

VOLUME 17

NUMBER 3

FLORIDA QUARTERLY BULLETIN

OF THE
AGRICULTURAL DEPARTMENT

OCTOBER 1, 1907

B. E. MCLIN
COMMISSIONER OF AGRICULTURE
TALLAHASSEE, FLA.

Part 1—Crops

Part 2—Weather Report

Part 3—Fertilizers and Feed Stuff

Entered January 31, 1903, at Tallahassee, Florida, as second class matter
under Act of Congress of June 1900.

THESE BULLETINS ARE ISSUED FREE TO THOSE REQUESTING THEM

CAPITAL PUBLISHING COMPANY,
State Printer,
Tallahassee, Florida.



COUNTY MAP OF THE STATE OF FLORIDA.



PART I.
CROPS

DIVISION OF THE STATE BY COUNTIES.

Following are the divisions of the State, and the counties contained in each:

Northern Division.

Franklin,
Gadsden,
Hamilton,
Jefferson,
LaFayette,
Leon,
Liberty,
Madison,
Suwannee,
Taylor,
Wakulla.—11.

Southern Division.

Brevard,
Dade,
DeSoto,
Hillsborough,
Lee,
Manatee,
Monroe,
Osceola,
Polk,
St. Lucie—10.

Northeastern Division.

Alachua,
Baker,
Bradford,
Clay,
Columbia,
Duval,
Nassau,
Putnam,
St. Johns—9.

Western Division.

Calhoun,
Escambia,
Holmes,
Jackson,
Santa Rosa,
Walton,
Washington—7.

Central Division.

Citrus,
Hernando,
Lake,
Levy,
Marion,
Orange,
Pasco,
Suwanter,
Volusia—9.

DEPARTMENT OF AGRICULTURE

B. E. McLIN, Commissioner

H. S. ELLIOT, Chief Clerk.

CONDENSED NOTES OF CORRESPONDENTS—BY DIVISIONS.

NORTHERN DIVISION.—The crops of this division have experienced a series of misfortunes from the date of their planting to the present time, not equaled in this State for many years. The spring was late, cold and excessively dry for such a prolonged period that when seed failed to germinate it was almost impossible to replant. The result was bad stands of both cotton and corn. Following this, in the season when crops grow and require favorable weather conditions most, the rains began, and to the present date have continued to fall with most damaging results to all crops. Cotton will not make over 64 per cent of a crop, with good season from now to the end, and with continued rains even in moderate form, it will not reach 60 per cent. Corn is about 25 per cent short of last year, and the sweet potato crop has lost 20 per cent by excessive rains. The hay crop has been badly damaged by rains, and much loss caused either by inability to get it cut or ruined by rain after it was cut and before it could be cured and stored. Coupled with the foregoing reverses, the farmers are severely handicapped by the scarcity as well as the inefficiency of labor. For special purposes, at a rate of wages beyond the reach of the average farmer, moderately efficient labor can be had, but for all ordinary farming purposes it is not available to the extent that it is needed. Consequent upon these conditions, large quantities of fine farming lands lie idle.

WESTERN DIVISION.—There is practically no difference in the conditions existing in this division and the Northern. The percentage of condition is a little lower and the prospects of crop yields are a little worse in some sections, but in all essential respects the situation is the same. The shortness of the principal crops and their inability to regain the loss must be admitted by all

observing people. The cotton crop is near 40 per cent short, the corn crop 20 to 25 per cent, and other crops proportionally. The same labor conditions exist here that are complained of elsewhere, with no apparent probability of improvement; consequently large areas of farm lands are lying idle or given over to grazing purposes. It is not considered possible for much improvement in crop condition to take place at this late date and short time ahead. The one redeeming feature in all this excessive rainy season is that the pastures are fine, and live stock in excellent condition.

NORTHEASTERN DIVISION.—In this division crop conditions are better than in the preceding sections, although they suffered from the same causes at the same periods of the year. In the earlier parts of the year the vegetable and small fruit crops lost very considerably from the dry weather, and in the later months the field crops have and are still suffering to date from excessive rains. As in the sections previously considered, time is too short for cotton to recover but little, although the season is a little longer in most of the section. Complaints from some localities say that not 50 per cent of a cotton crop will be made, and other fall crops are nearly drowned out. So cotton is practically a failure in this section also.

CENTRAL DIVISION.—The effects of the long drought in the spring on the fruit trees has been offset to a great extent, as far as the trees are concerned, by the heavy rains of the summer and autumn. Fruit was also benefited, it is true; but the rain did not come in time to save it all, and the orange crop is now estimated to reach not over 78 per cent of a crop in this division, and grapefruit 83 per cent. The vegetable crops have been short, except in scattered localities, and the field crops will not amount to more than 75 per cent of an average, except perhaps in a few portions of the district. The same complaints of the shortness of labor obtain in this division as in the previously mentioned one.

SOUTHERN DIVISION.—In this division there are comparatively few field crops grown, the principal industry being the growing of vegetables and fruit. The field crops, with the exception of sweet potatoes, hay and pastures, have been cut very short by the dry weather,

being unable to make up the loss even with the aid of the rains that have recently fallen over most of this section. Vegetable crops suffered likewise, except in one or two sections of the district, and were consequently very short of the yield anticipated when seed was planted. The fruit trees were subjected to even more serious conditions, for the extent of the crops of fruit borne is measured to a very great degree by the abundance of moisture and the regularity and period of its application; hence the lack of rains for such a long extended period is shown very forcibly in short crops of all kinds. The pineapple crops of the district reached only about two-thirds of the average; the orange crop will barely exceed one-half of the crop reasonably to be expected under ordinary conditions, and the grapefruit or pomelo crop will not reach 50 per cent of the yield reasonably looked for. As this division includes the greatest fruit-growing section of the State, it becomes apparent that the crops of fruits mentioned will, for the State, hardly exceed 75 per cent of a full crop.

In some sections of the district there is considerable complaint of a new worm that is seriously damaging the velvet beans.

Report of Condition and Prospective Yield of Crops, Fruits and Fruit Trees for Quarter Ending September 30th, 1907, as Compared With an Average During Same Period of 1906.

COUNTIES	Upland Cotton		Sea Island Cotton		Corn	
	Condition	Prospective Yield	Condition	Prospective Yield	Condition	Prospective Yield
Northern Division.						
Franklin					85	89
Gadsden	65	67			100	100
Hamilton	75	69	75	99	75	76
Jefferson	70	68	80	75	80	95
Lafayette			60	69	75	75
Leon	60	62			100	100
Suwannee			60	69	80	80
Taylor			75	75	50	50
Div. Av. per cent.	68	64	70	67	81	85
Western Division.						
Calhoun	50	59	50	59	75	75
Escambia	75	65			75	80
Holmes	65	70			80	80
Jackson	62	70			95	95
Santa Rosa	60	60			75	100
Div. Av. per cent.	62	68	60	69	82	85
Northeastern Division.						
Alachua			75	75	100	100
Baker			50	50	100	100
Bradford			70	75	100	100
Clay			85	85	100	110
Columbia			75	90	90	80
Nassau					100	100
Div. Av. per cent.			71	75	98	97
Central Division.						
Citrus			70	70	80	80
Hernando					80	80
Lake					80	100
Levy			65	65	90	95
Marion			100	110	100	110
Orange					75	75
Pasco					85	85
Sumter			100	100	95	95
Volusia					75	75
Div. Av. per cent.			84	86	80	80
Southern Division.						
Brevard					100	100
DeSoto					90	95
Hillsborough			80	80	90	95
Manatee					100	100
Osceola					50	25
Polk					50	50
St. Lucie						
Div. Av. per cent.			80	80	85	78
State Av. per cent. ..	65	64	73	77	86	89

Condition and Prospective Yield of Crops—Continued.

COUNTIES	Sugar Cane		Field Peas		Rice	
	Condition	Prospect'Ve Yield	Condition	Prospect'Ve Yield	Condition	Prospect'Ve Yield
Northern Division						
Franklin	80	90	75	83	.....	.....
Gadsden	50	75	100	100	.....	.....
Hamilton	60	60	60	75	75	75
Jefferson	85	100	60	80	100	100
Lafayette	75	100	40	75	50	75
Leon	100	100	100	100	.....	.....
Suwannee	90	90	100	100	40	40
Taylor	100	100	90	100	.....	.....
Div. Av. per cent.....	80	89	78	89	66	72
Western Division.						
Calhoun	90	90	75	85	.....	.....
Escambia	100	100	100	25	100	100
Holmes	95	100	95	100	90	93
Jackson	90	95	95	100	.....	.....
Santa Rosa	80	75	40	75	.....	.....
Div. Av. per cent.....	91	92	81	77	95	95
Northeastern Division.						
Alachua	90	90	95	95	.....	.....
Baker	100	100	50	50	.....	.....
Bradford	90	95	90	90	.....	.....
Clay	110	110	100	100	100	100
Columbia	100	100	100	100	130	105
Nassau	90	90	100	100	.....	.....
Div. Av. per cent.....	97	98	89	89	100	102
Central Division.						
Citrus	75	60	85	80	.....	.....
Hernando	80	80	100	100	80	90
Lake	40	50	90	90	.....	.....
Levy	60	60	100	100	.....	.....
Marion	90	95	100	100	90	100
Orange	70	65	75	80	.....	.....
Pasco	80	80	95	95	90	90
Sumter	80	80	87	87	.....	.....
Volusia	93	80	100	100	.....	.....
Div. Av. per cent.....	74	76	92	92	87	93
Southern Division.						
Brevard	100	100	100	150	.....	.....
DeSoto	100	100	100	100	50	60
Hillsborough	85	80	90	90	.....	.....
Manatee	100	100	100	100	50	50
Osceola	80	60	100	100	100	100
Polk	50	40	75	75	60	50
St. Lucie .....	.....	.....	.....	.....	.....	.....
Div. Av. per cent.....	86	80	94	94	65	65
State Av. per cent....	86	87	87	88	83	85

Condition and Prospective Yield of Crops—Continued.

COUNTIES	Sweet Potatoes		Cassava		Plantains	
	Condition	Prospective Yield	Condition	Prospective Yield	Condition	Prospective Yield
Northern Division.						
Franklin	90	95				
Gadsden	75	90			75	100
Hamilton	75	75			75	90
Jefferson	90	95			95	100
Lafayette	65	80			75	85
Leon	100	120			100	100
Suwannee	100	100			100	100
Taylor	100	100			100	100
Div. Av. per cent.	87	94			88	96
Western Division.						
Calhoun	95	95			75	75
Escambia	75	80			100	100
Holmes	100	100			100	100
Jackson	100	100			100	100
Santa Rosa	100	100			75	85
Div. Av. per cent.	94	95			90	92
Northeastern Division.						
Alachua	90	95			100	100
Baker	100	100			80	100
Bradford	100	100			90	95
Clay	100	100	100	100	100	110
Columbia	90	90			100	100
Nassau	100	100			100	100
Div. Av. per cent.	98	99	100	100	95	101
Central Division.						
Citrus	90	100			100	100
Hernando	100	100	60	50	90	100
Lake	100	100	50	50	50	75
Levy	100	100			100	100
Marion	100	100	100	100	105	110
Orange	100	80	90	90		
Pasco	100	100	94	95	95	95
Sumter	85	85			87	85
Volusia	100	100	75	75	80	90
Div. Av. per cent.	97	97	78	77	88	93
Southern Division.						
Brevard	120	150	100	100		
DeSoto	90	95	100	100		
Hillsborough	80	80	90	90	80	85
Manatee	75	75				
Osceola	70	60	50	50	40	40
Polk	100	120	50	50	75	75
St. Lucie						
Div. Av. per cent.	89	97	78	78	65	67
State Av. per cent.	93	96	85	85	85	90

Condition and Prospective Yield of Crops—Continued.

COUNTIES	Broom Corn		Hay Grasses		Alfalfa	
	Condition	Prospect'v'e Yield	Condition	Prospect'v'e Yield	Condition	Prospect'v'e Yield
Northern Division.						
Franklin	80	95	.....	.....
Gadsden	100	100	.....	.....
Hamilton	75	75	.....	.....
Jefferson	80	80	.....	.....
Lafayette	65	75	.....	.....
Leon	100	100	.....	.....
Suwannee	100	100	.....	.....
Taylor	100	100	.....	.....
Div. Av. per cent.	88	91	.....	.....
Western Division.						
Calhoun	100	100	.....	.....
Escambia	50	75	100	100	100	100
Holmes	100	100	.....	.....
Jackson	100	100	.....	.....
Santa Rosa	81	100	.....	.....
Div. Av. per cent.	50	75	96	100	100	100
Northeastern Division.						
Alachua	100	100	.....	.....
Baker	100	100	.....	.....
Bradford	100	100	.....	.....
Clay	100	100	.....	.....
Columbia	100	100	.....	.....
Nassau	100	100	.....	.....
Div. Av. per cent.	96	102	.....	.....
Central Division.						
Citrus	100	100	.....	.....
Hernando	120	100	.....	.....
Lake	50	50	.....	.....
Levy	100	100	.....	.....
Marion	100	110	.....	.....
Orange	100	100	.....	.....
Pasco	50	50	.....	.....
Sumter	100	100	.....	.....
Volusia	100	100	.....	.....
Div. Av. per cent.	91	99	.....	.....
Southern Division.						
Brevard	100	100	.....	.....
DeSoto	100	100	.....	.....
Hillshorough	100	100	.....	.....
Manatee	100	100	.....	.....
Osceola	100	100	.....	.....
Polk	100	120	.....	.....
St. Lucie
Div. Av. per cent.	100	102	.....	.....
State Av. per cent.	50	75	94	97	100	101

Condition and Prospective Yield of Crops—Continued.

COUNTIES	Velvet Beans		Pastures		Bananas	
	Condition	Prospect'Ve Yield	Condition	Prospect'Ve Yield	Condition	Prospect'Ve Yield
Northern Division.						
Franklin			90	100		
Gadsden	50	75	100	100		
Hamilton	75	80	50	50		
Jefferson	90	90	100	100		
Lafayette	85	130	50	65		
Leon	100	100	110	110		
Suwannee	90	90				
Taylor			100	100		
Div. Av. per cent	82	89	90	94		
Western Division.						
Calhoun			100	100		
Escambia	100	100	130	100		
Holmes	90	100	100	100		
Jackson	100	100	100	100		
Santa Rosa	50	50				
Div. Av. per cent	85	88	130	100		
Northeastern Division.						
Alachua	100	100	100	100		
Baker			100	100		
Bradford			100	100		
Clay	110	100	100	100		
Columbia	100	100	100	100		
Nassau			100	100		
Div. Av. per cent	103	103	100	130		
Central Division.						
Citrus	100	100	100	100		
Hernando	90	80	100	100	90	90
Lake	103	100				
Levy	100	100	100	100		
Marion	100	125	100	100		
Orange			100	100		
Pasco	85	85	90	90	60	60
Sumter	80	85	100	100		
Volusia	100	100	100	100		
Div. Av. per cent	94	97	99	99	75	75
Southern Division.						
Brevard			100	100	100	100
DeSoto	90	75	100	100	100	100
Hillsborough	95	95	90	90	85	85
Manatee	100	100	100	100	75	50
Osceola	10	10	100	100	10	10
Polk	100	75	100	100	25	20
St. Lucie						
Div. Av. per cent	79	71	98	98	60	46
State Av. per cent	89	90	97	98	70	69

Condition and Prospective Yield of Crops—Continued.

COUNTIES	Pineapples		Guavas		Orange Trees	
	Condition	Prospect' ve Yield	Condition	Prospect' ve Yield	Condition	Prospect' ve Yield
Northern Division.						
Franklin
Gadsden
Hamilton
Jefferson
Lafayette
Leon
Suwannee
Taylor
Div. Av. per cent.
Western Division.						
Calhoun	100	100
Escambia
Holmes
Jackson
Santa Rosa
Div. Av. per cent.	100	100
Northeastern Division.						
Alachua	50	50
Baker	100	100
Bradford	90	75
Clay	100	115
Columbia
Nassau	100	50
Div. Av. per cent.	88	78
Central Division.						
Citrus	100	85
Hernando	100	80
Lake	100	60
Levy
Marion	100	110
Orange	100	80
Pasco	75	10	90	50
Sumter	87	87
Volusia	100	75
Div. Av. per cent.	75	10	97	78
Southern Division.						
Brevard	100	50	100	50
DeSoto	100	100	100	100	100	60
Hillsborough	70	60	60	50	95	70
Manatee	75	50	50	25	75	50
Osceola	50	20	80	05	80	40
Polk	25	25	75	40
St. Lucie	100	100	25	25	50	50
Div. Av. per cent.	79	66	63	40	82	51
State Av. Per cent.	79	66	69	25	92	77

Condition and Prospective Yield of Crops—Continued.

COUNTIES	Lemon Trees		Lime Trees		Grapefruit Trees	
	Condition	Prospective Yield	Condition	Prospective Yield	Condition	Prospective Yield
Northern Division.						
Franklin .....	.....	.....	.....	.....	.....	.....
Gadsden .....	.....	.....	.....	.....	.....	.....
Hamilton .....	.....	.....	.....	.....	.....	.....
Jefferson .....	.....	.....	.....	.....	.....	.....
Lafayette .....	.....	.....	.....	.....	.....	.....
Leon .....	.....	.....	.....	.....	.....	.....
Suwannee .....	.....	.....	.....	.....	.....	.....
Taylor .....	.....	.....	.....	.....	.....	.....
Div. Av. per cent. ....	.....	.....	.....	.....	.....	.....
Western Division.						
Calhoun .....	.....	.....	.....	.....	.....	.....
Escambia .....	.....	.....	.....	.....	.....	.....
Holmes .....	.....	.....	.....	.....	.....	.....
Jackson .....	.....	.....	.....	.....	.....	.....
Santa Rosa .....	.....	.....	.....	.....	.....	.....
Div. Av. per cent. ....	.....	.....	.....	.....	.....	.....
Northeastern Division.						
Alachua .....	.....	.....	.....	.....	.....	.....
Baker	100	75	.....	.....	.....	.....
Bradford .....	.....	.....	.....	.....	.....	.....
Clay .....	.....	.....	.....	.....	.....	.....
Columbia .....	.....	.....	.....	.....	.....	.....
Nassau	100	.....	.....	.....	.....	.....
Div. Av. per cent.	100	75	.....	.....	.....	.....
Central Division.						
Citrus .....	.....	.....	.....	.....	95	80
Hernando .....	.....	.....	.....	.....	100	80
Lake	100	40	.....	.....	100	80
Levy .....	.....	.....	.....	.....	.....	.....
Marion .....	.....	.....	.....	.....	100	110
Orange .....	.....	.....	.....	.....	100	80
Pasco .....	.....	.....	.....	.....	95	80
Sumter .....	.....	.....	.....	.....	87	87
Volusia	100	75	.....	.....	100	85
Div. Av. per cent.	100	57	.....	.....	97	83
Southern Division.						
Brevard	50	.....	50	.....	100	25
DeSoto	100	60	100	100	100	75
Hillsborough .....	.....	.....	70	50	95	40
Manatee	75	50	75	50	75	50
Osceola	40	05	40	.....	80	30
Polk	50	25	50	25	70	50
St. Lucie .....	.....	.....	75	75	75	75
Div. Av. per cent.	63	35	66	60	87	47
State Av. per cent.	88	56	66	60	92	63

PART II.
Weather Report

U. S. Department of Agriculture,
CLIMATOLOGICAL SERVICE
of the
WEATHER BUREAU

Central Office: Washington, D. C.

FLORIDA SECTION,

A. J. Mitchell, Section Director.

Report for May, 1907.

GENERAL SUMMARY.

There were no general storms during the month, although some high winds prevailed over most of the State during the prevalence of thunderstorms. The highest winds recorded at regular stations were: Jacksonville, 45 miles an hour, on the 2d, and Jupiter, 36 miles, on the 26th. The lowest monthly maximum velocity, 29 miles an hour, was recorded at Key West.

The distribution of barometric pressure was quite uniform. The highest reduced barometer, 30.20 inches, occurred at Jacksonville, and the lowest, 29.89 inches, was recorded at the same station; the range for the month was 0.31 of an inch.

July is our warmest month, although there is very little difference between its mean temperature and that of August. The mean temperature of the current month was 81.3 degrees, or 0.2 degree below the normal, and 0.3 degree above the mean of 1906. The average temperature for July since 1892 has ranged from 80.2 to 82.3 degrees. The highest temperature during the current month was

102 degrees. The following maxima occurred in July of previous years: 1896, 103 degrees; 1897 to 1899, inclusive, 102 degrees; 1901, 107 degrees; 1902 and 1903, 105 degrees; 1904, 101 degrees; and 1905, 102 degrees. The mean maximum temperature was 90.6; the mean minimum, 72.1 degree. The highest monthly mean temperature was 84.7 degrees; the lowest, 78.2 degrees. The coolest weather in the northern district prevailed mostly from the 3d to the 6th, inclusive, with rather high temperatures in the northern, central and western counties from the 19th to the 25th. Unusually high temperatures prevailed in the southern section of the State from the 20th to the 24th; and from the 27th to the 31st, inclusive.

July is a rainy month, the average precipitation being exceeded only by that of August and September; abnormally heavy rains frequently occur. The average rainfall this month was 7.75 inches, or 0.65 of an inch above the normal, and 1.75 inches less than the average for the same month of 1906. The month was noted for frequent and well distributed rains throughout all districts. The greatest amount at any station for the month was 15.97 inches, at Mount Pleasant. The greatest amount ever recorded during July since 1892 was 27.30 inches, in 1898. The least amount recorded during the current month was 0.68 of an inch at Key West. The 24-hour amounts at many stations frequently exceeded an inch, the maximum amount during that period being 4.44 inches at Pensacola. The greatest 24-hour amount for July of which there is authentic record was 9.05 inches, in 1896. Rain fell every day this month, and the average amounts in the several districts, expressed in inches, were: Northern, 6; central, 8; southern, 5; and western, 8 inches.

As indicated by the frequent rains, there was much cloudiness, about 65 per cent of the days having been generally overcast.

ATMOSPHERIC PRESSURE.

	Inches.
Mean, as determined from records of 5 stations.....	30.03
Departure from the normal, 5 records.....	0.00
Highest observed, at Jacksonville on the 17th.....	30.20
Lowest observed, at Jacksonville on the 27th.....	29.89
Range for the State.....	0.31

TEMPERATURE.

	Degrees.
Mean, as determined from records of 57 stations.....	81.3
Departure from the normal, 33 records,	-0.2
Highest monthly mean, at Flamingo.....	84.7
Lowest monthly mean, at Plant City.....	78.2
Highest recorded, at Wausau on the 22d.....	102.0
Lowest recorded, at Galt on the 6th.....	58.0
Range for the State.....	44.0

PRECIPITATION.

