
Bulletin 579

February, 1954

COMMERCIAL FERTILIZERS

Report for 1953



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Chief Chemist

THE CONNECTICUT AGRICULTURAL EXPERIMENT
STATION, NEW HAVEN, CONNECTICUT

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REPORT ON INSPECTION AND ANALYSIS OF COMMERCIAL FERTILIZERS, 1953

H. J. FISHER, Chief Chemist¹

CONNECTICUT LAW AND REGULATIONS REGARDING COMMERCIAL FERTILIZERS

The term "commerical 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 which have not been artificially treated or manipulated, marl and lime." An amendment of the law in 1949 permitted fertilizers to be labelled with guaranties of elements other than nitrogen, phosphorus and potassium, but did not change the requirement that mixed fertilizers must contain at least 0.82 per cent of nitrogen and 1 per cent of either phosphoric acid or potash for guaranties of these elements to be made. Phosphorus must be declared as available phosphoric acid (except in the case of bone, tankage and other natural organic materials, where total phosphoric acid is guaranteed) and potassium as water-soluble potash; all other elements must be guaranteed in terms of percentages of *the elements*, not as oxides or salts. A registration fee of \$10.00, payable annually, is charged for each element guaranteed in each brand of fertilizer; there is also a six-cent tonnage tax, payable semiannually.

While manufacturers usually register their own fertilizers, if a retailer sells a fertilizer manufactured by an out-of-state firm, and that firm refuses to register, under the law the retailer is responsible for registration fees and tonnage taxes. *The retailer, therefore, should assure himself that the requirements of the law have been met by the manufacturers of the brands which he handles, or himself be prepared to meet all these requirements.*

The law exempts from registration, and from other requirements, 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, peanut and soybean oil 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 per brand. This fee and the tonnage tax are entirely apart from the registration fee required by the feeding stuffs law for vegetable meals used as feeds (there is no tonnage tax on feeds).

Because manufacturers or jobbers do not know how much, if any, of their vegetable meal tonnage is sold or used as fertilizer, local dealers and purchasers report their sales or purchases to this Station. The information is

¹ Analyses were made by Mr. O. L. Nolan, Miss Helen Kocaba, Mrs. Janice Lewis and Mrs. Gillian Rose; inspection and sampling by Mr. Richard Nichols; compilations by Mr. Nolan and Miss Lillian Goffi.

not for publication but is used to inform manufacturers of the total sales of their meal 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.

Official Definitions of Fertilizer Terms and Materials

It is expected that fertilizers sold in this state will comply with the regulations and standards of the Association of American Fertilizer Control Officials. A copy of the "Official Publication" of that Association giving these definitions and regulations may be obtained from the secretary-treasurer, B. D. Cloaninger, Drawer 392, Clemson, South Carolina, for \$1.00.

REGISTRATIONS

Late Registrations for 1952

To the brands registered for 1952 in our last report should be added the following:

Central Soya Co., 300 Ft. Wayne Bank Bldg., Ft. Wayne, Ind.

Central Star 44% Solvent Extracted Soybean Oil Meal

Old Deerfield Fertilizer Co., Inc., 20 Sugarloaf St., So. Deerfield, Mass.

Argentine Cottonseed Meal, 41% Protein

Wessel, Duval & Co., Inc., 67 Broad St., New York, N. Y.

Linseed Meal

Registrations for 1953

For 1953, 80 firms and individuals registered 354 brands of fertilizer at this Station for sale in the State. As required by statute, the brands are listed as follows:

Agricultural Supply Co., 221 Richmond Ave., P. O. Box 57, West Haven, Conn.

Yale Special Mixture

Allied Chemical & Dye Corp., Nitrogen Div., 40 Rector St., New York 6, N. Y.

A-N-L Brand Fertilizer Compound
ARCADIAN the American Nitrate of Soda
Sulphate of Ammonia

The American Agricultural Chemical Co., 285 River St., No. Weymouth 91, Mass.

AA Quality Fertilizer 0-10-20
AA Quality Fertilizer 0-14-14
AA Quality Fertilizer 3-12-12
AA Quality Fertilizer 4-12-4
AA Quality Fertilizer 5-8-7
AA Quality Fertilizer 5-10-10
AA Quality Fertilizer 7-7-7
AA Quality Phosphate Rock
Agrico Country Club Fertilizer 6-10-4
Agrico Country Club Fertilizer 8-6-2
Agrico Country Club Fertilizer 8-6-4
Agrico Country Club Fertilizer 10-6-4
Agrico for Broadleaf Evergreens 6-10-4
Agrico for Corn 4-12-4
Agrico for Gardens 5-10-5
Agrico for Lawns, Trees and Shrubs 6-10-4
Agrico for New England 5-8-7
Agrico for Potatoes 5-10-10-1.2
Agrico for Potatoes 6-8-8
Agrico for Seeding Down 3-12-12
Agrico for Tobacco 6-3-6
Agrico for Top Dressing 7-7-7
Agrico for Truck 5-10-5
Agrico for Turf 6-8-2
Agrico Phosphate and Potash 0-10-20
Agrico Phosphate and Potash 0-14-14
Agrico Rose Food 5-9-6
Agrinite
Bone Meal

The American Agricultural Chemical Co., 285 River St., No. Weymouth 91, Mass.—Cont'd.

Muriate of Potash
18% Normal Superphosphate
Sheep Manure
Sulphate of Ammonia

American Cyanamid Co., 30 Rockefeller Plaza, New York 20, N. Y.

AERO Cyanamid, Granular
AERO Cyanamid, Special Grade
AERO-PHOS Florida Natural Phosphate (31% Total)
AERO-PHOS Florida Natural Phosphate (33% Total)
AEROPRILLS Fertilizer Grade Ammonium Nitrate
Garden Cyanamid

Apothecaries Hall Co., 28 Benedict St., Waterbury, Conn.

Bone Meal 2.25
Castor Pomace
Cotton Hull Ashes
Dry Ground Fish
Emjeo
Liberty Fertilizer 0-10-20
Liberty Fertilizer 0-14-14
Liberty Fertilizer 0-20-20
Liberty Fertilizer 3-12-12
Liberty Fertilizer 4-12-4
Liberty Fertilizer 5-10-5
Liberty Fertilizer 5-10-10
Liberty Fertilizer 5-10-10 with 1.2% Magnesium
Liberty Fertilizer 6-8-8
Liberty Fertilizer 6-8-8 with 1.2% Magnesium
Liberty Fertilizer 8-8-8
Liberty Fertilizer 8-16-16
Liberty Fertilizer with Sulphate of Potash 6-8-8
Liberty Fertilizer with Sulphate of Potash 6-8-8 with 1.2% Magnesium
Liberty Green-Gro Fertilizer 6-7-4
Liberty Green-Gro 3-Way-3 Lawn Dressing 6-10-4
Liberty High Grade Market Gardeners 5-8-7
Liberty High Grade Market Gardeners with Sulphate of Potash 5-8-7
Liberty Landscape and Golf Course 8-6-2
Liberty Special for Fruit and Grass 7-7-7
Liberty Tobacco Mixture 5-3-5
Liberty Tobacco Mixture 6-3-6
Liberty Tobacco Mixture with Castor Pomace 6-3-6
Liberty Tobacco Mixture with Cottonhull Ashes 6-3-6
Liberty Tobacco Starter 4-10-0
Liberty Tobacco Starter 5-5-15
Muriate of Potash
Nitrate of Potash
Precipitated Bone 38%
Precipitated Bone 42%
Sheep Manure
Sulphate of Potash
Sul-Po-Mag
Superphosphate, Granular
Superphosphate, Pulverized

Archer-Daniels-Midland Co., 600 Roanoke Bldg., Minneapolis, Minn.

Archer Quality 32% Protein Expeller Linseed Oil Meal (Fertilizer)

Armour Fertilizer Works, Box J, Carteret, N. J.

Armour's Big Crop Fertilizer 0-20-20
 Armour's Big Crop Fertilizer 5-8-7
 Armour's Big Crop Fertilizer 5-10-10
 Armour's Big Crop Fertilizer 7-7-7
 Armour's Big Crop Superphosphate 20%
 Armour's Bone Meal Fertilizer
 Armour's Gold Bond Tobacco Grower 6-3-6
 Armour's Pulverized Sheep Manure
 Armour's Vertagreen Plant Food 5-10-5
 Armour's Vertagreen Plant Food for Commercial Crops 6-12-12
 Armour's Vertagreen Plant Food for Professional Use 10-6-4

Ashcraft-Wilkinson Co., 601 Trust Co. of Georgia Bldg., Atlanta 3, Ga.

Cow-Eta Brand 36% Protein Cottonseed Meal
 Cow-Eta Brand 41% Protein Cottonseed Meal

Associated Seed Growers, Inc., Main & Pearl Sts., Cambridge, N. Y.

Asgrow Fertilizer 8-8-8

Associated Seed Growers, Inc., Railroad Ave., Milford, Conn.

Asgrow Lawn Food
 Japedizer

Atkins & Durbrow, Inc., 165 John St., New York 38, N. Y.

DRICONURE

H. J. Baker & Bro., 600 Fifth Ave., New York 20, N. Y.

MONTANSALPETER (Ammonium Sulphate Nitrate)

The F. A. Bartlett Tree Expert Co., 60 Canal St., Stamford, Conn.

Bartlett Green Tree Food

A. A. Bazinet (See Crawford Seed Store)**Brainard Nursery & Seed Co., 636 Enfield St., Thompsonville, Conn.**

Braco Brand Aluminum Sulphate

Joseph Breck & Sons Corp., 401 Summer St., Boston 10, Mass.

Breck's Quick-Life
 Brexone Garden-Gro
 Brexone Turf-Gro

Bruncote, Inc. (See The Geo. Phelps Co.)**The Buckeye Cotton Oil Co., 6th & Main Sts., Cincinnati, Ohio**

Buckeye 41% Protein Cottonseed Meal for Fertilizer

California Spray-Chemical Corp., Lucas and Ortho Way, Richmond, Calif.

ORTHO-GRO Starter Solution
 ORTHO Lawn Groom

The Canada Linseed Oil Mills, Ltd., 2215 Notre Dame St., East, Montreal 24, Quebec, Can.

"Maple Leaf" Brand Linseed Oilcake Meal

Carbola Chemical Co., Inc., Natural Bridge, N. Y.

CCC Triple-20 Plant Food

Central Chemical Corp., Box 532, Lebanon, Pa.

Farmrite Gardenrite
 Farmrite Hi-organic
 Farmrite Sheep Manure
 Farmrite Turf Organite

Chilean Nitrate Sales Corp., 120 Broadway, New York 5, N. Y.

Chilean Nitrate of Soda—Champion Brand

Coastal Drimanure Corp., Main St., Dagsboro, Del.

Dry-Manure

Consolidated Rendering Co., 178 Atlantic Ave., Boston 10, Mass.

Corenco 0-10-20 Hay and Pasture Special
 Corenco 0-14-14 Top Dresser
 Corenco 0-20-20
 Corenco 4-12-4 Complete Manure
 Corenco 4-12-16 Ladino Special
 Corenco 5-5-15 Tobacco Starter
 Corenco 5-8-7 Potato and General Crop
 Corenco 5-10-5 Home Garden
 Corenco 5-10-5 Onion Special-Super Truck
 Corenco 5-10-10 Peerless Potato
 Corenco 6-3-6 Perfection Tobacco Grower
 Corenco 6-3-6 Premium Tobacco Grower
 Corenco 6-8-8 Potato Special
 Corenco 7-7-7 Complete Fruit and Top Dressing
 Corenco 8-6-4 Landscape
 Corenco 8-16-16 Two-in-One
 Corenco 10-6-2
 Corenco Dried Cow Manure
 Corenco Ground Bone
 Corenco Ground Phosphate Rock
 Corenco Organic Tankage
 Corenco Sheep Manure
 Corenco Spurz-on
 Corenco Superphosphate 20%
 Muriate of Potash

Crawford Seed Store, 164-184 So. Main St., Providence, R. I.

Better Brand Sheep Manure (Mfr'd. by A. A. Bazinet, Woonsocket, R. I.)

The Davey Tree Expert Co., 117 S. Water St., Kent, Ohio

Davey Shredded Cattle Manure
 Davey Tree Food

R. G. Davis & Sons, Inc., 560 Grand Ave., New Haven, Conn.

"Organo"

The Davison Chemical Corp., Charles & Fayette Sts., Baltimore 3, Md.

Davco Granulated Fertilizer 0-10-20
 Davco Granulated Fertilizer 0-14-14 with 0.41% Boron
 Davco Granulated Fertilizer 0-20-20
 Davco Granulated Fertilizer 5-8-7
 Davco Granulated Fertilizer 5-10-5
 Davco Granulated Fertilizer 5-10-10
 Davco Granulated Fertilizer 6-8-8
 Davco Granulated Fertilizer 6-8-8 with 0.10% Boron and 0.18% Manganese
 Davco Granulated Fertilizer 7-7-7
 Davco Granulated Fertilizer 8-16-8

The Davison Chemical Corp., Charles & Fayette Sts., Baltimore 3, Md.—Cont'd.

Davco Granulated Fertilizer 8-16-16
Davco Granulated Fertilizer 10-10-10
Davco Granulated Superphosphate 20%

The Doggett-Pfeil Co., 642 Morris Turnpike, Springfield, N. J.

D & P Rose Food

E. I. du Pont de Nemours & Co., Inc., Wilmington 98, Del.

DU PONT NU GREEN Fertilizer Compound

Eastern States Farmers' Exchange, Inc., 26 Central St., West Springfield, Mass.

Eastern States 0-15-30
Eastern States 0-20-20
Eastern States 5-10-10-0.6
Eastern States 5-15-15-0.6
Eastern States 8-4-8-1.2 Tobacco
Eastern States 8-12-12-1.2 L.C.S.
Eastern States 8-12-12-1.2 S.M.
Eastern States 8-12-16-1.2
Eastern States 8-16-16-0.6
Eastern States 10-10-10-0.6
Eastern States Castor Pomace
Eastern States Muriate of Potash
Eastern States Plant Starter
Eastern States Sulfate of Potash
Eastern States Superphosphate—Granulated and Pulverized

The Espoma Co., P. O. Box 108, Millville, N. J.

Espoma
Holly-Tone

Faesy & Besthoff, Inc., 325 Spring St., New York 13, N. Y.

Pure Bone Meal

Ferro Corp., 4150 E. 50th St., Cleveland, Ohio

F.T.E. (Fritted Trace Elements)

Ford Motor Co., 3000 Schaefer Road, Dearborn, Mich.

Ford Ammonium Sulphate

Fox Point Chemical Co., 49 Valley St., East Providence, R. I.

Old Fox Brand 0-0-60
Old Fox Brand 0-10-20
Old Fox Brand 0-12-24
Old Fox Brand 0-20-0
Old Fox Brand 5-8-7-1.2
Old Fox Brand 5-10-10
Old Fox Brand 5-10-10-1.2
Old Fox Brand 7-7-7-1.2
Old Fox Brand 8-12-12-0.9
Old Fox Brand Bone Meal
Old Fox Turf Brand Fertilizer 8-6-2

The Glidden Co., Soya Products Div., 1825 No. Laramie Ave., Chicago, Ill.

Glidden Quality Products 44% Protein Solvent Extracted Soybean Oil Meal

Goldenrod Oil Meal Sales Co., P. O. Box 152, Memphis 1, Tenn.

Goldenrod Brand 41% Protein Cottonseed Meal, Prime Quality

Goulard & Olena, Inc., Skillman, N. J.

Cottonseed Meal
G & O Ground Bone Fertilizer
G & O Prizegro 5-10-5
G & O Rose Food
Sulphate of Ammonia

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

Hoffman Cow Manure (Dehydrated)

Hoover Soil Service, 121 No. Central St., Gilman, Ill.

A Soft Phosphate with Colloidal Clay

Humphreys-Godwin Co., 2246 Park Ave., Memphis, Tenn.

Dixie Brand 41% Cottonseed Meal

Imperial Agricultural Corp., 801 Windsor St., Hartford, Conn.

Cotton Cakes Ground (Mfr'd by Nidera Argentina S.A., Buenos Aires, Argentina)

Robin Jones Phosphate Co., P. O. Box 1021, Nashville, Tenn.

Arrow Brand Finely Ground Rock Phosphate

Spencer Kellogg & Sons, Inc., 98 Delaware Ave., Buffalo 2, N. Y.

