

urman Lloyd Mulford,

THE

# Connecticut Agricultural Experiment Station,

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## FERTILIZERS.

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On the following pages are tabulated analyses of 65 nitrogenous superphosphates and guanos and of 33 special manures. These analyses have been made of samples collected in all parts of the state during April and May of this year by special agents of the Station. Full discussion of these analyses is reserved for the annual report. Attention is here called to the following facts:

*Nitrogenous Superphosphates.*—Of the 65 brands analyzed, 22, or more than one-third, contain less of a single ingredient than is required by the manufacturer's guarantee. Two brands are thus

deficient in respect of two ingredients. In only 7 cases is there a deficiency of the most valuable ingredient, nitrogen, and in several cases the deficiency is in potash and due to a form of guarantee which is misleading and in this state *illegal*. The manufacturer is required to guarantee the *actual potash*. "Potash, sulphate, 4 per cent," is understood to mean 4 per cent. of actual potash in the form of sulphate and not 2.16 per cent. of potash combined with 1.84 per cent. of sulphuric acid.

The average cash ton price of these 65 brands has been \$33.74; the average valuation \$28.14; the difference \$5.60; and the percentage difference 19.9 per cent. This means that in general the purchaser has paid about one-fifth more per pound for nitrogen, phosphoric acid and potash when purchased ready-mixed than he has had to pay for the same elements of plant food unmixed.

*Special Manures.*—Of the 33 brands analyzed, 10 contain less of a single ingredient than is required by the manufacturer's minimum guarantee and 2 others are thus deficient in two ingredients.

The average cash ton price of these 33 brands has been \$39.18; the average valuation \$32.90; difference \$6.28; and the percentage difference 19.0 per cent.

Eleven of the special manures are designed particularly for the potato crop. The opinions of manufacturers, as well as those of farmers, would seem to differ widely regarding the fertilizers best suited to this crop, for it will be seen from the tables that the per cent. of nitrogen in the several potato manures ranges from 2.0 to 5.3 per cent., the phosphoric acid from 7.7 to 11.2, and potash from 4.2 to 10.0 per cent. If applied according to the manufacturer's directions, the different potato manures would supply from 13 to 53 pounds of nitrogen, from 52 to 100 pounds of phosphoric acid, and from 30 to 54 pounds of potash to the acre.

Four of the formulas contain about a third of their nitrogen in the form of nitrates, but four others contain no nitrates whatever. Two others contain all but a fraction of one per cent. of their nitrogen in the form of ammonia salts, but four others contain no ammonia.

It is evident that while each of these several brands may be an excellent general fertilizer, the claim that each or a majority of them is preëminently adapted to the special needs of the potato crop would be absurd.

NITROGENOUS SUPERPHOSPHATES AND GUANOS SAMPLED BY THE STATION.

Station No.	Name or Brand.	Manufacturer.	Dealer.	Dealers' cash price per ton.
2909	Dry Ground Fish Guano.	Leander Wilcox, Mystic Bridge.	C. M. Smith, E. Hartford.	-----
2879	Acidulated Fish Guano.	Leander Wilcox, Mystic Bridge.	C. M. Smith, E. Hartford.	\$22.00
2919	Dry Ground Fish.	Quinnipiac Co., New London.	Olds & Whipple, Hartford.	36.00
2908	Pure Dry Fish.	Joseph Church & Co., Tiverton, R. I.	H. K. Brainard, Thompsonville.	36.00
2748	Sanderson's Formula. A. A.	L. Sanderson, New Haven.	J. J. Merwin, Orange.	36.00
2891	Flour of Bone Phosphate.	G. W. Miller, Middlefield.	Manufacturer.	35.00
2828	Fish and Potash.	E. R. Kelsey, Branford.	Wilson & Burr, Middletown.	28.00
2880	Swift Sure Superphosphate.	M. L. Shoemaker & Co., Phila., Pa.	Miles Payne, Cheshire.	25.00
2857	Ammoniated Bone Superphosphate.	Russell Coe, Tremley, N. J.	J. P. Barstow & Co., Norwich.	37.00
2904	Harvest Queen Phosphate.	H. S. Miller & Co., Newark, N. J.	F. Ellsworth, Hartford.	38.00
2874	Market Garden Manure.	Quinnipiac Co., New London.	City Coal and Wood Co., New Britain.	30.00
2802	Standard or Success Fertilizer.	Lister's Agricultural Chemical Works, Newark, N. J.	Wilson & Burr, Middletown.	30.00
2823	Ammoniated Bone Phosphate.	Lister's Agricultural Chemical Works, Newark, N. J.	S. J. Hall, Meriden.	32.00
2873	Cumberland Superphosphate.	Cumberland Bone Co., Portland, Me.	J. O. Fox, Putnam.	25.00
2761	Pine Island Phosphate.	Quinnipiac Co., New London.	H. K. Brainard, Thompsonville.	28.00
			E. B. Clark, Milford.	39.00
			J. F. Elwood, Southport.	41.00
			J. A. Lewis, Willimantic.	28.00
			A. N. Clark, Milford.	25.00
			J. H. Fish, Newington.	30.00
			Edw. Carroll, E. Hartford.	37.00
			A. N. Clark, Milford.	28.00
			G. T. Fowler, Branford.	28.00
			Haley & Cheseboro, Stonington.	35.00
			H. H. Davenport, Putnam.	34.00
			J. E. Leonard, Jewett City.	32.00
			John Taylor, Old Mystic.	37.00
			Olds & Whipple, Hartford.	35.00
			B. E. Johnson, Higganum.	32.00
			E. B. Clark, Milford.	30.00

NITROGENOUS SUPERPHOSPHATES AND GUANOS SAMPLED BY THE STATION—Continued.

Station No.	Name or Brand.	Manufacturer.	Dealer.	Dealers' cash price per ton.
2795	Complete Manure, A Brand.	Mapes' Formula and Peruvian Guano Co., N. Y.	Mapes' Branch, Hartford. Wilson & Burr, Middletown.	\$36.00 36.00
2839	Fish and Potash.	Bowker Fertilizer Co., 43 Chatham Street, Boston, Mass.	J. P. Barstow & Co., Norwich. F. Hallock & Co., Birmingham.	36.00 35.00
2765	A. A. Ammoniated Bone Superphosphate.	H. J. Baker & Bro., 215 Pearl St., N. Y.	W. W. Cooper, Suffield. A. L. Winton, Bridgeport.	37.50 37.50
2797	Complete Manure for General Use.	Mapes' Formula and Peruvian Guano Co., N. Y.	M. F. Gregory & Co., Milford. W. F. Andross, E. Hartford.	38.00 37.50
2766	Ammoniated Bone Phosphate.	National Fertilizer Co., Bridgeport.	Mapes' Branch, Hartford. W. H. Childs, Manchester. Dean & Horton, Stamford. N. C. Barker, Lebanon. G. H. & H. B. Williams, E. Hartford. T. E. Eldridge, Norwich. S. W. Currier, Bridgeport. E. B. Clark, Milford.	39.00 39.00 40.00 33.00 32.00 ----- 35.00 30.00
2822	Farmers' New Method Fertilizer.	Bradley Fertilizer Co., 27 Kilby St., Boston, Mass.	Warren, Clark & Taylor, Sandy Hook. J. E. Leonard, Jewett City. Prentiss & Young, Norwich. D. N. Clark & Sons, Milford. W. J. Starr, Groton. G. R. Fowler, Central Village. F. S. Bidwell, Windsor Locks. Carter & Strong, Manchester. Wilson & Burr, Middletown. G. W. Carver, Putnam.	32.00 32.00 32.00 30.00 34.00 34.00 30.00 34.00 34.00 34.00 29.00

