

COMMERCIAL FERTILIZERS

REPORT FOR 1942

E. M. BAILEY
Chemist in Charge



Connecticut
Agricultural Experiment Station
New Haven

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Commercial Fertilizers Report for 1942

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LAW AND REGULATIONS REGARDING COMMERCIAL FERTILIZERS

THE TERM "commercial fertilizers" as used in the Connecticut fertilizer statute includes any and every substance imported, manufactured, prepared or sold for fertilizing or manuring or soil amendment purposes, except barnyard manure and stable manure that have not been artificially treated or manipulated, marl and lime. But no fertilizer containing less than 0.82 percent of nitrogen, or 1 percent of phosphoric acid or 1 percent of potash is accepted for registration.

The seller is responsible for the proper labelling of each package of fertilizer, for the registration of each brand sold or offered for sale, for the payment of the required analysis fee and for the payment of the tonnage tax. If, however, proper labelling, registration and payments of analysis fees and of tonnage tax have been provided for by the manufacturer or by another responsible person, all sellers of such brands are released from the above-mentioned requirements. The retailer, therefore, should assure himself that the requirements of the law have been met by the manufacturer of the brands which he handles, or himself be prepared to meet all these requirements.

It frequently happens that a manufacturer or jobber sells fertilizer materials which are the products of, and which are registered by, another firm or individual. Distributors in such cases should sell such materials by the exact brand names under which they are registered in order that there may be no mistake as to the identity of brands. Any change in the brand names, or failure to make the identity of the brand and its manufacturer clear, makes the distributor liable for the registration of the product as his own brand.

The law exempts from registration, and from other requirements referred to, only (1) fertilizers passing through the State in transit; (2) fertilizers and fertilizer materials shipped to regular fertilizer factories to be used for manufacturing purposes and (3) fertilizers and fertilizer chemicals sold to the Connecticut Agricultural Experiment Station for experimental purposes.

Cottonseed, linseed and soybean meals, when sold or used for fertilizer purposes, must be registered as fertilizers and the specified fees paid thereon. For such products the registration fee is \$10.00 for each brand payable annually, and six cents per ton tonnage fee, payable semi-annually.

NOTE: Analyses reported in this bulletin were made by Messrs. Nolan, Merwin and Walden; microscopic examinations by Miss Shepard; inspection and sampling by Mr. Stickney and compilations by Mrs. Vosburgh.

These fees are entirely apart from those required by the feeding stuffs statute.

Because manufacturers or jobbers do not know how much, if any, of their brands are sold or used as fertilizers, local dealers and purchasers report their sales or purchases to this Station. The information is not for publication but is used to inform manufacturers of the total sales of their brands as fertilizer in this State. It is expected that the fees provided for by statute will be paid by the manufacturer or other party responsible for the brands.

INSPECTION OF 1942

During the season of 1942 the Station agent collected 324 official samples of raw materials and mixed fertilizers including all the registered brands that could be located.

A summary of these samples and others submitted by farmers is given in the classification which follows.

Tonnage data are based upon returns made up to October 1, 1942, and are for the period July 1, 1941, to June 30, 1942. The figures do not include fertilizer tonnage distributed under the Federal Agricultural Conservation program.

REGISTRATIONS

Late Registrations for 1941

To the brands registered for 1941 in our last report should be added:

Consolidated Chemical Industries, Inc., Woburn, Mass.

Protena Fertilizer Tankage

Spencer Kellogg & Sons, Inc., Buffalo, N. Y.

Kellogg's 32% Protein Old Process Linseed Meal

Olds & Whipple, Inc., Hartford, Conn.

32% Linseed Meal

Registrations for 1942

For 1942, 58 firms and individuals registered 313 brands of fertilizers at this Station for sale in this State. As required by statute, the brands so registered are listed as follows:

The Acme Guano Co., Baltimore, Md.

Acme 3-12-6

Acme 4-8-4

Acme Vitaflor 4-8-5

Acme 5-8-7

Acme 7-7-7

Ted Alkire, Lubbock, Tex.

Kireal Cotton Hull Ash

Allied Chemical & Dye Corp., Barrett

Div., 40 Rector St., New York,
N. Y.

Arcadian Sulphate of Ammonia

Arcadian the American Nitrate of

Soda

Sulphate of Ammonia

**American Agricultural Chemical Co.,
No. Weymouth, Mass.**

AA Market Garden Fertilizer 4-8-4

AA Potato and Root Crop Fertilizer
4-8-10

AA Potato and Vegetable Fertilizer
5-8-7

AA 20% Superphosphate

AA Tobacco Starter 5-5-15

AA Top Dresser 7-7-7

Agrico for Aroostook with 10%
Potash 5-8-10

Agrico for Corn 3-10-6

Agrico for Corn 4-12-6

Agrico Country Club Fertilizer 8-6-2

Agrico for Fruit 8-8-4

Agrico for Gardens 4-10-4

Agrico for Lawns, Trees and Shrubs
7-7-5
Agrico for New England 4-8-10
Agrico for Potatoes and Vegetables
5-8-7
Agrico for Seeding Down 4-16-20
Agrico for Tobacco 6-3-6
Agrico for Top Dressing 7-7-7
Agrico for Truck 5-10-5
Castor Pomace
Fine Ground Bone
Muriate of Potash
18% Normal Superphosphate
Pulverized Sheep and Goat Manure

American Cyanamid Co., 30 Rockefeller Plaza, New York, N. Y.

20.6% 'Aero' Cyanamid Granular
21% 'Aero' Cyanamid Pulverized

American Potash & Chemical Corp., 70 Pine St., New York, N. Y.

Trona Muriate of Potash

Apothecaries Hall Co., Waterbury, Conn.

Ammo-Phos 11-48-0
Bone Meal 2.25%
Bone Meal 3.50%
Castor Pomace
Cotton Hull Ashes
Cottonseed Meal-Castor Pomace Mixture
Dry Ground Fish
Liberty Corn Fertilizer 3-12-6
Liberty Green Gro 6-5-3
Liberty High Analysis Fertilizer
8-16-16
Liberty High Grade Corn Fertilizer
4-12-4
Liberty High Grade Market Gardeners 5-8-7
Liberty High Grade Tobacco Manure 7-3-7
Liberty High Grade Vegetable
5-10-10
Liberty Market Gardeners Special
4-8-4
Liberty Potato and General Crops
4-8-10
Liberty Potato and Market Gardeners (Potash as Muriate) 4-8-7
Liberty Special Fertilizer for Fruit and Grass 7-7-7
Liberty Special Fertilizer for Lawns, etc., 4-4-0
Liberty Tobacco Mixture 5-3-5
Liberty Tobacco Mixture 6-3-6
Liberty Tobacco Mixture 6-3-7
Liberty Tobacco Starter 4-10-0
Liberty Tobacco Starter with Potash
5-5-15

Liberty Top Dresser for Grass and Grain 8-8-8
Liberty Truck Garden and Onion
5-10-5
Muriate of Potash 50%
Muriate of Potash 60%
Sheep Manure
Sulphate of Ammonia
Sulphate of Potash
Superphosphate 16%
Superphosphate 18%
Superphosphate 20%
Superphosphate 45%

Archer-Daniels-Midland Co., Minneapolis, Minn.

Archer Brand 32% Protein Old Process Linseed Meal
Archer Brand 44% Protein Soybean Oil Meal

Armour Fertilizer Works, 120 Broadway, New York, N. Y.

Armour's Big Crop Fertilizer 4-8-4
Armour's Big Crop Fertilizer 4-8-10
Armour's Big Crop Fertilizer 5-8-7
Armour's Big Crop Fertilizer 5-10-5
Armour's Big Crop Fertilizer 5-10-10
Armour's Big Crop Fertilizer 7-7-7
Armour's Big Crop Fertilizer 8-16-20
Armour's Big Crop Superphosphate
20%
Armour's Big Crop Tobacco Special
5-3-5
Armour's Big Crop Tobacco Special
6-3-6
Armour's Big Crop Tobacco Special
7-3-7
Armour's Big Crop Tobacco Starter
5-5-15
Armour's Bone Meal Fertilizer
Armour's Garden and Lawn Fertilizer 4-8-8
Armour's Special Putting Green Mixture 8-5-2
Armour's Special Tree Food Mixture
10-8-6
Castor Pomace
Muriate of Potash
Sheep Manure

Ashcraft-Wilkinson Co., Atlanta, Ga.

Cow-Eta Brand 43% Cottonseed Meal
Prime 41% Cottonseed Meal—
Castor Pomace Mixture

Associated Seed Growers, Inc., New Haven, Conn.

Clark's Tip Top 5-8-7

**Atkins & Durbrow, Inc., 165 John St.,
New York, N. Y.**

Driconure

**F. A. Bartlett Tree Expert Co., Inc.,
Stamford, Conn.**

Bartlett Green Tree Food 6-7-4

**The Baugh & Sons Co., 25 S. Calvert
St., Baltimore, Md.**

Baugh's Fish Bone and Potash
Mixture 4-8-4

Baugh's Old Dependable Potato
Grower 4-8-10

Baugh's Perfection Brand 3-10-6
Baugh's Peruvian Guano Substitute
5-8-7

Baugh's Premium Plant Food and
Soil Builder 5-10-5

Baugh's Pure Steamed Bone Meal
Baugh's Raw Bone Meal, Warranted
Pure

Baugh's Special Top Dresser 7-6-6

Baugh's 20% Superphosphate

Baugh's Truckers Favorite 5-10-5
Muriate of Potash

**Berkshire Chemical Co., Bridgeport,
Conn.**

Argentine Cottonseed Meal—Castor
Fertilizer Mixture

Berkshire Castor Pomace

Berkshire Dry Ground Menhaden
Fish

Berkshire Fertilizer 4-8-4

Berkshire Fertilizer 4-8-7

Berkshire Fertilizer 4-8-10

Berkshire Fertilizer 4-12-4

Berkshire Fertilizer 5-8-7

Berkshire Fertilizer 5-8-10

Berkshire Fertilizer 5-10-5

Berkshire Fertilizer 7-7-7

Berkshire Fertilizer 8-16-8

Berkshire Fertilizer 8-16-16

Berkshire Fertilizer Grass Special
6-6-5

Berkshire Fertilizer Tobacco 6-3-6

Berkshire Fertilizer Tobacco

Starter 5-5-15

Berkshire Fine Ground Bone

Berkshire Golf Green Fertilizer

8-5-2

Berkshire Raw Bone Meal

Berkshire Sheep Manure

**Buckeye Cotton Oil Co., Cincinnati,
Ohio.**

Buckeye 44% Protein Soybean Oil
Meal, Prime Quality

**Central Soya Co., Inc., Fort Wayne,
Ind.**

Central Star Brand Soybean Oil
Meal 44%

**Chilean Nitrate Sales Corp., 120
Broadway, New York, N. Y.**

Chilean Nitrate of Soda—Champion
Brand

Chilean Nitrate of Soda—Original
Old Style

Chilean Nitrate of Soda and Potash

Clinton Co., Clinton, Iowa

Clinton Soybean Oil Meal

Connecticut Toro Co., Hartford, Conn.

Netco Special 8-6-2

**Consolidated Chemical Industries, Inc.,
Woburn, Mass.**

Ground Raw Fertilizer Bone Meal

**Consolidated Rendering Co., 178 Atlan-
tic Ave., Boston, Mass.**

Corenco 0-20-20

Corenco 3-10-4 Animal Brand

Corenco 4-8-4 Corn and Vegetable

Corenco 4-8-7 Market Garden

Corenco 4-8-10 Potato Grower

Corenco 5-5-5 Lawn and Shrub

Corenco 5-5-15 Tobacco Starter

Corenco 5-10-5 Super Truck

Corenco 5-8-7 General Crop Manure

Corenco 5-8-10 Peerless Potato

Corenco 6-3-6 Special Tobacco

Grower

Corenco 7-7-7 Complete Fruit Top

Dressing

Corenco 8-16-14 Two-in-One

Corenco Ground Bone

Corenco Raw Bone Fertilizer

Corenco Sheep Manure

Cottonseed-Castor Mixture

Ground Tankage

Muriate of Potash

Superphosphate 16%

Superphosphate 20%

**The Davey Tree Expert Co., Kent,
Ohio.**

Davey Shredded Cattle Manure

Davey Tree Food 12-4-4

**The Davison Chemical Corp.,
Baltimore, Md.**

Davco Granulated 20%

Superphosphate

**The Drackett Products Co., Cincinnati,
Ohio**

Drackett Soybean Oil Meal 44%

**E. I. du Pont de Nemours & Co., Inc.,
Wilmington, Del.**

"Uramon" Fertilizer Compound

**Eastern States Farmers' Exchange,
Springfield, Mass.**

- Eastern States 0-20-20
- Eastern States 4-16-20
- Eastern States 5-5-15 Tobacco
- Eastern States 5-10-5
- Eastern States 5-10-10
- Eastern States 5-15-5
- Eastern States 7-7-7
- Eastern States 7-14-21
- Eastern States 8-4-8 Tobacco
- Eastern States 8-16-8
- Eastern States 8-16-16
- Eastern States 8-16-16 LCS (Low Chlorine Special)
- Eastern States 8-16-16 SM (Soluble Magnesium)
- Eastern States 8-24-8
- Eastern States 10-5-5
- Eastern States 10-10-10
- Eastern States Castor Pomace
- Eastern States Cottonhull Ash
- Eastern States Ground Steamed Bone
- Eastern States Muriate of Potash
- Eastern States Sulphate of Ammonia
- Eastern States Sulphate of Potash
- Eastern States Superphosphate 20%
- Eastern States Superphosphate 47% Triple

**Faesy & Besthoff, Inc., 22 E. Fortieth
St., New York, N. Y.**

Bone Meal

Ford Motor Co., Dearborn, Mich.

