
Bulletin 603

December, 1956

COMMERCIAL FERTILIZERS

Report for 1956



H. J. FISHER
Chief Chemist

THE CONNECTICUT AGRICULTURAL EXPERIMENT
STATION, NEW HAVEN, CONNECTICUT

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REPORT ON INSPECTION AND ANALYSIS OF COMMERCIAL FERTILIZERS, 1956

H. J. FISHER, Chief Chemist¹

CONNECTICUT LAW AND REGULATIONS REGARDING COMMERCIAL FERTILIZERS

The term "commercial fertilizers," as used in the Connecticut fertilizer statute, includes "any and every substance imported, manufactured, prepared or sold for fertilizing or manuring or soil amendment purposes, except barnyard manure and stable manure 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 not for publica-

¹Analyses were made by Messrs. O. L. Nolan and Sherman Squires, Miss Helen Kocaba, Mrs. Norma Spencer and Miss Sunrae Agostini; inspection and sampling by Mr. R. Richard Nichols; compilations by Mr. Nolan, Miss Evelyn Caputo and Miss Eleanor Hopcraft.

tion 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 \$2.00.

REGISTRATIONS

Late Registrations for 1955

To the brands registered for 1955 in our last report should be added the following:

Glidden Company, 1825 N. Laramie Ave., Chicago, Ill.

Glidden Quality Products 44% Protein Solvent Extracted Soybean Oil Meal

Registrations for 1956

For 1956, 92 firms and individuals registered 454 brands of fertilizer at this Station for sale in the State. As required by statute, the brands are listed as follows:

J. & L. Adikes, Inc., 182nd Place & 93rd Ave., Jamaica 23, N. Y.

Gro-Well Bone Meal
Gro-Well Cow Manure
Gro-Well Gro-Manure
Gro-Well Sheep Manure

Agricultural Supply Co., 221 Richmond Ave., West Haven, Conn.

Yale Special Mixture

Agriculture Products Corp., 307 White St., Danbury, Conn.

Orgurea

Alaska Fertilizer Co., 84 Seneca St., Seattle 1, Wash.

Alaska Fish Fertilizer

E. T. Allen Co., P. O. Box 951, Atlanta 1, Ga.

EMPIRE — 41% Protein Cottonseed Meal
Expello Brand 41% Protein Cottonseed Meal

Allied Chemical & Dye Corp., Nitrogen Div., Hopewell, Va.

"ARCADIAN" 12-12-12 Granular Fertilizer
"ARCADIAN" A-N-L Fertilizer Compound
"ARCADIAN" Nitrana Solution 2
"ARCADIAN" Nitrana Solution 4
"ARCADIAN" Nitrate of Soda
"ARCADIAN" Urea 45 Fertilizer Compound
Sulphate of Ammonia (20.6%N)

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

AA Quality Fertilizer 0-15-30
AA Quality Fertilizer 0-20-20
AA Quality Fertilizer 5-8-7
AA Quality Fertilizer 5-10-5
AA Quality Fertilizer 5-10-10
AA Quality Fertilizer 8-12-12
AA Quality Fertilizer 8-16-16
AA Quality Fertilizer 10-6-2
AA Quality Fertilizer 10-6-4
AA Quality Fertilizer 10-10-10
Agrico Bulb Food 5-9-6
Agrico Country Club 6-10-4
Agrico Country Club 8-6-4
Agrico Country Club 10-6-4
Agrico Phosphate & Potash 0-20-20
Agrico Rose Food 5-9-6
Agrico for Broadleaf Evergreens 6-10-4
Agrico for Corn 4-12-8
Agrico for Gardens 5-10-5
Agrico for Lawns, Trees and Shrubs 6-10-4
Agrico for New England 5-8-7
Agrico for New England 8-12-12
Agrico for Potatoes 5-10-10 with 1.2 Magnesium
Agrico for Seeding Down 3-12-12
Agrico for Tobacco 6-3-6
Agrico for Top Dressing 7-7-7
Agrico for Top Dressing 10-10-10
Agrico for Turf 6-8-2
Agrico for Turf 10-6-4
Agrinite
Bone Meal
Castor Pomace
20% Granular Superphosphate
Muriate of Potash
18% Normal Superphosphate
Phos-Feed Brand Dicalcium Phosphate
Phosphate Rock 0-30T-0
Pulverized Sheep Manure

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

AERO Cyanamid, Granular
AERO Cyanamid, Special Grade
AERO-PHOS Florida Natural Phosphate 31%
AERO-PHOS Florida Natural Phosphate 33%
AEROPRILLS Fertilizer Grade Ammonium Nitrate
Lawn and Garden Cyanamid

Apothecaries Hall Co., 8-28 Benedict St., Waterbury, Conn.

Aluminum Sulfate, Standard-Ground
Bell Cow Brand 41% Prime Cottonseed Meal
Castor Pomace
Cotton Hull Ashes
Dry Ground Fish
Emjeo
Green-Gro Bone Meal
Green-Gro Fertilizer Mixture
Green-Gro Landscape & Golf Course Fertilizer
Green-Gro Lawn Fertilizer
Green-Gro Urea-Form
Liberty Fertilizer 0-10-20
Liberty Fertilizer 0-14-14
Liberty Fertilizer 0-15-30
Liberty Fertilizer 0-20-20

Apothecaries Hall Co., 8-28 Benedict St., Waterbury, Conn. — Cont'd.

Liberty Fertilizer 3-12-12 with 0.11 Boron
 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 10-10-10
 Liberty Green Gro All Organic
 Liberty High Grade Market Gardeners
 Liberty Special Fertilizer for Fruit & Grass
 Liberty Super Bacco, 6-4-7 with 1.2 Magnesium
 Liberty Super Spud Special Potato Fertilizer with 1.2 Magnesium
 Liberty Tobacco Mixture 5-5-15
 Liberty Tobacco Mixture 6-3-6
 Liberty Tobacco Mixture with Castor Pomace
 Muriate of Potash
 Nitrate of Potash
 Precipitated Bone
 Sheep Manure
 Sulphate of Amonia
 Sulphate of Potash
 Superphosphate 20%

Archer-Daniels-Midland Co., P. O. Box 839, Minneapolis 2, Minn.

Archer Quality 36% Protein Solvent Extracted Linseed Oil Meal (Fertilizer)

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

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

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

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

Associated Seed Growers, Inc., Main St., Cambridge, N. Y.

Asgrow Azalea Food 7-7-7
 Asgrow Bone Meal
 Asgrow Bulb Food 4-12-8
 Asgrow Evergreen Food 10-6-4
 Asgrow Lawn Food
 Asgrow Plant Food 5-10-5
 Asgrow Rose Food 5-10-5
 Asgrow Sheep Manure
 Asgrow Soluble Fertilizer 20-20-20
 Japedizer

Atkins & Durbrow, Inc., Box 55, Port Colborne, Ontario, Canada

A & D Driconure
 Driconure 3-2-1

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

Nitrogran

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

Bartlett Green Tree Food

The Borden Co., Chemical Div., 350 Madison Ave., New York 17, N. Y.

Borden's "38"

The Boswell Co., Atlanta, Ga.

Pure Gold 41% Protein Cottonseed Meal

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

Breck's Garden Gro
 Breck's Greenite (all organic)
 Breck's Quick-Life
 Breck's Turf-Gro
 Breck's Velturf

Brookside Nurseries, 228 Brookside Rd., Darien, Conn.

Natures Nutrients

The Buckeye Cellulose Corp., 6th & Main Sts., Cincinnati, Ohio

Buckeye 41% Protein Cottonseed Meal for Fertilizer

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

ORTHO-GRO Liquid Plant Food
 ORTHO Lawn Groom

The Carac Corporation, 162 Babylon Tnpke., Freeport, N. Y.

Carac Evergreen & Shrub Fertilizer
 Carac Rose & Plant Fertilizer
 Carac 46-0-0 Nitrogen Concentrate

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

CCC Triple 20 Plant Food

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

Chilean Nitrate of Soda—Champion Brand

Cocke and Company, 32 Peachtree St., N. W., Atlanta 3, Ga.

Cocke-Sure Brand Prime Quality 36% Protein Cottonseed Meal
 Cocke-Sure Brand Prime Quality 41% Protein Cottonseed Meal

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

Corenco 0-15-30
 Corenco 0-20-20 Legume Special
 Corenco 4-12-16 Ladino Special
 Corenco 5-3-5 Peerless Tobacco Grower
 Corenco 5-5-15 Tobacco Starter
 Corenco 5-8-7 Potato & General Crop
 Corenco 5-10-5 Home Garden
 Corenco 5-10-5 Onion Special—Super Truck
 Corenco 5-10-5 Rose Special
 Corenco 5-10-10 Peerless Potato
 Corenco 5-10-10 Peerless Potato with 1.20 Magnesium
 Corenco 6-3-6 Perfection Tobacco Grower
 Corenco 6-3-6 Premium Tobacco Grower
 Corenco 6-8-8 Potato Special
 Corenco 6-8-8 Potato Special with 1.2 Magnesium

Consolidated Rendering Co., 178 Atlantic Ave., Boston, Mass. — Cont'd.

Corenco 7-7-7 Complete Fruit and Top Dressing
 Corenco 8-6-4 Landscape Fertilizer
 Corenco 8-6-4 Turf Green
 Corenco 8-16-16 Two-in-One
 Corenco 10-6-2
 Corenco 10-6-4
 Corenco 10-10-10
 Corenco Granular Superphosphate 20%
 Corenco Ground Bone
 Corenco Liquid Fertilizer Concentrate
 Corenco Liquid Green
 Corenco Organic Turf Fertilizer
 Corenco Sheep Manure
 Corenco Spurz-on
 Corenco Superphosphate 20%
 Muriate of Potash
 Sulphate of Ammonia

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

Davey Shredded Cattle Manure
 Davey Tree Food

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

"Organo"

Davison Chemical Co. Div., W. R. Grace & Co., 101 N. Charles St., Baltimore 3, Md.

Davco Granulated Fertilizer 0-15-30
 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 8-16-16
 Davco Granulated Fertilizer 10-10-10
 Davco Granulated 20% Superphosphate
 Muriate of Potash 60% Regular

E. I. du Pont de Nemours and Company, Wilmington, Del.

DU PONT NU GREEN Fertilizer Compound
 DU PONT Soluble Plant Food 19-22-16
 DU PONT URAMITE Fertilizer Compound

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

Castor Pomace
 Eastern States 0-15-30 with 0.2 Boron
 Eastern States 0-25-25
 Eastern States 5-10-10 with 1.2 Magnesium
 Eastern States 8-4-8 (Tobacco) with 1.2 Magnesium
 Eastern States 8-12-12 with 1.2 Magnesium
 Eastern States 8-12-12 L.C. with 1.2 Magnesium
 Eastern States 8-16-16 with 0.6 Magnesium
 Eastern States 10-10-10 with 0.6 Magnesium
 Eastern States 10-10-10 S.M. with 1.2 Magnesium
 Eastern States Starter 64
 Muriate of Potash
 Nitrogen Solution 37
 Superphosphate

The Espoma Company, P. O. Box #108, Millville, N. J.

Espoma
 Espoma Garden Fertilizer
 Espoma Rose Food
 Holly-Tone

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

F & B Broadleaf High Organic 6-10-4
 F & B Pure Bone Meal
 F & B Rose Food 8-10-4
 F & B Starter-Grower All-Purpose 15-30-15

Ferro Corporation, 4150 E. 56th St., Cleveland, Ohio

Ferro Agricultural F.T.E. No. FN-501
 Ferro Agricultural F.T.E. No. FN-502
 Ferro F.T.E.

Fertilene Corporation of America, 251 Central Park West, New York, N. Y.

Fertilene Complete Liquid Fertilizer

Fiestar, Inc., 665 Fifth Ave., New York 22, N. Y.

Fiestar

Forward House Div., Olin Mathieson Chem. Corp., 745 Fifth Ave., New York 22, N. Y.

Plantrons

The Garden Center Inc., 53 LaSalle Rd., West Hartford, Conn.

The Garden Center of West Hartford Lawn Food

Garden Supply Sales Corp., 2120 Lake Ave., Rahway, N. J.

Farmanure

Geigy Agricultural Chemicals, 89 Barclay St., New York 8, N. Y.

Sequestrene NaFe Iron Chelate

Goldenrod Oil Meal Sales Co., 727 Beale Ave., P. O. Box 152, Memphis 1, Tenn.

Goldenrod Brand 41% Protein Cottonseed Meal — Prime Quality

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

G & O Cottonseed Meal 41% Protein
 G & O Ground Bone Fertilizer
 G & O Muriate of Potash
 G & O Prizegro 5-10-5
 G & O Raw Bone Meal
 G & O Rhodo-Azalea Food
 G & O Rose Food
 G & O Sheep & Guano Manure
 G & O Special Food for Bulbs
 G & O 20% Superphosphate
 G & O Tree & Shrub Food
 Godfrey's Hi-Organic No-Filler 10-6-4

Grace Chemical Co., Div. of W. R. Grace & Co., Box 4906, Memphis, Tenn.

Grace Urea Prills

Gregory-Doyle, Inc., West 11th St., Huntington Sta., New York, N. Y.

Gregory-Doyle 8-16-16

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

Hoffman Cow Manure (Dehydrated)
 Hoffman Sheep Manure (Kiln-Dried)

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

Dixie Brand 41% Cottonseed Meal

Kahn Bros. Co., 4425 S. Halsted St., Chicago, Ill.

All-Organic

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

Castor Pomace
 Spencer Kellogg's 34% Protein Old Process (Expeller) Linseed Oil Meal
 Spencer Kellogg's 44% Protein Toasted Soybean Oil Meal — Solvent Extracted

Lawn-Tex Corp., 1640 W. Fulton St., Chicago, Ill.

Organi-Green

Lebanon Chemical Corporation, Box 532, Lebanon, Pa.

Azalea Food
Bone Meal
Cow Manure
Fertilizer 5-10-10
Fertilizer 10-6-4
Granulated 20% Superphosphate
Hi Organic
Plant Food
Rose Food
Sheep Manure
Spray Gro
Sulphate of Ammonia
Turf Organic
Uni-Form 10-6-4

Lee Patten Seed Co., 360 Ninth St., Jersey City, N. J.

Patco Lawn Food

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

"LOVIT BRAND" 41% Protein Cottonseed Meal, Prime Quality

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

FER-MEL General Purpose Plant Food
FER-MEL Turf & Tree Food

McArdle's Seed Co., 388 Greenwich Ave., Greenwich, Conn.

McArdle's Hi-Organic 10-6-4

Monsanto Chemical Co., 1700 South Second, St. Louis 4, Mo.

Folium

Natural Plant Food Co., 210 W. California, Oklahoma City 2, Okla.

Longhorn Brand Cattle Manure
Ramshorn Brand Sheep Manure

Nitro-Form Agricultural & Chemical, 92 Sunnyside Ave., Woonsocket, R. I.

Nitro-Form

Old Deerfield Fertilizer Co., Inc., 20 Sugar Loaf St., South Deerfield, Mass.

Old Deerfield 5-5-15 Tobacco Starter
Old Deerfield 5-8-7
Old Deerfield 5-10-10 Potato Fertilizer
Old Deerfield 6-3-6 Complete Tobacco
Old Deerfield 6-3-6-2 Tobacco w/1000# C/S Meal
Old Deerfield 6-4-7 Hi-Grade Complete Tobacco
Old Deerfield 7-7-7
Old Deerfield Castor Pomace
Old Deerfield Cotton Hull Ash
Old Deerfield Superphosphate, 20%

Old Fox Agricultural Sales Inc., 49 Valley St., East Providence, R. I.

Old Fox Bone Meal
Old Fox Brand 0-12-24
Old Fox Brand 0-15-30
Old Fox Brand 0-20-0
Old Fox Brand 0-20-20
Old Fox Brand 4-16-20
Old Fox Brand 5-8-7
Old Fox Brand 5-10-5 Garden Food
Old Fox Brand 5-10-10

Old Fox Brand 5-10-10 with 1.2 Magnesium
Old Fox Brand 6-3-6 Tobacco Fertilizer with 1.2 Magnesium
Old Fox Brand 7-7-7
Old Fox Brand 8-6-2 Turf Food
Old Fox Brand 8-6-2 Turf Food with 2.5 Chlordane
Old Fox Brand 10-6-4
Old Fox Brand 10-10-10
Old Fox Brand Muriate of Potash
Old Fox Brand Organo

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

O & W 0-20-20 Fertilizer
O & W 4-8-4 Complete Lawn 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 & 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 — Potash derived from Cotton Hull Ashes
O & W 6-3-6 Pomace Base Fertilizer — Potash derived from Cotton Hull Ash
O & W 6-3-6 Special Tobacco Fertilizer
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
O & W 8-12-12 High Grade General Purpose Fertilizer with 1.8 Magnesium
O & W 10-6-4 Luxura
O & W 10-10-10 Fertilizer
O & W Bone Meal
O & W Castor Pomace
O & W Cotton Hull Ashes
O & W Granulated 20% Superphosphate
O & W Menhaden Dry Ground Fish
O & W Muriate of Potash
O & W Nitro-Gro 4-4-0 All Organic Plant Food
O & W Sheep Manure
O & W Sulphate of Potash
O & W Sulphate of Potash Magnesia
O & W Triple Superphosphate
Precipitated Bone Phosphate

Olin Mathieson Chemical Corp., 10 Light St., Baltimore 3, Md.

Mathieson Ammo-Phos Fertilizer 13-13-13

The Frank S. Platt Co., Boston Post Rd., Branford, Conn.

Platt's Concentrated 10-5-5 Lawn Fertilizer

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

Premier Dehydrated Cow Manure

The Rackliffe Oil Co., 114 Franklin Sq., New Britain, Conn.

Lawn-Ade

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

Ra-Pid-Gro

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

Cotton Hull Ash
Gro-Fast All Organic
Gro-Fast Aluminum Sulphate
Gro-Fast Bone Meal
Gro-Fast Cow Manure
Gro-Fast Evergreen Food
Gro-Fast Plant Food

The Rogers & Hubbard Co., Off Bank St., Portland, Conn. — Cont'd.

