Commercial FERTILIZERS

Report for 1959

H. J. FISHER
Chief Chemist

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REPORT ON INSPECTION AND ANALYSIS OF COMMERCIAL FERTILIZERS

1959

H. J. FISHER, Chief Chemist[1]

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.

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[1] Analyses were made by Messrs. Sherman Squires, Werner Mueller and Walter Oliver, Miss Helen Kocaba and Miss Sunrae Agostini; inspection and sampling by Mr. R. Richard Nichols; compilations by Miss Eleanor Hopcraft.

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. This information is not for publication but is used to inform manufacturers of the total sales of their meal as fertilizer in this State. It is expected that the fees provided for by statute will be paid by the manufacturer or other party responsible for the brands.

Official Definitions of Fertilizer Terms and Materials

It is expected that fertilizers sold in this state will comply with the regulations and standards of the Association of American Fertilizer Control Officials. A copy of the "Official Publication" of that Association giving these definitions and regulations may be obtained from the secretary-treasurer, B. D. Cloaninger, Drawer 392, Clemson, South Carolina, for $2.00.

REGISTRATIONS

For 1959, 111 firms and individuals registered 441 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., 182-12 93rd Ave., Jamaica 23, N. Y.

Gro-Well Bone Meal
Gro-Well Cottonseed Meal

AGRICULTURAL PRODUCTS CO., 156 Valley St., E. Providence, R. I.

Apco Kingston Lawn Food 10-6-4
Apco Kingston Lawn & Garden 5-10-5

AGRICULTURAL SUPPLY CO., 221 Richmond Ave., West Haven, Conn.

Yale Special Mixture

ALLIED CHEMICAL CORP., Nitrogen Div., P. O. Drawer 61, Hopewell, Va.

"Arcadian" A-N-L Fertilizer Compound
"Arcadian" 12-12-12 Granular Fertilizer
"Arcadian" Nitrana Solution 2
"Arcadian" Nitrana Solution 3
"Arcadian" Nitrana Solution 4
"Arcadian" Nitrate of Soda
"Arcadian" Pelleted Ammonium Nitrate
"Arcadian" Uran 30 Solution
"Arcadian" Uran 32 Solution
"Arcadian" Urea 45 Fertilizer Compound

AMERICAN AGRICULTURAL CHEMICAL CO., 285 River Street, No. Weymouth, Mass.

AA Fertilizer 0-15-30
AA Fertilizer 0-20-20
AA Fertilizer 5-10-10 with 1.2 Magnesium
AA Fertilizer 8-16-16
AA Fertilizer 10-10-10
AA Plant Food 5-10-5
Agrico Country Club 6-10-4
Agrico Country Club 8-6-4
Agrico for Azaleas, Camellias & Rhododendrons 6-10-4
Agrico for Corn 8-16-16
Agrico for Gardens 5-10-5
Agrico for Lawns, Trees & 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 5-20-10
Agrico for Top Dressing 7-7-7
Agrico for Top Dressing 12-12-12
Agrico for Top Dressing 15-10-10
Agrico for Turf 6-8-2
Agrico for Turf 10-6-4
Agrico Pesticide & Turf Food 6-10-4
Agrico Phosphate & Potash 0-15-30
Agrico Phosphate & Potash 0-20-20
Agrico Rose Food 5-9-6
Agrico Water Soluble Plant Food 17-17-17
Agrinite
Agri-Phos 20% Superphosphate
Bone Meal
Castor Pomace
Ground Phosphate Rock
Muriate of Potash
Superphosphate, 18% Normal

AMERICAN BULB CO., Marysville, Ohio

ABC Boost
ABC Bulb Food
ABC Rose Food

AMERICAN CYANAMID CO., P. O. Box 383, Princeton, N. J.

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

ARCHER-DANIELS-MIDLAND Co., P. O. Box 532, Minneapolis, Minn.

Archer Quality 34% Protein Linseed Oil Meal

ARMOUR FERTILIZER WORKS, Box J, Carteret, N. J.

Armour Armorganic Plant Food
Armour Big Crop Fertilizer 0-20-20
Armour Big Crop Fertilizer 5-8-7
Armour Big Crop Fertilizer 5-10-5
Armour Big Crop Fertilizer 5-10-10
Armour Big Crop Fertilizer 7-7-7
Armour Big Crop Fertilizer 10-10-10
Armour Big Crop Superphosphate
Armour Bone Meal Fertilizer
Armour Cattle Manure
Armour Fish Pond Special
Armour Gold Bond Tobacco Grower
Armour Home & Garden Special
Armour Lawn Special
Armour Pulverized Sheep Manure
Armour Sulphate of Ammonia
Armour Vertagreen Complete Plant Food for Commercial Crops 2-15-30
Armour Vertagreen Complete Plant Food for Commercial Crops 3-12-12
Armour Vertagreen for Acid Loving Plants
Armour Vertagreen Plant Food 5-10-5
Armour Vertagreen Plant Food for Commercial Crops 5-10-15
Armour Vertagreen Plant Food for Commercial Crops 6-12-6
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 Commercial Crops Tobacco Special 6-4-7
Armour Vertagreen Plant Food for Turf & Trees
Armour Vertagreen Rose Food 5-10-5
Armour Vertagreen Turf Food with Chlordane
Armour Vertagreen Turf Maker (50% Organic Nitrogen)

ATKINS & DURBROW, INC., Box 55, Port Colborne, Ontario, Canada

Driconure 3-2-1

F. A. BARTLETT TREE EXPERT CO., 2770 Summer St., Stamford, Conn.

Bartlett Green Tree Food

BENNETT & CLAYTON CO., Inc., Prospect Plains, Cranbury, N. J.

B/C Brand Fertilizer 5-10-5
B/C Brand Fertilizer 10-6-4

THE BORDEN CO., Chemical Div., 350 Madison Ave., New York, N. Y.

Borden's "38"

BRADLEY & BAKER, 155 East 44th St., New York, N. Y.

Cal-Nitro Fertilizer Compound

JOSEPH BRECK & SONS, CORP., 401 Summer St., Boston, Mass.

Breck's Feed No Weed with 2, 4-D and 2, 4, 5, T
Breck's Garden-Gro
Breck's Greenite (all organic)

JOSEPH BRECK & SONS, CORP., Boston, Mass. - Cont.

Breck's New Improved Turf-Gro
Breck's Quick-Life
Breck's Turf-Gro
Breck's Velturf (all organic)

BROOKSIDE NURSERIES, INC., 228 Brookside Rd., Darien, Conn.

Brookside's Dried Blood
Brookside's Natures Nutrients
Brookside's Raw Bone Meal

THE BUCKEYE CELLULOSE CORP., Cincinnati, Ohio

Buckeye 41% Protein Cottonseed Meal for Fertilizer

CADWELL & JONES, INC., 199 Walnut St., Hartford, Conn.

J & C Hi-Organic Fertilizer 10-6-4

CALIFORNIA SPRAY-CHEMICAL CORP., Lucas & Ortho Way, Richmond, Calif.

Ortho-Gro Liquid Plant Food
Ortho Lawn Groom

THE CANADA LINSEED OIL MILLS, LTD., 2215 Notre Dame East, Montreal, Canada

Maple Leaf 34% Protein Expeller Linseed Oil Meal

CARBOLA CHEMICAL CO., INC., Natural Bridge, N. Y.

CCC Triple 20 Plant Food

CHAMBERLIN & BARCLAY INC., Cranbury, N. J.
Registered by W. T. Grant Co., Hamden, Conn.

Old Reliable Fertilizer 10-6-4 (25% Organic)

CHIGUANO COMPOST CORP., Cherry St., Marion, Conn.

Chiguano

CHILEAN NITRATE SALES CORP., 120 Broadway, New York, N. Y.

Chilean Nitrate of Soda - Champion Brand

CLORO-SPRAY CORP., 2215 N. American St., Philadelphia, Pa.

Cloro-Spray

COCKE and CO., 208 William-Oliver Bldg., Atlanta 3, Ga.

Cocke-Sure Brand 41% Protein Cottonseed Meal

COMMERCIAL SOLVENTS CORP., 260 Madison Ave., New York, N. Y.

CSC Hi-D Ammonium Nitrate Fertilizer

CONSOLIDATED RENDERING CO., 178 Atlantic Ave., Boston, Mass.

Corenco 0-15-30
Corenco 0-20-20
Corenco 0-20-20 with .11 Boron
Corenco 4-12-16
Corenco 5-8-7
Corenco 5-10-5
Corenco 5-10-5 Home Garden

CONSOLIDATED RENDERING CO., Boston, Mass. - Cont.

Corenco 5-10-5 Rose Special
Corenco 5-10-10
Corenco 5-10-10 with 1.2 Magnesium
Corenco 5-10-10 Liquid Fertilizer Concentrate
Corenco 6-3-6 Perfection
Corenco 6-3-6 Premium Tobacco Grower
Corenco 6-8-8
Corenco 6-8-8 with 1.2 Magnesium
Corenco 7-7-7
Corenco 8-6-4 Landscape
Corenco 8-6-4 Turf Green
Corenco 8-12-12 with .9 Magnesium
Corenco 8-16-16
Corenco 10-5-5 Liquid Green
Corenco 10-6-4 Golf & Lawn
Corenco 10-8-2 Timberline
Corenco 10-10-10
Corenco Cottonseed Meal
Corenco Granulated Superphosphate 20%
Corenco Ground Bone
Corenco Organic Turf Fertilizer
Corenco Rhododendron, Azalea & Blueberry Special
Corenco Sheep Manure
Corenco Spurz-on
Corenco Superphosphate 20%
Muriate of Potash
Sulphate of Potash

THE DAVEY TREE EXPERT CO., 117 S. Water St., Kent, Ohio

Davey Shredded Cattle Manure
Davey Tree Food

R. G. DAVIS CO., 560 Grand Ave., New Haven, Conn.

Organo

DAVISON CHEMICAL CO., Div. W. R. Grace & Co., Hill Plant, Baltimore, Md.

0-15-30 Davco Granulated Fertilizer
0-15-30 Davco Granulated Fertilizer with Boron
0-20-20 Davco Granulated Fertilizer
5-10-5 Davco Granulated 3G Fertilizer
5-10-5 Davco Granulated Turf & Garden Food (Prem)
5-10-10 Davco Granulated 3G Fertilizer
5-10-10 Davco Quality Fertilizer
6-8-8 Davco Granulated 3G Fertilizer with Boron
7-7-7 Davco Granulated Fertilizer
8-16-16 Davco Granulated 3G Fertilizer
10-6-4 Davco Granulated Fertilizer
10-10-10 Davco Granulated 3G Fertilizer
15-10-10 Davco Granulated 3G Fertilizer
Davco Granulated 20% Superphosphate

DAYTON FERTILIZER CORP., Dayton, N. J.

Grand Garden Plant Food 6-10-4
Grand Garden Rose Food 6-8-6
Grand Lawn Brand Hi-Organic Plant Food with Heptachlor
Grand Union Brand Fertilizer 6-10-4

DOUGHTEN SEED CO., 253 Brunswick St., Jersey City, N. J.

Doughten's Lawn Food 9-8-3

E. I. duPONT deNEMOURS & CO., 5113 duPont Bldg., Wilmington, Del.

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

EASTERN STATES FARMERS' EXCHANGE, INC., 26 Central St., W. Springfield, Mass.

Castor Pomace
Eastern States 0-15-30 with .2 Boron
Eastern States 0-25-25
Eastern States 5-10-10 SM with 1.2 Magnesium
Eastern States 8-12-12 with 1.2 Magnesium
Eastern States 8-12-12 LC with 1.2 Magnesium
Eastern States 8-16-16 with .6 Magnesium
Eastern States 10-10-10 with .6 Magnesium
Eastern States 10-10-10 LC with 1.2 Magnesium
Eastern States 10-10-10 SM with 1.2 Magnesium
Eastern States 15-10-10
Eastern States Green Lawn
Eastern States Muriate of Potash 60%
Eastern States Nitrogen Solution 37
Eastern States Start-N-Gro
Eastern States 20% Superphosphate

EDGEWOOD FARMS, INC., Marysville, Ohio

Edgewood Farms Boost
Edgewood Farms Rose Food

THE ESPOMA CO., P. O. Box 431, Millville, N. J.

Bulb-Tone
Espoma
Espoma 10-6-4
Espoma Garden
Espoma Rose Food
Holly-Tone

FAESY & BESTHOFF, INC., 25 E. 26th St., New York, N. Y.

F & B Cottonseed Meal
F & B Pure Steamed Bone Meal

FERRO CORPORATION, 4150 E. 56th St., Cleveland, Ohio

Ferro Agricultural FTE - 501
Ferro Agricultural FTE - 502
Ferro FTE

FIESTAR, INC., 665 Fifth Ave., New York, N. Y.

Fiestar

G-D GARDEN PRODUCTS, INC., 11th & RR Ave., Huntington Sta., N. Y.

G-D All Purpose 5-10-5
G-D Economy 10-6-4
Green D Azalea Food
Green D Evergreen Food
Green D 50% Organic 10-6-4
Green D 100% Organic 10-6-4
Green D Plant Food
Green D Rose Food
Green D Tomato Food

THE GARDEN CENTER INC., 53 LaSalle Rd., W. Hartford, Conn.

Garden Center Lawn Fertilizer

GARDEN SUPPLY SALES CORP., 2120 Lake Ave., Rahway, N.J.

Farmanure

GEIGY AGRICULTURAL CHEMICALS, Saw Mill River Rd., Yonkers, N. Y.

Sequestrene 330 Fe Iron Chelate
Sequestrene NaFe Iron Chelate

GOLDENROD OIL MEAL SALES CO., 727 Beale St., Memphis, Tenn.

Goldenrod Brand 41% Protein Cottonseed Meal

GOULARD & OLENA, INC., Skillman, N. J.

G & O Doris Turf Special
G & O Evergreen Tree & Shrub Food
G & O Ground Bone
G & O Hyganic 10-6-4
G & O Muriate of Potash
G & O Prime Cottonseed Meal 41%
G & O Prizegro
G & O Rhodo-Azalea-Camellia-Holly-Blueberry
G & O Rose Food
G & O Special Food for Bulbs
G & O Sulphate of Ammonia
G & O Superphosphate 20%
G & O Tomato Food

W. R. GRACE & CO., Grace Chemical Div., 501 Home Federal Bldg., Memphis, Tenn.

Grace Urea Prills

GREGORY-DOYLE, INC., Huntington Station, N. Y.

Gregory-Doyle 10-6-4 50% Organic
Gregory-Doyle 10-10-10 50% Organic

HALSTEAD DISTRIBUTING CO., Mt. Kisco, N. Y.

5-10-5 for Lawns Gardens & Shrubs
10-6-4 for Lawns Gardens & Shrubs 50% Organic

THE CHARLES C. HART SEED CO., 304 Main St., Wethersfield, Conn.

Hart's All Organic
Hart's All Purpose Plant Food
Hart's Turf Food

HELLER GREENHOUSE LABORATORIES, 281 E. Pikes Peak Ave., Colorado Springs, Colo.

Heller-Gro

HERSHEY ESTATES, Hershey, Pa.

Ko-K-O Meal

A. H. HOFFMAN, INC., Landisville, Pa.

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

THE HUBBARD-HALL CHEMICAL CO., 28 Benedict St., Waterbury, Conn.

Castor Pomace
Cotton Hull Ashes
Dry Ground Fish
Green Gro 6-7-4
Green Ribbon Plant Food 5-10-5
HH Aluminum Sulphate
HH Bone Meal
HH Cow Manure & Inert Matter
HH Evergreen Food
HH Lawn Fertilizer 8-6-2
HH Lawn Fertilizer with Chlordane
HH Muriate of Potash 60%
HH Nitroganic
HH Plant Food
HH Rose Food
HH Sheep Manure & Inert Matter
HH Special Turf Fertilizer
HH Turf & Tree Food
HH Weed-Kil Lawn Food with 2-4 D Weed Killer
Horn & Hoof Meal
Liberty Fertilizer 0-15-30
Liberty Fertilizer 0-20-20
Liberty Fertilizer 0-20-20 with Boron
Liberty Fertilizer 4-8-20
Liberty Fertilizer 5-8-7
Liberty Fertilizer 5-10-5
Liberty Fertilizer 5-10-10
Liberty Fertilizer 5-10-10 with 1.2 Magnesium
Liberty Fertilizer 6-8-8 with 1.2 Magnesium
Liberty Fertilizer 7-7-7
Liberty Fertilizer 8-6-2
Liberty Fertilizer 8-6-4
Liberty Fertilizer 8-12-12 with 1.2 Magnesium
Liberty Fertilizer 8-16-16
Liberty Fertilizer 10-6-4
Liberty Fertilizer 10-10-10

THE HUBBARD-HALL CHEMICAL CO., Waterbury, Conn. - Cont.

Liberty Golf Course Fertilizer
Liberty New Super Spud with 1.2 Magnesium
Liberty Super Bacco Tobacco Fertilizer with 1.2 Magnesium
Liberty Super Corn Granular Type 10-10-10 Fertilizer
Liberty Super Gro with 1.2 Magnesium
Liberty Super Spud with 1.2 Magnesium
Liberty Tobacco Fertilizer
Liberty Triple Superphosphate
Nitrate of Potash
Precipitated Bone
Sulphate of Potash
Sul-Po-Mag
Superphosphate, 20%
Woodruff's Lawn & Tree Food

HUMPHREYS-GODWIN CO., 2246 Park Ave., Memphis, Tenn.

