



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 Chemist¹

CONNECTICUT LAW AND REGULATIONS REGARDING COMMERCIAL FERTILIZERS

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

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

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

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.

Connecticut Experiment Station
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	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%.	<u>15.70</u>	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	<u>20.50</u>	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                 | 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 de Nemours & 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  |

TABLE 1.  
ANALYSES OF MATERIALS SUPPLYING CHIEFLY NITROGEN

| No.             | Manufacturer or jobber and dealer                                                                        | Per cent nitrogen |      |
|-----------------|----------------------------------------------------------------------------------------------------------|-------------------|------|
|                 |                                                                                                          | F                 | 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                 | 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 & HOOV 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                  | 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 <sup>1</sup> | 20.50 |
| 8376             | Breck's Feed No Weed. Joseph Breck & Sons, Boston, Mass. Sampled at Vittner's Garden Center Inc., Manchester.          | 25.60 <sup>2</sup> | 25.00 |

<sup>1</sup> Nitrate nitrogen, 10.46%; ammonia nitrogen, 10.04%; soluble organic nitrogen, 0.02%.

<sup>2</sup> 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                  | 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 <sup>3</sup>  | 7.00  |
| 7711 | Bonus Weed & Feed. O. M. Scott & Sons Co., Marysville, Ohio. Sampled at Herold's, Guilford.                    | 25.60 <sup>4</sup> | 25.00 |

~ indicates deficiencies.

<sup>3</sup> Nitrate nitrogen, 0.24%; ammonia nitrogen, 7.36%; soluble organic nitrogen, 0.40%; inactive insoluble nitrogen, 0.64%.

<sup>4</sup> 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                     | G                                                                                                                              |                          |       |             |       |
| <b>SUPERPHOSPHATE</b> |                                                                                                                                |                          |       |             |       |
| 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 Checker-board Feed Store, New Milford.                                    | 0.70                     | 23.10 | 22.40       | 20.00 |

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|                                    |                                                                                                                   |       |                    |       |       |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------|-------|--------------------|-------|-------|
| 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 |
| <b>PRECIPITATED BONE PHOSPHATE</b> |                                                                                                                   |       |                    |       |       |
| 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 |
| <b>PHOSPHATE ROCK</b>              |                                                                                                                   |       |                    |       |       |
| 7939                               | The American Agricultural Chemical Co., No. Weymouth, Mass. Sampled at H. S. Coe & Co. Inc., Waterbury.           | 28.20 | 32.10 <sup>1</sup> | 3.90  | 3.00  |

<sup>1</sup> Guaranteed, 31.0%.

Commercial Fertilizers

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TABLE 3. ANALYSES OF POTASH SALTS, ETC.

| No.                             | Manufacturer or jobber and dealer                                                                                     | Per cent potash |       |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------|-----------------|-------|
|                                 |                                                                                                                       | F               | G     |
| MURIATE OF POTASH               |                                                                                                                       |                 |       |
| 7839                            | American Agricultural Chemical Co., No. Weymouth, Mass. Sampled at McArdle's Seed Co., Greenwich.                     | <u>58.84</u>    | 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.                        | <u>59.02</u>    | 60.00 |
| 8355                            | Consolidated Rendering Co., Boston, Mass. Sampled at New Haven Rendering Co., W. Haven.                               | <u>58.63</u>    | 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.                          | <u>58.94</u>    | 60.00 |
| NITRATE OF POTASH               |                                                                                                                       |                 |       |
| 7625 <sup>1</sup>               | The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Hatheway & Steane Corp., West Suffield.                    | 44.92           | 44.00 |
| 8455 <sup>2</sup>               | 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               | 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%.

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 | <u>13.65</u> | 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 | <u>19.40</u> | 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 | <u>19.50</u> | 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%.

TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station No. | Manufacturer and brand | Place of sampling |
|---|--|-------------------|
| AGRICULTURAL PRODUCTS CO., E. Providence, R. I. | | |
| 8337 | Apco Kingston Lawn Food 10-6-4 | Milford |
| 8338 | Apco Lawn & Garden Fertilizer 5-10-5 | Milford |
| AGRICULTURAL SUPPLY CO., West Haven, Conn. | | |
| 8334 | Yale Special Mixture 8-6-2 | Milford |
| AMERICAN AGRICULTURAL CHEMICAL CO.
North Weymouth, Mass. | | |
| 8384 ¹ | AA Quality Fertilizer 0-20-20 | Mansfield Depot |
| 8390 ¹ | AA Quality Fertilizer 0-20-20 | Storrs |
| 8403 | AA Fertilizer 0-20-20 | West Suffield |
| 8391 ² | AA Fertilizer 5-10-10-1.2 Magnesium | Woodbridge |
| 8402 | AA Fertilizer 8-16-16 | West Suffield |
| 8405 | AA Fertilizer 10-10-10 | West Suffield |
| 7942 | AA Plant Food 5-10-5 | Waterbury |
| 8404 | Agrico Country Club 8-6-4 | West Suffield |
| 8044 | Agrico for Azaleas, Camellias & Rhododendrons 6-10-4 | West Suffield |
| 7972 | Agrico for Gardens 5-10-5 | New London |
| 7970 | Agrico for Lawns, Trees & Shrubs 6-10-4 | New London |
| 7913 | Agrico for New England 5-8-7 | Southington |
| 7977 | Agrico for New England 5-8-7 | Norwich |
| 7914 ³ | Agrico for Potatoes 5-10-10-1.2 Magnesium | Southington |
| 8400 | Agrico for Top Dressing 7-7-7 | West Suffield |
| 8406 | Agrico for Top Dressing 15-10-10 | West Suffield |
| 7915 | Agrico for Turf 6-8-2 | Southington |
| 8042 | Agrico for Turf 10-6-4 | West Suffield |
| 7864 | Agrico Pesticide & Turf Food 6-10-4 | Greenwich |
| 8043 | Agrico Phosphate & Potash 0-20-20 | West Suffield |
| 8047 | Agrico Rose Food 5-9-6 | Stamford |

~~~~ indicates deficiencies.

<sup>1</sup> State purchase.

<sup>2</sup> Magnesium guaranteed, 1.2%; found, 1.69%.

<sup>3</sup> Magnesium guaranteed, 1.2%; found, 1.24%.

CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

| Nitrate | Nitrogen, per cent |               |                 |       | Phosphoric acid, per cent |       |                       | Potash, per cent |       |
|---------|--------------------|---------------|-----------------|-------|---------------------------|-------|-----------------------|------------------|-------|
|         | Ammoniacal         | Water-soluble | Water-insoluble | Total | Citrate-insoluble         | Total | So-called "available" | As muriate       | Total |
| 0.52    | 9.16               | 0.16          | 2.42            | 12.26 | 0.68                      | 6.02  | 5.34                  | 2.88             | 3.38  |
| 0.00    | 5.24               | 0.00          | 0.29            | 5.53  | 0.55                      | 11.12 | 10.57                 | 4.16             | 5.57  |
| 0.00    | 4.80               | 2.92          | 0.30            | 8.02  | 0.28                      | 7.15  | 6.87                  | 2.31             | 3.07  |
|         |                    |               |                 |       | 0.43                      | 20.90 | 20.47                 | 14.83            | 20.40 |
|         |                    |               |                 |       | 0.50                      | 21.90 | 21.40                 | 18.34            | 20.27 |
|         |                    |               |                 |       | 0.28                      | 21.25 | 20.97                 | 17.87            | 19.88 |
| 0.13    | 4.24               | 0.50          | 0.15            | 5.02  | 0.50                      | 11.30 | 10.80                 | 6.75             | 10.04 |
| 1.59    | 5.36               | 0.64          | 0.09            | 7.68  | 0.40                      | 17.05 | 16.65                 | 12.20            | 16.50 |
| 1.26    | 6.48               | 0.76          | 0.12            | 8.62  | 0.40                      | 11.52 | 11.12                 | 3.56             | 11.05 |
| 0.00    | 4.56               | 0.19          | 0.15            | 4.90  | 0.28                      | 11.07 | 10.79                 | 4.86             | 5.44  |
| 0.00    | 6.04               | 0.96          | 1.32            | 8.32  | 0.33                      | 6.77  | 6.44                  | 3.41             | 4.68  |
| 0.00    | 4.20               | 1.66          | 0.28            | 6.14  | 1.50                      | 12.22 | 10.72                 | 3.86             | 4.18  |
| 0.00    | 4.44               | 0.35          | 0.09            | 4.88  | 0.55                      | 11.12 | 10.57                 | 4.73             | 5.63  |
| 0.38    | 4.60               | 0.76          | 0.30            | 6.04  | 0.25                      | 11.22 | 10.97                 | 3.71             | 4.24  |
| 0.00    | 4.68               | 0.17          | 0.15            | 5.00  | 0.38                      | 10.60 | 10.22                 | 9.08             | 9.29  |
| 0.21    | 4.64               | 0.08          | 0.15            | 5.08  | 0.58                      | 11.53 | 10.95                 | 8.99             | 9.72  |
| 0.56    | 3.52               | 0.80          | 0.12            | 5.00  | 0.55                      | 10.60 | 10.05                 | 10.29            | 11.12 |
| 1.20    | 4.76               | 0.65          | 0.00            | 6.61  | 0.28                      | 7.30  | 7.02                  | 5.99             | 7.37  |
| 1.36    | 13.36              | 0.56          | 0.00            | 15.28 | 0.35                      | 10.40 | 10.05                 | 7.30             | 8.90  |
| 0.00    | 3.20               | 0.44          | 2.36            | 6.00  | 0.40                      | 8.70  | 8.30                  | 1.94             | 2.49  |
| 0.00    | 3.80               | 2.75          | 3.33            | 9.88  | 0.63                      | 7.10  | 6.47                  | 3.76             | 4.27  |
| 0.46    | 4.20               | 1.04          | 0.30            | 6.00  | 0.48                      | 11.00 | 10.52                 | 3.62             | 4.02  |
|         |                    |               |                 |       | 0.63                      | 20.20 | 19.57                 | 17.38            | 19.37 |
| 0.00    | 2.24               | 1.12          | 1.92            | 5.28  | 0.55                      | 9.67  | 9.12                  | 5.83             | 6.69  |

TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station No.                                     | Manufacturer and brand                                                  | Place of sampling |
|-------------------------------------------------|-------------------------------------------------------------------------|-------------------|
| ARMOUR FERTILIZER WORKS, Carteret, N. J.        |                                                                         |                   |
| 8158                                            | Armour Armorganic Plant Food 5-5-0                                      | Ridgefield        |
| 8428                                            | Armour Big Crop Fertilizer 0-20-20                                      | South Windsor     |
| 8426                                            | Armour Big Crop Fertilizer 5-8-7                                        | South Windsor     |
| 7935                                            | Armour Big Crop Fertilizer 5-10-5                                       | Plantsville       |
| 8194                                            | Armour Big Crop Fertilizer 5-10-10                                      | South Windsor     |
| 7912                                            | Armour Big Crop Fertilizer 7-7-7                                        | Plainville        |
| 8142                                            | Armour Big Crop Fertilizer 10-10-10                                     | Bristol           |
| 8178                                            | Armour Fish Pond Special 20-20-5                                        | South Windsor     |
| 8191                                            | Armour Home & Garden Special 5-10-5                                     | South Windsor     |
| 8192                                            | Armour Lawn Special 10-6-4                                              | South Windsor     |
| 8141                                            | Armour Vertagreen Complete Plant Food for Commercial Crops 2-15-30      | Bristol           |
| 8193                                            | Armour Vertagreen Complete Plant Food for Commercial Crops 3-12-12      | South Windsor     |
| 8177                                            | Armour Vertagreen for Acid-Loving Plants 5-10-10                        | South Windsor     |
| 7909                                            | Armour Vertagreen Plant Food 5-10-5                                     | Plainville        |
| 8425                                            | Armour Vertagreen Plant Food for Commercial Crops 6-12-6                | South Windsor     |
| 8190                                            | Armour Vertagreen Plant Food for Commercial Crops 6-12-12               | South Windsor     |
| 8424                                            | Armour Vertagreen Plant Food for Commercial Crops Tobacco Special 6-4-7 | South Windsor     |
| 7917                                            | Armour Vertagreen Plant Food for Turf & Trees 10-6-4                    | Plantsville       |
| 8189                                            | Armour Vertagreen Rose Food 5-10-5                                      | South Windsor     |
| 8140                                            | Armour Vertagreen Turf Food with Chlor-dane 10-6-4                      | Bristol           |
| 8123                                            | Armour Vertagreen Turf Maker 8-6-2                                      | Buckland          |
| 8195                                            | Armour Vertagreen Turf Maker 8-6-2                                      | South Windsor     |
| F. A. BARTLETT TREE EXPERT CO., Stamford, Conn. |                                                                         |                   |
| 7754                                            | Bartlett Green Tree Food 6-8-6                                          | Danbury           |
| BENNETT & CLAYTON CO., INC., Cranbury, N. J.    |                                                                         |                   |
| 8170                                            | B/C Brand Fertilizer 5-10-5                                             | New Canaan        |