Gro-Fast Rose Food
 Gro-Fast Sheep Manure
 Gro-Fast SOL (Water Soluble Concentrate)
 Hoof Meal
 Hubbard Alfalfa Fertilizer
 Hubbard Alfalfa Fertilizer with Borax
 Hubbard Castor Pomace
 Hubbard Climax Tobacco Fertilizer
 Hubbard Dairy Fertilizer
 Hubbard Double Strength Fertilizer
 Hubbard Garden Fertilizer
 Hubbard General Crop Fertilizer
 Hubbard General Crop Fertilizer with 1.2 Magnesium
 Hubbard Golf Course Fertilizer 8-6-2
 Hubbard Golf Course Fertilizer 8-6-2 with Chlordane
 Hubbard Golf Course Fertilizer 10-6-4
 Hubbard Hi-Organic 5-10-10
 Hubbard Hi-Organic 6-8-8
 Hubbard Hi-Organic 6-12-12
 Hubbard Hi-Top Fertilizer
 Hubbard Hi-Yield Fertilizer
 Hubbard Muriate of Potash
 Hubbard Nitrate of Potash
 Hubbard Potato Fertilizer
 Hubbard Potato Fertilizer with 1.2 Magnesium
 Hubbard Potato Fertilizer with Sulphate of Potash
 Hubbard Sulphate of Ammonia
 Hubbard Superphosphate
 Hubbard Tobacco Grower
 Hubbard Tobacco Starter
 Hubbard Top Dressing
 Hubbard Valley Brand
 Hubbard Vegetable Fertilizer
 Hubbard Weed-Kil Lawn Food
 Precipitated Bone

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

Red Seal Brand Ruhm's Phosphate Rock

St. Louis National Stockyards Co., Exchange Bldg., National Stock Yards, Ill.

Wizard Brand Cow Manure
 Wizard Brand Sheep Manure

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

Scott's Organic
 Scott's Turf Builder
 Scott's Weed & Feed

Sears, Roebuck & Co., 925 So. Homan Ave., Chicago 7, Ill.

Cross Country Azalea Food
 Cross Country Bone Meal
 Cross Country Bulb Food
 Cross Country Cattle Manure
 Cross Country Evergreen Food
 Cross Country Instant Rose Food
 Cross Country Instant Tomato Food
 Cross Country Lawn Food
 Cross Country Plant Food
 Cross Country Rose Food
 Cross Country Sheep Manure
 Cross Country Sulfate of Ammonia
 Cross Country Wat-R-Mix

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

Shea Chemical Corp., Adams, Mass.
 Shea Dicalcium Phosphate Feeding Grade

The Sherwin-Williams Co., 101 Prospect Ave. N.W., Cleveland, Ohio
 Sherwin-Williams 34% Linseed Oil Meal (A Blend of Expellent and Solvent Extracted Meals)

M. L. Shoemaker Div., Wilson & Co., Delaware Ave. & Venango St., Philadelphia, Pa.
 M. L. Shoemaker "Swift-Sure" Tobacco Starter

Soil Builders International Corp., 33 West 42nd St., New York 36, N. Y.
 Glorion

The Southern Cotton Oil Co., Columbus, Miss.
 SCO-CO Brand 41% Protein Cottonseed Meal

Spencer Chemical Co., Dwight Bldg., Kansas City, Mo.
 "Mr. N." Ammonium Nitrate Fertilizer

Super Lawn Corporation, 355 Clinton Place, Newark, N. J.
 Super Lawn

Swift & Co., Plant Food Div., 440 Church St., Hartford 1, Conn.

Blenn
 Brimm
 Golden Vigoro
 Instant Vigoro
 Pasturgo 2-12-12
 Pasturgo 5-10-10
 Red Steer 0-10-20
 Red Steer 0-15-30
 Red Steer 0-20-20
 Red Steer 5-8-7
 Red Steer 5-10-10
 Red Steer 7-7-7
 Red Steer 8-16-16
 Red Steer 10-10-10
 Vigoro
 Vigoro C. G.
 Vigoro Camellia & Azalea
 Vigoro Complete Rose Food
 Vigoro Plus Chlordane

Triple A Mills, Townsend Harbor, Mass.
 Sure-Gro (Poultry Manure) Fertilizer

Universal Chemical Co., Lynn, Mass.
 Electra Plant Food

Valley Feed & Supply Co., Inc., Union Rd., Spring Valley, N. Y.
 Adorna
 C-D Organic Dry Manure

The Van Iderstine Co., 37-30 Review Ave., Long Island City, N. Y.
 Vico Steamed Bone Meal Fertilizer

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

Oscar F. Warner, 24 East 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
Wonderlawn Complete 10-6-4 Lawn Food

Andrew Wilson, Inc., Baltusrol Way, Springfield, N. J.

Wilson's Eureka Plant Food

F. H. Woodruff & Sons, Inc., 9 Depot St., Milford, Conn.

Gro-Sod Lawn Food

Woodruff Fertilizer & Chemical Works, Inc., Sackett Point Rd., North Haven, Conn.

Woodruff's 0-15-30 Fertilizer
Woodruff's 0-20-20 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 8-6-4 Fertilizer
Woodruff's 10-10-10 Fertilizer
Woodruff's Lawn & Tree Food 10-5-5
Woodruff's Muriate of Potash 60%
Woodruff's Superphosphate 20%
Woodruff's Tobacco Fertilizer
Woodruff's Tobacco Starter

Young & Halstead Co., 3 East Main St., Mt. Kisco, N. Y.

Professional Tree Food 7-7-7

FERTILIZER INSPECTION FOR 1956

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, because all authorities are agreed that a small number of grades can take care of all of the needs of agriculture, and that standardization on a few grades will promote economy in the manufacture of fertilizer and so help to keep prices down, ever since the compulsory limitation imposed by War Food Order No. 5 during World War II was revoked (on September 30, 1945) 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:

Ratio	Minimum Grade
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

This list has not been changed up to the present time.

That most Connecticut farmers realize the desirability of using recommended grades is shown by the fact that 77 per cent of the mixed fertilizers sold during the 1955-1956 season were of the recommended ratios and minimum grades. A fertilizer of a recommended 1-1-1 ratio but just under the minimum grade of 8-8-8, namely the 7-7-7, accounted for another 4 per cent.

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 is 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 1956 was 891.

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, 1955 and June 30, 1956 (these tonnage figures do not include fertilizer distributed under the Federal Agricultural Conservation Program):

CLASSIFICATION OF FERTILIZER MATERIALS AND FERTILIZER TONNAGE

(Tonnage is for the period July 1, 1955 to June 30, 1956)

	Page	No. of Samples	Tonnage	
I. Containing chiefly nitrogen:				
Nitrate of ammonia	21	4	667	
Nitrate of soda	21	5	489	
Sulphate of ammonia	21	3	19	
Cyanamid and urea	21	14	365	
Castor pomace	22	10	1,950	
Cottonseed meal	22	112	6,047	
Horn and hoof meal	24	2	16	
Linseed oil meal	24	11	406	
Soybean oil meal	24	5	77	
Other materials	24	3	289	
				10,325
II. Containing chiefly phosphoric acid:				
Superphosphate 18%	25	2	512	
20%	25	17	5,561	
46%	26	2	78	
Precipitated bone	26	27	801	
Phosphate rock	26	1	54	
				7,006
III. Containing chiefly potash:				
Muriate of potash	27	10	742	
Sulphate of potash	27	9	153	
Sulphate of potash-magnesia			68	
Cottonhull ashes	27	14	555	
				1,518
IV. Containing nitrogen and phosphoric acid:				
Dry ground fish	28	14	503	
Bone meal	28	14	634	
Other materials	29	2	921	
				2,058
V. Containing nitrogen and potash:				
Nitrate of potash	27	7	20	
				20
VI. Mixed fertilizers:				
Commercial mixtures	30	267	50,927 ¹	
Special and home mixtures		113	3,623	
				54,550
VII. Miscellaneous:				
Aluminum sulphate	59	1	8	
Borax		1	16	
Sheep and cattle manure	46	25	980	
Limestone and similar materials	48	21		
Fertilizers sold in small packages	49	100		
Lawn sprays	58	8	3	
Other miscellaneous materials	59	39	176	
Check meals and fertilizers		28		
				1,183
Totals		891		76,660

¹For distribution of this tonnage see next page.

Mixed Fertilizer Tonnage

Grades Approved for Connecticut

Grade	Tons	Grade	Tons
0-10-10	222	6-12-12	212
0-12-24	171	8- 4- 8	461
0-14-14	138	8- 6- 2	311
0-15-30	1,658	8- 8- 8	142
0-20-20	1,271	8-16-16	2,232
0-25-25	414	10-10-10	5,614
5- 5-15	235	12-12-12	104
5- 8- 7	2,248	12-24-12	1
5-10- 5	2,075	15-15-15	3
5-10-10	10,072	15-30-15	5
6- 3- 6	8,025	16-32-16	3
6- 8- 8	3,499	18-18-18	11
		Total	39,127
Other Grades			
(50 tons or more)			
1- 1- 1	121	6- 4- 7	283
2- 2- 2	77	6- 7- 4	349
3- 2- 1	36	6- 8- 2	198
3-12-12	165	6- 8- 6	92
4- 8- 4	81	6-10- 4	1,565
4- 8- 8	710	7- 7- 7	2,158
4-10- 0	68	7-11- 5	52
4-12- 4	52	8- 6- 4	766
4-16-20	88	8-12-12	1,171
4.75- 4- 0	63	9- 7- 4	966
5- 2- 3	96	10- 5- 5	214
5- 3- 5	286	10- 6- 2	57
5- 4- 0	520	10- 6- 4	1,086
5- 5- 5	60		
		Total	11,380

(Less than 50 tons)

1- 1- 0	5	5- 6- 4	12
2-12-12	30	5- 8- 6	47
3- 1- 1	12	5- 9- 6	23
3-2.5- 1.5	8	7- 8- 5	5
4- 4- 0	10	7-10- 5	24
4- 4- 2	35	12- 4- 4	12
4- 6- 4	23	12- 6- 4	5
4-10- 4	32	23-21-17	11
4-12- 6	32	24-12-12	21
4-12- 8	33	Other grades	35
5- 5- 0	5		
		Total	420
		Grand Total	50,927

I. Materials Chiefly Valuable for Nitrogen

The past year saw a decline in production of Connecticut tobacco resulting from increased substitution of the new tobacco "paper" for tobacco leaves in the manufacture of cigars. A direct consequence of this was a drop in consumption of vegetable meals as fertilizer from 11,232 tons in 1955 to 8,480 tons in 1956. In spite of this 25 per cent decline, 82 per cent of the primarily nitrogenous materials purchased for fertilizer use in this State during the 1956 season were still vegetable meals — 59 per cent cottonseed meal, 19 per cent castor pomace, and the balance linseed and soybean oil meals.

Analyses of the 79 official samples of nitrogenous fertilizers are given in Table 1. Seventy-one of these met their guaranties and eight were deficient. The substandard samples included all four official samples of nitrate of ammonia and two out of six and two out of eight samples respectively of cyanamid and urea.

II. Materials Chiefly Valuable for Phosphoric Acid

Analyses of 15 official samples of 20 per cent superphosphate, two samples of the 18 per cent and one of the 46 per cent grades, are given in Table 2; all of these met their guaranties. Four out of five samples of precipitated bone were also satisfactory, as was the one sample of phosphate rock.

III. Materials Chiefly Valuable for Potash

Ten official samples of muriate of potash, two of sulphate of potash and six of cotton hull ashes were analyzed as shown in Table 3. The only deficient sample was one of muriate of potash.

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 of such natural organic products, and most of them bear guaranties of total nitrogen and total phosphoric acid only. Five official samples of dry ground fish, 14 of bone meal and one of "Milorganite" (a treated sewage sludge) were analyzed in 1956. All samples met their guaranties for both nitrogen and phosphoric acid, with the exception of two bone meals which were low in nitrogen. Analyses are given in Table 4.

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.

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

VI. Mixed Fertilizers

Commercial Mixtures

Analyses of 263 official samples of mixed fertilizers are given in Table 5. Results are summarized as follows:

Total number of samples		263	
Samples deficient in:			
one item	94		
two items	8		
three items	1	103	
Percentage of samples meeting all guaranties		61	
Total guaranties made		745 ¹	
Guaranties not met:			
nitrogen	64		
phosphoric acid	28		
potash	20	112	
Percentage met			85

Eighty-five per cent of all guaranties were substantially met or exceeded.

¹Two hundred and twenty-one samples with three guaranties, 41 with two guaranties and one with no major element guaranty (guaranties for minor elements not included).

Nineteen official samples guaranteed magnesium (usually 1.2 per cent) in addition to the major components; all of these met their guaranties. Two samples met their claims for boron (0.20 and 0.65 per cent respectively). One sample guaranteed copper, zinc, iron and sulphur in addition to nitrogen, phosphoric acid and potash, while another ("Ferro F.T.E. (Fritted Trace Elements)") carried no major element guaranty but did declare six minor elements (manganese, iron, zinc, copper, boron and molybdenum). No deficiency in any of these minor elements was found.

Special and Home Mixtures

One hundred and thirteen samples of special and home mixtures were analyzed during the year, the great majority for tobacco growers. Because the composition of these samples is of no 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 not exempt from payment of registration fees and tonnage taxes unless they are furnished to The Connecticut Agricultural Experiment Station for experimental purposes.

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

Materials	No. of Samples	Reference
Supplying nitrogen	11	Table 1
Supplying phosphoric acid	6	Table 2
Supplying potash	4	Table 3
Supplying nitrogen and phosphoric acid	3	Table 4
Mixed fertilizers	33	Table 5
Aluminum sulfate	1	Table 10
Total	58	

VII. Miscellaneous

Sheep and cattle manures. These products bear guaranties of nitrogen, total phosphoric acid and potash, although some brands guarantee "available" instead of total phosphoric acid. Of the 23 official samples analyzed during the 1955-1956 season 20 met all guaranties, two were low in nitrogen and one was deficient in phosphoric acid. Analyses are given in Table 6.

Limestone and similar materials. Because the legal definition of "commercial fertilizers" (G.S. 6733) specifically excludes "marl and lime", no regular inspection of liming materials is made. Occasional samples of limestone, hydrated lime and gypsum ("land plaster") are analyzed for farmers or State or Federal agencies, and analyses of 19 such samples are given in Table 7.

Fertilizers sold in small packages. Fertilizers sold only in packages of 10 pounds or less net weight are not required to be registered. No attempt, therefore, is made to sample all the small package fertilizers on the market, but such brands as come to the attention of our agent are picked up and analyzed as a matter of public interest. During the 1955-1956 season 100 samples were analyzed, of which 78 met all their guaranties; this is a distinctly higher percentage than the 61 found for fertilizers sold in 100-lb. bags, and is the second successive year for which this superiority of the smaller packages has been noted. Analyses are given in Table 8.

Lawn sprays. Last year considerable interest was shown in a new method of selling fertilizers, namely, by direct application to consumers' lawns as dilute aqueous solutions. All of the firms engaging in this practice were oil dealers, who had entered the custom fertilizer application business in the hope of keeping their trucks and drivers busy during their summer off-season.

This new practice offered quite a sampling problem for us, because it was much more difficult for our agent to locate oil trucks on their rounds with loads of liquid fertilizer than to find bagged fertilizers lying quietly in known warehouses. Nevertheless 19 diluted liquid fertilizer samples were obtained and analyzed in 1955.

Either the business has not proved to be so profitable as was expected or the trucks are getting harder to find, because this year we were able to obtain only four samples. Results of analysis of these are reported in Table 9; all samples met their guaranties.

Other miscellaneous materials. Twenty-nine other miscellaneous products were examined; analyses are given in Table 10.

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 three samples were analyzed in connection with collaborative studies of methods for the determination of phosphoric acid conducted by the Association of Official Agricultural Chemists. Twenty-eight 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 87 per cent.

	No. of samples	No. of guaranties	Deficiencies
Nitrate of ammonia	4	4	4
Nitrate of Soda	5	5	0
Sulphate of ammonia	3	3	0
Cyanamid	6	6	2
Urea	8	8	2
Castor pomace	9	9	0
Cottonseed meal	35	35	0
Horn and hoof meal	1	1	0
Linseed oil meal	4	4	0
Soybean oil meal	1	1	0
Miscellaneous nitrogenous materials	3	3	0
Superphosphate	18	18	0
Precipitated bone	5	5	1
Phosphate rock	1	1	0
Muriate of potash	10	10	1
Nitrate of potash	2	2	0
Sulphate of potash	5	5	0
Cotton hull ashes	6	6	0
Dry ground fish	5	10	0
Bone meal	14	28	2
"Milorganite"	1	2	0
Mixed fertilizer	263	745	113
Sheep and cattle manure	23	69	3
Totals	422	970	128
Per cent guaranties met			87

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				
7693 ²	AEROPRILLS. American Cyanamid Co., New York, N. Y.	Cheshire: Connecticut Reformatory	33.20	33.50
8050 ²	AEROPRILLS. American Cyanamid Co., New York, N. Y.	Southbury: Southbury Training School	33.20	33.50
8134	AEROPRILLS. American Cyanamid Co., New York, N. Y.	Norwich: Eastern States Farmers' Exchange, Inc.	33.25	33.50
8283	Spencer. Spencer Chemical Co., Kansas City, Mo.	North Haven: Woodruff Fertilizer & Chemical Works, Inc.	33.00	33.50
Nitrate of Soda				
8279 ³	Arcadian. Allied Chemical & Dye Corp., New York, N. Y.	Windsorville: Apothecaries Hall Co.	16.34	16.00
7697 ^{2,4}	Chilean, Champion Brand. Chilean Nitrate Sales Corp., New York, N. Y.	Cheshire: Connecticut Reformatory	16.00	16.00
8133 ^{2,5}	Chilean, Champion Brand. Chilean Nitrate Sales Corp., New York, N. Y.	Norwich: Norwich State Hospital	16.06	16.00
8135 ⁶	Chilean, Champion Brand. Chilean Nitrate Sales Corp., New York, N. Y.	Norwich: Eastern States Farmers' Exchange, Inc.	16.00	16.00
8273 ⁷	Chilean, Champion Brand. Chilean Nitrate Sales Corp., New York, N. Y.	South Windsor: South Windsor Tobacco Co.	16.32	16.00
Sulphate of Ammonia				
8127 ²	Allied Chemical & Dye Corp., New York, N. Y.	Enfield: N. G. Osborn Prison Farm	20.86	20.60
8042	Consolidated Rendering Co., Boston, Mass.	West Haven: New Haven Rendering Co.	20.68	20.50
8044	Hubbard. The Rogers & Hubbard Co., Portland, Conn.	Portland: The Rogers & Hubbard Co.	20.52	20.50
Cyanamid				
8119	AERO. American Cyanamid Co., New York, N. Y.	East Windsor Hill: South Windsor Equipment Co.	20.88	21.00
8125 ²	AERO. American Cyanamid Co., New York, N. Y.	Enfield: N. G. Osborn Prison Farm	21.22	21.00
8132 ²	AERO. American Cyanamid Co., New York, N. Y.	Norwich: Norwich State Hospital	20.86	21.00
8282	AERO. American Cyanamid Co., New York, N. Y.	Buckland: Eastern States Farmers' Exchange, Inc.	22.88	21.00
8285	AERO. American Cyanamid Co., New York, N. Y.	Wilson: Chirstensen-Rand Inc.	21.00	21.00
8288	Lawn & Garden. American Cyanamid Co., New York, N. Y.	Greenwich: McArdle's Seed Co.	21.00	21.00

¹Deficiencies are in boldface type.