NITROGENOUS SUPERPHOSPHATES AND GUANOS SAMPLED BY THE STATION—Continued.

Station No.	Name or Brand.	Manufacturer.	Dealer.	Dealers' cash price per ton.
2860	Darling's Animal Fertilizer.	L. B. Darling Fertilizer Co., Pawtucket, R. I.	R. P. Hubbard, Middletown.	\$36.00
2798	Complete Manure for Light Soils.	Mapes' Formula and Peruvian Guano Co., N. Y.	F. S. Bidwell, Windsor Locks. J. P. Barstow & Co, Norwich. Mapes' Branch, Hartford.	35.00 44.00 45.00
2762	Ammoniated Bone Superphosphate, American Brand.	Williams & Clark Fertilizer Co., 81 Fulton St., N. Y.	G. K. Nason, Willimantic. Wilson & Burr, Middletown. Dix & Wells, Wethersfield. Daniel Morgan, Poquonock. J. E. Roodie, Jewett City. C. L. Backus, Andover. Charles Stagg, Stratford.	44.00 35.00 35.00 36.00 --- 35.00
2793	Chittenden's Fish and Potash.	National Fertilizer Co., Bridgeport.	L. N. Dimmock, New London. Abbott & Co., Birmingham. F. S. Bidwell, Windsor Locks. H. K. Brainard, Thompsonville. J. P. Little, Columbia. G. H. & H. B. Williams, E. Hartford. N. C. Barker, Lebanon. T. E. Eldridge, Norwich.	35.00 40.00 34.00 35.00 36.00 32.00 33.00 34.00
2876	Fish and Potash, Plain Brand.	Quinnipiac Co., New London.	A. J. Martin, Wallingford. B. E. Johnson, Higganum.	28.00 31.00
2760	Quinnipiac Phosphate.	Quinnipiac Co., New London.	J. P. Little, Columbia. G. M. Williams, New London. D. C. Wood, Stratford. J. S. Worthington, Portland. Olds & Whipple, Hartford.	36.00 37.00 37.00 36.00 38.00

NITROGENOUS SUPERPHOSPHATES AND GUANOS SAMPLED BY THE STATION—Continued.

Station No.	Name or Brand.	Manufacturer.	Dealer.	Dealers' cash price per ton.
2815	Ammoniated Bone Phosphate.	Bowker Fertilizer Co., 43 Chatham St., Boston, Mass.	J. E. Leonard, Jewett City. N. E. Smith, Woodmont.	\$32.00 30.00
2976	Standard Bone Superphosphate.	H. S. Miller & Co., Newark, N. J.	E. B. Clark, Milford. W. B. Martin, Rockville.	34.00 35.00
2841	Sea Fowl Guano.	Bradley Fertilizer Co., 27 Kilby St., Boston, Mass.	Staples & Raymond, Westport. Southington L. & F. Co., Southington. A. Williams, Collinsville.	34.00 35.00 36.00
2882	Royal Bone Phosphate.	Williams & Clark Fertilizer Co., 81 Fulton St., N. Y.	W. W. Cooper, Suffield. F. S. Bidwell, Windsor Locks.	32.00 28.00
2852	Fish and Potash, Anchor Brand.	Bradley Fertilizer Co., 27 Kilby St., Boston, Mass.	Hale, Day & Co., South Manchester. F. S. Bidwell, Windsor Locks. H. J. Morse, Cheshire.	30.00 32.00 32.00
2820	Bradley's Patent Superphosphate of Lime.	Bradley Fertilizer Co., 27 Kilby St., Boston, Mass.	R. A. Parker, Warehouse Point. N. C. Barker, Lebanon. W. J. Starr, Groton. D. Beers, Danbury.	36.00 37.00 38.00
			J. E. Leonard, Jewett City. Burtis & Mead, New Canaan. D. N. Clark & Sons, Milford. E. B. Clark, Woodmont. Warren, Clark & Taylor, Sandy Hook. J. E. Holmes, Stratford.	36.00 38.00 34.00 37.00 36.00 37.00
			Wheeler & Howe, Bridgeport. Raymond Bros., South Norwalk. Prentiss & Young, Norwich. G. A. Dickinson, Haddam. G. R. Fowler, Central Village. Carter & Strong, Manchester. Dix & Wells, Wethersfield. Wilson & Burr, Middletown. J. P. Little, Columbia.	37.00 36.00 36.00 36.00 38.00 35.00 35.00 36.00

NITROGENOUS SUPERPHOSPHATES AND GUANOS SAMPLED BY THE STATION—Continued.

Station No.	Name or Brand.	Manufacturer.	Dealer.	Dealers' cash price per ton.
2520	Bradley's Patent Superphosphate of Lime.	Bradley Fertilizer Co., 27 Kilby St., Boston, Mass.	J. A. Lewis, Willimantic. R. A. Parker, Warehouse Point. Quinnebaug Store, Danielsonville. W. B. Martin, Rockville. W. H. Cheney's Sons, S. Manchester. W. F. Andross, East Hartford. A. C. Sternberg, Hartford. G. W. Carver, Putnam. H. D. Lamphear, Chaplin. F. S. Bidwell, Windsor Locks. N. C. Barker, Lebanon. I. W. Denison & Co., Mystic. Wheeler & Howe, Bridgeport. Backus Bros., South Windham. F. P. Burr & Co., Middletown. Arnold Rudd, New London. J. P. Barstow & Co., Norwich. J. A. Amidon, Wethersfield. G. H. & H. B. Williams, E. Hartford. D. Fitzgerald, Stratford. D. G. Penfield, Danbury.	\$38.00 34.00 36.00 36.00 38.00 36.00 35.00 35.00 36.00 34.00 34.00 35.00 34.00 35.00 33.00 33.00 42.00 42.00 42.50 29.00 28.50 32.00 37.50 30.00 30.00 30.00
2768	High Grade Phosphate.	E. Frank Coe, 16 Burling Slip, N. Y.		
2800	Chittenden's Complete Fertilizer.	National Fertilizer Co., Bridgeport.		
2833	Reese's New England Favorite.	J. S. Reese & Co., New Bedford, Mass.	Ansell Arnold & Co., Willimantic.	29.00
2813	Clark's Cove Bay State Fertilizer, G. G.	J. S. Reese & Co., Licensee, New Bedford, Mass.	Ansell Arnold & Co., Willimantic. H. H. Davenport, Pomfret. W. Tillinghast, Plainfield. Manufacturer.	28.50 32.00 37.50 30.00
2889	Victor Phosphate.	Apothecaries Hall Co., Waterbury.	W. F. Andross, East Hartford.	30.00
2892	Bone, Fish and Potash.	Read Fertilizer Co., N. Y.	H. E. Ives, Cheshire.	30.00