	Inches.
Average, as determined from records of 56 stations,	7.75
Departure from the normal, 39 records,	-0.65
Greatest amount for any 24 hours, at Pensacola on the 26th and 27th.....	4.44
Greatest monthly amount, at Mt. Pleasant.....	15.07
Least monthly amount, at Key West.....	0.68
Average number of days on which 0.01 or more fell	15

SUNSHINE AND CLOUDINESS.

Average number of clear days,	11
Average number of partly cloudy days.....	15
Average number of cloudy days.....	5

WIND.

Prevailing wind direction.....	Southwest.
--------------------------------	------------

CLIMATOLOGICAL DATA FOR JULY, 1907.

15

STATIONS	COUNTIES	Elevation, Feet.	Temperature in Degree Fah.							Precipitation, inches				Wind.				
			Length of Record Years							Total.	Departure from the Normal.	Greatest in 24 Hours.	Number rainy Days.	Number Clear Days.	Number Fairly Clear Days.	Number cloudy Days.	Prevailing Direction of Wind.	
			Mean.	Departure from the Normal.	Highest.	Lowest.	Extreme Daily Range.											
Norman Section.																		
Archer.....	Alaska.....	30	24	69.8	-0.3	88	34	68	9	15	15	4	1	10	0	10	7	W
Orlando Keys.....	Idaho.....	10	14	81.3	-1.2	98	27	85	16	16	14	1	1	10	0	10	W	
Federal Point.....	Idaho.....	10	14	81.3	-1.2	98	27	85	16	16	14	1	1	10	0	10	W	
Perandrea.....	Nevada.....	10	14	81.3	-1.2	98	27	85	16	16	14	1	1	10	0	10	W	
Capitowille.....	Alaska.....	120	21	81.3	-1.2	98	27	85	16	16	14	1	1	10	0	10	W	
Hastings.....	Idaho.....	0	10	82.3	-0.4	98	24	82	14	14	12	1	1	10	0	10	W	
Jacksonville.....	Idaho.....	45	37	81.3	-0.4	97	21	80	14	14	12	1	1	10	0	10	W	
Jasper.....	Idaho.....	150	0	82.3	-0.4	97	21	80	14	14	12	1	1	10	0	10	W	
Johnston.....	Idaho.....	125	11	81.3	-0.3	98	22	82	15	15	13	1	1	10	0	10	W	
Lake City.....	Columbia.....	50	18	81.3	-0.3	98	21	82	15	15	13	1	1	10	0	10	W	
Marchessay.....	Idaho.....	125	12	81.3	-1.1	98	21	82	15	15	13	1	1	10	0	10	W	
Middleburg.....	Idaho.....	90	7	81.3	-0.3	98	21	82	15	15	13	1	1	10	0	10	W	
St. Augustine.....	St. Johns.....	10	12	80.3	-0.3	97	20	81	15	15	13	1	1	10	0	10	W	
Waltham.....	St. Johns.....	10	12	80.3	-0.3	97	21	82	15	15	13	1	1	10	0	10	W	

CLIMATOLOGICAL DATA FOR JULY, 1907—Continued.

23

STATIONS.	COUNTIES.	Elevation, feet.	Length of Record Years.	Temperature in degrees Fakh.						Precipitation inches.			Sky.			Prevailing direction of wind.	
				Mean.	Departure from the normal.	Highest.	Lowest.	Days.	Record Daily Range.	Total.	Departure from the normal.	Greatest in 24 Hours.	Number rainy days.	Number clear days.	Number partly cloudy days.		Number cloudy days.
CENTRAL SECTION.																	
Bartow.....	Colt.....	115	17	81.7	-0.9	97.59	67	1*	3.87	16.24	-1.1	19.11	17	17	0	0	W
Brooksville.....	Hernando.....	126	14	80.6	-0.10	95.8*	66	1*	3.86	16.21	-1.0	19.10	17	17	0	0	W
Clermont.....	Lake.....	160	14	81.7	-0.10	96.8*	66	1*	3.86	16.21	-1.0	19.10	17	17	0	0	W
DeLand.....	Volusia.....	57	6	81.7	-0.10	96.8*	66	1*	3.86	16.21	-1.0	19.10	17	17	0	0	W
Easton.....	Lake.....	58	17	81.4	-1.1	96.8*	67	1*	3.85	16.18	-1.1	19.09	18	17	0	0	W
Fort Meade.....	Colt.....	120	23	80.3	-1.0	96.26	67	1*	3.85	16.17	-1.0	19.08	18	17	0	0	W
Fort Pierce.....	St. Lucie.....	6	14	80.4	-1.0	97.04	67	1*	3.84	16.14	-1.0	19.08	18	17	0	0	W
Georgetown.....	St. Bernard.....	26	26	81.36	..	94.26	71	1*	3.83	16.12	-1.0	19.07	18	17	0	0	W
Grosmont.....	Orange.....	122	16	81.6	-0.8	97.8	66	1*	3.82	16.09	-1.0	19.06	18	17	0	0	W
Inverness.....	Citrus.....	47	6	80.2	-1.3	96.21*	68	1*	3.81	16.06	-1.0	19.05	19	17	0	0	W
Kissimmee.....	Ocala.....	65	12	82.0	-0.4	96.8*	68	1*	3.81	16.05	-1.0	19.05	18	17	0	0	W
Malabar.....	Howard.....	34	6	81.4	..	96.26	67	1*	3.81	16.04	-1.0	19.05	18	17	0	0	W
New Smyrna.....	Volusia.....	9	18	80.8	-0.2	96.26	67	1*	3.81	16.03	-1.0	19.05	18	17	0	0	W
Ocala.....	Marion.....	66	24	81.6	-0.2	96.26	68	1*	3.80	16.02	-1.0	19.05	18	17	0	0	W

CLIMATOLOGICAL DATA FOR JULY, 1907—Continued.

24

STATIONS	COUNTIES	Elevation, feet.	Length of Record Years	Temperature in degrees Fahrenheit					Precipitation in inches			Sky.				
				Mean.	Departure from the normal.	Highest.	Days.	Lowest.	Date.	Total.	Departure from the normal.	Greatest in 24 hours.	Number rainy days.	Number partly rainy days.	Number clear days.	Prevailing direction of wind.
Orange City	Volusia	110	16	81.7	-1.1	95	1	65	11.1	-1.4	1	1	19	1	0	0
Orlando	Orange	111	17	82.0	-0.6	97	4	65	14.7	-1.4	1	1	17	1	0	0
Yemassee	Sumter		15	80	1.0	95	4	65	14.7	-1.4	1	1	17	1	0	0
Plant City	Hillsborough	124	15	81.1	-1.1	95	4	65	14.7	-1.4	1	1	17	1	0	0
Rockwell	Marion	74	15	81.0	-1.1	95	4	65	14.7	-1.4	1	1	17	1	0	0
St. Leo	Polk	60	15	81.1	-1.1	95	4	65	14.7	-1.4	1	1	17	1	0	0
Tampa	Hillsborough	29	17	80.5	-1.5	95	4	65	14.7	-1.4	1	1	17	1	0	0
Tarpon Springs	Hillsborough	13	15	80.6	-1.4	95	4	65	14.7	-1.4	1	1	17	1	0	0
Titusville	Brevard	35	15	81.1	-1.1	95	4	65	14.7	-1.4	1	1	17	1	0	0
SOUTHERN SECTION																
Arnold	DeSoto	120	16	81.7	-1.1	96	1	65	11.1	-1.4	1	1	19	1	0	0
Avon Park	In Man.	120	16	81.7	-1.1	96	1	65	11.1	-1.4	1	1	19	1	0	0
Flamingo	Monroe	6	6	81.2	-1.2	95	1	65	11.1	-1.4	1	1	19	1	0	0
Hypocrene	Halle	16	16	81.6	-1.1	95	1	65	11.1	-1.4	1	1	19	1	0	0

CLIMATOLOGICAL DATA FOR JULY, 1907—Continued.

22

STATIONS	COUNTIES	Elevation, Feet	Length of Record Years	Temperature in degrees Feh				Precipitation inches			Sky			Prevailing direction of wind	
				Month	Departure from the normal.	Highest.	Lowest.	Date.	Lowest Daily Means	Total.	Departure from the normal.	Greatest in 24 hours.	Number Clear Days		Number Partly Cloudy Days	Number Cloudy Days
Jupiter.....	Dade.....	29	19	81.6	+0.6	90.29	69	76	21	4.14	1.1	1	2	1	
Key West.....	Monroe.....	22	26	82.6	+0.1	91.11	70	75	22	4.08	1.1	1	2	1	
Manatee.....	Manatee.....	22	22	81.6	+0.1	90.29	69	76	21	4.14	1.1	1	2	1	
Miami.....	Dade.....	12	12	82.6	+0.4	90.29	69	76	21	4.14	1.1	1	2	1	
Myers.....	Lee.....	12	12	80.4	+0.6	90.29	69	76	21	4.14	1.1	1	2	1	
Wisconsin Eastern.															
Apalachicola.....	Franklin.....	24	2	80.4	.....	90.29	72	78	22	10.59	+4.05	1	1	1	0 0 0
Berthel.....	Holmes.....	111	6	80.8	+1.9	90.29	70	74	22	9.22	+3.01	1	1	1	0 0 0
Carrabelle.....	Franklin.....	106	11	82.6	+0.7	90.29	70	75	22	9.26	+3.10	1	1	1	0 0 0
DeFuniak Springs..	Walton.....	132	20	80.6	+0.2	90.29	68	75	21	9.57	+2.46	1	1	1	0 0 0
Fosholloway.....	Taylor.....	79	1	81.1	.....	90.29	67	74	20	9.51	.....	1	1	1	0 0 0
Gall.....	Santa Rosa.....	91	1	81.6	.....	90.29	68	75	20	10.11	.....	1	1	1	0 0 0
Madison.....	Madison.....	200	4	82.2	.....	90.29	65	73	20	4.41	+0.59	1	1	1	0 0 0
Marionna.....	Jackson.....	300	2	81.0	.....	90.29	67	75	20	7.36	+0.87	1	1	1	0 0 0

CLIMATOLOGICAL DATA FOR JULY, 1902—Continued.

25

STATIONS.	COUNTIES.	Elevation, feet.	Length of Record, Years.	Temperature in degrees Fahrenheit.						Precipitation, inches.				Prevailing direction of wind.			
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Total.	Departure from the normal.	Wettest.	Greatest in 24 hours.		Number Rainy Days.	Number Clear Days.	Number Partly Cloudy Days.	Number Cloudy Days.
Holts.....	Brown Co.....	65	22	59.2	-1.9	89	8-22	62	11	1.25	1.25	0	17	1	1	0	0
Monticello.....	Jefferson.....	307	22	70.2	.....	90	8-24	64	11	1.05	1.05	0	17	1	1	0	0
Mount Pleasant.....	Clackson.....	303	22	69.0	.....	89	8-22	64	11	1.05	1.05	0	17	1	1	0	0
Ponca.....	Columbia.....	56	28	81.0	-0.4	95	7-19	71	8	1.2	1.2	0	14	12	1	0	0
St. Andrew.....	Washington.....	24	22	82.1	-0.1	95	8-21	67	11	1.05	1.05	0	17	1	1	0	0
Trilokness.....	Leon.....	233	22	69.0	.....	92	8-22	68	11	1.05	1.05	0	17	1	1	0	0
Wasson.....	Washington.....	258	9	81.4	.....	92	8-22	67	11	1.05	1.05	0	17	1	1	0	0
Lynn Roberts, June, 1902.				.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Arvada.....	.....	.....	.....	.....	.....	89	8-24	.....	12	8.12	.....	0	0	.....	.....	.....	.....
Plant City.....	.....	.....	.....	78.0	-2.1	90	8-2	68	4	2.01	1.83	0.24	0	.....	.....	.....	.....

All records are used in determining State means, but the mean departures from normal temperature and precipitation are based on records from stations that have ten or more years of observation.

The letters a, b, c, etc., indicate number of days missing from report. * More than one day.

PART III.

Fertilizers and
Feeding Stuffs



REGULATIONS GOVERNING THE TAKING AND
FORWARDING OF FERTILIZER OR COMMERCIAL
FEEDING STUFF SAMPLES TO THE
COMMISSIONER OF AGRICULTURE.

SECTION 15 OF THE LAWS.

Special samples of Fertilizers or Commercial Feeding Stuffs sent in by purchasers, under Section 9 of the laws, shall be drawn in the presence of two disinterested witnesses, from one or more packages, thoroughly mixed and a FAIR SAMPLE OF THE SAME OF NOT LESS THAN EIGHT OUNCES (ONE-HALF POUND) SHALL BE PLACED IN A CAN OR BOTTLE, SEALED AND SENT BY A DISINTERESTED PARTY TO THE COMMISSIONER OF AGRICULTURE AT TALLAHASSEE. NOT LESS THAN EIGHT OUNCES, IN A TIN CAN OR BOTTLE, WILL BE ACCEPTED FOR ANALYSIS. This rule is adopted to secure fair samples of sufficient size to make the necessary determinations, and to allow the preservation of a duplicate sample in case of protest or appeal. These duplicate samples will be preserved for two months from date of certificate of analysis.

The State Chemist is not the proper officer to receive special samples from the purchaser. The propriety of the method of drawing and sending the samples as fixed by the law is obvious.

The drawing and sending of special samples in rare cases is in compliance with law. Samples are frequently sent in paper packages or paper boxes, badly packed, and frequently in very small quantity (less than ounce); frequently there are no marks, numbers or other means of identification; the postmark in some instances being absent.

I would call the attention of those who desire to avail themselves of this privilege to Sections 9 and 10 of the law, which are clear and explicit.

Hereafter strict compliance with above regulations will be required. *The sample must not be less than one half pound, in a can or bottle, sealed and addressed to the Commissioner of Agriculture. The sender's name and address must also be on the package, this rule applying to special samples of fertilizers or commercial feeding stuff.*

INSTRUCTIONS TO MANUFACTURERS AND DEALERS.

Each package of Commercial Fertilizer, and each package of Commercial Feeding Stuff (after August 22, 1905) must have, securely attached thereto, a tag with the guaranteed analysis required by law, and the stamp showing the payment of the inspector's fee. This provision of the law—Section 3 of both laws—will be rigidly enforced.

Manufacturers and dealers will be required to properly tag and stamp each package of Commercial Fertilizer or Commercial Feeding Stuff under penalty as fixed in Section 6, of both laws. Tags shall be attached to the top end of each bag, or head of each barrel.

INSTRUCTIONS TO PURCHASERS.

Purchasers are cautioned to purchase no Commercial Fertilizers or Commercial Feeding Stuff (after August 22, 1905) that does not bear on *each package* an analysis tag with the guarantee required by law, and the stamp showing the payment of the inspector's fee. Goods not having the guarantee tag and stamp are irregular and fraudulent; the absence of the guarantee tag and stamp being evidence that the manufacturer or dealer has not complied with the law. Without the guarantee tag and stamp showing what the goods are guaranteed to contain, the purchaser has no recourse against the manufacturer or dealer. Such goods are sold illegally and fraudulently, and are generally of little value. All reputable manufacturers and dealers now comply strictly with the law and regulations by placing the guarantee tag and stamp on each package.

The interest of the consumer, the farmer, or stockman, demands that they purchase no Commercial Fertilizer or Commercial Feeding Stuff (after August 22, 1905), that does not have securely attached the guarantee tag and inspection stamp.

INSTRUCTIONS TO SHERIFFS.

The attention of the Sheriffs of the various counties

is called to Section 3 of both laws, defining their duties. This department expects each Sheriff to assist in maintaining the law and protecting the citizens of the State from the imposition of fraudulent, inferior or deficient Commercial Fertilizers or Commercial Feeding Stuffs.

B. E. McLIN,
Commissioner of Agriculture.

The following tables of average composition of Commercial Feed Stuffs are compiled from the report of the Connecticut Experiment Station. They cover a large number of analyses, and are fully representative of the standard composition of the various feeds in the tables. They are given for reference. Should a feed stuff vary materially from these averages, its purity may be questioned. If the "ash" content exceed to any great extent, sweepings may be suspected. If the crude fiber be excessive, oat hulls, corn cobs, rice chaff, or other ligneous or fibrous materials may be suspected. While the valuable constituents, "protein," "sugar and starch," and "fat," should not materially vary from these tables of averages, that are practically standards of comparison, for the feeds mentioned in the tables.

COPIES OF THE FERTILIZER LAW.

Citizens interested in the fertilizer and stock feed laws of the State, and desiring to avail themselves of their protection, can obtain copies free of charge by sending for same to the Commissioner of Agriculture.

AVERAGE COMPOSITION OF COMMERCIAL
FEED STUFFS.

NAME OF FEED	Crude Fiber.	Protein.	Starch and Sugar.	Fat.	Ash.
Cotton Seed Meal....	7.05	43.16	24.59	9.22	6.69
Linseed Meal	8.76	34.70	35.91	5.34	6.12
Wheat Bran	8.39	15.93	54.62	4.70	5.33
Middlings	6.36	17.14	50.60	4.26	4.30
Mixed Feed (wheat)..	7.80	16.86	54.44	4.79	5.30
Corn Meal	1.64	8.73	71.32	3.14	1.20
Corn (grain).....	2.16	10.50	69.60	5.40	1.50
Corn Cobs	30.10	2.40	54.90	0.50	1.40
Corn and Cob Meal...	6.60	8.50	64.80	3.50	1.50
Corn & Oats, eq'l p'ts..	5.80	9.60	66.10	4.40	2.20
Wheat	1.80	11.90	71.99	2.10	1.80
Oats	9.50	11.80	59.70	5.00	3.09
Soja Beans	4.80	34.00	28.00	16.50	5.40
Velvet Beans & Hulls..	9.20	19.70	51.30	4.50	3.30
Rice Hulls	35.70	3.60	38.60	0.70	13.20
Gluten Meal.....	1.25	37.06	46.52	3.27	0.68
Gluten Feed.....	7.31	24.17	54.30	3.44	1.80

AVERAGE COMPOSITION OF COMMERCIAL FEED
STUFFS—(Continued.)

NAME OF FEED.	Crude Fiber.	Protein.	Starch and Sugar.	Fat.	Ash.
Hominy Feed	4.05	10.49	65.27	7.85	2.54
Rye Products (bran) ..	4.53	15.57	61.28	3.02	3.80
Barley Sprouts	10.91	27.20	42.66	1.56	6.34
Distillers' Grains	12.90	32.23	33.34	12.09	1.86
Oat Feed	20.57	7.91	54.58	3.26	5.34
Provender	3.91	10.62	67.34	4.03	1.83
Victor Feed	10.63	8.83	62.46	4.02	3.64
XXX Corn & Oat F'ds	9.94	9.66	64.66	5.09	3.24
Corn & Oat Feeds....	12.09	8.73	61.73	3.73	3.22
Proprietary Horse F'ds	9.57	12.48	60.54	4.27	2.83
Molasses Feeds	8.49	16.34	51.72	1.79	6.18
Poultry Feeds	4.62	15.89	60.27	5.32	27.63
Beef Scrap .....	.....	44.70	3.23	14.75	29.20
Quaker Dairy Feed...	15.53	14.42	52.12	4.05	5.31
Creamery Feed	10.07	20.06	51.00	5.38	3.57
Purina Feed	12.60	10.10	57.03	5.75	4.65

COMPOSITION OF FERTILIZER MATERIALS.

NITROGENOUS MATERIALS.

	Pounds Per Hundred.		
	Ammonia	Phosphoric Acid	Potash
Nitrate of Soda.....	17 to 19	.....	.....
Sulphate of Ammonia.....	21 to 24	.....	.....
Dried Blood.....	12 to 17	.....	.....
Concentrated Tankage.....	12 to 15	1 to 2	.....
Bone Tankage.....	6 to 9	10 to 15	.....
Dried Fish Scrap.....	8 to 10	6 to 8	.....
Cotton Seed Meal.....	7 to 10	2 to 3	1½ to 2
Hoof Meal.....	13 to 17	1½ to 2	.....

PHOSPHATE MATERIALS.

	Pounds Per Hundred.		
	Ammonia	Available	Insoluble Phosphoric Acid
Florida Pebble Phosphate.....	.....	.....	26 to 32
Florida Rock Phosphate.....	.....	.....	33 to 35
Florida Super Phosphate.....	.....	14 to 19	1 to 6
Ground Bone.....	3 to 6	5 to 8	15 to 17
Steamed Bone.....	2 to 4	6 to 9	1½ to 2½
Dissolved Bone.....	2 to 4	13 to 15	2 to 3

POTASH MATERIALS AND FARM MANURES.

	Pounds Per Hundred.			
	Actual Potash	Am'nia	Phos-phoric Acid	Lime
Muriate of Potash.....	50	.....	.....	.....
Sulphate of Potash.....	48 to 52	.....	.....	.....
Double Sul. of Pot. & Mag..	26 to 30	.....	.....	.....
Kainit.....	12 to 12½	.....	.....	.....
Sylvinit.....	16 to 20	.....	.....	.....
Cotton Seed Hull Ashes...	15 to 30	.....	7 to 9	10
Wood Ashes, unleached...	2 to 8	.....	.....	.....
Wood Ashes leached.....	1 to 2	.....	1 to 1½	35 to 40
Tobacco Stems.....	5 to 8	2 to 4	.....	3½
Cow Manure (fresh).....	0.40	0 to 41	3.16	0.31
Horse Manure (fresh).....	0.53	0 to 60	0.28	0.21
Sheep Manure (fresh).....	0.67	1.00	0.23	0.33
Hog Manure (fresh).....	0.60	0.55	0.19	0.68
Hen Dung (fresh).....	3.85	2.07	1.54	0.24
Mixed Stable Manure.....	0.63	0.76	0.26	0.70

**MARKET PRICES OF CHEMICALS AND FERTILIZING MATERIALS AT FLORIDA SEA PORTS,
JANUARY, 1907.**

Ammoniates,	Less than 5 tons.	5 to 10 tons.	10 tons & over.
Nitrate of Soda, 17 per cent.			
Ammonia	\$60.00	\$59.50	\$59.00
Sulphate of Ammonia 25 per cent.			
Ammonia	74.00	73.50	73.00
Dried Blood 17 per cent. Ammonia	60.00	59.50	59.00
Dried Blood 15 per cent. Ammonia	54.00	53.50	53.00

POTASH.

High Grade Sulphate Potash 48 per cent. Potash (K ₂ O) .	50.00	49.50	49.00
Low Grade Sulphate Potash 26 per cent. Potash (K ₂ O) .	30.00	29.50	29.00
Muriate of Potash 50 per cent. Potash (K ₂ O)	46.00	45.50	44.00
Nitrate Potash, 13 Am., 42 Potash (K ₂ O)	84.00	83.50	83.00
Kainit 12 per cent. Potash...	13.00	12.50	12.00
Canada Hardwood Ashes 4 per cent. (K ₂ O) Potash...	17.00	16.50	16.00

AMMONIA AND PHOSPHORIC ACID.