Castor Pomace
Spencer Kellogg's 32% Protein Old Process (Expeller) Linseed Oil Meal
Spencer Kellogg's 44% Protein Toasted Soybean Oil Meal—Solvent Extracted

L. B. Lovitt & Co., 314 Cotton Exchange Bldg., Memphis, Tenn.

"Lovit Brand" 41% Protein Cottonseed Meal

The Mamlon Co., 1089 Whalley Ave., New Haven 15, Conn.

FER-MEL Water Soluble Turf and Tree Food

Marianna Sales Co., 510 Cotton Exchange Bldg., Memphis, Tenn.

Sikeston Brand 41% Protein Cottonseed Meal (Mfr'd. by Sikeston Cotton Oil Mill, Inc., Sikeston, Mo.)
"WHITE MULE BRAND" 41% Protein Cottonseed Meal

McCormick & Co., Inc., McCormick Bldg., Baltimore 2, Md.

HY-GRO

Mock Seed Co., 1218 Smallman St., Pittsburgh, Pa.

Green Magic Lawn Food

Monsanto Chemical Co., 1700 So. 2nd St., St. Louis, Mo.

Folium

National Fats & Oils Co. (See Frank Policastro & Sons)**Natural Plant Food Co., 210 W. California St., Oklahoma City, Okla.**

Longhorn Brand Cattle Manure

Nidera Argentina S.A. (See Imperial Agricultural Corp.)**Nutritional Concentrates, Inc., 3090 W. Liberty Ave., Pittsburgh 16, Pa.**

Malabar-Sunnyhill Fertilizer

Old Deerfield Fertilizer Co., Inc., 20 Sugarloaf St., So. Deerfield, Mass.

Nitrate of Potash
 Old Deerfield Castor Pomace
 Old Deerfield Cotton Hull Ash 40%
 Old Deerfield Cottonseed Meal
 Old Deerfield 5-8-7 Fertilizer
 Old Deerfield 5-10-5 Trucker's Special
 Old Deerfield 5-10-10 Fertilizer
 Old Deerfield 6-3-6 Complete Tobacco
 Old Deerfield 7-7-7 Fertilizer

Olds & Whipple, Inc., 168 State St., Hartford, Conn.

Horn and Hoof Meal
 O & W Bone Meal
 O & W Castor Pomace
 O & W Cotton Hull Ash
 O & W Menhaden Dry Ground Fish
 O & W Sulphate of Potash
 O & W Superphosphate
 O & W Triple Superphosphate 47%
 O & W 0-14-14 Fertilizer
 O & W 0-20-20 Fertilizer
 O & W 4-8-4 Complete Lawn and Grass Fertilizer
 O & W 4-12-4 Market Garden Fertilizer
 O & W 5-3-5 Complete Tobacco Fertilizer-Potash derived from Cotton Hull Ash
 O & W 5-5-15 High Grade Tobacco Starter
 O & W 5-8-6 Luxura
 O & W 5-8-7 Potato and General Purpose Fertilizer
 O & W 5-10-5 Fertilizer
 O & W 5-10-10 Potato Fertilizer
 O & W 5-10-10 Potato Fertilizer with 1.2% Magnesium
 O & W 6-3-6 Blue Label Tobacco Fertilizer
 O & W 6-3-6 Blue Label Tobacco Fertilizer-Potash derived from Cotton Hull Ash
 W/0.13 Cu
 O & W 6-3-6 Pomace Base Fertilizer-Potash derived from Cotton Hull Ash W/0.13
 Cu
 O & W 6-8-8 Special Potato Fertilizer
 O & W 6-8-8 Special Potato Fertilizer with 1.2 Magnesium
 O & W 7-7-7 Top Dressing and Grass Fertilizer
 Precipitated Bone Phosphate
 41% Protein, Peruvian Cottonseed Meal
 Sulphate of Potash and Magnesia

The George S. Phelps Co., Thompsonville, Conn.

Sheep Manure (Mfr'd. by Bruncote, Inc., Woonsocket, R. I.)

The Frank S. Platt Co., Inc., 450 State St., New Haven, Conn.

Platt's Special 10-5-5 Lawn Fertilizer

Frank Policastro & Sons, 31 Crescent St., Glenbrook, Conn.

ATC Cottonseed Meal (Mfr'd. by National Fats & Oils Co., Beirut, Lebanon)

Premier Peat Moss Corp., 535 Fifth Ave., New York 17, N. Y.

Premier-Nure

Ra-Pid-Gro Corp., 88 Ossian St., Dansville, N. Y.

Ra-Pid-Gro

The Rogers & Hubbard Co., Bank St., Portland, Conn.

Castor Pomace
Gro-Fast Aluminum Sulphate
Gro-Fast Acid Fertilizer
Gro-Fast Bone Meal
Gro-Fast Cow Manure
Gro-Fast Plant Food
Gro-Fast Rose Food
Gro-Fast Sheep Manure
Hubbard 6-8-8 for Potatoes
Hubbard 10-10-10
Hubbard Alfalfa Fertilizer 0-14-14
Hubbard Alfalfa Fertilizer 0-14-14 W/0.55 Boron
Hubbard Climax
Hubbard Corn Fertilizer
Hubbard Dairy Fertilizer
Hubbard Double Strength Fertilizer
Hubbard Garden Fertilizer
Hubbard General Crop Fertilizer
Hubbard General Crop Fertilizer with Magnesium
Hubbard Golf Course Fertilizer
Hubbard High Potash Fertilizer
Hubbard Muriate of Potash
Hubbard Seeding Fertilizer
Hubbard Superphosphate
Hubbard Tobacco Grower
Hubbard Tobacco Starter
Hubbard Top Dressing Fertilizer
Hubbard Valley Brand
Hubbard Vegetable Fertilizer
Hubbard Weed-Kil Lawn Food (Contains 2, 4-D)
Sulphate of Ammonia

Rose Manufacturing Co., 445 Main St., Beacon, N. Y.

Tri-Ogen Rose Food

Ruhm Phosphate & Chemical Co., Box 361, Columbia, Tenn.

Red Seal Brand Ruhm's Phosphate Rock

St. Louis National Stockyards Co., National Stockyards, Ill.

Wizard Brand Cow Manure
Wizard Brand Pulverized Sheep Manure

O. M. Scott & Sons Co., Marysville, Ohio

Scott's Turf Builder
Scott's Weed and Feed

Sears, Roebuck and Co., 925 S. Homan Ave., Chicago 7, Ill.

Cross Country Azalea Food
Cross Country Berry Food
Cross Country Bone Meal
Cross Country Bulb Food
Cross Country Cattle Manure
Cross Country Economy Fertilizer
Cross Country Evergreen Food
Cross Country Lawn Food
Cross Country Lawn Food and Weed Killer
Cross Country Liquid Plant Food
Cross Country Plant Food
Cross Country Rose Food

Sears, Roebuck and Co., 925 S. Homan Ave., Chicago 7, Ill.—Cont'd.

Cross Country Sheep Manure
 Cross Country Soluble Plant Food
 Cross Country Sulphate of Ammonia

Sewerage Commission of the City of Milwaukee, P. O. Box 2079, Milwaukee 1, Wis.

Milorganite

The Sherwin-Williams Co., 101 Prospect Ave., Cleveland, Ohio

Sherwin-Williams 34% Linseed Oil Meal

M. L. Shoemaker, Inc., Div. Wilson & Co., Delaware Ave. & Venango St., Philadelphia 34, Pa.

M. L. Shoemaker's Fertilizer Bone
 M. L. Shoemaker's "Swift-Sure" Tobacco Starter

Sikeston Cotton Oil Mill, Inc. (See Marianna Sales Co.)**Wendell S. Still, Middle Country Rd., Selden, N. Y.**

Farmanure

Summers Fertilizer Co., Inc., 210 E. Redwood St., Baltimore 2, Md.

Summers "Best-On-Earth" 4-16-16 Fertilizer
 Summers "Best-On-Earth" 10-5-5 Fertilizer

Swift & Co., 25 Faneuil Hall Sq., Boston 9, Mass.

All Organic Lawn Food
 Blenn
 Brimm
 Instant Vigoro
 Pasturgro 0-10-20
 Pasturgro 5-10-10
 Red Steer 0-20-0
 Red Steer 0-20-20
 Red Steer 5-8-7
 Red Steer 5-10-10
 Red Steer 8-16-16
 Sheep Manure
 Swift's 41% Protein Cottonseed Meal
 Swift's Special Golf Plant Food
 Vigoro 5-10-5
 Vigoro C. G.

Tobacco By-Products & Chemical Corp., 401 E. Main St., Richmond, Va.

Sterilized Ground Tobacco Stems

Uni-Commercial, Inc., 70 Pine St., New York 5, N. Y.

"UNICO" Brand 41% Protein Cottonseed Meal

Valley Feed & Supply Co., Inc., Union Rd., Spring Valley, N. Y.

Adorna

Victor Chemical Works, 141 W. Jackson Blvd., Chicago 4, Ill.

"Take-Hold"

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

Bovung

Oscar F. Warner, 24 E. Aurora St., Waterbury, Conn.

Warner's Grubedizer
Warner's Lawn Fertilizer
Warner's Tree Food

Garfield Williamson, Inc., 1072 Westside Ave., Jersey City 6, N. J.
Plantspur**F. H. Woodruff & Sons, Inc., 9 Depot St., Milford, Conn.**
Turf-Maker Lawn Food**Woodruff Fertilizer Works, Inc., Sackett Point Rd., No. Haven, Conn.**

Woodruff's 0-14-14 Fertilizer
Woodruff's 5-8-7 Fertilizer
Woodruff's 5-10-5 Fertilizer
Woodruff's 5-10-10 Fertilizer
Woodruff's 7-7-7 Fertilizer
Woodruff's Lawn & Tree Food
Woodruff's Muriate of Potash 60%
Woodruff's Superphosphate 20%
Woodruff's Tobacco Fertilizer
Woodruff's Tobacco Starter 5-5-15

FERTILIZER INSPECTION FOR 1953

The Connecticut fertilizer law does not provide for compulsory limitation of the grades of fertilizer that may be sold in this State. It has in fact been the belief of this Station that no farmer should be prevented from purchasing any grade of fertilizer he wished, no matter how low in plant food units it might be or how ill adapted to the needs of his crops, so long as he made the purchase with his eyes open. However, since all authorities are agreed that a small number of grades can take care of all the needs of agriculture and that standardization on a few grades will promote economy in the manufacture of fertilizers and so help to keep prices down, for some years the New England agronomists have compiled lists of recommended fertilizer ratios and minimum grades.

On October 7, 1952 the agronomists and fertilizer dealers of southern New England met at Storrs and agreed upon the following list for the 1952-1953 season:

<u>Ratio</u>	<u>Minimum Grade</u>
0-1-1	0-14-14
0-1-2	0-10-20
1-1-1	8- 8- 8
1-1-3	5- 5-15 (Tobacco fertilizer)
1-2-1	5-10- 5
1-2-2	5-10-10
2-1-2	6- 3- 6 (Tobacco fertilizer)
3-4-4	6- 8- 8
4-3-1	8- 6- 2 (For maintenance of established turf)
5-8-7	5- 8- 7

That most Connecticut farmers realize the desirability of using recommended grades is shown by the fact that 82 per cent of the mixed fertilizers sold during the 1952-1953 season were of the recommended ratios and minimum grades. Another 7 per cent is accounted for by a fertilizer of a recommended ratio but just under the recommended minimum grade, namely, the 7-7-7.

During the past season the Station agent collected samples of all registered brands that could be found on the market. Certain fertilizer materials, particularly vegetable meals, are purchased almost wholly by tobacco growers for direct shipment in carload lots from outside the State. Most tobacco growers submit unofficial samples from each carload for analysis by this Station, but in addition an attempt has been made by our agent to take official samples from as many of these shipments as possible. The total number of fertilizer samples of all kinds analyzed in 1953 was 745.

The following tabulation lists the total number of samples analyzed, both official and unofficial of each class of fertilizer, as well as the tonnage sold in the period between July 1, 1952 and June 30, 1953 (these tonnage figures do not include fertilizer distributed under the Federal Agricultural Adjustment Program):

CLASSIFICATION OF FERTILIZER MATERIALS AND FERTILIZER TONNAGE

(Tonnage is for the period July 1, 1952 to June 30, 1953)

	Page	No. of samples	Tonnage	
I. Containing chiefly nitrogen:				
Nitrate of ammonia	24	2	525	
Nitrate of soda	24	6	749	
Sulphate of ammonia	24	6	32	
Cyanamid and urea	24, 25	5	148	
Castor pomace	25	6	2,591	
Cottonseed meal	25	119	9,957	
Horn and hoof meal	26	3	72	
Linseed oil meal	27	10	663	
Soybean oil meal	27	4	165	
Other materials	27	4	474	
				15,376
II. Containing chiefly phosphoric acid:				
Superphosphate 18%	28	2	625	
20%	28	16	4,059	
47%	29	1	8	
Precipitated bone	29	9	403	
Phosphate rock	29	3	145	
				5,240
III. Containing chiefly potash:				
Muriate of potash	30	9	1,074	
Sulphate of potash	30	3	323	
Sulphate of potash-magnesia	30	3	53	
Cottonhull ashes	31	11	569	
				2,019
IV. Containing nitrogen and phosphoric acid:				
Dry ground fish	32	8	503	
Bone meal	32	16	654	
Other materials	33	1	843	
				2,000
V. Containing nitrogen and potash:				
Nitrate of potash .....	..	3	169	
Other materials .....	..	...	116	
				285
VI. Mixed fertilizers:				
Commerical mixtures	34	199	56,646 ¹	
Special and home mixtures .....	..	129	973	
				57,619
VII. Miscellaneous:				
Aluminum sulphate .....	..	2	4	
Borax .....	..	...	11	
Sheep and cattle manure	48	17	1,094	
Limestone and similar materials	50	5		
Fertilizers sold in small packages	51	59		
Soil conditioners	58	27		
Other miscellaneous materials	60	20	25	
Check meals and fertilizers .....	..	37		
				1,134
Totals		745		83,673

¹ For distribution of this tonnage see next page.

Mixed Fertilizer Tonnage*Grades Approved for Connecticut*

<i>Grade</i>	<i>Tons</i>	<i>Grade</i>	<i>Tons</i>
0-10-20	835	6- 3- 6	14,446
0-12-24	63	6- 8- 8	3,451
0-14-14	761	6-12-12	286
0-15-30	1,029	8- 4- 8	870
0-19-19	9	8- 6- 2	751
0-20-20	1,106	8- 8- 8	123
5- 5-15	484	8-16- 8	22
5- 8- 7	5,600	8-16-16	1,553
5-10- 5	3,605	10-10-10	1,431
5-10-10	10,256	20-20-20	5

Total 46,686

*Other Grades**(More than 50 tons)*

3-12-12	401	6- 8- 6	77
4- 4- 2	100	6-10- 4	478
4- 8- 4	64	7- 7- 7	3,144
4-10- 0	69	8- 6- 4	919
4-12- 4	791	8-12-12	1,004
5- 3- 0	107	8-12-16	82
5- 3- 5	868	9- 7- 4	265
5-15-15	306	10- 5- 5	163
6- 7- 4	243	10- 6- 2	214
6- 8- 2	153	10- 6- 4	195

Total 9,643

(Less than 50 tons)

3- 2- 1	33	6- 3- 0	20
3.5-3.5-1.5	11	6- 4- 6	23
4- 4- 4	9	7- 8- 5	11
4- 6- 4	5	7-10- 5	49
4-10- 4	26	7-11- 5	24
4-12- 6	37	23-21-17	6
5- 8- 6	27	24-12-12	7
5- 9- 6	12	Other grades	17

Total 317

Grand Total 56,646

I. Materials Chiefly Valuable for Nitrogen

Eighty-seven per cent (13,376 tons) of the primarily nitrogenous fertilizers purchased for fertilizer use in Connecticut during the 1953 season were vegetable meals, all or substantially all of which were used as tobacco fertilizers. Synthetic organic (cyanamid and urea) and inorganic materials (nitrate and sulphate of ammonia and nitrate of soda) purchased by others than tobacco growers made up the other 13 per cent.

Analyses of the 56 official samples of nitrogenous fertilizers are given in Table 1. Thirty-three of these substantially met their guaranties; eleven samples of cottonseed meal, three each of nitrate of ammonia and miscellaneous materials, two samples each of cyanamid and horn and hoof meal, and one sample each of sulphate of ammonia and urea, were deficient.