NITROGENOUS SUPERPHOSPHATES AND GUANOS SAMPLED BY THE STATION—Continued.

Station No.	Name or Brand.	Manufacturer.	Dealer.	Dealers' cash price per ton.
2803	Hill and Drill Phosphate.	Bowker Fertilizer Co., 43 Chatham St., Boston, Mass.	Hull & Sweet, South Coventry. C. H. Bell, Portland. J. H. Ives, Danbury. C. T. Leonard, Norwalk. B. Curtis & Son, Stepney. W. B. Martin, Rockville. J. H. Fish, Newington. Olds & Whipple, Hartford. A. H. Hinckley, Old Mystic. F. S. Bidwell, Windsor Locks.	\$38.00 38.00 38.00 38.00 40.00 37.00 36.00 35.00 30.00 33.00
2905	Olds & Whipple's Special Phosphate.	Made for Dealer.		
2910	IXL Phosphate.	G. W. Miles, Milford.		
2843	Original Coe's Superphosphate.	Bradley Fertilizer Co., 27 Kilby St., Boston, Mass.		
2835	Soluble Pacific Guano.	W. D. Stewart & Co., Boston, Mass.	P. J. Bolan, Waterbury. W. F. Andross, East Hartford. City Coal and Wood Co., New Britain. Staples & Raymond, Westport. A. Williams, Collinsville. H. K. Brainard, Thompsonville. Olds & Whipple, Hartford. B. E. Johnson, Higganum. J. F. Silliman, New Canaan. A. L. Martin, Wallingford. J. P. Little, Columbia.	34.00 36.00 36.00 32.00 32.00 28.00 37.00 34.00 38.06 34.00 35.00
2974	Dissolved Bone Phosphate.	H. S. Miller & Co., Newark, N. J.		
2907	Fish and Potash.	Joseph Church & Co., Tiverton, R. I.		
2875	Fish and Potash, Crossed Fishes Brand.	Quinnipiac Co., New London.		
2807	Pilgrim Fertilizer.	J. S. Reese & Co., New Bedford, Mass.	Ansell Arnold & Co., Willimantic.	24.00
2854	Clark's Cove Company's King Philip Alkaline Guano.	J. S. Reese & Co., Licensees, New Bedford, Mass.	Ansell Arnold & Co., Willimantic. H. H. Davenport, Pomfret.	24.65 30.00
2829	Cecrops Fertilizer.	F. Ludlam, 140 Maiden Lane, N. Y.	Ahlquist & Allison, Portland. C. H. Cleveland, Brooklyn.	38.00 42.00
2830	Farmers' Friend Fertilizer.	Read Fertilizer Co., N. Y.	W. F. Andross, East Hartford. R. P. Hubbard, Middletown. H. E. Ives, Cheshire.	35.00 34.00 35.00



NITROGENOUS SUPERPHOSPHATES AND GUANOS SAMPLED BY THE STATION—*Concluded.*

Station No.	Name or Brand.	Manufacturer.	Dealer.	Dealers' cash price per ton.
2827	Cereal Fertilizer.	F. Ludlam, 140 Maiden Lane, N. Y.	W. J. Starr, Groton. W. Tillinghast, Plainfield. Ahlquist & Allison, Portland. C. A. Young, Danielsonville. C. H. Cleveland, Brooklyn. L. Browning, New London. Dix & Wells, Wethersfield. L. L. Hernan, Noroton. J. E. Leonard, Jewett City. Haley & Cheeseboro, Stonington. R. P. Hubbard, Middletown. W. Tillinghast, Plainfield. H. E. Ives, Cheshire. W. F. Andross, East Hartford. L. L. Hernan, Noroton. L. Browning, New London. J. A. Lewis, Willimantic. Mapes' Branch, Hartford.	\$32.00 32.00 32.00 31.00 32.00 37.00 35.00 35.00 36.00 45.00 30.00 33.00 32.00 32.00 35.00 30.00 62.00
2799	Ammoniated Bone Superphosphate.	Crocker Fertilizer Co., Buffalo, N. Y.		
2825	Lion Brand Fertilizer.	Read Fertilizer Co., N. Y.		
2796	New Rival Phosphate.	Crocker Fertilizer Co., Buffalo, N. Y.		
2890	Peruvian Guano. Cargo C. R. Lewis.	Mapes' Formula and Peruvian Guano Co., 158 Front St., N. Y., Importers.		
2855	Alkaline Bone Phosphate.	E. Frank Coe, 16 Burling Slip, N. Y.		
851	Triangle A, Fish and Potash.	Bradley Fertilizer Co., 27 Kilby St., Boston, Mass.		34.00 35.00
2831	Fish and Potash.	Farmers' Fertilizer Co., Syracuse, N. Y.		33.00
2856	High Grade Fish and Potash.	E. Frank Coe, 16 Burling Slip, N. Y.		30.00 34.00
2895	Davidge Vegetator.	Davidge Fertilizer Co., 121 Front St., N. Y.		29.00 30.00
2894	Ammoniated Bone Superphosphate.	Stearns Fertilizer Co., 181 Front St., N. Y.		35.00 34.00
2832	Standard Special Formula.	Farmers' Fertilizer Co., Syracuse, N. Y.		32.00
2872	Economical Bone Fertilizer.	Wilkinson & Co., 54 William St., N. Y.		32.00