High Grade Blood and Bone, 10 per cent Ammonia.....	40.00	39.50	39.00
Low Grade Blood and Bone, 6½ per cent. Ammonia, 8 per cent, Phosphoric Aid...	31.00	29.50	29.00
Raw Bone, 4 per cent. Ammonia, 22 per cent. Phosphoric Acid	32.00	31.50	31.00
Ground Castor Pomace, 6 per cent. Ammonia, 2 per cent Phosphoric Acid.....	25.00	24.50	24.00
Bright Cottonseed Meal, 8 per cent. Ammonia, market quotations	31.00	29.50	29.00

Dark Cotton Seed Meal, 6 per cent. Ammonia, market quotations	24.00	23.50	23.00
---	-------	-------	-------

PHOSPHORIC ACID.

High Grade Acid Phosphate, 16 per cent. Available Phosphoric Acid	15.00	14.50	14.50
Acid Phosphate 14 per cent. Available Phosphoric Acid.	14.00	13.50	13.00
Boneblack 17 per cent. Available Phosphoric Acid.	24.00	23.50	23.00
Odorless Phosphate	25.00	24.50	24.00

MISCELLANEOUS.

H. G. Ground Tobacco Stems, 3 per cent. Ammonia, 9 per cent. Potash	25.00	24.50	24.00
Pulverized Ground Tobacco Stems	16.00	15.50	15.00
Tobacco Dust, No. 1, 3 per cent. Ammonia, K ₂ O Potash	23.00	22.50	22.00
Tobacco Dust, No. 2, 1½ per cent. Ammonia, 1½ per cent. Potash	19.00	18.50	18.00
Dark Tobacco Stems, baled..	15.00	14.50	14.00
Land Plaster in sacks.....	10.50	10.25	10.00

The charges by reputable manufacturers for mixing and bagging any special or regular formula are \$1.50 per ton in excess of above prices.

Jacksonville Prices Current.

FEEDSTUFFS.

Pure wheat bran, per ton, \$27.00.

Pure Middlings, per ton, \$29.00.

Purina feed, per ton, \$27.00.

Victor meal, per ton, \$24.00.

Cotton hulls, per ton, \$10.00.

Other quotations are:

Gluten food, for cows, per ton, \$30.00.

Jersey cow feed, per ton, \$22.00.

Purina stock food, 100 sacks, 175 lbs., \$26.50.

Purina stock food, less quantity 100 lbs., \$27.00.

Atlas stock feed, per ton, \$28.00.

Atlas sugar feed, per ton, \$25.00.

Southern seed rye, per bushel, \$1.25.

Texas rust-proof seed oats, per bushel, 65c.

May or Burt seed oats, 32 pounds to bushel, per bushel,
80 cents.

Cotton seed meal, bright, 100 sacks, per ton, \$31.00.

Cotton seed meal, bright, less quantity, per ton, \$31.50.

Cotton seed meal, dark, car load, per ton, \$24.00.

Cotton seed meal, dark, 100 sacks, per ton, \$24.50.

Salt, 200-lb sacks, per sack, \$1.00.

Rock salt, for stock, per pound 1½c.

White corn, car load, per sack, of 100 pounds, \$1.25.

White corn, 100 sacks, per sack of 100 pounds, \$1.30.

White corn, less quantity, per sack of 100 pounds, \$1.35.

Mixed corn, 100 sacks, per sack of 100 pounds, \$1.20.

Mixed corn, less quantity, per sack of 100 pounds, \$1.25.

White oats, car load, per sack of 100 pounds, \$1.50.

White oats, 100 sacks, per sack of 100 pounds, \$1.60.

White oats, less quantity, per sack of 100 pounds, \$1.65.

Fancy White clipped oats, 100 pounds, 5c per sack
higher.

Note—Consumers are urged to compare the current prices with the "Feeding Value" as shown in the tables of analysis of feed stuff. It will be noted that Middlings and Bran at the prices quoted are more economical than other feeds, which sell for more per ton and are far below the standard in value. Low grade feeds, mill offal,

and similar feed, are largely advertised and sell for higher prices than standards, though of much less value.

A comparison of these prices and the tables will show that price does not govern value or quality; that some of the highest priced feeds have less value than others that can be purchased for less money. The effect of the "Stock Feed Law" has already been of marked benefit to the State. A number of low grade feeds, with fancy brands, and largely advertised, have been to large extent withdrawn from the State. If consumers will carefully study the tables of analysis of various brands, and compare them with the market prices, and purchase only those that compare favorably in quality and price, inferior feeds will soon disappear from the State.

FACTORS FOR CONVERSION.

To convert—

Ammonia into nitrogen, multiply by	0.824
Ammonia into protein by.....	5.15
Nitrogen into ammonia, multiply by	1.214
Nitrate of soda into nitrogen, multiply by	16.47
Nitrogen into protein by.....	6.25
Bone phosphatet into phosphoric acid, multiply by	0.458
Phosphoric acid into bone phosphate, multiply by	2.184
Muriate of potash into actual potash, multiply by	0.632
Actual potash into muriate potash, multiply by	1.583
Sulphate of potash into actual potash, multiply by	0.541
Actual potash into sulphate of potash, multiply by	1.85
Nitrate of potash into nitrogen, multiply by....	0.139
Carbonate of potash into actual potash, multiply by	0.681
Actual potash into carbonate of potash, multiply by	1.466
Chlorine, in "kainit," multiply potash (K ₂ O) by	2.33

For instance you buy 95 per cent. of nitrate of soda and want to know how much nitrogen is in it, multiply 95 per cent. by 16.47 you will get 15.65 per cent. nitrogen; you want to know how much ammonia this nitrogen is equivalent to, then multiply 15.65 per cent. by 1.214 and you get 18.99 per cent., the equivalent in ammonia.

STATE VALUATIONS.

For Available and Insoluble Phosphoric Acid, Ammonia and Potash for the Season of 1907.

Available Phosphoric Acid5 cents a pound
 Insoluble Phosphoric Acid1 cent a pound
 Ammonia (or its equivalent in nitrogen) 16½ cents a pound
 Potash (as actual potash, K₂O)5½ cents a pound

If calculated by units—

Available Phosphoric Acid\$1.00 per unit
 Insoluble Phosphoric Acid20 cents per unit
 Ammonia (or its equivalent in nitrogen) ..\$3.30 per unit
 Potash\$1.10 per unit

With a uniform allowance of \$1.50 per ton for mixing and bagging.

A unit is twenty pounds, or 1 per cent. in a ton. We find this to be the easiest and quickest method for calculating the value of fertilizer. To illustrate this take for example a fertilizer which analyzes as follows:

Available Phosphoric Acid ..6.22 per cent.x\$1.00— 6.22
 Insoluble Phosphoric Acid ..1.50 per cent.x .20— .30
 Ammonia3.42 per cent.x 3.30—11.28
 Potash7.23 per cent.x1.10— 7.95
 Mixing and Bagging.....— 1.50

Commercial value at sea ports27.25

Or a fertilizer analyzing as follows:

Available Phosphoric Acid8 per cent.x\$1.00—\$8.00
 Ammonia2 per cent.x 3.30— 6.60
 Potash2 per cent.x 1.10— 2.20
 Mixing and bagging 1.50

Commercial value at sea ports\$18.30

The above valuations are for cash for materials delivered at Florida seaports, and they can be bought in one ton lots at these prices at the date of issuing this Bulletin. Where fertilizers are bought at interior points, the additional freight to that point must be added.

If purchased in car load lots for cash, a reduction of ten per cent. can be made in above valuations, *i. e.*

Available Phosphoric Acid90 cents per unit
 Potash (K₂O)99 cents per unit
 Ammonia (or equivalent in nitrogen). \$2.97 per unit

The valuations and market prices in succeeding illustrations, are based on market prices for one ton lots.

SPECIAL SAMPLES.

It is shown by the number of "Special Samples" (those sent in direct by the purchaser of fertilizers) that the law is becoming more generally understood by the farmer, fruit and vegetable grower. Purchasers who have any reason to doubt the correctness of the guarantee on the goods furnished them, do not hesitate to send in samples for analysis.

This right to have a sample of the goods purchased analyzed by the State Chemist, under Section 9 of the law—without charge—the inspection fees covering the cost of analysis, as well as inspection—has doubtless had a direct influence upon the increased quality of the goods sold in the State. When properly drawn, sealed, witnessed and transmitted, the "Special Sample" has proved a safeguard to the customer, legitimate dealer, and manufacturer, and a check upon the careless, ignorant, or fraudulent vendor or manufacturer.

It furnishes the consumer with the same protection demanded by the manufacturer, who buys his materials only upon the guarantee, and pays for them according to analysis.

By far the largest amount of commercial fertilizers used in Florida, are manufactured or mixed by factories in the State. Large amounts of fertilizing materials are imported direct by factories and dealers located at our seaport cities; cargoes of potash salts direct from Germany are now frequently received by Florida importers, while large amounts of acid phosphate are manufactured at and exported from the various Gulf and Atlantic ports.

Florida consumers may now purchase their fertilizers and chemicals at Florida seaports as cheaply as at any of the seaports of the country.

On a preceding page a table of the "Average Composition of Commercial Feed Stuffs" will be found. The consumer should study this table, select the foods best suited to his demands—price of course considered—see that the "Guarantee" on the package he purchases compares favorably with the average in the table, and if doubtful of the truth of the statement on the "Guarantee" send at once a sample of the suspected material to the Commissioner of Agriculture at Tallahassee. Send one-half pound in a "tin can, sealed," as provided by law.

LIGHT WEIGHT—FALSE STATEMENTS.

Some complaint has been made recently as to failure to furnish full weight as guaranteed.

In one case of light weight cotton seed meal, discovered by the Inspector, the goods were sold by the sheriff, as provided by law.

Other cases have been reported, particularly "kainits."

The public, dealers and consumers, are cautioned to examine their purchases, and in case of doubt, have the casks weighed at the railroad station, or at the warehouse—reporting deficiencies in weight if found to exist, with names of sellers, manufacturers and witnesses to the weighing and other facts and circumstances. This applies to fertilizers and feeding stuff—(also to grain and other articles).

The department is desirous of maintaining the standard of both quality and quantity as expressed in the guarantee, and to this end requests the active co-operation of all citizens.

A false statement of weight on grain or feed is a misdemeanor, and subjects the seller to fine or imprisonment, or both, under Chapter 4967 (No. 92) Acts of 1901. Also the sale of light weight fertilizer and feed stuff subjects the seller to a fine and forfeiture of the goods, under the Fertilizer and Feed Stuff Laws.

BUREAU OF FERTILIZERS.

43

E. E. Rose, State Chemist.

L. Holmburger, Assistant Chemist.

Analysis of Special Samples Under Section 9, Act Approved May 23, 1901.

(Samples taken by Purchaser.)

NAME OR BRAND.	Laboratory Number.	Molecules.	Phosphoric Acid.			Ammonia.	Potash (K ₂ O).	BY WHOM SENT.
			Available.	Insoluble.	Total.			
Fertilizer No. 1.....	1971	.....	2.58	5.15	7.73	4.28	5.42	W. J. Kinball, Fort Pierce, Fla.
Fertilizer No. 2.....	1972	.....	.....	.....	9.43	4.82	2.65	W. J. Kinball, Fort Pierce, Fla.
Soft Phosphate (Matrix).....	1973	.....	.....	.....	29.34	.....	.....	P. A. Brown, Plant City, Fla.
Soft Phosphate (washed).....	1974	.....	.....	.....	29.34	.....	.....	P. A. Brown, Plant City, Fla.
Phosphate.....	1975	.....	.....	.....	18.75	.....	.....	Henry Shepard, Bristol, Fla.
Sulphate of Potash.....	1976	.....	.....	.....	.....	.....	.....	H. B. Moore & Moore, Milledge, Fla.
Wood and Bone.....	1977	.....	.....	.....	12.58	6.54	.....	Henry Lester, Tampa, Fla.
Sulphate of Potash.....	1978	.....	.....	.....	.....	.....	45.12	H. Arnold, Mulberry, Fla.
Fertilizer.....	1979	11.57	39.44	5.28	57.29	2.72	3.22	H. May, Fort Pierce, Fla.
Fertilizer.....	1980	7.37	2.85	2.97	13.19	4.95	11.28	A. Hixley, Fort Pierce, Fla.
Phosphate.....	1981	.....	.....	.....	28.75	.....	.....	W. S. Doyle, Yemassee, Fla.
Phosphate.....	1982	.....	.....	.....	18.75	.....	.....	W. S. Doyle, Yemassee, Fla.
Phosphate.....	1983	.....	.....	.....	27.85	.....	.....	Henry Shepard, Bristol, Fla.
Fertilizer.....	1984	12.72	5.53	2.37	20.62	2.89	5.24	P. Wynn, Galveston, Fla.

Fertilizer	1085	6.92	2.61	2.19	6.77	6.29	24.25	George W. Ruple, Fort Pierce, Fla.
Fertilizer	1086	3.54	2.16	2.56	6.51	4.25	22.44	Joseph Freedland, Boynton, Fla.
Fertilizer	1087	5.10	4.72	3.99	8.05	7.94	1.82	J. M. Kay, Daynton, Fla.
Soft Phosphate	1088				22.94			J. Hamontree, McMeekin, Fla.
Public Phosphate	1089				26.99			J. Hamontree, McMeekin, Fla.
Fertilizer	1090		6.47	2.20	5.72	4.22	3.42	Keenan & Edwards, Tampa, Fla.
Phosphate No. 1	1091				21.26			J. C. Gibson, DeFuniak Springs, Fla.
Phosphate No. 2	1092				29.29			J. C. Gibson, DeFuniak Springs, Fla.
Phosphate No. 3	1093				22.02			J. C. Gibson, DeFuniak Springs, Fla.
Fertilizer No. 1	1094	17.54	4.80	1.37	6.22	1.19	11.54	Walter Wadlin, Miami, Fla.
Phosphate	1095				22.45			C. J. Miller, Lakeland, Fla.
Fertilizer	1096	3.81	6.79	6.37	7.16	1.52	22.49	T. Kinshel, St. Petersburg, Fla.
Fertilizer	1097		6.91	1.14	7.62	4.24	7.17	W. J. Tweedell, Homestead, Fla.
Fertilizer	1098	8.17	7.71	3.99	19.61	4.47	8.53	J. J. Harvey, Hastings, Fla.
Fertilizer No. 1	1099	9.09	7.54	6.72	8.27	2.42	9.19	J. E. Rawlerson, Lilly, Fla.
Fertilizer No. 2	1100	11.72	6.94	6.42	7.28	2.59	19.52	J. E. Rawlerson, Lilly, Fla.
Fertilizer No. 3	1101	6.42	14.22	6.69	10.59	4.71	12.97	J. E. Rawlerson, Lilly, Fla.
Fertilizer No. 4	1102	5.74	6.79	6.15	8.65	4.98	14.22	J. E. Rawlerson, Lilly, Fla.
Fertilizer	1103	7.97	6.96	6.44	6.49	3.28	16.92	R. Hill, Oakland, Fla.
Fertilizer No. 2	1104	6.20	6.39	6.88	7.79	8.60	11.89	W. Wadlin, Miami, Fla.
Fertilizer	1105	16.24	7.92	6.24	8.27	2.22	12.41	A. E. Harrington, Winter Haven, Fla.
Canada Unleached Ashes	1106	12.80					2.29	O. Larson & Sons, Boynton, Fla.
Fertilizer	1107		6.62	6.29	6.82	4.84	12.02	W. E. Moss, Bonaventure, Fla.
Fertilizer	1108	16.27	6.22	6.21	6.82	1.26	9.22	D. W. Brown, Arcadia, Fla.
Phosphate No. 2	1109				28.46			N. M. Sault, Bowling Green, Fla.
Phosphate No. 3	1110				27.74			N. M. Sault, Bowling Green, Fla.
Phosphate No. 7	1111				21.57			N. M. Sault, Bowling Green, Fla.
Phosphate, No. 19	1112				22.65			N. M. Sault, Bowling Green, Fla.
Cotton Seed Meal	1113					7.68		Florida Cotton Oil Co., Jacksonville, Fla.
Phosphate No. 1, A	1114				29.82			John L. Morgan, Tallahassee, Fla.

BUREAU OF FERTILIZERS—Continued.

44

NAME OR BRAND.	Laboratory Number.	Moisture.	Phosphoric Acid.			Ammonia.	Potash (K ₂ O).	BY WHOM SENT.
			Available.	Insoluble.	Total.			
Fertilizer	1115	17.82	5.26	1.09	6.35	2.58	4.59	Walter Waldin, Miami, Fla.
Red Gum	1116	9.72	.....	.....	0.26	17.03	2.48	Wardens Fertilizer Co., Jacksonville, Fla.
Tobacco stems	1117	38.68	.....	.....	.....	0.25	5.87	L. R. Woods, Tampa, Fla.
Cotton Seed Meal No. 2	1118	.....	.....	.....	.....	0.29	.....	Florida Cotton Oil Co., Jacksonville, Fla.
Fertilizer	1119	.....	5.26	0.81	6.07	4.14	4.28	S. M. Harding, Dania, Fla.
Sheep Manure	1120	44.55	.....	.....	0.15	0.88	0.15	A. D. Key, Sanford, Fla.
Fertilizer	1121	1.75	5.22	0.35	5.57	.....	2.85	S. C. Mayo, Bradock, Fla.
Phospham	1122	.....	.....	.....	21.15	.....	.....	J. N. Harrell, Bristol, Fla.
Phosphate	1123	.....	.....	.....	7.00	.....	.....	A. M. Ramsey, Bristol, Fla.
Cotton Seed Meal (S. & N.)	1124	.....	.....	.....	.....	4.28	.....	Ward's Tobacco Co., Quincy, Fla.
Cotton Seed Meal (P. & M.)	1125	.....	.....	.....	.....	4.28	.....	Ward's Tobacco Co., Quincy, Fla.
Cotton Seed Meal (T)	1126	.....	.....	.....	.....	5.68	.....	Ward's Tobacco Co., Quincy, Fla.
Ashe	1127	6.21	.....	.....	.....	.....	0.40	John H. Baker, Tampa, Fla.
Carbonate of Potash 1791	1128	.....	.....	.....	.....	.....	61.50	Schweizer & Associates, Quincy, Fla.
Carbonate of Potash 11151	1129	.....	.....	.....	.....	.....	61.50	Schweizer & Associates, Quincy, Fla.
Carbonate of Potash 17261	1130	.....	.....	.....	.....	.....	58.85	Schweizer & Associates, Quincy, Fla.
Carbonate of Potash 17261	1131	.....	.....	.....	.....	.....	52.70	Schweizer & Associates, Quincy, Fla.
Fertilizer	1132	11.50	5.52	1.87	7.39	2.87	10.88	H. H. Hicks, Gulfway, Fla.

Fertilizer	1132	8.23	6.28	0.50	6.78	4.14	12.92	Ed. V. Lindberg, Crescent City, Fla.
Cotton Seed Meal	1134					2.83		Florida Cotton Oil Co., Jacksonville, Fla.
Fertilizer No. 4	1138	8.67	6.49	1.79	8.39	4.41	8.96	A. D. Smith, Oxford, Fla.
Fertilizer No. 5	1136	11.11	8.40	1.60	6.40	4.44	7.85	A. D. Smith, Oxford, Fla.
Fertilizer	1137	6.75	7.99	1.23	9.50	4.40	4.98	C. L. Saddy, Linden, Fla.
Fertilizer	1138	10.58	6.47	1.28	7.85	4.59	8.59	JAMES McKay, Boynton, Fla.
Castor Pomace No. 1	1139					5.68		W. W. Blackmer, Delray, Fla.
Castor Pomace No. 2	1140					5.87		W. W. Blackmer, Delray, Fla.
Castor Pomace No. 3	1141					5.82		W. W. Blackmer, Delray, Fla.
Fertilizer No. 1	1142	4.33	8.94	0.32	8.56	5.18	12.16	W. CHE, Crescent City, Fla.
Fertilizer No. 2	1143	7.34	8.47	3.84	9.31	7.84	18.16	W. CHE, Crescent City, Fla.
Fertilizer No. 4	1144	6.83	4.87	1.89	6.46	3.43	8.16	C. N. Perry, Oxford, Fla.
Fertilizer No. 5	1145	6.17	6.55	1.37	7.92	3.69	3.83	C. N. Perry, Oxford, Fla.
Fertilizer No. 6	1146	8.46	6.93	1.72	7.76	4.26	8.14	C. N. Perry, Oxford, Fla.
Fertilizer No. 7	1147	6.61	4.53	1.37	5.96	3.45	6.55	C. N. Perry, Oxford, Fla.
Fertilizer	1148	6.32	5.66	1.61	6.57	4.85	4.65	C. M. Perry, Oxford, Fla.
Fertilizer	1149		7.11	0.83	7.94	4.71	5.18	A. O. Graddy, Bartow, Fla.
Pebble Phosphate No. 1	1150				21.52			N. M. Sault, Bowling Green, Fla.
Pebble Phosphate No. 2	1151				24.02			N. M. Sault, Bowling Green, Fla.
Fertilizer No. 1	1152	4.66	4.95	1.44	8.33	4.72	6.82	E. P. Day, Webster, Fla.
Fertilizer No. 2	1153	19.63	6.91	1.94	7.91	3.97	5.93	E. P. Day, Webster, Fla.
Fertilizer No. 1	1154	4.99	6.31	1.35	7.66	2.56	8.34	James Freedland, Boynton, Fla.
Ashes No. 2	1155	18.55					3.12	James Freedland, Boynton, Fla.
Fertilizer No. 3	1156	8.26	6.37	2.03	8.48	4.61	9.83	James Freedland, Boynton, Fla.
Cotton Seed Meal	1157							J. L. McFarlin, Quincy, Fla.
Fertilizer	1158	7.07	5.59	0.54	6.13	4.32	19.16	H. A. Perry, Panama, Fla.
Cotton Seed Meal	1159					7.78		Taylor Brokerage Co., Jacksonville, Fla.
Rock Phosphate	1160				26.57			W. S. Hanson, Fort Myers, Fla.
Fertilizer	1161	8.98	8.63	0.25	8.38	4.29	9.53	W. F. Cowburn, Crescent City, Fla.
Fertilizer	1162	7.91	4.44	0.37	4.83	2.60	5.34	Walter Waddis, Miami, Fla.

BUREAU OF FERTILIZERS—Continued.