Dixie Brand 41% Cottonseed Meal

INTERNATIONAL MINERALS & CHEMICAL CORP., New Boston St., No. Woburn, Mass.

Fertilis 8-6-2 with .6 Magnesium
Fertilis 8-6-2 with .6 Magnesium and Chlordane
Fertilis Plant Food 5-10-5 with 1.2 Magnesium
Imported Nitrate of Potash
International 8-12-12 with 1.5 Magnesium
International 10-10-10 with .6 Magnesium
International Fertilizer 20% Superphosphate
International RAINBOW 8-12-12 with 1.2 Magnesium
Mello-Green Plant Food

KAPCO DIVISION of Summers Fertilizer Co. Inc., McKeesport, Pa.

Kapco 20-20-20

SPENCER KELLOGG & SONS, INC., 98 Delaware Ave., Buffalo, N. Y.

Spencer Kellogg's 32% Protein Old Process (Expeller) Linseed Oil Meal
Spencer Kellogg's 44% Protein Soybean Oil Meal - Solvent Extracted

LAWN-TEX, INC., 1640 W. Fulton St., Chicago, Ill.

Organi-Green

LEBANON CHEMICAL CORP., P. O. Box 532, Lebanon, Pa.

Lebanon Azalea Food
Lebanon Bone Meal
Lebanon Cow Manure
Lebanon Fertilizer 5-10-10
Lebanon Fertilizer 10-6-4
Lebanon Granulated 20% Superphosphate
Lebanon Green Gold
Lebanon Hi-Organic
Lebanon Plant Food
Lebanon Rose Food
Lebanon Sheep Manure
Lebanon Truck Crop

LEBANON CHEMICAL CORP., Lebanon, Pa. - Cont.

Lebanon Turf Organic
Lebanon Uniform

LEE PATTEN SEED CO., 360 Ninth St., Jersey City, N. J.

Patco Lawn Food

LEWIS INTERNATIONAL CO., 666 Clinton Ave., Newark, N. J.

Lincor Cow Manure
Lincor Garden Manure
Lincor Sheep Manure

L. B. LOVITT & CO., 314 Cotton Exchange Bldg., Memphis, Tenn.

"Lovit Brand" 41% Protein Cottonseed Meal - Prime Quality

MAEGEO DEHYDRATING CO., Lexington, N. C.

Dehydrated Sheep Manure
Fertal-Gro (Dehydrated Cow Manure)

THE MAMLON CO., 1089 Whalley Ave., New Haven, 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., 800 N. Lindbergh Blvd., St. Louis, Mo.

Lion Brand Ammonia Nitrate Fertilizer
Lion Prilled Urea Fertilizer

NATURAL PLANT FOOD CO., 1409 N. W. 50th St., Oklahoma City, Okla.

Longhorn Brand Cattle Manure
Ramshorn Brand Sheep Manure

NITRO-FORM AGRICULTURAL CHEMICALS CO., 92 Sunnyside Ave., Woonsocket, R. I.

Nitro-Form

NOTT MANUFACTURING CO., 200 S. Water St., Poughkeepsie, N. Y.

TRI-OGEN Rose Food

OLD FOX AGRICULTURAL SALES INC., 66 Valley St., E. Providence, R. I.

Old Fox Brand 0-15-30
Old Fox Brand 4-16-20
Old Fox Brand 5-10-10
Old Fox Brand 5-10-10 with 1.2 Magnesium
Old Fox Brand 6-3-6 for Tobacco with 1.2 Magnesium
Old Fox Brand 6-8-8 with 1.2 Magnesium
Old Fox Brand 6-10-10 with 1.2 Magnesium
Old Fox Brand 7-7-7
Old Fox Brand 8-16-16
Old Fox Brand 10-10-10
Old Fox Brand Superphosphate
Old Fox Brand Turf Food 8-6-2

OLIN MATHIESON CHEMICAL CORP., 32 South St., Baltimore, Md.

Mathieson 5-10-5
Mathieson 5-10-10
Mathieson 13-13-13
Mathieson Prilled Urea

PAX COMPANY, Div. Utah Cooperative Assoc., 580 W. 13th South St., Salt Lake City, Utah

Pax Crabgrass and Soil Pest Control

ROBERT B. PETERS CO., 323 N. 15th St., Allentown, Pa.

Peters Special 13-6-6
Peters Special 16-4-24
Peters Special 20-5-30
Peters Special 20-20-20
Peters Special 25-10-10

PLANT PRODUCTS CORP., Kennedy Ave., Blue Point, L.I., N.Y.

Soluble Fertilizer 12-32-12
Soluble Fertilizer 32-10-2

FRANK S. PLATT CO., Post Rd., Branford, Conn.

Platt's Lawn Food 10-5-5

HENRY A. POLLAK & CO., INC., Charlotte Ave., Hicksville, N.Y.

Grand Garden Plant Food

PROSPECT CO., Div. Bennett & Clayton Co., Inc., Prospect Plains, Cranbury, N. J.

Island Park 5-10-5 Plant Food
Princeton Park Lawn & Garden Fertilizer 5-10-5

RA-PID-GRO CORPORATION, 88 Ossian St., Dansville, N. Y.

Ra-Pid-Gro

THE RENARD CO., 223 Riverdale Ave., Yonkers, N. Y.

Plant Pen

RUHM PHOSPHATE & CHEMICAL CO., 813 S. Garden St., Columbia, Tenn.

Red Seal Brand Ruhm's Phosphate Rock

O. M. SCOTT & SONS CO., Marysville, Ohio

Scott's New Turf Builder
Scott's New Weed & Feed - Bonus
Scott's Organic

SEABOARD SEED CO., 701 S. Front St., Philadelphia, Pa.

Seaboard's Complete Lawn & Plant Food
Seaboard's Lawn Feeding Weed Killer

SEARS, ROEBUCK & CO., 925 So. Homan Ave., Chicago, Ill.

Cross Country Azalea-Camellia Food
Cross Country Bone Meal
Cross Country Bulb Food
Cross Country Cattle Manure
Cross Country Evergreen Food

SEARS, ROEBUCK & CO., Chicago, Ill. - Cont.

Cross Country Instant Plant Food
Cross Country Instant Rose Food
Cross Country Instant Tomato Food
Cross Country Lawn Food
Cross Country Lawn Food with Crabgrass Killer
Cross Country Lawn Food with Weed Killer
Cross Country Liquid Plant Food
Cross Country Plant Food
Cross Country Rose Food
Cross Country Sheep Manure
Cross Country Sulfate of Ammonia

SEWERAGE COMMISSION of the CITY of MILWAUKEE, P.O. Box 2079, Milwaukee, Wis.

Milorganite
Milorganite Plus 2, 4D

THE SHERWIN-WILLIAMS CO., 101 Prospect Ave., N.W., Cleveland, Ohio

Sherwin-Williams 32% Linseed Oil Meal (A Blend of Expeller and Solvent Extracted Meals)

M. L. SHOEMAKER, Div. Wilson & Co., Delaware Ave. & Venango St., Philadelphia, Pa.

M. L. Shoemaker's "Swift-Sure"

SOHIO CHEMICAL CO., Ft. Amanda & Adgate Rds., Lima, Ohio

Sohigro Urea Fertilizer Compound (coated)

THE SOUTHERN COTTON OIL CO., Memphis, Tenn.

Sco-Co 41% Protein Cottonseed Meal Prime Quality

ST. LOUIS NATIONAL STOCKYARDS CO., Exchange Bldg., National Stock Yards, Ill.

Wizard Brand Cow Manure
Wizard Brand Sheep Manure

THE STADLER FERTILIZER CO., 1010 Denison Ave., Cleveland, Ohio

Stadler's Gard-N-Gro
Stadler's Triple XXX Lawn & Tree Food

A. E. STALEY MFG. CO., Decatur, Ill.

44% Protein Solvent Extracted Soybean Oil Meal

STERLING FOREST PEAT HUMUS CO., INC., 25 Broad St., New York, N. Y.

Sterling Forest Soil-Fertilized

STIM-U-PLANT LABORATORIES, INC., 2077 Parkwood Ave., Columbus, Ohio

Stim-U-Plant 5-8-7
Stim-U-Plant 11-12-15

SWIFT & CO., Agricultural Chemical Div., Curtis Bay, Baltimore, Md.

Golden Vigoro 6-10-4
Golden Vigoro with End-o-Pest
Instant Vigoro
Par-Ex
Swift's Blenn Gran-U-Pels
Vigoro
Vigoro for Acid Loving Plants
Vigoro Bulb Food
Vigoro Lawn Starter
Vigoro Rose Food
Vitogro

TAYLOR CHEMICAL CORP., 9350 Wilshire Blvd., Beverly Hills, Calif.

Gro-Ano (Liquid Bat Guano)

TOWN & COUNTRY PRODUCTS, Div. Garfield Williamson, Inc., 1072 West Side Ave., Jersey City, N. J.

Green Pride Lawn Food

U. S. PHOSPHORIC PRODUCTS, Div. Tennessee Corp., P. O. Box 3269, Tampa, Fla.

Tencor Triple "46" 46% APA Triple Superphosphate

UNITED STATES STEEL CORP., 525 William Penn Place, Pittsburgh, Pa.

USS Ammonium Sulfate

UNIVERSAL CHEMICAL CO. INC., Box 195, West Lynn, Mass.

Electra Plant Food 5-10-3

VALLEY FEED & SUPPLY CO. INC., Union Rd., Spring Valley, N. Y.

Adorna
Adorna Azalea Food
Adorna Tree Food

WALGREN TREE EXPERTS INC., West Hartford, Conn.

Registered by The Hubbard-Hall Chemical Co., Waterbury, Conn.

Walgren Tree Food 8-6-2

WALKER-GORDON LABORATORY CO., Plainsboro, N. J.

Bovung

OSCAR F. WARNER, 24 East Aurora St., Waterbury, Conn.

Warner Grubedizer
Warner Lawn Food
Warner Tree Food

WESTERN COTTON OIL CO. Div. Anderson Clayton & Co. Inc., Pecos, Texas

Paymaster Brand 41% Protein Prime Quality Solvent Extracted Cottonseed Meal & Hydrolyzed Cottonseed & Soybean Oil

WHITNEY SEED CO. INC., 599-601 Perry St., Buffalo, N. Y.

Vital Brand Fertilizer 5-4-2 Plus Weed Killer
Vital Brand Lawn Fertilizer 10-6-4

WILBUR-ELLIS CO., 800 Second Ave., New York, N. Y.

"WIL-GRO" (Liquid fish fertilizer concentrate)

GARFIELD WILLIAMSON, INC., 1072 Westside Ave., Jersey City, N. J.

Plantspur
Wonderlawn Lawn Food

ANDREW WILSON, INC., Baltusrol Way, Springfield, N. J.

Wilson's Eureka Plant Food

S. D. WOODRUFF & SONS of Wethersfield, Inc., 304 Main St., Wethersfield, Conn.

Woodruff's Tuff Turf Turf Food

WOODRUFF LAWN PRODUCTS, Associated Seed Growers, Inc., Railroad Ave., Milford, Conn.

Gro-Sod Lawn Food
Weed-Nix Lawn Food

FERTILIZER INSPECTION FOR 1958

The Connecticut fertilizer law does not provide for compulsory limitation of the grades of fertilizer that may be sold in this State. However, because all authorities are agreed that a small number of grades can take care of all the needs of agriculture, and that standardization on a few grades will promote economy in the manufacture of fertilizer and aid in keeping prices down, ever since the compulsory limitation imposed by War Food Order No. 5 of 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.

Prior to the 1958-1959 season more than three-fourths of the mixed fertilizers sold in this State each year were of the recommended ratios and minimum grades. This year the percentage dropped to 69. This decrease appears to be due chiefly to an increase in the consumption of high-nitrogen fertilizers containing proportionately less phosphoric acid and potash than the approved ratios call for; for example, 1,197 tons more of the four grades 6-10-4, 10-5-5, 10-6-4 and 20-10-5 were purchased in 1958-1959 than in the previous year.

During the past season the Station agent collected samples of all registered brands that could be found on the market. The total number of samples analyzed was 53 fewer than the year before, but 4,050 more tons of fertilizer were sold.

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, 1958 and June 30, 1959 (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 of July 1, 1958 to June 30, 1959)

	No. of Samples	Tonnage	
I. Containing chiefly nitrogen:			
Nitrate of ammonia	4	755	
Nitrate of soda	3	674	
Sulphate of ammonia	4	88	
Cyanamid	3	170	
Urea	9	1,413	
Castor pomace	4	1,238	
Cottonseed meal	72	4,338	
Horn and hoof meal	2	13	
Linseed oil meal	11	352	
Soybean oil meal	2	244	
Tankage	...	2	
Other materials	7	2	
			9,289
II. Containing chiefly phosphoric acid:			
Superphosphate 18%	1	203	
20%	14	4,194	
46%	4	342	
Precipitated bone	7	66	
Phosphate rock	1	72	
			4,877
III. Containing chiefly potash:			
Muriate of potash	8	569	
Sulphate of potash	3	123	
Sulphate of potash-magnesia	1	73	
Cotton hull ashes	6	456	
			1,221
IV. Containing nitrogen and phosphoric acid:			
Dry ground fish	18	220	
Bone meal	13	500	
Other materials	2	1,226	
			1,946
V. Containing nitrogen and potash:			
Nitrate of potash	4	116	
			116
VI. Mixed fertilizers:			
Commercial mixtures	246	55,944[1]	
Special and home mixtures	12	6,782	
			62,726
VII. Miscellaneous:			
Borax	...	7	
Fritted trace elements	...	1	
Manganese sulphate	1	...	
Sheep and cattle manure	20	1,236	
Limestone and similar materials	4	...	
Fertilizer sold in small packages	87	...	
Other miscellaneous materials	19	72	
Check meals and fertilizers	20	...	
			1,316
Totals	612		81,491

[1] For distribution of this tonnage see next page.

MIXED FERTILIZER TONNAGE

Grades Approved for Connecticut

Grade	Tons	Grade	Tons
0-15-30	3,567	8-16- 8	18
0-20-20	715	8-16-16	2,671
0-25-25	377	10-10-10	11,456
5- 5-15	48	10-20-10	16
5- 8- 7	1,191	12-12-12	41
5-10- 5	2,484	12-24-12	5
5-10-10	8,433	13-13-13	31
6- 3- 6	3,658	15-15-15	3
6- 8- 8	2,643	15-30-15	1
6-12-12	572	16-32-16	3
8- 6- 2	620	18-18-18	1
8- 8- 8	40		
		Total	38,594

Other Grades (50 tons or more)

4-10- 0	51	6-10-10	189
4-10- 4	76	7- 0- 0	423
4-16-20	165	7- 7- 7	1,454
4.75- 4- 0	111	8- 6- 4	1,035
5- 2- 3	65	8-10-10	1,117
5- 4- 0	532	8-12-12	1,126
5- 5- 0	122	9- 8- 3	111
6- 4- 7	166	10- 5- 5	1,686
6- 7- 4	167	10- 6- 4	2,565
6- 8- 2	106	15-10-10	1,889
6- 8- 6	111	20-10- 5	1,237
6-10- 4	2,159	25- 0- 0	174
		Total	16,837

(Less than 50 tons)

2- 2- 0	10	6- 6- 8	10
3- 1- 1	8	6-18-18	13
3- 2- 1	42	7- 8- 5	5
3-12-12	5	7-10- 5	31
4- 4- 2	25	10- 8- 2	6
4- 6- 4	27	12- 4- 4	13
4- 6- 6	5	12- 6- 4	13
4- 8- 4	11	12-32-12	9
4- 8- 5	7	18- 8- 5	7
4- 8-20	16	20- 5-30	8
4-10- 0	51	23-21-17	17
4-12-16	16	24-12-12	21
5- 9- 6	28	25-10-10	5
5-10- 3	20	32-10- 2	5
5-15-30	29	Other grades	41
5-20-10	9		
		Total	513
		Grand total	55,944

I. Materials Chiefly Valuable for Nitrogen

Analyses of the 61 official samples of nitrogenous materials are given in Table 1. Fifty-eight of these met their guaranties and three were deficient. The substandard samples included one each of nitrate of soda, sulphate of ammonia and dried blood.

II. Materials Chiefly Valuable for Phosphoric Acid

Analyses of 14 official samples of 20 per cent superphosphate, one of the 18 per cent grade, two "triple" superphosphates, three samples of precipitated bone, and one sample of phosphate rock, are given in Table 2; all samples met their guaranties.

III. Materials Chiefly Valuable for Potash

Seven official samples of muriate of potash, two of cotton hull ashes, and one each of sulphate of potash and sulphate of potash-magnesia, were analyzed as shown in Table 3. Four of the muriate of potash samples were found deficient; the other materials met their guaranties.

IV. Materials Supplying Nitrogen and Phosphoric Acid

This group consists chiefly of dry ground fish and bone meal. Guaranties of "available" phosphoric acid are not required of such natural products, and most of them guarantee only total nitrogen and total phosphoric acid. Four official samples of dry ground fish, 10 of bone meal and two of "Milorganite" (a treated sewage sludge) were analyzed in 1959. Three of the bone meals were found deficient; all other samples met their guaranties. Analyses are given in Table 4.