~~~~~ indicates deficiencies.

CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

| Nitrate | Nitrogen, per cent | | | | Phosphoric acid, per cent | | | Potash, per cent | |
|---------|--------------------|---------------|-----------------|--------------|---------------------------|-------|-----------------------|------------------|--------------|
| | Ammoniacal | Water-soluble | Water-insoluble | Total | Citrate-insoluble | Total | So-called "available" | As muriate | Total |
| 0.00 | 0.00 | 0.66 | 5.00 | 5.66 | 1.25 | 7.16 | 5.91 | | |
| | | | | | 0.87 | 17.95 | <u>17.08</u> | 15.96 | <u>17.77</u> |
| 0.26 | 4.64 | 0.48 | 0.00 | 5.38 | 1.05 | 10.91 | <u>9.86</u> | 10.17 | <u>11.85</u> |
| 0.00 | 3.84 | 1.02 | 0.14 | 5.00 | 1.00 | 11.80 | 10.80 | 4.61 | 5.47 |
| 0.00 | 4.64 | 0.50 | 0.00 | 5.14 | 0.70 | 10.70 | 10.00 | 7.45 | 11.20 |
| 0.00 | 5.36 | 0.76 | 0.00 | <u>6.12</u> | 0.78 | 10.40 | 9.62 | 5.84 | 7.47 |
| 0.19 | 8.56 | 0.54 | 0.11 | <u>9.40</u> | 0.48 | 11.32 | 10.84 | 6.99 | 10.70 |
| 0.00 | 2.92 | 13.79 | 0.00 | <u>16.80</u> | 0.78 | 19.20 | <u>18.42</u> | 5.95 | 6.79 |
| 0.00 | 4.52 | 0.32 | 0.16 | <u>5.00</u> | 0.70 | 11.62 | <u>10.92</u> | 5.22 | 5.22 |
| 0.85 | 6.72 | 1.67 | 0.00 | <u>9.24</u> | 0.55 | 8.32 | 7.77 | 5.27 | 6.38 |
| 0.00 | 1.60 | 0.84 | 0.18 | 2.62 | 0.50 | 15.35 | 14.85 | 21.69 | <u>27.52</u> |
| 0.39 | 2.44 | 0.47 | 0.00 | 3.30 | 1.73 | 14.50 | 12.77 | 6.19 | <u>10.98</u> |
| 0.00 | 3.92 | 0.47 | 1.09 | 5.48 | 0.85 | 13.30 | 12.45 | 9.14 | 10.18 |
| 0.27 | 4.64 | 0.00 | 0.25 | 5.16 | 1.00 | 11.90 | 10.90 | 1.98 | 5.79 |
| 0.33 | 4.80 | 0.46 | 0.15 | <u>5.74</u> | 1.03 | 14.27 | 13.24 | 3.19 | 6.18 |
| 0.00 | 5.48 | 0.89 | 0.15 | 6.52 | 0.54 | 13.10 | 12.56 | 9.96 | 12.24 |
| 0.21 | 1.88 | 3.64 | 0.75 | 6.48 | 0.35 | 4.97 | 4.62 | 0.45 | 7.13 |
| 0.47 | 8.60 | 0.48 | 1.55 | 11.10 | 0.65 | 7.60 | 6.95 | 3.84 | 4.43 |
| 0.31 | 4.24 | 0.24 | 1.07 | 5.86 | 0.98 | 12.52 | 11.54 | 8.91 | 9.04 |
| 0.00 | 8.24 | 0.65 | 1.51 | 10.40 | 0.73 | 6.90 | 6.17 | 3.12 | 4.15 |
| 0.48 | 2.68 | 1.80 | 4.40 | 9.36 | 0.75 | 7.70 | 6.95 | 2.24 | 3.10 |
| 0.00 | 2.88 | 1.59 | 4.01 | 8.48 | 0.78 | 7.50 | 6.72 | 2.24 | 2.65 |
| 0.33 | 4.40 | 0.64 | 0.97 | 6.34 | 0.63 | 8.40 | <u>7.77</u> | 5.06 | 6.14 |
| 0.60 | 4.00 | 0.96 | 0.16 | 5.72 | 0.43 | 10.69 | 10.26 | 4.16 | 5.19 |

TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station No. | Manufacturer and brand | Place of sampling |
|--|---|--------------------|
| JOSEPH BRECK & SONS CORP., Boston, Mass. | | |
| 8378 ⁴ | Breck's Garden-Gro 5-10-10 with 1.2 Magnesium | Manchester |
| 8046 | Breck's New Improved Turf-Gro 20-6-4 | Stamford |
| 8377 | Breck's Turf-Gro 8-6-2 | Manchester |
| BROOKSIDE NURSERIES, INC., Darien, Conn. | | |
| 8086 | Brookside's Natures Nutrients 6-6-8 | Darien |
| CADWELL & JONES, INC., Hartford, Conn. | | |
| 7895 | J & C Hi-Organic Fertilizer 10-6-4 | Hartford |
| CHAMBERLIN & BARCLAY INC., Cranbury, N. J. | | |
| 8152 | Old Reliable Fertilizer 10-6-4 | Hamden |
| CONSOLIDATED RENDERING CO., Boston, Mass. | | |
| 7737 ¹ | Corenco 0-15-30 | Newtown |
| 8339 | Corenco 0-15-30 | West Haven |
| 7981 ^{1, 5} | Corenco 0-20-20 with Boron | Southbury |
| 8134 ^{1, 6} | Corenco 0-20-20 with Boron | Cheshire |
| 8102 | Corenco 5-8-7 | Norwich |
| 8174 | Corenco 5-10-5 | Norwalk |
| 8122 | Corenco 5-10-5 Home Garden | Buckland |
| 8351 | Corenco 5-10-5 Rose Special | West Haven |
| 8348 | Corenco 5-10-10 | West Haven |
| 8388 ¹ | Corenco 5-10-10 | Storrs |
| 8395 ⁷ | Corenco 5-10-10-1.2 Magnesium | West Haven |
| 8397 | Corenco 5-10-10 Liquid Fertilizer Concentrate | West Haven |
| 8398 | Corenco 6-3-6 Perfection | Springfield, Mass. |
| 8399 | Corenco 6-3-6 Premium Tobacco Grower | Springfield, Mass. |

~ 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%.

CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

| Nitrate | Nitrogen, per cent | | | | Phosphoric acid, per cent | | | Potash, per cent | |
|---------|--------------------|---------------|-----------------|--------------|---------------------------|-------|-----------------------|------------------|--------------|
| | Ammoniacal | Water-soluble | Water-insoluble | Total | Citrate-insoluble | Total | So-called "available" | As muriate | Total |
| 0.00 | 3.60 | 1.42 | 0.00 | 5.02 | 1.13 | 11.27 | 10.14 | 6.91 | 10.04 |
| 1.70 | 5.32 | 8.64 | 3.30 | <u>18.96</u> | 0.50 | 6.47 | 5.97 | 2.70 | 4.36 |
| 0.00 | 5.48 | 1.08 | 1.56 | 8.12 | 0.60 | 6.92 | 6.32 | | 2.46 |
| 0.00 | 0.00 | 0.97 | 6.13 | 7.10 | 0.63 | 9.18 | 8.55 | 1.21 | 8.53 |
| 0.88 | 4.84 | 2.40 | 1.62 | <u>9.74</u> | 0.45 | 7.40 | 6.95 | 3.00 | 4.59 |
| 0.19 | 6.20 | 1.15 | 2.02 | <u>9.56</u> | 0.28 | 7.10 | 6.82 | 4.12 | 5.57 |
| | | | | | 0.40 | 16.10 | 15.70 | 2.92 | 30.54 |
| | | | | | 0.35 | 16.34 | 15.99 | 25.26 | <u>25.92</u> |
| | | | | | 0.73 | 22.30 | 21.57 | 19.20 | <u>20.07</u> |
| | | | | | 0.65 | 21.20 | 20.55 | 9.40 | 20.13 |
| 0.53 | 3.40 | 0.92 | 0.21 | 5.06 | 0.40 | 8.80 | 8.40 | 5.94 | 7.44 |
| 0.00 | 3.40 | 1.54 | 0.24 | 5.18 | 0.60 | 11.30 | 10.70 | 3.73 | 5.80 |
| 0.82 | 3.32 | 0.64 | 0.30 | 5.08 | 0.55 | 11.10 | 10.55 | 4.89 | 5.77 |
| 0.00 | 2.64 | 1.52 | 1.06 | 5.22 | 0.85 | 12.00 | 11.15 | 8.72 | 9.47 |
| 0.87 | 3.00 | 1.12 | 0.11 | 5.10 | 0.33 | 11.12 | 10.79 | 9.22 | 10.01 |
| 0.00 | 3.88 | 1.77 | 0.09 | 5.74 | 0.35 | 10.60 | 10.25 | 8.91 | 10.04 |
| 0.66 | 2.88 | 1.35 | 0.13 | 5.02 | 0.63 | 11.60 | 10.97 | 6.84 | 10.08 |
| 0.36 | 3.40 | 1.72 | 0.00 | 5.48 | 0.00 | 10.30 | 10.30 | 9.07 | 10.70 |
| 0.00 | 0.00 | 2.61 | 3.39 | 6.00 | 0.25 | 4.47 | 4.22 | 0.24 | 6.38 |
| 0.00 | 0.00 | 3.04 | 2.54 | <u>5.58</u> | 0.18 | 3.95 | 3.77 | 0.23 | 6.65 |

TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station No. | Manufacturer and brand | Place of sampling |
|--------------------|--|-------------------|
| 8132 ¹ | Corenco 6-8-8 | Cheshire |
| 8346 ⁸ | Corenco 6-8-8-1.2 Magnesium | West Haven |
| 8133 ¹ | Corenco 7-7-7 | Cheshire |
| 8349 | Corenco 7-7-7 | West Haven |
| 8389 ¹ | Corenco 7-7-7 | Storrs |
| 8027 | Corenco 8-6-4 Landscape | Thompsonville |
| 7674 | Corenco 8-6-4 Turf Green | Shelton |
| 8356 | Corenco 8-6-4 Turf Green | West Haven |
| 8347 ⁹ | Corenco 8-12-12-.9 Magnesium | West Haven |
| 7979 ¹ | Corenco 8-16-16 | Southbury |
| 8155 ¹ | Corenco 8-16-16 | Newtown |
| 8358 | Corenco 8-16-16 | Wapping |
| 8396 | Corenco 10-5-5 Liquid Green | West Haven |
| 7673 | Corenco 10-6-4 Golf & Lawn | Shelton |
| 7753 | Corenco 10-6-4 Golf & Lawn | Danbury |
| 8034 | Corenco 10-6-4 Golf & Lawn | West Suffield |
| 8353 | Corenco 10-8-2 Timberline | West Haven |
| 8103 | Corenco 10-10-10 | Norwich |
| 8437 ¹ | Corenco 10-10-10 | Willimantic |
| 8015 | Corenco Organic Turf Fertilizer 4.75-4-0 | Thompsonville |
| 8350 | Corenco Rhododendron, Azalea & Blueberry Special 7-7-7 | West Haven |
| 8014 | Corenco Spurz-on 3-2.5-1.5 | Thompsonville |
| | THE DAVEY TREE EXPERT Co., Kent, Ohio | |
| 7872 | Davey Tree Food 12-4-4 | Old Greenwich |
| | R. G. DAVIS CO., New Haven, Conn. | |
| 7675 | Organo 10-5-5 | New Haven |
| | DAVISON CHEMICAL CO., Baltimore, Md. | |
| 7991 | 0-15-30 Davco Granulated Fertilizer | Torrington |
| 8440 ¹⁰ | 0-15-30 Davco Granulated Fertilizer with Boron | Willimantic |
| 8448 | 0-20-20 Davco Granulated Fertilizer | Willimantic |

~ 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%.

CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

| Nitrate | Nitrogen, per cent | | | | Phosphoric acid, per cent | | | Potash, per cent | |
|---------|--------------------|---------------|-----------------|-------|---------------------------|-------|-----------------------|------------------|-------|
| | Ammoniacal | Water-soluble | Water-insoluble | Total | Citrate-insoluble | Total | So-called "available" | As muriate | Total |
| 0.90 | 3.88 | 1.08 | 0.22 | 6.08 | 0.20 | 8.41 | 8.21 | 5.71 | 8.05 |
| 0.89 | 3.96 | 0.96 | 0.19 | 6.00 | 0.40 | 9.17 | 8.77 | 1.00 | 8.01 |
| 0.32 | 4.92 | 1.28 | 0.24 | 6.76 | 0.15 | 8.10 | 7.95 | 3.15 | 7.40 |
| 0.00 | 5.20 | 1.65 | 0.15 | 7.00 | 0.20 | 8.25 | 8.05 | 4.82 | 7.68 |
| 1.33 | 3.92 | 1.64 | 0.11 | 7.00 | 0.35 | 8.40 | 8.05 | 6.37 | 7.40 |
| 2.52 | 4.76 | 0.12 | 1.14 | 8.54 | 0.40 | 7.11 | 6.71 | 3.85 | 4.43 |
| 0.00 | 3.96 | 1.70 | 2.18 | 7.84 | 0.60 | 6.90 | 6.30 | 6.24 | 6.31 |
| 0.00 | 2.00 | 3.70 | 2.78 | 8.48 | 0.45 | 7.35 | 6.90 | 4.69 | 4.78 |
| 0.61 | 5.48 | 0.87 | 0.21 | 7.17 | 0.40 | 13.07 | 12.67 | 11.07 | 11.07 |
| 1.94 | 5.24 | 0.57 | 0.27 | 8.02 | 0.45 | 18.50 | 18.05 | 15.47 | 16.15 |
| 1.91 | 5.36 | 0.52 | 0.21 | 8.00 | 0.37 | 17.00 | 16.63 | 15.37 | 15.37 |
| 1.83 | 5.60 | 0.57 | 0.00 | 8.00 | 0.39 | 16.00 | 15.61 | 14.91 | 16.40 |
| 0.00 | 1.72 | 8.32 | 0.00 | 10.04 | 0.00 | 5.07 | 5.07 | 2.87 | 5.16 |
| 0.00 | 5.08 | 3.68 | 1.60 | 10.36 | 0.30 | 6.40 | 6.10 | 4.97 | 4.97 |
| 0.00 | 0.44 | 7.70 | 1.18 | 9.32 | 0.43 | 8.45 | 8.02 | 4.22 | 4.43 |
| 0.62 | 8.12 | 0.72 | 0.20 | 9.66 | 0.25 | 6.77 | 6.52 | 2.93 | 4.33 |
| 0.69 | 2.36 | 2.87 | 3.69 | 9.61 | 0.50 | 9.25 | 8.75 | 3.45 | 4.68 |
| 0.47 | 7.16 | 1.30 | 0.15 | 9.08 | 0.40 | 11.11 | 10.71 | 9.11 | 10.30 |
| 1.96 | 6.88 | 0.10 | 0.12 | 9.06 | 0.25 | 11.20 | 10.95 | 9.14 | 10.04 |
| | | | | 5.20 | 0.93 | 7.70 | 6.77 | | |
| 0.35 | 5.44 | 1.12 | 0.11 | 7.02 | 0.28 | 7.87 | 7.59 | 6.23 | 7.54 |
| | | | | 4.28 | | 3.77 | | 0.19 | 2.81 |
| 1.21 | 10.12 | 0.32 | 0.75 | 12.40 | 0.63 | 6.10 | 5.47 | 3.51 | 4.30 |
| 0.00 | 5.84 | 3.02 | 1.14 | 10.00 | 0.28 | 6.25 | 5.97 | 4.87 | 5.50 |
| | | | | | 0.81 | 20.33 | 19.52 | 24.04 | 24.21 |
| | | | | | 0.60 | 15.90 | 15.30 | 11.82 | 29.58 |
| | | | | | 0.78 | 21.65 | 20.87 | 16.51 | 21.42 |

TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station No. | Manufacturer and brand | Place of sampling |
|---|---|-------------------|
| 7984 | 5-10-5 Davco Granulated Turf & Garden Food (Prem) | New Milford |
| 8438 | 5-10-10 Davco Granulated 3G Fertilizer | Willimantic |
| 8441 | 5-10-10 Davco Quality Fertilizer | Willimantic |
| 8198 ¹¹ | 6-8-8 Davco Granulated 3G Fertilizer with Boron | Wilson |
| 8439 | 7-7-7 Davco Granulated Fertilizer | Willimantic |
| 7983 | 8-16-16 Davco Granulated 3G Fertilizer | New Milford |
| 7985 | 10-6-4 Davco Granulated 3G Fertilizer | New Milford |
| 7990 | 10-10-10 Davco Granulated 3G Fertilizer | Torrington |
| 8197 ¹² | 10-10-10 Davco Granulated 3G Fertilizer with Boron | Wilson |
| 8442 | 15-10-10 Davco Granulated 3G Fertilizer | Willimantic |
| DAYTON FERTILIZER CORP., Dayton, N. J. | | |
| 8173 | Grand Garden Plant Food 6-10-4 | New Canaan |
| 8172 | Grand Lawn Brand Hi-Organic Plant Food with Heptachlor 10-6-4 | New Canaan |
| 7870 | Grand Union Brand Fertilizer 6-10-4 | Greenwich |
| EASTERN STATES FARMERS' EXCHANGE, INC.
West Springfield, Mass. | | |
| 7672 ¹³ | Eastern States 0-15-30 with Boron | Willimantic |
| 7992 | Eastern States 0-25-25 | Torrington |
| 7629 ¹⁴ | Eastern States 5-10-10 S. M. with 1.2 Magnesium | Hazardville |
| 8383 ¹⁵ | Eastern States 8-12-12-1.2 Magnesium | Rockville |
| 7628 ¹⁶ | Eastern States 8-12-12 L. C. with 1.2 Magnesium | Hazardville |
| 7740 ¹⁷ | Eastern States 8-16-16-.6 Magnesium | Bethel |
| 7669 ¹⁸ | Eastern States 10-10-10-.6 Magnesium | Willimantic |

~~~~~ indicates deficiencies.

<sup>11</sup> Boron guaranteed, 0.0825%; found, 0.17%.

<sup>12</sup> Boron guaranteed, 0.0825%; found, 0.15%.

<sup>13</sup> Boron guaranteed, 0.2%; found, 0.46%.

<sup>14</sup> Magnesium guaranteed, 1.2%; found, 3.28%.

<sup>15</sup> Magnesium guaranteed, 1.2%; found, 1.39%.

<sup>16</sup> Magnesium guaranteed, 1.2%; found, 1.60%.

<sup>17</sup> Magnesium guaranteed, 0.6%; found, 0.68%.

<sup>18</sup> Magnesium guaranteed, 0.6%; found, 0.64%.

CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

| Nitrate | Nitrogen, per cent |               |                 |       | Phosphoric acid, per cent |       |                       | Potash, per cent |       |
|---------|--------------------|---------------|-----------------|-------|---------------------------|-------|-----------------------|------------------|-------|
|         | Ammoniacal         | Water-soluble | Water-insoluble | Total | Citrate-insoluble         | Total | So-called "available" | As muriate       | Total |
| 0.92    | 3.80               | 0.12          | 0.18            | 5.02  | 0.63                      | 15.75 | 15.12                 | 10.28            | 11.01 |
| 0.00    | 3.36               | 1.64          | 0.00            | 5.00  | 0.28                      | 10.97 | 10.69                 | 9.22             | 10.55 |
| 0.00    | 3.72               | 1.30          | 0.00            | 5.02  | 0.90                      | 11.22 | 10.32                 | 7.36             | 9.47  |
| 1.13    | 4.16               | 0.60          | 0.11            | 6.00  | 0.45                      | 8.77  | 8.32                  | 7.13             | 8.76  |
| 1.39    | 4.48               | 0.91          | 0.00            | 6.78  | 0.23                      | 8.00  | 7.77                  | 7.28             | 7.88  |
| 1.97    | 5.24               | 0.72          | 0.07            | 8.00  | 0.85                      | 17.30 | 16.45                 | 14.86            | 15.48 |
| 2.22    | 6.40               | 0.60          | 0.00            | 9.22  | 0.30                      | 9.70  | 9.40                  | 5.21             | 6.18  |
| 1.19    | 6.72               | 2.04          | 0.07            | 10.02 | 0.35                      | 10.90 | 10.55                 | 8.42             | 9.14  |
| 1.56    | 6.40               | 1.22          | 0.00            | 9.18  | 0.38                      | 11.11 | 10.73                 | 9.24             | 10.44 |
| 2.50    | 9.40               | 0.52          | 0.16            | 12.58 | 0.48                      | 12.22 | 11.74                 | 6.39             | 11.16 |
| 1.18    | 4.68               | 0.56          | 0.14            | 6.56  | 0.33                      | 10.82 | 10.49                 | 3.89             | 4.52  |
| 0.00    | 5.84               | 2.74          | 0.84            | 9.42  | 0.30                      | 7.70  | 7.40                  | 4.42             | 4.52  |
| 0.98    | 4.60               | 0.76          | 0.06            | 6.40  | 0.28                      | 10.80 | 10.52                 | 3.89             | 4.18  |
| 0.69    | 3.72               | 0.80          | 0.09            | 5.30  | 0.38                      | 10.42 | 10.04                 | 7.66             | 11.39 |
| 1.10    | 5.64               | 1.24          | 0.16            | 8.14  | 0.35                      | 12.70 | 12.35                 | 7.41             | 11.05 |
| 0.00    | 5.36               | 2.70          | 0.06            | 8.12  | 0.30                      | 13.10 | 12.80                 | 1.20             | 13.63 |
| 2.36    | 5.32               | 0.06          | 0.00            | 7.74  | 0.38                      | 16.50 | 16.12                 | 14.71            | 16.15 |
| 0.84    | 6.80               | 1.72          | 0.16            | 9.52  | 0.33                      | 10.80 | 10.47                 | 10.17            | 11.12 |

TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station No.        | Manufacturer and brand                            | Place of sampling |
|--------------------|---------------------------------------------------|-------------------|
| 8108 <sup>19</sup> | Eastern States 10-10-10 L. C. with 1.2 Magnesium  | Buckland          |
| 7623               | Eastern States 15-10-10                           | Granby            |
| 7741 <sup>20</sup> | Eastern States Green Lawn 10-5-5                  | Bethel            |
|                    | THE ESPOMA CO., Millville, N. J.                  |                   |
| 7865               | Espoma 3-2-1                                      | Greenwich         |
| 8168               | Espoma Garden 4-6-6                               | New Canaan        |
| 8167               | Holly-Tone 4-6-4                                  | New Canaan        |
|                    | FIESTAR, INC., New York, N. Y.                    |                   |
| 7941               | Fiestar 2-2-0                                     | Waterbury         |
|                    | G-D GARDEN PRODUCTS, INC., Huntington Sta., N. Y. |                   |
| 7819               | G-D All Purpose 5-10-5                            | Hamden            |
| 7762               | Green D 50% Organic 10-6-4                        | Hamden            |
| 7820               | Green D 100% Organic 10-6-4                       | Hamden            |
|                    | THE GARDEN CENTER INC., West Hartford, Conn.      |                   |
| 8331               | Garden Center Lawn Fertilizer 10-6-4              | West Hartford     |
|                    | GOULARD & OLENA, INC., Skillman, N. J.            |                   |
| 6419               | G & O Doris Turf Special 5-10-5                   | West Hartford     |
| 6420               | G & O Doris Turf Special 5-10-5                   | West Hartford     |
| 8163 <sup>21</sup> | G & O Hyganic 10-6-4                              | New Canaan        |
| 8162               | G & O Prizegro 5-10-5                             | New Canaan        |
| 7841               | G & O Special Food for Bulbs 5-6-15               | Greenwich         |
| 7840               | G & O Tomato 3-12-13                              | Greenwich         |

~ indicates deficiencies.

<sup>19</sup> Magnesium guaranteed, 1.2%; found, 1.50%.

<sup>20</sup> Magnesium guaranteed, 1.2%; found, 4.10%.

<sup>21</sup> 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%.

CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

| Nitrate | Nitrogen, per cent |               |                 |       | Phosphoric acid, per cent |       |                       | Potash, per cent |       |
|---------|--------------------|---------------|-----------------|-------|---------------------------|-------|-----------------------|------------------|-------|
|         | Ammoniacal         | Water-soluble | Water-insoluble | Total | Citrate-insoluble         | Total | So-called "available" | As muriate       | Total |
| 0.44    | 6.64               | 2.84          | 0.08            | 10.00 | 0.45                      | 10.77 | 10.32                 | 0.53             | 10.48 |
| 0.80    | 12.28              | 1.69          | 0.05            | 14.82 | 0.13                      | 10.87 | 10.74                 | 9.08             | 10.40 |
| 0.84    | 2.24               | 2.10          | 4.26            | 9.44  | 0.23                      | 5.90  | 5.67                  | 3.21             | 5.19  |
| 0.00    | 1.84               | 0.63          | 1.87            | 4.34  | 0.28                      | 3.95  | 3.67                  | 0.85             | 2.94  |
| 0.00    | 5.28               | 0.31          | 0.79            | 6.38  | 0.33                      | 5.35  | 5.02                  | 8.96             | 10.01 |
| 0.00    | 3.60               | 0.50          | 1.38            | 5.48  | 0.58                      | 7.27  | 6.69                  | 4.70             | 6.07  |