46

NAME OR BRAND.	Laboratory Number.	Moisture.	Phosphoric Acid.			Ammonia.	Potash (K ₂ O).	BY WHOM SENT.
			Available.	Insoluble.	Total.			
Fertilizer No. 1.....	1143	5.26	8.90	8.24	8.34	4.72	9.43	A. S. Nelson, Dunedin, Fla.
Fertilizer No. 3.....	1144	5.92	9.21	8.26	9.51	4.59	11.46	A. S. Nelson, Dunedin, Fla.
Kainit.....	1145	.....	.....	.....	.....	.....	12.27	R. J. Bush, Wethers, Fla.
Dried Blood.....	1146	.....	.....	.....	.....	15.64	.....	H. Witherington, Sanford, Fla.
Fertilizer.....	1147	11.82	7.13	8.27	7.58	2.15	6.97	J. B. Evans, Live Oak, Fla.
Fertilizer.....	1148	5.92	2.85	6.42	9.50	4.43	5.61	W. W. Blackman, Delray, Fla.
Cotton Seed Meal.....	1149	.....	.....	.....	.....	7.54	.....	Barron-Castlere, DeFuniak, Fla.
Bone and Potash.....	1179	6.74	6.71	12.87	12.5	1.89	29.29	Shroyer & Associates, Quincy, Fla.
Kainit.....	1171	.....	.....	.....	.....	.....	12.52	John Hieb, Baker's Mill, Fla.
Fertilizer.....	1172	14.09	12.19	1.37	13.57	1.86	1.57	D. T. Williams & Co., Milton, Fla.
Cotton Seed Meal.....	1173	.....	.....	.....	.....	7.92	.....	A. M. Roe, Monticello, Fla.
Fertilizer.....	1174	14.32	7.88	2.12	10.02	9.45	1.82	Geor Vickers, Edwards, Fla.
Cotton Seed Meal.....	1175	.....	.....	.....	.....	7.65	.....	John W. Henderson, Tallahassee, Fla.
Cotton Seed Meal.....	1176	.....	.....	.....	.....	6.92	.....	John W. Henderson, Tallahassee, Fla.
Cotton Seed Meal.....	1177	.....	.....	.....	.....	7.28	.....	J. T. Taylor, Quincy, Fla.
Fertilizer.....	1178	6.20	7.87	8.57	7.64	4.28	9.91	H. E. Parkes, Oxford, Fla.
Fertilizer.....	1179	10.42	2.64	2.21	9.52	2.24	8.11	George P. Hall, Opa, Fla.
Fertilizer No. 1.....	1180	9.64	8.92	1.72	8.64	5.34	4.97	J. R. Davis, Fortson, Fla.

Fertilizer No. 1.....	1181	10.70	8.34	9.98	7.32	5.44	3.91	J. R. Davis, Bartow, Fla.
Fertilizer	1182	7.38	7.55	9.74	8.29	2.85	8.03	W. H. Gillette, Sarasota, Fla.
Fertilizer	1183	.....	.....	.....	9.92	2.91	9.64	F. P. Pillsbury, Palmsola, Fla.
Fertilizer	1184	4.95	8.58	2.34	10.32	4.66	1.24	W. F. McDermitt, Oxford, Fla.
Kainit	1185	.....	.....	.....	.....	.....	12.92	T. Terry, Madison, Fla.
Potash Phosphate	1186	.....	.....	.....	12.34	.....	.....	J. L. Morgan, Tallahassee, Fla.
Rock Phosphate	1187	.....	.....	.....	17.47	.....	.....	B. F. Hampton, Gainesville, Fla.
Home Mixture Guano	1188	12.60	7.47	1.31	8.43	2.82	1.12	Marianna Mfg. Co., Marianna, Fla.
Potash Mixture	1189	17.17	10.37	9.58	10.85	.....	1.70	Marianna Mfg. Co., Marianna, Fla.
Cotton Seed Meal.....	1190	.....	.....	.....	.....	3.80	.....	Marianna Mfg. Co., Marianna, Fla.
Acid Phosphate	1191	21.48	12.67	8.97	15.24	.....	.....	Marianna Mfg. Co., Marianna, Fla.
Pulver Phosphate	1192	.....	.....	.....	10.97	.....	.....	E. F. Moody, Bowling Green, Fla.
Fertilizer	1193	.....	8.69	10.69	14.73	2.26	14.42	J. Hirschberg, Tallahassee, Fla.
Castor Pomace No. 1.....	1194	.....	.....	.....	.....	4.75	.....	N. J. Parks, Stuart, Fla.
Castor Pomace No. 2.....	1195	.....	.....	.....	.....	7.00	.....	N. J. Parks, Stuart, Fla.
Cotton Seed Meal.....	1196	.....	.....	.....	.....	7.79	.....	J. Hirschberg, Tallahassee, Fla.
Fertilizer	1197	12.23	7.52	1.58	9.13	2.72	2.08	J. W. Wicks, Pitts, Fla.
Fertilizer	1198	.....	8.69	2.24	8.32	6.94	10.99	J. F. Hoer, Jacksonville, Fla.
Fertilizer "G".....	1199	11.19	7.45	9.84	7.89	2.99	2.03	M. Stevenson, Bonifay, Fla.
Fertilizer "V".....	1200	11.85	8.59	1.82	10.32	6.52	2.17	M. Stevenson, Bonifay, Fla.
Fertilizer	1201	12.99	9.27	9.39	9.47	4.43	8.03	D. S. Barcland, Buckingham, Fla.
Acid Phosphate	1202	.....	12.70	9.29	14.98	.....	.....	A. L. Wilson Co., Quincy, Fla.
Fertilizer	1203	.....	7.82	4.92	11.85	2.42	12.62	Hal. S. Thomas, Miford, Fla.
Bone and Potash "B".....	1204	.....	9.93	7.97	17.93	1.09	10.92	K. B. Shaffer Co., Quincy, Fla.
Fertilizer	1205	.....	7.68	9.20	7.23	5.97	4.88	M. O. Conroy, Seville, Fla.
Rock Phosphate	1246	.....	.....	.....	11.67	.....	.....	I. M. Brandon, Brandon, Fla.
Fertilizer No. 1.....	1297	.....	4.82	9.97	6.78	6.60	7.87	H. E. Wims, Bonaventure, Fla.
Fertilizer No. 2.....	1298	.....	4.97	1.76	8.72	5.16	1.18	R. E. Wims, Bonaventure, Fla.
Marl Ashes	1299	.....	.....	.....	9.58	.....	6.65	J. B. Thomas, West Palm Beach, Fla.
Cotton Seed Meal.....	1310	.....	.....	.....	.....	7.83	.....	J. Hirschberg, Tallahassee, Fla.

BUREAU OF FERTILIZERS—Continued.

45

NAME OR BRAND.	Laboratory Number.	Moisture.	Phosphoric Acid.			Ammonia.	Potash (K ₂ O).	BY WHOM SENT.
			Available.	Insoluble.	Total.			
Phosphate No. 1.....	1211	.....	.....	.....	7.76	.....	.....	M. O. Overstreet, Orlando, Fla.
Phosphate No. 2.....	1212	.....	.....	.....	22.85	.....	.....	M. O. Overstreet, Orlando, Fla.
Phosphate No. 5.....	1213	.....	.....	.....	26.51	.....	.....	M. O. Overstreet, Orlando, Fla.
Fertilizer.....	1214	.....	6.43	6.24	6.67	6.21	7.66	A. Sims & Bro., Monticello, Fla.
Fertilizer.....	1215	8.76	7.96	6.44	7.59	3.99	13.65	Patrick Hannon, Haynes City, Fla.
Bone and Potash.....	1216	6.79	7.83	10.66	18.48	2.19	18.59	W. C. Cromartie, Tallahassee.
Fertilizer, No. 1.....	1217	7.06	6.77	.96	6.73	2.49	9.22	Fla. Ferts. Co., Gainesville.
Fertilizer, No. 2.....	1218	5.44	8.46	.59	9.45	5.29	5.82	Fla. Ferts. Co., Gainesville.
Fertilizer, No. 3.....	1219	7.53	7.48	1.57	9.96	2.74	4.27	Fla. Ferts. Co., Gainesville.
"Nitrate Soda" (Not N)- rate—Kaiser.....	1220	4.34	.....	.....	.....	.....	12.26	J. P. Andrews, DeLand.
Cotton Seed Meal.....	1221	.....	.....	.....	.....	6.59	.....	Tamplin & Co., Quincy.
Cotton Seed Meal (No. 2).....	1222	.....	.....	.....	.....	6.23	.....	Tamplin & Co., Quincy.
Fertilizer.....	1223	6.93	3.92	.24	7.37	5.24	7.71	W. S. Inland, Buckingham.
Fertilizer.....	1224	5.68	6.97	.11	7.03	2.95	10.48	Dr. Charles Deussen, Orlando.
Fertilizer.....	1225	6.03	6.91	1.43	8.58	4.23	5.56	H. A. Perry, Panama.
Fertilizer.....	1226	6.98	9.32	.14	7.48	2.93	11.52	Mrs. P. C. Grisham, Tallahassee.
Kaiser.....	1227	.....	.....	.....	.....	.....	11.56	K. M. Allison, Lee.

Fertilizer	1229	14.22	8.75	.28	9.92	4.51	16.94	H. A. Ferry, Panama.	
L. G. Hood and Bone	1229	6.91			11.05	4.77		H. G. Painter Ferts. Co., Jacksonville, Fla.	
Fertilizer	1229	7.92	9.54	.12	9.62	3.26	17.25	H. R. Kinding, Haines City.	
"Potash Salts"	1229	6.73						28.69	J. E. Duboisson & Bro., Panama.
Bird Guano	1229		11.72	1.26	13.09	12.41	1.75	Lovitt Ferguson, Tarpon Springs.	
Fertilizer	1229	4.98	9.61	.30	9.31	5.65	9.57	J. W. Bonbright, Arcadia.	
Fertilizer	1229	9.88	7.76	.62	8.27	3.27	8.53	W. S. Price, Lake Wales.	
Sulphate Potash, No. 1 Dark	1229						25.26	W. J. Hagan, Bayton.	
Sulphate Potash, No. 1 Light	1229						26.84	W. J. Hagan, Bayton.	
Tobacco Dust, No. 1	1237					2.32	9.72	Hardee Bros., Bayton.	
Cotton Seed Meal, No. 1	1232					5.82		Hardee Bros., Bayton.	
Ashes	1238						1.25	W. B. Kennedy, Sanford.	
Fertilizer	1246	7.21			2.99	6.62	6.48	C. S. Dixie, Ft. Pierce.	
Fertilizer, "X4"	1241	10.11			6.66	7.19	2.72	J. J. Scholinger, Delray.	
Spec. Mixt.	1242	8.00			4.28	2.54	8.57	East Coast Cattle Co., Ft. Pierce.	
Cotton Seed Meal	1243					7.63		David D. T. Moore, Eldred.	
Sul. Potash	1244						56.08	Anthony Ferts. Co., Eldred.	
Cotton Seed Meal	1243					7.65		Anthony Ferts. Co., Eldred.	
Castor Pomace	1246					8.89		Anthony Ferts. Co., Eldred.	
Spec. Mixt.	1247	8.32			2.64	8.97	2.40	F. W. Willis, Jensen.	
Cotton Seed Meal	1248					8.89		Baker & Helms, Jacksonville.	
Fertilizer	1249	7.94			7.94	5.82	8.71	C. F. Olmstead, Ft. Pierce.	
Fertilizer No. 1	1250	7.48			8.93	16.15		J. G. May, Ft. Pierce.	
Fertilizer No. 2	1251	9.45			11.95	7.22	4.63	J. G. May, Ft. Pierce.	
Bone Meal	1252				20.82	4.82		A. N. Hoodnagle, Ft. Pierce.	
Hood and Bone	1253				4.58	18.85		A. N. Hoodnagle, Ft. Pierce.	
Guano	1254	9.22	8.38	4.75	12.13	2.29	1.58	A. N. Hoodnagle, Ft. Pierce.	
Tobacco Dust	1255					2.97	12.66	A. N. Hoodnagle, Ft. Pierce.	
Blood	1256					17.28		A. N. Hoodnagle, Ft. Pierce.	

BUREAU OF FERTILIZERS—Continued.

26

NAME OR BRAND	Laboratory Number	Moisture	Phosphoric Acid			Ammonia	Potash (K ₂ O)	BY WHOM SENT
			Available	Insoluble	Total			
U. Cotton Seed Meal	1257					7.47	A. N. Hootkamp, Ft. Pierce.	
Palmate Ashes	1258					5.73	E. S. Montgomery, Crescent Grove.	
Dried Blood	1259					17.21	Anthony Fruit Co., Miami.	
Fertilizer	1264		8.76	3.36	9.44	3.55	8.96 M. P. Robinson, Sanford.	
Fertilizer	1261	5.23	7.05	1.29	14.59	4.18	8.77 W. E. Wilder, Lily.	
Fertilizer	1262	9.99			11.45	7.23	8.51 H. Neiman, Ft. Pierce.	
Fertilizer	1263	11.76	12.06	1.61	15.63	2.19	3.59 J. W. Green, Monticemy.	
Fertilizer	1264	5.37			8.36	6.42	16.118 F. Olinstead, Ft. Pierce.	
Caster Beans	1265					8.49	11. J. Schultz, Jensen.	
Fertilizer	1266	19.91	6.16	1.29	7.29	4.77	5.32 David Hines, Crescent City.	
Cotton Seed Meal, H. & T. Co. 11240	1267					8.74	William & Thomas Pats. Co., Jacksonville.	
Kaffir	1268					11.53	J. T. & J. B. Hunter, Geneva.	
Fertilizer (Phosphate Rock)	1269	7.81			8.47	4.29	8.12 W. W. Leno, Waller.	
Blood and Bone	1270					16.56	9. J. Baird, Gainesville.	
Tobacco Dust	1271					2.92	8.778 Pines, Monticemy.	
Fertilizer	1272	7.18	8.48	37	8.35	4.16	11.56 J. T. Miller, Haines City.	
Fertilizer	1273		6.88	67	7.55	3.77	8.89 Frank M. Pillsbury, Palma Sola.	
Sulphate of Potash	1274					17.81	T. C. Brewer, Quincy.	

Peruvian Guano	1272	8.25	9.95	9.25	8.00	3.25	V. C. Brewer, Quincy.	
Bone Meal	1273	14.15	2.12	19.80	4.50		V. C. Brewer, Quincy.	
Cotton Seed Meal	1274				8.25		V. C. Brewer, Quincy.	
Nitrate of Potash	1275				16.25	44.25	V. C. Brewer, Quincy.	
White Sulphur	1276					8.15	V. C. Brewer, Quincy.	
Fertilizer	1280	7.15	9.05	7.85	2.62	4.25	R. W. Turner, Parrish.	
Commercial Fertilizer	1281				1.75	19.25	T. H. Paleston, Monticello.	
Fertilizer	1282	29.95	1.55	1.77	9.65	1.75	2.00	J. D. Sims, Marianna.

For values see heading "State Values."

Note.—This department is not aware of the source of the goods, or the names of manufacturers of "Special Samples" sent in by purchasers. Dealers frequently send in samples of goods for examination before purchasing. A "Special Sample" sent in by a dealer or manufacturer hence is not an evidence that the goods are offered by him for sale. The "Official Samples" taken by the State Chemist, or his assistant, on following pages, state the name of the goods and the manufacturers, the guaranteed analysis, and the amount of fertilizing ingredients found by the State Chemist.

Moisture not determined in sample sent in paper or wood boxes.

Tobacco stems and tobacco dust contain some phosphoric acid, but it is bought for the potash and ammonia content. Cotton seed meal contains some phosphoric acid and some potash, but is bought for the ammonia content.

Where only the insoluble phosphoric acid is given in the table, it has been determined as total phosphoric acid.

Not less than eight ounces ($\frac{1}{2}$ pound) is required for a "Special Sample."

Special attention is called to the "Caution to Purchasers of Cotton Seed Meal" on another page. This adulterated meal is sold as bright or prime meal—though the guarantee is but 44 per cent. of Ammonia—it is evidently adulterated with rice hulls, its value is but little more than half that of prime meal.

DEPARTMENT OF AGRICULTURE, DIVISION OF CHEMISTRY.

52

R. E. Rose, State Chemist—ANALYSIS OF FERTILIZERS, 1907—L. Heinburger, Assistant Chemist.

Samples taken by State Chemist under Section 1, Act approved May 22, 1901.

NAME OR BRAND.	Laboratory Number.		Phosphoric Acid.					Pounds (K. 200)	BY WHOM AND WHERE MANUFACTURED.
			Soluble.	Available.	Insoluble.	Total.	Ammonia.		
Bowker's Dissolved Bone...	811	Guarant'd Analysis	19.99	19.99	1.49			Ann. Agri. Chem. Co., Jacksonville, Fla.	
		Official Analysis	12.54	18.94	9.57	19.29			
Williams & Clark's Fruit and Vine	842	Guarant'd Analysis	19.99	2.50	1.94		2.25	Ann. Agri. Chem. Co., Jacksonville, Fla.	
		Official Analysis	7.31	6.43	0.71	7.29	2.28		
Bradley's Special Fruit and Vine	812	Guarant'd Analysis	19.99	2.58	2.00		4.25	Ann. Agri. Chem. Co., Jacksonville Fla.	
		Official Analysis	8.90	7.24	1.58	9.22	4.22		
Bradley's Orange Tree...	841	Guarant'd Analysis	19.99	2.94	1.00		2.50	Ann. Agri. Chem. Co., Jacksonville, Fla.	
		Official Analysis	19.18	6.57	1.54	8.13	2.44		
American Standard Bone...	843	Guarant'd Analysis	19.99	8.00	2.00		2.00	Ann. Agri. Chem. Co., Jacksonville, Fla.	
		Official Analysis	12.17	8.70	2.48	11.18	2.22		

Williams & Clark's Florida Vegetable	846	Guarant'd Analysis	10.92	4.99	1.99	.....	4.99	5.99	Ann. Agri. Chem. Co.,
		Official Analysis	8.24	7.28	1.14	8.82	3.81	4.82	Jacksonville, Fla.
Bradley's Nursery Stock....	847	Guarant'd Analysis	10.99	8.92	1.99	.....	4.59	1.99	Ann. Agri. Chem. Co.,
		Official Analysis	10.24	9.88	1.71	11.87	4.57	1.43	Jacksonville, Fla.
Bradley's Fruit and Vine..	848	Guarant'd Analysis	10.99	5.59	2.99	.....	2.25	10.99	Ann. Agri. Chem. Co.,
		Official Analysis	7.41	7.82	9.22	7.24	2.41	9.24	Jacksonville, Fla.
Special Bone and Potash..	849	Guarant'd Analysis	10.99	12.99	.....	.....	.....	12.99	Ann. Agri. Chem. Co.,
		Official Analysis	11.21	14.59	9.95	14.55	.....	11.97	Jacksonville, Fla.
Bradley's Florida Vegetable.	850	Guarant'd Analysis	11.99	4.99	1.99	.....	4.99	5.99	Ann. Agri. Chem. Co.,
		Official Analysis	8.95	7.17	1.98	8.75	4.92	5.98	Jacksonville, Fla.
Armour's Vegetable	851	Guarant'd Analysis	10.99	7.99	2.99	.....	4.99	5.99	Armour's Fertil. Works,
		Official Analysis	9.51	7.92	1.11	8.94	4.92	4.92	Jacksonville, Fla.
Armour's Special Mixtures.	852	Guarant'd Analysis	11.99	8.25	1.59	.....	4.25	7.25	Armour's Fertil. Works,
		Official Analysis	4.89	6.22	1.89	8.22	4.92	7.22	Jacksonville, Fla.
Armour's Large Special F. & V.	853	Guarant'd Analysis	10.99	4.99	2.59	.....	3.99	13.99	Armour's Fertil. Works,
		Official Analysis	8.24	6.16	9.67	6.82	2.24	9.22	Jacksonville, Fla.
Ideal Fruit and Vine.....	854	Guarant'd Analysis	10.99	6.99	.....	.....	2.99	10.99	Wilson & Toomey Fert.
		Official Analysis	7.94	6.76	0.42	7.19	1.21	10.42	Co., Jacksonville, Fla.
Special Mixture No. 1.....	855	Guarant'd Analysis	8.99	4.99	1.99	.....	1.99	5.99	Wilson & Toomey Fert.
		Official Analysis	11.22	6.27	1.19	7.32	5.82	5.21	Co., Jacksonville, Fla.

ANALYSIS OF FERTILIZERS—Continued.

84

NAME OR BRAND.	Laboratory Number.	Phosphoric Acid.					Ammonia.	Cinch (1830)	BY WHOM AND WHERE MANUFACTURED
		Moisture.	Available.	Insoluble.	Total.				
Special Strawberry Fert...	554	Guaran's Analysis	12.00	5.00	.....	.....	2.50	2.00	Wilson & Turner Fert. Co., Jacksonville, Fla.
		Official Analysis	12.00	5.40	4.00	7.50	2.77	2.57	
Persian Vegetable Manure.	557	Guaran's Analysis	10.00	7.00	2.00	.....	5.00	8.00	Wilson & Turner Fert. Co., Jacksonville, Fla.
		Official Analysis	7.74	7.50	4.73	11.50	4.51	7.50	
Persian Fruit and Vine Manure.....	558	Guaran's Analysis	10.00	5.00	1.00	.....	2.00	10.00	Wilson & Turner Fert. Co., Jacksonville, Fla.
		Official Analysis	7.00	5.00	1.50	8.00	5.25	9.01	
Leaf Fertilizer	559	Guaran's Analysis	8.00	4.00	1.00	.....	4.00	6.00	Wilson & Turner Fert. Co., Jacksonville, Fla.
		Official Analysis	10.00	5.02	0.50	6.50	4.11	5.20	
Leaf Lettuce Fertilizer...	560	Guaran's Analysis	10.00	5.00	.....	.....	5.00	6.00	Wilson & Turner Fert. Co., Jacksonville, Fla.
		Official Analysis	8.42	5.10	1.02	7.10	5.81	7.10	
Leaf Vegetable Fertilizer...	561	Guaran's Analysis	8.00	5.00	1.00	.....	4.00	8.00	Wilson & Turner Fert. Co., Jacksonville, Fla.
		Official Analysis	8.21	5.00	0.70	6.70	4.50	8.54	

Florida Special Pineapple...	562	Guaran't'd Analysis	6.00	4.90	4.90	.....	4.00	7.00	Wilson & Toomer Fert. Co., Jacksonville, Fla.
		Official Analysis	3.70	4.50	3.81	8.40	3.90	8.50	
Favorite Early Tracker.....	563	Guaran't'd Analysis	10.00	6.00	2.00	.....	3.00	10.00	Sanders Fert. Co., Jacksonville, Fla.
		Official Analysis	8.70	3.70	1.14	6.00	3.07	10.00	
Cotton Seed Meal	564	Guaran't'd Analysis	.....	.....	.....	.....	1.75	3.00	Fla. Cotton Oil Co., Jacksonville, Fla.
		Official Analysis	.....	.....	.....	.....	8.12	.....
Favorite Non-Animated Special	565	Guaran't'd Analysis	14.00	10.00	1.00	.....	.....	11.00	Sanders Fert. Co., Jacksonville, Fla.
		Official Analysis	8.00	10.45	0.14	10.43	.....	10.32	
H. G. Acid Phosphate.....	566	Guaran't'd Analysis	10.00	10.00	0.50	.....	.....	.....	Sanders Fert. Co., Jacksonville, Fla.
		Official Analysis	11.40	17.35	0.17	17.32	.....	.....
Favorite Bone Black and Potash	567	Guaran't'd Analysis	10.00	5.00	0.50	.....	.....	12.00	Sanders Fert. Co., Jacksonville, Fla.
		Official Analysis	7.87	8.50	0.22	9.00	.....	11.70	
Favorite Fritter Mixers...	568	Guaran't'd Analysis	10.00	3.00	0.50	.....	4.00	12.00	Sanders Fert. Co., Jacksonville, Fla.
		Official Analysis	6.54	5.20	0.27	8.77	4.43	11.33	
Favorite Blood, Bone and Potash	569	Guaran't'd Analysis	10.00	5.00	1.00	.....	3.00	7.00	Sanders Fert. Co., Jacksonville, Fla.
		Official Analysis	5.40	8.47	0.84	9.31	4.89	6.50	
Simon Pure No. 1.....	570	Guaran't'd Analysis	8.50	6.00	1.00	.....	4.00	11.00	E. O. Painter Fert. Co., Jacksonville, Fla.
		Official Analysis	8.41	6.24	0.21	6.22	4.78	12.74	
Simon Pure No. 2.....	571	Guaran't'd Analysis	3.00	2.00	2.00	.....	4.00	4.00	E. O. Painter Fert. Co., Jacksonville, Fla.
		Official Analysis	8.58	7.43	2.15	9.54	5.41	6.79	

ANALYSIS OF FERTILIZERS—Continued.