V. Materials Supplying Nitrogen and Potash

The only fertilizer material on the Connecticut market falling in this category is nitrate of potash. Fertilizer grade potassium nitrate is required to contain at least 12 per cent of nitrogen and 44 per cent of soluble potash. Two official samples fully met their guaranties of 13 per cent nitrogen and 44 per cent potash. Analyses are given in Table 3.

VI. Mixed Fertilizers

Commercial Mixtures

Analyses of 235 official samples of mixed fertilizers are given in Table 5. Results are summarized as follows:

Total number of samples		235
Samples deficient in:		
one item	75	
two items	9	84
Percentage of samples meeting all guaranties		64
Total guaranties made[1]		679
Guaranties not met:		
nitrogen	58	
phosphoric acid	13	
potash	22	93
Percentage met		86

[1] Two hundred and nine samples with three guaranties and 26 with two guaranties (guaranties of minor elements not included).

Eighty-six per cent of all guaranties for major components were substantially met or exceeded.

Twenty-six samples guaranteed magnesium (1.2 per cent in 20 cases, 0.06 per cent in four cases and 0.9 and 0.02 per cent in one case each) in addition to the major components; all samples met their guaranties, but the sample guaranteeing 0.02 per cent was found to contain 40 times the guaranty. There were nine samples declaring boron (three each 0.11 and 0.08 per cent and one each 0.34, 0.20 and 0.035 per cent), of which all except two met their guaranties. One of the samples containing magnesium and boron also bore guaranties for trace amounts of copper, zinc, manganese, iron and molybdenum; it was deficient in copper, zinc and molybdenum.

Special and Home Mixtures

Twelve samples of special and home mixtures were analyzed during the year, mostly for tobacco growers. Five years ago there were 150 such samples, but of late years there has been a steady decline - partly because the larger growers made private arrangements for testing their own mixes and partly because less tobacco has been grown.

Since the composition of these 12 samples is not of public interest their analyses are not tabulated in this bulletin.

State Purchases of Fertilizer

Fertilizer materials and mixed goods supplied to State institutions on State purchase orders are regularly included in our annual inspection. Fertilizers so supplied are not exempt from payment of registration fees and tonnage taxes unless they are furnished to this 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	5	Table 1
Supplying phosphoric acid	5	Table 2
Supplying potash	3	Table 3
Supplying nitrogen and phosphoric acid	1	Table 4
Mixed fertilizers	26	Table 5
Total	40	

VII. Miscellaneous

Sheep and cattle manures. These products must bear guaranties of nitrogen, either total or "available" phosphoric acid, and potash. Of the 19 official samples analyzed during the 1958-1959 season 14 met all guaranties, four were deficient in nitrogen and one contained too little potash.

Limestone and similar materials. Because the legal definition of "commercial fertilizers" (G.S. 22-105) 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 and Federal and State agencies. Analyses of two samples of limestone and one each of gypsum and hydrated lime 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 every one of 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 1958-1959 season 87 samples of small package fertilizers were analyzed. Seventy-four of these, or 85 per cent, met all guaranties, and 93 per cent of the total of 251 guaranties of major components were met. This is a considerably better showing than that made this year by fertilizers sold in 100 lb. bags. Analyses are given in Table 8.

Other miscellaneous materials. Twenty other miscellaneous products were examined. Analyses of 13 of these samples are given in Table 9; the other seven were not of general interest.

Check meals and fertilizers. Collaboration was continued with the various check analysis programs: Eleven soybean oil meal samples received from the American Oil Chemists' Society were analyzed for nitrogen, and the usual fertilizer determinations were made on nine check fertilizers supplied by the National Plant Food Institute.

MAINTENANCE OF GUARANTIES

The maintenance of guaranties as compiled from analyses of ingredient materials and mixed goods (Tables 1-6 and 8) is shown in the following tabulation. Deficiencies of 0.1 per cent or less in nitrogen, 0.2 per cent or less in phosphoric acid and potash, and 20 per cent of the claimed value in the case of minor elements, are not counted. The proportion of guaranties substantially met was 89 per cent.

	No. of samples	No. of guaranties	Deficiencies
Nitrate of ammonia	4	4	0
Nitrate of soda	3	3	1
Sulphate of ammonia	3	3	1
Cyanamid	3	3	0
Urea	6	6	0
Castor pomace	3	3	0
Cottonseed meal	24	24	0
Horn and hoof meal	1	1	0
Linseed oil meal	6	6	0
Soybean oil meal	1	1	0
Miscellaneous nitrogenous materials	7	7	1
Superphosphate	18	18	0
Precipitated bone	3	3	0
Phosphate rock	1	1	0
Muriate of potash	7	7	4
Nitrate of potash	4	4	0
Sulphate of potash	1	1	0
Sulphate of potash-magnesia	1	1	0
Cotton hull ashes	2	2	0
Dry ground fish	4	8	0
Bone meal	10	20	3
"Milorganite"	2	4	0
Mixed fertilizer	235	719	98
Sheep and cattle manure	19	57	5
Small package fertilizers	87	252	16
Totals	455	1,158	129
Per cent guaranties met			89

TABLE 1.

ANALYSES OF MATERIALS SUPPLYING CHIEFLY NITROGEN

No.	Manufacturer or jobber and dealer	Per cent nitrogen F	Per cent nitrogen G
	NITRATE OF AMMONIA		
7980	AEROPRILLS. American Cyanamid Co., New York, N. Y. State purchase, Southbury Training School, Southbury.	33.56	33.50
8131	AEROPRILLS. American Cyanamid Co., New York, N. Y. State purchase, Conn. Reformatory, Cheshire.	33.52	33.50
8156	AEROPRILLS. American Cyanamid Co., New York, N. Y. State purchase, Fairfield State Hospital, Newtown.	34.22	33.50
8453	Lion. Monsanto Chemical Co., St. Louis, Mo. Sampled at A. N. Pierson, Inc., Cromwell.	33.56	33.50
	NITRATE OF SODA		
8422	Arcadian. Allied Chemical Corp., Hopewell, Va. Sampled at Walter M. Simmons & Sons, Inc., Granby. Sodium found, 26.99%.	15.70	16.00
7631	Chilean, Champion. Chilean Nitrate Sales Corp., New York, N. Y. Sampled at American Sumatra Tobacco Corp., Bloomfield. Sodium found, 26.40%.	16.12	16.00
7665	Chilean, Champion. Chilean Nitrate Sales Corp., New York, N. Y. Sampled at The Hartman Tobacco Co., Bloomfield. Sodium found, 26.18%.	16.00	16.00
	SULPHATE OF AMMONIA		
8427	Armour. Armour Fertilizer Works, Box J, Carteret, N. J. Sampled at Armour Fertilizer Works, So. Windsor.	20.50	20.50
8432	G & O. Goulard & Olena, Inc., Skillman, N. J. Sampled at Cadwell & Jones, Inc., Hartford	20.50	20.75
7866	USS. United States Steel, Pittsburgh, Pa. Sampled at McArdle's Seed Co., Greenwich.	21.32	21.00

~~~ indicates deficiencies.

TABLE 1.

ANALYSES OF MATERIALS SUPPLYING CHIEFLY NITROGEN

No.	Manufacturer or jobber and dealer	Per cent nitrogen F	Per cent nitrogen G
	CYANAMID		
7742	AERO. American Cyanamid Co., New York, N. Y. Sampled at Eastern States Farmers' Exchange, Inc., Bethel.	21.24	21.00
8109	AERO. American Cyanamid Co., New York, N. Y. Sampled at Eastern States Farmers' Exchange, Inc., Buckland.	22.89	21.00
8130	AERO. American Cyanamid Co., New York, N. Y. State purchase, Conn. Reformatory, Cheshire.	21.02	21.00
	UREA		
8423	Golden. Allied Chemical Corp., Hopewell, Va. Sampled at Walter M. Simmons & Son, Inc., Granby.	30.88	30.50
7827	AERO. American Cyanamid Co., New York, N. Y. Sampled at Eastern States Farmers' Exchange, Inc., No. Haven.	45.74	45.00
8199	AERO. American Cyanamid Co., New York, N. Y. Sampled at Christensen-Rand, Inc., Wilson.	45.84	45.00
8090	duPONT URAMITE. E. I. duPont deNemours & Co., Wilmington, Del. Sampled at Gardener's Center, Inc., Darien.	38.36	38.00
8124	Grace. W. R. Grace & Co., Memphis, Tenn. State purchase, State Highway Dept., Portland.	45.48	45.00
8365	Lion. Monsanto Chemical Co., St. Louis, Mo. Sampled at The Hubbard-Hall Chemical Co., Windsorville.	45.36	45.00
	CASTOR POMACE		
7632	The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at American Sumatra Tobacco Corp., Bloomfield.	6.22	5.50
7633	The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at American Sumatra Tobacco Corp., Bloomfield.	6.38	5.50
7829	The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Eastern States Farmers' Exchange, Inc., No. Haven.	6.56	5.50
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TABLE 1.

ANALYSES OF MATERIALS SUPPLYING CHIEFLY NITROGEN

No.	Manufacturer or jobber and dealer	Per cent nitrogen F	Per cent nitrogen G
	COTTONSEED MEAL		
7658	Cocke-Sure 41%. Cocke & Co., Atlanta, Ga. Sampled at American Sumatra Tobacco Corp., Bloomfield.	6.98	6.56
7659	Cocke-Sure 41%. Cocke & Co.,Atlanta, Ga. Sampled at American Sumatra Tobacco Corp., Bloomfield.	6.68	6.56
8169	Corenco. Consolidated Rendering Co., Boston, Mass. Sampled at Clapboard Hill Feed Co., Canaan.	6.58	6.56
7842	F & B. Faesy & Besthoff, Inc., New York, N. Y. Sampled at McArdle's Seed Co., Greenwich.	6.70	6.00
7602	Golden Rod 41%. Goldenrod Oil Meal Sales Co., Memphis, Tenn. Sampled at Cullman Bros., Inc., Granby.	6.84	6.56
7603	Golden Rod 41%. Goldenrod Oil Meal Sales Co., Memphis, Tenn. Sampled at Cullman Bros., Inc., Granby.	6.86	6.56
7604	Golden Rod 41%. Goldenrod Oil Meal Sales Co., Memphis, Tenn. Sampled at Cullman Bros., Inc., Granby.	6.92	6.56
7898	G & O. Goulard & Olena, Inc., Skillman, N. J. Sampled at Cadwell & Jones, Inc., Hartford.	6.64	6.56
7550	Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn. Sampled at Cullman Bros., Inc., Simsbury.	6.56	6.56
7551	Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn. Sampled at Cullman Bros., Inc., Simsbury.	6.56	6.56
7552	Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn. Sampled at Cullman Bros., Inc., Simsbury.	6.56	6.56
7554	Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn. Sampled at Hatheway & Steane Corp., West Suffield.	6.62	6.56
7556	Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn. Sampled at Hatheway & Steane Corp., West Suffield.	6.56	6.56

TABLE 1.

ANALYSES OF MATERIALS SUPPLYING CHIEFLY NITROGEN

No.	Manufacturer or jobber and dealer	Per cent nitrogen F	Per cent nitrogen G
7557	Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn. Sampled at Hatheway & Steane Corp., West Suffield.	6.72	6.56
7558	Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn. Sampled at Hatheway & Steane Corp., West Suffield.	6.56	6.56
7559	Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn. Sampled at L. B. Haas & Co., Hazardville.	6.72	6.56
7560	Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn. Sampled at American Sumatra Tobacco Corp., Bloomfield.	6.78	6.56
7630	Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn. Sampled at American Sumatra Tobacco Corp., Bloomfield.	6.80	6.56
7634	Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn. Sampled at American Sumatra Tobacco Corp., Bloomfield.	6.90	6.56
7663	Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn. Sampled at The Hartman Tobacco Co., Bloomfield.	6.62	6.56
7664	Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn. Sampled at The Hartman Tobacco Co., Bloomfield.	6.68	6.56
7999	"Lovit Brand" 41%. L. B. Lovitt & Co., Memphis, Tenn. Sampled at The Hubbard-Hall Chemical Co., Portland.	6.56	6.56
8447	Sco-Co 41%. The Southern Cotton Oil Co., Memphis, Tenn. Sampled at Gardener's Center, Inc., Darien.	6.56	6.56
8176	Paymaster Brand 41%. Western Cotton Oil Co., Pecos, Texas. Sampled at Libner Grain Co. Inc., Norwalk.	6.98	6.56
	HORN & HOOF MEAL		
8009	The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at L. B. Haas & Co., Hazardville.	13.12	13.00

TABLE 1.

ANALYSES OF MATERIALS SUPPLYING CHIEFLY NITROGEN

No.	Manufacturer or jobber and dealer	Per cent nitrogen F	Per cent nitrogen G
	LINSEED OIL MEAL		
7660	Archer Quality 34%. Archer-Daniels-Midland Co., Minneapolis, Minn. Sampled at The Hartman Tobacco Co., Bloomfield.	5.64	5.44
7661	Archer Quality 34%. Archer-Daniels-Midland Co., Minneapolis, Minn. Sampled at The Hartman Tobacco Co., Bloomfield.	5.58	5.44
8006	Maple Leaf 34%. Canada Linseed Oil Mills Ltd., Montreal, Canada. Sampled at L. B. Haas Co., Hazardville.	5.60	5.44
7555	Spencer Kellogg's 32%. Spencer Kellogg & Sons, Inc., Buffalo, N. Y. Sampled at Hatheway & Steane Corp., West Suffield.	5.86	5.12
7549	Sherwin-Williams 32%. The Sherwin-Williams Co., Cleveland, Ohio. Sampled at Cullman Bros., Inc., Simsbury.	5.84	5.12
7553	Sherwin-Williams 32%. The Sherwin-Williams Co., Cleveland, Ohio. Sampled at Cullman Bros., Inc., Granby.	5.82	5.12
	SOYBEAN OIL MEAL		
7596	Staley's 44%. A. E. Staley Mfg. Co., Decatur, Ill. Sampled at Cullman Bros., Inc., Simsbury.	7.30	7.04
	MISCELLANEOUS		
7844	Agrinite. American Agricultural Chemical Co., No. Weymouth, Mass. Sampled at McArdle's Seed Co., Greenwich.	7.00	7.00
8454	Cal-Nitro. Bradley & Baker, New York, N. Y. Sampled at A. N. Pierson, Inc., Cromwell.	20.52[1]	20.50
8376	Breck's Feed No Weed. Joseph Breck & Sons, Boston, Mass. Sampled at Vittner's Garden Center Inc., Manchester.	25.60[2]	25.00

[1] Nitrate nitrogen, 10.46%; ammonia nitrogen, 10.04%; soluble organic nitrogen, 0.02%.

[2] Nitrate nitrogen, 2.25%; ammonia nitrogen, 0.64%; soluble organic nitrogen, 22.71%.

TABLE 1.

ANALYSES OF MATERIALS SUPPLYING CHIEFLY NITROGEN

No.	Manufacturer or jobber and dealer	Per cent nitrogen F	Per cent nitrogen G
8088	Dried Blood. Brookside Nurseries, Inc., Darien, Conn. Sampled at Brookside Nurseries, Inc., Darien.	11.92	12.50
8354	duPONT NuGREEN. E. I. duPont deNemours & Co., Wilmington, Del. Sampled at New Haven Rendering Co., West Haven.	45.56	45.00
7845	PAX. Pax Company, Salt Lake City, Utah. Sampled at McArdle's Seed Co., Greenwich.	8.64[3]	7.00
7711	Bonus Weed & Feed. O. M. Scott & Sons Co., Marysville, Ohio. Sampled at Herold's, Guilford.	25.60[4]	25.00

~~ indicates deficiencies.

[3] Nitrate nitrogen, 0.24%; ammonia nitrogen, 7.36%; soluble organic nitrogen, 0.40%; inactive insoluble nitrogen, 0.64%.

[4] Nitrate nitrogen, 0.00%; ammonia nitrogen, 0.32%; soluble organic nitrogen, 13.77%; inactive insoluble nitrogen, 11.51%.

TABLE 2. ANALYSES OF SUPERPHOSPHATE, ETC.

Station No	Manufacturer or jobber and dealer	Per cent phosphoric acid			
		Citrate-insoluble	Total	"Available" F	"Available" G
	SUPERPHOSPHATE				
8401	18%. American Agricultural Chemical Co., No. Weymouth, Mass. Sampled at H. L. Oppenheimer & Sons, West Suffield.	0.50	20.00	19.50	18.00
7863	Agri-Phos. American Agricultural Chemical Co., No. Weymouth, Mass. Sampled at McArdle's Seed Co., Greenwich.	0.40	22.55	22.15	20.00
7978	Agri-Phos. American Agricultural Chemical Co., No. Weymouth, Mass. State purchase, Southbury Training School, Southbury.	0.38	21.55	21.17	20.00
8005	Agri-Phos. American Agricultural Chemical Co., No. Weymouth, Mass. State purchase, Osborn Prison Farm, Enfield.	0.88	22.30	21.42	20.00
8385	Agri-Phos. American Agricultural Chemical Co., No. Weymouth, Mass. State purchase, Mansfield Training School, Mansfield Depot.	0.13	21.55	21.42	20.00
8125	Trebo-Phos. American Cyanamid Co., New York, N. Y. State purchase, State Highway Dept., Portland.	1.30	49.20	47.90	46.00
8196	20%. Armour Fertilizer Works, Carteret, N. J. Sampled at Armour Fertilizer Works, South Windsor.	1.60	21.72	20.12	20.00
8104	20%. Consolidated Rendering Co., Boston, Mass. Sampled at A. E. Shedd Co. Inc., Norwich.	0.28	21.63	21.35	20.00
8352	20%. Consolidated Rendering Co., Boston, Mass. Sampled at New Haven Rendering Co., West Haven.	1.03	22.85	21.82	20.00
7986	20%. Davison Chemical Co., Baltimore, Md. Sampled at Checkerboard Feed Store, New Milford.	0.70	23.10	22.40	20.00
7605	20%. Eastern States Farmers' Exchange, Inc., West Springfield, Mass. Sampled at Ayer & Simmons, Inc., Granby.	0.83	22.90	22.07	20.00
8433	20%. Goulard & Olena, Inc., Skillman, N. J. Sampled at Cadwell & Jones, Inc., Hartford.	0.75	22.82	22.07	20.00
7836	20%. The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at The Hubbard-Hall Chemical Co., North Haven.	0.65	22.20	21.55	20.00
7943	20%. The Hubbard-Hall Chemical Co., Waterbury, Conn. State purchase, Conn. State Farm for Women, Niantic.	0.65	22.90	22.25	20.00
7666	Triple. The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at The Hartman Tobacco Co., Bloomfield.	0.73	48.60	47.87	46.00
7601	Triple. The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Cullman Bros., Inc., Granby.	0.80	47.80	47.00	46.00
7837	20%. International Minerals & Chemical Corp., No. Woburn, Mass. State purchase, Conn. State Hospital, Middletown.	0.28	20.30	20.02	20.00
7901	20%. Lebanon Chemical Corp., Lebanon, Pa. Sampled at Cadwell & Jones, Inc., Hartford.	0.50	22.10	21.60	20.00
	PRECIPITATED BONE PHOSPHATE				
7597	The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Cullman Bros., Inc., Simsbury.	0.33	43.60	43.27	42.00
7600	The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Cullman Bros., Inc., Granby.	0.35	47.40	47.05	42.00
7627	The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at L. B. Haas & Co., Hazardville.	5.30	45.90	40.60	38.00
	PHOSPHATE ROCK				
7939	The American Agricultural Chemical Co., No. Weymouth, Mass. Sampled at H. S. Coe & Co. Inc., Waterbury.	28.20	32.10[1]	3.90	3.00

[1] Guaranteed, 31.0%.

TABLE 3. ANALYSES OF POTASH SALTS, ETC.

No.	Manufacturer or jobber and dealer	Per cent potash F	Per cent potash G
	MURIATE OF POTASH		
7839	American Agricultural Chemical Co., No. Weymouth, Mass. Sampled at McArdle's Seed Co., Greenwich.	58.84	60.00
8008	American Agricultural Chemical Co., No. Weymouth, Mass. State purchase, Osborn Prison Farm, Enfield.	61.64	60.00
7944	Consolidated Rendering Co., Boston, Mass. State purchase, Conn. State Farm for Women, Niantic.	59.02	60.00
8355	Consolidated Rendering Co., Boston, Mass. Sampled at New Haven Rendering Co., W. Haven.	58.63	60.00
7826	Eastern States Farmers' Exchange, Inc., W. Springfield, Mass. Sampled at Eastern States Farmers' Exchange, No. Haven.	61.20	60.00
7998	The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at The Hubbard-Hall Chemical Co., Portland.	60.00	60.00
8129	The Hubbard-Hall Chemical Co., Waterbury, Conn. State purchase, Conn. Reformatory, Cheshire.	58.94	60.00
	NITRATE OF POTASH		
7625[1]	The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Hatheway & Steane Corp., West Suffield.	44.92	44.00
8455[2]	International Minerals & Chemical Corp., No. Woburn, Mass. Sampled at A. N. Pierson, Inc., Cromwell.	45.96	44.00
	SULPHATE OF POTASH		
8011	The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at L. B. Haas & Co., Hazardville.	50.00	48.00
	SULPHATE OF POTASH AND MAGNESIA		
7662	The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at The Hartman Tobacco Co., Bloomfield.	22.16	22.00

TABLE 3. ANALYSES OF POTASH SALTS, ETC.

No	Manufacturer or jobber and dealer	Per cent potash F	Per cent potash G
	COTTON HULL ASHES		
7624	The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Hatheway & Steane Corp., West Suffield.	34.38	unit basis
8010	The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at L. B. Haas & Co., Hazardville.	38.42	unit basis

