11.14	5.35	2.80	24.73
2298	Georgia State Standard Acid Phosphate....	Comer, Hull & Co., Savannah, Ga.....	12.22	1.70	1.05	22.88
2300	Acid Phosphate	Schloss & Kahn, Montgomery, Ala.....	13.19	4.39	3.11	26.37
2301	High Grade Acid Phosphate.....	O. W. Cooper & Co., Oxford, Ala.....	12.72	4.10	3.07	25.23
2302	XX Phosphate.....	" " "	10.19	4.04	2.36	21.34
2309	Eutaw Acid Phosphate.....	J. B. McMillan, Talladega, Ala.....	9.81	3.96	2.07	20.65
2324	High Grade Acid Phosphate.....	G. F. C. Moore, Andalusia, Ala.....	10.40	3.11	5.26	21.26
2327	No. 1	N. W. Lord, Columbus, Ohio	1.70	8.01	7.41	.....
2328	No. 2.....	" " "	2.41	6.60	5.39	.....
2329	No. 3	" " "	2.26	10.68	9.50	.....
2330	No. 4	" " "	0.77	8.20	10.27	.....
2333	English Phosphate.....	W. W. Morris, Daleville, Ala.....	12.59	2.71	4.80	22.95
2336	Phosphate	T. A. Byrd, Andalusia, Ala.....	10.79	4.10	4.81	22.33
2337	Southern Acid Phosphate,.....	W. J. Beverly, Rosewood, Ala.....	9.65	2.81	3.18	18.70
2338	High Acid Phosphate.....	J. C. Akin & Son, Notasulga, Ala.....	9.81	4.67	3.01	21.73
2344	Americus Dissolved Bone.....	C. P. Payne, Ozark, Ala.....	9.17	5.37	2.41	21.81

Analyses Reported by N. T. Lupton, State Chemist, from October 1, 1891, to July 1, 1892.

MISCELLANEOUS FERTILIZERS.

Sta. No.	NAME OF FERTILIZER.	BY WHOM SENT.	PHOSPHORIC ACID.		Acid Soluble.	Nitrog'n	Potash.	Equiv'lent to Bone Phosph'te
			Water Soluble.	Citrate Soluble				
2052	Swan Island Guano	A. Adams, Mobile, Ala .....	.....	3.31	12.70	.....	.....	34.90
2053	Swan Island Phosphate Rock	" " "	.....	.....	21.61	.....	.....	47.10
2055	Kainite	Mobile Phos. & Chem. Co., Mobile, Ala	.....	.....	.....	.....	13.15	.....
2060	Cotton Seed Meal	J. S. Newman, Auburn, Ala .....	.....	.....	3.13	6.86	1.69	.....
2064	Black River Phosphate Rock.	Troy Fertilizer Co., Troy, Ala	.....	.....	22.44	.....	.....	.....
2065	Concentrated Tankage..	" " "	.....	.....	1.23	11.13	.....	.....
2066	Cotton Seed Meal .....	" " "	.....	.....	3.16	7.56	1.85	.....
2072	Pure Ground Bone	Stand. Guano & Mfg. Co., New Orleans.	.....	.....	23.25	4.34	.....	.....
2074	Kainite .....	" " "	.....	.....	.....	.....	11.74	.....
2114	Florida Phosphate	Troy Fertilizer Co., Troy, Ala	.....	.....	35.67	.....	.....	.....
2115	Sulphate of Potash.....	" " "	.....	.....	.....	.....	47.92	.....
2116	Florida Phosphate Rock (1)	A. J. Phares, Yalaha, Fla	.....	1.57	36.86	.....	.....	.....

Analyses Reported by N. T. Lupton, State Chemist, from October 1, 1891, to July 1, 1892.

MISCELLANEOUS FERTILIZERS.

Sta. No.	NAME OF FERTILIZER.	BY WHOM SENT.	PHOSPHORIC ACID.		Acid Soluble	Nitrog'n	Potash	Equiv'lent to Bone Phosph'te
			Water Soluble.	Citrate Soluble				
2117	Florida Phosphate Rock (2)	A. J. Phares, Yalahala, Fla .....	.....	1.63	36.63	.....	.....	.....
2118	" " " (3)	" " .....	.....	2.21	36.40	.....	.....	.....
2134	Cotton Seed Meal	Eufaula Oil & Fert. Co., Eufaula, Ala..	.....	.....	3.01	7.07	1.32	.....
2135	Cotton Seed Hull Ashes .....	" " "	.....	.....	12.65	....	33.12	.....
2138	Muriate Potash .....	" " "	.....	.....	.....	.....	.....	51.62
2140	Natural Phosphate (1)	J. C. Killebrew, Newton, Ala .....	.....	.....	18.98	.....	.....	.....
2141	" " (2) .....	" "	.....	.....	24.46	.....	.....	.....
2142	" " (3) .....	" "	.....	.....	23.78	.....	.....	.....
2143	" " (4) .....	" "	.....	.....	21.13	.....	.....	.....
2144	" " (5) .....	" "	.....	.....	23.63	.....	.....	.....
2145	" " (6) .....	" "	.....	.....	21.86	.....	.....	.....
2146	" " (7) .....	" "	.....	.....	27.41	.....	.....	.....
2149	Kainite	Royal Fertilizer Co., Charleston, S. C.	.....	.....	.....	15.82	.....	.....
2174	Kainite	Reed Fertilizer Co., Charleston, S. C.	.....	.....	.....	12.37	.....	.....

2181	Muriate Potash.....	Marks & Gayle, Montgomery, Ala.					52.28	
2182	Kainite	" " "					12.41	
2188	Cotton Seed Meal.....	East Alabama Fert. Co., Clayton, Ala.		3.25	7.42	1.76		
2189	Muriate Potash.....	" " "					51.96	
2204	Ground Phosphate Rock	Troy Fertilizer Co., Troy, Ala.		21.50				
2213	Cerealite No. 1.....	G. F. Atkinson, Auburn, Ala.				7.84	0.27	
2214	" 2	" "				7.28	4.45	
2215	" 3	" "				7.28	2.74	
2247	Natural Phosphate.....	Dr. N. T. Lupton, Auburn, Ala.		26.64				58.07
2248	Phosphate.....	" "		1.30				
2264	Kainite	D.W. Caswell, Tuscaloosa, Ala.					16.64	
2266	Natural Phosphate.....	G. A. Stuck, Selma, Ala.		26.07				
2282	Bone Meal.....	Armour & Co., Birmingham, Ala.		23.88	3.50			
2283	Blood and Bone.....	" "		14.38	6.51			
2289	Natural Phosphate.....	G. A. O'Neal, Andalusia, Ala.		1.11				
2293	Natural Phosphate.....	G. A. Stuck, Selma, Ala.		18.10				39.45
2305	Nat. Florida Phos. Blitch No. 1	N. T. Lupton, Auburn, Ala.		38.47				83.86
2306	Stevens No. 1.....	" "		31.27	31.27			68.16
2307	Nat. Florida Phosphate, Kline.	" "		33.00	33.00			71.94

Analyses Reported by N. T. Lupton, State Chemist, from October 1, 1891, to July 1, 1892.
MISCELLANEOUS FERTILIZERS—Continued.

Sta. No.	NAME OF FERTILIZER.	BY WHOM SENT.	Phosphoric Acid.		Acid Soluble	Nitrogen	Potash.	Equiv'alent to Bone Phosphate
			Water Soluble.	Citrate Soluble.				
2313	No. 2 Soft Stevens.....	N. T. Lupton, Auburn, Ala.....	.....	.....	27.64	.....	.....	60.25
2314	No. 2 Hard Stevens.....	" " .....	.....	.....	33.36	....	.....	72.71
2320	Castor of Pumace	Troy Fertilizer Co., Troy, Ala.....	.....	.....	0.67	5 25	0 78	.....

MARLS.	Silica.	Oxides of Iron and Al.	Lime Cart.	Mag. Cart.	Phos. Acid.	Potash.
2030—Wat Henderson, Magnolia, Ala.....	.....	22 38	8 22	Trace.	0.86	0 39
2111—O. D. Kilebrew, Newton, Ala.....	41 88	2 22	54.33	Trace.	None.	.....
2343—Vincent Bell, Calhoun, Ala	62 30	17.28	14.16	3.32	.....	.....

CLAYS.	Moisture.	Water of Combination.	Silica.	Iron and Al. Ox.	Lime.	Magne'a	Soda.	Potash.
2042—Burch & Wyatt, Decatur, Ala	4.35	4.50	72.84	14.70	1.38	Trace.	2.18	0.16
2139—Burch & Wyatt, Decatur, Ala	1.64	....	87.12	4 63	0.28	0 07	4.17	0.01
2261—G. Riley & Co., Gadsden, Ala	1.56	....	64.81	29 91	0.54	0 64	.....	.....
2317—W. A. Steadham, Isbell, Ala	1.89	5.64	63.94	25.89	0 36	Trace.	2.26	0 29

In addition to the above, a large number of qualitative determinations of minerals were made, also analyses of a few samples of mineral waters, iron ores, pig iron, earthy matters, etc.

Guaranteed Analyses of Commercial Fertilizers, Filed in the Office of the Commissioner of Agriculture by Dealers and Manufacturers.

NAME OF FERTILIZER OR CHEMICAL.	BY WHOM REPORTED.		MANUFACTURED.	WHERE MANUFACTURED	Weight of Package.	GUARANTEED ANALYSIS.					Commercial Value.
	NAME.	ADDRESS.				Nitrogen.	Phosph'ric Acid	Oxide Soluble.	Water Soluble.	Acid Soluble.	
Buffalo Bone Guano	Adair & McCarty Bros	Atlanta, Ga.	Furm'n F'm Im. Co	Atlanta, Ga.	200	1.75	6	3	2	1	\$21 33
Farmer's High Grade Guano	" " "	" " "	" " "	" " "	200	2	6	3	2	1	22 30
Furm'n's sol. bone with am. & pot.	" " "	" " "	" " "	" " "	200	.85	8	3	2	1	20 82
Farish Furman Formula	" " "	" " "	" " "	" " "	200	..	8	3	2	2	18 50
Furman Acid Phosphate	" " "	" " "	" " "	" " "	200	..	10	2	2	....	18 00
Dissolved Bone	" " "	" " "	" " "	" " "	200	..	10	2	2	....	18 00
Adair's Ammo. Dissolved Bone....	" " "	" " "	Adair & McC. Bros	" " "	200	1.75	6	3	2	1	21 33
Planters' Soluble Guano	" " "	" " "	" " "	" " "	200	1.75	6	3	2	1	21 33
Adair's Acid Phosphate	" " "	" " "	" " "	" " "	200	..	10	2	2	....	18 00
Adair's Formula	" " "	" " "	" " "	" " "	200	..	8	3	2	2	18 50
Elephant Guano.....	Alb'ny Fert.& F.I.Co	Albany, Ga.	Alb'ny Ft.& F.I.Co	Albany, Ga.	200	.90	7	3	1½	1 90	22 81
Standard Guano	" " "	" " "	" " "	" " "	200	1.90	7	2	1½	1.30	22 20
Acid Phosphate	" " "	" " "	" " "	" " "	200	..	11	3	2	....	21 00
Ashepoo Fertilizer	Ashepoo Phos. Co ..	Charleston, S. C	Ashepoo Phos. Co.	Charleston, S. C	200	1.85	6 25	2 25	2	1	20 97
Eutaw Fertilizer	" " "	" " "	" " "	" " "	200	1.85	6.25	2 25	2	1	20 97
Ashepoo Acid Phosphate	" " "	" " "	" " "	" " "	200	..	8.50	2	1	....	15 75
Eutaw Acid Phosphate.	" " "	" " "	" " "	" " "	200	..	8.50	2	1	....	15 75
Ashepoo Bone Ash	" " "	" " "	" " "	" " "	200	..	8.50	2	1	1	16 75
Kainit	" " "	" " "	Imported....	.....	200	..	..	..	..	11	11 00
Americus Guano.....	Americus Guano Co,	Americus, Ga.	Americ's Guano Co	Americus, Ga.	200	2	7	2	2	1	22 30
Eddystone Soluble Guano.....	" " "	" " "	" " "	" " "	200	2	7	2	2	1	22 30
John M. Green's Formula	" " "	" " "	" " "	" " "	200	2	7	2	2	1	22 30
Americus Dissolved Bone	" " "	" " "	" " "	" " "	200	..	10	2	2	....	19 50
Americus Dis. Bone with Potash.....	" " "	" " "	" " "	" " "	200	..	10	3	2	1	20 50
Eddystone Soluble Guano.....	Atlanta, Guano Co.	Atlanta, Ga.	Atlanta Guano Co.	Atlanta, Ga.	200	2	7	2	2	1	22 30
John M. Green's Formula.....	" " "	" " "	" " "	" " "	200	2	7	2	2	1	22 30
Rainbow Soluble Guano	" " "	" " "	" " "	" " "	200	1	8	2	2	1	19 90

Guaranteed Analyses of Commercial Fertilizers, Filed in the Office of the Commissioner of Agriculture by Dealers and Manufacturers—Cont'd.