34

NAME OR BRAND.	Laboratory Number.	Moisture.	Phosphoric Acid.			Guano.	Pounds (1650).	BY WHOM AND WHERE MANUFACTURED.
			Available.	Insoluble.	Total.			
Goth Phosphate Manure	572	Guano's Analysis	16.00	.....	.....	0.00	0.00	E. O. Painter Fert. Co., Jacksonville, Fla.
		Official Analysis	6.42	.....	.....	0.24	4.15	
Leam River Fertilizer	573	Guano's Analysis	16.00	1.00	2.80	.....	0.00	E. O. Painter Fert. Co., Jacksonville, Fla.
		Official Analysis	6.11	0.22	1.15	7.50	0.00	
Curtis's Special	574	Guano's Analysis	.....	1.00	0.20	.....	0.20	E. O. Painter Fert. Co., Jacksonville, Fla.
		Official Analysis	6.57	0.29	0.19	8.75	6.25	
W. C. Davidson Fertilizer Ma- nure	575	Guano's Analysis	6.00	1.00	1.00	.....	0.00	Va. Agr. Chem. Co., Sta- unton, Va.
		Official Analysis	2.41	7.21	0.82	7.85	1.82	
W. C. Davidson's Heavy Bone manure	576	Guano's Analysis	.....	0.00	1.00	.....	2.00	Va. Agr. Chem. Co., Sta- unton, Va.
		Official Analysis	10.00	0.50	0.41	7.57	2.62	
W. C. Fla. Fruit Growers' Formula	577	Guano's Analysis	6.00	1.00	1.00	.....	0.00	Va. Agr. Chem. Co., Sta- unton, Va.
		Official Analysis	5.00	7.15	0.35	0.67	0.35	

No. 1 Ground Tobacco Dust	878	Guarant's Analysis	.....	.....	.....	.....	2.00	2.00	E. O. Painter Fert. Co., Jacksonville, Fla.
		Official Analysis	7.99	.....	.....	.....	1.59	1.84	
Gen. Bone Fertilizer.....	879	Guarant's Analysis	14.00	5.00	2.00	.....	5.00	2.00	E. O. Painter Fert. Co., Jacksonville, Fla.
		Official Analysis	8.97	5.75	1.75	2.24	4.91	4.14	
Williams & Clark's Fruit and Vine	880	Guarant's Analysis	19.00	5.50	2.00	.....	2.25	19.30	Anna, Agri. Chem. Co., Jacksonville, Fla.
		Official Analysis	8.58	7.00	0.50	2.45	2.45	3.64	
Williams & Clark's Vegeta- table	881	Guarant's Analysis	19.00	5.00	1.00	.....	4.00	1.50	Anna, Agri. Chem. Co., Jacksonville, Fla.
		Official Analysis	9.78	8.01	0.51	5.34	4.09	5.55	
Bradley's Fruit & Vine....	882	Guarant's Analysis	19.00	5.50	2.00	.....	2.25	19.00	Anna, Agri. Chem. Co., Jacksonville, Fla.
		Official Analysis	7.17	6.50	0.75	2.12	2.62	3.75	
Bradley's Fla. Vegetable....	883	Guarant's Analysis	19.00	5.00	1.00	.....	4.00	5.00	Anna, Agri. Chem. Co., Jacksonville, Fla.
		Official Analysis	3.47	7.12	1.79	5.21	4.04	5.59	
Williams & Clark's Nursery Stock	884	Guarant's Analysis	19.00	5.00	1.00	.....	4.50	2.00	Anna, Agri. Chem. Co., Jacksonville, Fla.
		Official Analysis	8.84	7.54	3.18	11.02	4.27	2.83	
Mape's Orange Tree Manure	885	Guarant's Analysis	19.00	6.00	2.00	.....	4.50	2.00	Mape's Formula, and F. G. Co., New York.
		Official Analysis	11.02	4.72	4.70	3.49	4.06	3.05	
Mape's Fruit and Vine....	886	Guarant's Analysis	13.00	5.00	2.00	.....	2.00	10.00	Mape's F. & F. G. Co., New York.
		Official Analysis	11.45	4.35	3.40	5.28	2.75	3.81	
Star Brand Cotton Seed Meal	887	Guarant's Analysis	.....	.....	.....	.....	7.10	.....	J. Lindsay Wells Co., Memphis, Tenn.
		Official Analysis	.....	.....	.....	.....	6.07	.....

ANALYSIS OF FERTILIZERS—Continued.

25

NAME OR BRAND.	Laboratory Number.	Analysis.	Phosphoric Acid.			Insoluble.	Total (K ₂ O).	BY WHOM AND WHERE MANUFACTURED.
			Monobasic.	Neobasic.	Total.			
Cotton Seed Meal	50	Usman's Analysis Official Analysis	2.45 2.91		2.45	2.00 2.55	1.75 Ga. C. O. Co., Macon, Ga.	
Dark Cotton Seed Meal.....	50	Usman's Analysis Official Analysis			1.75	5.00 5.22	1.50 Fla. C. O. Co., Jacksonville, Fla.	
Cotton Seed Meal	50	Usman's Analysis Official Analysis	1.05 1.51		2.25	2.50 3.02	1.50 Lathrop C. O. Co., Hanksville, Ga.	
Cotton Seed Meal.....	50	Usman's Analysis Official Analysis	2.45 3.52		2.45	2.00 2.21	1.75 Ga. C. O. Co., Macon, Ga.	
Goodling's 4 per cent Potash Acid	50	Usman's Analysis Official Analysis	14.80 12.85	5.00 5.91	1.00 1.27	16.20 19.29	4.00 Goodling Fert. Co., Pensacola, Fla.	
Goodling's Bone Compound.....	50	Usman's Analysis Official Analysis	10.00 9.27	8.00 8.21	1.00 1.15	2.00 14.26	2.00 Goodling's Fert. Co., Pensacola, Fla.	

Gooiding's Bone Compost	354	Guaran's Analysis	10.00	8.00	1.00	.....	2.00	2.00	Gooiding's Fert. Co.,	Co.,
		Official Analysis	12.29	9.44	2.46	11.44	2.23	1.74	Pensacola, Fla.	
Acid Phosphate, 16 per cent.	355	Guaran's Analysis	.....	15.00	.....	.....	.....	.....	Gooiding's Fert. Co.,	Co.,
		Official Analysis	15.71	14.94	0.37	17.23	.....	.....	Pensacola, Fla.	
Gooiding's Standard Bone Mixture	356	Guaran's Analysis	10.00	8.00	1.00	.....	2.00	2.00	Gooiding's Fert. Co.,	Co.,
		Official Analysis	12.75	9.10	1.64	10.80	1.71	2.04	Pensacola, Fla.	
Acid Phosphate, 14 percent.	357	Guaran's Analysis	14.00	14.33	1.00	.....	.....	.....	Gooiding's Fert. Co.,	Co.,
		Official Analysis	14.64	14.25	1.51	16.69	.....	.....	Pensacola, Fla.	
Cotton Seed Meal	358	Guaran's Analysis	.....	.....	.....	.....	7.50	.....	Marianna Manufg. Co.,	Co.
		Official Analysis	.....	.....	.....	.....	8.14	.....	Marianna, Fla.	
Kalnit	359	Guaran's Analysis	.....	.....	.....	.....	.....	10.00	Marianna Manufg. Co.,	Co.,
		Official Analysis	.....	.....	.....	.....	.....	12.11	Marianna, Fla.	
H. G. Acid Phosphate, 4 per cent. Potash	360	Guaran's Analysis	12.00	9.00	2.00	.....	.....	4.00	Marianna Manufg. Co.,	Co.,
		Official Analysis	13.39	7.83	1.55	9.42	.....	5.22	Marianna, Fla.	
Acid Phosphate	361	Guaran's Analysis	.....	14.00	.....	.....	.....	.....	Marianna Manufg. Co.,	Co.,
		Official Analysis	17.65	15.69	2.12	15.80	.....	.....	Marianna, Fla.	
Home Mixture Grade	362	Guaran's Analysis	10.00	8.00	2.00	.....	2.00	2.00	Marianna Manufg. Co.,	Co.,
		Official Analysis	12.49	8.47	1.63	10.10	1.95	2.51	Marianna, Fla.	
Cawotta Dissolved Bone and Potash	363	Guaran's Analysis	12.00	10.00	2.00	.....	.....	2.00	Cawotta Fert. Co., New-	New-
		Official Analysis	14.79	10.80	2.27	13.12	.....	1.15	nan, Ga.	nan, Ga.

NAME OR BRAND.	Laboratory Number.	Guarant'd Analysis.	Official Analysis.	Phosphoric Acid.			Ammonia.	Potash (K2O).	BY WHOM AND WHERE MANUFACTURED.
				Available.	Insoluble.	Total.			
Covetta Cotton Seed Meal Fertilizer	314	Guarant'd Analysis	10.00	2.00	2.00	.....	2.00	2.00	Covetta Fert. Co., Newnan, Ga.
		Official Analysis...	11.34	2.82	1.41	2.94	1.65	1.65	
Pope Brown's Special Formula	305	Guarant'd Analysis	10.00	2.00	2.00	.....	2.00	2.00	Covetta Fert. Co., Newnan, Ga.
		Official Analysis...	12.48	2.52	1.82	10.45	2.12	2.25	
Armour's King Cotton	346	Guarant'd Analysis	10.00	2.00	1.00	.....	2.00	2.00	Armour Fert. Works, Jacksonville, Fla.
		Official Analysis...	8.11	2.82	1.23	8.11	2.00	1.00	
Cotton Seed Meal	397	Guarant'd Analysis	.....	.....	.....	2.00	5.00	1.50	Fla. C. O. Co., Jacksonville, Fla.
		Official Analysis...	.....	.....	.....	.....	4.00	.....
Prime Cotton Seed Meal.....	348	Guarant'd Analysis	8.00	.....	.....	2.00	2.50	2.00	Fla. C. O. Co., Montgomery, Ala.
		Official Analysis...	.....	.....	.....	.....	2.10	2.10	

Campbell's Perfect Satisfaction	909	Guarant'd Analysis	19.00	8.66	1.66	.....	1.44	3.00	A. D. Campbell, Chipley, Fla.
		Official Analysis...	14.90	8.61	1.33	19.90	1.30	2.31	
Honest Fertilizer	910	Guarant'd Analysis	18.00	8.05	2.04	.....	2.90	1.40	Campbell & Butler, Chipley, Fla.
		Official Analysis...	13.43	7.25	1.60	8.83	1.50	2.30	
Ga. State Grange Fertilizer	911	Guarant'd Analysis	19.00	8.66	2.00	.....	2.60	2.00	Va.-Car. Chem. Co., Montgomery, Ala.
		Official Analysis...	13.34	8.20	2.20	11.59	2.09	1.81	
Mobile English Acid Phosphate	912	Guarant'd Analysis	12.00	11.60	2.00	.....	.....	.....	Va.-Car. Chem. Co., Montgomery, Ala.
		Official Analysis...	10.24	13.48	2.52	14.44	.....	.....
Alabama Fertilizer	913	Guarant'd Analysis	19.00	8.16	2.00	.....	2.15	1.50	Va.-Car. Chem. Co., Montgomery, Ala.
		Official Analysis...	15.12	9.14	1.94	11.95	1.34	1.42	
Edisto Ex. H. G. Acid Phos.	914	Guarant'd Analysis	12.00	10.44	2.00	.....	.....	.....	Va.-Car. Chem. Co., Montgomery, Ala.
		Official Analysis...	13.90	14.34	3.34	12.50	.....	.....
Scott's Champion Compound	915	Guarant'd Analysis	19.00	8.48	2.40	.....	1.40	1.90	Va.-Car. Chem. Co., Montgomery, Ala.
		Official Analysis...	12.00	7.65	1.43	9.13	1.23	2.35	
Alkaline Acid Phosphate 4 per cent Potash.....	916	Guarant'd Analysis	12.00	8.98	2.64	.....	.....	4.00	Va.-Car. Chem. Co., Montgomery, Ala.
		Official Analysis...	10.05	8.93	0.80	9.83	.....	2.35	
Cotton Seed Meal	917	Guarant'd Analysis	.....	.....	.....	2.50	4.00	1.50	Ga. Cotton Oil Co., Milledgeville, Fla.
		Official Analysis...	.....	.....	.....	.....	6.55	.....
Kainit	918	Guarant'd Analysis	19.00	.....	.....	.....	.....	12.00	The Adams Co., Jasper, Fla.
		Official Analysis...	.....	.....	.....	.....	.....	14.31	

ANALYSIS OF FERTILIZERS—Continued.

62

NAME OF BRAND	Laboratory Number.	Moisture	Phosphoric Acid.			Ammonia.	Total Nitrogen	BY WHOM AND WHERE MANUFACTURED.
			Available.	Insoluble.	Total.			
Sea Island Standard	315 Guarant'd Analysis	19.54	5.25	1.46	.....	7.85	3.96	Blackburn Manufg. Co., Blackburn, Ga.
	Official Analysis	21.32	5.31	9.47	8.15	9.27	3.15	
Kamin	316 Guarant'd Analysis	.....	.....	.....	.....	.....	12.00	Standard Fertilizer Co., Gainesville, Fla.
	Official Analysis	.....	.....	.....	.....	.....	11.71	
Standard Kelp Truckee...	311 Guarant'd Analysis	7.90	5.00	2.00	.....	5.00	5.00	Standard Fertilizer Co., Gainesville, Fla.
	Official Analysis	6.10	5.41	3.92	8.52	4.80	5.01	
Standard Fruit and Vine...	322 Guarant'd Analysis	5.00	7.00	1.00	8.10	2.00	12.00	Standard Fertilizer Co., Gainesville, Fla.
	Official Analysis	5.88	7.97	9.41	8.10	2.40	11.67	
Standard Fish and Pouch...	323 Guarant'd Analysis	11.00	2.00	1.00	1.00	4.00	8.00	Standard Fertilizer Co., Gainesville, Fla.
	Official Analysis	5.54	2.50	1.12	4.55	5.80	7.20	
Standard Vegetable No. 1...	324 Guarant'd Analysis	8.00	1.50	2.00	4.50	1.50	4.00	Standard Fertilizer Co., Gainesville, Fla.
	Official Analysis	5.00	5.75	2.17	7.40	4.00	6.71	

Standard Orange Fertilizer...	325	Guarant'd Analysis Official Analysis...	8.00 7.25	5.00 5.75	1.00 1.47	1.00 1.25	2.00 2.20	10.00 9.74	Standard Fertilizer Co., Gainesville, Fla.
No. 1 Peruvian and Fish Guano Mixture, Double Strength Potash	326	Guarant'd Analysis Official Analysis...	12.00 6.27	5.00 7.24	1.00 1.17	..... 3.41	4.00 4.11	10.00 10.10	Florida Fertilizer Co., Gainesville Fla.
Our Golden Fertilizer	327	Guarant'd Analysis Official Analysis...	12.00 4.90	5.00 7.90	1.00 1.25	..... 3.23	2.00 2.25	12.00 12.90	Florida Fertilizer Co., Gainesville, Fla.
No. 1 Peruvian and Fish Guano Mixture	328	Guarant'd Analysis Official Analysis...	12.00 6.75	5.00 7.01	1.00 1.41	..... 3.42	4.00 3.22	5.00 6.55	Florida Fertilizer Co., Gainesville Fla.
No. 2 Orange Tree Mixture	329	Guarant'd Analysis Official Analysis...	12.10 8.34	4.00 6.47	2.00 0.70	..... 1.23	2.00 3.70	5.00 5.27	Florida Fertilizer Co., Gainesville, Fla.
Potato Mixture	330	Guarant'd Analysis Official Analysis...	12.00 7.50	5.00 5.45	1.00 0.97	..... 4.46	2.00 2.15	3.00 3.50	Florida Fertilizer Co., Gainesville, Fla.
Bean and Pea Special....	331	Guarant'd Analysis Official Analysis...	12.00 8.95	5.00 7.10	1.00 0.24	..... 1.23	2.50 2.74	5.00 3.24	Florida Fertilizer Co., Gainesville, Fla.
No. 2 Mixed, Bone and Pot- ash	332	Guarant'd Analysis Official Analysis...	12.00 7.25	5.00 5.85	1.00 0.77	..... 4.40	4.00 4.68	4.00 3.51	Florida Fertilizer Co., Gainesville, Fla.
Lettuce and Cuke Special...	333	Guarant'd Analysis Official Analysis...	12.00 7.03	5.00 6.20	1.00 0.70	..... 4.26	5.50 6.00	4.00 4.01	Florida Fertilizer Co., Gainesville Fla.

ANALYSIS OF FERTILIZERS—Continued.

64

NAME OR BRAND.	Laboratory Number.		Phosphoric Acid.				Ammonia.	Potash (K ₂ O).	BY WHOM AND WHERE MANUFACTURED.
			Lossless.	Crystalline.	Insoluble.	Total.			
Cantaloupe Special	324	Guarant'g Analysis	12.66	2.86	2.05	.....	2.46	7.00	Florida Fertilizer Co., Gainesville, Fla.
		Official Analysis...	6.45	2.75	0.58	6.45	2.15	7.22	
No. 2 Double Strength of Potash	325	Guarant'g Analysis	12.66	2.86	1.66	.....	1.56	16.66	Florida Fertilizer Co., Gainesville, Fla.
		Official Analysis...	6.54	2.60	0.81	7.21	2.45	11.28	
Cotton Special	326	Guarant'g Analysis	12.66	2.86	1.66	.....	2.05	2.60	Florida Fertilizer Co., Gainesville, Fla.
		Official Analysis...	7.92	2.12	0.42	7.55	2.76	2.90	
Blood and Bone	327	Guarant'g Analysis	.....	2.94	2.66	.....	11.00	.....	Standard Fertilizer Co., Gainesville, Fla.
		Official Analysis...	.....	2.79	2.57	8.00	11.26	.....
Cotton Seed Heap	328	Guarant'g Analysis	7.45	.....	.....	.....	2.00	1.70	Georgia C. C. Co., Ma- con, Ga.
		Official Analysis...	.....	.....	.....	.....	8.12	.....
Tip Top Tomato Fertilizer ..	329	Guarant'g Analysis	2.66	2.66	1.66	.....	4.66	1.66	Va. Pac. Chem. Co., No- rumb, Va.
		Official Analysis...	7.07	7.22	0.89	8.21	1.16	6.51	

Florida Tree Grower.....	340	Quartzite Analysis Official Analysis.....	8.99 10.35	4.00 4.41	4.00 4.67	1.00 1.00	4.00 4.49	8.00 8.41	W. S. Lamb & Towner, Port Co., Jacksonville, Fla.
Florida Tomato Special.....	341	Quartzite Analysis Official Analysis.....	16.99 1.39	2.00 1.12	2.00 1.00	..... 8.64	5.00 4.49	9.00 8.52	Florida Fert. Co., Jack- sonville, Fla.
Southern States Special Veg- etable	342	Quartzite Analysis Official Analysis.....	6.99 4.54	6.00 3.57	1.00 1.00	..... 10.31	4.00 4.73	5.00 5.10	Ya-Car, Chem. Co., Sa- vannah, Ga.
Cotton Seed Meal	343	Quartzite Analysis Official Analysis.....	.....	.....	.....	2.00	2.50	1.50	Florida C. O. Co., Jack- sonville, Fla.
Cotton Seed Meal (dark).....	344	Quartzite Analysis Official Analysis.....	.....	.....	.....	1.75	5.00	1.50	Florida C. O. Co., Jack- sonville, Fla.
Florida Standard, Bone and Pitch	345	Quartzite Analysis Official Analysis.....	11.90 10.07	10.00 11.00	2.00 0.75	10.00	.....	2.00	Florida Fert. Co., New- port, Fla.
Pope Brown's Special Per- rite	346	Quartzite Analysis Official Analysis.....	10.99 12.12	2.00 2.00	2.00 2.40	..... 12.40	2.00 2.41	2.00	Florida Fert. Co., New- port, Fla.
Florida Cotton Seed Meal Fertilizer	347	Quartzite Analysis Official Analysis.....	10.99 12.54	2.00 1.47	2.00 2.00	..... 5.00	2.00	2.00	Florida Fert. Co., New- port, Fla.
Georgia Associated Bone Guano	348	Quartzite Analysis Official Analysis.....	10.00 2.00	2.00 2.00	1.00 1.25	..... 2.00	2.00	2.00	Medical Fertilizer Co., Savannah, Ga.
Chas. Hill's Concentrated Per- lite	349	Quartzite Analysis Official Analysis.....	14.00 8.50	2.00 1.57	1.00 1.27	..... 5.00	2.00	2.00	Medical Fertilizer Co., Savannah, Ga.

ANALYSIS OF FERTILIZERS—Continued.

