THE

Connecticut Agricultural Experiment Station.

NEW HAVEN, CONN.

BULLETIN No. 101.

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The Bulletins and Reports of this Station are mailed free to every citizen of Connecticut who applies for them.

This Bulletin contains some corrections of errors in Bulletin No. 100, besides analyses of six nitrogenous Superphosphates, one of Cotton hull ashes and one of "Hall's Coral Fertilizer."

CORRECTIONS.

On page 19 of Bulletin No. 100, the nitrogen and potash guaranteed in Chittenden's Bone Superphösphate, No. 2504 are stated to be 3.3 and 4.5 respectively. They should be 1.6 and 2.0, and the actual composition is therefore above the guarantee.

On page 26 the valuation of H. S. Miller & Co.'s Special Potato Manure No. 2603 should be \$36.82 instead of \$44.64 and the Percentage difference 8.7 instead of 10.4. The valuation is below cost instead of above it.

On the same page the Percentage difference in 2521, Crocker's Ammoniated Wheat and Corn Phosphate, should be 23.5 instead of 2.3.

The following analyses additional to those in Bulletin No. 100 have been made within the past year on samples of nitrogenous Superphosphates and Special manures which were drawn by Station Agents.

NITROGENOUS SUPERPHOSPHATES.

2647. Pure Bone Dissolved in Sulphuric Acid. Made by Mapes Formula and Peruvian Guano Co., N. Y. From Stock of Mapes Branch, Hartford.

2550. Davidge's Vegetator. Made by Davidge Fertilizer Co., 121 Front St., N. Y. Sampled from stock of J. M. Burke, So. Manchester and A. S. Hawkins, So. Coventry.

2630. Miles I. X. L. Phosphate. Made by G. W. Miles, agent, Milford, for John Guyer, New Haven. Sampled from stock of W. E. Wheeler, Mystic, D. N. Clark & Son, Milford, and A. A. Hubbard, Canaan.

2525. Davidge's Special Favorite. Made by Davidge Fertilizer Co., N. Y. Sampled from Stock of C. A. McLean, Simsbury, J. M. Burke, So. Manchester, A. S. Hawkins, So. Coventry.

SPECIAL MANURES.

2648. Mapes' Complete Manure for Heavy Soils. Made by the Mapes Formula and Peruvian Guano Co., N. Y. Sampled from Mapes Branch, Hartford.

2608. Davidge's Potato Manure. Made by Davidge Fertilizer Co., N. Y. Sampled from Stock of F. F. Hitchcock, Woodbury; W. B. Coan, Long Hill; W. P. Bartholomew, Putnam; S. H. Daggett, Andover; Geo. Boughton, Ridgebury; G. H. Platt, Redding Ridge.

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Mapes' Dissolved Bone.	Davidge's Vegetator.	Miles' I. X. L. Phosphate.	Davidge's Special Favorite.	Mapes' Complete for Heavy Soil.	Davidge's Potato Manure.
2647	2550	2630	2525	2648	2608
Nitrogen as nitrates				.86	
Nitrogen as ammonia 1.08	1.08	.53		1.85	.85
Organic Nitrogen 2.33	2.18	1.45	1.52	2.07	2.15
Total Nitrogen found 3.41	3.26	1.98	1.52	4.78	3.00
Total Nitrogen guaranteed 2.0	2.9	2.0	1.2	4.9	2.9
Soluble Phosphoric Acid 4.45	5.28	5.69	8.51	6.94	7.58
Reverted Phosphoric Acid 11.96	.87	2.25	2.17	3.08	1.84
Insoluble Phosphoric Acid 2.07	1.16	3.36	1.03	2.93	1.26
Total Phosphoric Acid found 18.48	7.31	11.30	11.71	12.95	10.68
Total Phosphoric Acid guaranteed	6.0		11.0	10.0	10.0
Potash found	4.08	1.26	1.63	3.29	3.67
Potash guaranteed	4.0	1.0	1.5	3.0	4.5
Chlorine	4.25	.93	1.41	.31	4.06
Cost per ton \$33.00	35.00	31.00	34.00	44.00	40.00
Valuation per ton	26.51	23.14	24.75	39.13	30,35
tween cost and valuation 19.00* * Valuation exceeds cost.	32.0	33.9	37.4	12.5	31.8

* Valuation exceeds cost.

HALL'S CORAL FERTILIZER.

Described by the maker as follows:-

"This fertilizer ranks with the best in the world. It is more necessary to the soil than phosphates or bone."

"It will destroy potato bugs and is sure death to all worms and insects."

"Sold by all first class dealers everywhere at \$15.00 per ton." Manufactured by the Vermont Chemical Fertilizer Co., Vergennes, Vermont.

No. 2646. A sample package of the above material, received . from D. H. Van Hoosear, Wilton, had the following composition :-

Carbonate of lime [ground limestone]	2646 94.77
Matters insoluble in acid	3,54
Other matters by difference	1.69
	100.00

It contained only traces of nitrogen and phosphoric acid.

No further comment is necessary on the absurd claims of the manufacturer.

COTTON HULL ASHES.

2643. Made by the American Oil Co. Sampled from 30 sacks in a car lot, sold by R. E. Pinney to C. H. Wells, Suffield.

ANALYSIS.	
	2643
Phosphoric Acid soluble in water	.46
Phosphoric Acid soluble in ammonium citrate ["reverted"].	6.84
Phosphoric Acid only soluble in Acid	.99
Potash soluble in water	19.36
Cost per ton	\$33.00
Valuation per ton	\$34.62