²State Purchases.

³Sodium: Guaranteed, 26.0%; found, 26.68.

⁴Sodium: Guaranteed, 26.0%; found, 26.38.

⁵Sodium: Guaranteed, 26.0%; found, 26.41.

⁶Sodium: Guaranteed, 26.0%; found, 26.59.

⁷Sodium: Guaranteed, 26.0%; found, 27.98.

TABLE 1. ANALYSES OF MATERIALS SUPPLYING CHIEFLY NITROGEN¹

Station No.	Manufacturer or jobber	Sampled from stock of	Per cent nitrogen	
			Found	Guaranteed
Urea				
8046	"Arcadian". Allied Chemical & Dye Corp., New York, N. Y.	North Haven: Eastern States Farmers' Exchange, Inc.	45.15	45.00
8278	Green Gro Urea-Form. Apothecaries Hall Co., Waterbury, Conn.	Windsorville: Apothecaries Hall Co.	38.90	38.00
8286	Borden's "38". The Borden Company, New York, N. Y.	New Canaan: Silliman's Inc.	37.20	38.00
7692 ²	DU PONT NU GREEN. E. I. du Pont de Nemours & Co., Wilmington, Del.	Cheshire: Connecticut Reformatory	45.15	45.00
8122	DU PONT NU GREEN. E. I. du Pont de Nemours & Co., Wilmington, Del.	Glastonbury: E. J. Bantle	45.00	45.00
8128 ²	DU PONT NU GREEN. E. I. du Pont de Nemours & Co., Wilmington, Del.	Enfield: N. G. Osborn Prison Farm	44.35	45.00
8289	DU PONT URAMITE. E. I. du Pont de Nemours & Co., Wilmington, Del.	Greenwich: McArdle's Seed Co.	37.90	38.00
8118	Nitro-Form. Woonsocket Color & Chemical Co., Woonsocket, R. I.	Hartford: Cadwell & Jones, Inc.	38.35	38.00
Castor Pomace				
7683	American Agricultural Chemical Co., North Weymouth, Mass.	Bloomfield: American Sumatra Tobacco Corp.	5.90	4.50
7684	American Agricultural Chemical Co., North Weymouth, Mass.	Bloomfield: American Sumatra Tobacco Corp.	6.08	4.50
8049 ²	Spencer Kellogg & Sons, Inc., Edgewater, N. J.	Middletown: Long Lane School	6.61	5.50
8141	Spencer Kellogg & Sons, Inc., Edgewater, N. J.	Hartford: Cadwell & Jones, Inc.	6.30	5.50
8295	Spencer Kellogg & Sons, Inc., Edgewater, N. J.	Windsorville: Apothecaries Hall Co.	6.28	5.50
8123	Old Deerfield Fertilizer Co., Inc., South Deerfield, Mass.	Glastonbury: E. J. Bantle	6.10	5.50
8271	The Rogers & Hubbard Co., Portland, Conn.	South Windsor: South Windsor Tobacco Co.	6.12	4.50
8272	The Rogers & Hubbard Co., Portland, Conn.	South Windsor: South Windsor Tobacco Co.	6.06	4.50
8274	The Rogers & Hubbard Co., Portland, Conn.	South Windsor: South Windsor Tobacco Co.	6.34	4.50
Cottonseed Meal				
7404	Empire 41%. E. T. Allen Co., Atlanta, Ga.	Simsbury: Cullman Bros., Inc.	7.03	6.56
7639	Empire 41%. E. T. Allen Co., Atlanta, Ga.	Simsbury: Cullman Bros., Inc.	6.60	6.56
7642	Empire 41%. E. T. Allen Co., Atlanta, Ga.	Bloomfield: The Hartman Tobacco Co.	6.70	6.56

¹Deficiencies are in boldface type.²State Purchases.TABLE 1. ANALYSES OF MATERIALS SUPPLYING CHIEFLY NITROGEN¹

Station No.	Manufacturer or jobber	Sampled from stock of	Per cent nitrogen	
			Found	Guaranteed
7643	Empire 41%. E. T. Allen Co., Atlanta, Ga.	Bloomfield: The Hartman Tobacco Co.	6.57	6.56
7656	Expello Brand 41%. E.T. Allen Co., Atlanta, Ga.	Simsbury: Cullman Bros., Inc.	6.92	6.56
7396	Pure Gold 41%. The Boswell Co., Atlanta, Ga.	Simsbury: Cullman Bros., Inc.	6.61	6.56
7397	Pure Gold 41%. The Boswell Co., Atlanta, Ga.	Simsbury: Cullman Bros., Inc.	6.77	6.56
7398	Pure Gold 41%. The Boswell Co., Atlanta, Ga.	Simsbury: Cullman Bros., Inc.	6.58	6.56
7400	Pure Gold 41%. The Boswell Co., Atlanta, Ga.	Granby: Cullman Bros., Inc.	6.86	6.56
7402	Pure Gold 41%. The Boswell Co., Atlanta, Ga.	Granby: Cullman Bros., Inc.	6.72	6.56
7405	Pure Gold 41%. The Boswell Co., Atlanta, Ga.	Simsbury: Cullman Bros., Inc.	6.66	6.56
8477	Pure Gold 41%. The Boswell Co., Atlanta, Ga.	East Windsor Hill: General Cigar Co.	6.84	6.56
8478	Pure Gold 41%. The Boswell Co., Atlanta, Ga.	East Windsor Hill: General Cigar Co.	6.94	6.56
7646	Buckeye 41%. The Buckeye Cellulose Corp., Cincinnati, Ohio	Bloomfield: The Hartman Tobacco Co.	6.61	6.56
7647	Buckeye 41%. The Buckeye Cellulose Corp., Cincinnati, Ohio	Bloomfield: The Hartman Tobacco Co.	6.72	6.56
7649	Buckeye 41%. The Buckeye Cellulose Corp., Cincinnati, Ohio	Bloomfield: American Sumatra Tobacco Corp.	6.78	6.56
7650	Buckeye 41%. The Buckeye Cellulose Corp., Cincinnati, Ohio	Bloomfield: American Sumatra Tobacco Corp.	6.76	6.56
7703	Cocke-Sure 36%. Cocke and Co., Atlanta, Ga.	Norwalk: Libner Grain Co., Inc.	6.34	5.76
7395	Cocke-Sure 41%. Cocke and Co., Atlanta, Ga.	Portland: The Rogers & Hubbard Co.	6.59	6.56
7403	Cocke-Sure 41%. Cocke and Co., Atlanta, Ga.	Granby: Cullman Bros., Inc.	6.62	6.56
7640	Cocke-Sure 41%. Cocke and Co., Atlanta, Ga.	West Suffield: Hatheway & Steane Corp.	6.64	6.56
7644	Cocke-Sure 41%. Cocke and Co., Atlanta, Ga.	Bloomfield: The Hartman Tobacco Co.	6.72	6.56
7645	Cocke-Sure 41%. Cocke and Co., Atlanta, Ga.	Bloomfield: The Hartman Tobacco Co.	7.08	6.56
7648	Cocke-Sure 41%. Cocke and Co., Atlanta, Ga.	Bloomfield: American Sumatra Tobacco Corp.	6.83	6.56
7651	Cocke-Sure 41%. Cocke and Co., Atlanta, Ga.	Bloomfield: American Sumatra Tobacco Corp.	6.82	6.56
7653	Cocke-Sure 41%. Cocke and Co., Atlanta, Ga.	Hazardville: L. B. Haas & Co.	6.69	6.56
7655	Cocke-Sure 41%. Cocke and Co., Atlanta, Ga.	Hazardville: L. B. Haas & Co.	6.67	6.56
8051 ²	Cocke-Sure 41%. Cocke and Co., Atlanta, Ga.	Storrs: University of Connecticut	6.55	6.56

¹Deficiencies are in boldface type.²State Purchase.

TABLE 1. ANALYSES OF MATERIALS SUPPLYING CHIEFLY NITROGEN¹

Station No.	Manufacturer or jobber	Sampled from stock of	nitrogen Per cent	
			Found	Guaranteed
8139	G & O Prime 41%. Goulard & Olena, Inc., Skillman, N. J.	Hartford: Cadwell & Jones, Inc.	6.76	6.56
8126	Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn.	West Suffeld: H. L. Oppenheimer & Sons	6.67	6.56
8269	Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn.	South Windsor South Windsor Tobacco Co.	6.62	6.56
8120	"Lovit Brand" 41%. L. B. Lovitt & Co., Memphis, Tenn.	Glastonbury: E. J. Bantle	6.66	6.56
8270	"Lovit Brand" 41%. L. B. Lovitt & Co., Memphis, Tenn.	South Windsor: South Windsor Tobacco Co.	6.72	6.56
7652	SCO-CO Brand 41%. The Southern Cotton Oil Co., Columbus, Miss.	Hazardville: L. B. Haas & Co.	6.73	6.56
7654	SCO-CO Brand 41%. The Southern Cotton Oil Co., Columbus, Miss.	Hazardville: L. B. Haas & Co.	6.77	6.56
8276	The Rogers & Hubbard Co., Portland, Conn.	South Windsor: South Windsor Tobacco Co.	14.82	14.50
	Linseed Oil Meal			
7401	Spencer Kellogg's 34%. Spencer Kellogg & Sons, Inc., Edgewater, N. J.	Granby: Cullman Bros., Inc.	6.00	5.44
7641	Spencer Kellogg's 34%. Spencer Kellogg & Sons, Inc., Edgewater, N. J.	West Suffeld: Hatheway & Steane Corp.	5.93	5.44
7698 ⁸	Sherwin-Williams 34%. The Sherwin-Williams Co., Cleveland, Ohio	Hazardville: L. B. Haas & Co.	5.74	5.00
7699 ⁹	Sherwin-Williams 34%. The Sherwin-Williams Co., Cleveland, Ohio	Hazardville: L. B. Haas & Co.	5.74	5.00
	Soybean Oil Meal			
7399	Spencer Kellogg's 44%. Spencer Kellogg & Sons, Inc., Buffalo, N. Y.	Simsbury: Cullman Bros., Inc.	7.50	7.04
	Miscellaneous			
8293	Orgurea. Agriculture Products Corp., Danbury, Conn.	Danbury: Agriculture Products Corp.	24.38	22.00
8280	A-N-L. Allied Chemical & Dye Corp., New York, N. Y.	Windsorville: Apothecaries Hall Co.	20.78	20.50
8045	Agrinite. The American Agricultural Chemical Co., No. Weymouth, Mass.	Fairfield: Fairfield Grain & Seed Co.	7.53	7.00

¹Deficiencies are in boldface type.⁸Potash: Guaranteed, 1.0%; found, 1.74%.⁹Potash: Guaranteed, 1.0%; found, 1.61%.TABLE 2. ANALYSES OF SUPERPHOSPHATE, ETC.¹

Station No.	Manufacturer or jobber	Sampled from stock of	Per cent phosphoric acid "Available"			
			Total	Found	Guaranteed	Citrate-insoluble
7998	Superphosphate 18% Normal. The American Agricultural Chemical Co., North Weymouth, Mass.	Branford: Collins & Freeman, Inc.	19.40	18.67	18.00	0.73
8093	18% Normal. The American Agricultural Chemical Co., North Weymouth, Mass.	Pawcatuck: The C. W. Campbell Co.	19.20	18.65	18.00	0.55
7781 ²	20% Granular. The American Agricultural Chemical Co., North Weymouth, Mass.	Southbury: Southbury Training School	21.70	20.60	20.00	1.10
7702 ²	20% Granulated. Apothecaries Hall Co., Waterbury, Conn.	Enfield: N. G. Osborn Prison Farm	22.00	21.38	20.00	0.62
7729 ²	20% Granulated. Apothecaries Hall Co., Waterbury, Conn.	Middletown: Conn. State Hospital	22.45	21.63	20.00	0.82
8317	Armour Big Crop Granular 20%. Armour Fertilizer Works, Carteret, N. J.	Plantsville: C. A. Cowles, Inc.	22.15	20.25	20.00	1.90
7827	Corenco 20%. Consolidated Rendering Co., Boston, Mass.	New Haven: R. G. Davis & Sons, Inc.	21.40	21.28	20.00	0.12
7853 ²	Corenco 20%. Consolidated Rendering Co., Boston, Mass.	Niantic: Farm for Women	21.80	21.73	20.00	0.07
8152	Corenco 20%. Consolidated Rendering Co., Boston, Mass.	West Haven: New Haven Rendering Co.	22.70	22.15	20.00	0.55
7874	Davco Granulated 20%. Davison Chemical Corp., Baltimore, Md.	Norwich: Checkerboard Feed Store	21.75	20.85	20.00	0.90
7704	20% Granular. Eastern States Farmers' Exchange, Inc., West Springfield, Mass.	Falls Village: Grover Atwood	21.90	21.04	20.00	0.86
8215	G & O 20%. Goulard & Olena, Inc., Skillman, N. J.	New Canaan: Silliman's Inc.	21.60	21.32	20.00	0.28
7907	20% Granulated. Lebanon Chemical Corp., Lebanon, Pa.	Hartford: Cadwell & Jones, Inc.	22.70	21.75	20.00	0.95
7735 ²	20% Granulated. Olds & Whipple, Inc., Hartford, Conn.	Middletown: Long Lane School	22.30	21.42	20.00	0.88

TABLE 2. ANALYSES OF SUPERPHOSPHATE, ETC.¹

Station No.	Manufacturer or jobber	Sampled from stock of	Per cent phosphoric acid			
			Citrate-insoluble	Total	Found	"Available"
7857 ²	20% Granulated. Olds & Whipple, Inc., Hartford, Conn.	Norwich: Norwich State Hospital	0.88	22.20	21.32	20.00
7673	O & W Triple. Olds & Whipple, Inc., Hartford, Conn.	Bloomfield: The Hartman Tobacco Co.	0.48	46.80	46.32	46.00
8002	Hubbard 20%. The Rogers & Hubbard Co., Portland, Conn.	Guilford: Fred C. Morse & Son	0.30	20.10	19.80	20.00
7951	Woodruff's 20%. Woodruff Fertilizer & Chemical Works, Inc., North Haven, Conn.	North Haven: Woodruff Fertilizer & Chemical Works, Inc.	0.78	22.20	21.42	20.00
7682	Precipitated Bone Phosphate The American Agricultural Chemical Co., North Weymouth, Mass.	Bloomfield: The Hartman Tobacco Co.	5.36	43.60	38.24	30.00
7667	Apothecaries Hall Co., Waterbury, Conn.	West Suffield: Hatheway & Steane Corp.	0.44	42.50	42.06	38.00
7669	Apothecaries Hall Co., Waterbury, Conn.	West Suffield: Hatheway & Steane Corp.	0.72	41.20	40.48	38.00
8023	The Rogers & Hubbard Co., Portland, Conn.	South Windsor: South Windsor Tobacco Co.	0.43	45.90	45.47	40.00
8010	Shea Chemical Corp., Adams, Mass.	Hazardville: L. B. Haas & Co.	2.25	41.15	38.90	42.35
8154	Phosphate Rock AA Quality. The American Agricultural Chemical Co., North Weymouth, Mass.	West Haven: New Haven Rendering Co.	27.93	31.80 ³	3.87	3.00

¹Deficiencies are in boldface type.

²State Purchases.

³Guaranteed 30.0%.

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				
7701 ²	Apothecaries Hall Co., Waterbury, Conn.	Enfield: N. G. Osborn Prison Farm	61.32	60.00
8294	Apothecaries Hall Co., Waterbury, Conn.	Windsorville: Apothecaries Hall Co.	60.04	60.00
7689 ²	Consolidated Rendering Co., Boston, Mass.	Cheshire: Connecticut Reformatory	59.84	60.00
8131 ²	Consolidated Rendering Co., Boston, Mass.	Niantic: Farm for Women	61.72	60.00
8281	Consolidated Rendering Co., Boston, Mass.	Colchester: P. Cutler, Inc.	61.12	60.00
8292	Davison Chemical Co., Baltimore, Md.	New Milford: Checkerboard Feed Store	60.80	60.00
8140	Goulard & Olenca, Inc., Skillman, N. J.	Hartford: Cadwell & Jones, Inc.	56.84	60.00
8048 ²	Olds & Whipple, Inc., Hartford, Conn.	Middletown: Long Lane School	62.28	60.00
8043	The Rogers & Hubbard Co., Portland, Conn.	Portland: The Rogers & Hubbard Co.	60.96	60.00
8284	Woodruff Fertilizer & Chemical Works, Inc., North Haven, Conn.	North Haven: Woodruff Fertilizer & Chemical Works, Inc.	60.40	60.00
Nitrate of Potash				
7670 ³	Apothecaries Hall Co., Waterbury, Conn.	West Suffield: Hatheway & Steane Corp.	46.12	44.00
8275 ⁴	The Rogers & Hubbard Co., Portland, Conn.	South Windsor: South Windsor Tobacco Co.	44.96	44.00
Sulphate of Potash				
7666	Apothecaries Hall Co., Waterbury, Conn.	Simsbury: Cullman Bros., Inc.	52.56	48.00
7664	Apothecaries Hall Co., Waterbury, Conn.	Simsbury: Cullman Bros., Inc.	52.80	48.00
7672	Olds & Whipple, Inc., Hartford, Conn.	Bloomfield: The Hartman Tobacco Co.	22.28	21.50
8121	Olds & Whipple, Inc., Hartford, Conn.	Glastonbury: E. J. Bantle	50.96	48.00
8267	Olds & Whipple, Inc., Hartford, Conn.	Hazardville: L. B. Haas & Co.	52.20	48.00
Cotton Hull Ashes				
7665	Apothecaries Hall Co., Waterbury, Conn.	Simsbury: Cullman Bros., Inc.	36.84	.....
7671	Apothecaries Hall Co., Waterbury, Conn.	West Suffield: Hatheway & Steane Corp.	37.24	.....
8041	Old Deerfield Fertilizer Co., Inc., South Deerfield, Mass.	Glastonbury: E. J. Bantle	34.94	35.00
7674	Olds & Whipple, Inc., Hartford, Conn.	Bloomfield: The Hartman Tobacco Co.	37.40	35.00
8129	Olds & Whipple, Inc., Hartford, Conn.	Hazardville: L. B. Haas & Co.	36.56	35.00
8277	The Rogers & Hubbard Co., Portland, Conn.	South Windsor: South Windsor Tobacco Co.	40.96	40.00

¹Deficiencies are in boldface type.

²State Purchases.

³Nitrogen: Guaranteed, 13.0%; found, 13.16%.

⁴Nitrogen: Guaranteed, 13.0%; found, 13.30%.