## ANALYSES OF NITROGENOUS SUPERPHOSPHATES SAMPLED BY THE STATION.

Station No.	Name or Brand.	Nitrogen.				Phosphoric Acid.					Potash.		Chlorine.	Cost per Ton.	Valuation per Ton.	Percentage Difference between Cost and Valuation.	
		Nitrogen as Nitrates.	Nitrogen as Ammonia.	Nitrogen Organic.	Total Nitrogen.	Soluble.	Reverted.	Insoluble.	Total Found.	Total Guaranteed.	Found.	Guaranteed.					
2909	Wilcox's Dry Ground Fish Guano	---	---	8.61	8.61	.93	4.20	1.93	7.06	---	5.13	4.0	---	---	\$32.00	\$38.23	16.3*
2879	Wilcox's Acidulated Fish Guano	---	.97	4.59	5.56	1.76	2.72	.47	4.35	---	4.48	4.0	---	---	22.00	26.09	15.7*
2919	Quinnipiac Dry Ground Fish	---	---	9.26	9.26	.81	3.60	2.43	6.84	---	4.41	4.0	---	---	36.00	39.64	9.2*
2908	Church & Co.'s Pure Dry Fish	---	---	8.84	8.84	.72	4.26	2.71	7.69	---	4.98	6.8	---	---	47.50	47.60	3.4*
2748	Sanderson's Formula, A.A.	2.33	---	2.14	4.47	4.40	2.64	.74	7.78	10.0	7.04	6.0	---	2.26	36.00	39.23	8.2*
2891	G. W. Miller's Flour of Bone Phosphate	1.12	.21	3.33	4.66	---	---	---	12.60†	9.0	---	---	---	4.92	35.00	34.63	1.0
2828	Kelsey's Fish and Potash	---	.78	3.24	4.02	2.56	3.16	.68	6.40	4.0	5.72	---	---	3.51	27.00	26.65	1.0
2880	Shoemaker's Swift Sure Superphosphate	.57	---	2.57	3.14	8.03	3.86	3.54	15.43	---	11.89	9.0	---	4.87	37.50	36.87	1.7
2837	Boite Phosphate	---	---	2.82	2.82	6.08	2.70	1.07	9.85	10.0	8.78	8.0	---	4.58	30.00	28.13	6.6
2904	H. S. Miller's Harvest Queen Phosphate	---	---	1.71	1.71	6.14	2.69	1.11	9.94	---	8.83	10.0	---	2.61	25.00	23.36	7.0
2874	Quinnipiac Market Garden Manure	.59	1.18	1.80	3.57	4.70	5.66	.86	11.22	---	10.36	8.0	---	7.05	40.00	36.66	9.1
2802	Lister's Standard or Success Fertilizer	---	---	2.03	2.03	7.36	2.79	2.17	12.32	---	10.15	10.0	---	1.37	28.00	25.61	9.3
2823	Lister's Ammoniated Bone Phosphate	---	---	2.05	2.05	1.05	2.51	2.47	12.03	---	9.56	9.0	---	1.56	28.00	25.31	10.6
2873	Cumberland Superphosphate	.31	---	2.13	2.44	6.24	6.48	2.12	14.84	12.0	12.72	---	---	1.96	34.50	31.17	10.7
2761	Quinnipiac Pine Island Phosphate	---	---	2.48	2.48	4.95	7.08	1.34	13.37	---	12.03	9.0	---	1.07	32.00	28.73	11.4

\* Valuation exceeds cost.

† A mixture of fertilizer chemicals and ground bone, 89 per cent. of which passes holes  $\frac{1}{2}$  inch in diameter.

## ANALYSES OF NITROGENOUS SUPERPHOSPHATES SAMPLED BY THE STATION—Continued.

Station No.	Name or Brand.	Nitrogen.				Phosphoric Acid.				Potash.		Chlorine.	Cost per Ton.	Valuation per Ton.	Percentage Difference between Cost and Valuation.				
		Nitrogen as Nitrates.	Nitrogen as Ammonia.	Nitrogen, Organic.	Total Nitrogen.	Nitrogen Guaranteed.	Soluble.	Reverted.	Insoluble.	Total Found.	Total Guaranteed.					Found.	Guaranteed.		
2795	Mapes' Complete Manure, A Brand	.35	.72	1.90	2.97	2.5	7.39	4.28	1.83	13.50	12.0	11.67	10.0	3.05	2.5	3.61	\$36.00	\$32.02	12.4
2839	Bowker's Fish and Potash	---	---	2.54	2.54	2.3	5.95	1.99	4.42	12.36	8.0	7.94	---	4.15	4.0	.27	32.50	28.68	13.3
2765	Baker's A.A. Ammoniated Bone Superphosphate	---	---	1.98	.86	2.84	2.5	11.14	.36	13.15	---	12.79	10.0	3.00	2.0	2.72	37.50	32.87	14.1
2797	Mapes' Complete Manure for General Use	.92	.64	2.17	3.73	3.3	7.16	3.68	2.02	12.86	---	10.84	10.0	4.17	4.0	3.51	39.00	34.17	14.1
2766	National Fertilizer Co.'s Ammoniated Bone Phosphate	---	---	2.63	2.63	1.7	7.26	3.00	.78	11.04	9.0	10.26	7.0	2.57	2.0	1.18	32.50	28.14	15.5
2822	Bradley's Farmers' New Method Fertilizer	---	---	2.31	2.31	1.6	7.74	2.72	1.30	11.76	10.0	10.46	8.0	2.88	3.0	2.79	32.00	27.70	15.5
2860	Darling's Animal Fertilizer	---	.41	2.80	3.21	3.3	3.90	4.21	3.40	11.51	10.0	8.11	---	5.29	4.0	4.09	35.00	20.28	15.6
2798	Mapes' Complete Manure for Light Soil	1.54	1.44	2.37	5.35	4.9	4.96	3.31	2.03	10.30	8.0	8.27	7.0	7.05	6.0	6.70	44.00	37.91	16.1
2762	Williams & Clark's Ammoniated Bone Superphosphate, Americus Brand	.16	.68	1.94	2.78	2.0	7.47	4.34	.62	12.43	11.0	11.81	10.0	1.99	2.0	2.00	35.00	29.99	16.7
2793	Chittenden's Fish and Potash	---	.96	2.92	3.88	3.3	1.31	4.37	3.10	8.78	6.0	5.68	---	5.05	5.0	4.95	33.00	28.26	16.8
2876	Quinnipiac Fish and Potash, Plain Brand	---	.56	2.25	2.81	2.0	1.60	3.31	3.00	7.91	6.0	4.91	4.0	5.22	4.0	4.97	28.00	23.59	18.7
2760	Quinnipiac Phosphate	.29	.51	1.93	2.73	2.5	4.46	7.50	1.42	13.38	---	11.96	9.0	1.90	2.0	2.40	36.00	30.08	19.7
2815	Bowker's Ammoniated Bone Phosphate	.43	---	1.81	2.24	2.0	6.29	3.25	3.33	12.87	10.0	9.54	8.0	2.19	2.0	2.74	31.50	26.32	19.7
2976	Miller's Standard Superphosphate	---	.15	2.56	2.71	2.4	9.76	.69	.26	10.71	---	10.45	10.0	2.75	1.5	.30	35.00	29.22	19.7
2841	Bradley's Sea Fowl Guano	.20	.29	2.12	2.61	2.5	8.69	2.05	1.16	11.90	11.0	10.74	9.0	2.13	2.0	2.31	34.00	28.39	19.8
2882	Williams & Clark Co.'s Royal Bone Phosphate	---	---	1.66	1.66	.8	5.78	2.62	2.29	10.69	---	8.40	7.0	2.70	2.0	.36	29.00	23.30	20.4

ANALYSES OF NITROGENOUS SUPERPHOSPHATES SAMPLED BY THE STATION—Continued.