65

NAME OR BRAND.	Laboratory Number.	Moisture.	Phosphoric Acid.			Ammonia.	Potash (K ₂ O).	BY WHOM AND WHERE MANUFACTURED.
			Analytic.	Insoluble.	Total.			
Acid Phosphate	556	Guaran's Analysis	14.00	14.00	1.00			Metals Fertilizer Co., Savannah, Ga.
		Official Analysis...	9.25	12.21	0.55	14.20		
Conberland Bone Superphosphate	561	Guaran's Analysis	15.00	9.40	1.80	2.80	1.60	Conberland Bone Phos. Co., Portland, Me.
		Official Analysis...	11.20	9.75	2.11	11.85	2.50	
Bradley Palmetto Acid Phosphate	562	Guaran's Analysis	15.00	12.00	1.00			Bradley Fert. Co., Boston, Mass.
		Official Analysis...	16.80	12.00	4.20	14.70		
Special Mixture	563	Guaran's Analysis	16.00	7.00	16.50	2.75	20.00	Archer's Fert. Works, Jacksonville, Fla.
		Official Analysis...	3.45	5.00	2.00	15.35	2.25	
Guano Peruvian Guano..	564	Guaran's Analysis	16.50	7.00	1.00	5.70	1.50	De Mortimer Co., New York.
		Official Analysis...	15.11	8.50	2.70	10.38	2.10	
Cotton Seed Meal.....	565	Guaran's Analysis				7.50		Hathridge C. O. Co., Hathridge, Ga.
		Official Analysis...				7.77		

Cotton Seed Meal.....	906	Guarant'd Analysis				2.80	7.50	1.50	So. C. O. Co., Fort Gaines, Ga.
		Official Analysis...					8.62		
Cotton Seed Meal.....	907	Guarant'd Analysis					7.50		Georgia C. O. Co., Al- bany, Ga.
		Official Analysis...					7.73		
Cotton Seed Meal.....	908	Guarant'd Analysis				2.60	7.50	1.60	So. C. O. Co., Fort Gaines, Ga.
		Official Analysis...					7.74		
Cotton Seed Meal.....	909	Guarant'd Analysis				2.50	7.50	1.50	Cuthbert C. O. Co., Cuth- bert, Ga.
		Official Analysis...					7.77		
Simon Pure Garden.....	909	Guarant'd Analysis	8.00	4.00	2.00		5.50	6.50	E. O. Painter Fert. Co., Jacksonville.
		Official Analysis...	7.73	6.13	2.04	8.13	6.36	6.11	
Gen Fruit and Vine.....	901	Guarant'd Analysis	8.00	6.00	1.80		3.00	10.00	E. O. Painter Fert. Co., Jacksonville.
		Official Analysis...	6.33	6.00	1.85	7.65	2.21	11.60	
H. G. Acid Phosphate.....	902	Guarant'd Analysis		20.00					E. O. Painter Fert. Co., Jacksonville.
		Official Analysis...	12.07	17.05	.60	17.63			
Bright Cotton Seed Meal..	903	Guarant'd Analysis				2.25	8.00	1.00	E. O. Painter Fert. Co., Jacksonville.
		Official Analysis...					8.43		
H. G. Blood and Bone...	904	Guarant'd Analysis	8.00			7.00	10.00		E. O. Painter Fert. Co., Jacksonville.
		Official Analysis...	5.02			7.53	11.08		
Simon Pure No. 1.....	905	Guarant'd Analysis	8.00	6.00	1.80		4.00	11.00	E. O. Painter Fert. Co., Jacksonville.
		Official Analysis...	8.45	7.47	.35	7.77	4.00	12.70	

ANALYSIS OF FERTILIZERS—Continued.

68

NAME OR BRAND,	Laboratory Number.	Moisture.	Phosphoric Acid.			Ammonia.	Potash (K ₂ O).	BY WHOM AND WHERE MANUFACTURED.
			Available.	Insoluble.	Total.			
Sisco Pure, Pineapple Fruit No. 2	262	Guarant's Analysis	5.99	.....	.....	5.99	5.99	E. O. Peabody Fert. Co., Jacksonville.
		Official Analysis...	5.77	.....	.....	5.55	5.51	
Armour's Original No. 1....	265	Guarant's Analysis	10.00	5.00	.....	5.00	5.00	Armour Fert. Works, Jacksonville.
		Official Analysis...	8.67	6.69	2.85	3.45	4.26		5.27
Armour's Large Size, Pk.,	266	Guarant's Analysis	10.39	6.00	5.00	.....	5.00	Armour Fert. Works, Jacksonville.
		Official Analysis...	7.55	6.74	.85	7.23	5.11		10.23
Armour's Fruit and Vine....	268	Guarant's Analysis	10.00	6.00	1.00	.....	5.50	Armour Fert. Works, Jacksonville.
		Official Analysis...	7.17	7.21	.50	7.50	5.59		10.24
Armour's Top-table	274	Guarant's Analysis	10.00	7.00	2.00	.....	1.00	Armour Fert. Works, Jacksonville.
		Official Analysis...	8.70	7.68	.92	8.60	2.82		6.25
Armour's Head, Base and and Potash	271	Guarant's Analysis	10.00	5.00	1.00	.....	5.00	Armour Fert. Works, Jacksonville.
		Official Analysis...	5.00	5.27	1.83	10.10	4.24		6.90

Orange Fertilizer	972	Guarant'd Analysis	18.00	8.00	5.00	.....	4.00	12.00	Armour Fert. Works, Jacksonville.
		Official Analysis...	7.82	9.52	.20	9.72	4.80	11.58	
Armour's Potash Compound	973	Guarant'd Analysis	10.00	10.00	1.00	.....	.....	11.00	Armour Fert. Works, Jacksonville.
		Official Analysis...	11.31	9.75	1.84	10.80	.....	10.82	
Mayer's Fruit and Vine Ma- sure	974	Guarant'd Analysis	18.00	5.00	2.00	.....	1.00	18.00	Mayer's Fert. and Pure Guano Co., New York.
		Official Analysis...	19.16	5.28	2.77	8.68	2.78	11.52	
Mayer's Orange Grove Ma- sure	975	Guarant'd Analysis	18.00	6.00	2.00	.....	4.00	2.00	Mayer's Fert. and Pure Guano Co., New York.
		Official Analysis...	11.89	6.14	4.18	10.24	4.21	2.55	
Am. Dis. Bone.....	976	Guarant'd Analysis	18.00	14.00	1.00	.....	.....	.....	Amn. Agri. Chem. Co., Jacksonville.
		Official Analysis...	6.68	15.83	.24	16.12	.....	.....
Special Mixture	977	Guarant'd Analysis	18.00	7.00	10.50	.....	2.75	18.00	Armour Fert. Works, Jacksonville.
		Official Analysis...	4.48	6.54	7.71	14.25	2.45	18.22	
Cotton Seed Meal	978	Guarant'd Analysis	.....	.....	.....	2.50	1.00	1.00	Quilman Oil Co., Quil- man, Ga.
		Official Analysis...	.....	.....	.....	.....	1.24	.....
No. 1 Pure Guano Mixture, Double Strength Potash..	979	Guarant'd Analysis	12.00	8.00	1.00	.....	4.00	10.00	Florida Fert. Co., Gaines- ville.
		Official Analysis...	6.68	6.20	.87	6.93	2.59	10.15	
No. 2 Orange Tree Mixture..	980	Guarant'd Analysis	12.00	6.00	2.00	.....	1.00	5.00	Florida Fertilizer Co., Gainesville.
		Official Analysis...	8.28	7.15	1.09	8.25	4.12	4.85	
Fish and Potash	981	Guarant'd Analysis	12.00	2.00	2.00	.....	6.52	5.00	Florida Fertilizer Co., Gainesville.
		Official Analysis...	4.11	2.82	1.41	4.23	0.28	4.81	

ANALYSIS OF FERTILIZERS—Continued.

79

NAME OR BRAND.	Laboratory Number.	Mixture.	Phosphoric Acid.			Ammonia.	Potash (K ₂ O)	BY WHOM AND WHERE MANUFACTURED.	
			Available.	Insoluble.	Total.				
Lattice and Coke Special..	382	Guarant'd Analysis Official Analysis..	12.46 8.32	2.00 6.55	1.00 .82	..... 7.65	4.50 4.15	4.40 4.65	Florida Fertilizer Co., Gainesville.
No. 1 Pure Fish and Guano Mixture	383	Guarant'd Analysis Official Analysis..	12.46 6.82	2.00 5.80	1.00 .87	..... 6.67	4.00 3.90	5.00 5.41	Florida Fertilizer Co., Gainesville.
Standard Coke Special....	384	Guarant'd Analysis Official Analysis..	9.46 5.37	5.04 5.15	2.00 2.59	7.00 8.01	5.00 4.97	8.00 8.90	Standard Fertilizer Co., Gainesville.
Standard Vegetable No. 1..	385	Guarant'd Analysis Official Analysis..	8.46 6.32	4.54 5.55	2.00 1.85	7.50 7.80	4.50 4.20	6.00 6.73	Standard Fertilizer Co., Gainesville.
Standard Potato Special..	386	Guarant'd Analysis Official Analysis..	14.46 6.85	4.54 6.20	2.00 1.59	6.50 8.45	3.50 3.55	8.00 7.81	Standard Fertilizer Co., Gainesville.
Standard Catalpa	387	Guarant'd Analysis Official Analysis..	14.46 8.27	7.00 8.24	2.00 1.39	9.00 9.67	7.00 6.57	5.00 6.04	Standard Fertilizer Co., Gainesville.

Stazard Littere Special...	383	Guaran't Analysis	8.00	1.50	2.50	7.00	6.00	8.00	Standard Fertilizer Co., Gainesville.
		Official Analysis...	7.15	5.70	1.43	7.11	5.83	6.55	
Armour's Large Spec. Fruit and Vine	382	Guaran't Analysis	10.00	6.50	.50	.....	3.00	10.50	Armour Fertilizer Works, Jacksonville.
		Official Analysis...	5.35	6.41	1.15	7.50	3.00	9.50	
Armour's Original No. 1 Mixture	380	Guaran't Analysis	10.00	1.00	.....	.....	5.00	5.00	Armour Fertilizer Works, Jacksonville.
		Official Analysis...	7.02	5.14	1.26	6.38	4.60	5.35	
Com Bran Ferta.....	381	Guaran't Analysis	10.00	5.00	2.00	.....	5.00	5.00	E. Q. Painter Fertilizer Comp'y, Jacksonville.
		Official Analysis...	5.20	6.05	1.61	7.60	5.11	5.55	
Williams & Clark Fla. Vege- table	382	Guaran't Analysis	10.00	0.00	1.00	.....	4.00	5.00	Ann. Agr. Chem. Co.'s Works, Jacksonville.
		Official Analysis...	7.05	7.27	1.45	8.72	3.00	4.00	
Special Mixture	380	Guaran't Analysis	10.00	1.00	1.00	.....	5.00	5.00	East Coast Cattle Co., Ft. Pierce.
		Official Analysis...	7.20	.....	.....	4.54	5.25	5.00	
Mapee' Fruit and Vine Ma- nure	384	Guaran't Analysis	10.00	5.00	2.00	.....	3.00	10.00	Mapee' Fert. & Pure Gu- ano Co., New York, N. Y.
		Official Analysis...	11.55	6.91	2.65	8.60	2.47	11.71	
Mapee' Vegetable Manure..	385	Guaran't Analysis	12.00	6.00	2.00	.....	5.00	4.00	Mapee' Fert. & Pure Gu- ano Co., New York, N. Y.
		Official Analysis...	11.51	5.55	3.00	9.22	4.97	5.80	
Mapee' Orange Tree Manure	386	Guaran't Analysis	12.00	6.00	2.00	.....	4.00	5.0	Mapee' Fert. & Pure Gu- ano Co., New York, N. Y.
		Official Analysis...	15.47	6.13	3.97	10.00	3.68	5.21	
Special Mixture	387	Guaran't Analysis	.....	.....	.....	1.50	6.00	3.00	Ann. Agr. Chem. Co., Jacksonville.
		Official Analysis...	9.27	.....	.....	2.50	6.57	3.27	

ANALYSIS OF FERTILIZERS—Continued.

73

NAME OR BRAND.	Laboratory Number.	Signature.	Phosphoric Acid.			Ammonia.	Potash (K ₂ O).	BY WHOM AND WHERE MANUFACTURED.	
			Available.	Insoluble.	Total.				
Osca Sweet Potatoes.....	995	Guarant'd Analysis.....	.....	.....	4.95	4.52	6.59	K. O. Painter Fert. Co., Jacksonville.
		Official Analysis.....	7.21	4.51	.22	5.94	4.52		6.57
Strom Pure No. 2.....	999	Guarant'd Analysis.....	8.00	5.00	2.00	4.00	6.00	K. O. Painter Fert. Co., Jacksonville.
		Official Analysis.....	7.15	5.55	3.10	11.15	5.15	6.14	
Strom Pure Spec. No. 1.....	999	Guarant'd Analysis.....	8.00	6.00	1.00	2.00	10.00	K. O. Painter Fert. Co., Jacksonville.
		Official Analysis.....	9.15	6.75	.50	7.20	2.81	11.26	
Gen Vegetable.....	998	Guarant'd Analysis.....	5.00	5.00	2.00	4.00	2.00	K. O. Painter Fert. Co., Jacksonville.
		Official Analysis.....	8.15	12.22	.79	13.55	4.41	1.89	
Nitrate Soda.....	997	Guarant'd Analysis.....	14.00	K. O. Painter Fert. Co., Jacksonville.
		Official Analysis.....	.....	.....	.....	.....	14.42	.....
No. 1 Ground Tobacco Dust.....	997	Guarant'd Analysis.....	2.00	2.00	K. O. Painter Fert. Co., Jacksonville.
		Official Analysis.....	.....	.....	.....	.....	1.26	1.11

V. C. Champion Citrus Com- pound	3666	Guarant'd Analysis	10.00	6.93	1.00	.....	3.00	14.00	Va. Carolina Chem. Co., Savannah, Ga.
		Official Analysis...	5.54	7.48	.37	7.85	2.58	11.63	
V. C. Fruit and Vine.....	3666	Guarant'd Analysis	8.00	6.00	1.00	.....	2.50	10.00	Va. Carolina Chem. Co., Savannah, Ga.
		Official Analysis...	6.65	7.25	.81	8.70	3.51	9.15	
V. C. Old Dominion	3666	Guarant'd Analysis	8.00	7.00	1.00	.....	3.00	8.00	Va. Carolina Chem. Co., Savannah, Ga.
		Official Analysis...	6.15	7.34	.30	8.34	2.45	8.64	
V. C. Tip Top Tomato.....	3667	Guarant'd Analysis	8.00	7.00	1.00	.....	4.00	5.00	Va. Carolina Chem. Co., Savannah, Ga.
		Official Analysis...	4.87	8.27	.89	8.97	4.53	6.21	
XX Acid Phos. and Potash	3668	Guarant'd Analysis	.....	10.00	.....	.....	.....	6.00	Va. Carolina Chem. Co., Savannah, Ga.
		Official Analysis...	4.97	8.16	1.97	9.33	3.77	6.73	
Sulphate Potash	3669	Guarant'd Analysis	2.50	.....	.....	.....	.....	45.00	Va. Carolina Chem. Co., Savannah, Ga.
		Official Analysis...	6.55	.....	.....	.....	.....	49.50	
Cotton Seed Meal.....	3674	Guarant'd Analysis	.....	.....	.....	2.50	7.50	.....	McCaw Mfg. Co., Macon, Ga.
		Official Analysis...	.....	.....	.....	.....	8.00	.....
Cotton Seed Meal.....	3675	Guarant'd Analysis	.....	.....	.....	2.50	7.50	1.50	Piedmont Oil and Refin- ing Co., Phenixville, Ala.
		Official Analysis...	.....	.....	.....	.....	7.90	.....
Cotton Seed Meal.....	3675	Guarant'd Analysis	.....	.....	.....	2.50	7.50	1.50	Fla. Cotton Oil Co., Jack- sonville,
		Official Analysis...	.....	.....	.....	.....	8.15	.....
Cotton Seed Meal.....	3675	Guarant'd Analysis	.....	.....	.....	2.50	7.00	1.50	Fla. Cotton Oil Co., Jack- sonville,
		Official Analysis...	.....	.....	.....	.....	4.70	.....

ANALYSIS OF FERTILIZERS—Continued.

74

NAME OR BRAND.	Laboratory Number.		Moisture.	Phosphoric Acid.			Ammonia.	Potash (K ₂ O).	BY WHOM AND WHERE MANUFACTURED.
				Available.	Insoluble.	Total.			
Cumberland Bone Sulph. Phosphate of Lime.....	1014	Gauss's Analysis.....	15.00	9.00	1.00	.....	2.80	1.00	Cumberland Bone Phos. Co., Portland, Me.
		Official Analysis.....	11.20	9.20	2.31	11.30	2.45	1.41	
Cotton Seed Meal.....	1015	Gauss's Analysis.....	.....	.....	.....	.....	2.54	1.50	Fla. Cotton Oil Co., Tallahassee.
		Official Analysis.....	.....	.....	.....	.....	1.45	.....
Cotton Seed Meal.....	1016	Gauss's Analysis.....	.....	.....	.....	.....	2.50	1.20	Produce Oil and Refining Co., Farmdale, Ala.
		Official Analysis.....	.....	.....	.....	.....	2.22	.....

N. E. ROSE, State Chemist—BUREAU OF FEED STUFFS—E. L. BRIDGES, A. M. HENRY, Assistant Chemists.

Analysis of Special Samples under Sec. 3, Act approved May 24, 1905.

(Samples taken by purchaser.)

NAME OR BRAND.	Laboratory Number.	Fiber.	Protein.	Starch and Sugar.	Fat.	Ash.	BY WHOM SENT.
Iran	39	17.79	9.49	52.45	2.05	1.00	John High, Baker's Mill, Fla.
Cocoa Nut Meal	40	12.34	20.86	29.28	9.05	1.70	W. A. Boura, Jacksonville, Fla.
Cocoa Nut Meal	41	12.83	20.92	11.19	9.79	1.36	W. A. Boura, Jacksonville, Fla.
Kearlizer Corn and Oat Feed.....	42	11.94	7.55	61.75	4.52	1.58	R. H. Mickler, Tallahassee, Fla.
Corn and Oat Feed	43	4.52	9.24	67.58	2.71	1.32	Baker & Holmes, Jacksonville, Fla.
Our Own	44	6.85	9.49	65.29	3.29	2.52	Baker & Holmes Jacksonville, Fla.
Peerless Feed—Wheat Bran.....	45	8.23	14.56	54.59	4.23	1.19	J. Y. Detwiler, New Smyrna, Fla.
Peerless Feed—Wheat Bran.....	46	7.82	15.83	54.22	4.42	1.05	J. Y. Detwiler, New Smyrna, Fla.
Pure Winter Wheat Middlings.....	47	6.96	19.31	55.27	2.44	4.59	Allen & Clayton, Tampa, Fla.
Shorta	48	6.94	17.95	53.77	4.92	1.29	L. A. Morrow & Fox, Wauchula, Fla.
Bright Cotton Seed Meal.....	49	9.56	29.71	27.53	9.66	4.19	W. S. Jackson, Micanopy, Fla.
Truss	50	17.19	14.56	51.44	2.37	4.26	J. H. Vidal, Gainesville, Fla.
C. G. & Co., Ground Feed.....	51	3.79	16.27	69.02	2.59	1.58	Consolidated Grocery Co., Jacksonville.
Kempier's Sol. Cattle Feed.....	52	12.66	13.95	51.26	3.29	5.79	Wm. T. Kempier Elev'r Co., Kansas City, Mo.
Natal Grass Hay	53	36.75	7.45	39.22	1.86	1.62	T. K. Godfrey, Wabla, Fla.
Japanese Kudzu Vine Hay.....	54	69.69	16.59	32.81	1.68	5.52	C. E. Peas, Chipley, Fla.

NOTICE—The especial attention of consumers and dealers is called to the following paragraph:

Consumers desiring to avail themselves of the provisions of Sec. 3 of the Law, providing for "Special Samples" drawn by consumers, are requested to read carefully Sec. 3 of the Law and the "Rules and Regulations Governing the taking and forwarding Special Samples of Feed Stuff and Fertilizers" found on a preceding page of the report. Also to compare the "official analysis" and the "market value of various feeds sold in the State.

It will be found that in a number of cases the "market value," or price, is no criterion of the actual feeding value of the goods. That in several instances the highest "market value" is placed on the most inferior goods.

Consumers should compare the guaranteed tag on the bag with the table of "average composition of feed stuff." In case of doubt as to the truthfulness of the guarantee, draw a sample, according to law, and regulations, and send in a tin box sealed, to the "Commissioner of Agriculture." Preserve the "guaranteed tags" off the packages, to compare with the result of the analysis of the sample by the State Chemist.

R. E. ROSE, State Chemist—ANALYSIS OF FEED STUFF, 1907—B. H. BRIDGES, A. M. HENRY, Assistant Chemists.
 Samples taken by State Chemist under Section 1, Act Approved May 24, 1905.