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

Station No.	Manufacturers or jobber	Sampled from stock of	Per cent nitrogen			phosphoric Per cent acid		Mechanical analyses (in percentage)	
			Ammonia found	Total found	Total guaranteed	Total found	Total guaranteed	Finer than 1/50 inch	Coarser than 1/50 inch
Dry Ground Fish									
7625	Apothecaries Hall Co., Waterbury, Conn.	Simsbury: Cullman Bros., Inc. ....	....	10.53	9.50	7.50	5.00	....	....
7668	Apothecaries Hall Co., Waterbury, Conn.	West Suffield: Hatheway & Steane Corp. ....	....	10.50	9.50	7.02	5.00	....	....
7686	O & W Menhaden. Olds & Whipple, Inc., Hartford, Conn.	Hazardville: L. B. Haas & Co. ....	....	9.62	9.00	6.85	5.00	....	....
7687	O & W Menhaden. Olds & Whipple, Inc., Hartford, Conn.	Hazardville: L. B. Haas & Co. ....	....	10.04	9.00	7.88	5.00	....	....
7947	O & W Menhaden. Olds & Whipple, Inc., Hartford, Conn.	Glastonbury: E. J. Bantle ....	....	10.14	9.00	7.38	5.00	....	....
Bone Meal									
8239	Gro-Well. J. & L. Adikes, Inc., Jamaica, N. Y.	Wilton: Young's Nurseries, Inc.	0.00	2.20	2.25	29.50	21.25	73.0	27.0
8157	The American Agricultural Chemical Co., North Weymouth, Mass.	Ansonia: A. Hodos & Sons, Inc.	0.04	2.53	1.50	28.20	25.00	70.0	30.0
7896 ²	Apothecaries Hall Co., Waterbury, Conn.	Newtown: Fairfield State Hospital ...	0.02	2.07	2.25	28.30	22.00	71.0	29.0
7940	Armour. Armour Fertilizer Works, Carteret, N. J.	East Windsor Hill: South Windsor Equipment Co.	0.00	2.33	2.30	23.70	23.00	66.0	34.0
8169 ³	Asgrow. Associated Seed Growers, Inc., Cambridge, N. Y.	Milford: Associated Seed Growers Inc.	0.04	2.14	2.00	30.30	26.00	67.0	33.0
7736 ²	Corenco. Consolidated Rendering Co., Boston, Mass.	Middletown: Long Lane School	0.00	2.93	2.00	25.30	22.00	50.0	50.0
7854 ²	Corenco. Consolidated Rendering Co., Boston, Mass.	Norwich: Uncas on Thames Sanatorium	0.04	2.77	2.00	25.85	22.00	50.0	50.0
7828	F & B Pure Steamed. Faesy & Besthoff, New York, N. Y.	New Haven: R. G. Davis & Sons, Inc.	0.03	2.59	2.47	25.80	23.00	71.5	28.5
Milorganite									
8092 ⁴	Sewerage Commission of the City of Milwaukee, Wis.	Pawcatuck: The C. W. Campbell Co. ..	0.08	5.60	5.50	4.98	4.75	....	....

¹Deficiencies are in boldface type.²State Purchases.³"Available" phosphoric acid: Guaranteed, 16.0%; found, 19.30%.⁴Found: Nitrogen, organic, water-soluble, 0.32%; nitrogen, organic, insoluble, 5.20%; "available" phosphoric acid, 4.23% (guaranteed 4.0%).

TABLE 5. ANALYSES OF MIXED FERTILIZERS

Station No.	Manufacturer and brand	Place of sampling
Agricultural Supply Co., West Haven, Conn.		
7720	Yale Special Mixture 8-6-2	Wallingford
Allied Chemical & Dye Corp., Hopewell, Va.		
7718	"Arcadian" 12-12-12 Granular Fertilizer	East Wallingford
The American Agricultural Chemical Co., North Weymouth, Mass.		
8159	AA Quality Fertilizer 0-15-30	Ansonia
7923	AA Quality Fertilizer 0-20-20	Wapping
8204	AA Quality Fertilizer 5-8-7	East Granby
8237	AA Quality Fertilizer 5-10-5	Cos-Cob
7856 ²	AA Quality Fertilizer 5-10-10	Norwich
8206	AA Quality Fertilizer 5-10-10	East Granby
8101	AA Quality Fertilizer 8-16-16	Colchester
8005	AA Quality Fertilizer 10-6-2	Windsor Locks
8236	AA Quality Fertilizer 10-6-4	Cos-Cob
8201	AA Quality Fertilizer 10-10-10	East Granby
7846	Agrico Country Club 6-10-4	Hamden
8202	Agrico Country Club 8-6-4	East Granby
8205	Agrico Country Club 10-6-4	East Granby
8160	Agrico Phosphate & Potash 0-20-20	Ansonia
8231	Agrico Rose Food 5-9-6	Greenwich
8230	Agrico for Broadleaf Evergreens 6-10-4	Greenwich
8203	Agrico for Corn 4-12-8	East Granby
7901	Agrico for Gardens 5-10-5	West Hartford
7712	Agrico for Lawns, Trees & Shrubs 6-10-4	Fairfield
7905	Agrico for New England 5-8-7	Hartford
7925	Agrico for New England 5-8-7	Wapping
7922	Agrico for Potatoes 5-10-10 with 1.2 Magnesium	Wapping
8163	Agrico for Seeding Down 3-12-12	Ansonia
8327	Agrico for Tobacco 6-3-6	Wapping
7791 ²	Agrico for Top Dressing 7-7-7	Willimantic
7906	Agrico for Top Dressing 7-7-7	Hartford
8326	Agrico for Top Dressing 10-10-10	New London
8059	Agrico for Turf 6-8-2	Ansonia
8162	Agrico for Turf 10-6-4	Wapping
Apothecaries Hall Co., Waterbury, Conn.		
7879	Green Gro Fertilizer Mixture 6-7-4	Norwich
8312	Green Gro Fertilizer Mixture 6-7-4	Danbury
8054	Green Gro Landscape & Golf Course Fertilizer 8-6-2	Windsorville
8024	Green Gro Lawn Fertilizer 6-7-4	Windsorville
8008	Liberty Fertilizer 0-10-20	West Suffield
8370	Liberty Fertilizer 0-10-20	Windsorville
8200	Liberty Fertilizer 0-14-14	Bloomfield
8375	Liberty Fertilizer 0-15-30	Windsorville
8313	Liberty Fertilizer 0-20-20	Danbury
8056	Liberty Fertilizer 3-12-12	Windsorville
8199	Liberty Fertilizer 4-12-4	Bloomfield

¹Deficiencies are in boldface type.

²State Purchases.

CONTAINING NITROGEN, PHOSPHORIC ACID AND POTASH¹

Per cent nitrogen					Per cent phosphoric acid			Per cent potash		Magnesium per cent
Nitrate	Ammoniacal	Organic water-soluble	Organic water-insoluble	Total	Citrate-insoluble	Total	So-called "available"	As murate	Total	
0.00	4.82	2.54	0.64	8.00	0.20	6.55	6.35	2.41	2.78	....
4.42	6.76	0.50	0.10	11.78	0.52	12.90	12.38	11.40	12.20	....
....	....	....	....	....	0.53	14.45	13.92	18.92	29.88	....
....	....	....	....	....	0.85	20.70	19.85	13.05	18.25	....
0.49	4.44	0.00	0.07	5.00	0.40	8.53	8.13	6.33	7.24	....
0.17	5.00	0.00	0.19	5.36	0.48	11.03	10.55	4.00	5.13	....
0.00	4.86	0.22	0.10	5.18	0.50	10.35	9.85	8.91	10.15	....
0.10	4.74	0.10	0.09	5.03	0.60	10.85	10.25	8.13	9.72	....
1.66	5.92	0.34	0.12	8.04	0.45	16.98	16.53	15.50	15.50	....
0.65	9.08	0.04	0.14	9.91	0.33	6.70	6.37	1.37	2.62	....
0.00	9.28	0.16	0.17	9.61	0.60	7.50	6.90	2.83	4.40	....
2.06	6.92	0.10	0.11	9.19	0.43	11.30	10.87	4.37	10.12	....
0.00	5.06	0.65	0.39	6.10	0.58	10.83	10.25	3.69	4.02	....
0.36	5.40	0.56	1.71	8.03	0.50	7.00	6.50	3.45	4.21	....
0.18	8.90	0.16	0.29	9.53	0.35	7.00	6.65	3.86	4.12	....
....	....	....	....	....	0.65	19.35	18.70	18.06	22.08	....
0.38	2.38	0.70	1.80	5.26	0.60	10.08	9.48	6.31	6.31	....
0.12	4.86	0.26	0.82	6.06	0.60	11.48	10.88	3.61	4.08	....
0.17	3.92	0.00	0.13	4.22	0.78	12.80	12.02	7.41	8.45	....
0.00	4.20	0.45	0.25	4.90	1.15	11.15	10.00	4.49	4.65	....
0.31	5.00	0.28	0.41	6.00	0.92	11.20	10.28	3.98	4.12	....
0.00	4.48	0.00	0.24	4.72	0.63	8.95	8.32	6.93	7.06	....
0.00	4.60	0.01	0.27	4.88	0.65	9.35	8.70	6.23	7.06	....
0.00	4.80	0.00	0.18	4.98	0.60	10.58	9.98	9.36	10.51	1.17
0.24	2.28	0.36	0.23	3.11	0.95	12.90	11.95	7.28	12.12	....
0.00	1.48	2.01	2.63	6.12	0.10	4.02	3.92	0.90	6.31	....
1.30	5.46	0.20	0.04	7.00	0.22	7.55	7.33	6.96	7.33	....
1.20	5.48	0.04	0.07	6.79	0.30	7.75	7.45	6.49	7.20	....
1.65	8.14	0.14	0.05	9.98	0.15	10.60	10.45	9.03	10.01	....
0.44	2.38	0.96	2.39	6.17	1.07	8.95	7.88	1.46	2.40	....
0.32	4.78	1.70	2.70	9.50	0.48	6.73	6.25	4.26	4.27	....
0.39	4.44	0.44	1.32	6.59	0.45	8.70	8.25	3.84	4.68	....
0.52	4.68	0.26	1.22	6.68	0.40	8.75	8.35	4.17	5.00	....
0.26	6.12	0.44	1.58	8.40	0.78	7.95	7.17	1.98	4.15	....
0.35	4.30	0.46	1.46	6.57	0.30	9.18	8.88	3.74	4.33	....
....	....	....	....	....	0.88	11.65	10.77	18.10	20.03	....
....	....	....	....	....	0.98	11.90	10.92	16.60	20.46	....
....	....	....	....	....	0.65	14.65	14.00	12.04	16.12	....
....	....	....	....	....	0.25	14.00	13.75	29.47	31.18	....
....	....	....	....	....	0.58	19.65	19.07	20.15	22.78	....
0.65	2.36	0.38	0.05	3.44	0.55	13.33	12.78	12.58	13.74	....
0.00	3.80	0.83	0.29	4.92	1.18	13.60	12.42	1.66	5.70	....

TABLE 5. ANALYSES OF MIXED FERTILIZERS

Station No.	Manufacturer and brand	Place of sampling
7734 ²	Liberty Fertilizer 5-10-5	Middletown
8207	Liberty Fertilizer 5-10-5	Suffield
7880	Liberty Fertilizer 5-10-10	Norwich
8368	Liberty Fertilizer 5-10-10 with 1.2 Magnesium	Windsorville
8055	Liberty Fertilizer 6-8-8 with 1.2 Magnesium	Windsorville
8369	Liberty Fertilizer 8-16-16	Windsorville
8057	Liberty Fertilizer 10-10-10	Windsorville
8376	Liberty Green Gro All Organic 5-4-0	Windsorville
8064	Liberty High Grade Market Gardeners 5-8-7	New London
7691 ²	Liberty Special for Fruit and Grass 7-7-7	Cheshire
7895 ²	Liberty Special for Fruit and Grass 7-7-7	Newtown
8063	Liberty Special for Fruit and Grass 7-7-7	New London
8373	Liberty Super Bacco 6-4-7 with 1.2 Magnesium	Windsorville
8367	Liberty Super Spud Special Potato Fertilizer 6-8-8 with 1.2 Magnesium	Windsorville
8372	Liberty Tobacco Mixture 5-5-15	Windsorville
8374	Liberty Tobacco Mixture 6-3-6 with 1.2 Magnesium	Windsorville
8371	Liberty Tobacco Mixture 6-3-6 with Castor Pomace	Windsorville
Armour Fertilizer Works, Carteret, N. J.		
7942	Armour's All Organic 5-5-0	East Windsor Hill
8380	Armour's Big Crop Fertilizer 0-20-20	East Windsor Hill
8107	Armour's Big Crop Fertilizer 5-8-7	Bolton Notch
8381	Armour's Big Crop Fertilizer 5-10-5	East Windsor Hill
7941	Armour's Big Crop Fertilizer 5-10-10	East Windsor Hill
8316	Armour's Big Crop Fertilizer 7-7-7	Plantville
7927	Armour's Big Crop Fertilizer 10-10-10	East Windsor Hill
8378	Armour's Gold Bond Tobacco Grower 6-3-6	East Windsor Hill
8108	Armour Vertagreen Plant Food 5-10-5	Bolton Notch
8106	Armour Vertagreen Plant Food for Commercial Crops 6-12-12	Bolton Notch
7928	Armour Vertagreen Plant Food for Commercial Crops 8-8-8	East Windsor Hill
8379	Armour Vertagreen Plant Food for Professional Use 10-6-4	East Windsor Hill
Associated Seed Growers, Inc., Cambridge, N. Y.		
8170	Asgrow Lawn Food 10-6-4	Milford
8171	Japedizer 8-6-4	Milford
H. J. Baker, & Bro., New York, N. Y.		
7989	Nitrogranic 5-4-0	North Haven
The F. A. Bartlett Tree Expert Co., Stamford, Conn.		
8243	Bartlett Green Tree Food 6-8-6	Stamford
Joseph Breck & Sons, Corp., Boston, Mass.		
8098	Breck's Greenite (all organic) 5-4-0	Norwichtown
8248	Breck's Turf-Gro 8-6-2	Stamford
8249	Breck's Velturf 10-6-4	Stamford

¹Deficiencies are in boldface type.²State Purchases.CONTAINING NITROGEN, PHOSPHORIC ACID AND POTASH¹

Per cent nitrogen					Per cent phosphoric acid			Per cent potash		
Nitrate	Ammoniacal	Organic water-soluble	Organic water-insoluble	Total	Citrate-insoluble	Total	So-called "available"	As muriate	Total	Magnesium per cent
0.48	4.02	0.14	0.40	5.04	0.70	11.80	11.10	3.68	5.38	.....
0.60	3.80	0.48	0.25	5.13	2.40	12.45	10.05	4.61	5.63	.....
0.81	3.90	0.50	0.18	5.39	1.70	11.15	9.45	9.42	10.01	.....
0.97	3.50	0.32	0.21	5.00	0.58	10.78	10.20	7.12	10.15	1.32
0.71	5.32	0.36	0.22	6.61	0.83	10.00	9.17	5.94	9.18	1.42
1.21	6.48	0.35	0.06	8.10	1.03	16.20	15.17	2.72	17.75	.....
0.80	7.16	0.46	0.06	8.48	0.73	11.55	10.82	8.29	10.01	.....
0.00	0.08	0.20	5.42	5.70	1.30	6.40	5.10	.....	.....	.....
0.49	4.16	0.40	0.33	5.38	1.28	10.20	8.92	6.72	7.84	.....
0.41	5.20	0.76	0.20	6.57	0.56	8.22	7.66	7.16	8.42	.....
0.00	4.80	1.02	0.29	6.11	0.95	9.65	8.70	7.80	8.42	.....
0.85	6.00	0.28	0.19	7.32	0.93	7.85	6.92	5.88	6.99	.....
0.80	0.12	2.22	3.00	6.14	0.35	6.26	5.91	0.41	8.83	1.14
0.32	5.82	0.56	0.25	6.95	0.45	9.83	9.38	6.21	8.53	1.45
1.25	0.20	3.04	1.49	5.98	0.35	5.73	5.38	0.72	18.93	.....
0.00	0.28	3.09	3.47	6.84	0.23	5.41	5.18	0.19	5.16	1.63
1.15	0.16	2.00	3.07	6.38	0.18	6.00	5.82	1.18	7.77	.....
Armour's All Organic 5-5-0										
0.00	0.12	0.27	5.15	5.54	.....	6.35	.....	.....	.....	.....
Armour's Big Crop Fertilizer 0-20-20										
.....	.....	.....	.....	.....	0.93	17.80	16.87	20.28	21.12	.....
Armour's Big Crop Fertilizer 5-8-7										
0.20	4.00	0.24	0.08	4.52	0.98	13.38	12.40	8.39	8.49	.....
Armour's Big Crop Fertilizer 5-10-5										
0.27	4.36	0.22	0.15	5.00	1.00	11.75	10.75	4.13	5.25	.....
Armour's Big Crop Fertilizer 5-10-10										
0.00	4.56	0.29	0.12	4.97	0.98	11.00	10.02	9.20	10.48	.....
Armour's Big Crop Fertilizer 7-7-7										
0.31	5.72	0.04	0.15	6.22	0.93	10.65	9.72	6.15	7.14	.....
Armour's Big Crop Fertilizer 10-10-10										
0.48	8.82	0.00	0.12	9.42	0.70	11.15	10.45	7.13	9.22	.....
Armour's Gold Bond Tobacco Grower 6-3-6										
0.14	0.36	2.70	2.68	5.88	0.33	4.23	3.90	0.62	6.06	.....
Armour Vertagreen Plant Food 5-10-5										
0.13	4.96	0.16	0.17	5.42	0.48	11.45	10.97	3.11	5.22	.....
Armour Vertagreen Plant Food for Commercial Crops 6-12-12										
0.54	5.42	0.00	0.08	6.04	0.83	11.70	10.87	12.54	13.71	.....
Armour Vertagreen Plant Food for Professional Use 8-8-8										
0.44	6.80	0.40	0.04	7.68	0.95	9.50	8.55	7.28	8.39	.....
Armour Vertagreen Plant Food for Professional Use 10-6-4										
0.24	6.60	1.18	1.73	9.75	0.63	7.00	6.37	3.89	4.15	.....
Asgrow Lawn Food 10-6-4										
0.71	2.50	4.42	2.02	9.65	0.58	6.95	6.37	4.36	4.46	.....
Japedizer 8-6-4										
0.46	4.00	2.10	1.66	8.22	0.45	6.70	6.25	4.32	5.03	.....
Nitrogranic 5-4-0										
0.00	0.12	0.41	5.03	5.53	1.75	6.95	5.20	.....	.....	.....
Bartlett Green Tree Food 6-8-6										
0.35	5.18	0.20	0.68	6.41	0.60	8.08	7.48	5.95	7.10	.....
Breck's Greenite (all organic) 5-4-0										
0.00	0.06	0.49	4.23	4.78	0.93	5.15	4.22	.....	.....	.....
Breck's Turf-Gro 8-6-2										
0.19	5.32	0.74	1.73	7.98	0.70	7.23	6.53	0.19	2.31	.....
Breck's Velturf 10-6-4										
0.00	0.44	2.14	6.75	9.33	0.28	6.50	6.22	4.29	4.87	.....