Ford Ammonium Sulphate

**The Glidden Co., Soya Products Div.,
Chicago, Ill.**

Glidden 4 Hi Brand 44% Protein Soybean Oil Meal

**Goulard & Olena, Inc., 140 Liberty St.,
New York, N. Y.**

- G & O Ground Bone
- G & O Lawn, Garden and Flower Fertilizer 5-8-5
- J. B. Greens Fertilizer 10-4-3

A. H. Hoffman, Inc., Landisville, Pa.

- Hoffman's Bone Meal
- Hoffman's Cow Manure
- Hoffman's Sheep Manure

**Humphreys-Godwin Co., Memphis,
Tenn.**

Dixie Brand Prime 41% Protein Cottonseed Meal

**Spencer Kellogg & Sons, Inc., Buffalo,
N. Y.**

Castor Pomace

Killen & Hall, Inc., Darien, Conn.

Killen & Hall Tree Food 6-6-5

L. B. Lovitt & Co., Memphis, Tenn.

"Lovit Brand" 41% Protein Cottonseed Meal

**McArdle's Seed Store, Greenwich,
Conn.**

McArdle's Special Fertilizer 6-5-3

**Mechling Bros. Chemicals, Div. of
General Chemical Co., 12 So.
Twelfth St., Philadelphia, Pa.**

Veget-Aid 5-10-5

**Norwood Brand Fertilizer Co., No.
Reading, Mass.**

Norwood Brand Sheep Manure

**Old Deerfield Fertilizer Co., Inc., So.
Deerfield, Mass.**

- Castor Pomace
- Cottonhull Ashes
- Cottonseed-Castor Mixture
- Double Sulfate Potash Magnesium
- Old Deerfield 4-8-7
- Old Deerfield 5-8-7
- Old Deerfield 5-8-7 and 2 (Potash Other Than Muriate)
- Old Deerfield 5-10-10
- Old Deerfield 6-3-7 Tobacco
- Old Deerfield Dry Ground Fish
- Old Deerfield Sulfate of Ammonia
- Old Deerfield Triple Superphosphate 47%

Olds & Whipple, Inc., Hartford, Conn.

- O & W 3-10-4 Corn Special Fertilizer
- O & W 3-12-6 Fertilizer
- O & W 4-8-4 Market Garden Fertilizer
- O & W 4-8-7 Potato and General Purpose Fertilizer
- O & W 5-3-5 Complete Tobacco Fertilizer
- O & W 5-3-5 Complete Tobacco Fertilizer Potash Derived From Cottonhull Ashes
- O & W 5-5-15 High Grade Tobacco Starter and Potash Compound

- O & W 5-8-7 Potato and General Purpose Fertilizer
 O & W 5-10-10 Fertilizer
 O & W 6-3-5 Blue Label Tobacco Fertilizer Potash Derived From Cottonhull Ashes
 O & W 6-3-6 Blue Label Tobacco Fertilizer
 O & W 6-3-6 Blue Label Tobacco Fertilizer Potash Derived From Cottonhull Ashes
 O & W 6-3-7 Special Tobacco Fertilizer
 O & W 7-7-7 Top Dressing and Grass Fertilizer
 O & W Bone Meal
 O & W Castor Pomace
 O & W Cotton Hull Ashes
 O & W Dry Ground Fish
 O & W High Grade Sulphate of Potash 48%
 O & W Sulphate of Ammonia
 O & W Superphosphate 20%
 O & W Superphosphate 47%
 So. American Cottonseed Meal 95%
 — Castor Pomace 5% Mixture — 38% Protein
- Plantspur Products Co., 1072 West Side Ave., Jersey City, N. J.**
 Plantspur Fertilizer 4-4-2
- The Frank S. Platt Co., Inc., New Haven, Conn.**
 Platco 5-8-7 Fertilizer
 Platt's 10-5-5 Lawn Fertilizer
- The Pulverized Manure Co., 503 Exchange Bldg., Union Stock Yards, Chicago, Ill.**
 Wizard Brand Cow Manure
 Wizard Brand Pulverized Sheep Manure
- The Rogers & Hubbard Co., Portland, Conn.**
 Domestic Sheep Manure
 Gro Fast Plant Food 5-8-6
 Hubbard's All Soils Fertilizer 4-8-4
 Hubbard's Castor Pomace
 Hubbard's Climax Tobacco Fertilizer 5-3-5
 Hubbard's Corn Fertilizer 4-8-7
 Hubbard's Corn and Grain Fertilizer 3-10-4
 Hubbard's Cottonhull Ash
 Hubbard's Dry Ground Fish Meal
 Hubbard's Fine Ground Bone
 Hubbard's Fruit Fertilizer 8-8-8
 Hubbard's Golf Course Fertilizer 8-6-2
- Hubbard's High Potash Fertilizer 4-8-10
 Hubbard's Muriate Potash
 Hubbard's Nitrogen Solution
 Hubbard's Potato Fertilizer 5-8-7
 Hubbard's Raw Knuckle Bone Flour
 Hubbard's Strictly Pure Bone
 Hubbard's 16% Superphosphate
 Hubbard's Superphosphate 20%
 Hubbard's Tobacco Grower 6-3-6
 Hubbard's Top Dressing
 Hubbard's Triple Superphosphate 47%
 Hubbard's Vegetable Manure
 Red H Brand 4-8-4
 Red H Brand 4-8-7
 Red H Brand 4-8-10
 Red H Brand 5-8-7
 Red H Brand 5-10-10
 Red H Brand 7-6-6
 Red H Brand 7-7-7
 Red H Brand 8-16-14
 Yale Special Mixture 8-6-4
- Ruhm Phosphate & Chemical Co., Mt. Pleasant, Tenn.**
 "Red Seal Brand Ruhm's Phosphate Rock 30%"
 "Red Seal Brand Ruhm's Phosphate Rock 32%"
- O. M. Scott & Sons Co., Marysville, Ohio**
 Scott's Turf Builder 10-6-4
- Sears, Roebuck & Co., Chicago, Ill.**
 Garden Master 5-8-7
- Sewerage Commission of the City of Milwaukee, Milwaukee, Wis.**
 Milorganite
- M. L. Shoemaker Co., Philadelphia, Pa.**
 Shoemaker's "Swift-Sure" 4-10-0
 Tobacco Starter
- Stumpp & Walter Co., 132 Church St., New York, N. Y.**
 Sawco Bone Fertilizer 2.47-24.00
 Sawco Cattle Manure
 Sawco Emerald Grass Fertilizer 5-7-3
 Sawco General Garden Fertilizer 5-10-5
 Sawco Pulverized Sheep Manure 2-1-2
 Sawco Rose Food 3-4-2
 Sawconure 2-1-1

**Summers Fertilizer Co., Inc.,
Baltimore, Md.**

Summers "Best on Earth" 8-5-2
Summers "Best on Earth" Sheep
Manure
Summers Ground Bone Meal

**Swift & Co. Fertilizer Works,
Baltimore, Md.**

Bone Meal Fertilizer 2.47-23
Roselawn 5-8-7
Swift's Special Golf Fertilizer 6-12-4
Swift's Special Golf Fertilizer 12-6-4
Swift's Sheep Manure
Vigoro 4-12-4

Tennessee Corp., Lockland, Ohio.

Loma 5-10-4
Turfood 10-6-4

**I. P. Thomas & Son Co., 721 Market
St., Camden, N. J.**

I. P. Thomas 3-10-6
I. P. Thomas 5-8-7

**Walker-Gordon Laboratory Co., Inc.,
Plainsboro, N. J.**

Bovert
Bovung

**F. H. Woodruff & Sons, Inc., Milford,
Conn.**

Gro-Sod Lawn Food 10-6-4

**Woodruff Fertilizer Works, Inc.,
North Haven, Conn.**

Precipitated Bone Meal
Woodruff's 3-10-6 Fertilizer
Woodruff's Big Crop Fertilizer
5-8-7
Woodruff's Corn Fertilizer 4-16-4
Woodruff's Market Garden
Fertilizer 4-8-4
Woodruff's Superphosphate 20%
Woodruff's Tobacco Starter
Fertilizer 5-5-15
Woodruff's Top Dresser 7-6-6
Woodruff's Yankee Special
Fertilizer 5-10-5

CLASSIFICATION OF FERTILIZER MATERIALS AND FERTILIZER TONNAGE

	Page number	Number of samples	Tonnage	
<i>I. Containing Chiefly Nitrogen</i>				
Nitrate of soda	19	10	1,416	
Ammonium sulphate	19	7	504	
Castor pomace	20	18	4,312	
Cottonseed meal (and C.S.M.-C.P.)	20	85	8,481	
Linseed meal	20	13	533	
Soybean meal	21	16	219	
Other materials	19	4	354	15,819
<i>II. Containing Chiefly Phosphoric Acid</i>				
Superphosphate	22	27	5,836	
Precipitated bone	23	4	67	5,903
<i>III. Containing Chiefly Potash</i>				
Muriate of potash	24	10	777	
Sulphate of potash	24	4	321	
Cottonhull ashes	24	29	1,649	2,747
<i>IV. Containing Nitrogen and Potash</i>				
Nitrate of potash	16	4 }	299	299
Nitrate of potash-soda	16	5 }		
<i>V. Containing Nitrogen and Phosphoric Acid</i>				
Dry ground fish	25	18	1,204	
Tankage	16	1	86	
Ground bone	26	31	1,710	
Other materials	16	4	31	3,031
<i>VI. Mixed Fertilizer</i>				
Commercial mixtures	28	190	34,403 ¹	
Special and home mixtures	40	68	2,232	36,635
<i>VII. Miscellaneous</i>				
Sheep manure, etc.	43	18	682	
Lime	45	29	.....
Other materials	48	43	.....
Check metals and fertilizers	18	42	.....	682
Totals		681		65,126

¹ For distribution of this tonnage see next page.

MIXED FERTILIZER TONNAGE

Fertilizer ratios and grades recommended for Connecticut

(University of Connecticut Extension Service, Bul. 302, Jan. 1941)

Ratio	Grade	No. of brands	Tonnage
1-1-1	7-7-7	10	1,801
	8-8-8 } 10-10-10 }	3	412
1-1-3	5-5-15	8	824
2-1-1	10-5-5	2	95
2-1-2	6-3-6	8	3,403
	7-3-7 ¹ } 8-4-8 }	3	841
1-2-1	5-10-5 } 8-16-8 }	14	1,029
1-3-1	4-12-4	3	729
	5-15-5 } 8-24-8 }	2	521
1-2-2	4-8-8 } 5-10-10 }	8	2,308
	8-16-16	6	999
	5-8-7 ¹	20	10,091
	4-8-10 ¹ } 8-16-20 ¹ }	11	1,249
1-4-2	3-12-6	4	226
1-4-5	4-16-20	2	199
Total	21	104	24,727

Miscellaneous grades supplying 20 or more units of plant food

Ratio	Grade	No. of brands	Tonnage
.....	8-8-4 } 4-16-4 }	4	403
.....	4-12-6 }		
.....	7-14-21 }		
.....	10-8-6 } 12-6-4 }	3	43
.....	12-4-4 }		
.....	10-6-4 } 8-5-8 }			5	223
.....	6-12-4 }		
.....	5-8-10 } 8-16-14 }	8	859
.....	0-20-20 }		
Total	13			20	1,528

¹ Not recommended grades but widely used in Connecticut.

MIXED FERTILIZER TONNAGE—(Concluded)

Miscellaneous grades supplying less than 20 units of plant food

Ratio	Grade	No. of brands	Tonnage
.....	5-8-6 } 3-4-2 } 4-4-0 } 4-10-0 }	5	424
.....	6-6-5 } 6-7-4 } 7-7-5 } 4-4-2 }	5	262
.....	7-6-6	4	325
.....	6-5-3 } 8-6-2 } 8-6-4 } 10-4-3 }	8	203
.....	8-5-2	5	120
.....	5-3-5 } 5-5-5 }	7	1,270
.....	6-3-7	3	1,263
.....	4-8-4	11	2,218
.....	3-10-4	4	347
.....	4-8-7	7	1,041
.....	6-3-5 } 4-10-4 } 3-10-6 }	8	596
.....	4-8-5 } 5-7-3 } 5-8-5 } 5-10-4 }	4	79
Total	<hr/> 27	<hr/> 71	<hr/> 8,148

I. RAW MATERIALS CHIEFLY VALUABLE FOR NITROGEN**Nitrate of Soda, etc.**

Analyses of official samples of this group are given in Table 1.

Two samples of Old Style Chilean Nitrate of Soda were below guaranty. These goods were received in bulk at the plant of a local distributor where the material was reground and bagged. The contamination with phosphatic material was without doubt accidental in the process of regrinding. A sample of the original shipment sent us by the importers, Chilean Nitrate Sales Corp., from their warehouse in Boston was substantially up to guaranty. We found 15.82 percent nitrogen by the official Devarda method, as compared with 16.04 percent found by the above firm's analysis of the same sample. By the modified Gunning method we found 15.92 percent.

Three unofficial samples were analyzed for purchasers.

Vegetable Meals

Analyses of 22 official samples of vegetable meals are given in Table 2. Guaranties were met or exceeded in all cases.

One hundred and ten unofficial samples were examined for purchasers.

II. RAW MATERIALS CHIEFLY VALUABLE FOR PHOSPHORIC ACID

Nineteen official samples of superphosphate were analyzed.

This material is sold under guaranties ranging from 16 to 47 percent available phosphoric acid. Only two deficiencies were found that exceeded 0.2 percent; all other samples substantially met or exceeded guaranties.

Five samples of superphosphate 20 percent supplied by the Agricultural Adjustment Administration under the Agricultural Conservation Program were examined for the Hartford office by this agency. All samples fully met the guaranty of 20 percent. Three unofficial samples were examined for purchasers.

One official sample of precipitated bone was examined, and three were analyzed for purchasers.

Results of analyses of official samples are given in Table 3.