~~~ indicates deficiencies.

[1] Nitrogen guaranteed, 13.0%; found, 13.16%.

[2] Nitrogen guaranteed, 13.0%; found, 13.0%.
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TABLE 4. ANALYSES OF GROUND FISH, BONE, ETC.

Station No.	Manufacturer or jobber and dealer	Per cent nitrogen			Per cent phosphoric acid		Mechanical analysis (per cent)	
		Ammoniacal	Total found	Total guaranteed	Total found	Total guaranteed	Finer than 1/50 inch	Coarser than 1/50 inch
	DRY GROUND FISH							
7598	The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Cullman Bros., Inc., Simsbury.		10.98	9.50	8.00	5.00		
7599	The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Cullman Bros., Inc., Granby.		10.28	9.50	6.60	5.00		
7606	The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Hatheway & Steane Corp., W. Suffield.		10.62	9.50	7.30	5.00		
7626	The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at L. B. Haas & Co., Hazardville.		10.68	9.50	6.80	5.00		
	BONE MEAL							
8392	American Agricultural Chemical Co., No. Weymouth, Mass. Sampled at Rose-Hurst Farm, Woodbridge.	0.00	2.44	1.50	27.08	25.00	53.0	47.0
7936	Armour Fertilizer Works, Carteret, N. J. Sampled at C. A. Cowles, Inc., Plantsville.	0.00	3.20	2.30	24.60	23.00	54.0	46.0
8087	Brookside Nurseries, Inc., Darien, Conn. Sampled at Brookside Nurseries, Inc., Darien.	0.00	2.55	[1]	13.65	21.00		
8175	Consolidated Rendering Co., Boston, Mass. Sampled at Libner Grain Co., Inc., Norwalk.	0.00	2.58	2.00	27.90	22.00	59.0	41.0
8387	Consolidated Rendering Co., Boston, Mass. State purchase, Mansfield Training School, Mansfield Depot.	0.00	2.82	2.00	27.40	22.00	56.0	44.0
7843	Faesy & Besthoff, Inc., New York, N. Y. Sampled at McArdle's Seed Co., Greenwich.	0.08	2.52	2.47	27.60	23.00	60.0	40.0
6418	Goulard & Olena, Inc., Skillman, N. J. Sampled at Peter Cascio Nursery, West Hartford.	0.00	5.95	3.50	19.40	22.00	6.0	94.0
6421	Goulard & Olena, Inc., Skillman, N. J. Sampled at Peter Cascio Nursery, West Hartford.	0.00	6.15	3.50	19.50	22.00	4.0	96.0
7899	Goulard & Olena, Inc., Skillman, N. J. Sampled at Cadwell & Jones, Inc., Hartford.	0.00	2.66	2.40	25.35	20.00	52.0	48.0
7971	The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at New London Grain Co., New London.	0.00	2.66	2.00	29.40	23.00	46.0	54.0
	MILORGANITE							
7940	Sewerage Commission of the City of Milwaukee, Milwaukee, Wis. Sampled at H. C. Coe & Co. Inc., Waterbury.	0.00	7.50	5.50	4.65[2]			
8446	Sewerage Commission of the City of Milwaukee, Milwaukee, Wis. Sampled at Wayne Feed Supply Co., Plainville.	0.00	6.76	5.00	4.35[3]			

~~~ indicates deficiencies.

[1] Nitrogen not guaranteed.

[2] Guaranteed "available" phosphoric acid, 4.0%; found, 3.95%.

[3] Guaranteed "available" phosphoric acid, 4.0%; found, 4.05%.
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TABLE 5. ANALYSES OF MIXED FERTILIZERS

CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

Station No.	Manufacturer and brand	Place of sampling	Nitrogen, per cent: Nitrate	Ammoniacal	Water-soluble	Water-insoluble	Total	Phosphoric acid, per cent: Citrate-insoluble	Total	So-called "available"	Potash, per cent: As muriate	Total
	AGRICULTURAL PRODUCTS CO., E. Providence, R.I.											
8337	Apco Kingston Lawn Food 10-6-4	Milford	0.52	9.16	0.16	2.42	12.26	0.68	6.02	5.34	2.88	3.38
8338	Apco Lawn & Garden Fertilizer 5-10-5	Milford	0.00	5.24	0.00	0.29	5.53	0.55	11.12	10.57	4.16	5.57
	AGRICULTURAL SUPPLY CO., West Haven, Conn.											
8334	Yale Special Mixture 8-6-2	Milford	0.00	4.80	2.92	0.30	8.02	0.28	7.15	6.87	2.31	3.07
	AMERICAN AGRICULTURAL CHEMICAL CO. North Weymouth, Mass.											
8384[1]	AA Quality Fertilizer 0-20-20	Mansfield Depot						0.43	20.90	20.47	14.83	20.40
8390[1]	AA Quality Fertilizer 0-20-20	Storrs						0.50	21.90	21.40	18.34	20.27
8403	AA Fertilizer 0-20-20	West Suffield						0.28	21.25	20.97	17.87	19.88
8391[2]	AA Fertilizer 5-10-10-1.2 Magnesium	Woodbridge	0.13	4.24	0.50	0.15	5.02	0.50	11.30	10.80	6.75	10.04
8402	AA Fertilizer 8-16-16	West Suffield	1.59	5.36	0.64	0.09	7.68	0.40	17.05	16.65	12.20	16.50
8405	AA Fertilizer 10-10-10	West Suffield	1.26	6.48	0.76	0.12	8.62	0.40	11.52	11.12	3.56	11.05
7942	AA Plant Food 5-10-5	Waterbury	0.00	4.56	0.19	0.15	4.90	0.28	11.07	10.79	4.86	5.44
8404	Agrico Country Club 8-6-4	West Suffield	0.00	6.04	0.96	1.32	8.32	0.33	6.77	6.44	3.41	4.68
8044	Agrico for Azaleas, Camellias & Rhododendrons 6-10-4	West Suffield	0.00	4.20	1.66	0.28	6.14	1.50	12.22	10.72	3.86	4.18
7972	Agrico for Gardens 5-10-5	New London	0.00	4.44	0.35	0.09	4.88	0.55	11.12	10.57	4.73	5.63
7970	Agrico for Lawns, Trees & Shrubs 6-10-4	New London	0.38	4.60	0.76	0.30	6.04	0.25	11.22	10.97	3.71	4.24
7913	Agrico for New England 5-8-7	Southington	0.00	4.68	0.17	0.15	5.00	0.38	10.60	10.22	9.08	9.29
7977	Agrico for New England 5-8-7	Norwich	0.21	4.64	0.08	0.15	5.08	0.58	11.53	10.95	8.99	9.72
7914[3]	Agrico for Potatoes 5-10-10-1.2 Magnesium	Southington	0.56	3.52	0.80	0.12	5.00	0.55	10.60	10.05	10.29	11.12
8400	Agrico for Top Dressing 7-7-7	West Suffield	1.20	4.76	0.65	0.00	6.61	0.28	7.30	7.02	5.99	7.37
8406	Agrico for Top Dressing 15-10-10	West Suffield	1.36	13.36	0.56	0.00	15.28	0.35	10.40	10.05	7.30	8.90
7915	Agrico for Turf 6-8-2	Southington	0.00	3.20	0.44	2.36	6.00	0.40	8.70	8.30	1.94	2.49
8042	Agrico for Turf 10-6-4	West Suffield	0.00	3.80	2.75	3.33	9.88	0.63	7.10	6.47	3.76	4.27
7864	Agrico Pesticide & Turf Food 6-10-4	Greenwich	0.46	4.20	1.04	0.30	6.00	0.48	11.00	10.52	3.62	4.02
8043	Agrico Phosphate & Potash 0-20-20	West Suffield						0.63	20.20	19.57	17.38	19.37
8047	Agrico Rose Food 5-9-6	Stamford	0.00	2.24	1.12	1.92	5.28	0.55	9.67	9.12	5.83	6.69

~~~ indicates deficiencies.

[1] State purchase.

[2] Magnesium guaranteed, 1.2%; found, 1.69%.

[3] Magnesium guaranteed, 1.2%; found, 1.24%.
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TABLE 5. ANALYSES OF MIXED FERTILIZERS CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

Station No.	Manufacturer and brand	Place of sampling	Nitrogen, per cent: Nitrate	Nitrogen, per cent: Ammoniacal	Nitrogen, per cent: Water-soluble	Nitrogen, per cent: Water-insoluble	Nitrogen, per cent: Total	Phosphoric acid, per cent: Citrate-insoluble	Phosphoric acid, per cent: Total	Phosphoric acid, per cent: So-called "available"	Potash, per cent: As muriate	Potash, per cent: Total
	ARMOUR FERTILIZER WORKS, Carteret, N. J.											
8158	Armour Armorganic Plant Food 5-5-0	Ridgefield	0.00	0.00	0.66	5.00	5.66	1.25	7.16	5.91		
8428	Armour Big Crop Fertilizer 0-20-20	South Windsor						0.87	17.95	17.08	15.96	17.77
8426	Armour Big Crop Fertilizer 5-8-7	South Windsor	0.26	4.64	0.48	0.00	5.38	1.05	10.91	9.86	10.17	11.85
7935	Armour Big Crop Fertilizer 5-10-5	Plantsville	0.00	3.84	1.02	0.14	5.00	1.00	11.80	10.80	4.61	5.47
8194	Armour Big Crop Fertilizer 5-10-10	South Windsor	0.00	4.64	0.50	0.00	5.14	0.70	10.70	10.00	7.45	11.20
7912	Armour Big Crop Fertilizer 7-7-7	Plainville	0.00	5.36	0.76	0.00	6.12	0.78	10.40	9.62	5.84	7.47
8142	Armour Big Crop Fertilizer 10-10-10	Bristol	0.19	8.56	0.54	0.11	9.40	0.48	11.32	10.84	6.99	10.70
8178	Armour Fish Pond Special 20-20-5	South Windsor	0.00	2.92	13.79	0.00	16.80	0.78	19.20	18.42	5.95	6.79
8191	Armour Home & Garden Special 5-10-5	South Windsor	0.00	4.52	0.32	0.16	5.00	0.70	11.62	10.92	5.22	5.22
8192	Armour Lawn Special 10-6-4	South Windsor	0.85	6.72	1.67	0.00	9.24	0.55	8.32	7.77	5.27	6.38
8141	Armour Vertagreen Complete Plant Food for Commercial Crops 2-15-30	Bristol	0.00	1.60	0.84	0.18	2.62	0.50	15.35	14.85	21.69	27.52
8193	Armour Vertagreen Complete Plant Food for Commercial Crops 3-12-12	South Windsor	0.39	2.44	0.47	0.00	3.30	1.73	14.50	12.77	6.19	10.98
8177	Armour Vertagreen for Acid-Loving Plants 5-10-10	South Windsor	0.00	3.92	0.47	1.09	5.48	0.85	13.30	12.45	9.14	10.18
7909	Armour Vertagreen Plant Food 5-10-5	Plainville	0.27	4.64	0.00	0.25	5.16	1.00	11.90	10.90	1.98	5.79
8425	Armour Vertagreen Plant Food for Commercial Crops 6-12-6	South Windsor	0.33	4.80	0.46	0.15	5.74	1.03	14.27	13.24	3.19	6.18
8190	Armour Vertagreen Plant Food for Commercial Crops 6-12-12	South Windsor	0.00	5.48	0.89	0.15	6.52	0.54	13.10	12.56	9.96	12.24
8424	Armour Vertagreen Plant Food for Commercial Crops Tobacco Special 6-4-7	South Windsor	0.21	1.88	3.64	0.75	6.48	0.35	4.97	4.62	0.45	7.13
7917	Armour Vertagreen Plant Food for Turf & Trees 10-6-4	Plantsville	0.47	8.60	0.48	1.55	11.10	0.65	7.60	6.95	3.84	4.43
8189	Armour Vertagreen Rose Food 5-10-5	South Windsor	0.31	4.24	0.24	1.07	5.86	0.98	12.52	11.54	8.91	9.04
8140	Armour Vertagreen Turf Food with Chlordane 10-6-4	Bristol	0.00	8.24	0.65	1.51	10.40	0.73	6.90	6.17	3.12	4.15
8123	Armour Vertagreen Turf Maker 8-6-2	Buckland	0.48	2.68	1.80	4.40	9.36	0.75	7.70	6.95	2.24	3.10
8195	Armour Vertagreen Turf Maker 8-6-2	South Windsor	0.00	2.88	1.59	4.01	8.48	0.78	7.50	6.72	2.24	2.65
	F. A. BARTLETT TREE EXPERT CO., Stamford, Conn.											
7754	Bartlett Green Tree Food 6-8-6	Danbury	0.33	4.40	0.64	0.97	6.34	0.63	8.40	7.77	5.06	6.14
	BENNETT & CLAYTON CO., INC., Cranbury, N. J.											
8170	B/C Brand Fertilizer 5-10-5	New Canaan	0.60	4.00	0.96	0.16	5.72	0.43	10.69	10.26	4.16	5.19

~~~ indicates deficiencies.
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TABLE 5. ANALYSES OF MIXED FERTILIZERS CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

Station No.	Manufacturer and brand	Place of sampling	Nitrogen, per cent: Nitrate	Nitrogen: Ammoniacal	Nitrogen: Water-soluble	Nitrogen: Water-insoluble	Nitrogen: Total	Phosphoric acid, per cent: Citrate-insoluble	Phosphoric acid: Total	Phosphoric acid: So-called "available"	Potash, per cent: As muriate	Potash: Total
	JOSEPH BRECK & SONS CORP., Boston, Mass.											
8378[4]	Breck's Garden-Gro 5-10-10 with 1.2 Magnesium	Manchester	0.00	3.60	1.42	0.00	5.02	1.13	11.27	10.14	6.91	10.04
8046	Breck's New Improved Turf-Gro 20-6-4	Stamford	1.70	5.32	8.64	3.30	18.96	0.50	6.47	5.97	2.70	4.36
8377	Breck's Turf-Gro 8-6-2	Manchester	0.00	5.48	1.08	1.56	8.12	0.60	6.92	6.32		2.46
	BROOKSIDE NURSERIES, INC., Darien, Conn.											
8086	Brookside's Natures Nutrients 6-6-8	Darien	0.00	0.00	0.97	6.13	7.10	0.63	9.18	8.55	1.21	8.53
	CADWELL & JONES, INC., Hartford, Conn.											
7895	J & C Hi-Organic Fertilizer 10-6-4	Hartford	0.88	4.84	2.40	1.62	9.74	0.45	7.40	6.95	3.00	4.59
	CHAMBERLIN & BARCLAY INC., Cranbury, N. J.											
8152	Old Reliable Fertilizer 10-6-4	Hamden	0.19	6.20	1.15	2.02	9.56	0.28	7.10	6.82	4.12	5.57
	CONSOLIDATED RENDERING CO., Boston, Mass.											
7737[1]	Corenco 0-15-30	Newtown						0.40	16.10	15.70	2.92	30.54
8339	Corenco 0-15-30	West Haven						0.35	16.34	15.99	25.26	25.92
7981[1,5]	Corenco 0-20-20 with Boron	Southbury						0.73	22.30	21.57	19.20	20.07
8134[1,6]	Corenco 0-20-20 with Boron	Cheshire						0.65	21.20	20.55	9.40	20.13
8102	Corenco 5-8-7	Norwich	0.53	3.40	0.92	0.21	5.06	0.40	8.80	8.40	5.94	7.44
8174	Corenco 5-10-5	Norwalk	0.00	3.40	1.54	0.24	5.18	0.60	11.30	10.70	3.73	5.80
8122	Corenco 5-10-5 Home Garden	Buckland	0.82	3.32	0.64	0.30	5.08	0.55	11.10	10.55	4.89	5.77
8351	Corenco 5-10-5 Rose Special	West Haven	0.00	2.64	1.52	1.06	5.22	0.85	12.00	11.15	8.72	9.47
8348	Corenco 5-10-10	West Haven	0.87	3.00	1.12	0.11	5.10	0.33	11.12	10.79	9.22	10.01
8388[1]	Corenco 5-10-10	Storrs	0.00	3.88	1.77	0.09	5.74	0.35	10.60	10.25	8.91	10.04
8395[7]	Corenco 5-10-10-1.2 Magnesium	West Haven	0.66	2.88	1.35	0.13	5.02	0.63	11.60	10.97	6.84	10.08
8397	Corenco 5-10-10 Liquid Fertilizer Concentrate	West Haven	0.36	3.40	1.72	0.00	5.48	0.00	10.30	10.30	9.07	10.70
8398	Corenco 6-3-6 Perfection	Springfield, Mass.	0.00	0.00	2.61	3.39	6.00	0.25	4.47	4.22	0.24	6.38
8399	Corenco 6-3-6 Premium Tobacco Grower	Springfield, Mass.	0.00	0.00	3.04	2.54	5.58	0.18	3.95	3.77	0.23	6.65