TABLE 5. ANALYSES OF MIXED FERTILIZERS

Station No.	Manufacturer and brand	Place of sampling
8431	California Spray-Chemical Corp., Richmond, Calif. ORTHO-GRO Liquid Plant Food 10-5-5	Darien
8155	Consolidated Rendering Co., Boston, Mass. Corenco 0-15-30	West Haven
7891 ²	Corenco 0-20-20 Legume Special	Newtown
8102	Corenco 0-20-20 Legume Special	Colchester
7706	Corenco 5-8-7 Potato & General Crop	Seymour
8014	Corenco 5-10-5 Home Garden	Thompsonville
8393	Corenco 5-10-5 Onion Special—Super Truck	West Haven
7774	Corenco 5-10-10 Peerless Potato	Waterbury
8151	Corenco 5-10-10 Peerless Potato with 1.2 Magnesium	West Haven
8366	Corenco 6-3-6 Perfection Tobacco Grower	Springfield, Mass.
8365	Corenco 6-3-6 Premium Tobacco Grower	Springfield, Mass.
8217	Corenco 6-8-8 Potato Special	West Haven
8156	Corenco 6-8-8 Potato Special with 1.2 Magnesium	West Haven
7881	Corenco 7-7-7 Complete Fruit and Top Dressing	New Haven
7708	Corenco 8-6-4 Landscape Fertilizer	Bridgeport
7738 ²	Corenco 8-16-16 Two-in-One	Meriden
8150	Corenco 8-16-16 Two-in-One	West Haven
7742 ²	Corenco 10-6-2 Fertilizer	New Britain
7798 ²	Corenco 10-6-4 Fertilizer	Storrs
7903 ²	Corenco 10-6-4 Fertilizer	Hartford
7855 ²	Corenco 10-10-10 Fertilizer	Norwich
8009	Corenco 10-10-10 Fertilizer	West Suffield
8430	Corenco Liquid Fertilizer Concentrate 5-10-10	West Haven
8196	Corenco Liquid Green 10-5-5	Wilson
8015	Corenco Organic Turf Fertilizer 4.75-4-0	Thompsonville
8007	Corenco Spurz-On 3-2.5-1.5	West Suffield
8244	The Davey Tree Expert Co., Kent, Ohio Davey Tree Food 12-4-4	Old Greenwich
7826	R. G. Davis & Sons, Inc., New Haven, Conn. Organo 10-5-5	New Haven
8310	The Davison Chemical Co., Baltimore, Md. Davco Granulated Fertilizer 0-15-30	New Milford
7872	Davco Granulated Fertilizer 0-20-20	Norwich
7873	Davco Granulated Fertilizer 5-8-7	Norwich
8311	Davco Granulated Fertilizer 5-10-5	New Milford
7790	Davco Granulated Fertilizer 5-10-10	Willimantic
7782	Davco Granulated Fertilizer 8-16-16	Willimantic
7783	Davco Granulated Fertilizer 10-10-10	Willimantic

CONTAINING NITROGEN, PHOSPHORIC ACID AND POTASH¹

Per cent nitrogen				Per cent phosphoric acid				Per cent potash		
Nitrate	Ammoniacal	Organic water-soluble	Organic water-insoluble	Total	Citrate-insoluble	Total	So-called "available"	As muriate	Total	Magnesium per cent
0.81	0.81	9.63	0.00	11.25	....	5.36	5.36	....	5.20	....
....	....	....	....	....	0.55	14.80	14.25	25.11	28.66	....
....	....	....	....	....	0.60	18.05	17.45	23.93	24.30	....
....	....	....	....	....	0.73	20.80	20.07	17.16	17.16	....
0.87	3.76	0.34	0.13	5.10	0.16	9.37	9.21	6.36	7.54	....
1.12	3.60	0.16	0.30	5.18	0.65	11.00	10.35	4.30	5.25	....
0.86	4.06	0.38	0.23	5.53	0.38	10.70	10.32	5.03	5.22	....
0.86	3.84	0.68	0.15	5.53	0.32	10.50	10.18	8.23	10.44	....
1.34	3.40	0.00	0.12	4.86	0.48	10.60	10.12	6.51	10.97	1.71
1.29	0.08	2.80	2.20	6.37	0.23	4.31	4.08	0.41	6.48	....
0.23	0.24	3.16	2.10	5.73	0.20	4.30	4.10	0.39	6.45	....
1.29	4.24	0.04	0.13	5.70	0.23	8.95	8.72	7.25	8.63	....
1.02	4.24	0.12	0.18	5.56	0.55	9.18	8.63	6.60	8.16	1.31
0.85	5.98	0.14	0.19	7.16	0.28	8.50	8.22	4.93	7.13	....
0.00	4.52	1.68	1.62	7.82	0.35	6.57	6.22	4.13	4.52	....
0.00	5.52	2.36	0.15	8.03	0.70	17.30	16.69	14.33	15.58	....
0.00	5.06	2.78	0.16	8.00	0.55	16.70	16.15	14.46	15.53	....
0.46	9.06	0.38	0.13	10.03	0.16	6.18	6.02	1.54	2.15	....
0.67	7.82	0.62	0.24	9.35	0.18	7.58	7.40	3.86	4.87	....
0.45	8.12	0.38	0.11	9.06	0.18	7.70	7.52	3.28	4.08	....
1.10	7.70	0.50	0.25	9.55	0.38	10.95	10.57	7.95	9.96	....
0.81	8.08	0.48	0.13	9.50	0.40	10.78	10.38	11.54	13.31	....
0.00	3.14	1.60	0.00	4.74	0.00	9.59	9.59	1.86	10.55	....
0.00	1.86	8.16	0.00	10.02	0.03	5.32	5.29	4.36	5.03	....
0.00	0.14	0.37	4.89	5.40	1.18	6.30	5.15	....	....	....
0.00	0.56	1.26	1.68	3.50	....	3.95	....	0.90	1.99	....
0.80	10.54	0.50	0.53	12.37	0.53	5.15	4.62	4.93	5.50	....
0.00	6.00	2.91	1.09	10.00	0.32	6.00	5.68	6.04	6.62	....
....	....	....	....	....	0.68	17.10	16.42	25.03	30.34	....
....	....	....	....	....	0.88	21.70	20.82	17.10	20.63	....
0.00	5.00	0.04	0.08	5.12	0.40	8.90	8.50	6.35	7.81	....
0.00	5.00	0.17	0.09	5.26	0.48	10.70	10.22	5.31	5.87	....
0.00	5.00	0.18	0.11	5.29	0.36	10.85	10.49	7.49	10.01	....
0.00	7.96	0.09	0.09	8.14	0.84	18.75	17.91	13.39	16.33	....
0.00	9.68	0.20	0.04	9.92	0.36	11.20	10.84	9.46	11.20	....

¹Deficiencies are in boldface type.²State Purchases.

TABLE 5. ANALYSES OF MIXED FERTILIZERS

Station No.	Manufacturer and brand	Place of sampling
Eastern States Farmers' Exchange, Inc., West Springfield, Mass.		
7793 ²	Eastern States 0-15-30 with 0.2 Boron	Willimantic
7721	Eastern States 0-25-25	North Haven
7871	Eastern States 5-10-10 with 1.2 Magnesium	Norwich
8114	Eastern States 8-4-8 (Tobacco) with 1.2 Magnesium ..	East Hartford
8110	Eastern States 8-12-12 with 1.2 Magnesium	Buckland
8011	Eastern States 8-12-12 L.C. with 1.2 Magnesium	Hazardville
7792	Eastern States 8-16-16 with 0.6 Magnesium	Willimantic
7722	Eastern States 10-10-10 with 0.6 Magnesium	North Haven
8109	Eastern States 10-10-10 S.M. with 1.2 Magnesium	Buckland
The Espoma Company, Millville, N. J.		
8225	Espoma 3-2-1	Greenwich
7992	Espoma Garden Fertilizer 4-6-6	Branford
7994	Holly-Tone 4-6-4	Branford
Ferro Corp., Cleveland, Ohio		
7675 ³	Ferro F. T. E. (Fritted Trace Elements)	Bloomfield
Fiestar, Inc., New York, N. Y.		
8401	Fiestar 1-1-0	Darien
7835	Fiestar 2-2-0	Hamden
8229	Fiestar 2-2-0	Greenwich
Forward House Div. Olin-Mathieson Chem. Corp., New York, N. Y.		
8408 ⁴	Plantrons 12-24-12	Bridgeport
The Garden Center Inc., West Hartford, Conn.		
7900	The Garden Center of West Hartford Lawn Food 10-6-4	West Hartford
Goulard & Olena, Inc., Skillman, N. J.		
8214	G & O Prizegro 5-10-5	New Canaan
8218	G & O Rose Food 7-8-5	New Canaan
8212	G & O Special Food for Bulbs 5-6-15	New Canaan
8219	G & O Tree & Shrub Food 9-7-4	New Canaan
7715	Godfrey's Hi-Organic No-Filler 10-6-4	Fairfield
Gregory-Doyle, Inc., Huntington Station, N. Y.		
7731 ²	Gregory-Doyle 8-16-16	Middletown
7894 ²	Gregory-Doyle 8-16-16	Newtown

¹Deficiencies are in boldface type.

²State Purchases.

³Boron, found 0.26%.

⁴Manganese found, 2.7%, guaranteed, 2.52%; iron found, 7.37%, guaranteed, 7.00%; zinc found, 4.08%, guaranteed, 3.2%; copper found, 3.29%, guaranteed, 3.2%; boron found, 0.65%, guaranteed, 0.62%; molybdenum found, 0.12%, guaranteed, 0.13%.

⁵Copper found, 0.21%, guaranteed, 0.1%; zinc found, 0.09%, guaranteed, 0.1%; iron found, 0.51%, guaranteed 0.1%; sulphur found, 9.15%, guaranteed, 9.0%.

CONTAINING NITROGEN, PHOSPHORIC ACID AND POTASH¹

Nitrate	Per cent nitrogen				Per cent phosphoric acid			Per cent potash		Magnesium per cent
	Ammoniacal	Organic water-soluble	Organic water-insoluble	Total	Citrate-insoluble	Total	So-called "available"	As muriate	Total	
.....	.....	.....	.....	.....	0.32	16.40	16.08	27.43	29.34	.....
.....	.....	.....	.....	.....	0.22	25.95	25.73	24.01	25.32	.....
1.30	3.56	0.28	0.12	5.26	0.45	11.23	10.78	9.99	11.58	1.66
1.29	0.32	3.68	2.67	7.96	0.23	4.63	4.40	0.74	9.04	2.98
1.76	5.84	0.24	0.09	7.93	0.53	13.40	12.87	8.43	13.27	1.40
2.17	5.70	0.02	0.08	7.97	0.45	13.75	13.30	2.55	14.22	1.63
1.68	6.08	0.18	0.16	8.10	0.32	16.90	16.58	14.07	17.05	1.25
1.84	7.82	0.20	0.06	9.92	0.36	10.85	10.49	10.13	10.82	0.99
2.05	7.40	0.00	0.08	9.53	0.80	11.45	10.65	8.31	11.43	1.43
0.15	2.44	0.52	1.42	4.53	0.43	3.96	3.53	0.78	2.22	.....
0.00	4.00	0.32	0.80	5.12	0.50	6.28	5.78	6.11	7.50	.....
0.00	2.50	0.49	1.93	4.92	0.48	6.85	6.37	3.33	4.12	.....
.....
0.00	0.02	0.08	0.50	0.60	0.27	2.49	2.22	.....	.....	.....
0.76	0.08	0.12	0.80	1.76	0.23	2.54	2.31	.....	.....	.....
0.00	0.15	0.12	1.11	1.38	0.08	2.49	2.41	.....	.....	.....
0.00	6.76	5.11	0.16	12.03	0.28	25.55	25.27	6.31	12.43	.....
0.00	5.36	2.23	2.09	9.68	0.50	7.15	6.65	4.74	5.57	.....
0.47	3.60	0.52	1.10	5.69	0.48	10.93	10.45	5.46	5.63	.....
0.32	4.56	0.32	1.15	6.35	0.83	10.58	9.75	4.21	5.03	.....
0.23	3.70	0.42	1.49	5.84	0.48	7.20	6.72	11.67	14.85	.....
0.00	5.00	1.75	1.11	7.86	0.45	9.85	9.40	1.54	6.55	.....
0.00	6.80	1.77	1.46	10.03	0.46	6.58	6.12	4.95	5.22	.....
1.35	2.66	3.18	0.12	7.31	0.94	15.20	14.26	14.37	15.38	.....
1.29	4.92	1.14	0.11	7.46	1.20	14.95	13.75	16.11	16.97	.....

TABLE 5. ANALYSES OF MIXED FERTILIZERS

Station No.	Manufacturer and brand	Place of sampling
Lawn-Tex Corp., Chicago, Ill.		
7993	Organi-Green 5-5-0	Branford
8227	Organi-Green 5-5-0	Greenwich
Lebanon Chemical Corp., Lebanon, Pa.		
7918	Lebanon Azalea Food 7-7-7	Hartford
7917	Lebanon Fertilizer 5-10-10	Hartford
8320	Lebanon Fertilizer 10-6-4	Hartford
7897	Lebanon Hi-Organic 8-8-8	West Hartford
7919	Lebanon Plant Food 5-10-5	Hartford
8322	Lebanon Rose Food 7-7-7	Hartford
8319	Lebanon Turf-Organic 5-4-0	Hartford
7898	Uni-Form 10-6-4	West Hartford
8323	Uni-Form 10-6-4	Hartford
McArdle's Seed Co., Greenwich, Conn.		
8226	McArdle's Hi-Organic 10-6-4	Greenwich
The Mamlon Co., New Haven, Conn.		
8238	Fer-Mel Turf & Tree Food 24-12-12	New Haven
Old Deerfield Fertilizer Co., Inc., South Deerfield, Mass.		
7945	Old Deerfield 5-8-7 Fertilizer	Glastonbury
7946	Old Deerfield 5-10-10 Fertilizer	Glastonbury
7944	Old Deerfield 7-7-7 Fertilizer	Glastonbury
Old Fox Agricultural Sales, Inc., East Providence, R. I.		
8091	Old Fox Brand 0-12-24	Pawcatuck
7892 ²	Old Fox Brand 0-15-30	Newtown
7799 ²	Old Fox Brand 0-20-20	Storrs
7800 ²	Old Fox Brand 0-20-20	Mansfield
8080 ²	Old Fox Brand 0-20-20	Pawcatuck
7700 ²	Old Fox Brand 5-8-7	Enfield
8072	Old Fox Brand 5-8-7	Groton
7696 ²	Old Fox Brand 5-10-10	Cheshire
7779 ²	Old Fox Brand 5-10-10	Southbury
7825 ²	Old Fox Brand 5-10-10	Mansfield
7797 ²	Old Fox Brand 7-7-7	Storrs
8070	Old Fox Brand 7-7-7	Groton
8079	Old Fox Brand 8-6-2 Turf Food	Pawcatuck
8078	Old Fox Brand 8-6-2 Turf Food with 2.5 Chlordane	Pawcatuck
8022 ²	Old Fox Brand 10-6-4	Portland
7744	Old Fox Brand 10-10-10	Waterbury
7893 ²	Old Fox Brand 10-10-10	Newtown
8081	Old Fox Brand 10-10-10	Pawcatuck

¹Deficiencies are in boldface type.²State Purchases.CONTAINING NITROGEN, PHOSPHORIC ACID AND POTASH¹

Per cent nitrogen				Per cent phosphoric acid				Per cent potash		Magnesium per cent
Nitrate	Ammoniacal	Organic water-soluble	Organic water-insoluble	Total	Citrate-insoluble	Total	So-called "available"	As muriate	Total	
0.00	0.10	0.46	5.12	5.68	1.28	6.90	5.62	....	....	....
0.00	0.08	0.33	5.25	5.66	1.25	6.50	5.25	....	....	....
0.57	4.68	0.24	1.11	6.60	0.50	8.00	7.50	7.44	8.83	....
1.28	3.48	0.16	0.18	5.10	0.68	10.88	10.20	8.01	9.00	....
0.80	8.64	0.18	0.18	9.80	0.15	6.23	6.08	4.01	4.65	....
0.25	4.36	0.96	2.34	7.91	0.80	7.10	6.30	8.19	8.63	....
1.07	3.16	0.26	0.16	4.65	0.45	10.13	9.68	5.14	5.97	....
0.55	4.28	0.16	1.15	6.14	0.10	8.40	8.30	7.00	8.29	....
0.00	0.24	0.31	4.70	5.25	1.18	6.41	5.23	....	....	....
0.43	3.52	2.28	3.49	9.72	0.63	6.65	6.02	4.04	4.30	....
0.58	2.92	2.64	4.39	10.53	0.50	6.53	6.03	3.81	4.34	....
0.71	6.40	1.00	1.66	9.77	0.86	8.48	7.62	4.13	4.65	....
0.78	3.40	17.56	0.06	21.80	0.05	14.40	14.35	10.33	16.42	....
0.44	4.00	0.76	0.20	5.40	0.68	9.30	8.62	4.98	7.64	....
0.00	2.98	1.20	0.73	4.91	1.30	11.40	10.10	6.16	11.66	....
0.18	5.54	1.02	0.26	7.00	0.58	8.70	8.12	6.08	7.61	....
....	....	....	....	....	0.25	12.48	12.23	18.91	25.82	....
....	....	....	....	....	0.28	15.00	14.72	27.44	27.44	....
....	....	....	....	....	0.28	20.40	20.12	18.92	19.88	....
....	....	....	....	....	0.26	20.30	20.04	18.13	19.10	....
....	....	....	....	....	0.40	20.80	20.40	14.20	20.12	....
0.45	4.36	0.12	0.18	5.11	0.40	8.60	8.20	6.04	7.54	....
0.61	3.96	0.12	0.07	4.76	0.30	9.05	8.75	6.20	7.06	....
0.88	4.00	0.06	0.06	5.00	0.48	11.22	10.74	9.38	10.51	....
0.00	4.48	0.69	0.15	5.32	1.54	11.20	9.66	9.38	10.33	....
0.67	4.36	0.14	0.13	5.30	0.96	10.93	9.97	9.22	10.55	....
0.00	6.12	0.80	0.08	7.00	0.40	8.28	7.88	7.34	7.91	....
0.42	6.84	0.24	0.03	7.53	0.18	7.25	7.07	6.14	8.08	....
0.41	5.64	0.70	1.37	8.12	0.68	6.63	5.95	2.05	2.22	....
0.35	5.42	1.02	1.25	8.04	0.63	7.10	6.47	2.46	2.59	....
0.00	5.38	2.27	1.56	9.21	0.63	7.75	7.12	4.56	4.78	....
0.32	9.36	0.50	0.23	10.41	0.35	10.38	10.03	9.23	10.33	....
0.31	9.00	0.60	0.09	10.00	0.25	10.35	10.10	10.21	11.24	....
0.16	8.46	0.54	0.20	9.36	0.25	11.65	11.40	8.69	11.01	....