NAME OF FERTILIZER OR CHEMICAL.	BY WHOM REPORTED.		By Whom MANUFACTURED.	Where MANUFACTURED	Weight of Package.	GUARANTEED ANALYSIS.					Commercial Value.
	NAME.	ADDRESS.				Nitrogen.	Water Soluble.	Phosph'ric Acid Citrate Soluble.	Acid Soluble.	Potash.	
Atlanta Soluble Bone	Atlanta Guano Co ..	Atlanta, Ga.....	Atlanta Guano Co.	Atlanta, Ga.....	200	10	3	2	.....	19 50
unny South Acid Phosphate.....	"	" "	"	"	200	10	3	2	.....	19 50
eece's Soluble Bone	"	" "	"	"	200	10	3	2	.....	19 50
tlantic Fertilizer	Atlantic Phos. Co...	Charleston, S. C	Atlantic Phos. Co.	Charleston, S. C	200	2	6	2	1	20 80	
tlantic Dissolved Bone	"	"	"	"	200	10	2	2½	.....	18 00
tlantic Acid Phosphate	"	"	"	"	200	9	2	1½	1	17 50	
soluble Guano	Ashley Phos. Co....	"	Ashley Phos. Co..	"	200	2	4	2	1	20 80	
otton and Corn Compound.....	"	"	"	"	200	1¾	4	2	1	19 82	
mall Grain Specific	"	"	"	"	200	1¾	4	2	1	19 82	
mmoniated Dissolved Bone	"	"	"	"	200	1	4	2	1	16 90	
soluble Fish Guano	"	"	"	"	200	2½	4	2	1	22 75	
cid Phosphate	"	"	"	"	200	6	4	2	1	16 00	
solved Bone	"	"	"	"	200	7	5	2	.....	18 00
ainit	"	Imported			200	.....	.....	13	13 00	
abama Fertilizer	Alabama Fert. Co ..	Montgom'ry, Ala	Ala. Fertilizer Co.	Montgom'ry, Ala	200	2	7	1	2	23 30	
elican	"	"	"	"	200	2	6	1	1	20 80	
cid Phosphate	"	"	"	"	200	10	3	1½	.....	19 50
ainit	"	"	Imported	"	200	.....	.....	13	13 00	
luriate Potash	"	"	"	"	200	.....	.....	83	83 00	
airie Fertilizer	"	"	Ala. Fertilizer Co.	"	200	3	6	1	3	26 70	
ried and Ground Blood	"	"	Armour Pack'g Co	Kansas City, Mo	200	10	.....	.....	.....	39 00
oncentrated Tankage	"	"	"	"	200	8½	.....	.....	.....	33 15
one Black	"	"	Phil'a Sugar Ref'y	Philadelphia, Pa	200	18	6	.....	.....	36 00
cid Phosphate No. 2	"	"	Imported	"	200	16	5	.....	.....	31 50
Wappoo High Grade Acid Phos..	"	"	Wappoo Mills.....	Charleston, S. C	200	12	1½	.....	.....	20 25
erkeley's Dissolved Bone	Berkeley Phos. Co...	Charleston, S. C	Berkeley Phos. Co	Arkley, near Charleston, S. C	200	10	2	2	.....	18 00

rkeley Acid Phosphate.....	"	"	"	"	200	...	9	1	2	1.5	16 50
rkeley Soluble Guano.....	"	"	"	"	200	2.06	7	1	2	1.5	21 53
rkeley's Ammo. Dissolved Bone.	"	"	"	"	200	1.05	7	1	2	1.5	17 60
ldsmith Stand. C. & C. Guano	"	"	"	"	200	1.65	6	2	2	1	19 44
id Potash.....	"	"	"	"	200	...	8	2	2	....	15 00
ldwin's Ammoniated Dis. Bone.	Baldwin Fert. Co.	Savannah, Ga.	Baldwin Fert. Co.	Port Royal, S. C.	200	1.75	8	2	1.50	2	23 88
orgia State Grange Fertilizer..	"	"	"	"	200	1.75	8	2	1.50	2	23 88
orgia State Grange Acid Phos..	"	"	"	"	200	...	10	2	2	....	18 00
ne and Potash	"	"	"	"	200	...	9	2	1.50	4	20 50
ne Compound.....	"	"	"	"	200	1.75	8	2	1.50	....	21 88
wker's Cotton Fertilizer.....	Bowker Fertilizer Co	"	Bowker Fert. Co.	Elizabeth Pt.N.J & Charlest'n,S.C	200	1 $\frac{3}{4}$	7	2	2	1 $\frac{1}{4}$	21 58
wker's Nassau Guano.....	"	"	"	"	200	1 $\frac{3}{4}$	7	2	2	1 $\frac{1}{4}$	21 58
wker's Crown Guano.....	"	"	"	"	200	1 $\frac{3}{4}$	7	2	2	1 $\frac{1}{4}$	21 58
wker's Dis. Bone Phosphate..	"	"	"	"	200	...	9	2	2	1 $\frac{1}{4}$	17 75
ssau Dis. Bone Phos. with Pot'sh	"	"	"	"	200	...	9	2	2	1 $\frac{1}{4}$	17 75
own Dis. Bone with Phosphate.,	"	"	"	"	200	...	9	2	2	1 $\frac{1}{4}$	17 75
ssau Dissolved Bone Phosphate.	"	"	"	"	200	...	10	3	2	....	19 50
rman Kainit.....	"	"	Imp.frcm Germany	"	200	...	...	...	...	12	12 00
wker's Soluble Pacific Guano..	"	"	Bowker Fert. Co.	Charleston, S. C	200	1.65	6	2	1	1	19 44
wker's Sol. Pac. Dis. Bone Phos.	"	"	"	"	200	...	9	2	2	1 $\frac{1}{4}$	17 75
D. Sea Fowl Guano.....	Bradley Fert. Co.	Boston, Mass.	Bradley Fert. Co.	Boston, Mass...	200	1.85	6.50	2	50	2	21 71
dley's Patent Super Phosphate.	"	"	"	"	200	1.85	6.50	2	50	2	21 71
dley's Ammo. Dissolved Bone..	"	"	"	"	200	1.65	6	2	2	1	19 43
gle Ammo. Bone Super Phos..	"	"	"	"	200	1.65	6	2	2	1	19 43
olina Fertilizer.....	"	"	"	"	200	1.85	6.50	2	50	2	21 71
metto Acid Phosphate.....	"	"	"	"	200	...	9	3	1	....	18 00
dmont Acid Phosphate.....	J. A. Brown & Co.	Kellyton, Ala.	Marietta GuanoCo.	Atlanta, Ga....	200	...	9	4	2	....	19 50
G. C. Guano	"	"	"	"	200	1	7	2	2	1 $\frac{1}{4}$	18 65
bama Fertilizer.....	J. W. Bledsoe.....	Three Notch, Ala	Alabama Fert. Co.	Montgomery, Ala	200	2	7	2	1	2	23 30
orite Formula Fertilizer.....	"	"	Edisto Phcs. Co .	Charleston, S. C.	200	2	6	2	1	1	20 80
e Acid Phosphate	"	"		Savannah, Ga. &	200	...	10	3	1 $\frac{1}{2}$	....	19 50
St. Stmp. Ammo. Sup. Phos .	Comer, Hull & Co .	Savannah, Ga.	Comer, Hull & Co.	Port Royal, S. C.	200	1.65	7	1	1	2	20 44
: Royal Cotton Fertilizer	"	"	"	"	200	1.65	7	1	1	2	20 44
ethorpe Ammo. Dissolved Bone.	"	"	"	"	200	1.65	7	1	1	2	20 44
est City Ammo. Dissolved Bone	"	"	"	"	200	1.65	7	1	1	2	20 44

Guaranteed Analyses of Commercial Fertilizers, Filed in the Office of Commissioner of Agriculture by Dealers and Manufacturers—Cont'd.

NAME OF FERTILIZER OR CHEMICAL.	BY WHOM REPORTED.		By Whom MANUFACTURED.	WHERE MANUFACTURED.	Weight of Package.	GUARANTEED ANALYSIS.					Commercial Value.
	NAME.	ADDRESS.				Nitrogen.	Water Soluble.	Citrate Soluble.	Acid Soluble.	Potash.	
urdie's Cot. Boll Am. Sup. Phos- escent Bone Fertilizer	Comer, Hull & Co.	Savannah, Ga.	Ga. Fert. Co. & Pt. Roy'l Fert Co. S. C	Port Royal, S. C	200 200	1.65 1.65	7 7	1 1	1 1	2 2	20 44 20 44
rmers Ammo. Dis. Bone.....	"	"	Comer, Hull & Co.	"							
liance Ammo. Dis. Bone.....	"	"	Ga. Fert. Co. & Pt.	"							
uth Carolina Ammo. Dis. Bone.	"	"	Royal Fert. Co. S. C	"	200	1.65	7	1	1	1	19 44
uth Carolina Ammo. Dis. Bone.	"	"	"	"	200	1.65	7	1	1	1	19 44
d Reliable.....	"	"	"	"	200	1.65	4	1	1	.10	18 54
immond & Hull's Pure Animal..	"	"	"	"	200	1.65	7	1	1	.10	18 54
ne High Grade Vegetable Fert..	"	"	Comer, Hull & Co	"	200	5	7	1	1	5	36 50
orgia Fertilizer.....	"	"	"	"	200	1.65	7	1	1	2	20 44
nly, Handl'y & Co Am. Dis. Bone	"	"	Ga. Fert. Co. & Pt.	"							
lis English Acid Phosphate.	"	"	Royal Fert. Co. S. C	"	200	1.65	7	1	1	1	19 44
. State Standard Acid Phosphate	"	"	Comer, Hull & Co.	"	200	...	10	2	1	....	18 00
escent Bone Acid Phosphate.....	"	"	"	"	200	...	10	2	1	....	18 00
rest City Acid Phosphate.....	"	"	"	"	200	...	10	2	1	....	18 00
rt Royal Acid Phosphate.	"	"	"	"	200	...	10	2	1	....	18 00
lethorpe Acid Phosphate.	"	"	"	"	200	...	10	2	1	....	18 00
tton Boll Acid Phosphate	"	"	"	"	200	...	10	2	1	....	18 00
. State Stand. & Dis. Bone Phos..	"	"	"	"	200	...	10	2	1	....	18 00
rt Royal Dis. Bone Phosphate...	"	"	"	"	200	...	10	2	1	....	18 00
lethorpe Dis. Bone Phosphate..	"	"	"	"	200	...	10	2	1	....	18 00
orgia Acid Phosphate.....	"	"	"	"	200	...	10	2	1	....	18 00
anly, Handley & Co. XX Ac. Phos.	"	"	"	"	200	...	10	2	1	....	18 00
nuine German Kainit.....	"	"	Imp. by C. H. & Co from Germany.		200	...	....	....	....	11	11 00
me C. & C. Guano.....	"	"	Rome Chemical Co								
			Pur. by C. H. & Co	Rome, Ga.....	200	1.65	6	2	1	1	19 43

Some Sol. Bone with Am. & Potash	"	"	"	"	200	1	6	2	1	1	1	16 90
Some Dis. Bone with Am. & Potash	"	"	"	"	200	1	6	2	1	1	1	16 90
Some Acid Phosphate	"	Savannah, Ga..	"	"	200	...	10	2	1	1	1	18 00
Some Bone and Potash	"	"	"	"	200	...	8	2	1	1	1	16 00
Complete Cotton Fertilizer	Commerc'l Guano Co	"	Com'al Guano Co.	Savannah, Ga..	200	1.65	7	1	2	1	1	19 44
Batham Guano	"	"	"	"	200	1.65	7	1	2	1	1	19 44
Pomona Guano	"	"	"	"	200	1.65	7	1	2	1	1	19 44
Cherokee Ammoniated Bone	"	"	"	"	200	1.65	7	1	2	1	1	19 44
Ulimax Guano	"	"	"	"	200	1.65	7	1	2	1	1	19 44
Old Time Guano	"	"	"	"	200	1.65	7	1	2	1	1	19 44
Georgia Bone Compound	"	"	"	"	200	...	8	2	2	2	2	17 00
Our Dissolved Bone Phosphate	"	"	"	"	200	...	10	2	2	2	2	Trace. 18 00
Batham Acid Phosphate	"	"	"	"	200	...	10	2	2	2	2	Trace. 18 00
Pomona Acid Phosphate	"	"	"	"	200	...	10	2	2	2	2	Trace. 18 00
Batham Vegetator	"	"	"	"	200	2.50	8	2	2	3½	28 2	
Excelsior Fruit Grower	"	"	"	"	200	1.25	4	1	2	2	8	20 38
Georgia Bone Guano	"	"	"	"	200	1.65	7	1	1	1	1	18 44
Crocker's South Dis. Bone Sup. Pho	Crocker Fertilizer & Chemical Co. ...	Bufialo, N. Y..	Crocker Fertilizer & Chemical Co.	Buffalo, N. Y..	200	1.23	4	4	1	1½	1	18 30
Crocker South. Am. Bone Sup. Pho	"	"	"	"	200	1.64	4	4	1	2	2	20 40
standard	Columbus Oil Mill...	Columbus, Miss.	Columbus Oil Mill	Columbus, Miss.	200	1.90	6.67	3.20	1.18	1.89	1	24 10
Some Mixture	Columbus Fert. Co.	Columbus, Ga..	Columbus Fert. Co.	Girard, Ala....	200	2	6	2	2	1½	2	21 30
Soluble Bone	"	"	"	"	200	...	10	3	2	2	2	19 50
Common Cotton Fertilizer	Cincinnati Dess. Co.	Cincinnati, O..	Cincinnati Dess. Co	Cincinnati, O..	200	1.85	2	7	1	1	1	21 72
Potato Fertilizer	"	"	"	"	200	4.15	4	4	4	4	5	33 18
Chicora Dissolved Bone	Chicora Fertilizer...	Charleston, S. C	Chicora Fert. Co.	Charleston, S. C	200	1.75	7	2	1	1	2	22 32
Chicora Acid Phosphate	"	"	"	"	200	...	11	1	1	1	1	18 00
Chicora Acid Phosphate	"	"	"	"	200	...	9	1	1	1	1	16 00
Chicora Soluble Guano	"	"	"	"	200	1.75	6.50	1.50	1.50	1	1	19 82
Ammoniated Alkaline Phosphate	Cheasp'ke Guano Co	Baltimore, Md..	Chesp'ke Guano Co	Baltimore, Md..	200	2	4	4½	2	1½	2	22 05
Ammoniated Dissolved Bone	"	"	"	"	200	2	4	4½	2	1½	2	22 05
Stonewall Guano	"	"	"	"	200	2	4	4½	2	1½	2	22 05
V. O. C. A. Pure Blood Guano	Coweta Fertilizer Co	Newnan, Ga...	Coweta Fert. Co.	Newnan, Ga...	200	2½	7.50	2.50	1	2	2	25 77
Ioweta High Grade	"	"	"	"	200	2	7	2	1	1	2	23 30
Aurora Ammoniated Phosphate	"	"	"	"	200	1.75	6½	1½	1	2	2	20 82
Ioweta Animal Bone	"	"	"	"	200	1.75	6½	1½	1	2	2	20 82
Ioweta H. G. Acid Phosphate	"	"	"	"	200	...	10	2	1	1	1	18 00