Station No.	Name or Brand.	Nitrogen.					Phosphoric Acid.					Potash.		Chlorine.	Cost per Ton.	Valuation per Ton.	Percentage Difference between Cost and Valuation.		
		Nitrogen as Nitrates.	Nitrogen as Ammonia.	Nitrogen Organic.	Total Nitro. Found.	Nitrogen Guaranteed.	Soluble.	Reverted.	Insoluble.	Total Found.	Total Guaranteed.	Found.	Available.					Guaranteed.	Found.
2852	Bradley's Anchor Brand Fish and Potash.	---	---	3.76	3.76	3.3	4.76	1.84	1.36	7.96	5.0	6.60	3.0	2.67	3.0	4.64	\$32.00	\$26.39	21.3
2820	Bradley's Patent Superphosphate of Lime.	.20	.14	2.37	2.71	2.3	8.53	2.42	1.10	12.05	---	10.95	9.0	1.98	1.5	2.00	35.00	28.84	21.4
2768	E. F. Coe's High Grade Phosphate	---	---	2.24	2.24	2.0	8.67	1.75	1.54	11.96	11.0	10.42	9.0	2.53	2.0	.33	34.00	27.95	21.6
2800	Chittenden's Complete Fertilizer	.81	---	3.03	3.84	3.3	3.34	5.60	3.79	12.73	8.0	8.94	6.0	5.49	6.0	1.84	42.00	34.52	21.7
2833	Reese's New England Fertilizer	---	---	2.51	2.51	2.3	6.86	3.31	2.84	13.01	10.5	10.17	9.0	1.81	2.0	2.05	34.00	27.83	22.1
2813	Clark's Cove Bay State Fertilizer, G.G.	---	.28	2.06	2.34	1.9	7.26	1.35	3.58	12.19	10.5	8.61	8.5	2.70	2.3	2.21	32.00	26.19	22.2
2889	Apothecaries Hall Co.'s Victor Phosphate.	---	---	2.33	2.33	2.5	7.68	1.36	.04	9.08	8.5	9.04	---	2.24	2.0	1.97	30.00	24.30	22.6
2892	Read's Fish and Potash.	---	---	2.78	2.78	2.5	3.52	2.46	1.73	7.71	6.0	5.98	4.0	4.96	4.0	5.05	30.00	24.28	23.5
2803	Bowker's Hill and Drill Phosphate.	.81	---	2.05	2.86	2.5	7.52	2.21	2.64	12.37	11.0	9.73	10.0	2.40	2.0	.25	36.00	29.03	24.0
2905	Olds & Whipple's Special Phosphate.	.87	---	2.07	2.94	---	8.61	1.07	.78	10.46	---	9.68	---	2.18	---	.42	35.00	27.88	25.5
2910	G. W. Miles' IXL Phosphate	---	.31	1.47	1.78	---	7.71	1.81	.74	10.26	---	9.52	9.0	2.26	1.5	1.86	30.00	23.60	27.1
2843	Original Coe's Superphosphate.	.47	---	1.66	2.13	2.0	8.45	2.40	1.24	12.09	10.0	10.85	8.0	.99	1.0	1.13	33.00	25.77	28.1
2835	Soluble Pacific Guano.	1.85	---	.70	2.55	2.3	8.10	2.68	1.36	12.14	10.5	10.78	8.5	1.97	2.0	1.92	35.00	27.33	28.1
2974	Dissolved Bone Phosphate	---	.10	1.73	1.83	1.6	7.82	1.55	.65	10.02	9.5	9.37	8.0	2.94	1.5	.25	32.00	24.88	28.6
2907	Church & Co.'s Fish and Potash.	---	.30	2.96	3.26	3.3	1.55	2.71	.88	5.14	5.0	4.26	---	3.89	3.0	6.90	28.00	21.67	29.2
2875	Quinnipiac Fish and Potash, Crossed Fishes Brand	---	.78	3.02	3.80	3.3	1.12	3.79	3.57	8.48	5.0	4.91	3.0	4.41	3.0	4.06	34.00	26.51	32.0

ANALYSES OF NITROGENOUS SUPERPHOSPHATES SAMPLED BY THE STATION—Concluded.

Station No.	Name or Brand.	Nitrogen.				Phosphoric Acid.						Potash.		Chlorine.	Cost per Ton.	Valuation per Ton.	Percentage Difference between Cost and Valuation.	
		Nitrogen as Nitrates.	Nitrogen as Ammonia.	Nitrogen Organic.	Total Nitrogen.	Soluble.	Reverted.	Insoluble.	Total Found.	Total Guaranteed.	Found.	Guaranteed.	Available.					Found.
2807	Reese's Pilgrim Fertilizer.	---	.28	1.42	1.70	1.0	5.70	1.00	2.22	8.92	7.5	6.70	6.5	2.99	2.57	\$27.00	\$20.42	32.2
2854	Clark's Cove King Philip Alkaline Guano	---	---	1.73	1.73	1.2	6.35	1.37	2.31	10.03	7.5	7.72	6.5	3.29	2.33	30.00	22.51	33.3
2829	Ludlam's Cecrops Fertilizer	.64	---	1.85	2.49	3.3	8.05	1.39	1.18	10.62	---	9.44	7.0	6.80	5.89	40.00	29.95	33.6
2830	Read's Farmers Friend Fertilizer	---	---	1.95	1.95	2.0	7.37	2.92	1.62	11.91	11.0	10.29	9.0	2.25	2.23	34.50	25.80	33.7
2827	Ludlam's Cereal Fertilizer	.59	---	.87	1.46	1.2	8.64	1.26	2.11	12.01	11.0	9.90	8.0	2.34	4.01	32.00	23.78	34.6
2799	Crocker's Ammoniated Bone Superphosphate	---	---	2.97	2.97	2.9	6.77	2.09	1.60	10.46	---	8.86	10.0	1.49	1.25	36.00	36.37	36.5
2825	Read's Lion Brand Fertilizer	---	---	1.20	1.20	.8	6.64	2.74	1.33	10.71	10.0	9.38	8.0	4.19	4.80	32.00	23.39	36.7
2796	Crocker's New Rival Phosphate	---	---	1.48	1.48	1.2	6.51	2.76	2.59	11.86	---	9.27	10.0	2.14	1.6	32.00	23.07	38.7
2890	Mapes' Peruvian Guano	---	---	1.35	6.50	6.7	7.44	3.99	3.27	14.70	14.7	11.43	---	2.99	3.0	62.80	44.65	38.8
2855	E. F. Coe's Alkaline Bone Phosphate	---	---	1.42	1.42	1.0	6.96	2.70	3.47	13.13	11.0	9.66	9.0	2.07	.52	34.00	24.38	39.5
2851	Bradley's Triangle A, Fish and Potash	---	.62	2.00	2.62	2.0	3.25	1.60	1.35	6.20	6.0	4.85	4.0	3.99	6.12	30.00	20.91	43.5
2881	Farmers' Fertilizer Co.'s Fish and Potash	---	---	1.69	1.69	1.6	4.26	2.33	1.25	7.84	7.0	6.59	6.5	7.42	13.0	34.00	23.50	44.7
2856	E. F. Coe's High Grade Fish and Potash	---	---	2.21	2.21	3.0	.51	3.75	4.66	8.92	6.0	4.26	4.0	3.10	2.0	29.50	19.56	50.8
2895	Davidge's Vegetator	---	---	3.03	3.03	2.9	4.67	.82	.07	5.56	---	5.49	5.0	3.85	4.0	35.00	22.51	55.4
2894	Stearn's Ammoniated Bone Superphosphate	trace	.37	1.29	1.66	1.6	2.82	4.41	2.79	10.02	8.5	7.23	---	2.88	2.5	34.00	21.36	59.2
2882	Farmers' Fertilizer Co.'s Standard Special Formula.	.09	---	.65	.74	.8	7.30	2.09	.63	10.02	10.0	9.39	8.0	1.88	4.0	32.00	19.36	65.3
2872	Wilkinson's Economical Bone Fertilizer	---	---	1.02	1.02	1.2	.24	4.17	5.52	9.93	6.0	4.41	---	3.11	3.0	32.00	17.00	88.2