~~~ indicates deficiencies.

[1] State purchase.
[4] Magnesium guaranteed, 1.2%; found, 1.50%.
[5] Boron guaranteed, 0.11%; found, 0.10%.
[6] Boron guaranteed, 0.11%; found, 0.08%.
[7] Magnesium guaranteed, 1.2%; found, 1.35%.
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TABLE 5. ANALYSES OF MIXED FERTILIZERS CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

Station No.	Manufacturer and brand	Place of sampling	Nitrogen, per cent: Nitrate	Nitrogen, per cent: Ammoniacal	Nitrogen, per cent: Water-soluble	Nitrogen, per cent: Water-insoluble	Nitrogen, per cent: Total	Phosphoric acid, per cent: Citrate-insoluble	Phosphoric acid, per cent: Total	Phosphoric acid, per cent: So-called "available"	Potash, per cent: As muriate	Potash, per cent: Total
8132[1]	Corenco 6-8-8	Cheshire	0.90	3.88	1.08	0.22	6.08	0.20	8.41	8.21	5.71	8.05
8346[8]	Corenco 6-8-8-1.2 Magnesium	West Haven	0.89	3.96	0.96	0.19	6.00	0.40	9.17	8.77	1.00	8.01
8133[1]	Corenco 7-7-7	Cheshire	0.32	4.92	1.28	0.24	6.76	0.15	8.10	7.95	3.15	7.40
8349	Corenco 7-7-7	West Haven	0.00	5.20	1.65	0.15	7.00	0.20	8.25	8.05	4.82	7.68
8389[1]	Corenco 7-7-7	Storrs	1.33	3.92	1.64	0.11	7.00	0.35	8.40	8.05	6.37	7.40
8027	Corenco 8-6-4 Landscape	Thompsonville	2.52	4.76	0.12	1.14	8.54	0.40	7.11	6.71	3.85	4.43
7674	Corenco 8-6-4 Turf Green	Shelton	0.00	3.96	1.70	2.18	7.84	0.60	6.90	6.30	6.24	6.31
8356	Corenco 8-6-4 Turf Green	West Haven	0.00	2.00	3.70	2.78	8.48	0.45	7.35	6.90	4.69	4.78
8347[9]	Corenco 8-12-12-.9 Magnesium	West Haven	0.61	5.48	0.87	0.21	7.17	0.40	13.07	12.67	11.07	11.07
7979[1]	Corenco 8-16-16	Southbury	1.94	5.24	0.57	0.27	8.02	0.45	18.50	18.05	15.47	16.15
8155[1]	Corenco 8-16-16	Newtown	1.91	5.36	0.52	0.21	8.00	0.37	17.00	16.63	15.37	15.37
8358	Corenco 8-16-16	Wapping	1.83	5.60	0.57	0.00	8.00	0.39	16.00	15.61	14.91	16.40
8396	Corenco 10-5-5 Liquid Green	West Haven	0.00	1.72	8.32	0.00	10.04	0.00	5.07	5.07	2.87	5.16
7673	Corenco 10-6-4 Golf & Lawn	Shelton	0.00	5.08	3.68	1.60	10.36	0.30	6.40	6.10	4.97	4.97
7753	Corenco 10-6-4 Golf & Lawn	Danbury	0.00	0.44	7.70	1.18	9.32	0.43	8.45	8.02	4.22	4.43
8034	Corenco 10-6-4 Golf & Lawn	West Suffield	0.62	8.12	0.72	0.20	9.66	0.25	6.77	6.52	2.93	4.33
8353	Corenco 10-8-2 Timberline	West Haven	0.69	2.36	2.87	3.69	9.61	0.50	9.25	8.75	3.45	4.68
8103	Corenco 10-10-10	Norwich	0.47	7.16	1.30	0.15	9.08	0.40	11.11	10.71	9.11	10.30
8437[1]	Corenco 10-10-10	Willimantic	1.96	6.88	0.10	0.12	9.06	0.25	11.20	10.95	9.14	10.04
8015	Corenco Organic Turf Fertilizer 4.75-4-0	Thompsonville					5.20	0.93	7.70	6.77		
8350	Corenco Rhododendron, Azalea & Blueberry Special 7-7-7	West Haven	0.35	5.44	1.12	0.11	7.02	0.28	7.87	7.59	6.23	7.54
8014	Corenco Spurz-on 3-2.5-1.5	Thompsonville					4.28		3.77		0.19	2.81
	THE DAVEY TREE EXPERT Co., Kent, Ohio											
7872	Davey Tree Food 12-4-4	Old Greenwich	1.21	10.12	0.32	0.75	12.40	0.63	6.10	5.47	3.51	4.30
	R. G. DAVIS CO., New Haven, Conn.											
7675	Organo 10-5-5	New Haven	0.00	5.84	3.02	1.14	10.00	0.28	6.25	5.97	4.87	5.50
	DAVISON CHEMICAL CO., Baltimore, Md.											
7991	0-15-30 Davco Granulated Fertilizer	Torrington						0.81	20.33	19.52	24.04	24.21
8440[10]	0-15-30 Davco Granulated Fertilizer with Boron	Willimantic						0.60	15.90	15.30	11.82	29.58
8448	0-20-20 Davco Granulated Fertilizer	Willimantic						0.78	21.65	20.87	16.51	21.42

indicates deficiencies.

[1] State purchase.

[8] Magnesium guaranteed, 1.2%; found, 1.13%.

[9] Magnesium guaranteed, 0.9%; found, 1.25%.

[10] Boron guaranteed, 0.34%; found, 0.21%.

TABLE 5. ANALYSES OF MIXED FERTILIZERS CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

Station No.	Manufacturer and brand	Place of sampling	Nitrogen, per cent: Nitrate	Nitrogen, per cent: Ammoniacal	Nitrogen, per cent: Water-soluble	Nitrogen, per cent: Water-insoluble	Nitrogen, per cent: Total	Phosphoric acid, per cent: Citrate-insoluble	Phosphoric acid, per cent: Total	Phosphoric acid, per cent: So-called "available"	Potash, per cent: As muriate	Potash, per cent: Total
7984	5-10-5 Davco Granulated Turf & Garden Food (Prem)	New Milford	0.92	3.80	0.12	0.18	5.02	0.63	15.75	15.12	10.28	11.01
8438	5-10-10 Davco Granulated 3G Fertilizer	Willimantic	0.00	3.36	1.64	0.00	5.00	0.28	10.97	10.69	9.22	10.55
8441	5-10-10 Davco Quality Fertilizer	Willimantic	0.00	3.72	1.30	0.00	5.02	0.90	11.22	10.32	7.36	9.47
8198[11]	6-8-8 Davco Granulated 3G Fertilizer with Boron	Wilson	1.13	4.16	0.60	0.11	6.00	0.45	8.77	8.32	7.13	8.76
8439	7-7-7 Davco Granulated Fertilizer	Willimantic	1.39	4.48	0.91	0.00	6.78	0.23	8.00	7.77	7.28	7.88
7983	8-16-16 Davco Granulated 3G Fertilizer	New Milford	1.97	5.24	0.72	0.07	8.00	0.85	17.30	16.45	14.86	15.48
7985	10-6-4 Davco Granulated 3G Fertilizer	New Milford	2.22	6.40	0.60	0.00	9.22	0.30	9.70	9.40	5.21	6.18
7990	10-10-10 Davco Granulated 3G Fertilizer	Torrington	1.19	6.72	2.04	0.07	10.02	0.35	10.90	10.55	8.42	9.14
8197[12]	10-10-10 Davco Granulated 3G Fertilizer with Boron	Wilson	1.56	6.40	1.22	0.00	9.18	0.38	11.11	10.73	9.24	10.44
8442	15-10-10 Davco Granulated 3G Fertilizer	Willimantic	2.50	9.40	0.52	0.16	12.58	0.48	12.22	11.74	6.39	11.16
	DAYTON FERTILIZER CORP., Dayton, N. J.											
8173	Grand Garden Plant Food 6-10-4	New Canaan	1.18	4.68	0.56	0.14	6.56	0.33	10.82	10.49	3.89	4.52
8172	Grand Lawn Brand Hi-Organic Plant Food with Heptachlor 10-6-4	New Canaan	0.00	5.84	2.74	0.84	9.42	0.30	7.70	7.40	4.42	4.52
7870	Grand Union Brand Fertilizer 6-10-4	Greenwich	0.98	4.60	0.76	0.06	6.40	0.28	10.80	10.52	3.89	4.18
	EASTERN STATES FARMERS' EXCHANGE, INC. West Springfield, Mass.											
7672[13]	Eastern States 0-15-30 with Boron	Willimantic						0.40	14.45	14.05	28.15	30.88
7992	Eastern States 0-25-25	Torrington						0.33	27.30	26.97	23.43	24.80
7629[14]	Eastern States 5-10-10 S.M. with 1.2 Magnesium	Hazardville	0.69	3.72	0.80	0.09	5.30	0.38	10.42	10.04	7.66	11.39
8383[15]	Eastern States 8-12-12-1.2 Magnesium	Rockville	1.10	5.64	1.24	0.16	8.14	0.35	12.70	12.35	7.41	11.05
7628[16]	Eastern States 8-12-12 L.C. with 1.2 Magnesium	Hazardville	0.00	5.36	2.70	0.06	8.12	0.30	13.10	12.80	1.20	13.63
7740[17]	Eastern States 8-16-16-.6 Magnesium	Bethel	2.36	5.32	0.06	0.00	7.74	0.38	16.50	16.12	14.71	16.15
7669[18]	Eastern States 10-10-10-.6 Magnesium	Willimantic	0.84	6.80	1.72	0.16	9.52	0.33	10.80	10.47	10.17	11.12

~~~ indicates deficiencies.

[11] Boron guaranteed, 0.0825%; found, 0.17%.
[12] Boron guaranteed, 0.0825%; found, 0.15%.
[13] Boron guaranteed, 0.2%; found, 0.46%.
[14] Magnesium guaranteed, 1.2%; found, 3.28%.
[15] Magnesium guaranteed, 1.2%; found, 1.39%.
[16] Magnesium guaranteed, 1.2%; found, 1.60%.
[17] Magnesium guaranteed, 0.6%; found, 0.68%.
[18] Magnesium guaranteed, 0.6%; found, 0.64%.
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TABLE 5. ANALYSES OF MIXED FERTILIZERS

CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

Station No.	Manufacturer and brand	Place of sampling	Nitrogen, per cent: Nitrate	Nitrogen, per cent: Ammoniacal	Nitrogen, per cent: Water-soluble	Nitrogen, per cent: Water-insoluble	Nitrogen, per cent: Total	Phosphoric acid, per cent: Citrate-insoluble	Phosphoric acid, per cent: Total	Phosphoric acid, per cent: So-called "available"	Potash, per cent: As muriate	Potash, per cent: Total
8108[19]	Eastern States 10-10-10 L. C. with 1.2 Magnesium	Buckland	0.44	6.64	2.84	0.08	10.00	0.45	10.77	10.32	0.53	10.48
7623	Eastern States 15-10-10	Granby	0.80	12.28	1.69	0.05	14.82	0.13	10.87	10.74	9.08	10.40
7741[20]	Eastern States Green Lawn 10-5-5	Bethel	0.84	2.24	2.10	4.26	9.44	0.23	5.90	5.67	3.21	5.19
	THE ESPOMA CO., Millville, N. J.											
7865	Espoma 3-2-1	Greenwich	0.00	1.84	0.63	1.87	4.34	0.28	3.95	3.67	0.85	2.94
8168	Espoma Garden 4-6-6	New Canaan	0.00	5.28	0.31	0.79	6.38	0.33	5.35	5.02	8.96	10.01
8167	Holly-Tone 4-6-4	New Canaan	0.00	3.60	0.50	1.38	5.48	0.58	7.27	6.69	4.70	6.07
	FIESTAR, INC., New York, N. Y.											
7941	Fiestar 2-2-0	Waterbury	0.00	0.16	2.20	0.00	2.36	0.20	3.50	3.30		
	G-D GARDEN PRODUCTS, INC., Huntington Sta., N. Y.											
7819	G-D All Purpose 5-10-5	Hamden	0.47	3.16	0.88	0.23	4.74	0.10	10.95	10.85	4.83	5.63
7762	Green D 50% Organic 10-6-4	Hamden	0.33	4.84	4.70	0.29	10.16	0.33	6.70	6.37	3.73	4.49
7820	Green D 100% Organic 10-6-4	Hamden	0.00	2.64	5.90	2.70	11.24	0.38	6.75	6.37	2.03	4.15
	THE GARDEN CENTER INC., West Hartford, Conn.											
8331	Garden Center Lawn Fertilizer 10-6-4	West Hartford	0.76	4.24	3.20	1.82	10.02	0.63	7.09	6.46	3.73	4.21
	GOULARD & OLENA, INC., Skillman, N. J.											
6419	G & O Doris Turf Special 5-10-5	West Hartford	0.42	1.76	2.65	0.59	5.42	0.25	11.00	10.75	4.30	5.22
6420	G & O Doris Turf Special 5-10-5	West Hartford	0.00	1.36	1.74	0.96	4.06	0.65	11.00	10.35	4.58	5.34
8163[21]	G & O Hyganic 10-6-4	New Canaan	0.35	6.68	2.28	0.87	10.18	0.35	6.62	6.27	3.84	4.68
8162	G & O Prizegro 5-10-5	New Canaan	0.26	3.24	0.96	1.28	5.74	0.38	11.37	10.99	5.11	5.84
7841	G & O Special Food for Bulbs 5-6-15	Greenwich	0.00	3.84	0.70	1.10	5.64	0.53	7.70	7.17	14.24	15.97
7840	G & O Tomato 3-12-13	Greenwich	0.00	2.16	0.45	0.89	3.50	0.78	13.00	12.22	12.16	13.02

~~~ indicates deficiencies.