III. RAW MATERIALS CHIEFLY VALUABLE FOR POTASH

Muriate of potash, sulphate of potash and cottonhull ashes are the chief sources of potash for fertilizer purposes.

Ten official samples of muriate of potash were examined. All substantially met or exceeded guaranties, except 3826 which showed a deficiency of about 1 percent.

Three official samples of sulphate of potash met or exceeded guaranties.

Six official samples of cottonhull ashes ranged from 25.98 percent to 41.88 percent potash. Because of their variable potash content they are usually sold on an analysis basis.

Analyses of official samples in this group are given in Table 4. One sample of sulphate of potash and 23 samples of cottonhull ashes were examined for purchasers.

IV. RAW MATERIALS SUPPLYING NITROGEN AND POTASH

One official sample of Chilean nitrate of soda and potash, Chilean Nitrate Sales Corp., New York, was sampled from stock of Apothecaries Hall Co., Waterbury. It contained 15 percent nitrogen and 14.24 percent potash, 15 percent and 14 percent respectively being guaranteed. Four samples were examined for purchasers.

Four samples of nitrate of potash were analyzed for purchasers. This salt should contain not less than 12 percent nitrogen and not less than 44 percent potash. The samples examined ranged from 12.79 to 13.75 percent nitrogen, and from 43.24 to 46.81 percent potash.

V. RAW MATERIALS SUPPLYING NITROGEN AND PHOSPHORIC ACID

Analyses of four official samples of dry ground fish are given in Table 5. All met the guaranties, and the chlorine contents were low. Fourteen samples submitted by purchasers were examined. These were of the same order of nitrogen, phosphoric acid and chlorine content as the official samples. Chlorine ranged from 0.05 to 0.38 percent and averaged 0.18 percent.

Twenty-three official samples of ground bone were examined and the analyses are given in Table 6. Eight unofficial samples were analyzed.

Ground raw bone is made from bones that have not been steamed under pressure before drying and grinding. It contains from 3.3 to 4.1 percent nitrogen, and 20 to 25 percent phosphoric acid.

Ground steamed bone contains 1.65 to 2.50 percent nitrogen, less than raw bone.

There were no deficiencies in nitrogen. The only two in phosphoric acid, 3799 and 3902, were both well above the guaranty in nitrogen.

Only one official sample of tankage was examined. It was the product of the Consolidated Rendering Co., Boston, and guaranteed 7.40 percent nitrogen and 9.15 percent phosphoric acid, both guaranties being fully met, with 8.31 and 10.30 percent respectively.

Two official samples of Milorganite, product of the Sewerage Commission, Milwaukee, Wis., were analyzed. They contained respectively 5.90

and 6 percent nitrogen (6 percent guaranteed); 2.11 and 2.32 percent available phosphoric acid (2 percent guaranteed), and 2.76 percent total phosphoric acid (2.75 percent guaranteed).

One official sample of Ammo-Phos 11-48 was taken from stock of Apothecaries Hall Co., Waterbury, Conn. It contained 11.21 percent nitrogen and 48.13 percent available phosphoric acid fully meeting the guaranty. One sample of the same product was analyzed for a purchaser. This also was satisfactory.

VI. MIXED FERTILIZERS

Analyses of 176 official samples of mixed fertilizer are given in Table 7. The results are summarized as follows:

Total number of samples	176	
Samples deficient in:		
one item	39	
two items	5	
three items	0	44
Percentage of samples meeting guaranties		75
Total guaranties made		523 ¹
Guaranties not met:		
nitrogen	33	
phosphoric acid	9	
potash	7	49
Percentage of guaranties met		91

Seventy-five percent of the samples substantially met or exceeded guaranties; and 91 percent of individual guaranties were fulfilled. Deficiencies of 0.1 percent or less in nitrogen, and 0.2 percent or less in available phosphoric acid and potash are not included.

Balancing overruns against shortages, commercial deficiencies did not exceed \$1.00 per ton. There was no evidence of inferior sources of nitrogen in the mixtures judged by the usual laboratory methods. Fourteen miscellaneous samples were examined for purchasers.

Special and Home Mixtures

Analyses of special and home mixtures, 68 in number, are given in Table 8. They are largely tobacco formulas.

State Purchases of Fertilizer

Raw materials and mixed goods supplied to state institutions on state purchase orders have been included in our regular inspection for several years. Such brands are subject to registration and the tonnage tax; the only exemptions are in the case of fertilizer sold to the Experiment Station for experimental purposes.

¹ Five samples with only two guaranties.

Samples of fertilizer sold on state purchase orders are indicated in the several tables. They are summarized as follows:

No. of samples	Material	Reference
2	Nitrate of soda	Table 1
2	Cyanamid	" 1
2	Sulphate of ammonia	" 1
1	Cottonseed meal	" 2
2	Superphosphate 20 percent	" 3
2	Muriate of potash	" 4
2	Ground bone	" 6
10	Mixed fertilizers	" 7

Guaranties were fully met or exceeded in all of these samples except for shortages in phosphoric acid in two samples which, however, represented no commercial deficiencies due to overages in other items of plant food.

VII. SHEEP MANURE, ETC.

Analyses of 18 official samples of sheep manure and similar materials are given in Table 9.

VIII. MISCELLANEOUS

Liming materials are not required to be registered in this State, but 28 samples have been examined for purchasers and others, representing for the most part distribution under the Agricultural Conservation Program, the samples being drawn and submitted by representatives of that agency. Analyses are given in Table 10.

Forty-three samples of miscellaneous materials have been examined. Fourteen of these were sewage waste from various city and town sewage disposal plants. Analyses of a few of these materials are given in Table 11 for reference purposes.

Collaboration in the programs of the American Oil Chemists Society and of the F. S. Royster Guano Co. has been continued. The purpose of these programs is to further uniformity in control work, and they are participated in by state, commercial and industrial chemists. In this connection 42 samples of check meals and fertilizers have been analyzed.

TABLE 1. ANALYSES OF NITRATE OF SODA, ETC.

Station no.	Manufacturer or jobber	Sampled from stock of	Per cent nitrogen	
			Found	Guaranteed
Nitrate of Soda				
3642	Arcadian, The American. Allied Chemical & Dye Corp., New York, N. Y.	West Haven: L. T. Frisbie Co.	16.17	16.00
3665 ¹	Arcadian, The American. Allied Chemical & Dye Corp., New York, N. Y.	Middletown: Conn. State Hospital	16.00	16.00
3801 ¹	Arcadian, The American. Allied Chemical & Dye Corp., New York, N. Y.	Cheshire: Connecticut Reformatory	16.00	16.00
3735	Chilean, Champion Brand. Chilean Nitrate Sales Corp., New York, N. Y.	North Haven: Eastern States Farmers' Exchange	16.04	16.00
3888	Chilean, Original Old Style. Chilean Nitrate Sales Corp., New York, N. Y.	Meriden: Church & Morse, Inc.	14.92 ²	16.00
4348	Chilean, Original Old Style. Chilean Nitrate Sales Corp., New York, N. Y.	Guilford: Fred C. Morse & Son	15.60 ³	16.00
Cyanamid				
3829	20.6% 'Aero' Granular. American Cyanamid Co., New York, N. Y.	E. Hartford: Eastern States Farmers' Exchange	20.60	20.60
3963 ¹	20.6% 'Aero' Granular. American Cyanamid Co., New York, N. Y.	Meriden: Conn. School for Boys	20.62	20.60
3967 ¹	20.6% 'Aero' Granular. American Cyanamid Co., New York, N. Y.	Newtown: Fairfield State Hospital	20.66	20.60
Uramon Fert. Compound				
4182	E. I. du Pont de Nemours Co., Wilmington, Del.	Hartford: Olds & Whipple, Inc.	41.90	42.00
Sulphate of Ammonia				
3959	Arcadian. Allied Chemical & Dye Corp., New York, N. Y.	No. Haven: Woodruff Fertilizer Works, Inc.	20.90	20.60
4110	Arcadian. Allied Chemical & Dye Corp., New York, N. Y.	Portland: The Rogers & Hubbard Co.	21.00	20.60
3743	Apothecaries Hall Co., Waterbury, Conn.	East Windsor: Apothecaries Hall Co.	20.52	20.50
3667	Ford. Ford Motor Co., Dearborn, Mich.	Middletown: Ford Motor Co.	21.00	20.80
3907 ¹	Olds & Whipple, Inc., Hartford, Conn.	Storrs: Connecticut State University	20.64	20.56
4116 ¹	Olds & Whipple, Inc., Hartford, Conn.	New Canaan: State Highway Dept.	20.74	20.56

¹ State purchase.² Total phosphoric acid 1.30%. See text p. 15.³ Total phosphoric acid 0.39%. See text p. 15.

TABLE 2. ANALYSES OF CASTOR POMACE, COTTONSEED MEAL, ETC.

Station no.	Manufacturer or jobber	Sampled from stock of	Per cent nitrogen	
			Found	Guaranteed
Castor Pomace				
3950	The American Agricultural Chemical Co., No. Weymouth, Mass.	West Haven: The American Agricultural Chemical Co.	5.72	4.50
3746	Apothecaries Hall Co., Waterbury, Conn.	East Windsor: Apothecaries Hall Co.	5.68	4.50
4396	Apothecaries Hall Co., Waterbury, Conn.	Putnam: Louis Grant ...	5.67	4.50
3807	Armour Fertilizer Works, New York, N. Y.	East Windsor Hill: David Ahern	5.75	4.50
4004	Berkshire, Berkshire Chemical Co., Bridgeport, Conn.	South Windsor: Roderick King	5.95	4.50
3978	E. S. Eastern States Farmers' Exchange, Springfield, Mass.	E. Hartford: Eastern States Farmers' Exchange	5.80	5.00
4342	Spencer Kellogg & Sons, Inc., Buffalo, N. Y.	East Windsor: Apothecaries Hall Co.	5.86	4.52
4255	Old Deerfield Fertilizer Co., Inc., South Deerfield, Mass.	West Suffield: H. Beresford	6.00	5.00
4256	Old Deerfield Fertilizer Co., Inc., South Deerfield, Mass.	Suffield: Frank & Raymond Kent	5.61	5.00
3716	O. & W. Olds & Whipple, Inc., Hartford, Conn.	Hartford: Olds & Whipple, Inc.	5.91	4.50
3662	Hubbard's. The Rogers & Hubbard Co., Portland, Conn.	Portland: The Rogers & Hubbard Co.	5.69	4.50
Cottonseed Meal				
4178	Cow-Eta 43%. Ashcraft-Wilkinson Co., Atlanta, Ga. ...	Simsbury: Cullman Bros., Inc.	7.03	6.88
3977	Argentine Cottonseed-Castor Pomace Mixture. The Berkshire Chemical Co., Bridgeport, Conn.	Bridgeport: The Berkshire Chemical Co.	7.00	6.40
4114 ¹	Consolidated Rendering Co., Boston, Mass.	New Canaan: State Highway Dept.	6.57	6.50
4398	Dixie Prime 41%. Humphreys-Godwin Co., Memphis, Tenn.	Putnam: Dayville Grain & Feed Co.	6.58	6.58
4009	"Lovit 41%." L. B. Lovitt & Co., Memphis, Tenn.	Greenwich: McArdle's Seed Store	7.35	6.56
3981	So. American Cottonseed-Castor Pomace Mixture. Olds & Whipple, Inc., Hartford, Conn.	Hartford: Olds & Whipple, Inc.	6.79	6.08
Linseed Meal				
4177	Archer Brand 32% Old Process. Archer-Daniels-Midland Co., Minneapolis, Minn. ...	Simsbury: Cullman Bros., Inc. ...	5.28	5.00

¹ State purchase.

TABLE 2. ANALYSES OF CASTOR POMACE, COTTONSEED MEAL, ETC.—(Concluded)

Station no.	Manufacturer or jobber	Sampled from stock of	Per cent nitrogen	
			Found	Guaranteed
Soybean Meal				
4343	Archer Brand 44%. Archer-Daniels-Midland Co., Minneapolis, Minn.	East Windsor: Apothecaries Hall Co.	7.32	7.00
4269	Central Star Brand. Central Soya Co., Inc., Fort Wayne, Ind.	North Bloomfield: Consolidated Cigar Corp. ...	7.29	7.04
4183	Drackett 44%. The Drackett Co., Cincinnati, Ohio	So. Windsor: J. E. Shepard	7.13	7.04
4117	Glidden 4 Hi Brand 44%. The Glidden Co., Chicago, Ill. ...	Darien: The Ring's End Fuel Co.	7.36	7.00

TABLE 3. ANALYSES OF SUPERPHOSPHATE, ETC.