II. Materials Chiefly Valuable for Phosphoric Acid

Analyses of 14 official samples of 20 per cent superphosphate, two samples of the 18 per cent grade and one sample of 47 per cent "triple" superphosphate are given in Table 2; all of these except the 47 per cent sample and one 20 per cent met their guaranties. Of four samples of precipitated bone and three of phosphate rock, only one precipitated bone sample was below guaranty.

III. Materials Chiefly Valuable for Potash

Nine official samples of muriate of potash, two of sulphate of potash, two of sulphate of potash-magnesia and five of cottonhull ashes were analyzed; analyses are given in Table 3. All samples except three of muriate of potash met their guaranties.

IV. Materials Supplying Nitrogen and Phosphoric Acid

This group consists chiefly of dry ground fish and bone meal. Guaranties of "available" phosphoric acid are not required on such natural products of organic origin, and most of them bear guaranties of total nitrogen and total phosphoric acid only. The three official samples of dry ground fish exceeded their guaranties, as did 10 of the 15 samples of bone meal. The one sample of "Milorganite," a treated sewage sludge, was deficient in nitrogen.

V. Materials Supplying Nitrogen and Potash

There is only one fertilizer material now on the market falling into this classification, namely, nitrate of potash. Fertilizer grade potassium nitrate is required to contain at least 12 per cent of nitrogen and 44 per cent of potash.

Both official samples, whose analyses are given in Table 3, met their guaranties of 13 per cent nitrogen and 44 per cent potash.

VI. Mixed Fertilizers

Commercial Mixtures

Analyses of 199 official samples of mixed fertilizers are given in Table 5. Results are summarized as follows:

Total number of samples	199	
Samples deficient in:		
one item	62	
two items	4	66
Percentage of samples meeting guaranties		67
Total guaranties made		569 ¹
Guaranties not met:		
nitrogen	40	
phosphoric acid	22	
potash	8	70
Percentage met		88

¹ One hundred and seventy-one samples with three guaranties and 28 samples with two guaranties (guaranties for minor elements not included).

Eighty-eight per cent of all guaranties were substantially met or exceeded—exactly the same percentage found for the 1951 and 1952 seasons.

Fifteen official samples guaranteed magnesium (usually 1.2 per cent) as well as the major fertilizer components. One sample guaranteed 0.41 per cent boron; another sample 0.10 per cent each of boron and manganese; and two samples guaranteed 0.13 per cent of copper. All of these minor element guaranties were met except for one sample which was deficient in copper.

Special and Home Mixtures

One hundred and twenty-nine samples of special and home mixtures were analyzed during the year, the great majority for tobacco growers. Because the composition of these samples is not a matter of public interest, their analyses are not tabulated in this bulletin.

State Purchases of Fertilizer

Fertilizer materials and mixed goods supplied to State institutions on State purchase orders are regularly included in our annual inspection. Fertilizers so supplied are subject to registration and tonnage tax (unless supplied to The Connecticut Agricultural Experiment Station for experimental purposes).

Samples representing State purchases are indicated in the several tables. They are summarized as follows:

<i>Materials</i>	<i>No. of samples</i>	<i>Reference</i>
Supplying nitrogen	12	Table 1
Supplying phosphoric acid	5	Table 2
Supplying potash	5	Table 3
Supplying nitrogen and phosphoric acid	5	Table 4
Mixed fertilizers	24	Table 5
	Total	51

VII. Miscellaneous

Sheep and cattle manures. These products usually bear guaranties of nitrogen, total phosphoric acid and potash, although some brands guarantee "available" instead of total phosphoric acid. Of the 15 official samples analyzed during the 1952-1953 season, all met their guaranties except two sheep manures that were deficient in nitrogen. Analyses are given in Table 6.

Limestone and similar materials. Because the legal definition of "commercial fertilizers" specifically excludes "marl and lime," no regular inspection of liming materials is made. Occasional samples of limestone, hydrated lime and gypsum are analyzed for farmers or state or federal agencies, and analyses of five such samples are given in Table 7.

Fertilizers sold in small packages. Fertilizers sold only in packages of 10 pounds or less are not required to be registered. No attempt, therefore, is made to sample all brands of small package fertilizers that are on the market, but those that come to the attention of our agent are picked up and

analyzed as a matter of interest. During the 1952-1953 season 59 samples were analyzed, of which 47, or 80 per cent, met all their guaranties; this is a considerably higher percentage than the 66 found for mixed fertilizers sold in 100 lb. bags.

Analyses are given in Table 8.

Soil conditioners. In the 1952 report¹ we published analyses of 11 samples of the new products intended to modify the structure of the soil that have attracted much attention in the press during the last two years. These soil conditioners, of which "Krilium" is the best-known example, contain as their active ingredients synthetic organic polymers, usually either sodium polyacrylate or a vinyl acetate-maleic acid polymer. The samples reported in 1952 were not, however, analyzed for any specific organic compound; instead the percentages of the major fertilizer elements, nitrogen, phosphorus and potassium, were determined, as well as the proportions of water, mineral and organic matter; pH determinations were also run as indications of the relative alkalinities or acidities of the various preparations.

That these analyses were of interest to the public was shown by a demand for Bulletin 563 that exhausted the supply. We have, therefore, included in the present bulletin analyses of 27 other samples of soil conditioning materials. Most of these samples were supplied by our Soils Department, and represented materials they were using in pot and field tests; this explains the presence in Table 9, side by side with commercial soil conditioners, of experimental products and such materials as "Ivory Snow" and liquid hand soap.

Only one of the samples in Table 9 bore definite fertilizer guaranties: "RX-15," manufactured by Garden Research Laboratories, Madison, N. J. This product is sold as a 15-15-15 fertilizer (it was deficient in nitrogen and potash), and perhaps should not have been included in the soil conditioner table, but was placed there because of the type of claims made for it.

A comparison of the other 26 samples shows their total nitrogen content to vary from zero to 10.59 per cent, their phosphoric acid content to range upwards from none to 6.49 per cent and their potash content to run from nothing to 1.65 per cent. Moisture is as little as 1.36 per cent in "Wyandotte C-9056-C Pluronic L62" and as much as 89.58 per cent in "Experimental Chemical RSPA," and the percentage of organic matter (which should be a rough indication of the concentration of organic polymer, the active ingredient) runs from 4.85 in the "Clay Cement Solids" to 98.62 in the "Wyandotte C-9056-C Pluronic L62." Reactions vary from a pH of 4.00 ("Krilium No. 631") to 9.75 ("Kleen-It").

Other miscellaneous materials. Twenty other miscellaneous products were examined; analyses are given in Table 10. Included are two samples of crushed granite, which is being used to some extent as a tobacco fertilizer because the insoluble potash that it contains is apparently gradually made available to the tobacco plant. Granite, while it contains almost no water-

¹Conn. Agr. Expt. Sta. Bul. 563, 60-61 (1952).

soluble potash, may contain as much as 5 per cent of insoluble potash, but the two samples analyzed by us in 1953 averaged only 1.92 per cent.

Two samples of aluminum sulphate and two of tobacco stems are listed in this table, even though they are official samples of registered materials, because they would not fit very well into any of the other tables. All four samples met their respective guaranties (8.5 and 9 per cent aluminum in the case of the aluminum sulphates and 1.22 per cent nitrogen and 4.34 per cent potash for the tobacco stems).

Check meals and fertilizers. Collaboration was continued with the check analysis programs sponsored by the American Oil Chemists' Society and the F. S. Royster Guano Company, and 10 samples were analyzed in connection with collaborative studies of methods for the determination of phosphoric acid and potash conducted by the Association of Official Agricultural Chemists. Thirty-seven samples in all were analyzed under these various programs.

MAINTENANCE OF GUARANTIES

The maintenance of guaranties as compiled from analyses of ingredient materials and mixed goods (Tables 1-6) is shown in the following tabulation. Deficiencies of 0.1 per cent or less in nitrogen or 0.2 per cent or less in phosphoric acid and potash are not counted. The proportion of guaranties substantially met was 86 per cent.

	<i>No. of samples</i>	<i>No. of guaranties</i>	<i>Deficiencies</i>
Nitrate of ammonia	2	2	2
Nitrate of soda	5	5	1
Sulphate of ammonia	6	6	1
Cyanamid	3	3	2
Urea	1	1	1
Castor pomace	5	5	0
Cottonseed meal	25	25	11
Horn and hoof meal	2	2	2
Linseed oil meal	2	2	0
Soybean oil meal	1	1	0
Miscellaneous nitrogenous materials	4	4	3
Superphosphate	17	17	2
Precipitated bone	4	4	1
Phosphate rock	3	3	0
Muriate of potash	9	9	3
Nitrate of potash	2	4	0
Sulphate of potash	2	2	0
Sulphate of potash-magnesia	2	2	0
Cottonhull ashes	5	5	0
Dry ground fish	3	6	0
Bone meal	15	29	5
"Milorganite"	1	2	1
Mixed fertilizer	199	569	70
Sheep and cattle manure	15	45	2
Totals	333	753	107
Per cent guaranties met			86

TABLE 1. ANALYSES OF MATERIALS SUPPLYING CHIEFLY NITROGEN¹

Station No.	Manufacturer or jobber	Sampled from stock of	Per cent nitrogen	
			Found	Guaranteed
Nitrate of Ammonia				
5528 ²	AEROPRILLS. American Cyanamid Co., New York, N. Y.	Cheshire: Connecticut Reformatory	29.35	33.50
5591 ²	AEROPRILLS. American Cyanamid Co., New York, N. Y.	Mansfield Depot: Mansfield State Training School	33.26	33.50
Nitrate of Soda				
5529 ^{3,4}	Arcadian. The American. Allied Chemical & Dye Corp., New York, N. Y.	Cheshire: Connecticut Reformatory	16.00	16.00
5768 ^{3,4}	Arcadian. The American. Allied Chemical & Dye Corp., New York, N. Y.	Norwich: Norwich State Hospital	15.48	16.00
5532 ⁵	Chilean, Champion Brand. Chilean Nitrate Sales Corp., New York, N. Y.	Southbury: Southbury Training School	16.00	16.00
5588 ⁶	Chilean, Champion Brand. Chilean Nitrate Sales Corp., New York, N. Y.	Bolton Notch: Tony Ansaldo ..	16.00	16.00
5618 ⁶	Chilean, Champion Brand. Chilean Nitrate Sales Corp., New York, N. Y.	North Haven: Eastern States Farmers' Exchange, Inc.	16.00	16.00
Sulphate of Ammonia				
5638 ²	Allied Chemical & Dye Corp., New York, N. Y.	Somers: N. G. Osborn Prison Farm	20.60	20.60
5700	Allied Chemical & Dye Corp., New York, N. Y.	Greenwich: McArdle's Seed Store	20.88	20.60
5769 ²	Allied Chemical & Dye Corp., New York, N. Y.	Norwich: Norwich State Hospital	20.70	20.60
6097	The American Agricultural Chemical Co., North Weymouth, Mass.	Darien: Ring's End Fuel Co. .	20.76	20.50
5903	Goulard & Olena, Inc., Skillman, N. J.	Darien: Ring's End Fuel Co. .	20.62	20.75
5812	The Rogers & Hubbard Co., Portland, Conn.	Portland: The Rogers & Hubbard Co.	20.58	20.50
Cyanamid				
5540 ²	AERO. American Cyanamid Co., New York, N. Y.	Middletown: Long Lane School	19.22	20.00

¹ Deficiencies are in bold face type.² State purchases.³ Sodium guaranteed, 26.0%; found, 28.31%.⁴ Sodium guaranteed, 26.0%; found, 31.10%.⁵ Sodium guaranteed, 26.0%; found, 30.32%.⁶ Sodium guaranteed, 26.0%; found, 29.07%.

TABLE 1. ANALYSES OF MATERIALS SUPPLYING CHIEFLY NITROGEN¹

Station No.	Manufacturer or jobber	Sampled from stock of	Per cent nitrogen	
			Found	Guaranteed
5767 ²	AERO. American Cyanamid Co., New York, N. Y.	Norwich: Norwich State Hospital	19.92	20.00
5829 ²	AERO. American Cyanamid Co., New York, N. Y.	Niantic: Connecticut Farm for Women	19.36	20.00
Urea				
5811	DU PONT NU GREEN Fertilizer Compound. E. I. du Pont de Nemours & Co., Wilmington, Del.	Portland: The Rogers & Hubbard Co.	44.29	45.00
Castor Pomace				
5382	Apothecaries Hall Co., Waterbury, Conn.	Windsor: Imperial Agricultural Corp.	5.77	4.50
5902	Apothecaries Hall Co., Waterbury, Conn.	Bloomfield: Bloomfield Farmers' Exchange	6.45	4.50
5381	Spencer Kellogg & Sons, Inc., Buffalo, N. Y.	Windsor: Imperial Agricultural Corp.	5.95	5.55
5544 ²	Spencer Kellogg & Sons, Inc., Buffalo, N. Y.	Middletown: Long Lane School	6.10	5.55
5855	Spencer Kellogg & Sons, Inc., Buffalo, N. Y.	Wilson: Anders Christensen ..	5.84	5.55
Cottonseed Meal				
6056	Cow-Eta Brand 36%. Ashcraft-Wilkinson Co., Atlanta, Ga. .	Windsorville: Apothecaries Hall Co.	6.33	5.76
5363	Cow-Eta Brand 41%. Ashcraft-Wilkinson Co., Atlanta, Ga. .	East Granby: Cullman Bros., Inc.	6.73	6.56
5364	Cow-Eta Brand 41%. Ashcraft-Wilkinson Co., Atlanta, Ga. .	East Granby: Cullman Bros., Inc.	6.50	6.56
5368	Cow-Eta Brand 41%. Ashcraft-Wilkinson Co., Atlanta, Ga. .	West Suffield: Hatheway-Steane Corp.	6.18	6.56
5369	Cow-Eta Brand 41%. Ashcraft-Wilkinson Co., Atlanta, Ga. .	West Suffield: Hatheway-Steane Corp.	7.03	6.56
5373	Cow-Eta Brand 41%. Ashcraft-Wilkinson Co., Atlanta, Ga. .	West Suffield: A. N. Shepard & Son	6.35	6.56
5374	Cow-Eta Brand 41%. Ashcraft-Wilkinson Co., Atlanta, Ga. .	West Suffield: A. N. Shepard & Son	6.60	6.56
5394	Cow-Eta Brand 41%. Ashcraft-Wilkinson Co., Atlanta, Ga. .	Hazardville: L. B. Haas & Co.	6.36	6.56
5910	Buckeye 41%. The Buckeye Cotton Oil Co., Cincinnati, Ohio	Saugatuck: L. H. Gault & Sons, Inc.	6.43	6.56

¹ Deficiencies are in bold face type.² State purchases.

TABLE 1. ANALYSES OF MATERIALS SUPPLYING CHIEFLY NITROGEN¹

Station No.	Manufacturer or jobber	Sampled from stock of	Per cent nitrogen	
			Found	Guaranteed
6005	Goulard & Olena, Inc., Skillman, N. J.	Darien: Ring's End Fuel Co. .	6.69	6.70
5393	Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn.	Hazardville: L. B. Haas & Co.	6.16	6.56
5395	Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn.	Hazardville: L. B. Haas & Co.	6.43	6.56
5375	Cotton Cakes. Imperial Agricultural Corp., Hartford, Conn.	Windsor: Imperial Agricultural Corp.	6.50	6.92
5376	Cotton Cakes. Imperial Agricultural Corp., Hartford, Conn.	Windsor: Imperial Agricultural Corp.	6.96	6.92
5377	Cotton Cakes. Imperial Agricultural Corp., Hartford, Conn.	Windsor: Imperial Agricultural Corp.	6.90	6.92
5698	"Lovit Brand" 41%. L. B. Lovitt & Co., Memphis, Tenn.	Greenwich: McArdle's Seed Store	6.32	6.56
5365	Sikeston Brand 41%. Marianna Sales Co., Memphis, Tenn. .	East Granby: Cullman Bros., Inc.	6.24	6.56
5360	"White Mule Brand" 41%. Marianna Sales Co., Memphis, Tenn.	Simsbury: Cullman Bros., Inc.	6.29	6.56
5361	"White Mule Brand" 41%. Marianna Sales Co., Memphis, Tenn.	Simsbury: Cullman Bros., Inc.	6.45	6.56
5362	"White Mule Brand" 41%. Marianna Sales Co., Memphis, Tenn.	Simsbury: Cullman Bros., Inc.	6.52	6.56
5400	"White Mule Brand" 41%. Marianna Sales Co., Memphis, Tenn.	East Windsor Hill: General Cigar Co., Inc.	6.50	6.56
5405	"White Mule Brand" 41%. Marianna Sales Co., Memphis, Tenn.	East Windsor Hill: General Cigar Co., Inc.	6.65	6.56
5411	41%, Peruvian. Olds & Whipple, Inc., Hartford, Conn. .	Bloomfield: The Hartman Tobacco Co.	7.29	6.56
5412	41%, Peruvian. Olds & Whipple, Inc., Hartford, Conn. .	Bloomfield: The Hartman Tobacco Co.	6.52	6.56
6368	ATC. Frank Policastro & Sons, Glenbrook, Conn.	Glenbrook: Frank Policastro & Sons	5.82	...
Horn and Hoof Meal				
5397	Olds & Whipple, Inc., Hartford, Conn.	Hazardville: L. B. Haas & Co.	13.79	14.00
6110	Olds & Whipple, Inc., Hartford, Conn.	East Hartford: Olds & Whipple, Inc.	13.26	14.00

¹ Deficiencies are in bold face type.