TABLE 5. ANALYSES OF MIXED FERTILIZERS

Station No.	Manufacturer and brand	Place of sampling
Olds & Whipple, Inc., Hartford, Conn.		
7663	O & W 0-20-20 Fertilizer	East Hartford
7690 ²	O & W 0-20-20 Fertilizer	Cheshire
7780 ²	O & W 0-20-20 Fertilizer	Southbury
8258	O & W 4-8-4 Complete Lawn Fertilizer	East Hartford
8382	O & W 5-3-5 Complete Tobacco Fertilizer	East Hartford
8264	O & W 5-5-15 High Grade Tobacco Starter	East Hartford
8261	O & W 5-8-6 Luxura	East Hartford
7614	O & W 5-8-7 Potato & General Purpose Fertilizer	East Hartford
7904 ²	O & W 5-8-7 Potato & General Purpose Fertilizer	Hartford
8260	O & W 5-8-7 Potato & General Purpose Fertilizer	East Hartford
7615	O & W 5-10-5 Fertilizer	East Hartford
8257	O & W 5-10-5 Fertilizer	East Hartford
7617	O & W 5-10-10 Potato Fertilizer	East Hartford
8308	O & W 5-10-10 Potato Fertilizer	East Hartford
8262	O & W 5-10-10 Potato Fertilizer with 1.2 Magnesium	East Hartford
7618	O & W 6-3-6 Blue Label Tobacco Fertilizer	East Hartford
8307	O & W 6-3-6 Special Tobacco Fertilizer	East Hartford
7695 ²	O & W 6-8-8 Special Potato Fertilizer	Cheshire
8263	O & W 6-8-8 Special Potato Fertilizer with 1.2 Magnesium	East Hartford
8254	O & W 7-7-7 Top Dressing & Grass Fertilizer	Manchester
8309	O & W 8-12-12 High Grade General Purpose Fertilizer with 1.8 Magnesium	East Hartford
8259	O & W 10-6-4 Luxura	East Hartford
7661 ²	O & W 10-10-10 Fertilizer	Portland
7662 ²	O & W 10-10-10 Fertilizer	Portland
7616	O & W Nitro-Gro All Organic Plant Food 4-4-0	East Hartford
Olin-Mathieson Chemical Corp., Baltimore, Md.		
8220	Mathieson Ammo-Phos Fertilizer 13-13-13	New Canaan
The Frank S. Platt Co., Branford, Conn.		
8153	Platt's Concentrated 10-5-5 Lawn Fertilizer	West Haven
Ra-Pid-Gro Corp., Danville, N. Y.		
7730 ²	Ra-Pid-Gro 23-21-17	Middletown
The Rogers & Hubbard Co., Portland, Conn.		
7739	Gro-Fast All-Organic 5-4-0	Meriden
8075	Gro-Fast Evergreen Food 4-10-4	Stonington
7740	Gro-Fast Plant Food 5-10-5	Meriden
8255	Gro-Fast Rose Food 7-10-5	Manchester
8387	Hubbard Alfalfa Fertilizer 0-20-20	Portland
8391	Hubbard Alfalfa Fertilizer 0-20-20	Portland
8388	Hubbard Dairy Fertilizer 0-10-20	Portland
8411	Hubbard Double Strength Fertilizer 8-16-16	Portland
7723	Hubbard Garden Fertilizer 5-10-5	Danbury
7999	Hubbard General Crop Fertilizer 5-10-10	Guilford

¹Deficiencies are in boldface type.

²State Purchases.

CONTAINING NITROGEN, PHOSPHORIC ACID AND POTASH¹

Per cent nitrogen					Per cent phosphoric acid			Per cent potash		Magnesium per cent
Nitrate	Ammoniacal	Organic water-soluble	Organic water-insoluble	Total	Citrate-insoluble	Total	So-called "available"	As muriate	Total	
.....	.....	.....	.....	.....	0.28	19.80	19.52	23.81	25.37	.....
.....	.....	.....	.....	.....	0.54	21.50	20.96	18.18	21.90	.....
.....	.....	.....	.....	.....	0.46	20.95	20.49	18.23	21.23	.....
0.34	3.78	0.16	0.78	5.06	0.43	8.73	8.30	5.01	5.38	.....
0.00	0.28	1.74	3.02	5.04	0.15	3.76	3.61	0.56	5.25	.....
1.34	0.20	2.72	0.96	5.22	0.30	6.85	6.55	1.24	15.08	.....
0.15	3.54	1.34	1.41	6.44	0.43	9.85	9.42	3.85	4.66	.....
0.98	3.94	0.22	0.14	5.28	0.25	8.80	8.55	6.32	7.61	.....
0.67	4.12	0.14	0.25	5.18	0.30	9.00	8.70	6.31	7.37	.....
1.08	4.32	0.32	0.12	5.84	0.23	9.23	9.00	5.05	7.84	.....
0.41	4.34	0.32	0.18	5.25	0.75	11.67	10.92	3.94	5.28	.....
0.67	5.00	0.38	0.15	6.20	0.28	10.73	10.45	6.01	6.01	.....
0.22	4.58	0.36	0.17	5.33	0.25	10.82	10.57	8.95	10.66	.....
0.71	4.26	0.44	0.09	5.50	0.33	11.25	10.92	8.34	11.12	.....
0.81	4.12	0.20	0.09	5.22	0.30	10.93	10.63	9.65	11.05	1.57
1.02	0.20	1.56	3.54	6.32	0.20	3.92	3.72	0.49	6.10	.....
2.18	3.86	0.16	0.08	6.28	0.15	3.90	3.75	0.86	6.45	.....
0.84	4.84	0.08	0.15	5.91	0.22	9.87	9.65	6.52	8.05	.....
0.83	4.50	0.22	0.13	5.68	0.20	9.65	9.45	0.48	9.22	2.14
0.84	6.00	0.46	0.20	7.50	0.15	8.05	7.90	6.60	7.44	.....
1.24	6.40	0.00	0.20	7.84	0.63	13.55	12.92	11.02	14.33	1.81
0.00	4.28	4.09	1.85	10.22	0.38	6.90	6.52	4.91	4.91	.....
0.20	1.20	5.86	2.40	9.66	0.35	9.00	8.65	9.35	14.02	.....
0.00	1.36	6.05	2.37	9.78	0.15	9.00	8.85	13.27	13.27	.....
0.00	0.10	0.33	4.48	4.91	0.05	6.74	6.69	.....	.....	.....
0.00	13.24	0.19	0.11	13.54	0.45	14.85	14.40	11.92	14.65	.....
0.36	5.68	2.92	1.07	10.03	0.45	6.30	5.85	5.71	6.65	.....
4.44	4.96	14.88	0.00	24.28	0.00	19.25	19.25	.....	16.76	.....
0.00	0.08	0.29	4.81	5.18	0.80	8.32	7.52	.....	.....	.....
0.00	1.74	1.11	1.17	4.02	0.55	12.03	11.48	4.13	4.62	.....
0.36	2.04	1.76	1.14	5.30	0.48	10.95	10.47	5.22	5.22	.....
0.47	2.88	1.76	1.51	6.62	1.85	14.65	12.80	0.23	5.68	.....
.....	.....	.....	.....	.....	0.40	22.00	21.60	17.21	19.26	.....
.....	.....	.....	.....	.....	0.33	18.80	18.47	19.88	20.37	.....
.....	.....	.....	.....	.....	0.18	10.75	10.57	19.50	20.63	.....
1.50	6.48	0.52	0.17	8.67	0.50	15.80	15.30	6.84	18.00	.....
1.25	3.56	0.18	0.32	5.31	0.88	11.78	10.90	5.21	5.50	.....
1.34	3.58	0.26	0.24	5.42	0.85	10.95	10.10	8.91	10.37	.....

TABLE 5. ANALYSES OF MIXED FERTILIZERS

Station No.	Manufacturer and brand	Place of sampling
8384	Hubbard General Crop Fertilizer 5-10-10 with 1.2 Magnesium	Portland
7725	Hubbard Golf Course Fertilizer 8-6-2	Hamden
7726	Hubbard Golf Course Fertilizer 10-6-4	Hamden
8386	Hubbard Hi-Organic 5-10-10	Portland
7619	Hubbard Hi-Organic 6-8-8	Portland
8412	Hubbard Hi-Organic 6-12-12	Portland
7621	Hubbard Hi-Top Fertilizer 10-10-10	Portland
8392	Hubbard Hi-Yield Fertilizer 8-12-12	Portland
8383	Hubbard Potato Fertilizer 6-8-8	Portland
8385	Hubbard Potato Fertilizer 6-8-8	Portland
8413	Hubbard Potato Fertilizer 6-8-8 with 1.2 Magnesium	Portland
7622	Hubbard Tobacco Grower 6-3-6	Portland
8389	Hubbard Tobacco Grower 6-3-6	Portland
8415	Hubbard Tobacco Grower 6-3-6	Portland
7623	Hubbard Top Dressing 7-7-7	Portland
8390	Hubbard Valley Brand 6-3-6	Portland
8097	Hubbard Vegetable Fertilizer 5-8-7	Norwichtown
7737 ²	Hubbard Weed-Kil Lawn Food 6-10-4	Middletown
O. M. Scott & Sons, Co., Marysville, Ohio		
7776	Scott's Organic 5-2-3	Waterbury
7884	Scott's Turf Builder 9-7-4	New Haven
7773	Scott's Weed & Feed 7-11-5	Waterbury
Sears, Roebuck & Co., Chicago, Ill.		
7829	Cross Country Lawn Food 5-5-0	Hamden
7831	Cross Country Plant Food 5-10-5	Hamden
M. L. Shoemaker Co., Inc., Div. Wilson & Co. Philadelphia, Pa.		
8006	M. L. Shoemaker "Swift-Sure" Tobacco Starter 4-10-0	West Suffield
Soil Builders International Corp., New York, N. Y.		
7991	Glorion 4-8-8	Branford
Super Lawn Corp., Newark, N. J.		
8433	Super Lawn Liquid Fertilizer 12-8-4	Hartford
Swift & Co., Hartford, Conn.		
8105	Blenn 5-10-5	Middletown
7775	Golden Vigoro 6-10-4	Waterbury
8103	Swift's Red Steer Brand 5-8-7	Middletown
8104	Swift's Red Steer Brand 7-7-7	Middletown
7887	Vigoro 6-10-4	Newtown
8095	Vigoro Plus Chlordane 6-10-4	Norwich

¹Deficiencies are in boldface type.²State Purchase.CONTAINING NITROGEN, PHOSPHORIC ACID AND POTASH¹

Nitrate	Per cent nitrogen				Per cent phosphoric acid			Per cent potash		Magnesium per cent
	Ammoniacal	Organic water-soluble	Organic water-insoluble	Total	Citrate-insoluble	Total	So-called "available"	As muriate	Total	
0.87	4.16	0.22	0.21	5.46	0.43	11.65	11.22	9.27	10.15	1.84
1.25	3.40	1.98	1.48	8.11	0.34	6.80	6.46	2.58	2.75	.....
0.59	4.80	2.46	2.34	10.19	0.40	6.98	6.58	3.80	4.05	.....
0.57	2.88	0.72	1.11	5.28	0.50	11.40	10.90	10.05	10.40	.....
0.72	3.14	1.14	1.17	6.17	0.10	8.72	8.62	8.05	8.15	.....
0.78	3.64	0.52	1.02	5.96	0.50	13.30	12.80	7.66	14.14	.....
0.10	8.58	1.02	0.10	9.80	0.10	10.20	10.10	8.96	10.12	.....
1.05	6.64	0.36	0.26	8.31	0.40	11.80	11.40	11.50	12.60	.....
0.80	4.72	0.58	0.25	6.35	0.55	9.15	8.60	0.76	8.12	.....
0.88	4.92	0.20	0.16	6.16	0.30	9.40	9.10	8.25	9.00	.....
0.89	4.20	0.28	0.25	5.62	1.70	11.03	9.33	5.06	9.98	2.06
0.77	0.38	1.62	3.21	5.98	0.10	3.80	3.70	0.64	6.59	.....
0.81	0.32	2.00	3.17	6.30	0.28	3.60	3.32	0.42	6.79	.....
0.00	0.62	2.66	3.25	6.53	0.13	4.04	3.91	0.93	7.27	.....
0.77	6.12	0.24	0.17	7.30	0.10	8.32	8.22	6.12	7.20	.....
1.41	0.84	2.26	1.86	6.37	0.18	4.85	4.67	0.50	8.01	.....
0.89	4.16	0.24	0.21	5.50	0.45	9.80	9.35	5.90	7.23	.....
0.30	4.72	0.28	1.08	6.38	0.66	10.95	10.29	3.73	4.33	.....
0.17	1.36	0.36	3.38	5.27	0.24	3.86	3.62	1.29	3.23	.....
0.00	7.78	0.32	1.25	9.35	0.38	7.93	7.55	4.34	4.55	.....
0.00	5.88	0.37	2.05	8.30	0.23	10.90	10.67	3.74	4.78	.....
0.00	0.04	0.61	4.72	5.37	1.24	6.50	5.26	.....	.....	.....
0.92	3.72	0.28	0.08	5.00	0.44	10.65	10.21	4.59	5.13	.....
0.58	3.06	0.10	0.58	4.32	1.15	12.95	11.80	.....	.....	.....
0.65	2.58	0.36	0.61	4.20	1.33	9.10	7.77	4.87	8.18	.....
0.26	2.92	7.10	0.00	10.28	0.03	7.18	7.15	2.92	4.24	.....
0.52	4.26	0.02	0.32	5.12	0.73	10.70	9.97	5.30	5.77	.....
0.00	1.34	1.57	3.30	6.21	1.70	12.50	10.80	0.58	4.52	.....
0.75	3.72	0.40	0.15	5.02	0.33	9.28	8.95	6.20	7.10	.....
0.79	5.68	0.20	0.15	6.82	0.18	7.78	7.60	6.44	7.47	.....
0.56	4.50	0.68	0.27	6.01	0.88	10.88	10.00	4.05	4.62	.....
0.32	4.86	0.24	0.38	5.80	0.65	11.07	10.42	3.74	4.12	.....

TABLE 5. ANALYSES OF MIXED FERTILIZERS

Station No.	Manufacturer and brand	Place of sampling
8228	Universal Chemical Co., Lynn, Mass. Electra Plant Food 5-10-3	Greenwich
8250	Valley Feed & Supply Co., Inc., Spring Valley, N. Y. Adorna 3-1-1	Stamford
7772	Oscar F. Warner, Waterbury, Conn. Warner's Lawn Food 8-6-4	Waterbury
7745	Warner's Tree Food 12-6-4	Waterbury
8404	Garfield Williamson, Inc., Jersey City, N. J. Plantspur 4-4-2	Darien
8405	Wonderlawn Complete 10-6-4 Lawn Food	Darien
7620	F. H. Woodruff & Sons, Inc., Milford, Conn. Gro-Sod Lawn Food 10-6-4	Portland
8684	Gro-Sod Lawn Food 10-6-4	Milford
8166	Woodruff Fertilizer & Chemical Works, Inc., North Haven, Conn. Woodruff's 0-20-20 Fertilizer	North Haven
7950	Woodruff's 5-8-7 Fertilizer	North Haven
7847	Woodruff's 5-10-5 Fertilizer	Hamden
7949	Woodruff's 5-10-10 Fertilizer	North Haven
8167	Woodruff's 7-7-7 Fertilizer	North Haven
7834	Woodruff's 8-6-4 Fertilizer	Hamden
7990	Woodruff's 8-6-4 Fertilizer	North Haven
7948	Woodruff's 10-10-10 Fertilizer	North Haven
7688 ²	Woodruff's Lawn & Tree Food 10-5-5	New Haven
7836	Woodruff's Lawn & Tree Food 10-5-5	Hamden
8165	Woodruff's Tobacco Fertilizer 6-3-6	North Haven
8164	Woodruff's Tobacco Starter 5-5-15	North Haven
8400	Young & Halstead Co., Mt. Kisco, N. Y. Professional Tree Food 7-7-7	Darien

¹Deficiencies are in boldface type.²State Purchase.CONTAINING NITROGEN, PHOSPHORIC ACID AND POTASH¹

Nitrate	Per cent nitrogen			Per cent phosphoric acid			Per cent potash			Magnesium per cent
	Ammoniacal	Organic water-soluble	Organic water-insoluble	Total	Citrate-insoluble	Total	So-called "available"	As muriate	Total	
0.58	3.16	0.14	1.88	5.76	0.45	10.58	10.13	3.24	3.26	....
0.00	0.08	0.40	3.08	3.56	2.13	4.51	2.38	0.93	1.30	....
0.00	2.08	3.92	2.24	8.24	1.36	7.60	6.24	4.44	5.22	....
0.39	1.92	7.90	1.99	12.20	0.52	7.80	7.28	4.25	4.68	....
0.00	2.62	0.31	1.50	4.43	0.53	5.72	5.19	2.66	3.96	....
0.25	6.96	1.52	0.77	9.50	0.38	7.60	7.22	....	5.16	....
1.45	4.92	2.08	1.08	9.53	0.20	6.40	6.20	4.21	4.49	....
0.28	4.24	2.96	2.08	9.56	0.63	6.95	6.32	3.81	4.05	....
....	....	....	....	....	2.58	28.60	26.02	5.48	15.45	....
0.00	4.36	0.38	0.44	5.18	0.53	8.85	8.32	6.84	7.64	....
0.00	3.18	1.52	0.37	5.07	0.53	10.98	10.45	5.92	6.31	....
0.00	4.20	0.52	0.35	5.07	0.85	11.45	10.60	9.26	10.12	....
0.00	1.04	4.56	0.38	6.98	0.40	8.58	8.18	6.16	7.47	....
0.00	2.78	4.33	1.18	8.29	0.60	9.02	8.42	3.82	4.12	....
0.00	3.08	3.85	1.13	8.06	0.80	8.63	7.83	2.97	4.08	....
0.00	2.44	6.54	0.24	9.22	0.78	11.32	10.54	8.83	10.08	....
0.14	2.32	7.44	0.52	10.42	0.32	6.26	5.94	3.70	5.10	....
0.00	2.52	6.36	1.21	10.09	0.63	6.78	6.15	4.85	5.07	....
1.43	0.20	1.80	2.85	6.28	0.35	4.10	3.75	0.08	7.06	....
1.26	0.32	2.08	1.14	4.80	0.30	5.35	5.05	0.84	17.23	....
0.47	6.06	0.38	0.27	7.18	0.65	8.65	8.00	8.27	8.63	....