Station no.	Manufacturer or wholesale dealer	Dealer or purchaser	Per cent phosphoric acid			
			Citrate-insoluble	Total	"Available"	
					Found	Guaranteed
	Superphosphate					
3666 ¹	AA 20%. The American Agricultural Chemical Co., No. Weymouth, Mass.	Middletown: Long Lane Farm ...	1.32	21.91	20.59	20.00
3798 ¹	AA 20%. The American Agricultural Chemical Co., No. Weymouth, Mass.	Cheshire: Connecticut Reformatory	1.61	22.13	20.52	20.00
4058	AA 20%. The American Agricultural Chemical Co., No. Weymouth, Mass.	West Haven: The American Agricultural Chemical Co.	1.11	20.70	19.59	20.00
3906	18% Normal. The American Agricultural Chemical Co., No. Weymouth, Mass.	Willimantic: W. D. Grant, Inc. ...	1.09	19.47	18.38	18.00
4155	16%. Apothecaries Hall Co., Waterbury, Conn.	East Windsor: Apothecaries Hall Co.	0.30	18.43	18.13	16.00
3756	18%. Apothecaries Hall Co., Waterbury, Conn.	East Windsor: Apothecaries Hall Co.	0.85	19.53	18.68	18.00
3757	20%. Apothecaries Hall Co., Waterbury, Conn.	East Windsor: Apothecaries Hall Co.	1.32	21.90	20.58	20.00
3827	Armour's Big Crop 20%. Armour Fertilizer Works, New York, N. Y.	East Windsor Hill: David Ahern ..	1.14	21.01	19.87	20.00
3850	Baugh's 20%. The Baugh & Sons Co., Baltimore, Md.	Hamden: The Hamden Lehigh Coal Co.	0.30	20.57	20.27	20.00
3645	16%. Consolidated Rendering Co., Boston, Mass.	West Haven: L. T. Frisbie Co. ...	0.11	17.03	16.92	16.00
3643	20%. Consolidated Rendering Co., Boston, Mass.	West Haven: L. T. Frisbie Co. ...	0.05	21.09	21.04	20.00

3713	Davco Granulated 20%. Davison Chemical Co., Baltimore, Md.	Bridgeport: Berkshire Chemical Co.	0.65	22.02	21.37	20.00
3734	Eastern States 20%. Eastern States Farmers' Exchange, Springfield, Mass.	No. Haven: Eastern States Farmers' Exchange	0.42	21.70	21.28	20.00
3714	O & W 20%. Olds & Whipple, Inc., Hartford, Conn.	Hartford: Olds & Whipple, Inc. ...	0.94	21.60	20.66	20.00
3725	O & W 47%. Olds & Whipple, Inc., Hartford, Conn.	Hartford: Olds & Whipple, Inc. ...	0.60	48.56	47.96	47.00
4148	Hubbard's 16%. The Rogers & Hubbard Co., Portland, Conn.	New London: The Aben Hardware Co.	0.07	17.44	17.37	16.00
3661	Hubbard's 20%. The Rogers & Hubbard Co., Portland, Conn.	Portland: The Rogers & Hubbard Co.	0.65	20.66	20.01	20.00
3926	Hubbard's Triple 47%. The Rogers & Hubbard Co., Portland, Conn.	Portland: The Rogers & Hubbard Co.	0.62	48.72	48.10	47.00
3742	Woodruff's 20%. The Woodruff Fertilizer Works, Inc., No. Haven, Conn.	No. Haven: The Woodruff Fertilizer Works, Inc.	0.45	20.02	19.57	20.00
Precipitated Bone						
4261	The Woodruff Fertilizer Works, Inc., No. Haven, Conn.	No. Haven: The Woodruff Fertilizer Works, Inc.	0.13	38.64	38.51	38.00

¹ State purchase.

Analyses

TABLE 4. ANALYSES OF POTASH SALTS, ETC.

Station no.	Manufacturer and brand	Sampled from stock of	Per cent potash	
			Found	Guaranteed
Muriate of Potash				
3951	50%. The American Agricultural Chemical Co., No. Weymouth, Mass.	West Haven: The American Agricultural Chemical Co.	50.80	50.00
3908 ¹	Trona. American Potash & Chemical Co., New York, N. Y.	Storrs: Connecticut State University	60.58	60.00
3965 ¹	Trona. American Potash & Chemical Co., New York, N. Y.	Newtown: The Fairfield State Hospital	60.28	60.00
3744	50%. Apothecaries Hall Co., Waterbury, Conn.	East Windsor: Apothecaries Hall Co.	52.64	50.00
3745	60%. Apothecaries Hall Co., Waterbury, Conn.	East Windsor: Apothecaries Hall Co.	61.00	60.00
3826	50%. Armour Fertilizer Works, New York, N. Y.	East Windsor Hill: David Ahern	48.98	50.00
3846	50%. The Baugh & Sons Co., Baltimore, Md.	Hamden: The Hamden Lehigh Coal Co.	50.26	50.00
3644	60%. Consolidated Rendering Co., Boston, Mass. ...	West Haven: L. T. Frisbie Co.	61.38	60.00
4341	E. S. 60%. Eastern States Farmers' Exchange, Springfield, Mass.	Willimantic: Eastern States Farmers' Exchange	60.46	60.00
3663	Hubbard's 60%. The Rogers & Hubbard Co., Portland, Conn.	Portland: The Rogers & Hubbard Co.	59.76	60.00
Sulphate of Potash				
3753	Apothecaries Hall Co., Waterbury, Conn.	East Windsor: Apothecaries Hall Co.	48.84	48.00
4191	Double Sulphate of Potash Magnesium. Old Deerfield Fertilizer Co., So. Deerfield, Mass.	Hazardville: L. B. Haas & Co., Inc.	22.20	22.00
3723	O & W High Grade 48%. Olds & Whipple, Inc., Hartford, Conn.	Hartford: Olds & Whipple, Inc.	49.08	48.00
Cottonhull Ashes				
4192	Kireal. Ted Alkire, Lubbock, Texas	Hazardville: L. B. Haas & Co., Inc.	35.95	33.00
4174	Lot N. Apothecaries Hall Co., Waterbury, Conn. ...	East Windsor: Apothecaries Hall Co.	41.88	.....²
4270	Old Deerfield Fertilizer Co., Inc., So. Deerfield, Mass.	Enfield: Consolidated Cigar Corp.	30.28	.....²
3982	O & W. Olds & Whipple, Inc., Hartford, Conn.	Hartford: Olds & Whipple, Inc.	37.89	.....²
3664	The Rogers & Hubbard Co., Portland, Conn.	Portland: The Rogers & Hubbard Co.	25.98	.....²
4347	Hubbard's. The Rogers & Hubbard Co., Portland, Conn.	Portland: The Rogers & Hubbard Co.	35.88	.....²

¹ State purchase.² Unit basis.

TABLE 5. ANALYSES OF DRY GROUND FISH, ETC.

Station no.	Manufacturer and wholesale dealer	Sampled from stock of	Per cent nitrogen		Per cent phosphoric acid	
			Total found	Total guaranteed	Total found	Total guaranteed
3752 ¹	Apothecaries Hall Co., Waterbury, Conn. . .	East Windsor: Apothecaries Hall Co.	9.80	9.00	7.12	5.00
3976 ²	Berkshire Menhaden. The Berkshire Chemical Co., Bridgeport, Conn.	Bridgeport: The Bridgeport Chemical Co.	9.92	9.00	6.72	5.00
3726 ³	Olds & Whipple. Olds & Whipple, Inc., Hartford, Conn.	Hartford: Olds & Whipple, Inc.	9.53	9.00	7.71	5.00
4346 ⁴	Hubbard's. The Rogers & Hubbard Co., Portland, Conn.	Portland: The Rogers & Hubbard Co.	9.59	9.46	6.50	5.00

¹ Chlorine 0.30 per cent.
² Chlorine 0.11 per cent.
³ Chlorine 0.18 per cent.
⁴ Chlorine 0.30 per cent.

Analyses

TABLE 6. ANALYSES OF GROUND BONE

Station no.	Manufacturer and brand	Sampled from stock of	Per cent nitrogen		Per cent phosphoric acid		Mechanical analysis (in percentage)	
			Total found	Total guaranteed	Total found	Total guaranteed	Finer than 1/50 inch	Coarser than 1/50 inch
3704 ¹	Fine Ground. The American Agricultural Chemical Co., No. Weymouth, Mass. . .	West Haven: The American Agricultural Chemical Co., No. Weymouth, Mass.	2.62	2.47	23.42	23.00	59.5	40.5
3702 ²	Fine Ground. The American Agricultural Chemical Co., No. Weymouth, Mass. . .	Middletown: Long Lane Farm	2.56	2.47	23.28	23.00	65.0	35.0
3799 ³	Fine Ground. The American Agricultural Chemical Co., No. Weymouth, Mass. . .	Cheshire: Connecticut Reformatory	3.93	2.47	20.94	23.00	37.7	62.3
4173	2.25%. Apothecaries Hall Co., Waterbury, Conn.	East Windsor: Apothecaries Hall Co.	2.80	2.25	25.20	22.00	66.6	33.4
3751	3.50%. Apothecaries Hall Co., Waterbury, Conn.	East Windsor: Apothecaries Hall Co.	3.62	3.50	23.49	20.00	35.0	65.0
3806	Armour's. Armour Fertilizer Works, New York, N. Y.	East Windsor Hill: David Ahern	3.00	2.40	24.41	23.00	67.7	32.3
3847	Baugh's, Warranted Pure. The Baugh & Sons Co., Baltimore, Md.	Hamden: Hamden Lehigh Coal Co.	4.04	3.70	21.81	20.50	41.6	58.4
3848	Baugh's Pure Steamed. The Baugh & Sons Co., Baltimore, Md.	Hamden: Hamden Lehigh Coal Co.	3.03	2.47	24.30	23.00	45.8	54.2
3705	Berkshire Fine Ground. Berkshire Chemical Co., Bridgeport, Conn.	Bridgeport: Berkshire Chemical Co.	2.88	2.05	26.50	25.00	56.7	43.3
4012	Berkshire Raw Bone. Berkshire Chemical Co., Bridgeport, Conn.	Cos Cob: Belmont Feed Co.	3.75	3.70	21.82	20.60	36.8	63.2
3902 ⁴	Corenco. Consolidated Rendering Co., Boston, Mass.	Danielson: Young Bros. Co.	2.98	2.47	21.71	23.00	54.5	45.5
3784	Corenco Raw Bone. Consolidated Rendering Co., Boston, Mass.	New Haven: The Frank S. Platt Co.	4.06	3.70	23.30	20.00	27.7	72.3

3732	Eastern States Ground Steamed. Eastern States Farmers' Exchange, Springfield, Mass.	No. Haven. Eastern States Farmers' Exchange	2.73	2.30	26.63	23.00	73.0	27.0
4008	Faesy & Besthoff, Inc., New York, N. Y.	Greenwich: McArdle's Seed Store	2.48	2.25	28.32	27.00	61.7	38.3
4107	G & O. Goulard & Olena, Inc., New York, N. Y.	New Britain: Rackliffe Bros. Co.	2.83	2.40	23.81	22.75	60.7	39.3
4264	Hoffman's. A. H. Hoffman, Inc., Lancaster, Pa.	New Haven: Sears & Roebuck Co.	3.88	3.70	21.88	20.00	35.7	64.3
3724	Olds & Whipple. Olds & Whipple, Inc., Hartford, Conn.	Hartford: Olds & Whipple, Inc.	2.50	2.47	26.80	22.00	57.6	42.4
4109	Hubbard's Fine Ground. The Rogers & Hubbard Co., Portland, Conn.	Portland: The Rogers & Hubbard Co.	2.43	2.47	29.31	23.00	63.6	36.4
4108	Hubbard's Raw Knuckle Bone Flour. The Rogers & Hubbard Co., Portland, Conn.	Portland: The Rogers & Hubbard Co.	4.10	3.70	24.80	24.70	77.2	22.8
3694	Hubbard's Strictly Pure. The Rogers & Hubbard Co., Portland, Conn.	Portland: The Rogers & Hubbard Co.	4.00	3.70	23.91	20.00	59.7	40.3
3835	Sawco. Stumpp & Walter Co., New York, N. Y.	Stamford: Stumpp & Walter Co.	3.29	2.47	24.86	24.00	53.9	46.1
4227	Summer's Fine Ground. Summers Fertilizer Co., Inc., Baltimore, Md.	Bridgeport: Brooklawn Grain & Feed Co.	2.58	2.47	24.34	22.88	62.5	37.5
4118	Swift & Co. Fertilizer Works, Baltimore, Md.	Danbury: Danbury Hardware Co.	2.54	2.47	26.20	23.00	57.5	42.5

¹ Chlorine 1.92 per cent.

² State purchase; chlorine 2.46 per cent.

³ State purchase.

⁴ Chlorine 2.74 per cent.

TABLE 7. ANALYSES OF MIXED FERTILIZER

Station no.	Manufacturer and brand	Place of sampling
The Acme Guano Co., Baltimore, Md.		
4064	Acme 3-12-6	Suffield
3700	Acme 4-8-4	Middletown
4268	Acme Vitaflor 4-8-5	Bloomfield
3701	Acme 5-8-7	Middletown
3699	Acme 7-7-7	Middletown
The American Agricultural Chemical Co., North Weymouth, Mass.		
3691	AA Market Garden Fertilizer 4-8-4	West Haven
3949	AA Potato and Root Crop Fertilizer 4-8-10	West Haven
3952	AA Tobacco Starter 5-5-15	West Haven
3945	AA Top Dresser 7-7-7	West Haven
3905	Agrico for Aroostook with 10% Potash 5-8-10	Willimantic
4636	Agrico for Aroostook with 10% Potash 5-8-10	West Haven
3688	Agrico for Corn 3-10-6	West Haven
3689	Agrico for Corn 4-12-6	West Haven
3948	Agrico Country Club Fertilizer 8-6-2	West Haven
3693	Agrico for Fruit 8-8-4	West Haven
3943	Agrico for Gardens 4-10-4	West Haven
3884	Agrico for Lawns, Trees and Shrubs 7-7-5	Meriden
3946	Agrico for New England 4-8-10	West Haven
3690	Agrico for Potatoes and Vegetables 5-8-7	West Haven
3692	Agrico for Seeding Down 4-16-20	West Haven
3947	Agrico for Tobacco 6-3-6	West Haven
3944	Agrico for Top Dressing 7-7-7	West Haven
3687	Agrico for Truck 5-10-5	West Haven
Apothecaries Hall Co., Waterbury, Conn.		
3781	Liberty Corn Fertilizer 3-12-6	East Windsor
3780	Liberty Green-Gro 6-5-3	East Windsor
3760	Liberty High Grade Corn Fertilizer 4-12-4	East Windsor
3758	Liberty High Grade Market Gardeners 5-8-7	East Windsor
4168	Liberty High Grade Tobacco Manure 7-3-7	East Windsor
3750	Liberty High Grade Vegetable 5-10-10	East Windsor
3755	Liberty Market Gardeners Special 4-8-4	East Windsor
3759	Liberty Potato and General Crops 4-8-10	East Windsor
3789	Liberty Special Fertilizer for Fruit and Grass 7-7-7	New Haven
4167	Liberty Special Fertilizer for Lawns 4-4-0	East Windsor
4171	Liberty Tobacco Mixture 6-3-6	East Windsor
4170	Liberty Tobacco Mixture 6-3-7	East Windsor
4156	Liberty Tobacco Starter 4-10-0	East Windsor
4169	Liberty Tobacco Starter with Potash 5-5-15	East Windsor
3968	Liberty Top Dresser for Grass and Grain 8-8-8	Stepney
4172	Liberty Truck Garden and Onion 5-10-5	East Windsor