## SPECIAL MANURES SAMPLED BY THE STATION.

Station No.	Name or Brand.	Manufacturer.	Dealer.	Dealers' cash price per ton.
2684	Fairchild's Formula for Seeding Down.	Rogers & Hubbard Co., Middletown.	Manufacturers.	\$40.00
2710	Soluble Potato Manure.	Rogers & Hubbard Co., Middletown.	Manufacturers.	37.00
2685	Fairchild's Formula for Corn and General Crops.	Rogers & Hubbard Co., Middletown.	Manufacturers.	46.00
2951	Mapes' Seeding Down Manure.	Mapes' F. & P. G. Co., New York.	Mapes' Branch, Hartford.	37.50
2871	Fruit and Vine Manure.	Mapes' Formula and Peruvian Guano Co., New York.	Mapes' Branch, Hartford.	38.00
2819	Complete Manure for Potatoes and Vegetables.	Bradley Fertilizer Co., 27 Kilby St., Boston, Mass.	D. N. Clark & Sons, Milford. Geo. Dickinson, Haddam. Wilson & Burr, Middletown. J. E. Holmes, Stratford.	39.00 40.00 38.00 38.00
2801	Corn Manure.	Mapes' Formula and Peruvian Guano Co., New York.	Carter & Strong, Manchester. F. S. Bidwell, Windsor Locks. Mapes' Branch, Hartford. W. W. Cooper, Suffield. G. K. Nason, Willimantic.	42.00 38.00 41.00 41.00 42.60
2858	Tobacco Manure, Connecticut Brand.	Mapes' Formula and Peruvian Guano Co., New York.	J. P. Barstow & Co., Norwich. Dean & Horton, Stamford.	41.00 42.00
2893	Americus High Grade Special Tobacco.	Williams & Clark Fertilizer Co., 81 Fulton St., New York.	Mapes' Branch, Hartford. W. W. Cooper, Suffield.	45.00 45.00
2824	Grass and Grain Spring Top Dressing.	Mapes' Formula and Peruvian Guano Co., New York.	Hale, Day & Co., South Manchester. John Branstead, Portland. G. K. Nason, Willimantic. W. W. Cooper, Suffield.	40.00 40.00 42.60 41.00
2804	Complete Potato Manure.	H. J. Baker & Bro., 215 Pearl St., N. Y.	Mapes' Branch, Hartford. M. T. Gregory & Co., Milford. Allen Betts, Norwalk.	41.00 42.00 42.00
2975	Corn Fertilizer.	H. S. Miller & Co., Newark, N. J.	W. W. Cooper, Suffield. E. F. Hawley, Newtown. G. T. Fowler, Branford.	42.50 42.50 32.00

## SPECIAL MANURES SAMPLED BY THE STATION—Continued.

Station No.	Name or Brand.	Manufacturer.	Dealer.	Dealers' cash price per ton.
2952	Stockbridge Seeding Down Manure.	Bowker Fertilizer Co., 43 Chatham St., Boston, Mass.	Southington Lumber & Feed Co., Southington.	\$40.00
2886	Complete Corn Manure.	H. J. Baker & Bro., 215 Pearl St., N. Y.	Strong & Tanner, Winsted. S. J. Hall, Meriden.	40.00 42.00
2950	Special Potato Manure.	H. S. Miller & Co., Newark, N. J.	W. W. Cooper, Suffield. I. J. Scoville, Bristol.	42.50 40.00
2759	Potato Manure.	Mapes' Formula and Peruvian Guano Co., N. Y.	Staples & Raymond, Westport. H. P. Treat, Orange. G. K. Nason, Willimantic.	40.00 44.50 43.00
2861	Tobacco Manure, Wrapper Brand.	Mapes' Formula and Peruvian Guano Co., N. Y.	Mapes' Branch, Hartford. J. P. Barstow & Co., Norwich. Wilson & Burr, Middletown.	44.00 43.00 45.00
2818	Ammoniated Wheat and Corn Phosphate.	Crocker Fertilizer Co., Buffalo, N. Y.	Wheeler & Howe, Bridgeport. W. W. Cooper, Suffield.	52.00 50.00
2840	Bowker's Tobacco Manure.	Bowker Fertilizer Co., 43 Chatham St., Boston, Mass.	Mapes' Branch, Hartford. J. A. Lewis, Willimantic.	35.00 33.00
2767	Potato Manure.	Williams & Clark Fertilizer Co., 81 Fulton St., N. Y.	Dix & Wells, Wethersfield. C. A. Young, Danielsonville. W. B. Martin, Rockville.	33.00 44.00 35.00
			Charles Stagg, Stratford. Joseph Roode, Jewett City. Daniel Morgan, Poquonock. H. K. Brainard, Thompsonville. C. L. Backus, Andover. F. S. Bidwell, Windsor Locks. Abbott & Co., Birmingham.	36.00 35.00 36.00 --- 36.00 40.00