Guaranteed Analyses of Commercial Fertilizers, Filed in the Office of Commissioner of Agriculture by Dealers and Manufacturers—Cont'd.

NAME OF FERTILIZER OR CHEMICAL.	BY WHOM REPORTED.		By Whom MANUFACTURED.	Where MANUFACTURED	Weight of Package.	GUARANTEED ANALYSIS.				Commercial Value.
	NAME.	ADDRESS.				Nitrogen.	Water Soluble.	Citrate Soluble.	Phosph'ric Acid Soluble.	
Cumberland Bone Super Phos . . .	Cumberland Bone Phosphate Co . .	Portland, Me . .	Cumberland Bone Phosphate Co.	Portland, Me . .	200 1.65	6	2	2	1	\$19 43
uskaloosa Guano	D. H. Caswell	Tuscaloosa, Ala . .	D. H. Caswell	Tuscaloosa, Ala . .	200 2	8	1	1	1	22 30
Iagnet Guano	Davis, Marshall & Co	Mobile, Ala	& Co	Mobile, Ala	200 .25	4	4	1	1	13 98
cid Phosphate	" "	" "	National Acid Co	New Orleans, La	200 . . .	6	6	1	.....	18 00
erman Kainit	" "	" "	Imported . . . . .	..... . . . . .	200 . . . . .	.....	.....	.....	10	10 00
Etiwan Guano	Etiwan Phos. Co	Chaleston, S. C	Etiwan Phos. Co	Charleston, S. C	200 1 3/4	5	2	2	1 1/4	18 57
Etiwan Ammo. Super Phosphate	" "	" "	" "	" "	200 1 1/2	5	2	1	1	17 38
Etiwan Ammo. Dissolved Bone	" "	" "	" "	" "	200 7/8	7	2	1	1	17 91
Etiwan Acid Phosphate	" "	" "	" "	" "	200	8	3	1	1	17 50
Etiwan Dissolved Bone	" "	" "	" "	" "	200	10	1	1	.....	16 50
ast Alabama Fertilizer	East Ala. Fert. Co	Clayton, Ala	East Ala. Fert. Co	Clayton, Ala	200 1.85	7 75	1 75	.50	1.75	23 21
ast Alabama Dissolved Bone	" "	" "	" "	" "	200	10	3 1/2	1	.....	20 25
Eufaula Fertilizer	Eufaula Oil & Fer. Co	Eufaula, Ala	Eufaula, Ala	Eufaula, Ala	200 2 1/4	6	2 1/2	2	2	23 53
cid Phosphate	" "	" "	Comm. Guano Co	Savannah, Ga	200	12	2	2	.....	21 00
disto Dissolved Bone	Edisto Phosphate Co	Charleston, S. C	Edisto Phos. Co	Charleston, S. C	200	9	3	1 1/2	.....	18 00
disto Acid Phosphate	" "	" "	" "	" "	200	8	2	1	1	16 00
disto Ammo. Dissolved Bone	" "	" "	" "	" "	200 1.64	6	2	1	1	19 39
disto Soluble Guano	" "	" "	" "	" "	200 1.64	6	2	1	1	19 39
disto Ammoniated Fertilizer	" "	" "	" "	" "	200 2.06	6	2	1	1	21 03
disto Ammo. Dissolved Bone	" "	" "	" "	" "	200 1.23	6	2	1	1	17 80
Furman's High Grade	Furm'n Fa'm Im. Co	Atlanta, Ga	Furman Farm Im- provement Co	Atlanta, Ga	200 2.25	7 50	2 50	2	1.50	25 28
arish Furman's Formula	" "	" "	" "	" "	200	8 54	3 27	2 24	3.32	21 03
Goulding Bone Compound	Gould'g Fer. Co. L'd	Pensacola, Fla	Goulding Fert. Co. & Pensacola, Fla	Dublin, Ireland	200 1.75	7	2	1	1	21 33

Goulding's St. George.....	"	"	"	"	"	200	1	5	2	1	2		16 40
Goulding's Super Phosphate.....	"	"	"	"	"	200	..	10	2	1			18 00
Goulding's Vegetable Compound.....	"	"	"	"	"	200	3.50	5	2	1	3		27 15
Goulding's Special Compound.....	"	"	"	"	"	200	1.75	7	2	1	1		21 33
Goulding's Seminole Fertilizer.....	"	"	"	"	"	200	1	5	2	1	2		16 40
Lull & Lancaster's H'h Gr.Ac. Phos	"	"	"	"	"	200	..	10	2	1			18 00
Furman's Acid Phosphate.....	Fur. Farm Imp. Co.	Atlanta, Ga.....	Fur. Farm Imp. Co.	Atlnnta, Ga....		200	..	11	2	2			19 50
Mastodon Ammo. Sol. Phosphate..	Ga. Chemical Works.	Augusta, Ga.....	Ga. Chem. Works.	Augusta, Ga....		200	2	6 $\frac{3}{4}$	2 $\frac{1}{4}$	1 $\frac{1}{2}$	1		22 30
Georgia Formula.....	"	"	"	"	"	200	1 $\frac{3}{4}$	6 $\frac{3}{4}$	2 $\frac{1}{4}$	1 $\frac{1}{2}$	1		21 32
Acid Phosphate	"	"	"	"	"	200	..	9	3	1	1		19 00
Acid Phosphate	"	"	"	"	"	200	..	10	3	1			19 50
Waverly Fert. Season of 1890-91.....	Paul Hoffman	Waverly, Ala....	W. & P. Hoffman.	Waverly, Ala..		200	2.50	4.50	2.25	1.25	1		20 88
Waverly Fertilizer, this Season.....	"	"	"	"	"	200	2.50	4.50	2.25	1.25	1		20 88
Acid Phosphate	"	"	"	"	"	200	..	6	4	2	1		16 00
Wando Acid Phosphate	"	"	Wando Phos. Co..	Charleston, S.C.		200	..	10	1	1 $\frac{1}{2}$			16 50
Imperial Ammoniated Fertilizer.....	Imperial Fert. Co...	Charleston, S. C	Imperial Fert. Co.	"		200	2.06	6	2	2	1		21 03
Cte. Cte. Ammoniated Fertilizer	"	"	"	"	"	200	2.06	6	2	2	1		21 03
Cte. Cte. Soluble Guano	"	"	"	"	"	200	1.65	6	2	1 $\frac{1}{2}$	1		19 44
Imperial Soluble Guano	"	"	"	"	"	200	1.65	6	2	1 $\frac{1}{2}$	1		19 44
KXX Blood and Bone	"	"	"	"	"	300	1.65	6	2	1 $\frac{1}{2}$	1		19 44
Imperial Ammo. Dissolved Bone	"	"	"	"	"	200	.82	8	2	1 $\frac{1}{2}$	1		19 20
Imperial Acid. Phosphate	"	"	"	"	"	100	..	9	2	1 $\frac{1}{2}$	1		17 50
Cte. Cte. Acid Phosphate	"	"	"	"	"	200	..	9	2	1 $\frac{1}{2}$	1		17 50
KXX Ammo. Phosphate	"	"	"	"	"	200	..	9	2	1 $\frac{1}{2}$	1		17 50
Imperial Dissolved Bone.....	"	"	"	"	"	200	..	10	2	2			18 00
Cte. Cte. Dissolved Bone.....	"	"	"	"	"	200	..	10	2	2			18 00
Lockwood Cotton Grower.....	"	"	"	"	"	200	1.65	6	2	1 $\frac{1}{2}$	1		19 44
Sterling Guano	"	"	"	"	"	200	1.65	6	2	1 $\frac{1}{2}$	1		19 44
Sterling Acid	"	"	"	"	"	200	..	9	2	1 $\frac{1}{2}$	1		17 50
Lockwood Acid.....	"	"	"	"	"	200	..	9	2	1 $\frac{1}{2}$	1		17 50
Jee Fertilizer.....	Jernigan & Lipscomb	Opelika, Ala....	Jerni'n & Lips'cmb	Opelika, Ala....		200	2.2	8	1	1	2		24 27
Armer's Club Guano.....	"	"	"	"	"	200	1.67	8	1	1	2		22 01
& L. Dissolved Bone.....	"	"	"	"	"	200	..	11	2	2			19 50
Kenesaw High Grade Ammonia	Kenesaw Guano Co.	Atlanta, Ga	Kenesaw Guano Co	Clifton, Ga		200	2 $\frac{1}{2}$	6	3 $\frac{1}{2}$	1	1 $\frac{3}{4}$		25 75
Kenesaw Ammo. Dissolved Bone.	"	"	"	"	"	200	2	6	3 $\frac{1}{2}$	1	1 $\frac{1}{2}$		23 55
Blood & Bone Compound.....	"	"	"	"	"	200	1 $\frac{1}{2}$	6	3 $\frac{1}{2}$	1	1		21 10
High Grade Acid Phosphate.....	"	"	"	"	"	200	..	10	3 $\frac{1}{2}$	1			20 25

Guaranteed Analyses of Commercial Fertilizers, Filed in the Office of Commissioner of Agriculture by Dealers and Manufacturers—Cont'd.

NAME OF FERTILIZER OR CHEMICAL.	BY WHOM REPORTED.		BY WHOM MANUFACTURED.	WHERE MANUFACTURED.	Weight of Package.	GUARANTEED ANALYSIS.				Commercial Value.
	NAME.	ADDRESS.				Nitrogen.	Phosph'ric Acid	Citrate Soluble.	Acid Soluble.	
mmonium Dissolved Bone Phosphate.	Lister's Agricultural Chemical Works.	Newark, N. J...	Lister's Agricul'tra	Newark, N. J..	167	1.65	6	2	...	1 \$19 44
& R. Ammoniated Guano	Lorentz & Rittler...	Baltimore, Md...	Lorentz & Rittler	Baltimore, Md...	200	1.64	6	2	2	1 19 39
onogram Cotton Special.....	" "	" "	" "	" "	200	.83	6	2	1	16 24
otash Acid Phosphate.....	" "	" "	" "	" "	200	...	8	2	2	1 3/4 16 75
appoo High Grade Acid Phos.	J. F. Leary.....	Montgom'y, Ala	Wappoo Mills...	Charleston, S. C	200	...	12	1 1/2	...	20 25
ust Proof.....	Luverne Fert. Co...	Luverne, Ala...	Luverne, Fert. Co	Luverne, Ala...	200	1.65	7	7	1	19 43
tanter's Pride Guano.....	Marietta Guano Co.	Atlanta, Ga ...	Marietta Guano Co	Atlanta, Ga....	200	1.75	7	2	2	1.50 21 82
olid South Guano.....	" "	" "	" "	" "	200	1.75	7	2	2	1.50 21 82
G. C. Dissolved Bone.....	" "	" "	" "	" "	200	1	7	2	2	1 25 18 65
edmont Acid Phosphate.....	" "	" "	" "	" "	200	...	9	4	2	19 50
eef Blood and Bone Compound.	" "	" "	" "	" "	200	1	7	2	2	1.25 18 65
lliance High Grade Guano.....	" "	" "	" "	" "	200	1.75	7	2	2	1 25 21 57
olid South Guano.....	" "	" "	" "	" "	200	1.75	7	2	2	1.25 21 57
eef Blood and Bone Compound.	" "	" "	" "	" "	200	1	7	2	2	1.25 18 65
G. C. Dissolved Bone.....	" "	" "	" "	" "	200	1	7	2	2	1.25 18 65
edmont Acid Phosphate.....	" "	" "	" "	" "	200	...	9	4	2	19 50
arietta High Grade Acid Phos.	" "	" "	" "	" "	200	...	7	4	2	19 50
lanter's Pride Guano	" "	" "	" "	" "	200	1.75	7	2	2	1.25 21 57
obile Standard Guano.....	Mobile Phosphate &	Mobile, Ala....	Mobile Phos. &	Mobile, Ala....	200	1.86	8	2	2	1 23 25
lipse Guano.....	Chemical M'fg Co .	" "	Chemical M'fg Co.	Mobile, Ala....	200	1.65	7	2	2	1 20 93
X. L. Acid Phosphate.....	" "	" "	" "	" "	200	...	10	2	2	18 00
obile Standard Acid Phosphate.	" "	" "	" "	" "	200	...	11	2	2	19 50
ainit.....	" "	" "	Imported.....	" "	200	...	...	...	11	11 00
obile Standard Guano	" "	" "	" "	" "	200	1.86	8	2	1	23 25
X. L. Acid Phosphate.....	" "	" "	" "	" "	200	...	10	2	2	18 00
ontgomery Blood and Bone Fert.	Montgomery Fer. Co	Montgom'ry, Ala	Montgom'ry Fer. Co	Montgom'ry, Ala	200	2	7	2	1	23 30