CONTAINING NITROGEN, PHOSPHORIC ACID AND POTASH

Per cent nitrogen					Per cent phosphoric acid			Per cent potash		Station no.
In nitrates	In ammonia	Organic water-soluble	Organic water-insoluble	Total	Citrate-insoluble	Total	So-called "available"	As muriate	Total	
0.21	2.50	0.00	0.50	3.21	1.61	13.89	12.28	3.11	6.43	4064
0.58	2.46	0.14	0.70	3.88	3.70	11.92	8.22	2.87	4.63	3700
0.00	1.40	0.62	2.51	4.53	1.51	14.39	12.88	5.29	5.29	4268
0.00	4.16	0.22	0.81	5.19	0.39	9.23	8.84	3.38	7.13	3701
0.00	5.24	0.31	0.57	6.12	0.65	9.19	8.54	3.89	6.80	3699
0.62	2.88	0.18	0.39	4.07	0.69	8.80	8.11	4.24	4.24	3691
0.40	3.06	0.26	0.30	4.02	0.65	8.90	8.25	10.12	10.12	3949
1.25	1.44	0.36	1.84	4.89	0.77	6.79	6.02	0.96	15.29	3952
0.57	5.76	0.00	0.36	6.69	0.39	7.35	6.96	7.02	7.02	3945
0.66	3.72	0.14	0.36	4.88	0.95	8.65	7.70	10.55	10.55	3905
0.73	3.66	0.30	0.24	4.93	0.60	9.10	8.50	9.77	9.77	4636
0.23	2.12	0.36	0.29	3.00	0.77	10.97	10.20	5.90	5.90	3688
0.37	3.00	0.26	0.41	4.04	0.98	13.20	12.22	6.04	6.04	3689
1.03	3.10	0.90	2.97	8.00	0.61	7.06	6.45	2.50	2.50	3948
0.51	6.94	0.06	0.45	7.96	0.55	8.83	8.28	4.26	4.26	3693
0.16	2.78	0.18	0.98	4.10	0.97	11.38	10.41	4.07	4.07	3943
0.38	4.50	0.28	1.79	6.95	0.62	7.91	7.29	5.44	5.44	3884
0.41	3.00	0.18	0.42	4.01	0.75	8.86	8.11	9.88	9.88	3946
0.50	3.84	0.22	0.36	4.92	0.67	8.61	7.94	7.08	7.08	3690
1.02	2.86	0.04	0.16	4.08	0.86	17.59	16.73	19.78	19.78	3692
0.73	0.08	1.66	3.57	6.04	0.35	3.86	3.51	0.44	6.11	3947
0.46	5.92	0.06	0.36	6.80	0.46	7.33	6.87	7.07	7.07	3944
0.66	3.92	0.16	0.39	5.13	0.93	11.03	10.10	5.01	5.01	3687
0.55	2.06	0.56	0.65	3.82	0.94	12.55	11.61	6.95	6.95	3781
0.00	1.98	1.67	2.89	6.54	0.64	6.64	6.00	4.11	5.25	3780
0.00	3.20	0.46	0.84	4.50	0.96	12.93	11.97	5.31	5.31	3760
0.55	3.64	0.06	0.93	5.18	0.37	8.82	8.45	7.21	7.21	3758
1.46	0.26	2.38	2.88	6.98	0.18	4.80	4.62	0.74	8.14	4168
0.57	3.88	0.06	0.70	5.21	0.45	10.74	10.29	10.95	10.95	3750
0.39	2.66	0.34	0.75	4.14	0.51	8.67	8.16	4.65	4.65	3755
0.39	3.00	0.32	0.55	4.26	0.26	8.84	8.58	10.06	10.06	3759
0.50	6.00	0.06	0.81	7.37	0.24	7.89	7.65	7.63	7.63	3789
0.00	0.00	0.34	4.64	4.98	2.78	9.61	6.83	.....	.....	4167
1.40	0.20	2.14	2.76	6.50	0.14	5.29	5.15	3.99	7.11	4171
1.21	0.16	1.14	3.43	5.94	0.19	4.49	4.30	0.64	9.15	4170
0.13	2.88	0.52	1.47	5.00	0.87	11.32	10.45	.....	.....	4156
1.40	0.16	1.48	1.93	4.97	0.19	5.72	5.53	1.01	19.09	4169
0.47	6.54	0.22	0.81	8.04	0.25	8.97	8.72	8.80	8.80	3968
1.18	2.84	0.08	0.75	4.85	0.30	9.91	9.61	8.55	8.55	4172

TABLE 7. ANALYSES OF MIXED FERTILIZER

Station no.	Manufacturer and brand	Place of sampling
Armour Fertilizer Works, 120 Broadway, New York, N. Y.		
3804	Armour's Big Crop Fertilizer 4-8-4	East Windsor Hill
4067	Armour's Big Crop Fertilizer 4-8-10	East Windsor Hill
3825	Armour's Big Crop Fertilizer 5-8-7	East Windsor Hill
3805	Armour's Big Crop Fertilizer 5-10-10	East Windsor Hill
3828	Armour's Big Crop Fertilizer 7-7-7	East Windsor Hill
3803	Armour's Big Crop Tobacco Special 5-3-5	East Windsor Hill
4065	Armour's Big Crop Tobacco Special 6-3-6	East Windsor Hill
4344	Armour's Big Crop Tobacco Special 7-3-7	East Windsor Hill
4066	Armour's Big Crop Tobacco Starter 5-5-15	East Windsor Hill
3808	Armour's Garden and Lawn Fertilizer 4-8-8	East Windsor Hill
Associated Seed Growers, Inc., New Haven, Conn.		
3957	Clark's Tip Top 5-8-7	North Haven
F. A. Bartlett Tree Expert Co., Stamford, Conn.		
3842	Bartlett Green Tree Food 6-7-4	Stamford
The Baugh & Sons Co., Baltimore, Md.		
3878	Baugh's Fish Bone and Potash Mixture 4-8-4	Hamden
3877	Baugh's Old Dependable Potato Grower 4-8-10	Hamden
3845	Baugh's Perfection Brand 3-10-6	Hamden
3880	Baugh's Peruvian Guano Substitute 5-8-7	Hamden
3849	Baugh's Premium Plant Food-Soil Builder 5-10-5	Hamden
3881	Baugh's Special Top Dresser 7-6-6	Hamden
4267	Baugh's Special Top Dresser 7-6-6	Hamden
3879	Baugh's Truckers Favorite 5-10-5	Hamden
4266	Baugh's Truckers Favorite 5-10-5	Hamden
The Berkshire Chemical Co., Bridgeport, Conn.		
3709	Berkshire Fertilizer 4-8-4	Bridgeport
4199	Berkshire Fertilizer 4-8-7	Bridgeport
3975	Berkshire Fertilizer 4-8-10	Bridgeport
3974	Berkshire Fertilizer 4-12-4	Bridgeport
3708	Berkshire Fertilizer 5-8-7	Bridgeport
4200	Berkshire Fertilizer 5-8-10	Bridgeport
4626	Berkshire Fertilizer 5-8-10	Bridgeport
3710	Berkshire Fertilizer 5-10-5	Bridgeport
3711	Berkshire Fertilizer 7-7-7	Bridgeport
3966 ¹	Berkshire Fertilizer 8-16-8	Newtown
3964 ¹	Berkshire Fertilizer 8-16-16	Newtown

¹ State purchase.

CONTAINING NITROGEN, PHOSPHORIC ACID AND POTASH—(Continued)

In nitrates	Per cent nitrogen				Per cent phosphoric acid			Per cent potash		Station no.
	In ammonia	Organic water-soluble	Organic water-insoluble	Total	Citrate-insoluble	Total	So-called "available"	As muriate	Total	
0.22	2.56	0.60	0.44	3.82	0.84	8.36	7.52	4.34	4.34	3804
0.76	2.74	0.06	0.44	4.00	0.62	8.60	7.98	10.29	10.29	4067
0.61	3.42	0.30	0.75	5.08	0.35	8.53	8.18	7.00	7.00	3825
0.52	3.76	0.12	0.56	4.96	0.62	9.91	9.29	10.46	10.46	3805
0.44	5.86	0.14	0.56	7.00	0.52	7.12	6.60	7.48	7.48	3828
1.05	0.14	1.30	2.18	4.67	0.31	3.88	3.57	0.40	5.60	3803
0.92	0.26	1.46	3.21	5.85	0.23	3.65	3.42	0.44	6.54	4065
1.10	0.24	2.12	3.20	6.66	0.24	3.90	3.66	0.58	7.83	4344
1.41	0.44	1.88	1.06	4.79	0.54	6.00	5.46	1.01	15.37	4066
0.62	2.50	0.18	0.70	4.00	0.56	8.42	7.86	7.97	7.97	3808
0.92	2.96	0.26	0.84	4.98	0.40	8.56	8.16	6.98	6.98	3957
0.00	5.60	0.06	0.95	6.61	2.46	10.78	8.32	5.21	5.21	3842
0.20	2.92	0.39	0.23	3.74	0.65	8.21	7.56	4.18	4.18	3878
0.36	3.14	0.16	0.32	3.98	0.85	9.02	8.17	10.01	10.01	3877
0.00	2.38	0.49	0.31	3.18	0.81	10.74	9.93	6.53	6.53	3845
0.56	3.92	0.06	0.38	4.92	0.66	8.46	7.80	7.33	7.33	3880
0.30	3.28	1.08	0.41	5.07	1.19	11.41	10.22	5.52	5.52	3849
2.85	3.20	0.14	0.34	6.53	0.48	7.16	6.68	6.61	6.61	3881
2.96	3.18	0.04	0.32	6.50	0.64	7.39	6.75	6.49	6.49	4267
0.28	3.58	0.36	0.22	4.44	0.88	11.14	10.26	5.81	5.81	3879
0.40	3.82	0.36	0.27	4.85	0.86	11.37	10.51	5.10	5.10	4266
0.00	3.00	1.28	0.26	4.54	0.36	8.87	8.51	4.59	4.59	3709
0.18	2.92	0.72	0.18	4.00	0.31	8.53	8.22	7.38	7.38	4199
0.14	2.82	1.00	0.26	4.22	0.51	9.05	8.54	10.81	10.81	3975
0.00	2.76	1.19	0.23	4.18	0.55	12.91	12.36	4.28	4.28	3974
0.16	3.50	1.10	0.23	4.99	0.28	8.61	8.33	7.53	7.53	3708
0.00	4.00	0.64	0.36	5.00	1.04	9.31	8.27	8.69	9.17	4200
0.00	3.94	0.62	0.32	4.88	0.86	9.03	8.17	9.06	9.06	4626
1.05	3.58	0.18	0.22	5.03	0.45	10.79	10.34	5.31	5.31	3710
0.00	5.90	0.99	0.29	7.18	0.46	7.86	7.40	7.02	7.02	3711
0.00	7.00	0.79	0.21	8.00	0.45	17.75	17.30	8.28	8.28	3966
0.13	6.52	1.20	0.31	8.16	0.22	15.41	15.19	16.30	16.30	3964

TABLE 7. ANALYSES OF MIXED FERTILIZER

Station no.	Manufacturer and brand	Place of sampling
3973	Berkshire Golf Green Fertilizer 8-5-2	Bridgeport
3712	Berkshire Fertilizer Grass Special 6-6-5	Bridgeport
4201	Berkshire Fertilizer Tobacco Starter 5-5-15	Bridgeport
3972	Berkshire Fertilizer Tobacco 6-3-6	Bridgeport
Connecticut Toro Co., 77 Wellington St., Hartford, Conn.		
4181	Netco Special 8-6-2	Hartford
Consolidated Rendering Co., 178 Atlantic Ave., Boston, Mass.		
3802 ¹	0-20-20	Cheshire
3941	Corenco 3-10-4 Animal Brand	West Haven
3684	Corenco 4-8-4 Corn and Vegetable	West Haven
3932	Corenco 4-8-7 Market Garden	West Haven
3900	Corenco 4-8-10 Potato Grower	Danielson
3686	Corenco 5-5-5 Lawn and Shrub	West Haven
4059	Corenco 5-5-15 Tobacco Starter	West Haven
3685	Corenco 5-8-7 General Crop Manure	West Haven
3931	Corenco 5-8-10 Peerless Potato	West Haven
3683	Corenco 5-10-5 Super Truck	West Haven
3942	Corenco 6-3-6 Special Tobacco Grower	West Haven
3682	Corenco 7-7-7 Complete Fruit Top Dressing	West Haven
Eastern States Farmers' Exchange, Springfield, Mass.		
3736	Eastern States 0-20-20	North Haven
3733	Eastern States 4-16-20	North Haven
4153	Eastern States 5-5-15 Tobacco	East Hartford
3833	Eastern States 5-10-5	East Hartford
3737	Eastern States 5-10-10	North Haven
3832	Eastern States 5-15-5	East Hartford
3830	Eastern States 7-7-7	East Hartford
4061	Eastern States 7-14-21	Wapping
4154	Eastern States 8-4-8 Tobacco	East Hartford
3961	Eastern States 8-16-8	Northford
3903	Eastern States 8-16-16	Danielson
4062	Eastern States 8-16-16 LCS (Low Chlorine Special)	Wapping
3979	Eastern States 8-16-16 SM (Soluble Magnesium)	East Hartford
3831	Eastern States 8-24-8	East Hartford
4271	Eastern States 10-5-5	Bethel
4068	Eastern States 10-10-10	North Haven
General Chemical Co., Mechling Bros. Chemicals Div., Camden, N. J.		
4202	Veget-Aid 5-10-5	Bridgeport

¹ State purchase.