TABLE 6. ANALYSES OF SHEEP MANURE, ETC.¹

Station No.	Manufacturer and brand	Place of sampling
8399	Gro-Well Cow Manure. J. L. Adikes, Jamaica, N. Y.	Darien: The Planter's Barn
7924	Pulverized Sheep Manure. The American Agricultural Chemical Co., North Weymouth, Mass.	Wapping: Sherwood Waldon
7743	Liberty Sheep Manure. Apothecaries Hall Co., Waterbury, Conn.	Waterbury: Warren F. Kaynor Reg. Tech. School
8062	Liberty Sheep Manure. Apothecaries Hall Co., Waterbury, Conn.	New London: New London Grain Co.
8172	Armour Pulverized Sheep Manure. Armour Fertilizer Works, Carteret, N. J.	Milford: Associated Seed Growers, Inc.
7997	A & D Driconure. Atkins & Durbrow, Inc., New York, N. Y.	Branford: Collins & Freeman, Inc.
7705	Corenco Brand Sheep Manure. Consolidated Rendering Co., Boston, Mass.	Seymour: Seymour Grain & Coal Co.
8245	Davey Shredded Cattle Manure. The Davey Tree Expert Co., Kent, Ohio	Old Greenwich: The Davey Tree Expert Co.
7882	Farmanure. Garden Supply Sales, Rahway, N. J.	New Haven: Jackson-Marvin Hardware Co., Inc.
8213	G & O Sheep & Guano Manure. Goulard & Olena, Inc., Skillman, N. J.	New Canaan: Silliman's Inc.
7711	Lebanon Cow Manure. Lebanon Chemical Corp., Lebanon, Pa.	Fairfield: Fairfield Grain & Seed Co.
8318	Lebanon Sheep Manure. Lebanon Chemical Corp., Lebanon, Pa.	Hartford: Cadwell & Jones, Inc.
8071	Ramshorn Brand Sheep Manure. Natural Plant Food Co., Oklahoma City, Okla.	Groton: The C. W. Campbell Co.
8253	O & W Sheep Manure. Olds & Whipple, Inc., Hartford, Conn.	Manchester: Larsen's Hardware
7714	Premier Dehydrated Cow Manure. Premier Peat Moss Corp., New York, N. Y.	Fairfield: Godfrey Garden Shop
7624	Gro-Fast Sheep Manure. The Rogers & Hubbard Co., Portland, Conn.	Portland: The Rogers & Hubbard Co.
7830	Cross Country Cattle Manure. Sears, Roebuck & Co., Chicago, Ill.	Hamden: Sears, Roebuck & Co.
8012	Wizard Brand Cow Manure. St. Louis National Stockyards Co., National Stockyards, Ill.	Thompsonville: Brainard Nursery & Seed Co.
8013	Wizard Brand Sheep Manure. St. Louis National Stockyards Co., National Stockyards, Ill.	Thompsonville: Brainard Nursery & Seed Co.
8158	Sure-Gro Poultry. Triple A Mills, Townsend Harbor, Mass.	Ansonia: A. Hodos & Sons, Inc.
8489	C-D Organic Dry. Valley Feed & Supply Co., Inc., Spring Valley, N. Y.	West Suffield: H. L. Oppenheimer & Sons
8058	Bovung. Walker-Gordon Laboratory Co., Plainsboro, N. J.	New London: The G. M. Williams Co.
8394	Bovung. Walker-Gordon Laboratory Co., Plainsboro, N. J.	West Haven: New Haven Rendering Co.

¹Deficiencies are in boldface type.²Guaranteed, 0.25%.³Guaranteed, 1.00%.TABLE 6. ANALYSES OF SHEEP MANURE, ETC.¹

Per cent nitrogen					Per cent phosphoric acid			Per cent potash			Sand per cent
Ammoniacal	Organic water-soluble	Organic water-insoluble	Total found	Total guaranteed	Citrate-insoluble	Total found	Total guaranteed	So-called "available" found	Total found	Total guaranteed	
0.20	0.21	0.62	1.03	1.00	0.18	0.63	1.00	0.45	1.51	1.00	63.21
0.08	0.28	1.06	1.42	1.25	....	2.30	1.00	....	5.31	2.00	24.94
0.08	0.32	1.18	1.58	1.00	0.20	2.20	....	2.00 ²	5.07	1.00	26.76
0.08	0.30	1.12	1.50	1.00	1.07	2.30	....	1.23 ²	4.52	1.00	25.59
0.16	0.53	1.17	1.86	1.25	....	2.15	1.00	....	4.27	2.00	32.87
0.44	0.27	1.19	1.90	1.00	0.43	1.95	....	1.53 ³	1.42	1.00	31.70
0.00	0.24	1.10	1.34	1.25	....	2.55	1.00	....	4.18	2.00	33.37
0.54	0.76	1.75	3.05	2.00	0.60	3.27	....	2.67 ³	2.18	1.00	7.00
0.36	1.12	1.70	3.18	2.00	0.60	3.60	....	3.00 ³	2.09	1.00	11.15
0.28	0.18	1.18	1.64	1.50	0.13	1.12	1.00	0.99	1.04	1.00	58.50
0.28	0.11	1.95	2.34	1.50	0.36	2.35	....	1.99 ³	3.20	2.00	27.52
0.08	0.00	2.40	2.48	1.50	0.48	1.70	....	1.22 ³	2.53	2.00	22.34
0.20	0.21	1.76	2.17	2.00	....	1.75	1.00	....	2.59	2.00	20.31
0.12	0.27	1.75	2.14	1.25	0.40	2.03	....	1.63 ³	2.97	2.00	14.29
0.72	0.23	1.08	2.03	2.00	0.32	2.20	....	1.88 ³	1.51	1.00	24.04
0.20	0.27	1.03	1.50	1.25	....	1.75	1.00	....	2.28	2.00	35.24
0.16	0.08	1.63	1.87	1.50	0.26	1.35	1.10	1.09 ³	2.34	2.00	24.89
0.06	0.29	1.61	1.96	2.00	0.48	2.10	....	1.62 ³	1.93	2.00	34.70
0.23	0.00	1.49	1.72	2.00	0.45	1.60	....	1.15 ³	2.00	2.00	27.54
0.46	0.90	1.71	3.07	3.25	....	4.40	2.50	....	2.12	1.50	2.08
0.24	0.43	0.87	1.54	1.00	0.22	1.68	....	1.46 ³	1.07	1.00	47.16
0.38	0.56	1.39	2.33	2.00	0.25	2.05	....	1.80 ³	2.72	1.00	1.66
0.16	0.60	1.45	2.21	2.00	0.38	1.91	1.00	1.53 ³	2.46	1.00	2.09

TABLE 7. ANALYSES OF LIMESTONE AND SIMILAR MATERIALS¹

Station No.	Manufacturer or dealer and brand	Sampled from stock of or sent by	Calcium oxide, per cent		Magnesium oxide, per cent	
			Guaranteed	Found	Guaranteed	Found
Apothecaries Hall Co., Waterbury, Conn.						
5967	Hydrated Lime	Suffield: Hatheway-Steane Corp.		47.58		30.00
5968	Hydrated Lime	Suffield: Hatheway-Steane Corp.		46.84		30.61
5969	Hydrated Lime	Suffield: Hatheway-Steane Corp.		46.91		30.49
5970	Hydrated Lime	Suffield: Hatheway-Steane Corp.		47.33		30.93
5769 ²	Land Plaster	Simsbury: Cullman Bros., Inc.	30.00	34.94		
5979	Land Plaster	Suffield: Hatheway-Steane Corp.	30.00	35.70		
5980	Land Plaster	Suffield: Hatheway-Steane Corp.	30.00	33.32		
6318	Land Plaster	Simsbury: Cullman Bros., Inc.	30.00	33.47		
Connecticut Adamant Plaster Co., New Haven, Conn.						
5992 ³	Land Plaster	Simsbury: Cullman Bros., Inc.	30.00	32.37		
5993 ⁴	Land Plaster	Simsbury: Cullman Bros., Inc.	30.00	33.29		
Manufacturer Unknown						
6340	Land Plaster	Simsbury: Cullman Bros., Inc.		34.17		
6284	Land Plaster	Simsbury: Cullman Bros., Inc.		32.57		
6285	Land Plaster	Simsbury: Cullman Bros., Inc.		33.27		
6339	Magnesian Lime	Simsbury: Cullman Bros., Inc.		47.25		32.32
8526	Lime	New Haven: George Zeidenberg		60.43		
New England Lime Co., Canaan, Conn.						
6152	Agricultural Hydrated Lime	Simsbury: Cullman Bros., Inc.	47.00	47.72	31.00	31.71
6265	Agricultural Hydrated Lime	Simsbury: Cullman Bros., Inc.	47.00	47.68	31.00	31.00
6286	Hydrated Lime	Simsbury: Cullman Bros., Inc.		72.78		0.36
O. M. Scott & Sons Co., Marysville, Ohio						
8291 ⁵	Scott's Soil Improver	Manchester: Larsen's Hardware	28.00	27.96	9.24	10.38

¹Deficiencies are in boldface type.

²Calcium sulphate: Guaranteed, 64.50%; found, 85.0%.

³Calcium sulphate: Guaranteed, 64.50%; found, 78.76%.

⁴Calcium sulphate: Guaranteed, 64.50%; found, 81.0%.

⁵Sulphur: Guaranteed, 8.03%, found, 10.86%; passing 100 mesh sieve, 22.5%; 50 mesh sieve, 72.5%; 20 mesh sieve, 98.0%; 8 mesh sieve, 100%.

TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS¹

Station No.	Manufacturer and brand	Treatment	Per cent nitrogen				Per cent phosphoric acid				potash Per cent	
			Nitrate	Ammoniacal	Organic water-soluble	Organic water-insoluble	Total	Citrate-insoluble	Total	So-called "available"	As muriate	Total
A-M-R Chemical Co., Inc., Brooklyn, N. Y.												
8252	Kem Liquid Plant Food .08-16-10	Stamford	0.08	0.00	0.00	0.00	0.08	0.00	0.21	0.21		0.14
J & L Adikes, Inc., Jamaica, N. Y.												
8241	Gro-Well Rose Food 3-12-6	Wilton	0.32	2.72	0.28	1.18	4.50	0.63	12.65	12.02	5.44	6.21
The American Agricultural Chemical Co., North Weymouth, Mass.												
8409	Agrico Bulb Food 5-9-6	Bridgeport	0.45	2.16	0.44	1.79	4.84	0.93	9.98	9.05	6.38	6.38
8094	Agrico for Broadleaf Evergreens 6-10-4	Pawcatuck	0.31	4.02	0.54	1.11	5.98	0.70	11.08	10.38	4.30	4.36
8000	Agrico for Gardens 5-10-5	Branford	0.34	4.30	0.21	0.20	5.05	1.03	11.40	10.37	4.50	5.03
8112	Agrico for Lawns, Trees & Shrubs 6-10-4	Buckland	0.44	5.06	0.14	0.48	6.12	0.73	11.08	10.35	4.36	4.36
7848	Agrico Rose Food 5-9-6	Hamden	0.11	2.30	0.80	1.97	5.18	0.53	10.10	9.57	5.05	6.62
American Chemical Paint Co., Amber, Pa.												
8233	Gro-Stuf 20-20-20	Greenwich	0.32	1.40	19.28		21.00	0.05	20.60	20.55	6.74	21.33
Apothecaries Hall Co., Waterbury, Conn.												
8017	Green Gro Acid Fertilizer 8-5-5	Thompsonville	0.51	5.26	0.44	1.11	7.32	0.45	6.55	6.10	5.21	5.97
7878 ²	Green Gro Bone Meal 2.25-22.0	Norwich		0.00			2.82		25.60			

¹Deficiencies are in boldface type.

²Mechanical analysis: Fine, 31.0%; coarse, 69.0%

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	
			Nitrate	Ammoniacal	Organic water-soluble	Organic water-insoluble	Total	Citrate-insoluble	Total	So-called "available"	As muriate	Total
7877	Green Gro Home Garden Fertilizer 5-8-7	Norwich	0.00	3.68	0.65	1.63	5.96	0.53	9.30	8.77	3.43	3.70
7709	Green Gro Rose Food 5-7-6	Seymour	0.57	3.84	0.20	0.92	5.53	0.52	8.67	8.15	6.27	7.30
7777 ³	Green Gro Sheep Manure 1-0.25-1	Waterbury	.....	0.00	0.44	1.20	1.64	0.22	2.00	1.78	.....	4.84
Armour Fertilizer Works, Carteret, N. J.												
8096 ⁴	Armour Sheep Manure 1.25-1-2	Norwich	0.00	0.20	0.33	1.15	1.68	.....	1.99	.....	.....	4.08
Associated Seed Growers, Inc., Cambridge, N. Y.												
8173 ⁵	Asgrow Bone Meal 2-26.0	Milford	.....	0.02	.....	.....	2.83	9.60	27.60	18.00	.....	.....
8192	Asgrow Plant Food 5-10-5	Milford	0.60	3.84	0.54	0.27	5.25	0.53	10.65	10.12	3.44	6.82
Atkins & Durbrow, Inc., New York, N. Y.												
8208 ⁶	A & D Driconure 1-1-1	Suffield	0.00	0.92	0.30	2.03	3.25	0.40	3.26	2.86	.....	2.09
Atlas Fish Fertilizer Co., San Francisco, Calif.												
8016	Atlas Fish Emulsion Fertilizer 5-1-1	Thompsonville	0.00	0.68	4.06	0.54	5.28	0.18	1.18	1.00	1.17	1.17
The Borden Co., New York, N. Y.												
8124	Borden "38"	Branford	.....	.....	.....	.....	36.85	.....	.....	.....	.....	.....
8287	Borden "38"	New Canaan	.....	.....	.....	.....	37.90	.....	.....	.....	.....	.....
Brainard Nursery & Seed Co., Thompsonville, Conn.												
8018	For Your Garden Landscape Fertilizer 8-6-4	Thompsonville	0.00	4.66	2.25	0.69	7.60	0.35	7.00	6.65	3.35	4.71
8019 ⁷	For Your Garden Pulverized Cattle Manure 2-1-1	Thompsonville	0.00	0.18	0.19	1.83	2.20	0.33	1.75	1.42	.....	2.31
Joseph Breck & Sons, Boston, Mass.												
8021	Breck's Quick-Life Instant Plant Food 16-32-16	Middletown	0.00	7.42	8.17	0.00	15.59	0.18	29.90	29.72	17.40	19.10
California Spray-Chemical Corp., Richmond, Calif.												
8004	Ortho-Gro Liquid Plant Food 10-5-5	Clinton	0.72	0.85	8.58	0.00	10.15	0.15	5.20	5.05	.....	4.74
The Carac Corp., Freeport, N. Y.												
8410	Carac Evergreen & Shrub Fertilizer 25-14-18	Bridgeport	0.22	1.28	25.40	0.00	26.90	0.38	16.10	15.72	.....	19.43
8290	Carac Nitrogen Concentrate 46-0-0	Stamford	.....	.....	.....	.....	46.00	.....	.....	.....	.....	.....
8247	Carac Rose & Plant Fertilizer 22-18-22	Stamford	0.00	0.44	22.60	0.00	23.04	.....	19.00	19.00	.....	24.58
Clinton Nurseries, Clinton, Conn.												
7796	New Era African Violet Food 5-12-9	Willimantic	2.48	3.18	0.26	0.11	6.03	0.08	12.15	12.07	.....	10.15
7886 ⁸	New Era Cow Manure 2-1-1	New Haven	0.00	0.18	0.27	1.55	2.00	0.10	1.29	1.19	.....	0.98
8003	New Era Rose Food 5-10-5	Clinton	1.07	3.88	0.16	0.29	5.40	1.23	11.90	10.67	5.21	5.87
8001	New Era Vitamin Plant Food 7-15-8	Branford	2.00	2.96	2.32	0.10	7.38	0.25	15.30	15.05	.....	9.00
Consolidated Rendering Co., Boston, Mass.												
7719 ⁹	Corenco Ground Bone 2-22	Wallingford	.....	0.08	.....	.....	2.74	.....	27.80	.....	.....	.....

¹Deficiencies are in boldface type.

³Sand, 27.82%.

⁴Sand, 26.59%.

⁵Mechanical analysis: Fine, 74.0%; coarse, 26.0%.

⁶Sand, 1.91%.

⁷Sand, 22.21%.

⁸Sand, 4.08%.