## SPECIAL MANURES SAMPLED BY THE STATION—Continued.

Station No.	Name or Brand.	Manufacturer.	Dealer.	Dealers' cash price per ton.
2821	Potato Manure.	Bradley Fertilizer Co., 27 Kilby St., Boston, Mass.	A. C. Sternberg, Hartford. F. S. Bidwell, Windsor Locks. D. N. Clark & Sons, Milford. Wilson & Burr, Middletown. N. C. Barker, Lebanon. D. Beers, Danbury. City Coal and Wood Co., New Britain. W. H. Cheney's Sons, South Manchester. Waterbury & June, Greenwich. Raymond Bros., South Manchester. W. B. Martin, Rockville. G. R. Fowler, Central Village. G. W. Carver, Putnam. Carter & Strong, Manchester. J. E. Leonard, Jewett City. G. A. Dickinson, Haddam. F. C. Root, Suffield. W. F. Andross, East Hartford. W. W. Cooper, Suffield. J. S. Wells, Hebron. E. B. Clark, Woodmont. E. B. Clark, Milford. L. Browning, New London. E. B. Clark, Woodmont. J. A. Lewis, Willimantic.	\$37.00 35.00 35.00 35.00 37.00 38.00 40.00  39.00 --- 37.00 37.00 --- 36.00 39.00 38.00 38.00 36.00 36.00 36.00 37.00 38.00 42.50 40.00 40.00
2763	Stockbridge Vegetable Manure.	Bowker Fertilizer Co., 43 Chatham St., Boston, Mass.		



## SPECIAL MANURES SAMPLED BY THE STATION—Continued.

Station No.	Name or Brand.	Manufacturer.	Dealer.	Dealers' cash price per ton.
2842	Complete Manure for Corn and Grain.	Bradley Fertilizer Co., 27 Kilby St., Boston, Mass.	J. E. Holmes, Stratford.	\$42.00
2764	Potato Manure.	Quinnipiac Co., New London.	D. N. Clark & Sons, Milford. Carter & Strong, Manchester. B. E. Johnson, Higganum. John Taylor, Old Mystic.	39.00 42.00 34.00 38.00
2816	Potato Manure.	E. Frank Coe, 16 Burling Slip, N. Y.	J. S. Worthington, Portland. J. F. Silliman, New Canaan. D. C. Wood, Stratford. G. M. Williams, New London. Olds & Whipple, Hartford.	40.00 38.00 38.00 35.00
2826	Great Eastern Vegetable, Vine and Tobacco Fertilizer.	Great Eastern Fertilizer Co., Rutland, Vt.	J. A. Amidon, Wethersfield. N. C. Barker, Lebanon. H. S. Hall, (2d) Wallingford. D. E. Stone, Cheshire. L. L. Herman, Noroton. F. Woodford, Farmington. Andrew Bonfoey, Higganum. W. A. Snow, Columbia. W. Tillinghast, Plainfield.	40.00 40.00 33.00 35.00 37.00 35.00 35.00 39.00
2834	Reese's Concentrated Potato and Corn Manure.	J. S. Reese & Co., New Bedford, Mass.	J. A. Paine, Danielsonville. J. A. Lewis, Willimantic.	42.50 40.00
2897	Stockbridge Fruit Manure.	Bowker Fertilizer Co., 43 Chatham St., Boston, Mass.	E. S. Lincoln, Chaplin.	38.00
2814	Stockbridge Corn Manure.	Bowker Fertilizer Co., 43 Chatham St., Boston, Mass.	S. R. Jones, Peep River. J. A. Lewis, Willimantic. City Coal and Wood Co., New Britain. W. B. Martin, Rockville.	40.00 40.00 41.00 41.00

SPECIAL MANURES SAMPLED BY THE STATION—*Concluded.*

Station No.	Name or Brand.	Manufacturer.	Dealer.	Dealers' cash price per ton.
2814	Stockbridge Corn Manure.	Bowker Fertilizer Co., 43 Chatham St., Boston, Mass.	J. A. Paine, Danielsonville. J. M. Williams, Manchester.	\$42.50 39.00
2817	Potato, Hop and Tobacco Phosphate.	Crocker Fertilizer Co., Buffalo, N. Y.	W. H. Anderson, Putnam. Dix & Wells, Wethersfield. C. A. Young, Danielsonville. W. Tillinghast, Plainfield. L. L. Herman, Noroton. J. E. Leonard, Jewett City. L. Browning, New London. J. H. Fish, Newington. W. C. Russell, Orange. E. Hill, Moosup. W. A. Snow, Columbia.	42.00 35.00 36.00 36.00 35.00 36.00 37.00 38.00 35.00 36.00
2853	General Fertilizer for Grain and Grass.	Great Eastern Fertilizer Co., Rutland, Vt.	Henry Dackett, Andover.	40.00
2878	Potato Manure.	Davidge Fertilizer Co., 121 Front St., N. Y.		
2881	Stearns' Potato Grower.	Stearns Fertilizer Co., 181 Front St., N. Y.	R. P. Hubbard, Middletown.	34.00