CONTAINING NITROGEN, PHOSPHORIC ACID AND POTASH—(Continued)

In nitrates	Per cent nitrogen				Per cent phosphoric acid			Per cent potash		Station no.
	In ammonia	Organic water-soluble	Organic water-insoluble	Total	Citrate-insoluble	Total	So-called "available"	As muriate	Total	
0.45	2.34	2.52	3.19	7.50	0.65	6.34	5.69	1.62	2.50	3973
0.00	4.88	0.93	0.20	6.01	0.14	6.59	6.45	5.23	5.23	3712
2.73	0.16	0.46	1.95	5.30	0.40	6.88	6.48	0.80	14.00	4201
0.58	0.38	1.60	3.44	6.00	0.31	3.76	3.45	0.68	6.47	3972
0.53	4.84	0.78	2.12	8.27	0.66	7.11	6.45	3.22	3.22	4181
...	...	...	...	...	0.25	21.00	20.75	20.80	20.80	3802
0.71	1.62	0.70	0.19	3.22	0.56	10.67	10.11	4.28	4.28	3941
0.98	2.56	0.42	0.11	4.07	0.25	8.39	8.14	4.17	4.17	3684
0.91	2.40	0.56	0.18	4.05	0.25	8.40	8.15	7.05	7.05	3932
0.86	2.72	0.52	0.06	4.16	0.40	8.45	8.05	10.14	10.14	3900
0.97	1.66	0.40	2.03	5.06	0.18	5.96	5.78	5.86	5.86	3686
1.62	0.20	1.28	2.08	5.18	0.30	5.80	5.50	0.94	15.18	4059
0.94	3.50	0.50	0.14	5.08	0.15	8.40	8.25	7.07	7.07	3685
0.88	3.36	0.40	0.07	4.71	0.25	9.51	9.26	9.71	9.71	3931
0.77	3.60	0.60	0.07	5.04	0.11	10.27	10.16	5.25	5.25	3683
0.56	0.34	2.06	2.85	5.81	0.25	4.57	4.32	0.82	6.85	3942
1.09	5.48	0.52	0.09	7.18	0.25	7.09	6.84	7.26	7.26	3682
0.95	3.06	0.62	0.25	4.88	0.58	19.71	19.13	20.42	20.42	3736
0.19	0.24	2.16	2.39	4.98	0.67	16.89	16.22	20.36	20.36	3733
1.02	3.92	0.00	0.20	5.14	0.10	5.15	5.05	0.98	16.71	4153
0.59	4.08	0.28	0.24	5.19	0.49	10.60	10.11	5.78	5.78	3833
0.00	3.96	1.17	0.25	5.38	0.77	11.21	10.44	10.37	10.37	3737
1.57	5.30	0.24	0.23	7.34	0.60	16.26	15.66	5.91	5.91	3832
1.01	5.50	0.00	0.47	6.98	0.23	7.66	7.43	7.10	7.10	3830
0.40	0.22	4.46	3.28	8.36	0.26	14.19	13.93	21.28	21.28	4061
1.53	6.42	0.06	0.18	8.19	0.10	4.11	4.01	0.51	8.64	4154
0.96	6.64	0.22	0.21	8.03	0.34	16.81	16.47	8.57	8.57	3961
0.60	6.56	0.28	0.43	7.87	0.40	16.76	16.36	16.28	16.28	3904
0.89	6.52	0.32	0.44	8.17	0.24	15.51	15.27	1.40	17.60	4062
0.15	6.78	1.22	0.29	8.44	0.59	16.97	16.38	16.54	16.54	3979
2.13	7.48	0.08	0.23	9.92	0.35	24.05	23.70	8.95	8.95	3831
2.50	6.96	0.20	0.21	9.87	0.12	5.77	5.65	5.30	6.16	4271
0.23	3.22	0.92	0.99	5.36	0.19	11.46	11.27	10.06	10.06	4068
0.23	3.22	0.92	0.99	5.36	0.96	11.88	10.92	4.89	5.78	4202

TABLE 7. ANALYSES OF MIXED FERTILIZER

Station no.	Manufacturer and brand	Place of sampling
	Goulard & Olena, Inc., 140 Liberty St., New York, N. Y.	
4105	G & O No Filler Fertilizer 5-8-5	New Britain
4106	J. B. Greens Fertilizer 10-4-3	New Britain
	Killen & Hall, Inc., Darien, Conn.	
3843	Killen and Hall Tree Food 6-6-5	Darien
	McArdle's Seed Store, Greenwich, Conn.	
4007	McArdle's Special Fertilizer 6-5-3	Greenwich
	Old Deerfield Fertilizer Co., Inc., South Deerfield, Mass.	
4258	Old Deerfield 4-8-7	Somers
4254	Old Deerfield 5-8-7	West Suffield
4253	Old Deerfield 6-3-7 Tobacco	West Suffield
	Olds & Whipple, Inc. Hartford, Conn.	
3980	O & W 3-10-4 Corn Special Fertilizer	Hartford
4119 ¹	O & W 3-12-6 Fertilizer	Middletown
4149 ¹	O & W 3-12-6	Niantic
3731	O & W 4-8-4 Market Garden Fertilizer	Hartford
3715	O & W 4-8-7 Potato and General Purpose Fertilizer	Hartford
4151	O & W 5-3-5 Complete Tobacco Fertilizer	Hartford
4193	O & W 5-3-5 Complete Tobacco Fertilizer (Potash derived from Cottonhull Ashes)	Hazardville
4150	O & W 5-5-15 High Grade Tobacco Starter and Potash Compound	Hartford
3679 ¹	O & W 5-8-7 Potato and General Purpose Fertilizer	Portland
3728	O & W 5-8-7 Potato and General Purpose Fertilizer	Hartford
3962 ¹	O & W 5-8-7 Potato and General Purpose Fertilizer	Meriden
3727	O & W 5-10-10 Fertilizer	Hartford
3791 ¹	O & W 5-10-10 Fertilizer	Cheshire
4120 ¹	O & W 5-10-10 Fertilizer	Middletown
4152	O & W 6-3-5 Blue Label Tobacco Fertilizer (Potash derived from Cottonhull Ashes)	Hartford
3730	O & W 6-3-6 Blue Label Tobacco Fertilizer	Hartford
3983	O & W 6-3-6 Blue Label Tobacco Fertilizer (Potash derived from Cottonhull Ashes)	Hartford
3729	O & W 7-7-7 Top Dressing and Grass Fertilizer ..	Hartford
3800 ¹	O & W 7-7-7 Top Dressing and Grass Fertilizer ..	Cheshire

¹ State purchase.

CONTAINING NITROGEN, PHOSPHORIC ACID AND POTASH—(Continued)

In nitrates	Per cent nitrogen				Per cent phosphoric acid			Per cent potash		Station no.
	In ammonia	Organic water-soluble	Organic water-insoluble	Total	Citrate-insoluble	Total	So-called "available"	As muriate	Total	
0.36	4.22	0.18	0.48	5.24	0.73	10.04	9.31	5.50	5.50	4105
2.09	0.34	1.90	5.20	9.53	1.30	6.97	5.67	4.24	4.24	4106
0.24	4.78	0.54	0.29	5.85	0.24	6.28	6.04	4.86	4.86	3843
0.35	2.10	1.28	3.00	6.73	0.39	6.65	6.26	4.85	4.85	4007
0.78	1.88	0.82	0.84	4.32	0.69	9.02	8.33	1.79	7.75	4258
0.74	2.26	1.24	0.83	5.07	0.50	9.79	9.29	6.23	7.75	4254
1.43	1.00	0.82	3.10	6.35	0.34	4.86	4.52	0.65	8.02	4253
0.00	1.96	0.89	0.49	3.34	0.41	11.15	10.74	4.48	4.48	3980
0.00	2.14	0.47	0.70	3.31	0.58	13.11	12.53	6.80	6.80	4119
0.00	2.10	0.57	0.61	3.28	0.49	12.44	11.95	7.73	7.73	4149
0.29	3.16	0.48	0.60	4.53	0.43	8.89	8.46	4.28	4.28	3731
0.33	2.26	1.08	0.60	4.27	0.26	8.76	8.50	7.33	7.33	3715
0.32	0.16	1.16	3.24	4.88	0.28	3.87	3.59	0.40	5.29	4151
0.43	0.28	1.34	3.21	5.26	0.24	3.99	3.75	0.80	6.03	4193
0.69	0.22	2.50	1.79	5.20	0.61	7.15	6.54	1.50	15.27	4150
0.52	3.32	0.48	0.86	5.18	0.55	9.02	8.47	7.23	7.23	3679
0.71	3.32	0.50	0.79	5.32	0.50	8.90	8.40	7.24	7.24	3728
0.00	4.14	0.88	0.59	5.61	0.35	8.81	8.46	7.89	7.89	3962
0.48	3.62	0.94	0.53	5.57	0.21	11.30	11.09	10.08	10.08	3727
0.44	3.44	0.94	0.61	5.43	0.30	11.08	10.78	10.83	10.83	3791
0.00	3.36	1.62	0.58	5.56	0.25	10.97	10.72	11.12	11.12	4120
0.83	0.04	1.80	3.33	6.00	0.41	4.92	4.51	0.43	5.99	4152
1.23	0.12	1.28	3.49	6.12	0.30	4.24	3.94	0.70	7.60	3730
0.93	0.06	1.48	3.61	6.08	0.25	4.26	4.01	0.82	6.22	3983
0.67	4.44	1.36	1.03	7.50	0.26	7.67	7.41	7.83	7.83	3729
0.95	4.54	0.90	0.99	7.38	0.30	7.59	7.29	7.71	7.71	3800

TABLE 7. ANALYSES OF MIXED FERTILIZER

Station no.	Manufacturer and brand	Place of sampling
	The Frank S. Platt Co., New Haven, Conn.	
3783	Platt's 5-8-7 Fertilizer	New Haven
3782	Platt's 10-5-5 Lawn Fertilizer	New Haven
	The Rogers & Hubbard Co., Portland, Conn.	
3787	Gro-Fast Plant Food 5-8-6	New Haven
3925	Hubbard's All Soils Fertilizer 4-8-4	Portland
3928	Hubbard's Climax Tobacco Fertilizer 5-3-5	Portland
3922	Hubbard's Corn Fertilizer 4-8-7	Portland
3911	Hubbard's Corn and Grain Fertilizer 3-10-4	Portland
3695	Hubbard's Fruit Fertilizer 8-8-8	Portland
4112	Hubbard's Golf Course Fertilizer 8-6-2	Portland
3930	Hubbard's High Potash Fertilizer 4-8-10	Portland
3883	Hubbard's Potato Fertilizer 5-8-7	Cheshire
3929	Hubbard's Tobacco Grower 6-3-6	Portland
4111	Hubbard's Top Dressing 8-5-8	Portland
4594	Hubbard's Top Dressing 8-5-8	Portland
3698	Hubbard's Vegetable Manure 5-8-10	Portland
3923	Red H Brand 4-8-4	Portland
4069	Red H Brand 4-8-7	Guilford
3697	Red H Brand 4-8-10	Portland
3696	Red H Brand 5-8-7	Portland
3927	Red H Brand 5-10-10	Portland
3909	Red H Brand 7-6-6	Portland
3910	Red H Brand 7-7-7	Portland
3924	Red H Brand 8-16-14	Portland
4060	Yale Special Mixture 8-6-4	New Haven
	O. M. Scott & Sons Co., Marysville, Ohio.	
3887	Scott's Turf Builder 10-6-4	Meriden
	M. L. Shoemaker Co., Philadelphia, Pa.	
4176	Shoemaker's "Swift-Sure" 4-10-0 Tobacco Starter	Simsbury
	Stumpp & Walter Co., 132 Church St., New York, N. Y.	
3834	Sawco Emerald Grass Fertilizer 5-7-3	Stamford
3836	Sawco General Garden Fertilizer 5-10-5	Stamford
4014	Sawco Rose Food 3-4-2	Stamford

CONTAINING NITROGEN, PHOSPHORIC ACID AND POTASH—(Continued)