TABLE 1. ANALYSES OF MATERIALS SUPPLYING CHIEFLY NITROGEN¹

Station No.	Manufacturer or jobber	Sampled from stock of	Per cent nitrogen	
			Found	Guaranteed
Linseed Oil Meal				
5366	Archer Quality 36%. Archer-Daniels-Midland Co., Minneapolis, Minn.	West Suffield: Hatheway-Steane Corp.	5.45	5.12
5938 ²	Sherwin-Williams 34%. The Sherwin-Williams Co., Cleveland, Ohio	East Hartford: Olds & Whipple, Inc.	5.68	5.44
Soybean Oil Meal				
6057	Glidden Quality Products 44%. The Glidden Co., Chicago, Ill.	Windsorville: Apothecaries Hall Co.	7.29	7.04
Miscellaneous				
5979 ³	A-N-L. Allied Chemical & Dye Corp., New York, N. Y.	Bethel: Eastern States Farmers' Exchange, Inc.	20.20	20.50
5595	Agrinite. The American Agricultural Chemical Co., North Weymouth, Mass.	Newtown: Newtown Farm Supply Co.	8.31	8.25
5639	Corenco Organic Tankage. Consolidated Rendering Co., Boston, Mass.	Thompsonville: Brainard Nursery & Seed Co.	7.70	8.25
5749	Montansalpeter (Ammonium Sulphate Nitrate) H. J. Baker & Bro., New York, N. Y.	East Hartford: Eastern States Farmers' Exchange, Inc. ...	25.80	26.00

¹ Deficiencies are in bold face type.² Potash guaranteed, 1.0%; found, 1.52%.³ Magnesium guaranteed, 4.22%; found 4.61%.

TABLE 2. ANALYSES OF SUPERPHOSPHATE, ETC.¹

Station No.	Manufacturer or jobber	Sampled from stock of	Per cent phosphoric acid			
			Citrate-insoluble	Total	"Available"	
					Found	Guaranteed
Superphosphate						
5383	18% Normal. The American Agricultural Chemical Co., No. Weymouth, Mass.	Windsor: Imperial Agricultural Corp.	0.53	18.55	18.02	18.00
5742	18% Normal. The American Agricultural Chemical Co., No. Weymouth, Mass.	East Hartford: The American Agricultural Chemical Co.	0.95	19.45	18.50	18.00
5367	Granulated. Apothecaries Hall Co., Waterbury, Conn.	West Suffield: Hatheway & Steane Corp.	1.35	21.85	20.50	20.00
5536 ²	Granulated. Apothecaries Hall Co., Waterbury, Conn.	Southbury: Southbury Training School	1.20	21.70	20.50	20.00
5546 ²	Pulverized. Apothecaries Hall Co., Waterbury, Conn.	Middletown: Conn. State Hospital ..	0.00	19.85	19.85	20.00
5637 ²	Granulated. Apothecaries Hall Co., Waterbury, Conn.	Somers: N. G. Osborn Prison Farm .	1.45	22.30	20.85	20.00
5773	Granulated. Apothecaries Hall Co., Waterbury, Conn.	Pleasant Valley: Park & Forest Commission	1.55	21.80	20.25	20.00
5828 ²	Pulverized. Apothecaries Hall Co., Waterbury, Conn.	Niantic: Conn. Farm for Women ...	0.38	19.95	19.57	20.00
6071	Armour's Big Crop 20%. Armour Fertilizer Works, Carteret, N. J.	East Windsor Hill: John Schweir & Son	0.80	21.30	20.50	20.00
5683	Corenco 20%. Consolidated Rendering Co., Boston, Mass.	Thompsonville: Geo. S. Phelps Co. ..	0.60	21.60	21.00	20.00
5862	Davco Granulated 20%. The Davison Chemical Corp., Baltimore, Md.	West Suffield: H. L. Oppenheimer & Sons	1.15	22.30	21.15	20.00

5802	Eastern States Granulated 20%. Eastern States Farmers' Exchange, Inc., West Springfield, Mass.	Torrington: Eastern States Farmers' Exchange, Inc.	1.15	23.55	22.40	20.00
5850	Old Fox Brand. Fox Point Chemical Co., East Providence, R. I.	Pawcatuck: The C. W. Campbell Co.	0.87	21.30	20.43	20.00
6103	O&W. Olds & Whipple, Inc., Hartford, Conn. ..	East Hartford: Olds & Whipple, Inc.	2.40	22.50	20.10	20.00
6109	O&W Triple 47%. Olds & Whipple, Inc., Hartford, Conn.	East Hartford: Olds & Whipple, Inc.	0.73	46.10	45.37	47.00
5504	Hubbard 20%. The Rogers & Hubbard Co., Portland, Conn.	Portland: Consolidated Cigar Corp. .	0.10	20.50	20.40	20.00
5621	Woodruff Fertilizer Works, Inc., North Haven, Conn.	North Haven: Woodruff Fertilizer Works, Inc.	1.68	22.91	21.23	20.00
Precipitated Bone Phosphate						
5370	38%. Apothecaries Hall Co., Waterbury, Conn.	West Suffield: Hatheway & Steane Corp.	0.35	41.50	41.15	38.00
5401	42%. Apothecaries Hall Co., Waterbury, Conn.	East Windsor Hill: General Cigar Co., Inc.	0.20	43.40	43.20	42.00
5396	Olds & Whipple, Inc., Hartford, Conn.	Hazardville: L. B. Haas & Co.	1.40	41.10	39.70	38.00
5408	Olds & Whipple, Inc., Hartford, Conn.	Bloomfield: The Hartman Tobacco Co.	0.90	37.40	35.55	38.00
Phosphate Rock						
5679 ³	AA Quality. The American Agricultural Chemical Co., No. Weymouth, Mass.	Thompsonville: Brainard Nursery & Seed Co. ....	....	30.30	....	....
5824 ⁴	AERO-PHOS Florida Natural. American Cyanamid Co., New York, N. Y.	Centerbrook: S. M. Prann, Inc.	29.50	33.85	4.35	3.00
5615 ³	Corenco Ground. Consolidated Rendering Co., Boston, Mass.	New Haven: R. G. Davis & Sons, Inc. ....	....	30.30	....	....

¹ Deficiencies are in bold face type.

² State purchases.

³ Total phosphoric acid guaranteed, 30.0%.

⁴ Total phosphoric acid guaranteed, 33.0%.

TABLE 3. ANALYSES OF POTASH SALTS, ETC.¹

Station No.	Manufacturer or jobber	Sampled from stock of	Per cent potash	
			Found	Guaranteed
Muriate of Potash				
6118	The American Agricultural Chemical Co., North Weymouth, Mass.	East Hartford: The American Agricultural Chemical Co. ...	60.72	60.00
5530 ²	Apothecaries Hall Co., Waterbury, Conn.	Cheshire: Connecticut Reformatory	56.68	60.00
5535 ²	Apothecaries Hall Co., Waterbury, Conn.	Southbury: Southbury Training School	59.76	60.00
5549 ²	Apothecaries Hall Co., Waterbury, Conn.	Middletown: Connecticut State Hospital	60.28	60.00
5827 ²	Apothecaries Hall Co., Waterbury, Conn.	Niantic: Connecticut State Farm for Women	59.24	60.00
6008	Consolidated Rendering Co., Boston, Mass.	West Haven: New Haven Rendering Co.	59.96	60.00
5923	Old Fox Brand. Fox Point Chemical Co., East Providence, R. I.	Putnam: Putnam Farmers' Co-op Assoc., Inc.	59.88	60.00
5816	Hubbard. The Rogers & Hubbard Co., Portland, Conn. ...	Portland: The Rogers & Hubbard Co.	60.32	60.00
5629	Woodruff's 60%. Woodruff Fertilizer Works, Inc., North Haven, Conn.	North Haven: Woodruff Fertilizer Works, Inc.	60.28	60.00
Nitrate of Potash				
5378 ³	Apothecaries Hall Co., Waterbury, Conn.	Windsor: Imperial Agricultural Corp.	44.84	44.00
6128 ⁴	Apothecaries Hall Co., Waterbury, Conn.	Windsorville: Apothecaries Hall Co.	45.28	44.00
Sulphate of Potash				
5541 ²	Apothecaries Hall Co., Waterbury, Conn.	Middletown: Long Lane School	51.24	48.00
5407	O&W. Olds & Whipple, Inc., Hartford, Conn.	Bloomfield: The Hartman Tobacco Co.	50.40	48.00
Sulphate of Potash and Magnesia				
5392 ⁵	Apothecaries Hall Co., Waterbury, Conn.	Hazardville: L. B. Haas & Co.	22.54	22.00

¹ Deficiencies are in bold face type.² State purchases.³ Nitrogen guaranteed, 13.0%; found, 13.08%.⁴ Nitrogen guaranteed, 13.0%; found, 13.0%.⁵ Magnesium guaranteed, 10.0%; found, 11.72%.

TABLE 3. ANALYSES OF POTASH SALTS, ETC.¹

Station No.	Manufacturer or jobber	Sampled from stock of	Per cent potash	
			Found	Guaranteed
5406	Olds & Whipple, Inc., Hartford, Conn.	Bloomfield: The Hartman Tobacco Co.	23.38	21.50
Cottonhull Ashes				
5372	Apothecaries Hall Co., Waterbury, Conn.	West Suffield: Hatheway & Steane Corp.	36.02	unit basis
5403	Apothecaries Hall Co., Waterbury, Conn.	East Windsor Hill: General Cigar Co., Inc.	39.32	unit basis
5402	Old Deerfield 40%. Old Deerfield Fertilizer Co., South Deerfield, Mass.	East Windsor Hill: General Cigar Co., Inc.	42.04	40.00
5409	O&W. Olds & Whipple, Inc., Hartford, Conn.	Bloomfield: The Hartman Tobacco Co.	44.09	35.00
5756	O&W. Olds & Whipple, Inc., Hartford, Conn.	Glastonbury: E. J. Bantle	35.14	35.00

¹ Deficiencies are in bold face type.

TABLE 4. ANALYSES OF GROUND FISH, BONE, ETC.¹

Station No.	Manufacturer or jobber	Sampled from stock of	Per cent nitrogen		Per cent phosphoric acid		Mechanical analyses (in percentage)	
			Total found	Total guaranteed	Total found	Total guaranteed	Finer than 1/50 inch *	Coarser than 1/50 inch
Dry Ground Fish								
5371	Apothecaries Hall Co., Waterbury, Conn.	West Suffield: Hatheway & Steane Corp.	10.56	9.00	6.83	5.00	...	...
5391	O&W Menhaden. Olds & Whipple, Inc., Hartford, Conn.	Windsor: Imperial Agricultural Corp.	9.27	9.00	6.58	5.00	...	...
5398	O&W Menhaden. Olds & Whipple, Inc., Hartford, Conn.	Hazardville: L. B. Haas & Co.	10.00	9.00	6.70	5.00	...	...
Bone Meal								
5739	The American Agricultural Chemical Co., North Weymouth, Mass.	East Hartford: The American Agricultural Chemical Co. .	....	...	29.10	25.00	69.0	31.0
5803	Apothecaries Hall Co., Waterbury, Conn.	Torrington: Torrington Grain Co.	2.31	2.25	28.30	22.00	63.0	37.0
5956	Apothecaries Hall Co., Waterbury, Conn.	Bridgeport: Beardsley Park ..	2.24	2.25	28.55	22.00	66.5	33.5
5579	Armour's. Armour Fertilizer Works, Carteret, N. J.	East Windsor Hill: John Schweir & Son	2.50	2.30	23.30	23.00	46.0	54.0
5508	Corenco Ground. Consolidated Rendering Co., Boston, Mass.	New Haven: The Frank S. Platt Co.	2.08	2.00	28.75	22.00	69.0	31.0

5695	Pure. Faesy & Besthoff, Inc., New York, N. Y.	Greenwich: McArdle's Seed Store	2.06	2.47	29.05	23.00	66.5	33.5
5851	Old Fox Brand. Fox Point Chemical Co., East Providence, R. I.	Pawcatuck: The C. W. Campbell Co.	1.12	1.50	32.60 ²	....	78.0	22.0
5514	G&O Ground. Goulard & Olena, Inc., Skillman, N. J.	New Haven: Jackson-Marvin Hardware Co.	3.24	2.40	23.30	20.00	59.0	41.0
5737	O&W. Olds & Whipple, Inc., Hartford, Conn.	Rockville: The Rockville Grain & Coal Co.	2.29	2.47	28.60	22.00	70.0	30.0
5750	O&W. Olds & Whipple, Inc., Hartford, Conn.	Glastonbury: E. J. Bantle ...	1.97	2.47	30.10	22.00	67.5	32.5
5537 ³	Gro-Fast. The Rogers & Hubbard Co., Portland, Conn.	Southbury: Southbury Training School	2.04	2.00	29.05	23.00	65.0	35.0
5545 ³	Gro-Fast. The Rogers & Hubbard Co., Portland, Conn.	Middletown: Long Lane School	1.73	2.00	30.25	23.00	74.0	26.0
5592 ³	Gro-Fast. The Rogers & Hubbard Co., Portland, Conn.	Mansfield Depot: Mansfield State Training School	2.08	2.00	29.20	23.00	75.5	24.5
5636 ³	Gro-Fast. The Rogers & Hubbard Co., Portland, Conn.	Somers: N. G. Osborn Prison Farm	2.28	2.00	28.95	23.00	69.5	30.5
5755	M. L. Shoemaker's Fertilizer. M. L. Shoemaker, Inc., Philadelphia, Pa. ...	Glastonbury: E. J. Bantle	2.48	2.47	28.65	23.00	63.0	37.0
Milorganite								
5506 ³	Sewerage Commission of the City of Milwaukee, Milwaukee, Wis.	New Haven: The Conn. Agricultural Experiment Station	5.80	6.00	4.55 ⁴	2.75	...	...

¹ Deficiencies are in bold face type.² Guaranteed "available" phosphoric acid, 20.00%; found, 19.73%.³ State purchases.⁴ Guaranteed "available" phosphoric acid, 2.0%; found, 3.85%.