| 0.00    | 0.16               | 2.20          | 0.00            | 2.36  | 0.20                      | 3.50  | 3.30                  |                  |       |
| 0.47    | 3.16               | 0.88          | 0.23            | 4.74  | 0.10                      | 10.95 | 10.85                 | 4.83             | 5.63  |
| 0.33    | 4.84               | 4.70          | 0.29            | 10.16 | 0.33                      | 6.70  | 6.37                  | 3.73             | 4.49  |
| 0.00    | 2.64               | 5.90          | 2.70            | 11.24 | 0.38                      | 6.75  | 6.37                  | 2.03             | 4.15  |
| 0.76    | 4.24               | 3.20          | 1.82            | 10.02 | 0.63                      | 7.09  | 6.46                  | 3.73             | 4.21  |
| 0.42    | 1.76               | 2.65          | 0.59            | 5.42  | 0.25                      | 11.00 | 10.75                 | 4.30             | 5.22  |
| 0.00    | 1.36               | 1.74          | 0.96            | 4.06  | 0.65                      | 11.00 | 10.35                 | 4.58             | 5.34  |
| 0.35    | 6.68               | 2.28          | 0.87            | 10.18 | 0.35                      | 6.62  | 6.27                  | 3.84             | 4.68  |
| 0.26    | 3.24               | 0.96          | 1.28            | 5.74  | 0.38                      | 11.37 | 10.99                 | 5.11             | 5.84  |
| 0.00    | 3.84               | 0.70          | 1.10            | 5.64  | 0.53                      | 7.70  | 7.17                  | 14.24            | 15.97 |
| 0.00    | 2.16               | 0.45          | 0.89            | 3.50  | 0.78                      | 13.00 | 12.22                 | 12.16            | 13.02 |



TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station No.          | Manufacturer and brand                            | Place of sampling |
|----------------------|---------------------------------------------------|-------------------|
|                      | GREGORY-DOYLE, INC., Huntington Sta., N. Y.       |                   |
| 7982 <sup>1</sup>    | Gregory-Doyle 10-6-4 50% Organic                  | Southbury         |
| 8436 <sup>1</sup>    | Gregory-Doyle 10-6-4 50% Organic                  | New Britain       |
| 8154 <sup>1</sup>    | Gregory-Doyle 10-10-10                            | Newtown           |
|                      | HALSTEAD DISTRIBUTING CO., Mt. Kisco, N. Y.       |                   |
| 8157                 | 10-6-4 for Lawns Gardens & Shrubs 50% Organic     | Ridgefield        |
|                      | THE CHARLES C. HART SEED CO., Wethersfield, Conn. |                   |
| 7890                 | Hart's All Purpose Plant Food 5-10-5              | Wethersfield      |
| 7888                 | Hart's Turf Food 20-10-5                          | Wethersfield      |
|                      | THE HUBBARD-HALL CHEMICAL CO., Waterbury, Conn.   |                   |
| 7996                 | Green Gro 6-7-4                                   | Portland          |
| 7997                 | Green Ribbon Plant Food 5-10-5                    | Portland          |
| 7995                 | HH Evergreen Food 4-10-4                          | Portland          |
| 8105                 | HH Lawn Fertilizer 8-6-2                          | Norwich           |
| 8092                 | HH Lawn Fertilizer 8-6-2 with Chlordane           | Norwich           |
| 7678                 | HH Nitroganic 5-4-0                               | New Haven         |
| 8091                 | HH Plant Food 5-10-5                              | Darien            |
| 9339                 | HH Plant Food 5-10-5                              | Darien            |
| 7683                 | HH Rose Food 7-10-5                               | Hamden            |
| 8463                 | HH Special Turf Fertilizer 10-3-3                 | Portland          |
| 7679                 | HH Turf & Tree Food 10-6-4                        | Cheshire          |
| 8101                 | HH Weed-Kil Lawn Food 6-10-4 with 2, 4-D          | Norwich           |
| 8004                 | Liberty Fertilizer 0-15-30                        | Portland          |
| 8367                 | Liberty Fertilizer 0-20-20                        | Windsorville      |
| 8465 <sup>1,22</sup> | Liberty Fertilizer 0-20-20 with Boron             | Middletown        |
| 8368                 | Liberty Fertilizer 4-8-20                         | Windsorville      |
| 7758                 | Liberty Fertilizer 5-8-7                          | Danbury           |
| 8429 <sup>1</sup>    | Liberty Fertilizer 5-8-7                          | Windsor Locks     |

~ indicates deficiencies.

<sup>1</sup> State purchase.

<sup>22</sup> Boron found, 0.15%.

CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

| Nitrate | Nitrogen, per cent |               |                 |       | Phosphoric acid, per cent |       |                       | Potash, per cent |       |
|---------|--------------------|---------------|-----------------|-------|---------------------------|-------|-----------------------|------------------|-------|
|         | Ammoniacal         | Water-soluble | Water-insoluble | Total | Citrate-insoluble         | Total | So-called "available" | As muriate       | Total |
| 0.26    | 3.96               | 0.32          | 4.62            | 9.16  | 0.30                      | 7.97  | 7.67                  | 4.22             | 5.10  |
| 0.00    | 5.84               | 2.72          | 1.10            | 9.66  | 0.28                      | 7.03  | 6.75                  | 3.01             | 4.68  |
| 0.00    | 4.28               | 3.63          | 2.13            | 10.04 | 0.48                      | 10.20 | 9.72                  | 7.98             | 10.08 |
| 1.46    | 6.72               | 2.52          | 1.36            | 12.06 | 0.28                      | 8.70  | 8.42                  | 4.20             | 5.10  |
| 1.27    | 3.16               | 0.52          | 0.21            | 5.16  | 0.10                      | 10.60 | 10.50                 | 2.46             | 4.97  |
| 0.00    | 2.68               | 14.78         | 2.54            | 20.00 | 0.50                      | 13.50 | 13.00                 | 5.13             | 5.41  |
| 0.76    | 4.00               | 0.48          | 0.86            | 6.10  | 0.58                      | 8.42  | 7.84                  | 4.00             | 4.43  |
| 0.79    | 3.04               | 1.04          | 0.19            | 5.06  | 0.73                      | 11.34 | 10.61                 | 4.49             | 5.47  |
| 0.00    | 1.84               | 1.44          | 1.18            | 4.46  | 0.43                      | 11.45 | 11.02                 | 3.65             | 4.43  |
| 0.52    | 3.56               | 3.44          | 0.70            | 8.22  | 0.50                      | 6.52  | 6.02                  | 2.20             | 2.62  |
| 0.17    | 3.36               | 2.95          | 0.66            | 7.14  | 0.53                      | 6.57  | 6.04                  | 1.74             | 2.46  |
| 0.00    | 0.20               | 0.08          | 5.64            | 5.92  | 1.35                      | 7.75  | 6.40                  |                  |       |
| 0.60    | 2.20               | 1.76          | 0.86            | 5.42  | 0.65                      | 11.27 | 10.62                 | 4.18             | 5.38  |
| 0.11    | 2.00               | 1.96          | 1.07            | 5.14  | 0.65                      | 10.32 | 9.67                  | 4.90             | 5.50  |
| 0.90    | 4.20               | 1.00          | 1.54            | 7.64  | 1.43                      | 12.70 | 11.27                 | 0.58             | 6.35  |
| 0.00    | 0.40               | 3.52          | 6.18            | 10.10 | 0.55                      | 4.62  | 4.07                  | 4.70             | 4.78  |
| 0.54    | 5.16               | 3.64          | 1.88            | 11.22 | 0.53                      | 7.30  | 6.77                  | 4.17             | 4.43  |
| 0.00    | 4.92               | 1.24          | 0.78            | 6.94  | 1.55                      | 12.50 | 10.95                 | 3.64             | 4.52  |
|         |                    |               |                 |       | 0.00                      | 15.52 | 15.52                 | 28.06            | 29.43 |
|         |                    |               |                 |       | 0.58                      | 21.85 | 21.27                 | 16.24            | 20.07 |
|         |                    |               |                 |       | 0.30                      | 20.20 | 19.90                 | 17.73            | 23.82 |
| 0.81    | 2.72               | 0.40          | 0.07            | 4.00  | 0.34                      | 8.42  | 8.08                  | 17.91            | 20.59 |
| 0.56    | 3.80               | 0.65          | 0.11            | 5.12  | 0.30                      | 8.90  | 8.60                  | 6.52             | 7.13  |
| 0.00    | 4.00               | 0.96          | 0.30            | 5.26  | 1.28                      | 9.92  | 8.64                  | 5.99             | 8.18  |

TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station No.        | Manufacturer and brand                                     | Place of sampling |
|--------------------|------------------------------------------------------------|-------------------|
| 7646 <sup>1</sup>  | Liberty Fertilizer 5-10-5                                  | North Haven       |