⁹Mechanical analysis: Fine, 56.0%; coarse, 44.0%

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	
			Nitrate	Ammoniacal	Organic water-soluble	Organic water-insoluble	Total	Citrate-insoluble	Total	So-called "available"	As muriate	Total
8396	Corenco Home Garden Fertilizer 5-10-5	West Haven	0.86	4.04	0.20	0.22	5.32	0.25	10.28	10.03	5.74	6.45
8398	Corenco Landscape Fertilizer 8-6-4	West Haven	0.00	4.64	1.59	0.57	6.80	0.33	7.10	6.77	5.76	5.94
8395	Corenco Rhododendron-Azalea & Blueberry Special 7-7-7	West Haven	0.27	5.86	0.64	0.23	7.00	0.50	8.00	7.50	7.04	7.77
8397	Corenco Rose Special 5-10-5	West Haven	0.15	1.56	2.44	0.95	5.10	1.18	11.85	10.67	4.94	5.10
7889 ¹⁰	Corenco Sheep Manure 2-1-2	Newtown	0.00	0.14	0.46	1.85	2.45	0.55	2.25	1.70	.....	3.13
Eastern States Farmers' Exchange, Inc. West Springfield, Mass.												
8111	Eastern States Starter 64 16-32-16	Buckland	4.80	7.78	3.48	0.00	16.06	0.03	32.30	32.27	.....	16.73
The Espoma Co., Millville, N. J.												
7995	Espoma Rose Food 6-6-4	Branford	0.00	3.94	0.32	1.88	6.14	0.40	7.25	6.85	3.39	4.08
Faesy & Besthoff, Inc., New York, N. Y.												
8073 ¹¹	F & B Pure Bone Meal 2.47-23.0	Groton .....	.....	0.07	.....	.....	2.21	.....	29.10	.....	.....	.....
7996	F & B Starter-Grower All Purpose 15-30-15	Branford	0.00	6.28	8.74	0.00	15.02	0.18	31.20	31.02	11.50	15.70
Forward House Div., Olin-Mathieson Chem. Corp., New York, N. Y.												
7885	Plantrons 12-24-12	New Haven	0.17	11.70	0.36	0.14	12.37	0.25	24.90	24.65	11.34	11.62
Garden Research Laboratories, New York, N. Y.												
8061	RX-15 15-30-15	New London	0.00	6.52	7.08	0.00	13.60	0.28	33.10	32.82	14.86	16.38
Garden Supply Sales Corp., Rahway, N. J.												
8256 ¹²	Farmanure 2-1-1	Manchester	0.00	0.26	2.05	1.86	4.17	0.28	3.44	3.16	.....	1.61
Goulard & Olena, Inc., Skillman, N. J.												
8138 ¹³	G & O Aluminum Sulphate	West Hartford .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
8211 ¹⁴	G & O Cattle Manure 1.85-0.75-1.75	Windsor Locks	0.00	0.16	0.29	1.95	2.40	0.45	1.76	1.31	.....	3.04
8223	G & O Prizegro 5-10-5	New Canaan	0.57	3.82	0.30	0.81	5.50	0.65	11.65	11.00	3.73	5.73
8222	G & O Rose Food 7-8-5	New Canaan	0.16	4.54	1.26	1.46	7.42	0.83	8.75	7.92	4.05	4.05
8137	G & O Sulphate of Ammonia 20.75	West Hartford .....	.....	.....	.....	.....	21.00	.....	.....	.....	.....	.....
7899	G & O Superphosphate 20%	West Hartford .....	.....	.....	.....	.....	.....	0.48	21.40	20.92	.....	.....
8403	G & O Tomato Food 3-12-13	Darien	0.17	2.10	0.72	0.54	3.53	0.98	12.50	11.52	13.11	15.70
7716	Mr. Strawberry Big 3-13-7	Fairfield	0.19	0.00	0.74	2.10	3.03	1.88	16.17	14.29	7.40	7.74
Heller Greenhouse Laboratories, Colorado Springs, Colo.												
8113	Heller-Gro Complete Plant Food 15-15-15	Buckland	1.95	0.67	15.89	0.00	18.51	0.07	14.60	14.53	0.05	19.08
A. H. Hoffman, Inc., Landisville, Pa.												
8099	Hoffman Azalea & Evergreen Food 4-6-10	Norwichtown	0.00	4.06	0.26	1.32	5.64	0.15	5.65	5.50	1.82	12.27
7876 ¹⁵	Hoffman Cow Manure 2-1-1	Norwich	0.00	0.08	0.61	1.67	2.36	0.33	2.15	1.82	.....	2.53
8100	Hoffman Organic-Base Rose Food 5-10-5	Norwichtown	0.00	3.94	0.34	0.93	5.21	0.28	10.38	10.10	4.90	5.25
7852 ¹⁶	Hoffman Raw Bone Meal 3.70-18.5	Hamden .....	.....	0.04	.....	.....	4.50	.....	23.95	.....	.....	.....
7851 ¹⁷	Hoffman Sheep Manure 1.5-1-2	Hamden	0.00	0.00	0.26	1.29	1.55	0.43	2.05	1.62	.....	5.22
Horticultural Chemical Co., Jersey City, N. J.												
8251	Loft's General Purpose 100% Soluble Plant Food 12-14-14	Stamford	0.00	13.36	0.33	0.03	13.72	0.00	6.10	6.10	12.82	17.65

¹Deficiencies are in boldface type.¹⁰Sand, 15.04%.¹¹Mechanical analysis: Fine, 81.0%; coarse, 19.0%.¹²Sand, 0.59%.¹³Aluminum found, 9.68%.¹⁴Sand, 22.89%.¹⁵Sand, 13.86%.¹⁶Mechanical analysis: Fine, 39.5%; coarse, 60.5%.¹⁷Sand, 19.65%.

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	
			Nitrate	Ammoniacal	Organic water-soluble	Organic water-insoluble	Total	Citrate-insoluble	Total	So-called "available"	As muriate	Total
7778	The Hy-Trous Corp., Boston, Mass. Hy-Trous 4-8-4	Waterbury	1.15	1.87	1.00	0.00	4.02	0.13	8.09	7.96	.....	4.62
8136 ¹⁸	Lebanon Chem. Corp., Lebanon, Pa. Lebanon Aluminum Sulphate	West Hartford	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
8324	Lebanon Azalea Food 7-7-7	Hartford	0.98	3.16	0.10	1.44	5.68	0.45	8.05	7.60	6.68	8.12
7713 ¹⁹	Lebanon Bone Meal 2.30-20	Fairfield	.....	0.00	.....	.....	3.31	.....	24.20	.....	.....	.....
7902 ²⁰	Lebanon Cow Manure 1.5-1-2	West Hartford	0.00	0.25	0.00	2.33	2.58	0.45	1.65	1.20	.....	2.75
7921	Lebanon Hi-Organic 8-8-8	Hartford	1.00	3.72	0.20	1.68	6.60	0.85	11.55	10.70	7.13	8.08
8325	Lebanon Plant Food 5-10-5	Hartford	1.38	3.46	0.02	0.16	5.02	0.33	10.48	10.15	4.77	6.18
8168	Miller Chemical & Fertilizer Corp., Baltimore, Md. VHPF 6-25-15	Milford	4.84	1.60	0.20	0.10	6.74	0.13	28.65	28.52	.....	17.33
8074 ²¹	Natural Plant Food Co., Oklahoma City, Okla. Longhorn Brand Cattle Manure 2-1-2	Mystic	0.00	0.12	0.32	1.80	2.24	.....	1.75	.....	.....	2.65
7875	Park-Barnes, Inc., Hermosa Beach, Calif. Black Magic African Violet Blossom Booster 4-10-10	Norwich	0.00	0.23	3.99	0.00	4.22	0.07	10.10	10.03	.....	9.64
8432	Black Magic Liquid Fertilizer 10-5-5	Darien	0.26	0.77	9.53	0.00	10.56	.....	5.48	5.48	.....	5.10
7794	Black Magic Plant Food 2-3-2	Willimantic	0.00	0.08	0.01	2.27	2.36	0.32	4.14	3.82	0.65	4.12
7717 ²²	Pedigreed Seed Co., New York, N. Y. Loft's Lawn Food 5-10-4	Fairfield	0.46	2.12	0.56	2.52	5.66	0.44	9.28	8.84	5.73	5.73
8221	Plantabbs Corp., Baltimore, Md. Fulton's Plantabbs J1-15-20	New Canaan	7.93	3.40	0.04	0.03	11.40	0.03	18.40	18.37	.....	27.63
8020	Plant Marvel Laboratories, Chicago, Ill. Plant Marvel 12-31-14	Middletown	3.87	9.60	0.56	0.00	14.03	0.18	33.80	33.62	.....	13.12
7920	Ra-Pid-Gro Corp., Dansville, N. Y. Ra-Pid-Gro 23-21-17	Hartford	4.94	3.60	15.52	0.00	24.06	0.05	18.00	17.95	.....	18.50
7741	The Rogers & Hubbard Co., Portland, Conn. Gro-Fast Acid Fertilizer 4-10-4	Meriden	0.00	1.96	1.49	1.30	4.75	0.44	11.40	10.96	3.90	4.08
8130 ²³	Gro-Fast Aluminum Sulphate 9%	New Haven	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
7727 ²⁴	Gro-Fast Bone Meal 2-23	Hamden	.....	0.03	.....	.....	2.79	.....	27.25	.....	.....	.....
7850 ²⁵	Gro-Fast Cow Manure 2-1-1	Hamden	0.00	0.28	0.30	1.55	2.13	0.18	1.80	1.62	.....	2.43
7728	Gro-Fast Evergreen Food 4-10-4	Hamden	0.00	1.54	1.85	1.41	4.80	0.28	11.60	11.32	3.78	4.36
8076	Gro-Fast Plant Food 5-10-5	Stonington	0.45	2.04	1.78	1.05	5.32	0.50	10.63	10.13	4.75	5.19
7795	Gro-Fast Rose Food 7-10-5	Willimantic	0.33	2.80	2.96	1.56	7.65	1.48	13.25	11.77	0.52	5.57
8077	Gro-Fast Sol (Water Soluble Concentrate) 16-20-16	Stonington	2.69	4.56	6.64	0.04	13.93	0.05	20.05	20.00	10.98	15.28
8414	Gro-Fast Sol (Water Soluble Concentrate) 16-20-16	Portland	0.00	9.74	4.19	0.00	13.93	0.10	28.10	28.00	11.43	13.90
8232	Rose Manufacturing Co., Beacon, N. Y. Viol-Ogen Plant Food 13-26-13	Greenwich	3.17	4.34	8.38	0.03	15.92	0.10	18.80	18.70	17.00	20.38

¹Deficiencies are in boldface type.

¹⁸Aluminum found, 10.07%.

¹⁹Mechanical analysis: Fine, 56.0%; coarse, 44.0%.

²⁰Sand, 17.84%.

²¹Sand, 18.01%.

²²Boron found, 0.04%, guaranteed, 0.0001%; calcium found, 6.59%, guaranteed, 0.009%; zinc found, 0.010%, guaranteed, 0.001%; copper found, 0.12%; guaranteed, 0.002%; iron found, 0.34%, guaranteed, 0.001%; manganese found, 0.13%, guaranteed, 0.005%; magnesium found, 0.51%, guaranteed, 0.0055%.

²³Aluminum: Found, 9.95%; guaranteed, 9.0%.

²⁴Mechanical analysis: Fine, 72.0%; coarse, 28.0%.

²⁵Sand, 1.91%.

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	
			Nitrate	Ammoniacal	Organic water-soluble	Organic water-insoluble	Total	Citrate-insoluble	Total	So-called "available"	As muriate	Total
7832	Sears, Roebuck & Co., Chicago, Ill. Cross Country Azalea-Camellia Food 7-7-7	Hamden	0.00	5.86	0.72	0.12	6.70	0.24	8.45	8.21	6.19	7.03
8407 ²⁶	Cross Country Bone Meal 2-2-6	Norwalk	0.00	0.00	0.00	0.00	2.06	0.00	29.35	0.00	0.00	0.00
7833 ²⁷	Cross Country Cattle Manure 1.5-0.75-2	Hamden	0.00	0.12	0.64	0.90	1.66	0.00	1.70	0.00	0.00	2.40
7890	Soil Builders International Corp., New York, N. Y. Glorion 4-8-8	Newtown	0.22	2.20	0.72	0.86	4.00	0.82	8.10	7.28	0.00	7.02
7849 ²⁸	Stern's Garden Products, Inc., Geneva, N. Y. Stern's Miracid 21-7-7	Hamden	0.00	13.88	9.02	0.10	23.00	0.07	7.85	7.78	4.77	5.50
8060	Stern's Miracle-Gro 15-30-15	New London	0.00	5.88	9.12	0.06	15.06	0.23	30.50	30.27	8.75	16.13
8402	Stim-U-Plant Laboratories, Columbus, Ohio Stim-U-Plant African Violet Food 5-8-7	Darien	2.50	3.58	0.00	0.17	6.25	0.98	10.93	9.95	0.00	9.22
8210	Swift & Co., Plant Food Division, Hartford, Conn. Instant Vigoro 19-28-14	Windsor Locks	3.98	5.88	10.42	0.07	20.35	0.07	28.40	28.33	0.00	13.04
7888	Vigoro Camellia & Azalea 5-10-10	Newtown	0.25	4.14	0.22	0.64	5.25	0.58	10.63	10.05	8.38	10.04
7710	Vigoro Complete Plant Food 6-10-4	Seymour	0.41	5.00	0.12	0.35	5.88	0.64	10.87	10.23	3.74	4.30
8209	Vigoro Complete Rose Food 6-10-4	Suffield	0.31	3.20	0.50	1.70	5.81	0.95	11.40	10.45	1.46	4.05
8234	Universal Chemical Co., Lynn, Mass. Electra Plant Food 5-10-3	Greenwich	0.62	2.20	0.26	1.95	5.03	0.53	10.85	10.32	2.10	3.18
8242 ²⁹	Walker-Gordon Laboratory, Plainsboro, N. J. Bovung 2-1-1	Saugatuck	0.00	0.12	0.55	1.54	2.21	0.33	2.44	2.11	0.00	2.49
8240	Garfield Williamson, Inc., Jersey City, N. J. Plantspur 4-4-2	Wilton	0.00	4.47	0.00	1.06	5.53	0.23	5.60	5.37	2.60	3.35
8235	Andrew Wilson, Inc., Springfield, N. J. Wilson's Orchid Fertilizer 10-10-10	Greenwich	7.78	2.40	0.20	0.00	10.38	0.00	9.78	0.00	0.00	11.85

¹Deficiencies are in boldface type.²⁶Mechanical analysis: Fine, 67.5%; coarse, 32.5%.²⁷Sand, 28.35%.²⁸Iron sulphate; found, 0.17%; guaranteed, 20%.²⁹Sand, 2.27%.

TABLE 9. LAWN SPRAYS

Station No.	Manufacturer and brand of concentrate used	Dealer	Composition of diluted spray					
			Per cent nitrogen		Per cent phosphoric acid		Per cent potash	
			Guaranteed	Found	Guaranteed	Found	Guaranteed	Found
8426	Fertile Corp., of America New York, N. Y. Fertile Liquid Fertilizer 15-10-5	Waterbury: Wm. E. Wesson, Inc.	0.15	0.26	0.10	0.16	0.05	0.087
8428	Smith Equipment & Supply Co., Chicago, Ill. Fertil-Ade No. 1 10-8-6	East Hartford: The Savin Fuel Co.	0.10	0.12	0.08	0.094	0.06	0.077
8434	Super Lawn Corp., Newark, N. J. Super Lawn Liquid Fertilizer 12-8-4	Hartford: Parkville Coal & Oil Co.	0.12	0.13	0.08	0.081	0.04	0.051
8427	The Virilium Corp., Medway, Mass. Virilium 12-8-4	Waterbury: F. & S. Oil Co.	0.15	0.31	0.10	0.19	0.05	0.107

8047 ²	Aluminum sulfate, standard-ground	.....	.....	.....	.....	.....	.....	.....	9.63 ⁸
7333	Blueberry fertilizer	12.54	7.65	.....	5.80	.....	.....	.....	.....
7357	By-product of manufacture of aureomycin and terramycin	2.52	5.72	.....	0.22	.....	.....	.....	.....
7613	Chamberlain & Barkley Fertilizer 8-6-4	7.38 ⁴	6.27	5.92	7.68	4.58	.....	.....	.....
8704	Chicago sludge	5.22 ⁵	7.33	6.38	.....	.....	.....	.....	.....
6502	Fertilizer	0.95	6.52	.....	6.96	.....	.....	.....	.....
6503	Fertilizer	1.24	5.30	.....	3.86	.....	.....	.....	.....
6504	Fertilizer	1.49	8.20	.....	6.55	.....	.....	.....	.....
7485	Fertilizer	7.58	5.45	.....	0.25	.....	.....	.....	.....
8756	Fertilizer	1.35	4.08	.....	0.82	.....	.....	.....	.....
8757	Fertilizer	2.13	5.95	.....	2.81	.....	.....	.....	.....
8758	Fertilizer	2.39	2.25	.....	0.53	.....	.....	.....	.....
8759	Fertilizer	2.18	2.75	.....	0.67	.....	.....	.....	.....
8760	Fertilizer	2.58	3.15	.....	1.23	.....	.....	.....	.....
8761	Fertilizer	2.72	3.60	.....	1.45	.....	.....	.....	.....
8762	Fertilizer	2.73	0.30	.....	0.16	.....	.....	.....	.....
8161	Fertilizer 4-8-7	4.44	8.38	.....	7.37	.....	.....	.....	.....
8817	Fertilizer 8-6-4	7.38 ⁶	7.20	.....	5.50	.....	.....	.....	.....
8069	Humphrey manure	2.10	1.14	.....	1.61	.....	.....	.....	.....
8713	Hydrate organic by-product	2.63	7.18	.....	0.47	.....	.....	.....	.....
6462	"Lush Miracle Plant Mix" ⁷	.....	.....	.....	.....	.....	.....	0.48	0.024

¹Deficiencies are in boldface type.

²State Purchase.

³Guaranteed, 9.00%.

⁴Nitrate nitrogen, 0.58%; ammonia nitrogen, 5.06%; soluble organic nitrogen, 1.01%; insoluble nitrogen, 0.73%.

⁵Ammonia nitrogen, 0.04%; soluble organic nitrogen, 0.41%; insoluble nitrogen, 4.77%.

⁶Nitrate nitrogen, 0.67%; ammonia nitrogen, 6.48%; insoluble nitrogen, 0.23%.

⁷Iron, 0.36%; manganese, 0.018%; copper, 0.004%; zinc and nickel, faint traces.

TABLE 10. ANALYSES OF OTHER MISCELLANEOUS MATERIALS

Station No.	Material	Total nitrogen per cent	Total phosphoric acid, per cent	"Available" phosphoric acid, per cent	Water-soluble potash, per cent	Chlorine per cent	Moisture per cent	Ash per cent	Organic matter per cent	Aluminum per cent	Boron per cent
7824	Mink manure	3.90	9.90	1.02	0.73	.....	8.70	61.85	29.45	.....	.....
7861	Manure used for growing mushrooms	1.41 ⁸	1.30	1.02	1.48	.....	.....	.....	.....	.....	.....
6343	"Nature's Nutrients"	5.18	8.05	6.15	6.65	.....	.....	.....	.....	.....	.....
8584	"Orcoa"	0.83	0.68	.....	0.28	.....	.....	30.54	.....	.....	.....
8791	Plant food	23.40 ⁹	17.20	.....	18.68	.....	.....	.....	.....	.....	.....
8792	Plant food	24.45 ¹⁰	16.65	.....	18.43	.....	.....	.....	.....	.....	.....
7707	Rabbit skins and furs	13.14 ¹¹	0.80	.....	0.59	.....	.....	.....	.....	.....	.....
5981	"Swift Sure"	4.50	12.82	11.74	.....	.....	.....	.....	.....	.....	.....

⁸Soluble organic nitrogen, 0.36%; insoluble nitrogen, 1.05%; magnesium, 0.18%; sand, 46.35%.
⁹Nitrate nitrogen, 5.26%; ammonia nitrogen, 3.52%; soluble organic nitrogen as urea, 14.62%.
¹⁰Nitrate nitrogen, 5.03%; ammonia nitrogen, 3.00%; soluble organic nitrogen as urea, 16.42%.
¹¹Ammonia nitrogen, 0.32%; soluble organic nitrogen, 0.72%; insoluble nitrogen, 12.10%.

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