TABLE 5. ANALYSES OF MIXED FERTILIZERS

Station No.	Manufacturer and brand	Place of sampling
Agricultural Supply Co., West Haven, Conn.		
5521	Yale Special Mixture 8-6-2	Hamden
The American Agricultural Chemical Co., North Weymouth, Mass.		
5920	AA Quality Fertilizer 0-10-20	Putnam
6116	AA Quality Fertilizer 3-12-12	East Hartford ...
5744	AA Quality Fertilizer 4-12-4	East Hartford ...
6115	AA Quality Fertilizer 5-8-7	East Hartford ...
5743	AA Quality Fertilizer 5-10-10	East Hartford ...
5740	AA Quality Fertilizer 7-7-7	East Hartford ...
5741	Agrico Country Club Fertilizer 6-10-4	East Hartford ...
5581	Agrico Country Club Fertilizer 8-6-2	Manchester
5933	Agrico Country Club Fertilizer 10-6-4	West Haven
5728	Agrico for Broadleaf Evergreens 6-10-4	Stamford
5921	Agrico for Corn 4-12-4	Putnam
5596	Agrico for Gardens 5-10-5	Newtown
5856	Agrico for Lawns, Trees and Shrubs 6-10-4 ...	Windsor Locks ...
5857	Agrico for New England 5-8-7	Windsor Locks ...
6117	Agrico for Potatoes 5-10-10-1.2	East Hartford ...
6122	Agrico for Potatoes 6-8-8	East Hartford ...
6120	Agrico for Seeding Down 3-12-12	East Hartford ...
6119	Agrico for Tobacco 6-3-6	East Hartford ...
5843	Agrico for Top Dressing 7-7-7	Mystic
5932	Agrico for Truck 5-10-5	West Haven
5908	Agrico for Turf 6-8-2	Saugatuck
6121	Agrico Phosphate and Potash 0-10-20	East Hartford ...
5931	Agrico Phosphate and Potash 0-14-14	West Haven
5924	Agrico Rose Food 5-9-6	Bridgeport
Apothecaries Hall Co., Waterbury, Conn.		
5808	Liberty Fertilizer 0-10-20	Watertown
5796	Liberty Fertilizer 0-14-14	Canaan
5531 ²	Liberty Fertilizer 0-20-20	Cheshire
5594 ²	Liberty Fertilizer 0-20-20	Mansfield Depot ..
6058	Liberty Fertilizer 4-12-4	Windsorville
5539 ²	Liberty Fertilizer 5-10-5	Middletown
5702	Liberty Fertilizer 5-10-5	Greenwich
5542 ²	Liberty Fertilizer 5-10-10	Middletown
5635 ²	Liberty Fertilizer 5-10-10	Somers
6052	Liberty Fertilizer 5-10-10 with 1.2 Magnesium .	Windsorville
6127	Liberty Fertilizer 6-8-8	Windsorville
6053	Liberty Fertilizer 6-8-8 with 1.2 Magnesium ...	Windsorville

¹ Deficiencies are in bold face type.

² State purchases.

CONTAINING NITROGEN, PHOSPHORIC ACID AND POTASH¹

Per cent nitrogen					Per cent phosphoric acid			Per cent potash		
In nitrates	In ammonia	Organic water-soluble	Organic water-insoluble	Total	Citrate-insoluble	Total	So-called "available"	As muriate	Total	Magnesium
0.31	5.50	1.56	0.73	8.10	0.10	6.85	6.75	2.41	3.26	...
...	...	...	...	...	0.48	11.15	10.67	17.33	21.08	...
0.43	2.56	0.24	0.17	3.40	1.40	14.35	12.95	6.96	11.88	...
0.22	3.58	0.38	0.18	4.36	1.05	13.05	12.00	1.66	4.50	...
0.00	3.92	0.72	0.16	4.80	0.73	8.33	7.60	4.24	6.90	...
0.30	4.64	0.28	0.12	5.34	0.90	11.08	10.18	7.40	10.02	...
0.19	6.51	0.11	0.17	6.98	0.35	7.51	7.16	6.40	7.24	...
0.34	4.80	0.24	0.50	5.88	1.00	11.10	10.10	3.06	4.28	...
0.48	5.20	0.72	1.75	8.15	0.43	6.78	6.35	2.30	2.40	...
0.49	6.18	0.00	0.29	6.96	0.95	9.13	8.18	4.37	5.04	...
0.74	4.72	0.08	0.68	6.22	1.15	11.48	10.33	2.41	4.62	...
0.16	3.50	0.22	0.25	4.13	1.03	13.15	12.12	3.42	5.20	...
0.21	4.42	0.32	0.21	5.16	0.83	11.35	10.55	4.82	5.72	...
0.45	4.76	0.24	0.47	5.92	1.10	11.05	9.95	3.71	4.34	...
0.49	4.22	0.00	0.21	4.92	0.63	9.13	8.50	6.09	6.90	...
0.25	4.24	0.36	0.15	5.00	0.78	10.73	9.95	5.53	9.90	1.21
0.00	5.56	0.29	0.15	6.00	0.48	8.65	8.17	6.71	8.22	...
0.36	2.44	0.16	0.18	3.14	1.45	13.40	11.95	11.47	12.52	...
0.00	1.00	2.58	2.48	6.06	0.58	3.68	3.10	1.18	7.34	...
0.22	6.36	0.22	0.06	6.86	0.60	8.20	7.60	6.84	7.30	...
0.53	4.24	0.00	0.13	4.90	1.08	11.25	10.17	3.24	5.16	...
0.89	2.04	0.48	2.14	5.55	0.83	9.45	8.62	2.46	2.86	...
...	...	...	...	...	0.65	10.90	10.25	13.83	20.06	...
...	...	...	...	...	1.25	15.35	14.10	13.77	14.94	...
0.51	2.28	0.68	1.93	5.40	0.68	9.43	8.75	6.00	6.00	...
...	...	...	...	...	0.63	10.53	9.90	18.39	21.98	...
...	...	...	...	...	0.55	15.55	15.00	10.19	14.52	...
...	...	...	...	...	0.90	19.20	18.30	18.31	20.46	...
...	...	...	...	...	0.65	19.15	18.50	16.90	21.38	...
0.14	3.66	0.00	0.51	4.31	0.53	11.75	11.22	4.61	5.70	...
0.58	4.32	0.42	0.32	5.64	0.64	10.43	9.79	4.62	5.48	...
0.41	4.06	0.12	0.43	5.02	0.70	11.15	10.45	5.16	5.72	...
0.35	4.24	0.28	0.41	5.28	0.33	10.85	10.52	10.02	10.02	...
0.52	4.36	0.20	0.34	5.42	0.50	10.95	10.45	3.95	10.24	...
0.83	4.00	0.00	0.30	5.13	0.53	11.00	10.47	9.24	10.62	1.10
0.56	4.76	0.16	0.42	5.90	0.35	9.20	8.85	7.44	8.10	...
0.45	4.74	0.39	0.42	6.00	0.68	8.88	8.20	7.20	8.40	...

TABLE 5. ANALYSES OF MIXED FERTILIZERS

Station No.	Manufacturer and brand	Place of sampling
6054	Liberty Fertilizer 8-8-8	Windsorville
5804	Liberty Green-Gro Fertilizer 6-7-4	Torrington
5686	Liberty High Grade Market Gardeners 5-8-7 ..	Suffield
6067	Liberty High Grade Market Gardeners with Sul- phate of Potash 5-8-7	Windsorville
5685	Liberty Special for Fruit and Grass 7-7-7	Suffield
6125	Liberty Tobacco Mixture 5-3-5	Windsorville
6126	Liberty Tobacco Mixture 6-3-6	Windsorville
6068	Liberty Tobacco Mixture with Castor Pomace 6-3-6	Windsorville
6055	Liberty Tobacco Starter 4-10-0	Windsorville
6069	Liberty Tobacco Starter 5-5-15	Windsorville
Armour Fertilizer Works, Carteret, N. J.		
5577	Armour's Big Crop Fertilizer 0-20-20	East Windsor Hill .
5578	Armour's Big Crop Fertilizer 5-8-7	East Windsor Hill .
5576	Armour's Big Crop Fertilizer 5-10-10	East Windsor Hill .
5757	Armour's Big Crop Fertilizer 7-7-7	Norwich
6070	Armour's Gold Bond Tobacco Grower 6-3-6 ..	East Windsor Hill .
5587	Armour's Vertagreen Plant Food 5-10-5	Bolton Notch
5586	Armour's Vertagreen Plant Food for Commer- cial Crops 6-12-12	Bolton Notch
5934	Armour's Vertagreen Plant Food for Commer- cial Crops 6-12-12	Wilson
Associated Seed Growers, Inc., Milford, Conn.		
5959	Asgrow Lawn Food 10-6-4	Milford
5960	Japedizer 8-6-4	Milford
The F. A. Bartlett Tree Expert Co., Stamford, Conn.		
5978	Barlett Green Tree Food 6-8-6	Danbury
Consolidated Rendering Co., Boston, Mass.		
6012	Corenco 0-10-20 Hay and Pasture Special	West Haven
5919	Corenco 0-14-14 Top Dresser	Dayville
6011	Corenco 0-20-20	West Haven
5574 ²	Corenco 4-12-4 Complete Manure	Middletown
5589 ²	Corenco 4-12-4 Complete Manure	Storrs
6009	Corenco 4-12-16 Ladino Special	West Haven
6048	Corenco 5-5-15 Tobacco	Springfield, Mass .
5543 ²	Corenco 5-8-7 Potato and General Crop	Middletown
6136 ²	Corenco 5-8-7 Potato and General Crop	Portland

¹ Deficiencies are in bold face type.

² State purchases.

CONTAINING NITROGEN, PHOSPHORIC ACID AND POTASH¹

Per cent nitrogen					Per cent phosphoric acid			Per cent potash		
In nitrates	In ammonia	Organic water-soluble	Organic water-insoluble	Total	Citrate-insoluble	Total	So-called "available"	As muriate	Total	Magnesium
0.23	6.46	0.54	0.37	7.60	0.58	9.38	8.80	*7.02	8.80	...
0.55	4.96	0.00	0.99	6.50	0.63	9.50	8.87	3.36	4.32	...
0.14	4.14	0.40	0.35	5.03	0.45	8.75	8.30	0.45	7.64	...
0.22	4.20	0.18	0.41	5.01	0.48	9.35	8.87	0.65	8.00	...
0.22	5.66	0.40	0.41	6.69	0.33	7.90	7.57	5.93	7.04	...
0.72	0.40	1.72	2.84	5.68	0.33	5.13	4.80	0.56	6.64	...
1.02	0.36	1.12	3.21	5.71	0.33	4.58	4.25	0.40	8.24	...
0.93	0.28	1.90	3.42	6.53	0.18	5.28	5.10	0.32	8.76	...
0.00	2.64	1.31	0.59	4.54	0.73	11.33	10.60	....	....	...
1.67	0.08	2.10	2.03	5.88	0.40	5.49	5.09	0.66	15.10	...
...	...	...	...	...	0.48	19.25	18.77	15.06	20.60	...
0.30	4.40	0.14	0.16	5.00	0.85	9.03	8.18	5.33	6.92	...
0.28	4.42	0.13	0.16	4.99	0.30	11.05	10.75	7.88	10.34	...
0.23	6.12	0.00	0.07	6.42	0.60	8.15	7.55	5.18	7.72	...
1.33	0.12	2.02	2.25	5.72	0.68	3.60	2.92	0.24	6.20	...
0.00	4.62	0.18	0.20	5.00	0.40	11.15	10.75	3.38	5.94	...
0.35	5.38	0.00	0.17	5.90	0.30	13.10	12.70	10.96	11.56	...
0.50	5.06	0.12	0.10	5.78	0.33	12.40	12.07	10.39	12.04	...
0.37	4.66	3.78	1.32	10.13	0.48	7.28	6.80	4.41	5.46	...
0.49	3.72	3.18	1.06	8.45	0.60	7.53	6.93	3.83	4.96	...
0.00	5.30	0.20	0.50	6.00	0.75	10.23	9.48	2.17	7.44	...
...	...	...	...	...	0.20	10.58	10.38	18.61	19.44	...
...	...	...	...	...	0.23	14.50	14.27	13.97	14.94	...
...	...	...	...	...	0.70	19.05	18.35	17.26	19.96	...
0.41	2.42	0.88	0.29	4.00	0.43	11.25	10.82	5.90	7.26	...
1.49	2.52	0.20	0.32	4.53	1.20	12.20	11.00	4.70	4.92	...
0.21	3.36	0.86	0.07	4.50	0.30	13.00	12.70	13.57	16.74	...
0.00	0.20	2.47	2.17	4.84	0.60	6.60	6.00	1.14	14.66	...
0.13	4.00	0.70	0.17	5.00	0.00	8.30	8.30	6.80	7.86	...
0.73	4.40	0.06	0.18	5.37	0.13	9.10	8.97	6.02	7.24	...

TABLE 5. ANALYSES OF MIXED FERTILIZERS

Station No.	Manufacturer and brand	Place of sampling
5909	Corenco 5-10-5 Home Garden Fertilizer	Saugatuck
5614	Corenco 5-10-5 Onion Special-Super Truck	New Haven
5631 ²	Corenco 5-10-5 Onion Special-Super Truck	Meriden
5770 ²	Corenco 5-10-5 Onion Special-Super Truck	Norwich
5772 ²	Corenco 5-10-5 Onion Special-Super Truck	New London
5534 ²	Corenco 5-10-10 Peerless Potato	Southbury
5593 ²	Corenco 5-10-10 Peerless Potato	Mansfield Depot ...
5610 ²	Corenco 5-10-10 Peerless Potato	Newtown
6049	Corenco 6-3-6 Perfection Tobacco Grower	Springfield, Mass. .
6050	Corenco 6-3-6 Premium Tobacco Grower	Springfield, Mass. .
6007	Corenco 6-8-8 Potato Special	West Haven
5590 ²	Corenco 7-7-7 Complete Fruit and Top Dressing	Storrs
5611 ²	Corenco 7-7-7 Complete Fruit and Top Dressing	Newtown
5632 ²	Corenco 7-7-7 Complete Fruit and Top Dressing	Meriden
5517	Corenco 8-6-4 Landscape Fertilizer	New Haven
6006	Corenco 8-16-16 Two-In-One	West Haven
5823 ²	Corenco 10-6-2 Fertilizer	New Britain
6135 ²	Corenco 10-6-2 Fertilizer	Portland
5863	Corenco Spurz-On 3.5-3.5-1.5	West Suffield
R. G. Davis & Sons, Inc., New Haven, Conn.		
5613	"Organo" 10-5-5	New Haven
The Davison Chemical Corp., Baltimore, Md.		
5976	Davco Granulated Fertilizer 0-10-20	New Milford
5974 ³	Davco Granulated Fertilizer 0-14-14 with 0.41% Boron	New Milford
5977	Davco Granulated Fertilizer 0-20-20	New Milford
5860	Davco Granulated Fertilizer 5-8-7	West Suffield
5971	Davco Granulated Fertilizer 5-10-5	New Milford
5917	Davco Granulated Fertilizer 5-10-10	Willimantic
5852 ⁴	Davco Granulated Fertilizer 6-8-8 with 0.10% Boron and 0.18% Manganese	Wilson
5861	Davco Granulated Fertilizer 7-7-7	West Suffield
5973	Davco Granulated Fertilizer 8-16-8	New Milford
5972	Davco Granulated Fertilizer 8-16-16	New Milford
5975	Davco Granulated Fertilizer 10-10-10	New Milford
Eastern States Farmers' Exchange, Inc., West Springfield, Mass.		
5758	Eastern States 0-15-30	Norwich
5759	Eastern States 0-20-20	Norwich

¹ Deficiencies are in bold face type.

² State purchases.

³ Boron found, 0.18%.

⁴ Found: boron, 0.11%; manganese, 0.19%.

CONTAINING NITROGEN, PHOSPHORIC ACID AND POTASH¹

Per cent nitrogen					Per cent phosphoric acid			Per cent potash		
In nitrates	In ammonia	Organic water-soluble	Organic water-insoluble	Total	Citrate-insoluble	Total	So-called "available"	As muriate	Total	Magnesium
0.86	4.00	0.00	0.14	5.00	0.25	10.30	10.05	2.98	5.08	...
0.72	4.18	0.34	0.12	5.36	0.00	10.35	10.35	3.81	5.40	...
0.88	4.10	0.00	0.09	5.07	0.18	10.40	10.22	4.44	5.52	...
1.54	2.84	0.73	0.36	5.47	0.40	9.33	8.93	3.63	5.62	...
1.18	2.78	0.14	0.26	4.36	0.55	10.23	9.68	5.05	7.74	...
0.14	3.68	1.38	0.13	5.33	0.00	10.85	10.85	7.24	10.88	...
0.87	3.78	0.50	0.24	5.39	0.05	10.05	10.00	8.53	9.70	...
0.00	3.68	1.16	0.22	5.06	0.25	10.80	10.55	9.99	10.96	...
0.12	0.08	2.70	3.16	6.06	1.05	4.73	3.68	0.70	6.44	...
0.00	0.18	3.43	2.52	6.13	0.48	4.48	4.00	0.47	5.94	...
0.39	5.28	0.34	0.20	6.21	0.48	8.60	8.12	1.30	8.60	...
0.32	5.68	0.22	0.24	6.46	0.00	7.28	7.28	4.64	6.90	...
0.00	5.80	0.80	0.26	6.86	0.03	7.43	7.40	5.00	7.62	...
0.67	6.18	0.24	0.17	7.26	0.05	7.65	7.60	6.41	8.08	...
0.27	4.76	2.42	0.77	8.22	0.13	6.18	6.05	3.73	4.78	...
1.10	6.92	0.00	0.13	8.15	0.38	17.10	16.72	8.96	14.92	...
0.20	9.72	0.26	0.09	10.27	0.25	6.43	6.18	0.84	2.82	...
1.07	8.52	0.48	0.13	10.20	0.48	6.88	6.40	2.38	3.16	...
0.00	0.30	1.29	2.60	4.19	...	5.55	....	1.13	2.12	...
1.92	6.14	0.45	1.29	9.80	0.00	5.94	5.94	4.76	6.18	...
...	...	...	...	...	1.15	11.90	10.75	19.14	20.02	...
...	...	...	...	...	0.70	14.90	14.20	15.54	15.54	...
...	...	...	...	...	0.53	20.05	19.52	21.13	24.58	...
0.00	4.42	0.30	0.30	5.02	0.33	8.35	8.02	6.62	7.48	...
0.00	5.00	0.02	0.11	5.13	0.40	10.90	10.50	3.91	5.78	...
0.00	5.24	0.00	0.11	5.35	0.50	10.72	10.22	8.84	10.30	...
0.00	5.06	0.26	0.12	5.44	0.25	8.30	8.05	3.30	7.00	...
0.08	5.82	0.24	0.12	6.26	0.40	8.23	7.83	6.39	7.58	...
0.00	7.63	0.00	0.10	7.73	0.43	15.40	14.97	5.74	8.42	...
0.11	8.00	0.00	0.06	8.17	0.45	17.20	16.75	14.22	16.18	...
0.00	9.24	0.10	0.06	9.40	0.58	12.65	12.07	8.48	10.08	...
...	...	...	...	...	0.70	15.70	15.00	26.09	29.58	...
...	...	...	...	...	0.65	19.70	19.05	14.47	21.86	...