In nitrates	Per cent nitrogen				Per cent phosphoric acid			Per cent potash		Station no.
	In ammonia	Organic water-soluble	Organic water-insoluble	Total	Citrate-insoluble	Total	So-called "available"	As muriate	Total	
0.99	3.58	0.38	0.12	5.07	0.17	8.50	8.33	7.09	7.09	3783
0.00	5.02	2.60	2.44	10.06	0.23	5.91	5.68	5.47	5.47	3782
0.27	2.58	0.14	2.13	5.12	0.31	8.36	8.05	6.94	7.78	3787
0.47	2.02	0.28	1.23	4.00	0.60	8.98	8.38	4.63	4.63	3925
0.52	0.30	1.70	2.68	5.20	0.14	2.89	2.75	1.36	6.65	3928
0.57	1.86	0.44	1.18	4.05	0.84	8.84	8.00	7.90	7.90	3922
0.86	1.40	0.16	0.86	3.28	0.88	10.64	9.76	4.24	4.24	3911
2.13	4.08	0.32	1.70	8.23	0.29	8.70	8.41	7.03	8.40	3695
0.00	2.06	0.70	5.50	8.26	1.33	8.90	7.57	2.31	2.93	4112
0.53	2.08	0.30	1.27	4.18	0.45	8.79	8.34	10.91	10.91	3930
0.64	2.62	0.24	1.70	5.20	0.40	8.63	8.23	7.54	7.54	3883
0.68	0.28	1.90	3.14	6.00	0.21	3.80	3.59	0.40	7.07	3929
6.57	0.02	0.42	0.77	7.78	1.22	7.55	6.33	9.32	9.86	4111
6.10	0.13	0.28	1.02	7.53	2.05	9.05	7.00	3.04	8.98	4594
0.83	1.61	1.39	1.77	5.60	1.36	9.99	8.63	1.05	12.21	3698
0.60	2.86	0.14	0.62	4.22	0.35	8.50	8.15	4.74	4.74	3923
0.66	2.90	0.14	0.83	4.53	0.19	9.15	8.96	7.35	7.35	4069
0.58	2.86	0.16	0.77	4.37	0.34	8.36	8.02	10.19	10.19	3697
0.61	3.84	0.02	0.83	5.30	0.16	8.54	8.38	7.60	7.60	3696
0.50	3.22	0.58	0.85	5.15	0.31	10.37	10.06	10.70	10.70	3927
0.42	6.00	0.16	0.88	7.46	0.65	6.75	6.10	6.30	6.30	3909
0.71	2.76	3.32	0.65	7.44	0.30	7.39	7.09	7.77	7.77	3910
0.34	7.28	0.72	0.19	8.53	0.45	17.38	16.93	14.90	14.90	3924
0.00	4.94	1.53	1.43	7.90	0.35	6.77	6.42	5.26	5.26	4060
0.14	6.88	0.28	3.18	10.48	0.20	6.04	5.84	3.11	4.34	3887
0.62	2.16	0.10	0.78	3.66	1.92	12.08	10.16	...	...	4176
0.68	3.66	0.14	0.96	5.44	1.33	9.41	8.08	3.53	3.53	3834
0.58	4.06	0.10	0.38	5.12	0.87	11.55	10.68	5.12	5.12	3836
0.00	0.18	0.55	3.14	3.87	4.02	13.57	9.55	1.99	2.71	4014

TABLE 7. ANALYSES OF MIXED FERTILIZER

Station no.	Manufacturer and brand	Place of sampling
	Summers Fertilizer Co., Inc., Baltimore, Md.	
4113	Summer's "Best on Earth" 8-5-2	Bridgeport
	Swift & Co. Fertilizer Works, Baltimore, Md.	
4147	Roselawn 5-8-7	New London
4351	Swift's Special Golf Fertilizer 12-6-4	Bridgeport
3790	Vigoro 4-12-4	New Haven
	Tennessee Corp., Lockland, Ohio.	
4011	Loma 5-10-4	Greenwich
4010	Turfood 10-6-4	Greenwich
	I. P. Thomas & Son Co., Camden, N. J.	
3738	I. P. Thomas 3-10-6	North Haven
3960	I. P. Thomas 5-8-7	North Haven
	Walker-Gordon Laboratory Co., Inc., Plainsboro, N. J.	
4070	Bovert 4-12-4	New Haven
	F. H. Woodruff & Sons, Inc., Milford, Conn.	
4005	Gro-Sod Lawn Food 10-6-4	Milford
	The Woodruff Fertilizer Works, Inc., North Haven, Conn.	
3741	Woodruff's Big Crop Fertilizer 5-8-7	North Haven
3740	Woodruff's Corn Fertilizer 4-16-4	North Haven
4006	Woodruff's Market Garden Fertilizer 4-8-4	Hamden
4262	Woodruff's Tobacco Starter Fertilizer 5-5-15	North Haven
3739	Woodruff's Top Dresser 7-6-6	North Haven
3958	Woodruff's Yankee Special Fertilizer 5-10-5	North Haven

CONTAINING NITROGEN, PHOSPHORIC ACID AND POTASH—(Concluded)

In nitrates	Per cent nitrogen				Per cent phosphoric acid			Per cent potash		Station no.
	In ammonia	Organic water-soluble	Organic water-insoluble	Total	Citrate-insoluble	Total	So-called "available"	As muriate	Total	
0.00	0.40	3.73	3.87	8.00	0.71	5.91	5.20	2.54	2.54	4113
0.32	3.24	0.58	0.29	4.43	0.45	9.49	9.04	6.65	6.65	4147
0.00	11.28	0.28	0.25	11.81	0.20	6.26	6.06	4.03	4.03	4351
0.40	3.32	0.20	0.22	4.14	0.67	12.79	12.12	4.60	4.60	3790
0.20	4.10	0.10	0.66	5.06	0.49	11.34	10.85	3.52	4.30	4011
0.00	8.06	0.24	2.22	10.52	0.17	6.08	5.91	3.19	4.39	4010
0.13	1.68	1.00	0.29	3.10	0.92	10.90	9.98	6.88	6.88	3738
0.46	3.62	0.38	0.54	5.00	0.72	9.04	8.32	7.03	7.03	3960
...	...	...	...	4.30	0.51	13.05	12.54	...	5.23	4070
0.62	4.76	1.62	3.17	10.17	0.25	6.90	6.65	4.81	4.81	4005
0.70	2.94	0.54	0.70	4.88	0.40	8.74	8.34	7.66	7.66	3741
0.69	2.26	0.36	0.75	4.06	0.55	16.73	16.18	4.14	4.14	3740
0.00	2.92	0.31	0.78	4.01	0.32	8.51	8.19	4.54	4.54	4006
3.20	0.20	0.22	0.80	4.42	0.06	6.10	6.04	0.20	15.59	4262
1.77	2.22	1.96	0.85	6.80	0.36	6.65	6.29	6.57	6.57	3739
0.84	3.08	0.46	0.73	5.11	0.78	10.91	10.13	6.07	6.07	3958

TABLE 8. ANALYSES OF SPECIAL AND HOME MIXTURES

Station no.	Name of mixture	Sampled or submitted by	Total nitrogen percentage	Per cent phosphoric acid			Per cent potash			Station no.
				Citrate-insoluble	Total	So-called "available"	As muriate	Total	Chlorine	
3762	Home Mixture, F. A.-S. B. . . .	Bloomfield: American Sumatra Tobacco Corp.	6.02	0.28	4.47	4.19	0.70	6.88	0.53	3762
3629	1942 Formula B-B. B.	Hartford: Consolidated Cigar Corp.	6.13	0.15	3.86	3.71	0.33	6.67	0.25	3629
3631	1942 Formula B-P	Hartford: Consolidated Cigar Corp.	6.10	0.29	3.89	3.60	0.40	6.16	0.30	3631
3633	1942 Formula A-B. B.	Hartford: Consolidated Cigar Corp.	6.03	0.36	4.01	3.65	0.33	6.49	0.25	3633
3637	Formula A-P	Hartford: Consolidated Cigar Corp.	5.48	0.31	4.06	3.75	0.33	6.71	0.25	3637
3672	1942 Formula A. M.	Hartford: Consolidated Cigar Corp.	5.60	0.45	4.45	4.00	0.40	7.22	0.30	3672
3673	1942 Formula B. M.	Hartford: Consolidated Cigar Corp.	5.67	0.34	3.70	3.36	0.37	7.28	0.28	3673
3674	Formula B. M.-One M Mix. . . .	Hartford: Consolidated Cigar Corp.	5.78	0.34	3.81	3.47	0.40	7.56	0.30	3674
3675	1942 Formula B + C. H.	Hartford: Consolidated Cigar Corp.	6.20	0.22	3.96	3.74	0.27	6.34	0.20	3675
3870	1942 Formula A Du	Hartford: Consolidated Cigar Corp.	5.76	0.69	4.44	3.75	0.40	7.27	0.30	3870
3871	1942 Formula A Dee	Hartford: Consolidated Cigar Corp.	5.86	0.51	4.09	3.58	0.40	7.15	0.30	3871
3872	1942 Formula B Dee 1942	Hartford: Consolidated Cigar Corp.	5.95	0.40	3.75	3.35	0.40	6.45	0.30	3872
3873	1942 Formula B Gr	Hartford: Consolidated Cigar Corp.	5.71	0.45	4.09	3.64	0.31	8.86	0.23	3873
3467	Formula 3-11-42	Simsbury: Cullman Bros. Inc. . .	4.88	0.17	7.26	7.09	0.48	7.62	0.36	3467

3468	Formula 3-H-1-42	Simsbury: Cullman Bros. Inc.	4.42	0.19	6.86	6.67	0.27	6.32	0.20	3468
3469	Formula 3-H-2-42	Simsbury: Cullman Bros. Inc.	5.42	0.40	4.32	3.92	0.36	6.35	0.27	3469
3470	Formula 3-C-13-42	Simsbury: Cullman Bros. Inc.	4.54	0.12	5.64	5.52	0.44	6.67	0.33	3470
3471	Formula 3-B-42	Simsbury: Cullman Bros. Inc.	4.59	0.13	6.85	6.72	0.41	7.08	0.31	3471
3561	Formula 1-SH-1-42	Simsbury: Cullman Bros. Inc.	4.10	0.21	7.76	7.55	0.56	7.29	0.42	3561
3562	Formula 1-B-4-42	Simsbury: Cullman Bros. Inc.	4.22	0.21	6.46	6.25	0.47	6.26	0.35	3562
3563	Formula 1-MOS-2-42	Simsbury: Cullman Bros. Inc.	3.95	0.25	6.21	5.96	0.36	5.87	0.27	3563
3564	Formula 1-M-1-42	Simsbury: Cullman Bros. Inc.	4.89	0.24	5.99	5.75	0.36	4.26	0.27	3564
3565	Formula 1-B-3-42	Simsbury: Cullman Bros. Inc.	5.03	0.27	5.67	5.40	0.36	5.00	0.27	3565
3566	Formula 1-MC-1-42	Simsbury: Cullman Bros. Inc.	4.55	0.60	4.49	3.89	0.43	7.60	0.32	3566
3567	Formula 1-B-2-42	Simsbury: Cullman Bros. Inc.	4.13	0.57	5.39	4.82	0.36	6.07	0.27	3567
3568	Formula 2-N-3-42	Simsbury: Cullman Bros. Inc.	4.41	0.24	4.64	4.40	0.40	6.47	0.30	3568
3569	Formula 2-H-1A-42	Simsbury: Cullman Bros. Inc.	4.35	0.22	6.18	5.96	0.48	6.59	0.36	3569
3615	Formula 2-H-2-42	Simsbury: Cullman Bros. Inc.	4.55	0.34	6.65	6.31	0.60	8.98	0.45	3615
3616	Formula 2-H-3-42	Simsbury: Cullman Bros. Inc.	4.78	0.28	7.96	7.68	0.48	7.05	0.36	3616
3617	Formula 2-K-4-42	Simsbury: Cullman Bros. Inc.	4.31	0.24	10.00	9.76	0.52	7.14	0.39	3617
3618	Formula 2-K-5-42	Simsbury: Cullman Bros. Inc.	4.74	0.26	8.90	8.64	0.44	6.16	0.33	3618
3619	Formula 2-K-2-42	Simsbury: Cullman Bros. Inc.	4.85	0.29	6.77	6.48	0.54	7.56	0.41	3619
3620	Formula 2-K-1-42	Simsbury: Cullman Bros. Inc.	4.44	0.24	6.43	6.19	0.44	6.47	0.33	3620
3655	Formula 2-H-1-42	Simsbury: Cullman Bros. Inc.	4.69	0.41	4.58	4.17	0.51	6.26	0.38	3655
3656	Formula 2-LB-42	Simsbury: Cullman Bros. Inc.	4.86	0.73	5.19	4.46	0.36	6.12	0.27	3656
3657	Formula 3-S-3-42	Simsbury: Cullman Bros. Inc.	5.65	0.57	5.41	4.84	0.24	7.10	0.18	3657
3658	Formula 3-S-1-2-42	Simsbury: Cullman Bros. Inc.	5.52	0.55	5.56	5.01	0.25	6.76	0.19	3658
3659	Formula 3-H-3-42	Simsbury: Cullman Bros. Inc.	5.22	0.47	4.39	3.92	0.27	7.01	0.20	3659
3721	Home Mix Top Dresser with Sulphate of Potash (Apothecaries Hall Co.)	Simsbury: Cullman Bros. Inc.	7.84	0.45	8.32	7.87	0.65	8.08	0.49	3721
3722	Formula 2-N-2-42	Simsbury: Cullman Bros. Inc.	4.26	0.49	4.31	3.82	0.40	7.02	0.30	3722
3913	Formula S-1-42	Simsbury: Cullman Bros. Inc.	5.78	0.52	4.34	3.82	0.31	7.71	0.23	3913
3914	Formula S-2-42	Simsbury: Cullman Bros. Inc.	5.72	0.55	4.46	3.91	0.36	7.38	0.27	3914
3915	Formula S-3-42	Simsbury: Cullman Bros. Inc.	5.84	0.39	4.06	3.67	0.27	6.67	0.20	3915
3916	Formula S-4-42	Simsbury: Cullman Bros. Inc.	5.07	0.45	4.21	3.76	0.31	6.72	0.23	3916
3917	Formula S-6-42	Simsbury: Cullman Bros. Inc.	5.38	0.61	5.20	4.59	0.40	6.26	0.30	3917
3918	Formula S-5-42	Simsbury: Cullman Bros. Inc.	5.18	0.49	4.39	3.90	0.54	8.78	0.41	3918
3919	Formula S-7-42	Simsbury: Cullman Bros. Inc.	5.71	0.30	3.47	3.17	0.39	6.18	0.29	3919
3920	Formula S-8-42	Simsbury: Cullman Bros. Inc.	5.09	0.56	4.35	3.79	0.32	5.75	0.24	3920
3985	Formula H-2-42	Simsbury: Cullman Bros. Inc.	5.60	0.56	4.94	4.38	0.43	7.23	0.32	3985
3986	Formula H-3-42	Simsbury: Cullman Bros. Inc.	5.78	0.37	3.82	3.45	0.36	6.98	0.27	3986

TABLE 8. ANALYSES OF SPECIAL AND HOME MIXTURES—(Concluded)