ea Gull Soluble Guano.....	"	"	"	"	"	200	2	7	2	1	2	23 30	
mmoniated Dissolved Bone.....	"	"	"	"	"	200	1	7	2	1	1	18 40	
high Grade Acid Phosphate.....	"	"	"	"	"	200	...	10	2	1	...	18 00	
andiver's Ammo. Dissolved Bone.	"	"	"	"	"	200	1.05	8	1	1	1	18 59	
andiver's High Grade Acid Phos.	"	"	"	"	"	200	...	11	1	1	...	18 00	
ing. Acid Phosphate, High Grade.	"	"	"	"	"	200	...	11	1	1	...	18 00	
ea Gull Soluble Guano.....	"	"	"	"	"	200	2	7	2	1	2	23 30	
Montgomery Blood & Bone Fert.	"	"	"	"	"	200	2	7	2	1	2	23 30	
Capital City Standard Fertilizer.	"	"	"	"	"	200	1.50	7	2	1	2	21 35	
Bur Cotton King Guano.....	"	"	"	"	"	200	1	7	2	1	1	18 40	
High Grade English Acid Phos.	"	"	"	"	"	200	...	11	1	1	...	18 00	
Dowling Alkaline Guano..	"	"	"	"	"	200	1.23	7	1	1	2	18 79	
Alliance Soluble Guano.....	"	"	"	"	"	200	1.50	7	2	1	2	21 35	
Tariff Reform Soluble Guano.....	"	"	"	"	"	200	1.50	7	2	1	2	21 35	
L. S. & Co. High Grade Acid Phos	"	"	"	"	"	200	...	11	1	1	...	18 00	
English Acid Phos. High Grade..	"	"	"	"	"	200	...	11	1	1	...	18 00	
English Acid Phosphate.....	"	"	"	"	"	200	...	11	1	1	...	18 00	
outh. States Stand. An mo. Bone.	C. L. Montaigue & Co	Savannah, Ga.	C. L. Montaigue & Co	Savannah, Ga.	200	1.65	5	3	1	1	1	19 44	
avorite Fertilizer.....	Marks & Gayle.	Montgom'ry, Ala	Alabama Fert. Co.	Montgom'ry, Ala	200	2	6	2	1	1	1	20 80	
cid Phosphate.....	"	"	Edisto Phos. Co.	Charleston, S. C.	200	...	10	3	1½	...	...	19 50
Kainit..	"	"	Imported.....	.....	200	...	.....	.....	1¾	13	13	00
Muriate Potash.....	"	"	Imported.....	.....	200	...	.....	.....	1¾	82	82	00
southern Soluble Guano	Meridian Fert. Fac'y	Meridian, Miss.	Meridian Fert. Co.	Meridian, Miss	200	2	8¾	1¾	1	2¼	25	80	
standard Home Mixture Guano.	"	"	"	"	200	2	8½	1¾	1	2¼	25	43	
Perfection Guano.....	McMillan & Harris'n	Mobile, Ala....	McMil'n & Harris'n	Mobile, Ala....	200	2¼	7½	1	½	1½	23	02	
Jo. 1 Acid Phosphate.....	"	"	Imported.....	.....	200	...	14	1	...	...	...	22 50
Jo. 2 Acid Phosphate.....	"	"	Imported.....	.....	200	...	9	4	...	...	...	19 50
Kainit	"	"	Imported.....	.....	200	...	.....	.....	12½	12	50	12 50
cid Phosphate.....	National Fert. Co...	Nashville, Tenn.	National Fert. Co	Nashville, Tenn	200	...	10	2	2	...	...	18 00
mmoniated Dissolved Bone.....	"	"	"	"	200	1.02	8	2	1	1 25	20	22	
ock City Guano.....	"	"	"	"	200	1.85	6	2	1	1 25	20	46	
ennessee Guano.....	"	"	"	"	200	1.85	6	2	1	1 25	20	46	
Old Hickory Guano.....	"	"	"	"	200	1.85	6	2	1	1 25	20	46	
U. S. Yards,													
monniated Dissolved Bone.....	Northwest'n Fer. Co	Chicago, Ill ...	Northw'st'n Fer. Co	Chicago, Ill ...	200	1¾	2.20	5	80	...	.5	18 92
Natural Bone Dust	"	"	"	"	200	1¾	2	20	5	805	18 92
Ober's Dis. Bone Phos. Soluble...	G. Ober & Sons Co.	Baltimore, Md...	G. Ober Sons & Co	Baltimore, Md...	200	...	10	1	1	16 50	

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	NAME.	ADDRESS.				BY WHOM	Nitrogen.	Phosph'ric Acid	Citrate Soluble	
ber's Sol. Am. Super Phos. Lime.	G. Ober & Sons Co.	Baltimore, Md.	G. Ober Sons & Co	Baltimore, Md.	200	6 ³ / ₄	2	2	1.40	\$22 32
ber's Georgia Cotton Compound..	"	"	"	"	200 2	6 ³ / ₄	2 ³ / ₄	2	1.40	22 32
ber's Farmers Stand. Am. Phos..	"	"	"	"	200 1 80	6 ³ / ₄	1 ³ / ₄	2	1.50	21 27
ber's Ammoniated Dis. Bone	"	"	"	"	200 1 80	6 ³ / ₄	1 ³ / ₄	2	1.50	21 27
atapsco Ammo. Soluble Phos....	Patapsco Guano Co.	Augusta, Ga...	Patapsco Guano Co	"	200 2	6 ³ / ₄	2 ¹ / ₄	1 ¹ / ₃	1	22 30
mmoniated Dissolved Bone.....	"	"	"	"	200 1 ¹ / ₄	6 ³ / ₄	2 ¹ / ₄	1 ¹ / ₂	1	21 32
atapsco Acid Phosphate.....	"	"	"	"	200 ...	9	3	1	1	19 00
atapsco Acid Phosphate.....	"	"	"	"	200 ...	10	3	1	1	19 50
ollard Pacific Guano	Pacific Guano Co...	Boston, Mass...	Pacific Guano Co	Boston, Mass...	200 1.75	6 50	2	2	I	20 57
ome C. & C. Guano	Rome Chemical Co	Rome, Ga	Rome Chemical Co	Rome, Ga	200 2	6	2	1	2	21 80
ome Sol. Bone with Am. & Potash	"	"	"	"	200 1	8	2	1	2	20 90
ome Acid Phosphate	"	"	"	"	200 ...	8	2	1	1	15 00
mpire Guano	Rasin Fertilizer Co.	Baltimore, Md..	Rasin Fertilizer Co	Baltimore, Md..	200 2	5	4	1	1 ³ / ₄	23 05
luble Specific Guano	"	"	"	"	200 3	5	4	1	2	27 20
luble Sea Island Guano.....	"	"	"	"	200 2	5	4	1	1 ³ / ₄	23 05
id Phosphate	"	"	"	"	200 ...	10	4	1	1	21 00
uth American Guano	"	"	"	"	200 2	5	4	1	1 ³ / ₄	23 05
lant Guano	"	"	"	"	200 2	5	4	1	1 ³ / ₄	23 05
ing Guano.....	"	"	"	"	200 2	5	4	1	1 ³ / ₄	23 05
oyal Acid Phosphate	Royal Fertilizer Co.	Charleston, S. C	Royal Fert. Co....	Charleston, S. C	200 ...	9	2	1 ¹ / ₂	I	17 50
oyal Dissolved Bone.....	"	"	"	"	200 ...	10	2	2	..	18 00
oyal Ammoniated Fertilizer.....	"	"	"	"	200 2.06	6	2	2	1	21 03
oyal Soluble Guano.....	"	"	"	"	200 1.65	6	2	1 ¹ / ₂	1	19 44
oyal Ammoniated Dis. Bone.....	"	"	"	"	200 .82	8	2	1 ¹ / ₂	1	19 20
enuine German Kainit.....	"	"	Imported.....	"	200 .....	..	..	..	12	12 00
ese's Pacific Guano.....	John S. Reese & Co.	Baltimore, Md..	Jno. S. Reese & Co	Baltimore, Md..	200 1.85	3 50	5 1 20	1 20	21 17	
ccellenza Soluble Guano.....	"	"	"	"	200 1.85	3 50	5 1 20	1 20	21 17	

armers Friend.....	Read Fertilizer Co.	Charleston, S. C.	Read Fertilizer Co.	New York, N. Y	200	2.05	6	2	2	1	21 00
atchless Cotton Grower.....	"	"	"	"	200	1.64	6	2	2	1	19 42
ader Acid Phosphate	"	"	"	"	200	...	7	3	2	....	15 00
ub-Treasury Guano	"	"	"	"	200	1.64	6	2	2	1	19 42
enuine German Kainit	"	"	Imported.....	"	200	...	....	....	....	12.44	12 44
igh Grade Acid Phosphate.....	"	"	Read Fertilizer Co.	"	200	...	10	3	3	....	19 50
ew York Soluble Bone	"	"	"	"	200	...	7	3	3	....	15 00
soluble Sea Island Guano.....	W. C. Robinson	Coffeeville, Ala.	Rasin Fertilizer Co	Baltimore, Md..	200	2	6	3	1	2	23 30
ossypium Phosphate	G. W. Scott Mfg. Co.	Atlanta, Ga.....	G. W. Scott Mfg Co	Atlanta, Ga	200	2	6	3	1	1	22 80
ott's Animal Ammo. Guano.....	"	"	"	"	200	1.65	6	3	1	1	20 93
ansell's State Standard	"	"	"	"	200	1.65	6	3	1	1	20 93
ott's Patasso Phosphate	"	"	"	"	200	...	7	5	1	2	20 00
ott's High Grade Acid Phos	"	"	"	"	200	...	7.50	5.50	1	....	19 50
Standard Guano &	Standard Guano &										
teiner's Am. Raw Bone Sup. Phos	Chemical M'fg Co.	New Orleans, La	Chemical M'fg Co.	New Orleans, La	200	1 $\frac{3}{4}$	4	4	...	2	20 72
andard Ammo. Soluble Guano..	"	"	"	"	200	1 $\frac{3}{4}$	4	4	...	2	20 72
ampion Farmers Choice	"	"	"	"	200	1 $\frac{3}{4}$	4	4	...	2	20 72
round Bone	"	"	"	"	200	3 $\frac{1}{4}$	....	....	21	....	12 27
issolved Bone	"	"	"	"	200	...	15	1	....	....	24 00
cid Phosphate	"	"	"	"	200	...	15	1	....	....	24 00
ainit	"	"	Imported.....	"	200	...	....	....	12	....	12 00
ruit Tree Fertilizer.....	"	"	Standard Guano &								
egetable Fertilizer	"	"	Chemical M'fg Co	"	200	3 $\frac{1}{4}$	....	....	19	....	12 27
ono Soluble Guano	Stone Phos. Works	Charleston, S. C	Stano Phos. Works	Charleston, S. C	200	3 $\frac{1}{4}$	4	2	....	5	26 27
ono Acid Phosphate	"	"	"	"	200	2	6	2	2	1	20 80
ono Dissolved Bone.....	"	"	"	"	200	...	8	2	2	1	16 00
olden Rod Guano	So. Ala. Oil & Fer. Co	Ozark, Ala.....	South Ala. Oil &								
issolved Bone	"	"	Fertilizer Co....	Ozark, Ala.	200	1.83	7.75	1.75	.50	1.75	23 33
ew Issue Guano	"	"	"	"	200	...	10	3 $\frac{1}{2}$	....	....	20 25
amond Cot. Food Ammo. Bone.	Savannah Guano Co.	Savannah, Ga ..	Savan'h Guano Co	Savannah, Ga..	200	1.65	5	3	1	1	19 44
ir Own Ammoniated Bone.....	"	"	"	"	200	1.65	5	3	1	1	19 44
X Stannard Ammoniated Bo ne..	"	"	"	"	200	1.65	5	3	1	5	18 94
celsior Ammoniated Bone.....	"	"	"	"	200	1.65	5	3	1	1	19 44
glish Dis. Bone Acid Phosphate	"	"	"	"	200	...	8	5	1	....	19 50
andard Bone Guano	"	"	"	"	200	.82	7	3	1	1	19 22

Guaranteed Analyses of Commercial Fertilizers, Filed in the Office of the Commissioner of Agriculture by Dealers and Manufacturers—Cont'd.