NAME OR BRAND.	Laboratory Number.		Water.	Protein.	Starch and Sugar.	Fat.	Ash.	ADDRESS OF MANUFACTURERS.
Pure Wheat Middlings	241	Guarant'd Analysis	15.75	49.00	4.00	.....	.....	Hunter Bros' Milling Co., St. Louis, Mo.
		Official Analysis...	9.30	17.49	51.37	6.34	5.05	
Parina Feed	242	Guarant'd Analysis	12.30	3.90	59.70	4.50	.....	Ralston Parina Co., St. Louis, Mo.
		Official Analysis...	11.49	12.55	57.49	3.97	4.27	
Feed Stuff	243	Guarant'd Analysis	9.90	15.00	.....	4.00	.....	Tri-State Milling Co., Nashville, Tenn.
		Official Analysis...	6.54	12.55	58.00	4.81	4.52	
Sacred Dairy Feed.....	244	Guarant'd Analysis	11.75	24.50	48.34	2.50	.....	American Milling Co., Philadelphia, Pa.
		Official Analysis...	9.20	17.91	48.91	6.12	5.23	
Ballard's Ship Stuff.....	245	Guarant'd Analysis	8.70	17.07	40.05	4.71	.....	Ballard & Ballard Co., Louisville, Ky.
		Official Analysis...	6.27	17.53	55.24	4.77	4.81	
Pure Wheat Bran.....	246	Guarant'd Analysis	18.00	15.20	5.40	.....	.....	Acme Mills and Elevator Co., Hopkinsville, Ky.
		Official Analysis...	8.34	10.02	54.02	5.04	4.62	
Pure Wheat Bran.....	247	Guarant'd Analysis	9.50	14.50	50.00	4.00	.....	Liberty Mills, Nashville, Tennessee.
		Official Analysis...	8.97	15.99	54.33	4.17	4.49	

Banner Feed	248	Guarant'd Analysis	10.00	8.00	62.00	2.50	.....	American Cereal Co., Chicago,
		Official Analysis...	10.14	11.75	64.85	2.73	3.27	Illinois.
Pure Wheat Middlings.....	249	Guarant'd Analysis	.....	15.75	40.00	4.50	.....	Hunter Bros.' Milling Co., St.
		Official Analysis...	5.92	20.40	55.44	4.20	3.59	Louis, Mo.
Pure Wheat Shorts.....	250	Guarant'd Analysis	6.42	16.00	48.00	4.00	.....	Liberty Mills, Nashville, Ten-
		Official Analysis...	6.25	17.55	52.89	5.45	4.97	nesses.
Pure Wheat Bran.....	251	Guarant'd Analysis	9.50	14.50	50.00	4.00	.....	Liberty Mills, Nashville, Ten-
		Official Analysis...	9.79	15.99	52.99	4.99	6.57	nesses.
Cotton Seed Meal.....	252	Guarant'd Analysis	.....	25.52	24.00	9.20	.....	J. Lindsay Wells Co., Memphis,
		Official Analysis...	5.69	32.70	49.70	5.50	6.64	Tennessee.
Pure Wheat Middlings.....	253	Guarant'd Analysis	.....	15.75	64.25	4.20	2.70	C. Baker Milling Co., Red Bud,
		Official Analysis...	15.21	17.10	48.10	5.05	4.90	Illinois.
Feed Stuff	254	Guarant'd Analysis	15.51	11.00	54.19	2.20	.....	Capital Grain, Co., Nashville,
		Official Analysis...	20.77	11.01	50.24	2.15	4.45	Tennessee.
Pure Wheat Bran	255	Guarant'd Analysis	9.20	14.50	50.00	4.00	.....	Merchants' Mills, Mobile, Ala-
		Official Analysis...	8.20	14.45	51.95	4.50	5.83	bama.
Ship Stuff	256	Guarant'd Analysis	.....	15.00	46.75	6.50	.....	Mountain City Mill Co., Chat-
		Official Analysis...	5.32	16.00	50.25	4.25	4.60	tanooga, Tenn.
Pure Wheat Bran.....	257	Guarant'd Analysis	.....	15.50	46.00	4.25	.....	Kearneyville Mill Co., Water-
		Official Analysis...	9.83	15.45	52.15	2.15	6.20	loo, Illinois.

ANALYSIS OF FEED STUFF—Continued.

79

NAME OF BRAND.	Laboratory Number.		Fiber.	Protein.	Starch and Sugar.	Fat.	Ash.	ADDRESS OF MANUFACTURERS.
Ship Staff	258	Guarant'd Analysis	12.86	16.71	6.96	.....	.....	Mountain City Mill Co., Chat-tanooga, Tenn.
		Official Analysis...	5.05	16.21	58.98	4.45	4.26	
Pure Middings	259	Guarant'd Analysis	16.05	58.96	4.75	.....	.....	Columbia Mill and Elevator Co., Columbia, Tenn.
		Official Analysis...	5.15	16.90	67.76	4.10	4.27	
Pure Wheat Shorts.....	260	Guarant'd Analysis	6.42	16.09	48.09	4.60	.....	Cumberland Mills, Nashville, Tennessee.
		Official Analysis...	7.51	17.75	64.42	4.72	5.14	
Blair's Shorts	261	Guarant'd Analysis	8.96	16.75	28.45	3.56	.....	Blair Milling Co., Abilene, Kansas.
		Official Analysis...	5.74	17.72	66.84	4.17	4.23	
Cotton Seed Meal.....	262	Guarant'd Analysis	38.52	.....	.....	.....	.....	Florida C. O. Co., Tallahassee, Florida.
		Official Analysis...	19.58	42.24	24.59	5.45	5.49	
Pure Wheat Bran	263	Guarant'd Analysis	20.00	55.19	5.44	.....	.....	Arms Mill and Elevator Co., Hopkinsville, Ky.
		Official Analysis...	7.77	28.10	53.02	4.29	5.09	
Ballard's Ship Staff.....	264	Guarant'd Analysis	5.81	17.37	46.58	4.41	.....	Ballard & Ballard Co., Louis-ville, Ky.
		Official Analysis...	7.57	17.50	54.99	4.69	5.13	
Globe Gluten Feed.....	265	Guarant'd Analysis	25.60	51.00	2.16	.....	.....	Corn Products Refining Co., New York.
		Official Analysis...	7.69	28.36	49.63	3.52	3.47	

Ballard's Bran	250	Guaran't Analysis	8.40	15.27	18.59	4.43	.....	Ballard & Ballard Co., Louis-
		Official Analysis...	12.27	16.02	19.33	4.14	4.44	ville, Ky.
Cotton Seed Meal.....	251	Guaran't Analysis	.....	22.00	26.00	4.00	.....	Tennessee Fiber Co., Memphis,
		Official Analysis...	22.17	18.20	19.25	5.25	3.70	Tennessee.
Blair's Shorts	252	Guaran't Analysis	8.98	16.72	18.82	3.50	.....	Blair Milling Co., Arhison,
		Official Analysis...	5.82	17.64	16.31	5.24	3.14	Kansas.
Prime Cotton Seed Meal....	253	Guaran't Analysis	.....	18.62	.....	.....	.....	Alabama C. O. Co., Montgom-
		Official Analysis...	8.28	19.17	25.42	11.21	6.17	ery, Alabama.
Cooked Cow Feed.....	254	Guaran't Analysis	.....	26.00	44.00	7.50	.....	Nashville Feeg Co., Nashville,
		Official Analysis...	11.23	28.22	28.44	5.93	6.65	Tennessee.
Parina Poultry Feed	255	Guaran't Analysis	4.00	11.00	65.00	3.50	.....	Rabon Parina Co., St. Louis,
		Official Analysis...	7.50	19.72	69.19	3.48	3.33	Missouri.
Parina Feed	256	Guaran't Analysis	13.20	5.00	59.70	4.50	.....	Rabon Parina Co., St. Louis,
		Official Analysis...	11.91	16.65	58.25	3.90	3.82	Missouri.
Cotton Seed Meal	257	Guaran't Analysis	.....	22.00	13.00	5.00	.....	C. A. Tindall & Co., Memphis,
		Official Analysis...	21.25	22.62	35.04	4.14	4.51	Tennessee.
Mill Feed	258	Guaran't Analysis	.....	12.25	65.25	4.32	.....	Riverside Mill and Power Co.,
		Official Analysis...	4.25	22.55	62.94	3.11	3.51	Cartersville, Ga.
Pure Wheat Bran.....	259	Guaran't Analysis	.....	13.00	52.22	4.75	.....	Riverside Mill and Power Co.,
		Official Analysis...	10.10	15.00	53.21	3.25	4.70	Cartersville, Tenn.

Victor Co. and Out Feed..	276	Guaran't Analysis	12.28	7.95	62.00	2.69	.....	American Cereal Company, Chicago, Ill.
		Official Analysis...	12.18	7.70	59.65	2.80	5.93	
Diamond C. Corn and Oat Chops	277	Guaran't Analysis	14.72	7.62	61.23	3.15	.....	Corn Mills Co., East St. Louis, Illinois.
		Official Analysis...	14.67	7.49	59.95	3.70	4.50	
Parina Poultry Feed.....	278	Guaran't Analysis	4.90	11.00	65.44	3.60	.....	Parina Parina Co., St. Louis, Mo.
		Official Analysis...	3.70	10.48	67.60	3.99	3.81	
Sugared Feed	279	Guaran't Analysis	19.90	3.30	56.26	6.50	.....	Allan Feed Products and Mill- ing Co., New Orleans, La.
		Official Analysis...	19.37	14.64	49.12	3.88	7.68	
Feed Stuff	280	Guaran't Analysis	15.51	11.46	55.19	3.30	.....	Capital Grain Company, Nash- ville, Tenn.
		Official Analysis...	13.87	12.34	54.87	3.15	4.14	
Feed Stuff	281	Guaran't Analysis	13.11	11.40	55.19	3.20	.....	Capital Grain Company, Nash- ville, Tenn.
		Official Analysis...	17.86	10.27	53.92	3.49	4.47	
Hominy Feed	282	Guaran't Analysis	6.81	14.50	59.04	10.00	.....	Cumberland Mills, Nashville, Tennessee.
		Official Analysis...	6.85	10.35	68.62	1.99	2.81	
Globe Gluten Feed.....	283	Guaran't Analysis	.....	22.00	51.00	2.50	.....	Corn Products and Refin- ing Co., New York.
		Official Analysis...	7.20	27.15	49.10	3.84	3.87	
Bran Feed	284	Guaran't Analysis	.....	11.62	53.97	3.62	.....	City Grain and Feed Company, Columbia, Tenn.
		Official Analysis...	14.75	11.00	53.08	3.41	4.10	
Pure Wheat Bran	285	Guaran't Analysis	.....	14.40	63.58	4.23	.....	Arno Mill and Elevator Co., Hopkinsville, Ky.
		Official Analysis...	10.77	12.90	61.78	4.15	5.21	

ANALYSIS OF FEED STUFF—Continued.

83

NAME OF BRAND	Laboratory Number.		Fiber.	Protein.	Starch and Sugar.	Fat.	Ash.	ADDRESS OF MANUFACTURERS.
Wheat Bran	286	Guarant'd Analysis	19.99	14.99	4.56	.....	.....	Dalake-Walker Mill Co., Union City, Tenn.
		Official Analysis...	12.16	12.34	13.66	4.99	5.23	
Excelsior Corn and Oat Feed	287	Guarant'd Analysis	19.46	9.99	69.89	4.29	.....	Great Western Cereal Company, Chicago, Ill.
		Official Analysis...	19.34	9.99	69.79	5.01	4.29	
Ship Stuff	288	Guarant'd Analysis	11.99	14.71	6.99	.....	.....	Mountain City Mill Co., Chattanooga, Tenn.
		Official Analysis...	2.59	12.51	67.73	1.79	2.14	
Blair Shorts	289	Guarant'd Analysis	8.98	16.75	14.95	3.59	.....	The Blair Milling Co., Atchison, Kansas.
		Official Analysis...	5.76	17.38	17.61	4.35	4.69	
Pure Winter Wheat Middings	290	Guarant'd Analysis	16.99	26.39	4.99	.....	.....	Hunter Brothers' Milling Co., St. Louis, Mo.
		Official Analysis...	4.99	17.65	58.83	3.73	3.83	
Jolly Bean	291	Guarant'd Analysis	8.59	15.59	57.89	4.59	.....	Little Mill Co., Franklia, Tennessee.
		Official Analysis...	6.85	15.39	57.96	3.32	5.19	
Pure Wheat Bran	292	Guarant'd Analysis	14.99	63.16	4.33	.....	.....	Arno Mill and Elevator Co., Hopkinsville, Ky.
		Official Analysis...	7.89	15.59	51.57	3.59	5.63	

Pure Winter Wheat Bran...	290	Guaran't Analysis.....	14.00	14.00	2.50	.....	Hunter Brothers' Milling Co., St. Louis, Mo.
		Official Analysis...	8.87	15.00	12.94	2.81	4.84	
Cotton Seed Meal.....	294	Guaran't Analysis.....	28.15	.....	.....	.....	Florida C. O. Co., Jacksonville, Florida.
		Official Analysis...	9.07	29.82	28.33	11.28	8.65	
Pure Winter Wheat Bran...	295	Guaran't Analysis.....	14.00	14.00	2.50	.....	Hunter Brothers' Milling Co., St. Louis, Mo.
		Official Analysis...	8.22	14.19	12.65	4.84	5.76	
Quaker Dairy Feed.....	296	Guaran't Analysis.....	17.00	12.00	12.00	3.00	American Cereal Company, Chicago, Ill.
		Official Analysis...	15.87	12.69	12.19	4.29	4.12	
Pure Winter Wheat Mid- dlings.....	297	Guaran't Analysis.....	16.00	16.00	4.54	.....	Hunter Brothers' Milling Co., St. Louis, Mo.
		Official Analysis...	8.33	17.29	13.85	6.20	4.22	
Feed Stuff.....	298	Guaran't Analysis.....	15.52	11.00	12.15	3.50	Capital Grain Company, Nash- ville, Tenn.
		Official Analysis...	22.11	8.55	10.37	2.50	3.78	
Blair's Shorts.....	299	Guaran't Analysis.....	8.84	16.71	16.91	3.50	Blair Milling Co., Atchison, Kansas.
		Official Analysis...	8.20	14.74	19.93	4.02	4.94	
Wheat Bran.....	300	Guaran't Analysis.....	16.00	14.00	4.00	.....	Dahnke-Walker Milling Co., Union City, Tenn.
		Official Analysis...	16.41	11.85	12.35	1.87	4.91	
Blair's Bran.....	301	Guaran't Analysis.....	10.50	12.50	14.84	3.00	The Blair Milling Co., Atchison, Kansas.
		Official Analysis...	7.75	12.90	17.97	3.53	5.62	
Boaz Corn and Oat Feed..	302	Guaran't Analysis.....	11.00	9.00	10.00	4.00	Great Western Cereal Co., Chi- cago, Illinois
		Official Analysis...	10.80	8.80	11.85	3.18	4.74	

ANALYSIS OF FEED STUFF—Continued.

84

NAME OF BRAND.	Laboratory Number.		Fiber.	Protein.	Starch and Sugar.	Fat.	Ash.	ADDRESS OF MANUFACTURERS.
Mill Feed	202	Guarant'd Analysis	9.15	15.21	51.21	1.32	.....	The Capital Grate Co., Nash-ville, Tenn.
		Official Analysis...	9.39	14.30	52.32	0.89	1.23	
Pure Wheat Bran.....	204	Guarant'd Analysis	9.50	14.93	50.99	1.99	.....	Tennessee Mill Co., Hotell Springs, Tenn.
		Official Analysis...	9.18	14.80	52.00	2.11	0.40	
Purina Feed	205	Guarant'd Analysis	13.28	8.00	59.70	4.50	.....	Ralston Purina Co., St. Louis, Missouri.
		Official Analysis...	10.51	13.74	59.09	3.49	2.92	
Victor Corn and Oat Feed..	206	Guarant'd Analysis	12.00	7.84	62.00	1.00	.....	American Cereal Co., Chicago, Illinois.
		Official Analysis...	9.26	8.45	65.04	1.19	2.62	
Heavy Draught Feed.....	217	Guarant'd Analysis .....	.....	10.35	64.85	2.42	.....	United Grovery Co., Jackso-ville, Fla.
		Official Analysis...	4.85	11.50	65.07	1.65	1.72	
Globe Gluten Feed.....	208	Guarant'd Analysis .....	.....	25.00	51.00	2.50	.....	Corn Products Refining Co., New York.
		Official Analysis...	6.80	27.99	49.47	4.12	3.17	
Excelsior corn and Oat Feed	209	Guarant'd Analysis	10.40	9.00	60.00	4.20	.....	Great Western Cereal Co., Chi-cago, Illinois.
		Official Analysis...	11.25	9.90	61.62	4.99	4.75	
Wheat Bran	210	Guarant'd Analysis .....	.....	16.00	51.00	4.00	.....	Hanks-Walker Milling Co., Un-ion City, Tenn.
		Official Analysis...	11.00	14.62	53.65	3.20	5.08	

Lillie Bran	211	Guarant'd Analysis Official Analysis...	8.50 6.32	15.50 15.09	17.90 17.13	4.50 3.92	5.50	Lillie Milling Co, Franklin, Tennessee.
Pure Wheat Middlings....	212	Guarant'd Analysis Official Analysis...	..... 4.25	17.25 15.89	17.54 16.45	4.55 4.18	5.75	Barrett-Kraft & Kaufman Mill- ing Co, St. Louis, Mo.
Jax Feed	213	Guarant'd Analysis Official Analysis...	..... 19.39	8.47 8.15	14.02 13.79	1.53 1.52	1.90	United Grocery Co, Jackson- ville, Fla.
Sugared Feed	214	Guarant'd Analysis Official Analysis...	19.90 12.34	5.90 5.84	16.60 12.19	6.50 4.02	8.97	Atlas Feed Products and Refin- ing Co, New Orleans, La.
Feed Staff.....	215	Guarant'd Analysis Official Analysis...	15.74 13.12	11.90 9.65	15.19 13.34	1.39 2.51	3.99	Capital Grain Co, Nashville, Tennessee.
Pure Wheat Shorts	216	Guarant'd Analysis Official Analysis...	5.42 5.78	14.90 17.38	16.60 17.15	4.00 3.09	4.37	Cumberland Mills, Nashville, Tennessee.
Ballard's Ship Staff	217	Guarant'd Analysis Official Analysis...	5.90 5.30	16.87 19.95	17.14 17.81	4.72 4.52	4.59	Ballard & Ballard Co, Louis- ville, Ky.
Farrest City Feed Meal	218	Guarant'd Analysis Official Analysis...	..... 19.90	21.00 24.59	25.00 25.65	4.50 5.82	5.97	Southern C. O. Company, Sa- vannah, Ga.
Pure Wheat Bran	219	Guarant'd Analysis Official Analysis...	..... 8.54	14.00 15.59	14.60 13.92	1.50 3.94	6.00	Kelly Milling Company, Kan- sas City.
Albatross Bran	220	Guarant'd Analysis Official Analysis...	..... 8.85	14.75 15.90	12.64 13.18	1.79 1.83	5.27	John E. Meyer & Son, Spring- field, Mo.

ANALYSIS OF FEED STUFF—Continued.

88

NAME OF BRAND	Laboratory Number.		Fiber.	Protein.	Starch and Sugar.	Fat.	Ash.	ADDRESS OF MANUFACTURERS.
Wheat Bran	320	Guarant'd Analysis	13.50	14.50	14.40	2.60	.....	M. J. Kemper Elevator Co., Kansas City, Mo.
		Official Analysis...	9.34	15.90	12.42	2.52	5.25	
Quaker Dairy Feed	321	Guarant'd Analysis	11.66	12.90	12.66	2.30	.....	The American Cereal Co., Chi- cago, Illinois.
		Official Analysis...	11.65	12.95	11.56	2.05	5.50	
Banner Feed	322	Guarant'd Analysis	16.60	8.90	12.60	2.50	.....	The American Cereal Co., Chi- cago, Illinois.
		Official Analysis...	8.72	8.75	12.50	2.55	2.95	
Pure Wheat Bran	324	Guarant'd Analysis	9.50	14.50	16.00	4.00	.....	Liberty Mills, Nashville, Ten- nessee.
		Official Analysis...	8.60	15.00	15.91	3.15	6.45	
Middling Feed	325	Guarant'd Analysis	.....	12.20	11.80	2.15	.....	City Grain and Feed Co., Co- lumbia, Tenn.
		Official Analysis...	11.91	12.94	14.20	2.70	4.20	
Quaker Dairy Feed.....	326	Guarant'd Analysis	11.66	12.90	12.66	2.00	.....	American Cereal Company, Chi- cago, Illinois.
		Official Analysis...	13.07	12.55	12.95	2.50	5.90	
Standard Cow Feed.....	327	Guarant'd Analysis	.....	20.00	11.00	5.00	.....	M. F. Gustafson & Co., Pensacola, Florida.
		Official Analysis...	9.90	16.50	11.31	6.70	4.15	
Shreds	328	Guarant'd Analysis	6.25	15.50	11.25	5.25	.....	John T. Kemper Elevator Co., Kansas City, Mo.
		Official Analysis...	5.95	17.11	14.19	4.85	4.85	

Pure Wheat Bran	329	Guaran't Analysis	14.34	55.52	2.41	.....	The Denlap Milling Co., Clarksville, Tenn.
		Official Analysis...	14.15	54.92	2.55	2.42	
Nutriline Stock Feed.....	330	Guaran't Analysis	14.90	58.00	2.89	.....	Nutriline Feed and Oil Co., New Orleans, La.
		Official Analysis...	9.92	57.27	2.69	2.67	
Mill Feed	331	Guaran't Analysis	9.12	65.21	2.22	.....	Capital Grain Co., Nashville, Tennessee.
		Official Analysis...	8.79	60.52	2.22	2.60	
Feed Stuff	332	Guaran't Analysis	15.51	55.15	2.26	.....	Capital Grain Co., Nashville, Tennessee.
		Official Analysis...	12.37	55.22	2.45	4.45	
Sacrens Dairy Feed	333	Guaran't Analysis	11.72	48.54	2.59	.....	American Milling Co., Philadelphia, Pa.
		Official Analysis...	11.47	52.18	2.29	2.99	
Parina Feed	334	Guaran't Analysis	12.89	59.90	4.59	.....	Balston Parina Co., St. Louis, Missouri.
		Official Analysis...	12.66	58.25	2.12	4.15	
Kyons Feed	335	Guaran't Analysis	7.53	56.64	2.62	.....	The J. E. M. Milling Co., Frankfort, Ky.
		Official Analysis...	6.79	57.22	2.29	3.11	
Excelsior Chop Feed	336	Guaran't Analysis	19.43	60.50	4.69	.....	The Great Western Cereal Co., Chicago, Illinois.
		Official Analysis...	19.72	61.51	4.12	4.20	
Pure Wheat Ship Stuff....	337	Guaran't Analysis	5.90	52.60	4.99	.....	The Tennessee Mill Co., Estell Springs, Tenn.
		Official Analysis...	5.22	59.64	2.92	2.92	
Globe Gluten Feed.....	338	Guaran't Analysis	.....	51.60	2.59	.....	Corn Products Refining Co., New York
		Official Analysis...	7.58	51.03	2.29	2.52	

ANALYSIS OF FEED STUFF—Continued.