| 7682               | Liberty Fertilizer 5-10-5                                  | Cheshire          |
| 7989               | Liberty Fertilizer 5-10-5                                  | Torrington        |
| 7668               | Liberty Fertilizer 5-10-10                                 | Willimantic       |
| 7976 <sup>1</sup>  | Liberty Fertilizer 5-10-10                                 | Norwich           |
| 8007 <sup>1</sup>  | Liberty Fertilizer 5-10-10                                 | Enfield           |
| 8135 <sup>1</sup>  | Liberty Fertilizer 5-10-10                                 | Cheshire          |
| 8200 <sup>23</sup> | Liberty Fertilizer 6-8-8-1.2 Magnesium and Boron           | Wilson            |
| 8370 <sup>24</sup> | Liberty Fertilizer 6-8-8-1.2 Magnesium                     | Windsorville      |
| 7975               | Liberty Fertilizer 7-7-7                                   | New London        |
| 7835               | Liberty Fertilizer 8-6-2                                   | North Haven       |
| 7834               | Liberty Fertilizer 8-6-4                                   | North Haven       |
| 8362 <sup>25</sup> | Liberty Fertilizer 8-12-12-1.2 Magnesium                   | Windsorville      |
| 8366               | Liberty Fertilizer 8-16-16                                 | Windsorville      |
| 8330 <sup>1</sup>  | Liberty Fertilizer 10-6-4                                  | Hartford          |
| 8136               | Liberty Fertilizer 10-10-10                                | Waterbury         |
| 8373               | Liberty Fertilizer 10-10-10                                | Windsorville      |
| 8461 <sup>1</sup>  | Liberty Fertilizer 10-10-10                                | Portland          |
| 8464 <sup>1</sup>  | Liberty Fertilizer 10-10-10                                | Middletown        |
| 8363 <sup>26</sup> | Liberty New Super Spud 8-10-10-1.2 Magnesium               | Windsorville      |
| 8371 <sup>27</sup> | Liberty Super Bacco Tobacco Fertilizer 6-4-7-1.2 Magnesium | Windsorville      |
| 8361               | Liberty Super Corn Granular Type Fertilizer 10-10-10       | Windsorville      |
| 8364 <sup>28</sup> | Liberty Super Gro 6-12-12-1.2 Magnesium                    | Windsorville      |
| 8357 <sup>29</sup> | Liberty Super Spud 6-8-8-1.2 Magnesium                     | E. Windsor Hill   |
| 8372               | Liberty Tobacco Fertilizer 6-3-6                           | Windsorville      |
| 8462               | Liberty Tobacco Fertilizer 6-3-6                           | Portland          |
| 7830               | Woodruff's Lawn & Tree Food 10-5-5                         | North Haven       |

~ indicates deficiencies.

<sup>1</sup> State purchase.

<sup>23</sup> Magnesium guaranteed, 1.2%; found, 2.43%; Boron guaranteed, 0.0825%; found, 0.070%.

<sup>24</sup> Magnesium guaranteed, 1.2%; found, 1.47%.

<sup>25</sup> Magnesium guaranteed, 1.2%; found, 1.44%.

<sup>26</sup> Magnesium guaranteed, 1.2%; found, 1.76%.

<sup>27</sup> Magnesium guaranteed, 1.2%; found, 1.58%.

<sup>28</sup> Magnesium guaranteed, 1.2%; found, 1.98%.

<sup>29</sup> Magnesium guaranteed, 1.2%; found, 2.34%.

CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

| Nitrate | Nitrogen, per cent |               |                 |       | Phosphoric acid, per cent |       |                       | Potash, per cent |       |
|---------|--------------------|---------------|-----------------|-------|---------------------------|-------|-----------------------|------------------|-------|
|         | Ammoniacal         | Water-soluble | Water-insoluble | Total | Citrate-insoluble         | Total | So-called "available" | As muriate       | Total |
| 0.78    | 1.32               | 1.68          | 1.00            | 4.78  | 0.38                      | 11.40 | 11.02                 | 4.91             | 5.25  |
| 0.00    | 3.32               | 1.57          | 0.23            | 5.12  | 0.58                      | 10.65 | 10.07                 | 4.37             | 5.22  |
| 1.36    | 3.20               | 0.48          | 0.00            | 5.04  | 0.55                      | 11.02 | 10.47                 | 4.06             | 5.41  |
| 0.00    | 3.64               | 1.56          | 0.18            | 5.38  | 0.63                      | 11.00 | 10.37                 | 9.26             | 10.22 |
| 0.00    | 3.36               | 1.78          | 0.00            | 5.14  | 0.50                      | 11.29 | 10.79                 | 9.04             | 10.19 |
| 0.25    | 3.44               | 1.08          | 0.05            | 4.82  | 0.50                      | 11.60 | 11.10                 | 8.88             | 10.93 |
| 0.00    | 4.68               | 0.02          | 0.30            | 5.00  | 0.35                      | 11.24 | 10.89                 | 1.53             | 10.78 |
| 0.00    | 4.44               | 1.40          | 0.00            | 5.84  | 0.45                      | 8.50  | 8.05                  | 0.74             | 8.08  |
| 0.00    | 5.04               | 0.95          | 0.29            | 6.28  | 0.40                      | 9.30  | 8.90                  | 7.00             | 8.66  |
| 0.39    | 5.48               | 0.96          | 0.17            | 7.00  | 0.40                      | 8.25  | 7.85                  | 6.18             | 7.10  |
| 0.00    | 8.16               | 0.33          | 0.21            | 8.70  | 0.28                      | 7.15  | 6.87                  | 3.92             | 4.33  |
| 0.00    | 4.04               | 2.89          | 0.91            | 7.84  | 0.35                      | 6.80  | 6.45                  | 4.20             | 4.81  |
| 1.09    | 5.48               | 0.80          | 0.23            | 7.60  | 0.32                      | 12.30 | 11.98                 | 0.96             | 9.72  |
| 1.02    | 5.24               | 0.73          | 0.12            | 7.11  | 0.75                      | 16.85 | 16.10                 | 9.36             | 13.85 |
| 0.00    | 5.24               | 3.80          | 1.64            | 10.68 | 0.45                      | 7.69  | 7.24                  | 4.38             | 4.81  |
| 0.72    | 7.64               | 0.77          | 0.13            | 9.26  | 0.48                      | 11.94 | 11.46                 | 5.42             | 10.66 |
| 0.37    | 7.44               | 1.48          | 0.09            | 9.38  | 0.48                      | 12.30 | 11.82                 | 4.95             | 10.01 |
| 1.16    | 8.32               | 0.52          | 0.00            | 10.00 | 0.33                      | 10.97 | 10.64                 | 7.86             | 10.26 |
| 1.54    | 7.72               | 0.68          | 0.10            | 10.04 | 0.45                      | 11.32 | 10.87                 | 7.52             | 10.33 |
| 0.00    | 5.76               | 2.29          | 0.21            | 8.26  | 0.58                      | 10.58 | 10.00                 | 0.56             | 10.12 |
| 0.00    | 0.12               | 2.02          | 3.43            | 5.57  | 0.15                      | 4.95  | 4.80                  | 0.27             | 7.20  |
| 1.56    | 6.44               | 0.60          | 0.10            | 8.70  | 0.35                      | 10.90 | 10.55                 | 9.22             | 10.01 |
| 1.01    | 4.76               | 0.20          | 0.25            | 6.22  | 0.53                      | 13.35 | 12.82                 | 8.42             | 11.53 |
| 0.54    | 4.92               | 0.72          | 0.30            | 6.48  | 0.35                      | 9.10  | 8.75                  | 0.72             | 8.18  |
| 1.69    | 0.00               | 2.20          | 2.91            | 6.80  | 0.13                      | 3.65  | 3.52                  | 0.33             | 5.87  |
| 2.50    | 0.00               | 1.60          | 2.22            | 6.32  | 0.25                      | 4.05  | 3.80                  | 0.27             | 6.04  |
| 0.00    | 2.60               | 6.83          | 0.91            | 10.34 | 0.35                      | 5.90  | 5.55                  | 5.30             | 5.57  |

TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station No.                                                  | Manufacturer and brand                            | Place of sampling |
|--------------------------------------------------------------|---------------------------------------------------|-------------------|
| INTERNATIONAL MINERALS & CHEMICAL CORP.<br>No. Woburn, Mass. |                                                   |                   |
| 8041 <sup>30</sup>                                           | Fertilis 8-6-2-.6 Magnesium                       | West Suffield     |
| 8033 <sup>31</sup>                                           | Fertilis 8-6-2-.6 Magnesium & Chlordane           | West Suffield     |
| 7910 <sup>32</sup>                                           | Fertilis Plant Food 5-10-5-1.2 Magnesium          | Plainville        |
| 8032                                                         | Mello-Green Plant Food 5-5-0                      | West Suffield     |
| KAPCO DIVISION, McKeesport, Pa.                              |                                                   |                   |
| 8452                                                         | Kapco 20-20-20                                    | Cromwell          |
| LEBANON CHEMICAL CORP., Lebanon, Pa.                         |                                                   |                   |
| 7891                                                         | Lebanon Azalea Food 7-7-7                         | Wethersfield      |