TABLE 5. ANALYSES OF MIXED FERTILIZERS

Station No.	Manufacturer and brand	Place of sampling
5617	Eastern States 5-10-10-0.6	North Haven
5801	Eastern States 5-15-15-0.6	Torrington
6123	Eastern States 8-4-8-1.2 Tobacco	East Hartford
5575	Eastern States 8-12-12-1.2	East Windsor Hill
6124	Eastern States 8-12-16-1.2	East Hartford
5619	Eastern States 8-16-16-0.6	North Haven
5746	Eastern States 10-10-10-0.6	East Hartford
The Espoma Co., Millville, N. J.		
5697	Espoma 3-2-1	Greenwich
5696	Holly-Tone 4-6-4	Greenwich
Fox Point Chemical Co., East Providence, R. I.		
5847	Old Fox Brand 0-10-20	Pawcatuck
5845	Old Fox Brand 0-12-24	Pawcatuck
5841	Old Fox Brand 5-8-7-1.2	Groton
5842	Old Fox Brand 5-10-10	Groton
5848	Old Fox Brand 5-10-10-1.2	Pawcatuck
5833	Old Fox Brand 7-7-7-1.2	Groton
5922	Old Fox Brand 8-12-12-0.9	Putnam
5844	Old Fox Turf Brand Fertilizer 8-6-2	Pawcatuck
Goulard & Olena, Inc., Skillman, N. J.		
5904	G & O Prizegro 5-10-5	Darien
The Mamlon Co., New Haven, Conn.		
6047	FER-MEL Water Soluble Turf and Tree Food 24-12-12	New Haven
Old Deerfield Fertilizer Co., Inc. South Deerfield, Mass.		
5751	Old Deerfield 5-8-7 Fertilizer	Glastonbury
5754	Old Deerfield 5-10-5 Fertilizer Trucker's Special	Glastonbury
5753	Old Deerfield 5-10-10 Fertilizer	Glastonbury
6129	Old Deerfield 6-3-6 Complete Tobacco	Glastonbury
5752	Old Deerfield 7-7-7 Fertilizer	Glastonbury
Olds & Whipple, Inc., Hartford, Conn.		
6107	O&W 0-14-14 Fertilizer	East Hartford
5533 ²	O&W 0-20-20 Fertilizer	Southbury

¹ Deficiencies are in bold face type.² State purchases.

CONTAINING NITROGEN, PHOSPHORIC ACID AND POTASH¹

Per cent nitrogen					Per cent phosphoric acid			Per cent potash		
In nitrates	In ammonia	Organic water-soluble	Organic water-insoluble	Total	Citrate-insoluble	Total	So-called "available"	As muriate	Total	Magnesium
0.76	3.80	0.56	0.13	5.25	0.53	11.80	11.27	7.88	11.16	1.80
1.19	3.56	0.44	0.15	5.34	0.73	16.80	16.07	11.97	15.00	0.69
0.95	0.48	4.92	1.87	8.22	0.33	4.33	4.00	0.51	9.64	3.02
1.19	6.24	0.20	0.11	7.74	0.35	12.35	12.00	9.91	12.76	1.52
1.20	6.24	0.04	0.05	7.53	0.70	13.30	12.60	12.65	16.04	1.76
2.14	6.08	0.00	0.08	8.30	0.53	16.70	16.17	13.22	15.92	1.04
1.46	8.18	0.00	0.12	9.76	0.45	10.85	10.40	5.81	10.96	1.26
0.00	1.48	0.26	1.29	3.03	0.40	2.71	2.31	1.55	2.06	...
0.00	2.38	0.40	1.50	4.28	0.20	5.50	5.30	4.03	5.66	...
...	...	...	...	...	0.33	10.28	9.95	20.82	20.82	...
...	...	...	...	...	0.45	11.10	10.65	24.00	25.10	...
0.54	4.12	0.28	0.09	5.03	0.43	8.55	8.12	7.38	7.82	2.27
0.43	4.00	0.46	0.07	4.96	0.28	10.30	10.02	10.00	10.00	...
0.41	4.00	0.44	0.11	4.96	0.63	10.78	10.15	9.52	11.86	1.63
0.49	6.00	0.04	0.09	6.62	0.55	7.65	7.10	6.76	7.62	1.20
0.50	5.62	0.00	0.06	6.18	0.30	12.20	11.90	11.43	13.34	1.50
0.50	5.88	0.26	1.00	7.64	0.55	6.83	6.28	2.86	3.46	...
0.09	5.06	0.00	0.25	5.40	0.63	12.10	11.47	4.27	5.46	...
0.00	3.34	20.60	0.00	23.94	0.55	12.35	11.80	12.19	12.92	...
1.20	4.00	0.20	0.14	5.54	0.65	9.48	8.83	3.58	7.46	...
1.17	3.72	0.08	0.21	5.18	0.70	11.13	10.43	4.25	5.80	...
1.20	3.94	0.08	0.16	5.38	0.83	11.43	10.60	6.37	10.86	...
0.84	1.64	0.72	3.50	6.70	0.63	4.38	3.75	0.90	6.98	...
0.56	5.96	0.80	0.18	7.50	0.53	7.80	7.27	3.97	7.52	...
...	...	...	...	...	0.93	14.95	14.02	12.98	16.38	...
...	...	...	...	...	0.40	20.30	19.90	19.02	21.70	...

TABLE 5. ANALYSES OF MIXED FERTILIZERS

Station No.	Manufacturer and brand	Place of sampling
5608 ²	O&W 0-20-20 Fertilizer	Newtown
5937	O&W 4-8-4 Complete Lawn Grass Fertilizer ..	East Hartford
5961	O&W 4-12-4 Market Garden Fertilizer	East Hartford
5939	O&W 5-3-5 Complete Tobacco Fertilizer—Potash derived from Cotton Hull Ash	East Hartford
6102	O&W 5-5-15 High Grade Tobacco Starter	East Hartford
5940	O&W 5-8-6 Luxura	East Hartford
5526 ²	O&W 5-8-7 Potato and General Purpose Fer- tilizer	Cheshire
5582	O&W 5-8-7 Potato and General Purpose Fer- tilizer	Manchester
5936	O&W 5-10-5 Fertilizer	East Hartford
5941	O&W 5-10-5 Fertilizer	East Hartford
5736	O&W 5-10-10 Potato Fertilizer	Rockville
5963	O&W 5-10-10 Potato Fertilizer with 1.2% Mg	East Hartford
6106	O&W 6-3-6 Blue Label Tobacco Fertilizer ..	East Hartford
6104 ³	O&W 6-3-6 Blue Label Tobacco Fertilizer — Potash derived from Cotton Hull Ash	East Hartford
5962 ⁴	O&W 6-3-6 Pomace Base Tobacco Fertilizer — Potash derived from Cotton Hull Ash	East Hartford
5527 ²	O&W 6-8-8 Special Potato Fertilizer	Cheshire
6105	O&W 6-8-8 Special Potato Fertilizer with 1.2% Mg	East Hartford
5583	O&W 7-7-7 Top Dressing and Grass Fertilizer .	Manchester
The Frank S. Platt Co., Inc., New Haven, Conn.		
5509	Platt's Special 10-5-5 Lawn Fertilizer	New Haven
6010	Platt's Special 10-5-5 Lawn Fertilizer	West Haven
The Rogers & Hubbard Co., Portland, Conn.		
6076	Gro-Fast Acid Fertilizer 4-10-4	Portland
5825	Gro-Fast Plant Food 5-10-5	Centerbrook
5815	Gro-Fast Rose Food 7-10-5	Portland
6073	Hubbard 6-8-8 for Potatoes	Portland
5766	Hubbard 10-10-10	Norwich
5969	Hubbard Alfalfa Fertilizer 0-14-14	New Milford
5970	Hubbard Corn Fertilizer 4-12-4	New Milford
5814	Hubbard Dairy Fertilizer 0-10-20	Portland
5918	Hubbard Double Strength Fertilizer 8-16-16 ..	Willimantic
5519	Hubbard Garden Fertilizer 5-10-5	Hamden
5604	Hubbard General Crop Fertilizer 5-10-10	Danbury
5765	Hubbard General Crop Fertilizer 5-10-10	Norwich

¹ Deficiencies are in bold face type.

² State purchases.

³ Copper guaranteed, 0.13%; found, 0.02%.

⁴ Copper guaranteed, 0.13%; found, 0.16%.

CONTAINING NITROGEN, PHOSPHORIC ACID AND POTASH¹

Per cent nitrogen					Per cent phosphoric acid			Per cent potash		
In nitrates	In ammonia	Organic water-soluble	Organic water-insoluble	Total	Citrate-insoluble	Total	So-called "available"	As muriate	Total	Magnesium
...	...	...	...	...	0.75	20.75	20.00	18.19	21.02	...
1.09	2.80	0.00	0.61	4.50	0.73	8.88	8.15	3.96	4.90	...
0.07	4.20	0.00	0.23	4.50	0.93	13.15	12.22	3.99	4.78	...
0.00	0.04	2.11	2.89	5.04	0.43	4.20	3.77	0.74	6.24	...
1.51	1.50	1.26	0.94	5.21	0.90	7.04	6.14	1.91	16.02	...
0.54	3.36	0.14	1.34	5.38	0.85	10.15	9.30	5.33	7.14	...
0.26	4.08	0.64	0.34	5.32	0.10	9.03	8.93	6.46	7.42	...
0.64	3.96	0.02	0.26	4.88	0.38	9.05	8.67	6.18	7.94	...
0.00	4.90	0.36	0.24	5.50	0.70	10.90	10.20	5.01	5.74	...
0.64	4.00	0.06	0.30	5.00	0.53	9.45	8.92	4.76	6.06	...
0.90	4.20	0.00	0.35	5.45	1.05	11.90	10.85	8.33	10.16	...
0.56	4.48	0.12	0.22	5.38	0.60	11.38	10.78	10.03	10.56	1.69
1.21	0.38	1.70	2.90	6.19	0.38	3.53	3.15	0.29	7.38	...
0.97	0.24	1.84	3.18	6.23	0.83	3.68	2.85	0.62	6.27	...
1.31	0.12	2.20	2.63	6.26	0.70	3.96	3.26	1.16	6.52	...
0.85	5.50	0.08	0.10	6.53	0.38	8.60	8.22	7.79	8.70	...
0.98	5.08	0.00	0.17	6.23	0.75	8.43	7.68	3.79	8.14	2.22
1.17	5.76	0.00	0.10	7.03	0.15	8.35	8.20	6.87	7.32	...
0.14	6.06	2.54	1.02	9.76	0.13	6.50	6.37	4.66	6.12	...
0.42	6.12	1.62	0.94	9.10	0.48	6.58	6.10	4.85	6.64	...
0.82	2.06	2.14	0.63	5.65	0.63	10.28	9.65	3.98	4.87	...
0.26	2.42	1.26	1.11	5.05	0.65	11.08	10.43	1.83	6.28	...
0.27	1.98	3.09	1.56	6.90	2.55	15.08	12.53	0.36	5.24	...
0.68	4.80	0.48	0.14	6.10	0.43	9.85	9.42	7.68	9.14	...
1.17	3.10	5.55	0.16	9.98	0.73	11.55	10.82	6.39	9.54	...
...	...	...	...	...	0.75	14.80	14.05	11.19	14.12	...
1.36	3.00	0.00	0.18	4.54	0.88	13.70	12.82	4.13	4.70	...
...	...	...	...	...	0.38	10.58	10.20	17.73	21.56	...
0.86	6.72	0.42	0.10	8.10	0.80	17.00	16.20	15.32	16.68	...
0.72	4.06	0.20	0.20	5.18	0.38	11.23	10.85	5.40	5.40	...
0.00	4.20	0.49	0.31	5.00	0.73	11.30	10.57	9.25	10.16	...
1.04	3.68	0.40	0.22	5.34	0.85	11.58	10.73	8.13	10.76	...

TABLE 5. ANALYSES OF MIXED FERTILIZERS

Station No.	Manufacturer and brand	Place of sampling
5633	Hubbard Golf Course Fertilizer 8-6-2	Meriden
5797	Hubbard Golf Course Fertilizer 8-6-2	Canaan
5817	Hubbard Seeding Fertilizer 3-12-12	Portland
5813	Hubbard Tobacco Grower 6-3-6	Portland
5965	Hubbard Tobacco Grower 6-3-6	New Milford
6075	Hubbard Tobacco Starter 5-5-15	Portland
5605	Hubbard Top Dressing Fertilizer 7-7-7	Danbury
6074	Hubbard Valley Brand 6-3-6	Portland
5774	Hubbard Vegetable Fertilizer 5-8-7	Canaan
7611	Hubbard Vegetable Fertilizer 5-8-7	Portland
5958	Hubbard Weed-Kil Lawn Food 6-10-4 (contains 2, 4-D)	Milford
Rose Manufacturing Co., Beacon, N. Y.		
5703	Tri-Ogen Rose Food 5-10-5	Greenwich
O. M. Scott & Sons Co., Marysville, Ohio		
5512	Scott's Turf Builder 9-7-4	New Haven
5580	Scott's Weed and Feed 7-11-5	Manchester
Sears, Roebuck & Co., Chicago, Ill.		
5731	Cross Country Lawn Food 5-2-25	Stamford
5548	Cross Country Plant Food 5-10-5	Middletown
M. L. Shoemaker, Inc., Div. Wilson & Co., Philadelphia, Pa.		
5687	M. L. Shoemaker's "Swift-Sure" Tobacco Starter 4-10-0	Suffield
6108	M. L. Shoemaker's "Swift-Sure" Tobacco Starter 4-10-0	East Hartford
Summers Fertilizer Co., Inc., Baltimore, Md.		
5609 ²	Summers "Best-On-Earth" 4-16-16 Fertilizer ...	Newtown
5771 ²	Summers "Best-On-Earth" 10-5-5 Fertilizer ...	New London
Swift & Co., Boston, Mass.		
5846	All Organic Lawn Food 5-3-0	Pawcatuck
5905	All Organic Lawn Food 5-3-0	Darien
5810	Blenn 5-10-5	Middletown

¹ Deficiencies are in bold face type.² State purchases.