NAME OF FERTILIZER OR CHEMICAL.	BY WHOM REPORTED.		BY WHOM MANUFACTURED.	WHERE MANUFACTURED	Weight of Package.	GUARANTEED ANALYSIS.				Commercial Value.
	NAME.	ADDRESS.				Nitrogen.	Phosph'ric Acid	Citrate Soluble.	Acid Soluble.	
					Water Soluble.					
id Phosphate with Potash.	Savannah Guano Co.	Savannah, Ga.	Savan'h Guano Co	Savannah, Ga..	200	... 7	4	1	1	17 50
d Dominion	Southern Phos. Co.	Atlanta, Ga....	Southern Phos. Co	Atlanta, Ga.....	200 2	8	1½	1	1½	23 55
uthern Ammo. Dissolved Bone.	"	"	"	"	200 2	7	1½	1	1½	22 05
tent Pacific	"	"	"	"	200 2	7	1½	1	1½	22 05
owah Super Phosphate	"	"	"	"	200	85	8	2	1	19 31
uthern Acid Phosphate.	"	"	"	"	200	9	2	1	1	16 50
a Fowl Guano	Jos. Steiner & Sons.	Greenville, Ala.	Bradley Fert. Co..	Boston, Mass...	200	1.85	6 50	2.39	2	21 54
lmetto Acid Phosphate.	"	"	"	"	200	9	3	1	...	18 00
nglish Acid Phosphate	"	"	"	"	200	9	3	1	...	18 00
nkage.	"	"	"	"	200 5	80	....	15	...	15 00
igh Grade Eng. Acid Phosphate.	"	"	Imp.	"	200	9	3	1	...	18 00
a Fowl Guano B. D	Steiner Bros. & Co..	"	"	"	200	1.85	6.50	2.39	2	21 54
lmetto Acid Phosphate	"	"	"	"	200	9	3	1	...	18 00
nglish Acid Phosphate	"	"	"	"	200	9	3	1	...	18 00
nkage	"	"	"	"	200	9	3	1	...	18 00
nmoniated Dissolved Bone	A. J. Soliman & Sons	Charleston, S. C.	Armour Pack'g Co	Kansas City, Mo	200 5	80	....	15	...	15 00
complete Fertilizer	Scholze & Bro	Chattanooga, T.	Royal Fert. Co. ...	Charleston, S. C.	200 1.65	1½	2	6	2	19 44
asley's Standard Fertilizer	Tinsley Fertilizer Co	Selma, Ala....	Scholze & Bro ...	Chattanooga, T.	200	80	8	3 30	1 40	25 72
asley's Standard Acid Phosphate	"	"	Tinsley Fert. Co..	Selma, Ala.	200 2	8	1	2	1½	22 80
oy Perfect Fertilizer	Troy Fertilizer Co ..	Troy, Ala.	Troy Fert. Co.....	Troy, Ala.	200 1¾	7	1	...	1	19 50
rmer's Alliance Guano	"	"	"	"	200 1¾	7	1	...	1	19 82
oy Acid Phosphate.	"	"	"	"	200	10	2	...	...	18 00
xie Soluble Guano	"	"	"	"	200 1¾	7	1	...	1	19 82
orida Acid Phosphate	"	"	"	"	200	10	1	1	...	16 50
sin Acid Phosphate	Thomas Brothers...	Fairfield, Ala...	Rasin Fertilizer Co	Baltimore, Md..	200	12	2	1	...	21 00
uble Sea Island Guano	"	"	"	"	200 2	6	3	1	2	23 30
uble Specific Guano	"	"	"	"	200 3	8	2	1	2	28 70

rown Guano.....	Treadw'll, Abb'tt & C	Atlanta, Ga ...	Baldwin Fert. Co.	Port Royal, S. C	200	1 75	8	2	1.50	2	23 82	
andiver's Am. Dissolved Bone...	W. F. Vandiver & Co	Montgom'ry, Ala	Walton & Whann C	Charleston, S. C	200	1.05	8	1	1	1	18 59	
igh Grade English Acid Phos...	"	"	Montg'ry Fert. Co.	Montgomery, Ala	200	.87	7	2	1	1	17 91	
iamond Soluble Bone Phosphate.	"	"	"	"	200	...	11	1	1	1	18 00	
X Acid Phosphate.....	"	"	"	"	200	...	10	1	1	1	16 50	
andiver's High Grade Phosphate	"	"	Furman Farm Im-	East Point, Ga..	200	2.25	7 50	2.50	2	1.50	25 27	
urman High Grade.....	Vaughn & Robinson	Heflin, Ala.....	provement Co.	"	200	1 75	6	3	2	1	21 33	
uffalo Bone	"	"	"	"	200	.85	8	3	2	1	20 80	
urman's Soluble Bone	"	"	Marietta Guano Co.	Atlanta, Ga.....	200	1	7	1	2	1	17 40	
eef Blood & Bone Compound.....	"	"	"	"	200	...	9	4	2	1	19 50	
iedmont Acid.....	"	"	Walton & Whann C	Charleston, S. C.	200	2	6	2	2	2	22 05	
low Brand Raw Bone Super-phos	Walton & Whann Co	Charleston, S. C.	Walton & Whann C	Charleston, S. C.	200	1 $\frac{1}{2}$	5	2	1	1	17 35	
eliance Ammo. Super-phosphate	"	"	"	"	200	.87	7	2	1	1	17 90	
V. & W. Co. Ammo. Dis. Bone ..	"	"	"	"	200	...	10	1	1	1	16 50	
iamond Soluble Bone.....	"	"	"	"	200	...	10	1	1	1	16 50	
X Acid Phosphate.....	"	"	Walton Guano Co...	Social Circle, Ga	200	2	7	2	2	1	22 30	
Walton Guano	"	"	Walton Guano Co	Social Circle, Ga	200	...	10	3	2	1	19 50	
Walton Acid Phosphate.....	William & Clark		Williams & Clark									
merican Ammo. Bone Super-phos	Fertilizer Co.....	New York, N. Y.	Fertilizer Co ..	New York, N. Y	200	1.65	6	2	2	1	19 43	
Vando Soluble Guano.....	Wando Phos. Co....	Charleston, S. C.	Wando Phos. Co..	Charleston, S. C	200	1.65	6.50	2	2	1	20 19	
Vando Ammo. Dissolved Bone.....	"	"	"	"	200	.75	7	3	2	1	18 92	
Vando Acid Phosphate.....	"	"	"	"	200	..	0	1	.50	1	16 50	
Vando Dissolved Bone.....	"	"	"	"	200	..	10	1	.50	1	16 50	
Vando Acid Phosphate.....	"	"	"	"	200	..	9	1	1	1	16 00	
Vappoo High Grade Acid Phos..	Wappoo Mills	"	Wappoo Mills...	"	200	..	12	1 $\frac{1}{2}$	...	1	20 25
. X. L. Acid Phosphate	W. S. Wiggins, Sr.	Monroeville, Ala	Mobile Phosphate	& Chem. Co.	Mobile, Ala.....	200	..	10	2	2	1	18 00
Iobile Standard Guano.....	"	"	"	"	200	1.86	8	2	2	1	23 25	
'ure High Grade Phosphate	Williams Bros.....	LaPlace, Ala. .	Alabama Fert. Co.	Montgom'ry, Ala	200	..	10	3	1 $\frac{1}{2}$	1	19 50	
aint.....	"	"	Imported.....	"	200	..	..	..	..	12	12 00
ell Ammo. Bone Super-phosphate	Zell Guano Co.....	Baltimore, Md..	Zell Guano Co....	Baltimore, Md..	200	1 87	6	3	1	1 $\frac{1}{4}$	22 06	
ell Economizer.....	"	"	"	"	200	1 87	6	3	1	1 $\frac{1}{4}$	22 06	

FERTILIZER LAWS.

SECTION 139. *Sale or exchange of commercial fertilizers.*—Commercial fertilizers must not be sold or exchanged without a license from the Commissioner, authorizing the person making a sale or exchange to deal therein. All sales or exchanges made without such license are void.

SEC. 140. *License.*—On the payment of a fee of one dollar, the Commissioner must issue license to any person or firm, or corporation, or association of persons, authorizing the sale or exchange of fertilizers during a season, expiring on the thirtieth day of September of each year.

SEC. 141. *Tags to be supplied; licensee.*—The Commissioner must furnish the licensee on application, tags to be attached to fertilizers sold or exchanged, of the kind and description he is required by subdivision 17 of section 137 to prepare, on the payment to him of fifty cents for a number sufficient to tag a ton of fertilizers. *Before selling or exchanging, or offering to sell or exchange fertilizers, the licensee must attach one of the tags to each bag, barrel or package thereof, and a sale or exchange of fertilizers, not so tagged, is void.*

SEC. 142. *Fertilizers to be submitted to Commissioner.*—Before offering a fertilizer for sale or exchange, the person proposing to sell or exchange must submit to the Commissioner a written or printed statement setting forth—

1. The name and brand under which such fertilizer is to be sold or exchanged, the number of pounds contained in the bag, barrel or package, in which it is to be put upon the market, the name or names of the manufacturers, and the place of manufacturing.

2. A statement setting forth the amount of the named ingredients which they are willing to guarantee such fertilizer to contain. First, nitrogen ; second, water soluble phosphoric acid ; third, citrate soluble phosphoric acid ; fourth, acid soluble phosphoric acid ; fifth, potash ; and such statement shall be held to constitute a guarantee to the purchaser that every package of such fertilizer contains not less than the amount of each ingredient set forth in the statement, and when such statement sets forth the maximum and the minimum of any ingredient, the commercial value shall be estimated upon the minimum alone, but this shall not preclude the party from setting forth any other ingredients which the fertilizer may contain, which, as well as the preceding, shall be embraced in the guarantee.

SEC. 143. *Fertilizers or chemicals for manufacturing to be branded.*—All fertilizers, or chemicals for manufacturing or composting the same, offered for sale, exchange or distribution, must have branded upon or attached to each bag, barrel or package, *in such manner as the commissioner may by regulation establish*, the true analysis of such fertilizer or chemical, as claimed by the manufacturer, showing the percentage of valuable elements or ingredients such fertilizer or chemical contains, *and its commercial value*, calculated upon the standard of value of the principal ingredients as set forth in section 142, *as priced by the commissioner of agriculture* at the beginning of each season, and in every case the brand must specially set forth the percentage contained in the fertilizer or chemical of the several ingredients specified in section 142 in the terms of that section.

SEC. 144. *Fertilizer; what included in terms.*—The term “fertilizer,” or “commercial fertilizer,” as used in this article, does not include common lime, land plaster, cotton seed, cotton seed meal, ashes, or common salt not in combination.

SEC. 145. *Chemist of Department.*—The Professor of Chemistry of the Agricultural and Mechanical College is the official chemist of the Department. On the application of the Commissioner he must analyze and certify the analysis of all fertilizers, samples of which are furnished him, and at the request of the Commissioner, if he can without conflict with his duties as professor, must attend conventions of agricultural chemists, make reports of such matters as he may deem of interest to the Department, and render such other services in the line of his profession as the Commissioner may require.

SEC. 146. *Compensation of Chemist.*—The Chemist is entitled to such compensation as the Commissioner may deem reasonable; not exceeding five hundred dollars annually; and also to his necessary traveling expenses, while on duty assigned to him by the Commissioner; payable from the funds of the Department, on the certificate of the Commissioner.

SEC. 147. *Copy of official analysis; evidence.*—The copy of the official analysis of any fertilizer or chemical, under the seal of the Department of Agriculture, shall be admissible as evidence in any of the courts of this State, on the trial of any issue involving the merits of such fertilizer or chemical.

CRIMINAL LAWS.

SEC. 4153. *Dealing in fertilizers without submitting statement to Commissioner*—Any person who manufactures or exchanges, sells or offers for sale or exchange, any fertilizer without first submitting the statement required by law to the Commissioner of Agriculture, must, on conviction, be fined not more than five hundred dollars for each offense.

SEC. 4154. *Selling fertilizers without attaching proper tags*.—Any person who sells, exchanges or offers for sale or exchange, any bag, package or barrel of fertilizer which has not been tagged as provided by law, must, on conviction, be fined not less than fifty dollars for each offense.

SEC. 4155. *Using more than once, and counterfeiting tags, etc.*—Any person who counterfeits the tag prepared by the Commissioner of Agriculture, or who knowingly uses a counterfeit of such tag, or who uses a second time a genuine tag, or who uses the tag of a former season, must, on conviction, be fined one hundred dollars.

SEC. 4156. *Making false certificate of analysis of fertilizers*.—Any chemist who wilfully makes a false certificate of the analysis, or of the ingredients of any fertilizer intended or offered for sale or exchange, must, on conviction, be imprisoned in the penitentiary for not less than two, nor more than five years.

SEC. 4157. *Dealing in commercial fertilizers without license*.—Any person, who sells or exchanges fertilizers without having obtained a license from the Commissioner of Agriculture, as provided by law, must, on conviction, be fined not less than one hundred dollars for each offense.