[19] Magnesium guaranteed, 1.2%; found, 1.50%.

[20] Magnesium guaranteed, 1.2%; found, 4.10%.

[21] Copper guaranteed, 0.0381%; found, 0.021%: Zinc guaranteed, 0.0341%; found, 0.045%: Manganese guaranteed, 0.0546%; found, 0.018%: Magnesium guaranteed, 0.02%; found, 0.80%: Boron guaranteed, 0.0351%; found, 0.041%: Iron guaranteed, 0.904%; found, 0.90%: Molybdenum guaranteed, 0.02%; found, 0.013%.
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TABLE 5. ANALYSES OF MIXED FERTILIZERS CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

Station No.	Manufacturer and brand	Place of sampling	Nitrogen, per cent: Nitrate	Nitrogen, per cent: Ammoniacal	Nitrogen, per cent: Water-soluble	Nitrogen, per cent: Water-insoluble	Nitrogen, per cent: Total	Phosphoric acid, per cent: Citrate-insoluble	Phosphoric acid, per cent: Total	Phosphoric acid, per cent: So-called "available"	Potash, per cent: As muriate	Potash, per cent: Total
	GREGORY-DOYLE, INC., Huntington Sta., N. Y.											
7982[1]	Gregory-Doyle 10-6-4 50% Organic	Southbury	0.26	3.96	0.32	4.62	9.16	0.30	7.97	7.67	4.22	5.10
8436[1]	Gregory-Doyle 10-6-4 50% Organic	New Britain	0.00	5.84	2.72	1.10	9.66	0.28	7.03	6.75	3.01	4.68
8154[1]	Gregory-Doyle 10-10-10	Newtown	0.00	4.28	3.63	2.13	10.04	0.48	10.20	9.72	7.98	10.08
	HALSTEAD DISTRIBUTING CO., Mt. Kisco, N. Y.											
8157	10-6-4 for Lawns Gardens & Shrubs 50% Organic	Ridgefield	1.46	6.72	2.52	1.36	12.06	0.28	8.70	8.42	4.20	5.10
	THE CHARLES C. HART SEED CO., Wethersfield, Conn.											
7890	Hart's All Purpose Plant Food 5-10-5	Wethersfield	1.27	3.16	0.52	0.21	5.16	0.10	10.60	10.50	2.46	4.97
7888	Hart's Turf Food 20-10-5	Wethersfield	0.00	2.68	14.78	2.54	20.00	0.50	13.50	13.00	5.13	5.41
	THE HUBBARD-HALL CHEMICAL CO., Waterbury, Conn.											
7996	Green Gro 6-7-4	Portland	0.76	4.00	0.48	0.86	6.10	0.58	8.42	7.84	4.00	4.43
7997	Green Ribbon Plant Food 5-10-5	Portland	0.79	3.04	1.04	0.19	5.06	0.73	11.34	10.61	4.49	5.47
7995	HH Evergreen Food 4-10-4	Portland	0.00	1.84	1.44	1.18	4.46	0.43	11.45	11.02	3.65	4.43
8105	HH Lawn Fertilizer 8-6-2	Norwich	0.52	3.56	3.44	0.70	8.22	0.50	6.52	6.02	2.20	2.62
8092	HH Lawn Fertilizer 8-6-2 with Chlordane	Norwich	0.17	3.36	2.95	0.66	7.14	0.53	6.57	6.04	1.74	2.46
7678	HH Nitroganic 5-4-0	New Haven	0.00	0.20	0.08	5.64	5.92	1.35	7.75	6.40		
8091	HH Plant Food 5-10-5	Darien	0.60	2.20	1.76	0.86	5.42	0.65	11.27	10.62	4.18	5.38
9339	HH Plant Food 5-10-5	Darien	0.11	2.00	1.96	1.07	5.14	0.65	10.32	9.67	4.90	5.50
7683	HH Rose Food 7-10-5	Hamden	0.90	4.20	1.00	1.54	7.64	1.43	12.70	11.27	0.58	6.35
8463	HH Special Turf Fertilizer 10-3-3	Portland	0.00	0.40	3.52	6.18	10.10	0.55	4.62	4.07	4.70	4.78
7679	HH Turf & Tree Food 10-6-4	Cheshire	0.54	5.16	3.64	1.88	11.22	0.53	7.30	6.77	4.17	4.43
8101	HH Weed-Kil Lawn Food 6-10-4 with 2,4-D	Norwich	0.00	4.92	1.24	0.78	6.94	1.55	12.50	10.95	3.64	4.52
8004	Liberty Fertilizer 0-15-30	Portland						0.00	15.52	15.52	28.06	29.43
8367	Liberty Fertilizer 0-20-20	Windsorville						0.58	21.85	21.27	16.24	20.07
8465[1,22]	Liberty Fertilizer 0-20-20 with Boron	Middletown						0.30	20.20	19.90	17.73	23.82
8368	Liberty Fertilizer 4-8-20	Windsorville	0.81	2.72	0.40	0.07	4.00	0.34	8.42	8.08	17.91	20.59
7758	Liberty Fertilizer 5-8-7	Danbury	0.56	3.80	0.65	0.11	5.12	0.30	8.90	8.60	6.52	7.13
8429[1]	Liberty Fertilizer 5-8-7	Windsor Locks	0.00	4.00	0.96	0.30	5.26	1.28	9.92	8.64	5.99	8.18

~~~ indicates deficiencies.

[1] State purchase.

[22] Boron found, 0.15%.
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TABLE 5. ANALYSES OF MIXED FERTILIZERS CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

Station No.	Manufacturer and brand	Place of sampling	Nitrogen, per cent: Nitrate	Nitrogen, per cent: Ammoniacal	Nitrogen, per cent: Water-soluble	Nitrogen, per cent: Water-insoluble	Nitrogen, per cent: Total	Phosphoric acid, per cent: Citrate-insoluble	Phosphoric acid, per cent: Total	Phosphoric acid, per cent: So-called "available"	Potash, per cent: As muriate	Potash, per cent: Total
7646[1]	Liberty Fertilizer 5-10-5	North Haven	0.78	1.32	1.68	1.00	4.78	0.38	11.40	11.02	4.91	5.25
7682	Liberty Fertilizer 5-10-5	Cheshire	0.00	3.32	1.57	0.23	5.12	0.58	10.65	10.07	4.37	5.22
7989	Liberty Fertilizer 5-10-5	Torrington	1.36	3.20	0.48	0.00	5.04	0.55	11.02	10.47	4.06	5.41
7668	Liberty Fertilizer 5-10-10	Willimantic	0.00	3.64	1.56	0.18	5.38	0.63	11.00	10.37	9.26	10.22
7976[1]	Liberty Fertilizer 5-10-10	Norwich	0.00	3.36	1.78	0.00	5.14	0.50	11.29	10.79	9.04	10.19
8007[1]	Liberty Fertilizer 5-10-10	Enfield	0.25	3.44	1.08	0.05	4.82	0.50	11.60	11.10	8.88	10.93
8135[1]	Liberty Fertilizer 5-10-10	Cheshire	0.00	4.68	0.02	0.30	5.00	0.35	11.24	10.89	1.53	10.78
8200[23]	Liberty Fertilizer 6-8-8-1.2 Magnesium and Boron	Wilson	0.00	4.44	1.40	0.00	5.84	0.45	8.50	8.05	0.74	8.08
8370[24]	Liberty Fertilizer 6-8-8-1.2 Magnesium	Windsorville	0.00	5.04	0.95	0.29	6.28	0.40	9.30	8.90	7.00	8.66
7975	Liberty Fertilizer 7-7-7	New London	0.39	5.48	0.96	0.17	7.00	0.40	8.25	7.85	6.18	7.10
7835	Liberty Fertilizer 8-6-2	North Haven	0.00	8.16	0.33	0.21	8.70	0.28	7.15	6.87	3.92	4.33
7834	Liberty Fertilizer 8-6-4	North Haven	0.00	4.04	2.89	0.91	7.84	0.35	6.80	6.45	4.20	4.81
8362[25]	Liberty Fertilizer 8-12-12-1.2 Magnesium	Windsorville	1.09	5.48	0.80	0.23	7.60	0.32	12.30	11.98	0.96	9.72
8366	Liberty Fertilizer 8-16-16	Windsorville	1.02	5.24	0.73	0.12	7.11	0.75	16.85	16.10	9.36	13.85
8330[1]	Liberty Fertilizer 10-6-4	Hartford	0.00	5.24	3.80	1.64	10.68	0.45	7.69	7.24	4.38	4.81
8136	Liberty Fertilizer 10-10-10	Waterbury	0.72	7.64	0.77	0.13	9.26	0.48	11.94	11.46	5.42	10.66
8373	Liberty Fertilizer 10-10-10	Windsorville	0.37	7.44	1.48	0.09	9.38	0.48	12.30	11.82	4.95	10.01
8461[1]	Liberty Fertilizer 10-10-10	Portland	1.16	8.32	0.52	0.00	10.00	0.33	10.97	10.64	7.86	10.26
8464[1]	Liberty Fertilizer 10-10-10	Middletown	1.54	7.72	0.68	0.10	10.04	0.45	11.32	10.87	7.52	10.33
8363[26]	Liberty New Super Spud 8-10-10-1.2 Magnesium	Windsorville	0.00	5.76	2.29	0.21	8.26	0.58	10.58	10.00	0.56	10.12
8371[27]	Liberty Super Bacco Tobacco Fertilizer 6-4-7-1.2 Magnesium	Windsorville	0.00	0.12	2.02	3.43	5.57	0.15	4.95	4.80	0.27	7.20
8361	Liberty Super Corn Granular Type Fertilizer 10-10-10	Windsorville	1.56	6.44	0.60	0.10	8.70	0.35	10.90	10.55	9.22	10.01
8364[28]	Liberty Super Gro 6-12-12-1.2 Magnesium	Windsorville	1.01	4.76	0.20	0.25	6.22	0.53	13.35	12.82	8.42	11.53
8357[29]	Liberty Super Spud 6-8-8-1.2 Magnesium	E. Windsor Hill	0.54	4.92	0.72	0.30	6.48	0.35	9.10	8.75	0.72	8.18
8372	Liberty Tobacco Fertilizer 6-3-6	Windsorville	1.69	0.00	2.20	2.91	6.80	0.13	3.65	3.52	0.33	5.87
8462	Liberty Tobacco Fertilizer 6-3-6	Portland	2.50	0.00	1.60	2.22	6.32	0.25	4.05	3.80	0.27	6.04
7830	Woodruff's Lawn & Tree Food 10-5-5	North Haven	0.00	2.60	6.83	0.91	10.34	0.35	5.90	5.55	5.30	5.57

~~~ indicates deficiencies.

[1] State purchase.

[23] Magnesium guaranteed, 1.2%; found, 2.43%: Boron guaranteed, 0.0825%; found, 0.070%.

[24] Magnesium guaranteed, 1.2%; found, 1.47%.

[25] Magnesium guaranteed, 1.2%; found, 1.44%.

[26] Magnesium guaranteed, 1.2%; found, 1.76%.

[27] Magnesium guaranteed, 1.2%; found, 1.58%.

[28] Magnesium guaranteed, 1.2%; found, 1.98%.

[29] Magnesium guaranteed, 1.2%; found, 2.34%.
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TABLE 5. ANALYSES OF MIXED FERTILIZERS

CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

Station No.	Manufacturer and brand	Place of sampling	Nitrogen, per cent: Nitrate	Nitrogen, per cent: Ammoniacal	Nitrogen, per cent: Water-soluble	Nitrogen, per cent: Water-insoluble	Nitrogen, per cent: Total	Phosphoric acid, per cent: Citrate-insoluble	Phosphoric acid, per cent: Total	Phosphoric acid, per cent: So-called "available"	Potash, per cent: As muriate	Potash, per cent: Total
	INTERNATIONAL MINERALS & CHEMICAL CORP. No. Woburn, Mass.											
8041[30]	Fertilis 8-6-2-.6 Magnesium	West Suffield	0.39	5.44	0.88	1.55	8.26	0.55	7.10	6.55	0.85	3.26
8033[31]	Fertilis 8-6-2-.6 Magnesium & Chlordane	West Suffield	0.87	5.16	0.40	1.57	8.00	0.55	7.05	6.50	0.12	2.40
7910[32]	Fertilis Plant Food 5-10-5-1.2 Magnesium	Plainville	0.45	3.64	0.88	0.15	5.12	0.73	10.90	10.17	4.29	5.87
8032	Mello-Green Plant Food 5-5-0	West Suffield	0.00	0.00	0.30	5.06	5.36	0.95	7.29	6.34		
	KAPCO DIVISION, McKeesport, Pa.											
8452	Kapco 20-20-20	Cromwell	0.00	8.88	11.14	0.00	20.02	0.53	22.46	21.93	9.93	20.02
	LEBANON CHEMICAL CORP., Lebanon, Pa.											
7891	Lebanon Azalea Food 7-7-7	Wethersfield	0.00	4.64	1.07	1.29	7.00	0.43	8.07	7.64	6.88	7.77
8431	Lebanon Fertilizer 5-10-10	Hartford	0.72	3.44	0.76	0.30	5.22	0.48	11.15	10.67	7.95	10.22
7874	Lebanon Green Gold 20-10-5	Darien	0.47	2.84	13.48	1.97	18.76	0.53	10.60	10.07	5.60	5.73
7902	Lebanon Hi-Organic 8-8-8	Hartford	0.00	3.52	1.73	2.75	8.00	0.50	9.52	9.02	3.74	8.56
7900	Lebanon Rose Food 7-7-7	Hartford	1.36	4.88	0.36	1.17	7.77	0.65	9.20	8.55	7.89	8.32
8430	Lebanon Truck Crop 5-10-5	Hartford	1.14	3.44	0.76	0.00	5.34	0.25	10.68	10.43	4.06	5.47
7897	Lebanon Uniform 10-6-4	Hartford	0.00	2.24	3.63	3.47	9.34	0.65	7.82	7.17	4.12	4.55
	LEE PATTEN SEED CO., Jersey City, N. J.											
8106	Patco Lawn Food 9-8-3	Norwich	0.00	5.64	1.98	1.38	9.00	0.85	8.97	8.12	3.44	4.27
	THE MAMLON CO., New Haven, Conn.											
8419	Fer-Mel General Purpose Plant Food 18-18-18	New Haven	1.38	3.68	12.44	0.00	17.50	0.10	18.59	18.49	12.22	18.60
8420	Fer-Mel Turf & Tree Food 24-12-12	New Haven	1.76	3.28	19.12	0.00	24.16	0.01	12.66	12.65	2.99	13.13
	McARDLE'S SEED CO., Greenwich, Conn.											
7838	McArdle's Hi-Organic 10-6-4	Greenwich	0.23	4.44	4.30	1.85	10.82	0.40	7.20	6.80	4.24	4.24
	OLD FOX AGRICULTURAL SALES INC., E. Providence, R. I.											
8360[33]	Old Fox Brand 6-8-8-1.2 Magnesium	Wapping	0.00	4.40	1.55	0.07	6.02	0.28	9.25	8.97	5.51	8.45
8359[34]	Old Fox Brand 6-3-6 Tobacco with 1.2 Magnesium	Wapping	0.16	0.60	1.88	2.96	5.60	0.20	3.90	3.70	0.56	6.48

~~~ indicates deficiencies.

[30] Magnesium guaranteed, .60%; found, 1.27%.

[31] Magnesium guaranteed, .60%; found, 0.76%.

[32] Magnesium guaranteed, 1.2%; found, 1.47%.

[33] Magnesium guaranteed, 1.2%; found, 1.60%.

[34] Magnesium guaranteed, 1.2%; found, 1.48%.
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TABLE 5. ANALYSES OF MIXED FERTILIZERS CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

Station No.	Manufacturer and brand	Place of sampling	Nitrogen, per cent: Nitrate	Nitrogen, per cent: Ammoniacal	Nitrogen, per cent: Water-soluble	Nitrogen, per cent: Water-insoluble	Nitrogen, per cent: Total	Phosphoric acid, per cent: Citrate-insoluble	Phosphoric acid, per cent: Total	Phosphoric acid, per cent: So-called "available"	Potash, per cent: As muriate	Potash, per cent: Total
	ROBERT B. PETERS CO., Allentown, Pa.											
8457	Peters Special 13-6-6	Cromwell	0.00	0.00	1.43	11.57	13.00	0.23	7.12	6.89	6.44	6.82
8458	Peters Special 16-4-24	Cromwell	0.00	1.04	16.86	0.00	17.90	0.05	5.02	4.97	19.32	30.72
8459	Peters Special 20-5-30	Cromwell	0.00	1.56	18.44	0.00	20.00	0.13	5.18	5.05	25.84	30.94
8460	Peters Special 20-20-20	Cromwell	0.00	4.24	15.92	0.00	20.16	0.08	18.75	18.67	7.33	18.35
8456	Peters Special 25-10-10	Cromwell	1.68	2.80	20.52	0.00	25.00	0.10	10.81	10.71	8.15	10.78
	PLANT PRODUCTS CORP., Blue Point, L.I., N. Y.											
7994[1]	Soluble Fertilizer 12-32-12	Portland	0.00	7.44	5.56	0.18	13.18	0.80	35.60	34.80	10.38	11.74
7993[1]	Soluble Fertilizer 32-10-2	Portland	3.87	2.84	25.20	0.11	32.02	0.45	10.70	10.25	2.24	2.85
	FRANK S. PLATT CO., Branford, Conn.											
8345	Platt's Lawn Food 10-5-5	West Haven	0.00	6.28	2.50	1.30	10.08	0.20	5.40	5.20	5.72	6.86
	O. M. SCOTT & SONS CO., Marysville, Ohio											
7667	Scott's New Turf Builder 20-10-5	Manchester	0.00	1.24	11.25	7.51	20.00	0.55	9.50	8.95	4.20	5.47
8084	Scott's Organic 5-2-3	Darien	0.00	0.52	0.87	4.09	5.48	0.33	4.07	3.74	1.14	3.99
	SEABOARD SEED CO., Philadelphia, Pa.											
8421	Seaboard's Complete Lawn & Plant Food 20-10-5	Granby	0.00	2.35	14.19	2.16	18.70	0.46	10.00	9.54	5.58	6.24
	SEARS, ROEBUCK & CO., Chicago, Ill.											
7716	Cross Country Lawn Food 5-5-0	Hamden	0.00	0.00	0.39	5.11	5.50	1.45	7.30	5.85		
7733	Cross Country Lawn Food 5-5-0 with Crabgrass Killer	Hamden	0.00	0.00	0.43	5.13	5.56	1.10	13.30	12.20		
7715	Cross Country Lawn Food 5-5-0 with Weed Killer	Hamden	0.00	0.00	0.28	5.32	5.60	1.03	8.81	7.78		
7946	Cross Country Plant Food 5-10-5	New London	0.62	3.80	0.60	0.18	5.20	0.80	11.15	10.35	4.87	5.54
	M. L. SHOEMAKER DIV., Philadelphia, Pa.											
8035	M. L. Shoemaker's "Swift-Sure" 4-10-0	West Suffield	0.00	2.64	1.66	0.30	4.60	1.15	13.02	11.87		