CONTAINING NITROGEN, PHOSPHORIC ACID AND POTASH¹

Per cent nitrogen					Per cent phosphoric acid			Per cent potash		
In nitrates	In ammonia	Organic water-soluble	Organic water-insoluble	Total	Citrate-insoluble	Total	So-called "available"	As muriate	Total	Magnesium
0.00	3.40	2.97	1.63	8.00	0.05	6.95	6.90	2.43	3.04	...
0.60	3.62	2.46	1.48	8.16	0.45	6.55	6.10	0.92	2.82	...
0.91	2.30	0.04	0.18	3.43	0.55	13.55	13.00	10.37	12.08	...
0.75	0.50	2.72	2.78	6.75	0.63	4.18	3.55	0.61	6.24	...
0.00	0.16	2.74	3.15	6.05	0.33	4.29	3.96	0.48	7.56	...
2.46	0.20	1.80	1.12	5.58	0.38	5.75	5.37	0.70	15.44	...
0.58	5.46	0.69	0.12	6.85	0.65	8.67	8.02	6.54	7.33	...
0.89	0.28	2.28	2.35	5.90	0.20	3.34	3.14	0.82	6.58	...
0.98	2.94	0.94	0.14	5.00	0.70	9.53	8.80	7.19	7.60	...
0.20	4.10	0.93	0.27	5.50	0.98	9.63	8.65	6.83	7.92	...
0.29	4.66	0.12	1.02	6.09	0.93	11.53	10.60	3.77	4.52	...
0.61	3.18	0.84	0.48	5.11	1.65	12.13	10.48	1.37	5.04	...
0.63	6.48	0.16	1.69	8.96	0.35	7.60	7.25	4.66	5.70	...
0.38	3.84	0.12	2.29	6.63	0.58	12.10	11.52	5.40	5.94	...
0.29	0.12	0.04	4.37	4.82	1.10	4.55	3.45	....	....	...
0.96	3.76	0.30	0.23	5.25	0.48	10.75	10.27	4.09	5.34	...
0.28	1.28	1.72	0.64	3.92	0.70	12.30	11.60	....	....	...
1.11	2.88	0.04	0.19	4.22	1.25	11.85	10.60	....	....	...
0.00	5.00	1.02	0.09	6.11	0.63	12.85	12.22	19.22	22.14	...
0.00	7.80	1.25	0.15	9.20	0.68	5.81	5.13	2.74	6.06	...
0.29	0.08	0.36	4.39	5.12	0.68	5.10	4.42	....	....	...
0.32	0.00	0.28	4.93	5.53	0.83	5.39	4.56	....	....	...
0.72	3.84	0.00	0.16	4.72	0.60	10.85	10.25	5.18	5.70	...

TABLE 5. ANALYSES OF MIXED FERTILIZERS

Station No.	Manufacturer and brand	Place of sampling
5809	Red Steer 5-8-7	Middletown
5980	Swift's Special Golf Plant Food 8-6-4	West Haven
5522	Vigoro 5-10-5	Hamden
5925	Vigoro 5-10-5	Bridgeport
Victor Chemical Works Chicago, Ill.		
5916	"Take-Hold" 10-52-17	Waterbury
Oscar F. Warner, Waterbury, Conn.		
6072	Warner's Grubedizer 8-6-4	Waterbury
5912	Warner's Lawn Food 8-6-4	Waterbury
7739	Warner's Tree Food 12-6-4	Waterbury
F. H. Woodruff & Sons, Inc., Milford, Conn.		
5930	Turf-Maker Lawn Food 10-6-4	Milford
Woodruff Fertilizer Works, Inc., North Haven, Conn.		
5523	Woodruff's 5-8-7 Fertilizer	Hamden
5628	Woodruff's 5-8-7 Fertilizer	North Haven
6099	Woodruff's 5-10-5 Fertilizer	North Haven
5630	Woodruff's 5-10-10 Fertilizer	North Haven
6100	Woodruff's 7-7-7 Fertilizer	North Haven
5515	Woodruff's Lawn and Tree Food 10-5-5	New Haven
6078	Woodruff's Lawn and Tree Food 10-5-5	North Haven
6101	Woodruff's Tobacco Fertilizer 6-3-6	North Haven
6098	Woodruff's Tobacco Starter 5-5-15	North Haven

¹ Deficiencies are in bold face type.

CONTAINING NITROGEN, PHOSPHORIC ACID AND POTASH¹

Per cent nitrogen					Per cent phosphoric acid			Per cent potash		
In nitrates	In ammonia	Organic water-soluble	Organic water-insoluble	Total	Citrate-insoluble	Total	So-called "available"	As muriate	Total	Magnesium
0.51	4.00	0.36	0.18	5.05	0.28	8.68	8.40	6.38	7.36	...
0.00	4.86	2.04	0.70	7.60	0.38	7.00	6.62	3.34	4.56	...
0.63	4.36	0.00	0.24	5.23	0.78	10.95	10.17	2.15	5.50	...
0.26	4.56	0.00	0.13	4.95	0.38	10.53	10.15	5.21	5.40	...
0.88	8.84	0.37	0.00	10.09	0.58	52.60	52.02	0.00	18.92	...
0.76	1.92	3.04	2.40	8.12	0.68	7.25	6.57	3.76	4.16	...
0.42	2.04	2.72	2.70	7.88	0.45	6.68	6.23	4.70	4.70	...
0.94	2.00	7.32	2.09	12.35	0.38	6.65	6.27	3.98	4.38	...
1.52	4.14	2.62	1.90	10.18	0.48	7.30	6.82	5.28	5.28	...
0.11	4.40	0.44	0.16	5.11	0.25	8.65	8.40	5.91	7.04	...
0.00	4.44	0.42	0.16	5.02	0.25	8.60	8.35	4.40	6.96	...
0.17	4.08	0.54	0.29	5.08	0.43	8.58	8.15	6.34	7.64	...
0.55	3.28	0.64	0.33	4.80	0.43	10.30	9.87	11.96	12.24	...
0.10	4.52	1.84	0.19	6.65	0.48	7.43	6.95	7.24	7.24	...
0.38	2.08	0.34	0.30	3.10	0.30	6.80	6.50	5.77	6.10	...
0.69	2.12	6.28	0.22	9.31	0.65	5.65	5.00	4.98	5.44	...
1.27	0.08	1.56	2.67	5.58	0.45	4.14	3.69	0.08	7.18	...
1.36	0.52	1.88	1.56	5.32	0.53	5.50	4.97	0.40	15.64	...

TABLE 6. ANALYSES OF SHEEP MANURE, ETC.¹

Station No.	Manufacturer and brand	Place of sampling
5807	Sheep Manure. Apothecaries Hall Co., Waterbury, Conn.	Watertown: The Watertown Co-op Assoc., Inc.
5694	Armour's Pulverized Sheep Manure. Armour Fertilizer Works, Carteret, N. J.	Greenwich: McArdle's Seed Store
5798	DRICONURE. Atkins & Durbrow, Inc., New York, N. Y.	Canaan: Community Service, Inc.
5911	Corenco Dried Cow Manure. Consolidated Rendering Co., Boston, Mass.	Derby: Derby Feed Store ..
5849	Better Brand Sheep Manure. Crawford Seed Store, Providence, R. I.	Pawcatuck: The C. W. Campbell Co.
5727	Davey Shredded Cattle Manure. The Davey Tree Expert Co., Kent, Ohio	Old Greenwich: The Davey Tree Expert Co.
5699	Longhorn Brand Cattle Manure. Natural Plant Food Co., Oklahoma City, Okla. ..	Greenwich: McArdle's Seed Store
5684	Sheep Manure. The Geo. S. Phelps Co., Thompsonville, Conn.	Thompsonville: The Geo. S. Phelps Co.
5601	Gro-Fast Cow Manure. The Rogers & Hubbard Co., Portland, Conn.	Danbury: The Heyman Hardware Co.
5957	Gro-Fast Sheep Manure. The Rogers & Hubbard Co., Portland, Conn.	Milford: Associated Seed Growers, Inc.
5730	Cross Country Cattle Manure. Sears, Roebuck & Co., Chicago, Ill.	Stamford: Sears, Roebuck & Co.
5547	Cross Country Sheep Manure. Sears, Roebuck & Co., Chicago, Ill.	Middletown: Sears, Roebuck & Co.
5516	Farmanure. Wendell S. Still, Selden, N. Y.	New Haven: Jackson-Marvin Hardware Co.
5701	Sheep Manure. Swift & Co., Boston, Mass.	Greenwich: McArdle's Seed Store
5507	Bovung. Walker-Gordon Laboratory Co., Plainsboro, N. J.	New Haven: The Frank S. Platt Co.

¹ Deficiencies are in bold face type.

² Guaranteed available, 0.25%.

³ Guaranteed available, 1.0%.

⁴ Guaranteed available, 0.75%.

TABLE 6. ANALYSES OF SHEEP MANURE, ETC.¹

Per cent nitrogen					Per cent phosphoric acid				Per cent potash		Sand
In ammonia	Organic water-soluble	Organic water-insoluble	Total found	Total guaranteed	Citrate-insoluble	Total found	Total guaranteed	So-called "available" found	Total found	Total guaranteed	
0.00	0.52	1.04	1.56	1.00	0.23	0.53	...	0.30 ²	2.49	1.00	43.75
0.02	0.27	1.21	1.50	1.50	...	1.58	1.00	...	3.61	2.00	34.29
0.38	1.10	1.59	3.07	2.00	0.64	3.33	...	2.69 ³	1.95	1.00	10.17
0.32	0.51	1.45	2.28	2.00	...	1.56	1.00	...	2.83	1.00	7.30
0.04	0.34	0.62	1.00	1.50	...	0.31	0.50	...	3.34	3.00	48.85
0.54	0.98	1.87	3.39	2.00	0.70	4.78	...	4.08 ³	2.37	1.00	3.05
0.12	0.34	1.55	2.01	2.00	0.20	1.36	...	1.16 ³	2.37	2.00	35.30
0.00	0.20	0.82	1.02	1.00	...	0.81	1.00	...	3.18	1.00	52.33
0.30	0.30	1.90	2.50	2.00	...	2.04	1.00	...	1.42	1.00	2.55
0.20	0.15	0.94	1.29	1.25	0.60	1.74	...	1.14 ³	2.68	2.00	34.02
0.18	0.34	1.59	2.11	1.50	0.35	1.21	1.00	0.86 ⁴	2.66	2.00	23.15
0.12	0.11	1.64	1.87	1.50	0.17	0.92	...	0.75 ⁴	2.98	2.00	27.75
0.20	0.90	2.12	3.22	2.00	0.73	3.05	...	2.32 ³	2.13	1.00	5.20
0.00	0.18	1.43	1.61	2.00	0.25	1.38	...	1.13 ³	2.49	2.00	31.05
0.06	0.33	1.65	2.04	2.00	0.15	4.47	...	4.32 ³	1.97	1.00	2.37

TABLE 7. ANALYSES OF LIMESTONE AND SIMILAR MATERIALS

Station No.	Manufacturer and brand	Sampled from stock of or sent by	Calcium oxide, per cent	Magnesium oxide, per cent
	Apothecaries Hall Co., Waterbury, Conn.			
4439	Land Plaster	Suffield: Hatheway-Steane Corp.	33.75	....
	Connecticut Adamant Plaster Co., New Haven, Conn.			
4895	Land Plaster	Simsbury: Cullman Bros., Inc.	33.70	....
4896	Land Plaster	Simsbury: Cullman Bros., Inc.	34.01	....
4897	Land Plaster	Simsbury: Cullman Bros., Inc.	33.72	....
	Lee Lime Co., Lee, Mass.			
4442	Hydrated Lime	Suffield: Hatheway-Steane Corp.	45.47	30.91

TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS¹

Station No.	Manufacturer and brand	Place of sampling	Per cent nitrogen					Per cent phosphoric acid			Per cent potash	
			In nitrates	In ammonia	Organic water-soluble	Organic water-insoluble	Total	Citrate-insoluble	Total	So-called "available"	As muriate	Total
The American Agricultural Chemical Co., No. Weymouth, Mass.												
5954	Agrico for Lawns, Trees and Shrubs 6-10-4	Bridgeport	0.58	4.76	0.12	0.54	6.00	0.90	11.60	10.70	4.19	4.44
5729	Agrico Rose Food 5-9-6	Stamford	0.00	2.34	1.08	1.70	5.12	1.35	10.50	9.15	5.94	6.14
5745	Agrico Rose Food 5-9-6	East Hartford ..	0.49	2.24	0.60	1.67	5.00	0.85	10.28	9.43	5.41	6.02
Apothecaries Hall Co., Waterbury, Conn.												
5800	Green-Gro Fertilizer Mixture 6-7-4	Canaan	0.84	4.04	0.18	0.68	5.74	0.55	10.48	9.93	4.49	4.80
5906	Green-Gro Home Garden Fertilizer 5-8-7	Glenbrook	0.48	4.20	0.04	0.46	5.18	0.58	9.55	8.97	6.30	7.74
5806 ²	Green-Gro Raw Bone Meal 3.7-20 .	Torrington .....	...	0.16	...	...	4.03	...	23.60	...	...	...
5805	Green-Gro Rose Food 5-7-6	Torrington	0.45	3.64	0.20	0.97	5.26	0.43	9.33	8.90	6.17	6.90
5799 ³	Green-Gro Sheep Manure 1-0.25-1 .	Canaan .....	...	0.08	0.36	0.96	1.40	0.43	1.48	1.05	...	3.02
5832	Green-Gro 3-Way-3 Lawn Dressing 6-10-4	New London ...	0.00	4.48	0.70	0.99	6.17	0.70	11.48	10.78	5.21	5.75
Armour Fertilizer Works, Carteret, N. J.												
5520	Armour's Vertagreen Plant Food 5-10-5	Hamden	0.00	4.46	0.33	0.28	5.07	0.75	10.75	10.00	2.01	5.18

¹ Deficiencies are in bold face type.

² Mechanical analysis: fine, 29.5%; coarse, 70.5%.

³ Sand, 43.74%.

TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS¹

Station No.	Manufacturer and brand	Place of sampling	Per cent nitrogen					Per cent phosphoric acid			Per cent potash	
			In nitrates	In ammonia	Organic water-soluble	Organic water-insoluble	Total	Citrate-insoluble	Total	So-called "available"	As muriate	Total
	Atkins & Durbrow, Inc., New York, N. Y.											
5688 ²	DRICONURE 2-1-1	Suffield	0.00	0.28	0.83	1.58	2.69	0.60	3.95	3.35	...	2.13
	Brainard Nursery & Seed Co., Thompsonville, Conn.											
5681	For Your Garden Castor Pomace ..	Thompsonville .	...	...	...	...	5.88	...	...	...	...	...
5680	For Your Garden Superphosphate 20%	Thompsonville .	...	...	...	...	...	1.75	22.40	20.65	...	...
	California Spray-Chemical Corp., Richmond, Calif.											
5725	ORTHO-GRO Liquid Plant Food 10-5-5	Greenwich	1.57	0.73	11.35	0.04	13.69	0.35	5.71	5.36	0.08	5.20
	Carbola Chemical Co., Natural Bridge, N. Y.											
5616	CCC Triple 20 Plant Food 20-20-20	New Haven	3.78	8.16	8.20	0.02	20.16	0.98	21.40	20.42	0.11	19.80
	Clinton Nurseries, Clinton, Conn.											
5826	New Era African Violet Food 5-12-9	Centerbrook ...	1.83	1.84	0.58	0.28	4.53	0.45	12.10	11.65	0	8.38

Consolidated Rendering Co., Boston, Mass.												
6013	Corenco Home Garden Fertilizer 5-10-5	West Haven ...	0.23	3.28	1.06	0.28	4.85	1.15	10.55	9.40	5.41	7.18
6014	Corenco Landscape Fertilizer 8-6-4	West Haven ...	0.77	4.54	2.28	0.67	8.26	0.85	7.10	6.25	4.92	5.36
E. I. du Pont de Nemours & Co., Inc., Wilmington, Del.												
5724	Du Pont Soluble Plant Food 19-22-16	Greenwich	4.89	4.96	9.14	0.03	19.02	0.30	23.30	23.00	0.00	17.50
Eastern States Farmers' Exchange, Inc., West Springfield, Mass.												
5620	Eastern States Plant Starter 10-52-17	North Haven ..	0.00	10.16	0.35	0.02	10.53	0.03	52.25	52.22	0.12	17.14
Goulard & Olen, Inc., Skillman, N. J.												
5518 ³	G & O Ground Bone Fertilizer 2-4-20	New Haven ....	...	0.08	...	...	3.03	...	23.90	...	...	...
5859	G & O Rose Food 7-8-5	Windsor Locks .	0.36	4.72	0.56	1.36	7.00	0.53	10.38	9.85	4.86	5.28
Green Thumb Products, Toledo, Ohio												
5763	Green Thumb African Violet Plant Food 12-4-8	Norwich	5.40	0.36	1.44	1.52	8.72	1.00	13.95	12.95	0.88	10.56
A. H. Hoffman, Inc. Landisville, Pa.												
5602 ⁴	Hoffman Cow Manure 2-1-1	Danbury	0.00	0.08	0.21	1.71	2.00	0.00	1.42	1.42	...	1.54

¹ Deficiencies are in bold face type.

