

CONNECTICUT AGRICULTURAL EXPERIMENT STATION.

STATE COLLEGE, October 15, 1881.
PA.

652. CANADA ASHES.—Sampled and sent by Robert S. Conc, Moodus, from cargo of 1,000 bushels (barge A. P. Wright) purchased of James A. Bill, Lyme. Price 17 cents per bushel.

ANALYSIS.

Potash,	1.05
Soda,50
Lime,	34.65
Magnesia,	2.68
Oxide of iron,	1.49
Phosphoric acid,88
Sulphuric acid,20
Sand and insoluble matters,	8.61
Charcoal,	2.27
Water,	24.25
Carbonic acid and loss,	23.42
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	100.00

The composition is that of good Leached Ashes.

655. IMPURE LIMESTONE.—Sent by H. N. Bill, Willimantic.

CHEMICAL ANALYSIS.

Lime,	20.28
Magnesia,43
Potash,03
Soda,30
Oxide of iron,	1.89
Sulphuric acid,	trace
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Soluble in strong acids,	22.93
Silica and silicates insoluble in acids,	61.20
Carbonic acid (and loss on ignition),	16.47
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	100.60

This rock is said to be situated about two and a half miles from Willimantic and to occur in layers that in the aggregate amount to three feet in thickness. It burns and slacks like common limestone. It contains in round numbers, 40 per cent. of carbonates of lime and magnesia.

The sample analyzed was from a loose fragment believed by Mr. Bill to be identical with the rock of the ledge.

Very probably the impure lime obtained by burning this rock may be of great advantage if skillfully employed upon the contiguous farms.

G. W. DICKINSON'S BONE MANURES.

- 657. IVORY DUST.**
- 658. BONE TURNING CHIPS.**
- 666. PURE BONE SAWDUST.**

The above are from the manufactory of George W. Dickinson, of Essex, Ct. **657** and **658** were sampled by T. S. Gold, from material purchased of Charles A. Sill, of Saybrook, Agent. **666** was sampled by the manufacturer and received through Mr. Gold.

MECHANICAL ANALYSIS.

	657	658	666
Fine, smaller than $\frac{1}{32}$ inch, per cent.,	52	28	95
Fine medium, smaller than $\frac{1}{16}$ inch, per cent.,	21	29	5
Medium, smaller than $\frac{1}{8}$ inch, per cent.,	18	27	--
Coarse medium, smaller than $\frac{1}{4}$ inch, per cent.,	9	13	--
Coarse, larger than $\frac{1}{2}$ inch, per cent.,	--	3	--
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	100	100	100

CHEMICAL ANALYSIS.

	657	658	666
Nitrogen,	3.38	3.73	2.15
Phosphoric acid,	26.86	25.97	19.21
Estimated value,	\$39.54	\$37.83	\$29.40
Selling price at Saybrook in bulk,	\$35.00	\$30.00	\$20.00

661. SOLUBLE PACIFIC GUANO.—Manufactured by the Pacific Guano Co., Boston, Mass. Sold by H. A. Stillman & Co., Hartford. Sampled August 30th by Dr. E. H. Jenkins.

The Station is informed by the manufacturers that the sample of Soluble Pacific Guano, **565**, reported in Bulletin 58, April 28, was from a small quantity remaining over from last fall in the hands of the dealers, H. A. Stillman & Co., Hartford, and does not represent the article in market during 1881. Its price the manufacturers inform us should have been \$42 per ton and not \$45.

At the manufacturers' request sample **661** has been taken for analysis. The results are here compared with those obtained on **565**.

	661	565
Nitrogen of nitrates,62	none
Nitrogen of organic matter,	1.74	2.61
Soluble phosphoric acid,	7.29	5.90
Reverted " "	1.52	1.36
Insoluble " "	3.42	4.05
Potash,	1.76	2.28
Chlorine,	1.76	2.45
Estimated value,	\$36.83	\$35.36
Price at Hartford,	\$45.00	\$45.00

MAPES F. & P. G. Co's FERTILIZERS.

662. PURE FINE BONE DISSOLVED IN SULPHURIC ACID.

663. BONE SUPERPHOSPHATE.

664. LEOPOLDSHALL KAINITE.

665. MAPES TOBACCO MANURE, CONN. BRAND.

The above samples manufactured by the Mapes Formula and Peruvian Guano Company were sampled by Dr. Jenkins at the Company's Hartford Branch, August 30th.

	662	663	664	665
Nitrogen of nitrates,				2.52
" ammonia-salts,				1.95
" organic matter,	2.74			.39
Phosphoric acid, soluble,	1.65	13.41		3.29
" reverted,	19.34	1.54		2.32
" insoluble,	3.16	.70		1.85
Potash,			12.68	7.42
Chlorine,			26.08	1.14
Estimated value,	\$53.69	\$37.14	*	\$49.20
Selling price,	\$42.00	\$36.00	\$18.00	\$53.00

* Potash in this Kainite costs 7.1 cents per pound.

S. W. JOHNSON, Director.