SEC. 4158. *Fraud in manufacture, sale or exchange of fertilizer*.—Any person who commits a fraud in the manufacture, sale or exchange of any fertilizer, or of any of the ingredients of a fertilizer, must, on conviction, be fined not less than one hundred dollars for each offense.

LICENSES.

The following is a list of all licenses issued this season up to July 1st, with date when issued, number of license, post-offices, and the counties of the local dealers:

Date of Issue.	To Whom Issued.	POST-OFFICE.	COUNTY.	No. of License
1891				
Oct. 5	Adair, A. D. & McCarty.....	Atlanta, Ga.....		5
Oct. 8	Atlanta Guano Co	Atlanta, Ga.....		8
Oct. 8	Americus Guano Co	Americus, Ga.....		9
Oct. 14	Ashepoo Phosphate Co.....	Charleston, S. C.....		32
Dec. 3	Angier, Clarence	Atlanta, Ga		87
Dec. 10	Alabama Fertilizer Co.....	Montgomery, Ala	Montgomery.	94
Dec. 17	Arnold, F. M	Six Mile, Ala.	Bibb	98
Dec. 19	Allen, Sellers & Co	Montgomery, Ala	Montgomery.	101
Dec. 21	Albany Fer. & F. Imp. Co	Albany, Ga.		107
1892				
Jan. 6	Acree, O. A. C.....	Newton, Ala.....	Dale	131
Jan. 7	Agee, W. P.....	Perdue Hill, Ala	Monroe.	135
Jan. 16	Allen, Joel L.....	Opelika, Ala.....	Lee	168
Jan. 26	Allen, R. W. & Co	LaFayette, Ala	Chambers	205
Feb. 5	Askew, J. M	Wetumpka, Ala	Elmore	267
Feb. 6	Andrews, W. T	Gold Hill, Ala	Lee	276
Feb. 9	Adams, Harrison & Willis	Alexander City, Ala	Tallapoosa	291
Feb. 13	Akin, G. C. & Sons	Notasulga, Ala	Macon.	324
Feb. 19	Appling, Samuel	Day's Gap, Ala	Walker.	375
Feb. 19	Atkins, Owens & Co.....	Heflin, Ala	Cleburne	377
Feb. 25	Ashurst & DeLoach.....	Tallassee, Ala	Elmore	402
Mar. 14	Allred, Joseph.....	Hanceville, Ala	Blount	477
1891				
Oct. 5	Berkely Phosphate Co	Charleston. S. C		4
Oct. 8	Betts, W. H.....	Burnt Corn, Ala	Monroe.	11
Oct. 14	Bean, W. F.....	Troy, Ala	Pike	35
Oct. 17	Barbour, T. M	Tuscaloosa, Ala.	Tuscaloosa	40
Oct. 19	Baldwin Fertilizer Co.....	Savannah, Ga.....		42
Oct. 22	Bowker Fertilizer Co.....	Savannah, Ga		45
Oct. 26	Beavers & Marsh.....	Collinsville, Ala	DeKalb.	50
Nov. 7	Bradley Fertilizer Co.....	Boston, Mass.		60
Nov. 16	Brannen, C. S. & Son	Troy, Ala	Pike	69
Nov. 19	Beall, Jay W	Luverne, Ala.	Crenshaw.	73
Dec. 17	Boykin, Comer & Co.	Baltimore, Md.		99
Dec. 23	Brantley, T. K. & Sons	Troy, Ala	Pike	110
Dec. 23	Brantley, T. K. & Sons	Troy, Ala	Pike	111
1892				
Jan. 15	Brantley & Edmonson	Troy, Ala	Pike	164
Jan. 16	Beard, J. M	Rutledge, Ala	Crenshaw.	170
Jan. 19	Bowden, Samuel.....	Gordon, Ala	Henry	175
Jan. 28	Bowen, J. L	Five Points, Ala	Chambers.	215
Jan. 29	Bellinger Brothers.....	Gadsden, Ala	Etowah.	220
Jan. 29	Brock, G. W	Sand Rock, Ala	Cherokee.	223

LICENSES—CONTINUED.

Date of Issue.	To Whom Issued.	Post-Office.	County.	No. of License
1892				
Jan. 30	Bosworth, Smith & Co	LaFayette, Ala	Chambers	229
Feb. 1	Bell, Lane & Co	Lincoln, Ala	Talladega	234
Feb. 1	Brown, J. A. & Co	Kellyton, Ala	Coosa	235
Feb. 2	Bradley & Edwards	LaPine, Ala	Crenshaw	240
Feb. 2	Burgess, J. A	Edwardsville, Ala.	Cleburne	244
Feb. 8	Burgess & Kirby	Scottsboro, Ala.	Jackson	286
Feb. 8	Bradley, J. W. & Co	Bradleyton, Ala	Crenshaw	288
Feb. 10	Brake, J. L	Warrior, Ala	Jefferson	303
Feb. 10	Burt, R. A	Brandon, Ala	DeKalb	304
Feb. 11	Broun, W. S	Birmingham, Ala	Jefferson	306
Feb. 11	Baldwin, W. E	Flint, Ala	Morgan	315
Feb. 12	Brake, B. M	Warrior, Ala	Jefferson	317
Feb. 12	Brice & Donehoo	Murphree's Valley	Blount	320
Feb. 15	Brice, C. H. & H. E	New Market, Aia	Madison	336
Feb. 15	Beach, H. M.	Columbia, Ala	Henry	338
Feb. 17	Bell & Barker	Bell's Mills, Ala	Cleburne	357
Feb. 18	Brown, J. J	Ivy, Ala	Fayette	361
Feb. 20	Beeland, J. & Sons	Greenville, Ala	Butler	383
Feb. 23	Byers & Robinson	Ashville, Ala	St. Clair	390
Feb. 26	Brown, Robt. B. Oil Co.	St. Louis, Mo		411
Feb. 27	Burns & Wilson	Lincoln, Ala	Talladega	416
Mar. 10	Burnett Brothers	Cedar Bluff, Ala	Cherokee	462
Mar. 10	Baddiford, W. H.	Hardwicksburg, Ala	Henry	464
Mar. 11	Branyan & Wilson	Kennedy, Ala	Lamar	466
Mar. 18	Bliss, R. L	Florence, Ala	Lauderdale	489
Mar. 23	Bledsoe, J. W	Three Notch, Ala	Bullock	499
Mar. 26	Banks & Owen	Hurtsboro, Ala	Russell	508
Apr. 2	Billingsly, F. M	Fayetteville, Ala	Talladega	513
Apr. 5	Bass, J. W	Leeds, Ala	Jefferson	514
Apr. 27	Ballard, Joshua	Omaha, Ala	Randolph	524
1891				
Oct. 9	Comer, Hull & Co	Savannah, Ga		15
Oct. 10	Connor, M	Troy, Ala	Pike	22
Oct. 12	Carroll & Murphree	Troy, Ala	Pike	26
Oct. 14	Carlisle, M. W. & Brother	Roanoke, Ala	Randolph	31
Oct. 16	Commercial Guano Co.	Savannah, Ga		36
Oct. 22	Cowetta Fertilizer Co	Newnan, Ga		47
Oct. 22	Crocker Fert. & Chem. Co	Buffalo, N. Y	New York	48
Nov. 7	Columbus Oil Mills	Columbus, Miss		59
Nov. 21	Columbus Fertilizer Co.	Columbus, Ga		78
Nov. 25	Crawford, J. W	Abbeville, Ala	Henry	81
Nov. 28	Cincinnati Dессinating Co	Cincinnati, O		82
Dec. 4	Cody, M. & J. M	Dothen, Ala	Henry	88
Dec. 10	Chicora Fertilizer Co.	Charleston, S. C		93
Dec. 24	Cody, M. & J. M	Midland, City, Ala	Dale	113
Dec. 28	Crawford, J. R	Dothen, Ala	Henry	118
1892				
Jan. 6	Clarke, W. T. & Co	Spring Garden	Cherokee	130
Jan. 11	Cooke, R. E. & Co	Cottonwood, Ala	Henry	145
Jan. 16	Cleveland, M. L	Randolph, Ala.	Bibb	169
Jan. 21	Crew, Drummon & Co.	Goodwater, Ala	Crenshaw	189
Jan. 21	Crawley & Rouse	Wetumpka, Ala	Elmore	191

LICENSES—CONTINUED.

Date of Issue.	To Whom Issued.	Post-Office.	County.	No. of License
1892				
Jan. 26	Cosper, Glover & Co.....	Sterrett, Ala	Shelby	208
Jan. 28	Cox, Geo. W.....	Notasulga, Ala.	Macon	214
Feb. 1	Caswell, D. H.....	Tuscaloosa, Ala.	Tuscaloosa	236
Feb. 9	Campbell, C. G.....	Shorterville, Ala.	Henry	296
Feb. 9	Crompton, S. U.....	Maplesville, Ala.	Chilton	298
Feb. 12	Chadwick, J. J.....	Snead, Ala.	Blount	323
Feb. 13	Clements, W. N.....	Ft. Deposit, Ala	Lowndes	235
Feb. 13	Cumbee, J. & Son.....	Strouds, Ala.	Chambers	328
Feb. 13	Cordovan, F. M.....	Clio, Ala.	Barbour	333
Feb. 19	Cherry & Smith.....	Opelika, Ala.	Lee	370
Feb. 19	Chewacla Lime Works.....	Chewacla, Ala.	Lee	372
Feb. 24	Cohson, B. L.....	Gordon, Ala.	Henry	396
Feb. 27	Cooke, J. E.....	Marietta, Ala.	Walker	418
Mar. 1	Cullman Co., A. W. H. Co.	Cullman, Ala.	Cullman	425
Mar. 1	Crim Brothers.....	Newton, Ala.	Dale	426
Mar. 2	Cooke Brothers.....	Cooke Springs, Ala	St. Clair	431
Mar. 2	Cooke Brothers.....	Vandiver, Ala.	Shelby	432
Mar. 8	Cooke, Phillips & Walker.....	Kennedy, Ala.	Lamar	456
Mar. 14	Chestnut, J. E.....	Gaylesville, Ala.	Cherokee	479
Mar. 19	Cooke Brothers.....	Eden, Ala.	St. Clair	491
Mar. 23	Cotton, Geo.....	Columbia, Ala.	Henry	497
Mar. 24	Cooper, O. W.....	Oxford, Ala.	Calhoun	503
May 6	Carney, Wm. M.....	Williams Sta., Ala.	Escambia	525
1891				
Oct. 10	Davis, W. F. & Sons.....	Marion, Ala.	Perry	19
Dec. 2	Dowling, John W.....	Ozark, Ala.	Dale	86
1892				
Jan. 14	Dawson, W. P. & Son.....	Ware, Ala.	Elmore	157
Jan. 15	Dermis, P. C.....	Coopers, Ala.	Chilton	166
Jan. 21	Daniel, J. G. & Co.....	Greenville, Ala.	Butler	192
Jan. 22	Davis, John H.....	Athens, Ala.	Limestone	194
Jan. 29	Davis, E. R.....	Rock Run Sta., Ala.	Cherokee	225
Jan. 30	Davis, Marshall & Co.....	Mobile, Ala.	Mobile	233
Feb. 2	Dodson, W. R.....	North Port, Ala.	Tuscaloosa	245
Feb. 2	Douglass Brothers.....	Russellville, Ala.	Franklin	246
Feb. 4	Davenport, N. S.....	Valleyhead, Ala.	DeKalb	255
Feb. 6	Dunklin, D. G. & Sons.....	Greenville, Ala.	Butler	275
Feb. 10	Dumas, J. T.....	Arlington, Ala.	Wilcox	305
Feb. 15	Dean, W. T. & Brother.....	Fayetteville, Ala.	Talladega	345
Feb. 27	Davis & Naylor.....	Sand Mountain, Ala.	DeKalb	420
Mar. 3	Dake, Alex. G.....	Clanton, Ala.	Chilton	436
Mar. 7	Douglass & Duncan.....	Alexander City, Ala.	Tallapoosa	451
Mar. 15	Dean, W. R.....	Warrior, Ala.	Jefferson	483
1891				
Oct. 12	East Ala. Fertilizer Co.....	Clayton, Ala.	Barbour	23
Oct. 12	Etiwan Phosphate Co.....	Charleston, S. C. ....	.....	27
Oct. 28	Eufaula Oil & Fertilizer Co.	Eufaula, Ala.	Barbour	52
Dec. 28	Ellis, Charles.....	Savannah, Ga. ....	.....	117
1892				
Jan. 2	Edisto Phosphate Co.	Charleston, S. C. ....	.....	127
Jan. 14	Edmonson, R. L. & Bro.	Eufaula, Ala.	Barbour	155
Jan. 21	Evans, H. H. & Co.....	Greensboro, Ala.	Hale	186
Feb. 2	Emmons, T. J.....	Monroeville, Ala.	Monroe	248