~~~ indicates deficiencies.

[1] State purchase.
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TABLE 5. ANALYSES OF MIXED FERTILIZERS CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

Station No.	Manufacturer and brand	Place of sampling	Nitrogen, per cent: Nitrate	Nitrogen, per cent: Ammoniacal	Nitrogen, per cent: Water-soluble	Nitrogen, per cent: Water-insoluble	Nitrogen, per cent: Total	Phosphoric acid, per cent: Citrate-insoluble	Phosphoric acid, per cent: Total	Phosphoric acid, per cent: So-called "available"	Potash, per cent: As muriate	Potash, per cent: Total
	SWIFT & CO., Baltimore, Md.											
7759	Golden Vigoro 6-10-4	Danbury	0.00	1.36	1.28	3.54	6.18	0.73	12.30	11.57	0.60	3.80
7938	Golden Vigoro 6-10-4 with End-O-Pest	Waterbury	0.00	1.28	1.64	3.20	6.12	0.63	11.12	10.49	0.97	4.59
7738[1]	Swift's Blenn Gran-U-Pels 6-18-18	Newtown	0.28	5.00	0.54	0.26	6.08	0.73	19.40	18.67	3.33	17.10
8144	Vigoro 6-10-4	Hamden	0.00	4.92	0.66	0.14	5.72	0.63	11.37	10.74	2.96	4.52
	UNIVERSAL CHEMICAL CO. INC., West Lynn, Mass.											
7896	Electra Plant Food 5-10-3	Hartford	0.00	2.08	0.71	2.39	5.18	0.60	11.17	10.57	2.88	3.20
	WALGREN TREE EXPERTS INC., West Hartford, Conn.											
8000	Walgren Tree Food 8-6-2	Portland	0.00	3.76	3.37	0.67	7.80	0.43	6.65	6.22	2.32	2.81
	OSCAR F. WARNER, Waterbury, Conn.											
8139	Warner Grubedizer 8-6-4	Waterbury	0.33	1.60	3.12	2.29	7.34	0.78	8.07	7.29	4.43	4.71
8137	Warner Lawn Food 8-6-4	Waterbury	0.19	1.56	4.20	2.05	8.00	0.78	6.92	6.14	3.27	4.55
8138	Warner Tree Food 12-6-4	Waterbury	0.00	1.40	7.74	1.70	10.84	0.73	7.37	6.64	3.73	4.46
	WHITNEY SEED CO. INC., Buffalo, N. Y.											
8450	Vital Brand Fertilizer 5-4-2 plus Weed Killer	Willimantic	0.77	0.00	0.60	5.27	6.64	0.63	6.30	5.67	3.07	3.07
8449	Vital Brand Lawn Fertilizer 10-6-4	Willimantic	1.01	0.00	6.92	2.77	10.70	0.80	6.86	6.06	4.26	5.34
	GARFIELD WILLIAMSON INC., Jersey City, N. J.											
8127	Plantspur 4-4-2	Bridgeport	0.67	1.84	0.28	1.01	3.80	0.23	5.00	4.77	1.65	2.59
7706	Wonderlawn Lawn Food 10-6-4	Hamden	0.95	4.12	1.26	0.93	7.26	0.60	6.65	6.05	3.65	4.46
8128	Wonderlawn Lawn Food 10-6-4	Bridgeport	0.00	5.88	3.44	0.30	9.62	0.33	7.80	7.47	3.07	4.08
	S. D. WOODRUFF & SONS of Wethersfield, Inc. Wethersfield, Conn.											
7889	Woodruff's Tuff Turf Turf Food 10-6-4	Wethersfield	0.00	3.84	4.77	1.39	10.00	0.40	6.81	6.41	3.11	4.65
	WOODRUFF LAWN PRODUCTS, Milford, Conn.											
7967	Gro-Sod Lawn Food 10-6-4	New London	0.71	2.56	5.68	1.25	10.20	0.45	7.30	6.85	4.16	4.33
8394	Gro-Sod Lawn Food 10-6-4	Milford	0.00	4.48	3.92	1.82	10.22	0.48	7.00	6.52	4.06	4.59
8393	Weed-Nix Lawn Food 6-10-4	Milford	0.36	4.60	0.72	0.78	6.46	1.13	11.50	10.37	3.53	4.78

~~~ indicates deficiencies.

[1] State purchase.
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TABLE 6. ANALYSES OF SHEEP MANURE, ETC.

Station No.	Manufacturer, brand and dealer
7916	Dried Sheep Manure & Inert Matter. American Agricultural Chemical Co., No. Weymouth, Mass. Sampled at Louis Perillo Coal Co., Southington.
7918	Armour Cattle Manure. Armour Fertilizer Works, Carteret, N. J. Sampled at C. A. Cowles, Inc., Plantsville.
7911	Armour Pulverized Sheep Manure. Armour Fertilizer Works, Carteret, N. J. Sampled at Wayne Feed Supply Co., Plainville.
7937	Chiguano. Chiguano Compost Corp., Marion, Conn. Sampled at Chiguano Compost Corp., Marion.
8171	Corenco Sheep Manure & Inert Matter. Consolidated Rendering Co., Boston, Mass. Sampled at Clapboard Hill Feed Co., New Canaan.
8386	Corenco Sheep Manure & Inert Matter. Consolidated Rendering Co., Boston, Mass. State purchase, Mansfield Training School, Mansfield Depot.
7871	Davey Shredded Manure. The Davey Tree Expert Co., Kent, Ohio. Sampled at The Davey Tree Expert Co., Old Greenwich.
8085	Farmanure. Garden Supply Sales Corp., Rahway, N. J. Sampled at Ring's End Fuel Co., Darien.
8126	HH Cow Manure. The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Willis Distributors, Bridgeport.
7966	HH Sheep Manure & Inert Matter. The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at The Eaton & Wilson Co., New London.
7873	Lebanon Cow Manure. Lebanon Chemical Corp., Lebanon, Pa. Sampled at The Planter's Barn, Darien.
7880	Lincor Sheep Manure. Lewis International Co., Newark, N. J. Sampled at The Planter's Barn, Darien.
7828	Fertal-Gro Cow Manure. Maegeo Dehydrating Co., Lexington, N. C. Sampled at Eastern States Farmers' Exchange, Inc., North Haven.
8089	Dehydrated Sheep Manure. Maegeo Dehydrating Co., Lexington, N. C. Sampled at Gardener's Center, Inc., Darien.
7717	Cross Country Cattle Manure. Sears, Roebuck & Co., Chicago, Ill. Sampled at Sears, Roebuck & Co., Hamden.
7945	Cross Country Sheep Manure. Sears, Roebuck & Co., Chicago, Ill. Sampled at Sears, Roebuck & Co., New London.

~~ indicates deficiencies.

[1] Guaranteed 2.0%.

[2] Guaranteed 1.0%.

TABLE 6. ANALYSES OF SHEEP MANURE, ETC.

Nitrogen, per cent			Phosphoric acid, per cent				Potash, per cent		
Ammoniacal	Total found	Total guaranteed	Citrate-insoluble	Total found	Total guaranteed	So-called "available" found	Total found	Total guaranteed	Sand, per cent
0.00	1.72	1.25		1.20	1.00		2.72	2.00	22.91
0.00	2.12	2.00		1.20	1.00		2.43	2.00	22.43
0.00	1.54	1.25		1.60	1.00		3.64	2.00	43.73
0.00	1.54	2.00	0.40	3.47		3.07[1]	2.46	2.00	25.22
0.00	1.56	1.25	0.40	3.55		3.15[2]	2.40	2.00	23.72
0.00	1.92	1.25		1.00	1.00		5.38	2.00	33.52
0.00	3.90	2.00	0.78	4.72		3.94[2]	2.53	1.00	2.46
0.00	3.70	3.00	0.75	3.32		2.57[1]	2.56	1.00	1.08
0.00	1.73	2.00		0.87	1.00		6.79	1.00	5.34
0.00	1.66	1.25	0.25	1.25		1.00[2]	6.48	1.00	22.78
0.00	2.58	1.50	0.33	1.45		1.12[2]	2.40	2.00	35.66
0.00	1.00	1.00	0.13	1.12		0.99[2]	0.56	1.00	39.89
0.00	2.06	2.00	0.05	0.90		0.85[2]	9.18	7.00	6.78
0.00	2.00	2.00	0.28	1.35		1.07[2]	8.25	5.00	6.66
0.00	2.80	1.50	0.23	1.25	1.10	1.02[2]	3.07	2.00	21.48
0.00	2.58	1.50	0.59	1.45		0.86[2]	3.86	2.00	17.91

TABLE 6. ANALYSES OF SHEEP MANURE, ETC.

Station No.	Manufacturer, brand and dealer
8025	Wizard Brand Cow Manure. St. Louis National Stock Yards Co., National Stock Yards, Ill. Sampled at Brainard Seed Co., Thompsonville.
8026	Wizard Brand Sheep Manure. St. Louis National Stock Yards Co., National Stock Yards, Ill. Sampled at Brainard Seed Co., Thompsonville.
7757	Bovung. Walker-Gordon Laboratory Co., Plainsboro, N.J. Sampled at Meeker Hardware, Danbury.

~~ indicates deficiencies.

[1] Guaranteed 2.0%.

[2] Guaranteed 1.0%.

TABLE 6. ANALYSES OF SHEEP MANURE, ETC.

Nitrogen, per cent			Phosphoric acid, per cent				Potash, per cent		
Ammoniacal	Total found	Total guaranteed	Citrate-insoluble	Total found	Total guaranteed	So-called "available" found	Total found	Total guaranteed	Sand, per cent
0.00	2.12	2.00	0.23	1.55		1.32[2]	2.25	2.00	29.16
0.00	1.88	2.00	0.28	1.63		1.35[2]	2.85	2.00	22.16
0.12	1.62	2.00	0.18	1.70		1.52[2]	2.43	2.00	1.71

TABLE 7. ANALYSES OF LIMESTONE AND SIMILAR MATERIALS

No.	Manufacturer or dealer, brand and place of sampling	Calcium oxide, per cent		Magnesium oxide, per cent	
		F	G	F	G
	AGRICULTURAL GYPSUM CO., Chicago, Ill.				
7248	Land Plaster. Sampled by The Hatheway-Steane Corp., Suffield.	32.60			
	ROBBIE DURRELL, INC., Westport, Conn.				
6672	"Calcaphos" High Calcium Limestone. Sampled by Manufacturer.	38.63	46-48	0.46	.01-.03
	LEE LIME CORPORATION, Lee, Mass.				
7249	Limestone. Sampled by The Hatheway-Steane Corp., Suffield.	30.21		20.41	
	NEW ENGLAND LIME CO., Canaan, Conn.				
6701	Hydrated Lime. Sampled by The Hatheway-Steane Corp., Suffield.	44.79		30.61	

TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS

Station No.	Manufacturer and brand	Place of sampling	Nitrogen, per cent: Nitrate	Nitrogen: Ammoniacal	Nitrogen: Water-soluble	Nitrogen: Water-insoluble	Nitrogen: Total	Phosphoric acid, per cent: Citrate-insoluble	Phosphoric acid: Total	Phosphoric acid: So-called "available"	Potash, per cent: As muriate	Potash: Total
	AMERICAN AGRICULTURAL CHEMICAL CO. North Weymouth, Mass.											
8333	Agrico for Azaleas, Camellias and Rhododendrons 6-10-4	West Hartford	0.68	4.36	0.24	0.72	6.00	0.73	11.20	10.47	3.94	4.62
8028	Agrico for Gardens 5-10-5	Thompsonville	0.00	4.68	0.09	0.09	4.86	0.45	11.07	10.62	4.93	6.31
7881	Agrico Rose Food 5-9-6	Darien	0.00	2.32	1.32	2.08	5.72	0.60	10.20	9.60	5.52	6.11
8049	Agrico Water Soluble Plant Food 17-17-17	Stamford	3.77	3.68	9.88	0.05	17.38	0.08	17.65	17.57	0.48	17.65
	AMERICAN BULB CO., Marysville, Ohio											
8045	Bulb Food 16-8-5	Hamden	0.52	1.02	12.12	7.06	20.72	1.00	9.40	8.40	3.84	4.84
	AMERICAN CHEMICAL PAINT CO., Ambler, Pa.											
7868	ACP 20-20-20 Gro-Stuf	Greenwich	0.60	0.56	19.28	0.00	20.44	0.03	21.80	21.77	8.94	20.77
	ARMOUR FERTILIZER WORKS, Carteret, N. J.											
8048[1]	Armour Pulverized Sheep Manure 1.25-1-2	Stamford		0.00			1.34		1.85			3.51
8111	Armour Vertagreen Rose Food 5-10-5	Buckland	0.25	5.32	0.08	1.35	7.00	0.43	10.70	10.27	4.00	4.81
	ATKINS & DURBROW, INC., Port Colborne, Ont., Canada											
7756[2]	Driconure 3-2-1	Danbury	0.00	0.24	0.90	1.60	2.74	0.28	2.90	2.62		1.74
	ATLAS FISH FERTILIZER CO., San Francisco, Calif.											
7735	Atlas Fish Emulsion Fertilizer 5-1-1	Branford	0.00	0.60	4.84	0.30	5.74	0.00	1.10	1.10		1.54
	THE BORDEN CO., New York, N. Y.											
7867	Borden's "38"	Greenwich					39.48					
	BRAINARD SEED CO., Thompsonville, Conn.											
8030	For Your Garden Fertilizer Root Crop 5-10-10	Thompsonville	0.30	3.52	1.80	0.00	5.62	0.25	11.24	10.99	7.17	10.01
8031	For Your Garden General Garden Fertilizer 5-10-5	Thompsonville	0.44	3.24	1.32	0.30	5.30	0.20	11.26	11.06	5.21	6.31

~~~ indicates deficiencies.

[1] Sand, 40.38%.

[2] Sand, 4.67%.

TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS
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TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS

Station No.	Manufacturer and brand	Place of sampling	Nitrogen, per cent: Nitrate	Nitrogen, per cent: Ammoniacal	Nitrogen, per cent: Water-soluble	Nitrogen, per cent: Water-insoluble	Nitrogen, per cent: Total	Phosphoric acid, per cent: Citrate-insoluble	Phosphoric acid, per cent: Total	Phosphoric acid, per cent: So-called "available"	Potash, per cent: As muriate	Potash, per cent: Total
	JOSEPH BRECK & SONS, Boston, Mass.											
8380[3]	Breck's Garden Gro 5-10-10	Manchester	0.60	3.76	0.84	0.10	5.30	0.88	10.90	10.02	5.74	10.22
	CALIFORNIA SPRAY-CHEMICAL CORP., Richmond, Calif.											
7680	Ortho-Gro Liquid Plant Food 15-5-5	Cheshire	0.00	0.92	14.52	0.00	15.44	0.00	5.30	5.30		5.07
	THE CARAC CORPORATION, Freeport, N. Y.											
8121	Carac Rose & Plant Fertilizer 22-18-22	Buckland	0.00	0.68	21.34	0.00	22.02	0.08	16.15	16.07		21.24
	CLINTON NURSERIES, Clinton, Conn.											
7709	New Era African Violet Food 5-12-9	Clinton	2.00	3.24	1.18	0.30	6.72	0.20	13.05	12.85		9.58
7710	New Era Instant Rose Food 10-20-10	Clinton	1.99	4.08	4.72	0.27	11.06	0.43	21.40	20.97		11.12
7743	New Era Liquid Plant Food 8-12-8	Danbury	0.00	4.00	4.84	0.00	8.84	0.00	13.35	13.35	8.47	9.76
7752	New Era Plant Food 7-15-8	Danbury	2.70	3.16	2.04	0.20	8.10	0.15	17.30	17.15		8.22
	CONSOLIDATED RENDERING CO., Boston, Mass.											
8052[4]	Corenco Ground Bone 2-22-0	Stamford					6.74		13.85			
7822	Corenco Home Garden Fertilizer 5-10-5	Hamden	0.64	3.68	0.56	0.24	5.12	0.43	10.75	10.32	4.84	4.84
7825	Corenco Landscape Fertilizer 8-6-4	Hamden	0.00	4.76	2.02	0.68	7.46	0.25	6.10	5.85	5.79	5.90
8029	Corenco Rhododendron, Azalea & Blueberry Special 7-7-7	Thompsonville	1.69	4.92	0.40	0.05	7.06	0.35	8.48	8.13	3.21	6.96
8110	Corenco Rose Special 5-10-5	Buckland	0.00	2.72	1.21	1.19	5.12	1.05	11.87	10.82	4.94	5.77
	DAVISON CHEMICAL CO., Baltimore, Md.											
8451	Dav-Gro 20-20-20	Willimantic	3.16	8.40	8.44	0.00	20.00	0.98	22.54	21.56	3.15	19.05
	DAYTON FERTILIZER CORP., Dayton, N. J.											
8050	Grand Garden Plant Food 6-10-4	Stamford	0.63	4.48	1.04	0.11	6.26	0.30	11.15	10.85	2.54	4.46
7824	Grand Garden Rose Food 6-8-6	Hamden	0.45	3.40	0.84	1.45	6.14	0.38	9.00	8.62	6.04	6.04
	E. I. duPONT deNEMOURS & CO. INC., Wilmington, Del.											
7968	DuPont Soluble Plant Food 19-22-16	New London	5.94	4.64	9.24	0.00	19.82	0.00	23.85	23.85		17.90

~~~ indicates deficiencies.

[3] Magnesium guaranteed, 1.2%; found, 1.80%.

[4] Mechanical analysis: Fine, 54.0%; coarse, 46.0%.

TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS
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TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS

Station No.	Manufacturer and brand	Place of sampling	Nitrogen, per cent: Nitrate	Ammoniacal	Water-soluble	Water-insoluble	Total	Phosphoric acid, per cent: Citrate-insoluble	Total	So-called "available"	Potash, per cent: As muriate	Total
	EASTERN STATES FARMERS' EXCHANGE, INC. West Springfield, Mass.											
7739	Eastern States Start-N-Gro 16-32-16	Bethel	4.13	7.84	3.90	0.13	16.00	0.03	32.40	32.37		17.03
	EDGEWOOD FARMS, INC., Marysville, Ohio											
7964	Edgewood Farms Rose Food 18-9-5	New London	0.38	1.16	9.80	8.20	19.54	1.13	11.77	10.64	4.93	5.90
	THE ESPOMA CO., Millville, N. J.											
8336	Espoma 3-2-1	Milford	0.00	1.48	0.90	1.54	3.92	0.35	4.70	4.35	1.25	2.65
8335	Holly-Tone 4-6-4	Milford	0.00	2.92	0.51	1.55	4.98	0.43	6.51	6.08	3.74	5.44
	FIESTAR INC., New York, N. Y.											
8143	Fiestar 2-2-0	Bristol	0.00	0.40	0.03	2.03	2.46	0.40	4.94	4.54		
	FORWARD HOUSE DIV., New York, N. Y.											
7869	Plantrons 12-24-12	Greenwich	0.00	11.96	0.04	0.00	12.00	0.25	24.90	24.65	11.41	12.20
	GOULARD & OLENA, INC., Skillman, N. J.											
8379	G & O Rhodo-Azalea-Camellia-Holly-Blueberry Food 3-20-3	Manchester	0.51	2.28	0.44	0.29	3.52	0.78	21.85	21.07	2.19	3.48
8381	G & O Sheep & Guano Manure 1.5-1-1	Manchester		0.00			1.14		1.12			1.67
8159	G & O Special Food for Bulbs 5-6-15	Ridgefield	0.00	3.08	1.22	1.12	5.42	0.85	7.70	6.85	14.81	15.67
7908	G & O Sulphate of Ammonia 20.75	Hartford					21.25					
	A. H. HOFFMAN, INC., Landisville, Pa.											
8012[5]	Hoffman Bone Meal 3-13-0	Thompsonville					4.04	9.55	24.90	15.35		
8013[6]	Hoffman Cow Manure 2-1-1	Thompsonville		0.00			2.00	0.25	1.65	1.40		2.85
7760	Hoffman Rose Food 5-10-5	Danbury	0.00	4.04	0.28	1.10	5.42	0.10	11.20	11.10	5.10	5.77
7965[7]	Hoffman Sheep Manure 1-1-2	New London		0.00			1.00	0.20	1.10	0.90		2.25

~~~ indicates deficiencies.

[5] Mechanical analysis: Fine, 41.0%; coarse, 59.0%.

[6] Sand, 1.94%.

[7] Sand, 63.14%.

TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS
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TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS

Station No.	Manufacturer and brand	Place of sampling	Nitrogen, per cent: Nitrate	Nitrogen: Ammoniacal	Nitrogen: Water-soluble	Nitrogen: Water-insoluble	Nitrogen: Total	Phosphoric acid, per cent: Citrate-insoluble	Phosphoric acid: Total	Phosphoric acid: So-called "available"	Potash, per cent: As muriate	Potash: Total
	THE HUBBARD-HALL CHEMICAL CO., Waterbury, Conn.											
7708	Gro-Fast Rose Food 7-10-5	Hamden	0.56	4.36	1.54	1.52	7.98	1.30	12.40	11.10	1.77	6.59
7969	Gro-Fast Sol Plant Food 16-20-16	New London	2.72	5.04	8.24	0.00	16.00	0.02	19.75	19.73	15.54	16.80
7676[8]	HH Bone Meal 2-23-0	New Haven		0.08			3.22		25.65			
7887[9]	HH Cow Manure & Inert Matter 2-1-1	Berlin		0.00			2.78		1.72			1.86
7755	HH Evergreen Food 4-10-4	Danbury	0.41	1.76	1.18	1.27	4.62	0.53	12.90	12.37	3.78	4.21
7707	HH Plant Food 5-10-5	Hamden	0.00	2.28	2.61	0.87	5.76	0.80	11.00	10.20	5.29	5.38
7886	HH Rose Food 7-10-5	Berlin	0.00	4.40	1.74	1.86	8.00	1.23	13.10	11.87	0.53	6.65
8107[10]	HH Sheep Manure & Inert Matter 1.25-1-1	Norwich		0.00			1.38		1.30			3.57
	HYDROPONIC CHEMICAL CO. INC., Copley, Ohio											
7883	Hyponex African Violet Food 7-6-19	Darien	5.48	1.28	0.72	0.00	7.48	0.18	8.20	8.02		21.35
7885	Hyponex All Purpose Plant Food 7-6-19	Old Greenwich	5.46	1.32	0.52	0.10	7.40	0.25	7.10	6.85		20.58
	THE HY-TROUS CORP., Boston, Mass.											
7677	Hy-Trous Liquid Fertilizer 4-8-4	New Haven	0.90	1.36	0.56	0.00	2.82	0.00	7.25	7.25		3.76
	LEBANON CHEMICAL CORP., Lebanon, Pa.											
7894	Lebanon Plant Food 5-10-5	Wethersfield	0.00	3.52	1.52	0.16	5.20	0.20	11.07	10.87	5.55	6.31
7907	Lebanon Rose Food 7-7-7	Hartford	0.27	5.76	1.28	1.45	8.76	0.33	9.20	8.87	7.49	8.56
7882	Lebanon Spray Gro 20-20-20	Darien	0.50	7.68	11.60	0.22	20.00	0.05	21.00	20.95	18.31	22.72
8435	Lebanon Uniform 10-6-4	Hartford	0.98	2.80	3.27	2.95	10.00	0.38	6.39	6.01	2.28	4.81
	MAEGEO DEHYDRATING CO., Lexington, N. C.											
8434	Fertal-Gro Cattle Manure 1-1-1	Hartford		0.00			1.00	0.10	1.10	1.00		1.74
	MILLER CHEMICAL & FERTILIZER CORP., Baltimore, Md.											
8332	VHPF 6-25-15	West Hartford	4.48	1.76	0.76	0.00	7.00	0.18	29.18	29.00		16.80
	PARKS-BARNES, INC., Hermosa Beach, Calif.											
7681	Black Magic African Violet Blossom Booster 4-10-10	Cheshire	0.00	0.16	4.40	0.00	4.56	0.00	10.85	10.85		11.85
	PLANTABBS CORP., Baltimore, Md.											
7734	Fulton's Plantabbs 11-15-20	Branford	8.02	1.72	2.02	0.00	11.76	0.05	18.70	18.65		28.30

~~~ indicates deficiencies.

[8] Mechanical analysis: Fine, 49.0%; coarse, 51.0%.

[9] Sand, 37.89%. [10] Sand, 34.22%.

TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS
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TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS

Station No.	Manufacturer and brand	Place of sampling	Nitrogen, per cent: Nitrate	Ammoniacal	Water-soluble	Water-insoluble	Total	Phosphoric acid, per cent: Citrate-insoluble	Total	So-called "available"	Potash, per cent: As muriate	Total
	PLANT SHINE CO., Div. Schultz Co., St. Louis, Mo.											
7905	Schultz Instant Plant Food 20-30-20	Hartford	1.12	2.60	16.12	0.16	20.00	0.05	29.60	29.55		22.00
	RA-PID-GRO CORP., Dansville, N. Y.											
7736	Ra-Pid-Gro 23-21-17	Branford	4.40	4.00	15.60	0.00	24.00	0.00	19.50	19.50		16.98
	THE RENARD CO., Yonkers, N. Y.											
7751	Plant Pen 5-0-0	Danbury					7.82					
	ROSE MANUFACTURING CO., Beacon, N. Y.											
7821	African Violet Food 6-12-6	Hamden	0.00	6.84	0.18	0.30	7.32	0.13	13.60	13.47	3.63	6.52
8082	Tri-Ogen Rose Food 5-10-5	Stamford	0.00	3.24	1.65	0.19	5.08	0.55	11.48	10.93	0.32	5.94
	ROSS DANIELS, INC., Des Moines, Iowa											
8161	Ross Rose Plant Food Cartridge 15-25-10	Ridgefield	0.54	5.36	11.04	0.00	16.94	0.03	28.50	28.47		11.54
8160	Ross Starter Plant Food Cartridge 9-46-15	Ridgefield	0.00	10.04	0.02	0.00	10.06	0.05	52.70	52.65		16.50
	SEARS, ROEBUCK & CO., Chicago, Ill.											
8374	Cross Country Azalea-Camellia Food 8-8-8	Manchester	0.72	6.48	0.72	0.10	8.02	0.43	8.87	8.44	6.18	7.84
8375	Cross Country Cattle Manure 1.5-1-2	Manchester		0.00			2.62	0.50	2.46	1.96		2.85
8083	Cross Country Evergreen Food 10-6-4	Stamford	0.35	9.36	0.40	0.09	10.20	0.23	6.45	6.22	3.36	4.49
7962	Cross Country Instant Rose Food 20-20-20	New London	5.07	2.60	14.23	0.00	21.90	0.05	21.60	21.55		20.02
7714	Cross Country Instant Tomato Food 15-30-15	Hamden	0.26	6.28	10.00	0.00	16.54	0.08	30.40	30.32	13.67	16.87
7961	Cross Country Liquid Plant Food 15-10-5	New London	0.00	3.48	11.02	0.00	14.50	0.00	10.32	10.32	3.85	5.10
7963	Cross Country Plant Food 5-10-5	New London	0.00	4.32	0.77	0.17	5.26	0.18	10.77	10.59	4.89	5.90
7712	Cross Country Rose Food 5-10-5	Hamden	0.72	3.88	0.68	0.28	5.56	0.30	10.45	10.15	4.24	5.13
7713[11]	Cross Country Sheep Manure 1.5-.75-2	Hamden		0.20			2.66	0.48	2.30	1.82		3.17
	STERN'S NURSERIES, INC., Geneva, N. Y.											
8051	Stern's Miracid 30-10-10	Stamford	0.87	2.92	27.84	0.00	31.63	0.05	9.73	9.68	5.84	10.15
7761	Stern's Miracle-Gro 15-30-15	Danbury	0.36	7.08	7.98	0.00	15.42	0.10	30.70	30.60	13.32	15.07

~~~ indicates deficiencies.

[11] Sand, 16.21%.

TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS
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TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS

Station No.	Manufacturer and brand	Place of sampling	Nitrogen, per cent: Nitrate	Nitrogen, per cent: Ammoniacal	Nitrogen, per cent: Water-soluble	Nitrogen, per cent: Water-insoluble	Nitrogen, per cent: Total	Phosphoric acid, per cent: Citrate-insoluble	Phosphoric acid, per cent: Total	Phosphoric acid, per cent: So-called "available"	Potash, per cent: As muriate	Potash, per cent: Total
	STIM-U-PLANT LABORATORIES, Columbus, Ohio											
7884	Stim-U-Plant African Violet Food 5-8-7	Old Greenwich	2.52	3.88	0.64	0.00	7.04	0.23	11.45	11.22		10.22
	SWIFT & CO., Baltimore, Md.											
7904	Instant Vigoro 20-10-15	Wethersfield	2.90	7.24	11.40	0.00	21.54	0.05	13.40	13.35	9.55	15.18
8153	Vigoro Complete Plant Food 6-10-4	Hamden	0.00	4.96	0.92	0.14	6.02	0.60	11.90	11.30	3.25	4.30
8081	Vigoro for Acid-Loving Plants 5-10-10	Stamford	0.20	4.36	0.50	0.10	5.16	0.58	11.22	10.64	7.73	10.22
7744	Vigoro Rose Food 6-10-4	Danbury	0.94	2.80	0.68	1.94	6.36	1.13	12.91	11.78	4.57	5.10
	SWISS FARMS, Philmont, N. Y.											
7903	Instant Action Rose Food 6-15-11	Wethersfield	3.44	2.44	0.96	0.00	6.84	0.10	13.65	13.55		14.81
	WALKER-GORDON LABORATORY CO., Plainsboro, N.J.											
7823[12]	Bovung 2-1-1	Hamden		0.00			2.18	0.20	1.37	1.17		2.22

[12] Sand, 2.14%.

TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS

TABLE 9. ANALYSES OF OTHER MISCELLANEOUS MATERIALS
(Figures are in per cent)

Station No.	Material	Total nitrogen	Total phosphoric acid	Citrate-insoluble phosphoric acid	"Available" phosphoric acid	Water-soluble potash	Moisture	Manganese	Iron	Silicon dioxide
7157	Chicken manure - sugar cane mixture	3.44	6.35			2.75				
8145	Fertilizer	8.64	7.65			3.64				
8147	Fertilizer	5.16	10.55			6.65				
7547	Fertilizer - pesticide mixture[1]						1.27	21.46[2]	4.75	16.08
6070	Manganese sulfate	0.00	trace			61.92				
8323	Muriate of potash	1.10	0.75			0.03	46.66			
7790	"Naugro"[3]		22.32	18.06	4.26	0.12	24.14			
8197	Phosphate rock	12.46	24.25	0.03	24.22	12.24				
8554	Plant food tablets 10-23-12[4]	2.90	6.27			2.65				
8801	Poultry litter							0.01	major ingredient	major ingredient
8488	Residue from coking process[5]	2.96	0.85			5.44				
6310	Tobacco dust									
6504	Vermiculite-treated fertilizer 15-5-5[6]	17.20	8.10	0.30	7.80	5.44				

1 Chlordane: Guaranteed, 22.2%; found, 1.06%.
2 Guaranteed, 23-24%.
3 Fat, 1.03%.
4 Chlorine, trace.
5 Calcium, 0.15%; magnesium, 0.10%; zinc, 0.10%; lead, 150, copper, 100, chromium, 50, and tin, 50, parts per million.
6 Nitrate nitrogen, 0.00%; ammonia nitrogen, 6.16%; water-soluble nitrogen, 7.74%; active insoluble nitrogen, 0.95%; inactive insoluble nitrogen, 2.35%; chlorine, 3.81%.

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