² Sand, 12.72%.

³ Mechanical analysis: fine, 53.5%; coarse, 46.5%.

⁴ Sand, 1.35%.

TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS¹

Station No.	Manufacturer and brand	Place of sampling	Per cent nitrogen					Per cent phosphoric acid			Per cent potash	
			In nitrates	In ammonia	Organic water-soluble	Organic water-insoluble	Total	Citrate-insoluble	Total	So-called "available"	As muriate	Total
5955	Hoffman Organic-Base Rose Food 5-10-5	Bridgeport	0.08	3.60	0.16	1.57	5.41	0.38	10.43	10.05	4.25	6.24
5513 ²	Hoffman Raw Bone Meal 3.7-20 ..	New Haven ....	...	0.16	...	...	4.24	...	20.85	...	...	...
5603 ³	Hoffman Sheep Manure 1.5-1-2 ...	Danbury	0.00	0.00	0.20	1.20	1.40	0.18	1.46	1.28	...	3.16
Hydroponic Chemical Co., Inc., Copley, Ohio												
5511	Hyponex Plant Food 7-6-19	New Haven	5.85	1.50	0.02	0.05	7.42	0.08	8.05	7.97	0.08	21.32
The Hy-Trous Corp., Boston, Mass.												
5682	Hy-Trous—Liquid Fertilizer 4-8-4 .	Thompsonville .	1.27	1.95	1.06	0.04	4.32	0.00	8.43	8.43	0.00	4.74
McCormick & Co., Inc., Baltimore, Md.												
5510	HY-GRO 13-26-13	New Haven	4.53	5.42	3.46	0.13	13.54	0.03	27.35	27.32	5.70	15.42
Miller Chemical & Fertilizer Corp., Baltimore, Md.												
5738	Miller Nutri-Leaf Soluble Fertilizer 16-16-16	Rockville	5.78	1.04	9.95	0.08	16.85	1.40	15.25	13.85	0	17.62
5858	VHPF Soluble Fertilizer 6-25-15 ..	Windsor Locks .	4.08	0.86	0.76	0.00	5.70	0.28	28.60	28.32	0	17.38

Monsanto Chemical Co., St. Louis, Mo.													
5597	Folium 20-20-20	Newtown	6.79	4.66	8.62	0.11	20.18	0.00	20.55	20.55	0.08	21.34	
Nott Manufacturing Co., Mount Vernon, N. Y.													
5926	Nott's Plant Shoot 20-20-20	Bridgeport	1.35	4.56	12.48	0.07	18.46	0.33	20.45	20.12	17.21	18.72	
Olds & Whipple, Inc., Hartford, Conn.													
5964 ⁴	O & W Bone Meal 2.47-22	East Hartford ..	...	...	...	...	2.38	...	28.65	...	...	...	...
Plantabbs Corp., Baltimore, Md.													
5764	Fulton's Plantabbs Plant Food Tablets 11-15-20	Norwich	7.31	3.68	0.28	0.06	11.33	0.40	20.25	19.85	0.04	25.84	
Ra-Pid-Gro Corp., Dansville, N. Y.													
5607	Ra-Pid-Gro 23-21-17	Danbury	5.26	4.26	13.24	0.00	22.76	0.00	20.40	20.40	0.24	16.78	
The Rogers & Hubbard Co., Portland, Conn.													
5585	Gro-Fast Acid Fertilizer 4-10-4 ...	Manchester	0.00	1.80	1.68	1.28	4.76	0.00	10.15	10.15	3.89	4.82	
5584 ⁵	Gro-Fast Aluminum Sulphate	Manchester ....	...	...	...	...	...	...	...	...	...	...	...
5634 ⁶	Gro-Fast Bone Meal 2-23	Meriden .....	...	...	...	...	2.08	...	29.40	...	...	...	...
5830 ⁷	Gro-Fast Cow Manure 2-1-1	New London ...	0.00	0.00	0.66	1.08	1.74	0.25	1.29	1.04	...	3.36	

¹ Deficiencies are in bold face type.

² Mechanical analysis: fine, 30.5%; coarse, 69.5%.

³ Sand, 38.40%.

⁴ Mechanical analysis: fine 68.0%; coarse, 32.0%.

⁵ Aluminum guaranteed, 9.0%; found, 9.26%.

⁶ Mechanical analysis: fine, 74.0%; coarse, 26.0%.

⁷ Sand, 39.95%.

TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS¹

Station No.	Manufacturer and brand	Place of sampling	Per cent nitrogen					Per cent phosphoric acid			Per cent potash	
			In nitrates	In ammonia	Organic water-soluble	Organic water-insoluble	Total	Citrate-insoluble	Total	So-called "available"	As muriate	Total
5692	Gro-Fast Plant Food 5-10-5	Yalesville	0.16	2.90	1.14	1.22	5.42	0.60	11.45	10.85	4.82	5.50
5525	Gro-Fast Rose Food 7-10-5	Hamden	0.00	2.64	1.87	2.81	7.32	1.65	13.15	11.50	0.61	5.56
Sears, Roebuck & Co., Chicago, Ill.												
5599 ^a	Cross Country Bone Meal 2-26	Danbury .....	...	0.13	...	...	4.42	...	23.00	...	...	...
5733	Cross Country Lawn Food and Weed Killer 5-10-5	Stamford	0.46	4.06	0.24	1.18	5.94	2.45	13.48	11.03	5.37	5.70
5732	Cross Country Liquid Plant Food 10-5-5	Stamford	4.26	6.45	0.10	0.13	10.94	0.45	5.90	5.45	3.65	5.18
5550	Cross Country Plant Food 5-10-5 ..	Middletown	0.90	4.00	0.02	0.20	5.12	0.50	12.30	11.80	5.86	5.86
5907	Cross Country Rose Food 5-10-5 ..	Norwalk	1.56	3.38	0.88	0.50	6.32	1.05	11.83	10.78	1.06	6.66
5551	Cross Country Sheep Manure 1.5-1-2	Middletown	0.00	0.10	0.19	1.58	1.87	0.00	1.37	1.37	...	2.76
Stern's Nurseries, Geneva, N. Y.												
5606	Stern's Miracle-Gro 15-30-15	Danbury	0.11	6.60	8.90	0.03	15.64	0.03	31.70	31.67	8.56	12.04
Wendell S. Still, Selden, N. Y.												
5693 ^a	Farmanure 2-1-1	Yalesville	0.00	0.34	0.97	1.94	3.25	0.60	2.20	1.60	...	1.83

Stim-U-Plant Laboratories, Inc., Columbus, Ohio												
5726	Stim-U-Plant Food for African Violets 5-8-7	Greenwich	2.23	3.50	0.14	0.03	5.90	0.35	8.83	8.48	0.05	9.54
5723	Stim-U-Plant Plant Tablets 11-12-15	Greenwich	7.62	4.08	0.00	0.08	11.78	0.20	21.15	20.95	0.00	26.22
Swift & Co., Boston, Mass.												
5598	Instant Vigoro 19-28-14	Newtown	5.92	5.30	8.70	0.04	19.96	0.00	26.90	26.90	0.16	16.08
5600	Vigoro 5-10-5	Danbury	0.23	4.54	0.18	0.38	5.33	0.73	10.75	10.02	5.38	5.66
5831	Vigoro (Tablets) 5-10-5	New London ...	2.04	4.24	0.18	0.42	6.88	0.48	12.20	11.72	5.21	6.38
Walker-Gordon Laboratory Co., Plainsboro, N. J.												
5722 ⁴	Bovette 2-1-1	Greenwich	0.00	0.42	0.64	1.47	2.53	0.45	2.40	1.95	...	2.85
5524 ⁵	Bovung 2-1-1	Hamden	0.00	0.20	0.43	1.41	2.04	0.23	2.14	1.91	...	2.46
Garfield Williamson, Inc., Jersey City, N. J.												
5612	Plantspur 4-4-2	New Haven	0.19	2.18	0.42	1.21	4.00	0.02	5.24	5.22	1.46	2.40

¹ Deficiencies are in bold face type.

² Mechanical analysis: fine, 29.0%; coarse, 71.0%.

³ Sand, 5.24%.

⁴ Sand, 2.53%.

⁵ Sand, 2.23%.

TABLE 9. ANALYSES OF SOIL CONDITIONERS

Station No.	Manufacturer and brand	Ammonia nitrogen per cent	Organic nitrogen per cent	Total nitrogen per cent	Total phosphoric acid per cent	Potash per cent	Moisture per cent	Ash per cent	Organic matter per cent	pH (1:100 dilution)
4103	Alco Oil & Chemical Corp., Philadelphia, Pa. <i>Alco Products Tops 4 Crops</i>. . . . .	...	...	0.03	0.00	0.07	77.50	11.34	11.16	8.05
6715	American Cyanamid Co., Stamford, Conn. <i>Aerotil (dry 40%)</i>	0.00	1.95	1.95	0.01	1.16	10.36	59.20	30.44	8.50
6717	American Polymer Corp., Peabody, Mass. <i>Agrilon</i> . . .	0.00	1.26	1.26	0.13	0.78	6.30	74.60	19.10	7.10
4098	American Polymer Corp., Peabody Mass. <i>Polyco 296-BT-15% Solids</i>	0.88	0.80	1.68	0.00	0.11	86.59	5.53	7.88	7.98
4099	American Polymer Corp., Peabody, Mass. <i>Polyco 296 N Sodium Polyacrylate</i>	0.94	0.87	1.81	0.00	0.19	84.91	5.73	9.36	8.05
4102	Attapulugus Clay Co., Philadelphia, Pa. <i>Attaclay #SO-223-51</i>. . . . .	...	...	0.06	1.18	0.72	6.07	87.35	6.58	8.12
4095	Auburn Mfg. Co., Middletown, Conn. <i>Kleen-It</i>. . . . .	...	...	0.11	0.00	1.65	83.81	3.12	13.07	9.75
4104	E. I. du Pont de Nemours & Co., Inc., Wilmington, Del. <i>Du Pont Soil Conditioner W</i>	0.10	4.07	4.17	0.10	0.18	5.78	39.74	54.48	7.20
5720	Garden Research Laboratories, Madison, N. J. <i>RX-15</i>. . . . .	...	...	14.32 ¹	32.85 ²	14.53 ³	...	...	...	...
4107	General Aniline & Film Corp., New York, N. Y. <i>GAF Soil Conditioner S-17, 100 Active</i>	5.46	5.13	10.59	0.00	...	14.63	0.09	85.28	6.85
6716	B. F. Goodrich Chemical Co., Cleveland, O. <i>K-700</i> . . .	0.00	2.21	2.21	6.49	0.46	17.66	38.55	43.79	7.20
4096	Howard Chemical Co., New Haven, Conn. <i>Howard Liquid Hand Soap</i>. . . . .	...	...	0.06	0.00	2.73	85.26	3.69	11.05	8.92
4100	Manufacturer unknown. <i>Clay Cement Solids</i>. . . . .	...	...	0.03	0.48	0.58	4.90	90.25	4.85	8.78

6712	Monsanto Chemical Co., St. Louis, Mo. <i>Krilium No. 6</i>	0.00	0.00	0.00	0.03	0.16	7.85	13.50	78.65	5.90
6713	Monsanto Chemical Co., St. Louis, Mo. <i>Krilium No. 631</i>	0.00	0.00	0.00	0.05	0.27	5.00	63.95	31.05	4.00
6714	Monsanto Chemical Co., St. Louis, Mo. <i>Polymer 212-100</i>	0.93	0.80	1.73	0.01	0.00	87.08	0.30	12.62	8.10
4106	Procter & Gamble Co., Cincinnati, O. <i>Ivory Snow</i> ..	...	...	0.06	0.00	2.93	1.65	18.43	79.92	9.72
6711	Rohm & Haas Co., Philadelphia, Pa. <i>Experimental Chemical RGS</i>	0.03	0.55	0.58	0.01	0.59	87.47	5.16	7.37	7.90
6710	Rohm & Haas Co., Philadelphia, Pa. <i>Experimental Chemical RGS-1</i>	0.00	0.62	0.62	0.01	0.12	87.87	5.10	7.03	7.50
6709	Rohm & Haas Co., Philadelphia, Pa. <i>Experimental Chemical RSPA</i>	0.00	0.00	0.00	0.00	0.16	89.58	5.73	4.69	8.30
6707	Rohm & Haas Co., Philadelphia, Pa. <i>Experimental Chemical SC-15</i>	0.00	0.00	0.00	0.05	0.80	86.48	4.89	8.63	7.40
6708	Rohm & Haas Co., Philadelphia, Pa. <i>Experimental Chemical SC-16</i>	0.00	0.00	0.00	0.06	1.05	87.49	6.07	6.44	7.90
4097	Rohm & Haas Co., Philadelphia, Pa. <i>G 6717 Na Polyacrylate</i> .....	...	...	0.02	0.00	0.37	79.00	10.54	10.46	7.72
4101	Rohm & Haas Co., Philadelphia, Pa. <i>Rohm & Haas Ch 208E Sodium Acrylate</i> .....	...	...	0.18	0.00	0.90	1.37	54.60	44.03	7.92
4260	Terre Co., Rochelle Park, N. J. <i>Grown Tone #67 Soil Conditioner</i> ¹ .....	...	...	0.17	2.80	0.32	...	89.50	...	...
4105	Wyandotte Chemicals Corp., Wyandotte, Mich. <i>Carbose 1 THY-C-10274-2-2</i>	0.00	0.00	0.00	0.00	0.44	6.50	39.49	61.01	7.58
4094	Wyandotte Chemicals Corp., Wyandotte, Mich. <i>Wyandotte C-9056-C Pluronic L-62</i> .....	...	...	0.05	0.06	...	1.36	0.02	98.62	5.95

¹ Guaranteed, 15.00%.² Available phosphoric acid: Guaranteed, 30.00%; found, 32.85%.³ Guaranteed, 15.00%.⁴ Magnesium found, 4.45%.

TABLE 10. ANALYSES OF OTHER MISCELLANEOUS MATERIALS

Station No.	Material	Total nitrogen per cent	Total phosphoric acid per cent	"Available" phosphoric acid per cent	Total potash per cent	Water-soluble potash per cent	Moisture per cent	Ash per cent	Aluminum per cent	Chloride per cent	Fat per cent
5999	African violet food	5.17	9.21	...	...	9.34	...	...	9.08 ¹	...	...
6051	Aluminum sulphate "Braco"	...	...	...	...	...	0.05	99.80	...	...	...
5325	Bagasse ash	...	1.00	...	...	0.58	...	...	...	...	...
4057	German peat moss	1.01	0.05	...	...	0.09	...	...	...	...	...
4073	Granite dust	...	...	...	1.93	0.38	...	...	...	...	...
4074	Granite dust	...	...	...	1.91	0.24	...	...	9.09 ²	...	...
6077	"Gro-Fast" aluminum sulphate	...	...	...	...	...	...	...	...	...	...
5379	Ground tobacco stems	2.74 ^a	...	...	...	6.41 ¹	...	...	...	...	...
5380	Ground tobacco stems	2.35 ^a	...	...	...	7.13 ⁴	...	...	...	...	...
7199	Humus	1.77	0.52	...	...	2.31	37.08	21.27	...	...	...
3424	Liquid from humus swamp	0.003	0.000	...	...	0.21	...	...	...	...	...
4832	Maine peat	1.04	0.06	...	...	0.10	3.71	1.20	...	...	...
4058	Michigan peat	2.07	0.14	...	...	0.09	...	...	...	...	...
6081	Nutrient solution	0.09	0.22	...	...	0.18	...	...	...	0.03	...
2866	Organic fertilizer	0.54	0.04	...	...	0.12	69.34	12.54	...	...	...
2874	Potash spar	...	...	...	5.91	0.90	...	...	...	...	...
6143	Sewage sludge	0.10	0.07	0.07	...	0.32	4.19	...	...	...	0.11
6144	Sewage sludge	0.08	0.11	0.11	...	0.40	4.39	...	...	...	0.18
6451	Tobacco particles	2.69	0.50	...	...	5.10	...	...	...	...	...
3961	Tobacco stems	2.91	0.79	...	...	4.24	...	...	...	...	...
6452	Tobacco stems—veins	2.55	0.56	...	...	7.63	10.50	...	...	...	...
5555	Undehydrated "Gro-Mulch"	0.89	0.63	0.66	36.00

¹ Guaranteed, 8.5%.² Guaranteed, 9.0%.³ Guaranteed, 1.22%.⁴ Guaranteed, 4.34%.

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