| 8431                                                         | Lebanon Fertilizer 5-10-10                        | Hartford          |
| 7874                                                         | Lebanon Green Gold 20-10-5                        | Darien            |
| 7902                                                         | Lebanon Hi-Organic 8-8-8                          | Hartford          |
| 7900                                                         | Lebanon Rose Food 7-7-7                           | Hartford          |
| 8430                                                         | Lebanon Truck Crop 5-10-5                         | Hartford          |
| 7897                                                         | Lebanon Uniform 10-6-4                            | Hartford          |
| LEE PATTEN SEED CO., Jersey City, N. J.                      |                                                   |                   |
| 8106                                                         | Patco Lawn Food 9-8-3                             | Norwich           |
| THE MAMLON CO., New Haven, Conn.                             |                                                   |                   |
| 8419                                                         | Fer-Mel General Purpose Plant Food<br>18-18-18    | New Haven         |
| 8420                                                         | Fer-Mel Turf & Tree Food 24-12-12                 | New Haven         |
| McARDLE'S SEED CO., Greenwich, Conn.                         |                                                   |                   |
| 7838                                                         | McArdle's Hi-Organic 10-6-4                       | Greenwich         |
| OLD FOX AGRICULTURAL SALES INC., E. Providence, R. I.        |                                                   |                   |
| 8360 <sup>33</sup>                                           | Old Fox Brand 6-8-8-1.2 Magnesium                 | Wapping           |
| 8359 <sup>34</sup>                                           | Old Fox Brand 6-3-6 Tobacco with 1.2<br>Magnesium | Wapping           |

~ indicates deficiencies.

<sup>30</sup> Magnesium guaranteed, .60%; found, 1.27%.

<sup>31</sup> Magnesium guaranteed, .60%; found, 0.76%.

CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

| Nitrate | Nitrogen,<br>per cent |                   |                     |       | Phosphoric acid,<br>per cent |       |                          | Potash,<br>per cent |       |
|---------|-----------------------|-------------------|---------------------|-------|------------------------------|-------|--------------------------|---------------------|-------|
|         | Ammoniacal            | Water-<br>soluble | Water-<br>insoluble | Total | Citrate-<br>insoluble        | Total | So-called<br>"available" | As<br>muriate       | Total |
| 0.39    | 5.44                  | 0.88              | 1.55                | 8.26  | 0.55                         | 7.10  | 6.55                     | 0.85                | 3.26  |
| 0.87    | 5.16                  | 0.40              | 1.57                | 8.00  | 0.55                         | 7.05  | 6.50                     | 0.12                | 2.40  |
| 0.45    | 3.64                  | 0.88              | 0.15                | 5.12  | 0.73                         | 10.90 | 10.17                    | 4.29                | 5.87  |
| 0.00    | 0.00                  | 0.30              | 5.06                | 5.36  | 0.95                         | 7.29  | 6.34                     |                     |       |
| 0.00    | 8.88                  | 11.14             | 0.00                | 20.02 | 0.53                         | 22.46 | 21.93                    | 9.93                | 20.02 |
| 0.00    | 4.64                  | 1.07              | 1.29                | 7.00  | 0.43                         | 8.07  | 7.64                     | 6.88                | 7.77  |
| 0.72    | 3.44                  | 0.76              | 0.30                | 5.22  | 0.48                         | 11.15 | 10.67                    | 7.95                | 10.22 |
| 0.47    | 2.84                  | 13.48             | 1.97                | 18.76 | 0.53                         | 10.60 | 10.07                    | 5.60                | 5.73  |
| 0.00    | 3.52                  | 1.73              | 2.75                | 8.00  | 0.50                         | 9.52  | 9.02                     | 3.74                | 8.56  |
| 1.36    | 4.88                  | 0.36              | 1.17                | 7.77  | 0.65                         | 9.20  | 8.55                     | 7.89                | 8.32  |
| 1.14    | 3.44                  | 0.76              | 0.00                | 5.34  | 0.25                         | 10.68 | 10.43                    | 4.06                | 5.47  |
| 0.00    | 2.24                  | 3.63              | 3.47                | 9.34  | 0.65                         | 7.82  | 7.17                     | 4.12                | 4.55  |
| 0.00    | 5.64                  | 1.98              | 1.38                | 9.00  | 0.85                         | 8.97  | 8.12                     | 3.44                | 4.27  |
| 1.38    | 3.68                  | 12.44             | 0.00                | 17.50 | 0.10                         | 18.59 | 18.49                    | 12.22               | 18.60 |
| 1.76    | 3.28                  | 19.12             | 0.00                | 24.16 | 0.01                         | 12.66 | 12.65                    | 2.99                | 13.13 |
| 0.23    | 4.44                  | 4.30              | 1.85                | 10.82 | 0.40                         | 7.20  | 6.80                     | 4.24                | 4.24  |
| 0.00    | 4.40                  | 1.55              | 0.07                | 6.02  | 0.28                         | 9.25  | 8.97                     | 5.51                | 8.45  |
| 0.16    | 0.60                  | 1.88              | 2.96                | 5.60  | 0.20                         | 3.90  | 3.70                     | 0.56                | 6.48  |

<sup>32</sup> Magnesium guaranteed, 1.2%; found, 1.47%.

<sup>33</sup> Magnesium guaranteed, 1.2%; found, 1.60%.

<sup>34</sup> Magnesium guaranteed, 1.2%; found, 1.48%.

TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station No.                                    | Manufacturer and brand                              | Place of sampling |
|------------------------------------------------|-----------------------------------------------------|-------------------|
| ROBERT B. PETERS CO., Allentown, Pa.           |                                                     |                   |
| 8457                                           | Peters Special 13-6-6                               | Cromwell          |
| 8458                                           | Peters Special 16-4-24                              | Cromwell          |
| 8459                                           | Peters Special 20-5-30                              | Cromwell          |
| 8460                                           | Peters Special 20-20-20                             | Cromwell          |
| 8456                                           | Peters Special 25-10-10                             | Cromwell          |
| PLANT PRODUCTS CORP., Blue Point, L. I., N. Y. |                                                     |                   |
| 7994 <sup>1</sup>                              | Soluble Fertilizer 12-32-12                         | Portland          |
| 7993 <sup>1</sup>                              | Soluble Fertilizer 32-10-2                          | Portland          |
| FRANK S. PLATT CO., Branford, Conn.            |                                                     |                   |
| 8345                                           | Platt's Lawn Food 10-5-5                            | West Haven        |
| O. M. SCOTT & SONS CO., Marysville, Ohio       |                                                     |                   |
| 7667                                           | Scott's New Turf Builder 20-10-5                    | Manchester        |
| 8084                                           | Scott's Organic 5-2-3                               | Darien            |
| SEABOARD SEED CO., Philadelphia, Pa.           |                                                     |                   |
| 8421                                           | Seaboard's Complete Lawn & Plant Food 20-10-5       | Granby            |
| SEARS, ROEBUCK & CO., Chicago, Ill.            |                                                     |                   |
| 7716                                           | Cross Country Lawn Food 5-5-0                       | Hamden            |
| 7733                                           | Cross Country Lawn Food 5-5-0 with Crabgrass Killer | Hamden            |
| 7715                                           | Cross Country Lawn Food 5-5-0 with Weed Killer      | Hamden            |
| 7946                                           | Cross Country Plant Food 5-10-5                     | New London        |
| M. L. SHOEMAKER DIV., Philadelphia, Pa.        |                                                     |                   |
| 8035                                           | M. L. Shoemaker's "Swift-Sure" 4-10-0               | West Suffield     |