## ANALYSES OF SPECIAL MANURES SAMPLED BY THE STATION.

Station No.	Name or Brand.	Nitrogen.				Phosphoric Acid.				Potash.		Chlorine.	Cost per Ton.	Valuation per Ton.	Percentage Difference between Cost and Valuation.		
		Nitrogen as Nitrates.	Nitrogen as Ammonia.	Nitrogen, Organic.	Total Nitrogen.	Nitrogen Guaranteed.	Insoluble.	Total Found.	Total Guaranteed.	Available.	Found.					Guaranteed.	
2684	Fairchild's Formula for Seeding Down†	.25	---	2.81	3.06	.25	---	16.61†	18.0	---	---	14.67	12.5	\$40.00	\$44.73	11.0*	
2710	Rogers & Hubbard's Soluble Potato Manure.	1.36	.72	3.24	5.32	5.0	---	6.20	10.89	7.28	5.33	5.0	.22	37.00	36.91	0.2	
2685	Fairchild's Formula for Corn and General Crops†	3.40	---	1.92	5.32	5.5	---	---	13.30†	---	12.53	13.0	12.06	45.00	44.67	0.7	
2951	Mapes' Seeding Down Manure	.83	.15	2.41	3.39	2.5	---	---	15.24§	---	11.71	10.0	11.56	37.50	34.29	9.3	
2871	Mapes' Fruit and Vine Manure	.23	.35	1.42	2.00	1.7	---	.49	9.40	9.26	7.0	11.16	.52	38.00	34.74	9.4	
2819	Bradley's Comp. Manure for Potatoes and Vegetables	.38	1.39	1.99	3.76	3.7	---	7.06	10.66	9.70	8.0	6.49	6.60	38.00	34.28	10.9	
2801	Mapes' Corn Manure	.75	1.06	2.03	3.84	3.7	---	6.30	12.10	10.13	10.0	6.76	6.41	41.00	35.79	14.6	
2858	Mapes' Tobacco Manure, Conn. Brand	.83	1.52	2.23	4.58	4.7	---	6.08	9.62	8.58	7.8	8.46	.59	45.00	39.19	14.8	
2893	Williams & Clark's American High Grade Special for Tobacco	.72	1.17	1.60	3.49	3.7	---	4.32	11.05	8.0	9.17	7.0	.20	40.00	34.80	14.9	
2821	Mapes' Grass and Grain Spring Top Dressing	1.54	1.44	1.89	4.87	4.7	---	5.74	10.23	7.0	8.54	5.93	5.51	41.00	35.55	15.3	
2804	Baker's Comp. Potato Manure	---	3.43	.77	4.20	3.3	---	5.98	1.40	.30	7.68	---	10.0	5.02	42.00	36.11	16.3
2952	Stockbridge Seeding Down Manure	1.56	.15	1.93	3.64	2.5	---	7.36	2.25	11.86	12.0	9.61	3.0	40.00	33.83	18.2	
2975	Miller's Corn Fertilizer	---	---	2.04	2.04	1.4	---	5.15	4.06	1.06	10.27	7.5	9.21	34.00	26.74	19.6	
2836	Baker's Comp. Corn Manure	---	3.49	.73	4.22	4.9	---	5.97	1.26	.18	7.41	---	7.0	41.00	34.15	20.1	
2950	Miller's Special Potato Manure	---	3.07	.78	3.85	3.7	---	3.89	3.08	.92	7.89	---	7.0	41.00	33.79	21.3	
2759	Mapes' Potato Manure	1.46	.85	1.60	3.91	3.7	---	3.90	4.32	2.54	10.76	8.0	8.22	43.00	35.36	21.6	

\* Valuation exceeds cost. † Mixture of chemicals and ground bone, 100 per cent. of which passes holes  $\frac{1}{8}$  inch in diameter. ‡ Mixture of chemicals and ground bone, 93 per cent. of which passes holes  $\frac{1}{8}$  inch in diameter. § Mixture of chemicals and bone, 30 per cent. of which passes holes  $\frac{1}{8}$  inch in diameter. ¶ Mixture of chemicals and bone, 100 per cent. of which passes holes  $\frac{1}{8}$  inch in diameter.

## ANALYSES OF SPECIAL MANURES SAMPLED BY THE STATION—Concluded.

Station No.	Name or Brand.	Nitrogen.					Phosphoric Acid.						Potash.		Chlorine.	Cost per Ton.	Valuation per Ton.	Percentage Difference between Cost and Value.	
		Nitrogen as Nitrates.	Nitrogen as Ammonia.	Nitrogen Organic.	Total Nitro.	Nitrogen Guaranteed.	Soluble.	Reverted.	Insoluble.	Total Found.	Total Guaranteed.	Found.	Available.	Found.					Guaranteed.
2861	Mapes' Tobacco Manure, Wrapper Brand.	1.17	3.53	1.42	6.12	6.2	1.18	3.05	1.82	6.05	---	4.23	4.5	11.43	10.5	1.06	\$50.00	\$41.08	\$21.7
2818	Crocker's Ammoniated Wheat and Corn Phosphate	---	1.60	2.22	3.37	3.3	7.13	2.13	3.16	12.42	8.0	9.26	7.0	5.08	5.0	.48	33.00	26.81	23.1
2840	Bowker's Tobacco Manure	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	42.50	34.22	24.2
2767	Williams & Clark's Potato Manure	.29	---	2.55	2.84	2.0	5.41	2.96	1.12	9.49	---	8.37	8.0	5.75	6.0	3.09	36.00	28.96	24.3
2821	Bradley's Potato Manure	.29	---	2.34	2.63	2.5	6.43	2.43	1.50	10.36	8.0	8.86	6.0	5.87	5.0	5.79	36.00	28.91	24.5
2763	Stockbridge Vegetable Manure	1.32	.47	1.62	3.41	3.3	6.88	1.83	1.47	10.18	8.0	8.71	7.0	6.73	5.0	4.20	40.00	31.98	25.1
2842	Bradley's Complete Manure for Corn and Grain	.31	1.00	1.98	3.29	3.3	7.47	2.38	1.31	11.16	10.0	9.85	8.0	5.02	4.5	5.27	40.00	31.86	25.5
2764	Quinnipiac Potato Manure	.35	---	2.75	3.10	2.5	4.00	3.82	1.24	9.06	5.0	7.82	5.0	5.40	5.0	.96	37.00	29.35	26.0
2816	E. Frank Coe's Potato Manure	---	---	.66	1.64	2.30	7.49	1.69	1.40	10.58	8.0	9.18	8.0	5.69	6.0	.34	38.00	29.89	27.1
2826	Great Eastern Vegetable, Vine and Tobacco Fertilizer	---	---	2.14	2.14	2.1	7.04	1.92	1.20	10.16	---	8.96	8.0	5.97	6.0	5.69	35.00	27.52	27.2
2834	Reese's Concentrated Potato and Corn Manure	.37	---	2.62	2.99	2.7	3.36	4.73	3.14	11.23	7.0	8.09	6.0	6.95	7.5	7.06	39.00	30.61	27.4
2897	Stockbridge Fruit Manure	.64	---	1.79	2.43	2.5	7.31	2.46	2.77	12.54	7.0	9.77	6.0	5.38	4.0	.62	40.00	31.21	28.2
2814	Stockbridge Corn and Grain Manure	.81	---	2.46	3.27	3.2	6.50	2.66	3.07	12.23	10.0	9.16	8.0	4.17	4.0	3.06	40.00	30.73	30.2
2817	Crocker's Potato, Hop and Tobacco Phosphate	---	---	2.07	2.07	2.0	8.40	1.73	1.29	11.42	8.0	10.13	8.0	4.19	3.5	3.70	36.00	27.63	30.3
2853	Great Eastern General Fertilizer for Grass and Grain	---	---	2.80	2.80	2.9	7.06	1.69	1.27	10.02	---	8.75	8.0	2.43	2.0	2.86	35.00	26.31	33.0
2878	Davidge Potato Manure	1.11	---	1.81	2.92	2.9	6.75	3.16	1.28	11.19	---	9.91	9.0	4.23	4.0	4.48	40.00	29.50	35.6
2881	Stearns' Potato Grower	---	.65	1.36	2.01	2.5	4.14	2.06	2.46	8.66	5.0	6.20	---	5.34	5.0	.62	34.00	24.20	40.5