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Feb. 17	Emmett, L. S.....	Albertville, Ala.	Marshall.....	350
Feb. 18	Ethridge, W. R.....	Peach Bloom, Ala.	Conecuh.....	367
Mar. 5	Estes, T. J.....	Day's Gap, Ala.	Walker.....	446
Apr. 5	Englebert, F. R.....	Athens, Ala.	Limestone.....	515
Apr. 16	Emmons, J. D.....	Williams Sta., Ala.	Escambia.....	521
July 5	Espy, J. R.....	Gordon, Ala.	Henry.....	530
1891				
Oct. 5	Folmar & Sons.....	Troy, Ala.	Pike.....	2
Dec. 22	Farley, John C.....	Opelika, Ala.	Lee.....	108
1892				
Jan. 14	Finlay, W. A.....	Pollard, Ala.	Escambia.....	161
Jan. 18	Faust, Jap. M.....	Warrior, Ala.	Jefferson.....	172
Jan. 19	Forrester, B. A.....	Cowarts, Ala.	Henry.....	177
Jan. 29	Frohoff, Frank.....	Hanceville, Ala.	Blount.....	221
Feb. 4	French, B. D.....	Sylacauga, Ala.	Talladega.....	253
Feb. 8	Felder, J. B.....	Loachapoka, Ala.	Lee.....	279
Feb. 25	Fassett, F. M.....	Kirby's Creek, Ala.	Jackson.....	403
Feb. 25	Formby & Stewart.....	Spring Garden, Ala.	Cherokee.....	409
Mar. 5	Fullenwider, H.....	Vincent, Ala.	Shelby.....	449
Mar. 12	Finch, J. C.....	Finchburg, Ala.	Monroe.....	473
1891				
Oct. 22	Goulding Fertilizer Co., L'td	Pensacola, Fla.	.....	46
Nov. 9	Georgia Chemical Works	Augusta, Ga.	.....	61
Dec. 31	Gilley, W. A.....	Wicksburg, Ala.	Dale.....	122
1892				
Jan. 20	Griel Bros. & Co	Montgomery, Ala.	Montgomery.	178
Jan. 23	Gray, William.....	Dadeville, Ala.	Tallapoosa ..	195
Jan. 25	Greene, James R.....	Waverly, Ala.	Lee	199
Feb. 2	Gilbert, R. F.....	Portersville, Ala.	DeKalb.....	247
Feb. 8	Gerson, A. & Sons.....	Montgomery, Ala.	Montgomery.	277
Feb. 9	Gray, Draper & Co.....	Oxford, Ala.	Calhoun.....	297
Feb. 10	Gulledge, F. A.....	Verbena, Ala.	Chilton.....	302
Feb. 12	Gilbert, John R.....	Pinckneyville, Ala.	Clay	319
Feb. 18	Garner, William.....	Ozark, Ala.	Dale	364
Feb. 20	Griffith, Asa.....	Hanceville, Ala.	Blount	381
Feb. 26	Gitbreath, Emmett.....	Guntersville, Ala.	Marshall	413
Feb. 29	Gaines, R. A.....	Fredonia, Ala.	Chambers.....	422
Mar. 4	Griffith, J. J. & Bro.....	Hanceville, Ala.	Blount	442
Mar. 15	Gilder, G. C.....	Mount Meigs, Ala.	Montgomery.	481
Mar. 15	Gilder, G. C.....	Shady Grove, Ala.	Pike	482
Mar. 16	Griffin, W. H.....	Oxford, Ala.	Calhoun.....	486
1891				
Oct. 10	Henderson, J. C.....	Troy, Ala.	Pike	20
Oct. 10	Henderson, Fox.....	Troy, Ala.	Pike	21
Oct. 12	Henderson & Murphree.....	Ozark, Ala.	Dale	25
Oct. 14	Henderson & Rainer.....	Troy, Ala.	Pike	34
Oct. 24	Hooper, C. W. & Co.....	Selma, Ala.	Dallas	49
Nov. 14	Hodo, A. T.....	Carrollton, Ala.	Pickens	67
Dec. 19	Hughes, J. E.....	Floralla, Ala.	Bullock	102
Dec. 23	Hunt, L. A. & Co.....	Clio, Ala.	Barbour.....	112
Dec. 31	Henderson, E. M.....	Troy, Ala.	Pike	122

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Jan. 2	Hoffman, Paul.	Waverly, Ala.	Lee	126
Jan. 6	Houton & Co.	Columbia, Ala.	Henry	133
Jan. 7	Herring B. W.	Headland, Ala.	Henry	138
Jan. 11	Henderson Bros. & Co.	Troy, Ala.	Pike	140
Jan. 11	Henderson, W. D. & Chas.	Troy, Ala.	Pike	141
Jan. 11	Henderson, J. M. & Fox.	Troy, Ala.	Pike	142
Jan. 11	Howle Brothers	Edwardsville, Ala.	Cleburne	150
Jan. 11	Harwell, W. O.	Opelika, Ala.	Lee	151
Jan. 11	Holley, F. M.	Lawrenceville, Ala.	Henry	153
Jan. 18	Hill, Jones & Co.	Roanoke, Ala.	Randolph	171
Jan. 20	Hobbie, Teague & Co.	Montgomery, Ala.	Montgomery	180
Jan. 21	Holifield, J. A. & Co.	Auburn, Ala.	Lee	190
Jan. 21	Head, T. L. & Co.	China Grove, Ala.	Pike	193
Jan. 29	Harrison, Jno. D.	Grafton, Ala.	Henry	218
Jan. 29	Hudson, H. E.	Monroeville, Ala.	Monroe	222
Feb. 1	Hutchinson, J. N.	Salem, Ala.	Lee	239
Feb. 3	Hughes, R. F.	Piedmont, Ala.	Calhoun	250
Feb. 4	Henderson & Rainer	Troy, Ala.	Pike	260
Feb. 5	Herring, J. W. & Bro.	Midland City, Ala.	Dale	263
Feb. 6	Hertzler & Anderson.	Madison, Ala.	Madison	270
Feb. 8	Hirsch Brothers	Seale, Ala.	Russell	290
Feb. 9	Haddock, F. P.	Hatchechubbee, Ala.	Russell	295
Feb. 9	Haynes, D. P.	Oxford, Ala.	Calhoun	301
Feb. 11	Hamil Brothers	Troy, Ala.	Pike	310
Feb. 24	Hagwood, T. E.	Branchville, Ala.	St. Clair	399
Feb. 25	Hoffman, Walter	Waverly, Ala.	Lee	406
Feb. 25	Hood, David	Clarence, Ala.	Blount	407
Feb. 27	Hood, W. T.	Murphree's Val, Ala.	Blount	417
Mar. 3	Henderson, T. J.	Mountain Creek, Ala.	Chilton	437
Mar. 4	Haynie, W. H.	Loachapoka, Ala.	Lee	443
Mar. 9	Hartselle Bros. & Co.	Hartselle, Ala.	Morgan	457
Mar. 9	Henderson Brothers	Fullerton, Ala.	Cherokee	458
Mar. 12	Hurt & Co.	Limrock, Ala.	Jackson	471
Mar. 14	Henry, A. G., Jr.	Guntersville, Ala.	Marshall	474
Mar. 15	Hooper, C. S.	Blount Springs, Ala.	Blount	480
Mar. 17	Harrell, W. F.	Blount Springs, Ala.	Blount	488
Mar. 23	Hale, J. R. & Bro.	Hale, Ala.	Marion	495
Mar. 24	Hamilton Bros.	LaPlace, Ala.	Macon	504
Apr. 7	Hale & Hale	Leesburg, Ala.	Cherokee	514
1891				
Oct. 14	Imperial Fertilizer Co.	Charleston, S. C.		33
1892				
Feb. 17	Ivey, J. W.	Petrey, Ala.	Crenshaw	353
1891				
Oct. 30	Johnson, T. M.	Augusta, Ga.		57
Nov. 10	Jones, V. D.	Troy, Ala.	Pike	65
Dec. 1	James, P. P.	Centreville, Ala.	Bibb	84
Dec. 17	Jernigan & Lipscomb.	Opelika, Ala.	Lee	97
Dec. 21	Jones & Co.	Newton, Ala.	Dale	105
1892				
Jan. 11	Johnson, J. J.	Geneva, Ala.	Geneva	143
Feb. 11	Jones, Searcy & Whitman	Charlton, Ala.	Dale	309

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Feb. 23	Jordan, Manning & Co	Guntersville, Ala.....	Marshall.....	394
Mar. 1	Jennings, Ben.....	Seale, Ala	Russell.....	423
Jan. 20	Killan, W. E	Brandon, Ala	DeKalb.....	179
Jan. 25	Kirkland, Levi	Cowarts, Ala.....	Henry.....	200
Jan. 30	Koopman & Gerdes.....	Cullman, Ala.....	Cullman.....	232
Feb. 5	Kelley, G. W.....	Midland City, Ala	Dale.....	264
Feb. 6	Keel, S	Merigold, Ala	Madison	274
Feb. 17	Kysor, J. K	Burnt Corn, Ala	Monroe	352
Feb. 25	King, Claude	Leighton, Ala	Cothert .. .	404
Mar. 7	Killian, G. W.....	Portersville, Ala	DeKalb	450
Mar. 7	Kitchens Brothers	Heflin	Cleburne .. .	452
Mar. 25	Kroell, George.....	Montevallo, Ala	Shelby.....	506
1891				
Oct. 10	Lazenby, Reynolds & Co....	Forest Home, Ala	Butler.....	17
Oct. 30	Loeb, Simon	Montgomery, Ala	Montgomery	56
Nov. 23	Listers Agric. & Chem. Works	Newark, N. J .....	.....	79
Dec. 5	Lorentz & Rittler	Baltimore, Md .....	.....	89
Dec. 11	Lull & Lancaster	Wetumpka, Ala	Elmore	96
1892				
Jan. 7	Lemay, S. I	Hartselle, Ala	Morgan .. .	137
Jan. 15	Langston & Woodson	Atlanta, Ga .....	.....	165
Jan. 18	Lewis, D. L. & J. A	Alpine, Ala	Talladega .. .	174
Jan. 21	Long & Co	Granger, Ala	Henry .. .	187
Jan. 26	Lamar, L. & E	Selma, Ala	Dallas .. .	204
Jan. 27	Leary, J. F	Montgomery, Ala	Montgomery .. .	209
Jan. 29	Leslie, Geo	Gordon, Ala	Henry .. .	217
Feb. 2	Lewis, D. L. & J. A	Sycamore, Ala	Talladega .. .	242
Feb. 2	Lauderdale & Crew	Goodwater, Ala	Coosa .. .	249
Feb. 8	Lemle, L	Montgomery, Ala	Montgomery .. .	280
Feb. 8	Lowry, R. F	Perdue Hill, Ala	Monroe .. .	285
Feb. 11	Lowry, W. W	Williams Sta., Ala	Escambia .. .	312
Feb. 17	Lemle, I	Montgomery, Ala	Montgomery .. .	356
Feb. 18	Lauderdale, J. S	Alexander City, Ala	Tallapoosa .. .	358
Feb. 19	Luverne Fertilizer Co	Luverne, Ala	Crenshaw .. .	379
Feb. 20	Little, C. E	Auburn, Ala	Lee .. .	380
Feb. 22	Lee, Alonzo J	Burnt Corn, Ala	Monroe .. .	385
Feb. 27	Leman, A	Greenville, Ala	Butler .. .	415
Mar. 3	Lee, Robt. A. & Co	Greenville, Ala	Butler .. .	439
Mar. 10	Latham, S. A & Co	Montevallo, Ala	Shelby .. .	463
Mar. 21	Long, N. W. E	Hurtsboro, Ala	Russell .. .	492
Mar. 26	Lawrence, R	Cedar Bluff, Ala	Cherokee .. .	507
1891				
Oct. 5	Marietta Guano Co	Atlanta, Ga .....	.....	3
Oct. 9	Montgomery Fertilizer Co	Montgomery, Ala	Montgomery .. .	13
Oct. 9	Mobile Phosphate Co	Mobile, Ala	Mobile .. .	14
Oct. 9	Meridian Fertilizer Factory	Meridian, Miss .. .	.....	16
Oct. 10	Mahur, W. H	Randolph, Ala	Bibb .. .	18
Oct. 13	Murphree, Joel D	Troy, Ala	Pike .. .	29
Oct. 30	Montague, C. L. & Co	Savannah, Ga	54
Dec. 2	Mayfield, Pittman & Co	Roanoke, Ala	Randolph .. .	85