Station no.	Name of mixture	Sampled or submitted by	Total nitrogen percentage	Per cent phosphoric acid			Per cent potash			Station no.
				Citrate-insoluble	Total	So-called "available"	As muriate	Total	Chlorine	
3987	Formula H-4-42	Simsbury: Cullman Bros. Inc...	5.47	0.43	4.49	4.06	0.44	7.91	0.33	3987
3989	Formula H-7-42	Simsbury: Cullman Bros. Inc...	5.00	0.71	6.00	5.29	0.31	7.90	0.23	3989
3990	Formula H-6-42	Simsbury: Cullman Bros. Inc...	5.59	0.55	4.87	4.32	0.24	5.23	0.18	3990
3991	Formula H-5-42	Simsbury: Cullman Bros. Inc...	5.39	0.56	4.77	4.21	0.32	8.04	0.24	3991
3992	Formula 1-A-4-42	Simsbury: Cullman Bros. Inc...	5.80	0.53	4.45	3.92	0.43	6.94	0.32	3992
3993	Formula 1-A-3-42	Simsbury: Cullman Bros. Inc...	4.29	0.47	4.56	4.09	0.52	9.24	0.39	3993
3994	Formula 1-A-8-42	Simsbury: Cullman Bros. Inc...	5.07	0.59	4.80	4.21	0.36	6.32	0.27	3994
3995	Formula 1-A-1-42	Simsbury: Cullman Bros. Inc...	6.17	0.44	4.03	3.59	0.24	4.79	0.18	3995
3996	Formula 1-A-2-42	Simsbury: Cullman Bros. Inc...	5.30	0.32	2.96	2.64	0.15	3.95	0.11	3996
3997	Formula 1-STJ-42	Simsbury: Cullman Bros. Inc...	4.70	0.24	6.39	6.15	0.51	7.54	0.38	3997
3998	Formula 1-A-7-42	Simsbury: Cullman Bros. Inc...	5.38	0.43	4.49	4.06	0.39	7.19	0.29	3998
3999	Formula 1-A-6-42	Simsbury: Cullman Bros. Inc...	5.48	0.48	4.21	3.73	0.20	4.33	0.15	3999
4000	Formula 1-A-5-42	Simsbury: Cullman Bros. Inc...	4.50	0.41	3.90	3.49	0.52	9.34	0.39	4000
4001	Potato Fertilizer (Woodruff Fertilizer Works)	Simsbury: Cullman Bros. Inc...	4.80	0.36	9.06	8.70	0.96	11.63	0.72	4001
4397	Special Mixture	Putnam: Louis Grant	5.98	0.10	8.09	7.99	11.41	11.41	...	4397
3939	Fertilizer Formula	Windsor Locks: Robert Rodell	5.68	0.26	12.89	12.63	8.93	8.93	...	3939
1394	Fertilizer Formula	East Hartford: United Aircraft Co.	5.11	0.35	26.05	25.70	3.54	4.02	2.67	1394
4237	Special Mixture for Tobacco No. 2	Warehouse Point: Henry E. Wells	7.64	0.89	7.19	6.30	1.34	12.66	1.01	4237

TABLE 9. ANALYSES OF SHEEP MANURE, ETC.

Station no.	Name of mixture	Sampled or submitted by	Per cent nitrogen		Total per cent phosphoric acid		Per cent potash		Station no.
			Found	Guaranteed	Found	Guaranteed	Found	Guaranteed	
3844	Pulverized Sheep and Goat Manure. American Agricultural Chemical Co., No. Weymouth, Mass.	Darien: Rings End Fuel Co.	1.44	1.25	1.01	1.00	2.00	2.00	3844
3754	Sheep Manure. Apothecaries Hall Co., Waterbury, Conn.	East Windsor: Apothecaries Hall Co.	1.56	1.00	1.15	0.50	1.88	1.00	3754
3809	Sheep Manure. Armour Fertilizer Works, New York, N. Y.	East Windsor Hill: David Ahern	1.53	1.50	2.78	1.00	2.19	2.00	3809
3786	Driconure. Atkins & Durbrow, Inc., New York, N. Y.	New Haven: Lightbourn & Pond Co.	2.74	2.00	3.06	1.00	1.63	1.00	3786
3706	Berkshire Sheep Manure. Berkshire Chemical Co., Bridgeport, Conn.	Bridgeport: Berkshire Chemical Co.	1.55	1.50	1.28	1.00	2.13	2.00	3706
3901	Corenco Sheep Manure. Consolidated Rendering Co., Boston, Mass.	Danielson: Dayville Grain & Feed Co.	1.76	1.25	1.10	1.00	3.31	2.00	3901
4104	Hoffman's Cow Manure. A. H. Hoffman, Inc., Landisville, Pa.	New Haven: Page, Steele & Flagg Co.	2.22	2.00	2.84	... ¹	2.44	2.00	4104
4263	Hoffman's Sheep Manure. A. H. Hoffman, Inc., Landisville, Pa.	New Haven: The Sears-Roebuck Co.	2.32	1.85	2.06	... ²	3.29	2.00	4263
3885	Norwood Brand Sheep Manure. Norwood Brand Fertilizer Co., North Reading, Mass.	Meriden: Meriden Grain & Coal Co.	1.49	1.83	0.44	0.89	4.08	1.03	3885
4146	Wizard Brand Cow Manure. The Pulverized Manure Co., Chicago, Ill.	New London: The Aben Hardware Co.	2.02	2.00	1.58	... ³	2.58	1.00	4146

¹ Guaranteed "available" phosphoric acid 2.00 per cent; found 2.58 per cent.

² Guaranteed "available" phosphoric acid 1.00 per cent; found 1.77 per cent.

³ Guaranteed "available" phosphoric acid 1.00 per cent; found 1.47 per cent.

Analyses

TABLE 9. ANALYSES OF SHEEP MANURE, ETC.—(Concluded)

Station no.	Name of mixture	Sampled or submitted by	Per cent nitrogen		Total per cent phosphoric acid		Per cent potash		Station no.
			Found	Guaranteed	Found	Guaranteed	Found	Guaranteed	
4145	Wizard Brand Pulverized Sheep Manure. The Pulverized Sheep Manure Co., Chicago, Ill.	New London: The Aben Hardware Co.	1.82	2.00	1.84	... ⁴	2.93	2.00	4145
3886	Domestic Sheep Manure. The Rogers & Hubbard Co., Portland, Conn.	Meriden: Church & Morse, Inc.	1.82	1.50	2.86	1.00	2.71	1.50	3886
3840	Sawco Cattle Manure. Stumpp & Walter Co., New York, N. Y. ...	Stamford: Stumpp & Walter Co.	2.29	1.80	1.64	1.00	1.75	1.00	3840
3841	Sawconur 3-1-1. Stumpp & Walter Co., New York, N. Y.	Stamford: Stumpp & Walter Co.	3.01	3.00	3.94	... ⁵	1.98	1.00	3841
3839	Sawco Pulverized Sheep Manure 2-1-2. Stumpp & Walter Co., New York, N. Y.	Stamford: Stumpp & Walter Co.	2.41	2.00	1.47	1.00	2.38	2.00	3839
4226	Summer's "Best on Earth" Sheep Manure. Summers Fertilizer Co., Baltimore, Md.	Bridgeport: Brooklawn Grain & Feed Co.	1.86	1.00	3.81	1.00	3.29	2.00	4226
4013	Swift's Sheep Manure. Swift & Co. Fertilizer Works, Baltimore, Md.	Cos Cob: Belmont Feed Co.	2.14	1.85	1.88	1.00	3.22	1.75	4013
3785	Bovung. Walker-Gordon Laboratory Co., Inc., Plainsboro, N. J. ...	New Haven: Lightbourn & Pond Co.	2.37	2.00	2.54	2.00	2.29	2.00	3785

⁴ Guaranteed "available" phosphoric acid 1.00 per cent; found 1.59 per cent.

⁵ Guaranteed "available" phosphoric acid 1.00 per cent; found 3.60 per cent.

TABLE 10. ANALYSES OF LIMESTONE AND SIMILAR MATERIALS

Station no.	Manufacturer and brand	Sampled from stock of or sent by	Chemical analysis				Total oxides	Mechanical analysis (in percentage)		Station no.
			Per cent lime		Per cent magnesia			20 mesh	100 mesh	
			Found	Guaranteed	Found	Guaranteed				
3466	American Limestone Quarry Corp., Wingdale, N. Y. Ground limestone	Hartford: Agricultural Conservation Program ..	30.23	30.00	21.76	21.00	51.99	100.0 ¹	44.7 ²	3466
3876	Ground limestone	Hartford: Agricultural Conservation Program ..	30.31	30.00	21.39	21.00	51.70	98.8 ¹	43.6 ²	3876
2864	The Conklin Limestone Co., Inc., Canaan, Conn. Ground limestone	Hartford: Agricultural Conservation Program ..	29.04	30.00	20.07	20.00	49.11	100.0	...	2864
2865	Ground limestone	Hartford: Agricultural Conservation Program ..	28.03	30.00	19.16	20.00	47.19	100.0	...	2865
2866	The Connecticut Agstone Co., Danbury, Conn. Ground limestone	Hartford: Agricultural Conservation Program ..	40.07	42.00	6.19	6.00	46.26	95.7	...	2866
2869	Ground limestone	Hartford: Agricultural Conservation Program ..	45.00	42.00	4.61	6.00	49.61	96.0	...	2869
1605	New England Lime Co., Canaan, Conn. Hydrated lime	Bloomfield: American Sumatra Tobacco Corp. .	46.26	.....	31.00	.....	77.26	.....	...	1605
1604	Hydrated lime	Bloomfield: American Sumatra Tobacco Corp. .	45.76	.....	30.94	.....	76.70	.....	...	1604

¹ 40 mesh.
² 200 mesh.

TABLE 10. ANALYSES OF LIMESTONE AND SIMILAR MATERIALS—(Concluded)

Station no.	Manufacturer and brand	Sampled from stock of or sent by	Chemical analysis				Total oxides	Mechanical analysis (in percentage)		Station no.
			Per cent lime		Per cent magnesia			20 mesh	100 mesh	
			Found	Guaranteed	Found	Guaranteed				
	Patterson Limestone Products Co., Inc., Scarsdale, N. Y.									
2809	Ground limestone	Hartford: Agricultural Conservation Program ..	27.19	28.97	17.71	20.42	44.90	99.6	...	2809
2863	Ground limestone	Hartford: Agricultural Conservation Program ..	27.05	28.97	17.56	20.42	44.61	100.0	...	2863
2867	Ground limestone	Hartford: Agricultural Conservation Program ..	26.96	28.97	16.79	20.97	43.75	100.0	...	2867
2870	Ground limestone	Hartford: Agricultural Conservation Program ..	27.62	28.97	18.14	20.97	45.76	100.0	...	2870
3852	Ground limestone	Hartford: Agricultural Conservation Program ..	26.71	28.97	17.13	20.42	43.84	100.0	...	3852
	D. U. Smith & Bro., Ashley Falls, Mass.									
2868	Ground limestone	Hartford: Agricultural Conservation Program ..	30.48	30.00	21.26	21.00	51.74	100.0	...	2868
2871	Ground limestone	Hartford: Agricultural Conservation Program ..	30.88	30.00	21.36	21.00	52.24	100.0	...	2871
	U. S. Gypsum Co., Falls Village, Conn.									
3874	Ground limestone	Hartford: Agricultural Conservation Program ..	29.27	30.00	19.81	20.00	49.08	97.5	...	3874
3875	Ground limestone	Hartford: Agricultural Conservation Program ..	29.24	30.00	19.66	20.00	48.90	99.0	...	3875

Manufacturer Unknown									
2416	Hydrated lime, P	Hartford: Consolidated Cigar Corp.	46.84		32.94		79.78	....	2416
3198	Lime	Windsor: Tobacco Station	61.29	70.50	3.10	5.00	64.39	....	3198
2860	Land Plaster, Car Penn. 596060	Simsbury: Cullman Bros. Inc.	33.41		0.22		33.63	....	2860
2857	Land Plaster, Car CCC 58848	Simsbury: Cullman Bros. Inc.	33.46		0.07		33.53	....	2857
2854	Land Plaster, Car CCC 58848	Simsbury: Cullman Bros. Inc.	33.42		0.07		33.49	....	2854
4363	Spray lime	Simsbury: Cullman Bros. Inc.	72.54		0.69		73.23	....	4363
2989	Hydrated lime	Simsbury: Cullman Bros. Inc.	47.37	46.00	32.93	31.00	80.30	....	2989
2990	Hydrated lime	Simsbury: Cullman Bros. Inc.	46.83	46.00	32.42	31.00	79.25	....	2990
3019	Hydrated lime	Simsbury: Cullman Bros. Inc.	47.14	46.00	32.30	31.00	79.44	....	3019
4092	Gypsum	Hartford: A. N. Shepard & Son	33.40					....	4092
4093	Hydrated lime	Hartford: A. N. Shepard & Son	45.93		30.94		76.87	....	4093

• Analyses

3205	Plastic waste, urea base	air-dry	.....	.....	20.32	.....	.....	Nitrogen in nitrates, none; in ammonia, 0.34; in water-soluble organic, 16.94; in water-insoluble organic, 3.04. Activity of water-insoluble (alk. permanganate), 100%.
2389	Tobacco stems	21.5	.....	.....	3.10	0.63	6.99	.....
4586	Tobacco shredded	air-dry	.....	.....	.....	.....	4.59	Nicotine 0.01%.
4585	Tobacco leaf refuse	air-dry	.....	.....	.....	.....	3.41	Nicotine 0.81%.
4584	Tobacco stems, Canadian	air-dry	.....	.....	.....	.....	6.83	Nicotine 0.67%.
3676	Tobacco stems	air-dry	.....	.....	2.63	0.65	5.97	.....
3186	Tobacco cigar scraps	air-dry	2.62	0.88	3.19
3185	Tobacco stems and cigar scraps	air-dry	2.49	0.85	7.16

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