88

NAME OF BRAND.	Laboratory Number.		Fiber.	Protein.	Starch and Sugar.	Fat.	Ash.	ADDRESS OF MANUFACTURERS.
Victor Corn and Oat Feed...	339	Guarant's Analysis	12.96	7.56	61.08	2.93	.....	American Cereal Co., Chicago, Illinois.
		Official Analysis...	12.33	7.55	61.55	2.93	4.17	
Victor Feed	340	Guarant's Analysis	12.96	7.56	61.00	2.93	.....	American Cereal Co., Chicago, Illinois.
		Official Analysis...	12.69	7.99	62.20	2.93	3.92	
Beet Pulp	341	Guarant's Analysis	19.32	11.78	62.35	1.64	.....	L. T. Collier & Co., Agents, Norfolk, Va.
		Official Analysis...	19.55	1.55	58.90	0.55	3.25	
Hensley Feed	342	Guarant's Analysis	4.51	18.58	58.88	10.00	.....	Liberty Mills, Nashville, Tennessee.
		Official Analysis...	5.55	18.71	61.29	9.70	2.25	
Hensley Feed	343	Guarant's Analysis	4.51	18.58	58.30	10.00	.....	Liberty Mills, Nashville, Tennessee.
		Official Analysis...	4.55	19.58	64.12	9.68	2.52	
Pure Wheat Bran	344	Guarant's Analysis	8.91	17.47	53.52	4.75	.....	Sunny Side Flour Mills, Evansville, Ind.
		Official Analysis...	8.34	15.54	53.84	5.24	6.16	
Pure Wheat Bran	345	Guarant's Analysis	9.58	14.58	58.00	4.00	.....	The Liberty Mills, Nashville, Tennessee.
		Official Analysis...	8.82	14.55	51.45	4.71	5.54	
Pure Wheat Shorts	346	Guarant's Analysis	6.82	18.00	48.00	4.00	.....	The Liberty Mills, Nashville, Tennessee.
		Official Analysis...	7.01	17.44	62.66	5.78	5.57	

Schumacher Stock Feed....	247	Guarant'd Analysis	19.99	21.00	20.00	4.88	.....	American Cereal Co., Chicago, Illinois.
		Official Analysis...	21.22	20.27	20.28	2.37	8.95	
Cotton Seed Meal	248	Guarant'd Analysis	.....	25.99	.....	.....	.....	Florida Cotton Oil Company, Tallahassee, Fla.
		Official Analysis...	26.99	23.90	22.62	6.93	4.80	
Pure Wheat Bran	249	Guarant'd Analysis	9.50	14.00	14.00	5.00	.....	The Tennessee Mill Company, Estell Springs Tenn.
		Official Analysis...	14.99	14.13	11.22	4.43	7.60	
Pure Wheat Ship Stuff....	250	Guarant'd Analysis	5.00	10.00	10.00	4.00	.....	The Tennessee Mill Company, Estell Springs, Tenn.
		Official Analysis...	6.27	10.20	10.50	4.17	6.00	
Cotton Seed Meal	251	Guarant'd Analysis	7.00	43.10	24.50	9.25	.....	R. E. Cates & Co., Spartanburg, South Carolina.
		Official Analysis...	18.91	37.40	28.08	8.48	6.40	
Pure Wheat Middlings	252	Guarant'd Analysis	.....	16.45	16.50	4.54	.....	Inglehart Bros., Evansville, Indiana.
		Official Analysis...	4.10	16.45	16.90	4.13	3.90	
Pure Wheat Middlings....	253	Guarant'd Analysis	.....	15.70	16.50	4.30	.....	C. Becker Milling Co., Red Bud, Illinois.
		Official Analysis...	4.20	17.00	16.10	3.25	3.71	
Cotton Seed Meal	254	Guarant'd Analysis	.....	28.00	24.00	9.00	.....	J. Lindsey Wells Co., Memphis, Tennessee.
		Official Analysis...	3.40	40.00	23.70	3.97	7.64	
Pure Wheat Middlings	255	Guarant'd Analysis	.....	16.45	16.50	4.54	.....	Inglehart Bros., Evansville, Indiana.
		Official Analysis...	3.80	16.50	16.35	3.93	3.97	
Banner Feed	256	Guarant'd Analysis	10.00	8.00	10.00	3.50	.....	The American Cereal Company, Chicago, Ill.
		Official Analysis...	8.15	9.00	10.10	3.10	3.85	

ANALYSIS OF FEED STUFF—Continued.

99

NAME OF BRAND	Inventory Number.		Fiber.	Protein.	Starch and Sugar.	Fat.	Ash.	ADDRESS OF MANUFACTURERS
Pure Wheat Bran	357	Guarant'd Analysis		13.00	35.00	3.50	.....	Cleveland Bros., Mobile, Ala.
		Official Analysis...	9.45	13.53	33.11	2.63	6.08	Ibama.
Feed Meal	358	Guarant'd Analysis	10.90	25.00	25.00	4.00	.....	Southern Cotton Oil Company, Memphis, Tenn.
		Official Analysis...	14.32	22.60	24.22	4.65	4.38	
Mix Feed	359	Guarant'd Analysis		12.38	65.28	4.22	.....	Riverside Milling and Power Co., Cartersville, Ga.
		Official Analysis...	4.42	12.57	67.92	1.18	2.92	
Shorts	360	Guarant'd Analysis	6.25	15.50	61.25	5.25	.....	W. T. Kemmer Elevator Co., Kansas City, Mo.
		Official Analysis...	5.46	16.58	53.77	3.78	5.71	
Pure Wheat Shorts.....	361	Guarant'd Analysis		14.41	56.97	9.41	.....	Tri-State Milling Co., Nashville, Tenn.
		Official Analysis...	6.96	15.33	59.17	5.43	2.97	
Pure Wheat Middlings....	362	Guarant'd Analysis	4.00	17.00	50.00	1.00	.....	J. Zimmerman's Company, Mobile, Ala.
		Official Analysis...	4.87	17.50	50.00	2.15	4.21	
Pure Winter Wheat Mixed Feed	363	Guarant'd Analysis		16.25	51.00	4.00	.....	Osborn Milling Company, Cairo, Illinois.
		Official Analysis...	7.31	16.34	60.20	3.00	5.12	

Ship Staff	264	Guarant'd Analysis	22.00	18.71	5.29	.....	Mountain City Mill Company, Chattanooga, Tenn.
		Official Analysis... 5.28	23.80	22.29	2.41	2.21	
Brn	265	Guarant'd Analysis	9.52	21.92	7.18	.....	Mountain City Mill Company, Chattanooga, Tenn.
		Official Analysis... 8.22	14.05	27.23	2.88	6.12	
Pure Wheat Bran.....	266	Guarant'd Analysis	9.59	14.80	24.09	5.00	Tennessee Mill Company, Estelle Springs, Tenn.
		Official Analysis... 9.59	14.50	27.22	1.65	6.27	
Cotton Seed Meal.....	267	Guarant'd Analysis	25.75	.....	.....	.....	Florida Cotton Oil Company, Jacksonville, Fla.
		Official Analysis... 29.49	23.87	26.84	6.52	4.61	
Cotton Seed Meal.....	268	Guarant'd Analysis	25.52	.....	.....	.....	Florida Cotton Oil Company, Jacksonville, Fla.
		Official Analysis... 8.22	28.44	23.97	15.29	5.90	
Cooked Cow Feed.....	269	Guarant'd Analysis	26.00	41.00	7.50	.....	American Steam Feed Company, Nashville, Tenn.
		Official Analysis... 26.54	26.24	28.35	8.17	7.10	
Boys Chop Feed.....	270	Guarant'd Analysis	11.40	9.00	60.00	4.00	Great Western Cereal Company, Chicago, Ill.
		Official Analysis... 27.67	9.04	54.20	4.13	3.55	
Excelsior Dairy Feed.....	271	Guarant'd Analysis	11.75	26.50	14.54	3.50	American Milling Company, Philadelphia, Pa.
		Official Analysis... 7.53	27.45	14.52	4.22	6.90	
Star Mixed Feed.....	272	Guarant'd Analysis	11.55	22.97	2.82	.....	City Grain and Feed Company, Columbia, Tenn.
		Official Analysis... 4.42	22.02	24.21	3.64	5.52	
Excelsior Corn & Cut Feed	273	Guarant'd Analysis	20.40	9.00	60.00	4.20	Great Western Cereal Company, Chicago, Ill.
		Official Analysis... 7.11	8.00	27.04	2.81	3.71	

ANALYSIS OF FEED STUFF—Continued.

92

NAME OF BRAND	Laboratory Number	Fiber	Protein	Starch and Sugar	Fat	Ash	ADDRESS OF MANUFACTURERS
Diamond C. Corn and Oat Shorts	271 Analyst's Analysis	14.73	7.63	61.23	3.12	.....	Corn Mills, East St. Louis, Illinois.
	Official Analysis...	15.17	7.63	61.95	3.27	4.97	
Pure Wheat Ship Staff.....	272 Analyst's Analysis	5.99	16.00	55.00	4.09	.....	Tennessee Mill Company, Hotel Springs, Tenn.
	Official Analysis...	4.57	17.45	58.19	4.84	3.97	
Banner Feed	273 Analyst's Analysis	14.99	8.09	62.99	1.59	.....	The American Cereal Company, Chicago, Ill.
	Official Analysis...	9.16	9.45	66.19	2.83	2.97	
Cotton Seed Meal	274 Analyst's Analysis	7.45	31.34	24.39	9.22	.....	H. C. Carter & Co., Spartanburg, S. C.
	Official Analysis...	12.27	26.86	29.45	19.19	6.82	
Cotton Seed Meal	275 Analyst's Analysis	.....	25.39	31.00	9.99	.....	F. W. Brade & Co., Memphis, Tennessee.
	Official Analysis...	11.82	19.37	37.21	6.39	6.39	
Schneider Stock Feed.....	276 Analyst's Analysis	10.00	11.65	60.00	4.00	.....	The American Cereal Company, Chicago, Ill.
	Official Analysis...	9.42	11.65	61.64	1.57	3.37	
Hran	286 Analyst's Analysis	9.29	12.19	54.59	4.73	.....	Charleston Milling Company, Charleston, S. C.
	Official Analysis...	9.25	11.35	57.10	4.09	2.97	

Neutraline Dairy Feed.....	381	Guarant'd Analysis Official Analysis...	12.00 8.11	17.00 14.23	47.00 51.18	2.11 7.75	8.16	Katrine Food and Oil Co., New Orleans, La.
Victor Feed	382	Guarant'd Analysis Official Analysis...	12.00 19.55	7.50 8.35	42.00 45.90	3.00 1.65	3.55	The American Cereal Company, Chicago, Ill.
Mill Feed	383	Guarant'd Analysis Official Analysis...	..... 4.59	19.38 17.95	65.29 44.05	4.33 2.59	3.97	Riverside Milling and Power Co., Carterville, Ga.
Crescent Mixed Feed.....	384	Guarant'd Analysis Official Analysis...	..... 18.78	12.29 8.40	41.92 42.39	3.28 .27	1.31	City Grain and Feed Company, Columbia, Tenn.
Cotton Seed Meal.....	385	Guarant'd Analysis Official Analysis...	..... 11.33	38.00 39.05	..... 24.40	7.00 9.89	7.00	F. W. Beade & Co., Memphis, Tenn.
Cotton Seed Meal.....	386	Guarant'd Analysis Official Analysis...	..... 8.35	38.02 41.00	..... 27.71	..... 8.90	6.64	McCaw Manufacturing Company, Macon, Ga.
Fancy Shorts	387	Guarant'd Analysis Official Analysis...	..... 8.02	16.02 17.72	59.82 59.42	4.31 4.18	3.97	Phoenix Flour Mills, Evansville, Indiana.
Little Bran	388	Guarant'd Analysis Official Analysis...	8.50 6.05	18.50 14.50	17.82 29.22	4.59 3.09	4.50	Little Mill Company, Franklin, Tennessee.
Pure Wheat Bran.....	389	Guarant'd Analysis Official Analysis...	..... 7.16	14.00 16.32	63.58 57.47	4.26 2.02	4.87	Acme Mills and Elevator Co., Hopkinsville, Ky.
Blair's Bran	390	Guarant'd Analysis Official Analysis...	10.00 7.35	13.50 14.49	50.84 58.17	3.50 2.67	3.79	The Blair Milling Company, Atchison, Kan.

ANALYSIS OF FEED STUFF—Continued.

91

NAME OF BRAND.	Laboratory Number.		Fiber.	Protein.	Starch and Sugar.	Fat.	Ash.	ADDRESS OF MANUFACTURERS.
Pure Wheat Bran.....	231	Guarant'd Analysis.....	14.66	13.28	63.28	4.33	.....	Crescent Milling Company, Hopkinsville, Ky.
		Official Analysis...	6.45	16.21	56.45	3.94	4.93	
Nutriline Stock Feed.....	232	Guarant'd Analysis.....	16.69	12.69	55.00	2.90	.....	Nutriline Feed and Oil Co., New Orleans, La.
		Official Analysis...	6.42	12.57	54.92	3.08	4.37	
Kyome Feed.....	233	Guarant'd Analysis.....	7.53	16.42	56.04	3.62	.....	The J. E. M. Milling Company, Frankfort, Ky.
		Official Analysis...	8.56	15.60	58.98	3.34	4.57	
Parina Feed.....	234	Guarant'd Analysis.....	4.99	14.99	60.06	5.00	.....	Balston Parina Company, St. Louis, Mo.
		Official Analysis...	12.35	13.65	54.50	3.93	4.36	
Ship Staff.....	235	Guarant'd Analysis.....	5.99	16.59	56.50	3.39	4.46	Sweet Springs Milling Company, Sweet Springs, Mo.
		Official Analysis...	5.64	16.67	54.60	5.43	4.63	
Diamond C Corn and Oat Chop.....	236	Guarant'd Analysis.....	14.71	7.62	63.29	2.15	.....	Parma Mills Company, East St. Louis, Mo.
		Official Analysis...	16.95	4.67	58.45	2.78	5.07	
Pure Wheat Bran.....	237	Guarant'd Analysis.....	.....	12.69	55.66	3.59	.....	Haris, Marshall & Co., Mobile, Alabama.
		Official Analysis...	8.28	15.71	58.44	3.50	1.94	

Hominy Feed	398	Guaran't Analysis	6.82	19.59	50.00	19.00	.....	Cumberland Mills, Nashville, Tennessee.
		Official Analysis...	5.99	19.52	49.89	8.78	2.74	
Pure Wheat Bran.....	399	Guaran't Analysis	8.91	25.47	53.52	4.32	.....	George Bros., Evansville, In- diana.
		Official Analysis...	8.24	25.59	50.17	4.19	10.82	
Bran	400	Guaran't Analysis	.....	9.49	21.92	7.18	.....	The Mountain City Mill Com- pany, Chattanooga, Tenn.
		Official Analysis...	7.68	24.25	57.15	2.50	2.13	
Star Mixed Feed.....	401	Guaran't Analysis	.....	15.52	52.97	2.63	.....	City Grain and Feed Company, Columbia, Tenn.
		Official Analysis...	4.43	22.69	65.07	2.45	2.67	
Proteria Alfalfa Feed....	402	Guaran't Analysis	14.89	29.89	50.69	4.69	.....	Ralston Purina Company, St. Louis, Mo.
		Official Analysis...	9.72	22.79	50.94	2.72	2.74	
Middlings	403	Guaran't Analysis	.....	15.26	59.25	4.72	.....	The Higginville Milling Co., Higginville, Mo.
		Official Analysis...	9.45	25.77	55.59	5.51	4.30	
Purina Feed	404	Guaran't Analysis	6.89	14.89	69.69	4.89	.....	Ralston Purina Company, St. St. Louis, Mo.
		Official Analysis...	6.89	16.77	68.59	4.39	2.63	
Pure Wheat Bran.....	405	Guaran't Analysis	19.99	14.99	50.99	2.79	.....	H. C. Cole Milling Company, Chester, Ill.
		Official Analysis...	7.29	16.89	53.29	4.21	4.87	
Extreme Horse, Malt and On- Feed	406	Guaran't Analysis	12.29	19.89	52.45	2.69	.....	American Milling Company, Philadelphia, Pa.
		Official Analysis...	9.69	12.29	52.79	6.04	4.12	
Corn & Chick Feed.....	407	Guaran't Analysis	2.69	19.09	70.69	2.59	.....	Corn & Mills Company, East St. Louis, Ill.
		Official Analysis...	4.42	19.09	69.71	2.15	1.72	

ANALYSIS OF FEED STUFF—Continued.

91

NAME OF BRAND.	Laboratory Number.	Fiber.	Protein.	Starch and Sugar.	Fat.	Ash.	ADDRESS OF MANUFACTURERS.
Arrow Feed	408 Guarant'd Analysis	6.52	9.13	66.75	4.16	2.22	American Hoviny Company, Indianapolis, Ind.
	Official Analysis...	4.95	10.71	66.70	4.14	2.22	
Nutrilite Stock Feed.....	409 Guarant'd Analysis	16.47	12.44	58.09	2.00	.....	Nutrilite Feed & Oil Company, New Orleans, La.
	Official Analysis...	2.50	12.25	58.46	4.60	4.70	
Pure Wheat Middlings.....	410 Guarant'd Analysis	.....	15.92	56.09	4.89	.....	The Dunlap Milling Company, Clarksville, Tenn.
	Official Analysis...	4.12	17.40	60.21	4.29	2.50	
Success Dairy Feed	411 Guarant'd Analysis	11.75	16.58	48.54	2.56	.....	American Milling Company, Philadelphia, Pa.
	Official Analysis...	10.42	16.55	55.58	7.12	6.82	
Pure Wheat Bran.....	412 Guarant'd Analysis	.....	16.06	55.46	4.06	.....	Washington-Crosby Milling Co., Louisville, Ky.
	Official Analysis...	8.85	15.50	55.32	2.80	5.05	
Cotton Seed Meal	413 Guarant'd Analysis	.....	21.47	.....	.....	.....	Crawford Oil Mills, Crawford, Georgia.
	Official Analysis...	10.15	24.40	28.75	9.02	4.50	
Holland's Bran	414 Guarant'd Analysis	8.40	15.25	54.59	4.45	.....	Holland & Holland Company, Louisville, Ky.
	Official Analysis...	8.51	15.70	50.57	2.50	7.65	

Dairy Feed	164	Guarant'd Analysis.....	12.24	56.68	2.27	.....	United Grocery Company, Jack- sonville, Fla.
		Official Analysis...	18.85	12.68	18.14	2.28	6.97	
Veter Feed	164	Guarant'd Analysis.....	12.99	5.59	62.89	1.99	Quaker Oat Company, Chi- cago, Ill.
		Official Analysis...	11.17	5.59	62.49	2.19	1.97	
Jersey Feed	167	Guarant'd Analysis.....	16.32	49.99	2.12	.....	United Grocery Company, Jack- sonville, Fla.
		Official Analysis...	29.58	16.19	45.95	2.75	2.24	
Custom Feed Meal	168	Guarant'd Analysis.....	28.52	Sparta Custom Oat Mill, Sparta, Georgia.
		Official Analysis...	8.45	28.28	27.28	8.68	6.59	
Wheat Bran	169	Guarant'd Analysis.....	9.28	14.28	56.62	1.69	Atlanta Milling Company, At- lanta, Ga.
		Official Analysis...	9.75	15.95	52.94	2.16	7.22	
Thoroughbred Feed	129	Guarant'd Analysis.....	7.35	18.41	56.94	0.62	Lexington Hollar Mills, Lexing- ton, Ky.
		Official Analysis...	6.82	15.21	58.92	2.56	4.95	

SPECIAL NOTICE—The attention of dealers and consumers, is called to the table of "average composition of Feed Stuffs" on a preceding page. This table shows approximately the composition of the various feed stuffs sold throughout the country. Any material variation, from these averages, is presumptive evidence of impurity or adulteration.

A careful examination of the foregoing tables is recommended to both dealers and consumers. The guarantee of the manufacturer, should not vary materially from this table of average while the "official analysis" should show practically the same composition as the guarantee. Dealers and consumers, are requested in all cases of suspected inferiority, or adulteration to send a sample at once to the Commissioner of Agriculture for analysis.

Miscellaneous

THE FLORIDA PURE FOOD AND DRUG LAW, APPROVED JUNE 3D, 1907, BECAME OPERATIVE SEPTEMBER 1st, 1907.

The Florida Pure Food and Drug Law is now in force, as provided by the law. All dealers in "Foods and Drugs," including liquors—spirituous and malt liquors—are interested in this law, and should inform themselves as to its requirements. The law is made to conform as closely as practical to the United States "Pure Food and Drugs Act," and is very similar to those of many of the States that have recently adopted pure food laws, most of which are patterned after the United States law.

The regulations and standards adopted are practically the same as the United States regulations and standards, with changes made only where necessary to adapt them to local conditions. These regulations and standards are now in the hands of the printer, and will soon be ready for distribution to all applicants, together with a copy of the Pure Food and Drugs Law.

The Florida law differs from the United States law, and that of most States, in requiring the statement of the percentage of alcohol on all packages of foods, as well as drugs.

Foods, as defined in the law, Section 3, includes all articles used for food, drink, confectionery, or condiment, by man or other animal, whether simple, mixed or compound.

Section 5 declares packages are "misbranded," in case of foods and drugs, if they fail to bear a statement, in conspicuous letters, of the quantity or proportion (percentage) of any alcohol, etc., contained therein.

As there are many liquors, spirituous, malt and vinous, ales, ciders and divers so-called non-alcoholic drinks, "Hop-ales," "Hop-olines," "Malts," "Malt Brews," "Uno," and many other ordinary beers, with from two to six per cent, or more alcohol therein, it will be necessary

for all dealers to have the same properly labeled, at once, or be made liable under Section 1 of the law for misbranding.

This law was approved June 3d, 1907. It has been published in full by a number of the State papers, has also been published in a number of county papers, together with the other laws of 1907. A large issue of the law in pamphlet form has been made, and copies mailed to all applicants.

The law has been in force since September 1st, 1907, allowing all parties interested ample time to inform themselves as to its requirements. The object of the law is to prevent the sale of impure, adulterated, misbranded or spurious goods, to protect the honest manufacturer, or dealer, from the unfair competition of the makers of impure, or adulterated goods, and to protect the consumer from adulterated, spurious and often dangerous drugs, drinks and foods.

The execution of the law is entrusted to the Department of Agriculture in general, under the direction of the Commissioner of Agriculture. The direct supervision and execution of the law, is placed in the hands of the State Chemist, and his assistants. All correspondence should be with the Department of Agriculture. All blanks, pamphlets, rules, regulations, standards, decisions, etc., can be obtained by writing to the Commissioner of Agriculture for the same.

While it is not the intention of the Department to harshly interpret, nor to enforce with undue rigor, the law, rules and regulations, it will require all manufacturers and dealers to comply with the same, and when it is found that the law is being evaded, or ignored, prompt action will be taken.

It is to be hoped that the "Pure Food and Drugs Law," like the "Commercial Fertilizer Law," and the "Commercial Feed Stuff Law," will soon be understood by manufacturers, dealers, and consumers, thus protecting alike the honest manufacturer, dealer and consumer from the fraudulent and unfair competition of the makers of "cheap," or adulterated, spurious, unwholesome, or dangerous foods and drugs.

Believing the Department will have the assistance and moral support of all good citizens of the State, who desire to obtain only pure food and drugs for their fam-

ilies, their wives and children, as well as for their cattle and crops, that the people do not desire to pay first class prices for inferior materials, we shall ask the hearty co-operation of all persons, the manufacturer, the dealer, and the consumer, in the enforcement of the law.

Copies of the law, rules and regulations, standards, etc., will be sent to all applicants. Dealers in and manufacturers of foods, drinks, and drugs should inform themselves of the requirements of the law and regulations, and comply with the same at once, thus avoiding unnecessary complications, costs, and annoyance to themselves and the Department.

R. E. ROSE,
State Chemist.