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Dec. 10	Marks & Gayle.....	Montgomery, Ala	Montgomery	95
Dec. 17	Miles, T. B	Union Springs, Ala	Bullock	100
Dec. 24	Mills & Pauncey.....	Clay Hatchee, Ala	Dale	114
1892				
Jan. 11	Manley, Handley & Co	Roanoke, Ala	Randolph	146
Jan. 14	Martin, W. J	Abbeville, Ala	Henry	156
Jan. 14	Melton & Co	Pine Apple, Ala	Wilcox	162
Jan. 20	Mills, J. B	Shorterville, Ala	Henry	182
Jan. 25	Montgomery, H. B. T	Opelika, Ala	Lee	197
Jan. 28	Middlebrooks & Bro	Elamville, Ala	Barbour	212
Jan. 29	Mickle & East	Roanoke, Ala	Randolph	216
Jan. 30	Mash, D. J	Greenville, Ala	Butler	230
Feb. 4	Martin, T. J	Harpersville, Ala	Shelby	259
Feb. 5	Maas & Schwartz	Selma, Ala	Dallas	266
Feb. 11	Moreman, J. M	Waverly, Ala	Lee	311
Feb. 12	May, J. T	Montgomery, Ala	Montgomery	316
Feb. 19	Morris, J. C	Day's Gap, Ala	Walker	376
Feb. 25	Myers, J. S	Fort Payne, Ala	DeKalb	410
Feb. 26	Morris, D. W & Bro	Chepultepec, Ala	Blount	412
Feb. 27	Mackey, B. F	Mackey, Ala	Cherokee	419
Feb. 29	Manasses, J	Clayton, Ala	Barbour	421
Mar. 2	Marshall, J. Z	Irondale, Ala	Jefferson	429
Mar. 10	Milner, J. K	Columbiana, Ala	Shelby	460
Mar. 30	Morgan & Merryman	Heffin, Ala	Cleburne	510
May 28	Martin & Crocker	Gladstone, Ala	Madison	527
May 30	Mastin, C. J	Huntsville, Ala	Madison	528
June 9	Moore, H. D	Alpine, Ala	Talladega	529
1891				
Oct. 16	McMillan & Harrison	Mobile, Ala	Mobile	39
Dec. 19	McGriff & Oakley	Columbia, Ala	Henry	103
1892				
Jan. 5	McKenzie, F. S	Tallassee, Ala	Elmore	128
Jan. 11	McWilliams, J. B. & Co	Talladega, Ala	Talladega	147
Jan. 11	McGriff, T. P	Columbia, Ala	Henry	149
Jan. 14	McEntire & Co	Hanceville, Ala	Blount	158
Jan. 26	McEldery, G. T	Talladega, Ala	Talladega	206
Feb. 3	McGriffers, David	Knoxville, Ala	Greene	251
Feb. 5	McDonald, F. C. & Co	Luverne, Ala	Crenshaw	265
Feb. 9	McElhaney, F. G	Auburn, Ala	Lee	299
Feb. 12	McCleskey, & Co	Boaz, Ala	Marshall	321
Feb. 13	McKenzie & Rogers	Goodwater, Ala	Coosa	332
Feb. 15	McNutt, W. W	Brandon, Ala	DeKalb	335
Feb. 15	McGeehee, Driver & Co	LaFayette, Ala	Chambers	340
Feb. 16	McLendon & Tune	Jernigan, Ala	Russell	347
Mar. 2	McMillan & Simpson	Inverness, Ala	Bullock	433
Mar. 12	McCorquisdale, E	Coffeeville, Ala	Clarke	469
Mar. 14	McCord, W. T	Albertville, Ala	Marshall	476
Mar. 15	McBroom, A. M	Porterville, Ala	DeKalb	484
1891				
Oct. 13	National Fertilizer Co	Nashville, Tenn		30
Oct. 26	North Western Fertilizer Co	Chicago, Ill		51

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Dec. 9	Nettles, T. A.	Longstreet, Ala.	Monroe....	91
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Jan. 20	Neighbors, J. A. & Co	Goodwater, Ala.	Coosa	183
Jan. 30	Nicholls, J. A.	Childersburg, Ala.	Talladega.	227
Feb. 18	Noles & Tenant	Roanoke, Ala.	Randolph.	363
Feb. 22	Nordan, L. W.	Hardwicksburgh	Henry.	386
Feb. 24	Nixon, W. D.	Merrelton, Ala.	Calhoun....	401
Mar. 4	Norwood & Hattimer.	Fort Deposit, Ala.	Lowndes....	444
Mar. 21	Nichols & Vernon	Roanoke, Ala.	Randolph.	493
May. 6	Newton, C. A. & Son.	Bellville, Ala.	Conecuh ...	526
1891				
Oct. 21	O'Neal & Acree	Dothen, Ala.	Henry.	44
Nov. 16	Oberg Sons Company.	Baltimore, Md	.....	72
Dec. 22	Ozbin, W. N.	Hackelburg, Ala.	Monroe....	109
1892				
Jan. 23	Ogletree & Jackson	Estaboga, Ala.	Talladega.	196
Feb. 1	Oliver Brothers	Dadeville, Ala.	Tallapoosa.	237
Feb. 15	Orman & Bayless	New Market, Ala.	Madison.	339
Mar. 5	O'Neal & Law	Seawright, Ala.	Covington.	447
1891				
Oct. 17	Pearce, J. & Co	Guin, Ala.	Marion.	41
Oct. 30	Pollard, W. J.	Augusta, Ga. ....	.....	55
Nov. 9	Patapsco Guano Co.	Baltimore, Md	.....	62
Nov. 23	Pelzer, Rogers & Co.	Charleston, S. C	.....	80
Dec. 26	Prescott, C. M. & J. S.	Roanoke, Ala.	Randolph.	115
Dec. 28	Parish, P. L.	Henderson, Ala.	Pike.	116
1892				
Jan. 2	Pickens, J. M.	Cullman, Ala.	Cullman.	125
Jan. 7	Pope, M. F. & Co	Fayetteville, Ala.	Talladega.	136
Jan. 11	Pope, J. F.	Wilsonville, Ala.	Shelby.	148
Jan. 11	Ponder, B. F.	Opelika, Ala.	Lee.	152
Jan. 18	Porter, Martin & Co	Jacksonville, Ala.	Calhoun.	173
Jan. 19	Platt, W. H.	Kennedy, Ala.	Lamar.	176
Jan. 20	Phillips & Dean	Charlton, Ala.	Dale.	181
Feb. 5	Pullen & Taylor	Eutaw, Ala.	Greene.	262
Feb. 5	Pope, G. W.	Midland City, Ala.	Dale.	268
Feb. 9	Polk, M. S.	Alexander City, Ala.	Tallapoosa.	294
Feb. 17	Preer, T. C.	Opelika, Ala.	Lee.	351
Feb. 18	Parker, H. C.	Georgiana, Ala.	Butler.	360
Feb. 26	Pitts & Norris	Vincent, Ala.	Shelby.	414
Mar. 3	Payne, W. H.	Dadeville, Ala.	Tallapoosa.	438
Mar. 14	Phillips, D. T.	Elkmont, Ala.	Limestone.	475
Mar. 16	Prim & Kimbell	Jackson, Ala.	Clarke.	485
Mar. 24	Phillips, J. J. & G. W.	Syllacauga, Ala.	Talladega.	502
Mar. 31	Pennery, James A.	Hokes Bluff, Ala.	Etowah.	511
Apr. 18	Pugh, Stone & Co	Dadeville, Ala.	Tallapoosa.	522
1891				
Oct. 12	Raisin Fertilizer Co	Baltimore, Md	.....	28
Oct. 19	Royal Fertilizer Co	Charleston, S. C	.....	43
Nov. 10	Reese, John S. & Co	Baltimore, Md	.....	71
Dec. 5	Read Fertilizer Co.	Charleston, S. C	90
Dec. 21	Rayner Brothers	Newton, Ala.	Dale.	106

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Jan. 26	Russell, M. T. & Co	Grand Bay, Ala	Mobile	207
Jan. 29	Reynolds, F. L	Geneva, Ala	Geneva	219
Jan. 30	Rogers, J. E	Rogers, Ala	DeKalb	226
Feb. 5	Rainer Brothers	Troy, Ala	Pike	261
Feb. 6	Raspberry, B. T	Strasburg, Ala	Chilton	269
Feb. 6	Roberts & Webb	Pleasant Gap, Ala	Cherokee	273
Feb. 8	Robinson, B. F	Jemison, Ala	Chilton	283
Feb. 8	Roberson & Jones	Cropwell, Ala	St. Clair	289
Feb. 9	Ray & Robertson	Wilsonville, Ala	Shelby	300
Feb. 13	Rayner, L. W	Kirks Grove, Ala	Cherokee	326
Feb. 13	Robertson, Frederick & Co	Opelika, Ala	Lee	327
Feb. 15	Russell, E. J	Athens, Ala	Limestone	334
Feb. 15	Rome Oil Mill & Fertilizer Co	Rome, Ga		342
Feb. 20	Rains, G. M	Albertsville, Ala	Marshall	382
Feb. 25	Roberts, Frank S	Mobile, Ala	Mobile	392
Mar. 3	Robinson, W. C	Coffeeville, Ala	Clarke	435
Mar. 3	Russell, R. A. & Co	Gaylesville, Ala	Cherokee	440
Mar. 3	Russell, O. L. & Co	Lawrence, Ala	Cherokee	441
Mar. 8	Roberts, G. W	Collinsville, Ala	DeKalb	454
Mar. 12	Robertson, F. M	Fayette C. H., Ala	Fayette	472
Mar. 24	Reynolds, H. C. & B. W	Montevallo, Ala	Shelby	500
Apr. 9	Robinson, M. H	Jackson, Ala	Clarke	517
Apr. 11	Riddle, S. W. & Co	Gadsden, Ala	Etowah	519
Apr. 21	Riser, A. O	Alpine, Ala	Talladega	523
1891				
Oct. 6	South Ala. Oil & Fertilizer Co	Ozark and Dothen	Dale & Henry	7
Oct. 12	Scott, Geo. W. Mfg Co	Atlanta, Ga		24
Oct. 16	Stono Phosphate Co	Charleston, S. C		37
Oct. 30	Savannah Guano Co	Savannah, Ga		53
Oct. 31	Southern Phosphate Co	Atlanta, Ga		58
Nov. 9	Stedham, J. V	Stedham, Ala	Escambia	63
Nov. 9	Smith, Jasper	Guntersville, Ala	Marshall	64
Nov. 10	Shirley, S. W	Glee, Ala	Pike	66
Nov. 20	Steiner, Jas. & Son	Greenville, Ala	Butler	74
Nov. 20	Steiner Bros. & Co	Greenville, Ala	Butler	75
Dec. 1	Skipper, Jno. C	Dothen, Ala	Henry	83
1892				
Jan. 2	Schloss & Kahn	Montgomery, Ala	Montgomery	123
Jan. 5	Smith, T. & Meadows	Opelika, Ala	Lee	129
Jan. 14	Smith, F. C. & Co	Greenville, Ala	Butler	154
Jan. 15	Sampey, W. L	Clanton, Ala	Chilton	167
Jan. 21	Schuessler Brothers	LaFayette, Ala	Chambers	188
Jan. 25	Savage, L. W	Evergreen, Ala	Conecuh	198
Jan. 25	Street, J. C	Bluff Springs, Ala	Clay	201
Jan. 25	Smith Brothers	Syllacauga, Ala	Talladega	202
Jan. 27	Stephens, B. F. & Co	Louisville, Ala	Barbour	211
Jan. 30	Steinhardt, A	Greenville, Ala	Butler	228
Feb. 1	Seaman, E. S	DeArmanville, Ala	Calhoun	238
Feb. 2	Stevens & Spivy	Patsburg, Ala	Crenshaw	241
Feb. 3	Simon, Henry	Montgomery, Ala	Montgomery	254
Feb. 4	Shelton, G. D	Liberty, Ala	Blount	257

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Feb. 8	Samhenry & Co.....	Gadsden, Ala ..	Etowah	287
Feb. 9	Slaughter, Staffin & Co.	Perdue Hill, Ala..	Monroe	293
Feb. 11	Sanders & Purcell.....	Columbia, Ala.....	Henry	307
Feb. 11	Sims, J. F	Brompton, Ala ..	St. Clair	313
Feb. 12	Snead, J. H	Boaz, Ala	Marshall	322
Feb. 13	Stodghill, J. T	Fredonia, Ala ..	Chambers	329
Feb. 13	Sibert, W. J	Gadsden, Ala ..	Etowah	330
Feb. 17	Scholze & Brother.....	Chattanooga, Tenn.	349
Feb. 17	Simmons, C. M.....	Monroeville, Ala..	Monroe	354
Feb. 18	Simpson, C. M	Branchville, Ala ..	St. Clair	362
Feb. 19	Stieffelmeyer, C. A ..	Cullman, Ala ..	Cullman	369
Feb. 19	Stumpe, J. M	St. Florian, Ala ..	Lauderdale	371
Feb. 19	Sims, John M	Georgiana, Ala ..	Butler	373
Feb. 22	Stinnett, S. L	Athens, Ala	Limestone	384
Feb. 22	Smith & Black	Luverne, Ala	Crenshaw	387
Feb. 23	Smith, W. T	Wilsonville, Ala ..	Shelby	389
Feb. 25	Stewart, B. M. & J. D ..	Spring Garden, Ala.	Cherokee	408
Mar. 3	Schiffman, S. S	Huntsville, Ala ..	Madison	434
Mar. 5	Stewart, H. C	Sylacauga, Ala ..	Talladega	445
Mar. 5	Smith Brothers & Co ..	Heflin, Ala	Cleburne	448
Mar. 8	Shepherd, R. M	Kennedy, Ala ..	Lamar	455
Mar. 10	Sloane Brothers	Lebanon, Ala ..	DeKalb	459
Mar. 10	Steagall, P. C	Eufaula, Ala ..	Barbour	461
Mar. 14	St. John & Quigley.....	Mobile, Ala	Mobile	478
Mar. 19	Smith, E. S	Argo, Ala	Jefferson	490
Mar. 23	Sturdivant Brothers	Dadeville, Ala ..	Tallapoosa	498
Mar. 24	Smith, J. P. & Brother ..	Warrenton, Ala ..	Marshall	501
Mar. 28	Sistrunk & Jordan	Tallassee, Ala ..	Elmore	509
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