~~~~~ indicates deficiencies.

¹ State purchase.

CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

| Nitrate | Nitrogen, per cent | | | | Phosphoric acid, per cent | | | Potash, per cent | |
|---------|--------------------|---------------|-----------------|-------|---------------------------|-------|-----------------------|------------------|-------|
| | Ammoniacal | Water-soluble | Water-insoluble | Total | Citrate-insoluble | Total | So-called "available" | As muriate | Total |
| 0.00 | 0.00 | 1.43 | 11.57 | 13.00 | 0.23 | 7.12 | 6.89 | 6.44 | 6.82 |
| 0.00 | 1.04 | 16.86 | 0.00 | 17.90 | 0.05 | 5.02 | 4.97 | 19.32 | 30.72 |
| 0.00 | 1.56 | 18.44 | 0.00 | 20.00 | 0.13 | 5.18 | 5.05 | 25.84 | 30.94 |
| 0.00 | 4.24 | 15.92 | 0.00 | 20.16 | 0.08 | 18.75 | 18.67 | 7.33 | 18.35 |
| 1.68 | 2.80 | 20.52 | 0.00 | 25.00 | 0.10 | 10.81 | 10.71 | 8.15 | 10.78 |
| 0.00 | 7.44 | 5.56 | 0.18 | 13.18 | 0.80 | 35.60 | 34.80 | 10.38 | 11.74 |
| 3.87 | 2.84 | 25.20 | 0.11 | 32.02 | 0.45 | 10.70 | 10.25 | 2.24 | 2.85 |
| 0.00 | 6.28 | 2.50 | 1.30 | 10.08 | 0.20 | 5.40 | 5.20 | 5.72 | 6.86 |
| 0.00 | 1.24 | 11.25 | 7.51 | 20.00 | 0.55 | 9.50 | 8.95 | 4.20 | 5.47 |
| 0.00 | 0.52 | 0.87 | 4.09 | 5.48 | 0.33 | 4.07 | 3.74 | 1.14 | 3.99 |
| 0.00 | 2.35 | 14.19 | 2.16 | 18.70 | 0.46 | 10.00 | 9.54 | 5.58 | 6.24 |
| 0.00 | 0.00 | 0.39 | 5.11 | 5.50 | 1.45 | 7.30 | 5.85 | | |
| 0.00 | 0.00 | 0.43 | 5.13 | 5.56 | 1.10 | 13.30 | 12.20 | | |
| 0.00 | 0.00 | 0.28 | 5.32 | 5.60 | 1.03 | 8.81 | 7.78 | | |
| 0.62 | 3.80 | 0.60 | 0.18 | 5.20 | 0.80 | 11.15 | 10.35 | 4.87 | 5.54 |
| 0.00 | 2.64 | 1.66 | 0.30 | 4.60 | 1.15 | 13.02 | 11.87 | | |

TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station No. | Manufacturer and brand | Place of sampling |
|-------------------|--|-------------------|
| | SWIFT & CO., Baltimore, Md. | |
| 7759 | Golden Vigoro 6-10-4 | Danbury |
| 7938 | Golden Vigoro 6-10-4 with End-O-Pest | Waterbury |
| 7738 ¹ | Swift's Blenn Gran-U-Pels 6-18-18 | Newtown |
| 8144 | Vigoro 6-10-4 | Hamden |
| | UNIVERSAL CHEMICAL CO. INC., West Lynn, Mass. | |
| 7896 | Electra Plant Food 5-10-3 | Hartford |
| | WALGREN TREE EXPERTS INC., West Hartford, Conn. | |
| 8000 | Walgren Tree Food 8-6-2 | Portland |
| | OSCAR F. WARNER, Waterbury, Conn. | |
| 8139 | Warner Grubedizer 8-6-4 | Waterbury |
| 8137 | Warner Lawn Food 8-6-4 | Waterbury |
| 8138 | Warner Tree Food 12-6-4 | Waterbury |
| | WHITNEY SEED CO. INC., Buffalo, N. Y. | |
| 8450 | Vital Brand Fertilizer 5-4-2 plus Weed Killer | Willimantic |
| 8449 | Vital Brand Lawn Fertilizer 10-6-4 | Willimantic |
| | GARFIELD WILLIAMSON INC., Jersey City, N. J. | |
| 8127 | Plantspur 4-4-2 | Bridgeport |
| 7706 | Wonderlawn Lawn Food 10-6-4 | Hamden |
| 8128 | Wonderlawn Lawn Food 10-6-4 | Bridgeport |
| | S. D. WOODRUFF & SONS of Wethersfield, Inc.
Wethersfield, Conn. | |
| 7889 | Woodruff's Tuff Turf Turf Food 10-6-4 | Wethersfield |
| | WOODRUFF LAWN PRODUCTS, Milford, Conn. | |
| 7967 | Gro-Sod Lawn Food 10-6-4 | New London |
| 8394 | Gro-Sod Lawn Food 10-6-4 | Milford |
| 8393 | Weed-Nix Lawn Food 6-10-4 | Milford |

~ indicates deficiencies.

¹ State purchase.

CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

| Nitrate | Nitrogen, per cent | | | | Phosphoric acid, per cent | | | Potash, per cent | |
|---------|--------------------|---------------|-----------------|--------------|---------------------------|-------|-----------------------|------------------|-------|
| | Ammoniacal | Water-soluble | Water-insoluble | Total | Citrate-insoluble | Total | So-called "available" | As muriate | Total |
| 0.00 | 1.36 | 1.28 | 3.54 | 6.18 | 0.73 | 12.30 | 11.57 | 0.60 | 3.80 |
| 0.00 | 1.28 | 1.64 | 3.20 | 6.12 | 0.63 | 11.12 | 10.49 | 0.97 | 4.59 |
| 0.28 | 5.00 | 0.54 | 0.26 | 6.08 | 0.73 | 19.40 | 18.67 | 3.33 | 17.10 |
| 0.00 | 4.92 | 0.66 | 0.14 | <u>5.72</u> | 0.63 | 11.37 | 10.74 | 2.96 | 4.52 |
| 0.00 | 2.08 | 0.71 | 2.39 | 5.18 | 0.60 | 11.17 | 10.57 | 2.88 | 3.20 |
| 0.00 | 3.76 | 3.37 | 0.67 | <u>7.80</u> | 0.43 | 6.65 | 6.22 | 2.32 | 2.81 |
| 0.33 | 1.60 | 3.12 | 2.29 | <u>7.34</u> | 0.78 | 8.07 | 7.29 | 4.43 | 4.71 |
| 0.19 | 1.56 | 4.20 | 2.05 | <u>8.00</u> | 0.78 | 6.92 | 6.14 | 3.27 | 4.55 |
| 0.00 | 1.40 | 7.74 | 1.70 | <u>10.84</u> | 0.73 | 7.37 | 6.64 | 3.73 | 4.46 |
| 0.77 | 0.00 | 0.60 | 5.27 | 6.64 | 0.63 | 6.30 | 5.67 | 3.07 | 3.07 |
| 1.01 | 0.00 | 6.92 | 2.77 | 10.70 | 0.80 | 6.86 | 6.06 | 4.26 | 5.34 |
| 0.67 | 1.84 | 0.28 | 1.01 | <u>3.80</u> | 0.23 | 5.00 | 4.77 | 1.65 | 2.59 |
| 0.95 | 4.12 | 1.26 | 0.93 | <u>7.26</u> | 0.60 | 6.65 | 6.05 | 3.65 | 4.46 |
| 0.00 | 5.88 | 3.44 | 0.30 | <u>9.62</u> | 0.33 | 7.80 | 7.47 | 3.07 | 4.08 |
| 0.00 | 3.84 | 4.77 | 1.39 | 10.00 | 0.40 | 6.81 | 6.41 | 3.11 | 4.65 |
| 0.71 | 2.56 | 5.68 | 1.25 | 10.20 | 0.45 | 7.30 | 6.85 | 4.16 | 4.33 |
| 0.00 | 4.48 | 3.92 | 1.82 | 10.22 | 0.48 | 7.00 | 6.52 | 4.06 | 4.59 |
| 0.36 | 4.60 | 0.72 | 0.78 | 6.46 | 1.13 | 11.50 | 10.37 | 3.53 | 4.78 |

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.

| Ammoniacal | Nitrogen, per cent | | Phosphoric acid, per cent | | | | Potash, per cent | | Sand, per cent |
|------------|--------------------|------------------|---------------------------|-------------|------------------|-----------------------------|------------------|------------------|----------------|
| | Total found | Total guaranteed | Citrate-insoluble | Total found | Total guaranteed | So-called "available" found | Total found | Total guaranteed | |
| 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 | <u>1.54</u> | 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 | <u>1.73</u> | 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 | <u>0.56</u> | 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.

| Ammoniacal | Nitrogen, per cent | | Phosphoric acid, per cent | | | | Potash, per cent | | Sand, per cent |
|------------|--------------------|------------------|---------------------------|-------------|------------------|-----------------------------|------------------|------------------|----------------|
| | Total found | Total guaranteed | Citrate-insoluble | Total found | Total guaranteed | So-called "available" found | Total found | Total guaranteed | |
| 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 |
| 7248 | AGRICULTURAL GYPSUM CO., Chicago, Ill.
Land Plaster. Sampled by The Hatheway-Steane Corp., Suffield. | 32.60 | | | |
| 6672 | ROBBIE DURRELL, INC., Westport, Conn.
"Calcaphos" High Calcium Limestone. Sampled by Manufacturer. | 38.63 | 46-48 | 0.46 | .01-.03 |
| 7249 | LEE LIME CORPORATION, Lee, Mass.
Limestone. Sampled by The Hatheway-Steane Corp., Suffield. | 30.21 | | 20.41 | |
| 6701 | NEW ENGLAND LIME CO., Canaan, Conn.
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 |
|---|--|-------------------|
| AMERICAN AGRICULTURAL CHEMICAL CO.
North Weymouth, Mass. | | |
| 8333 | Agrico for Azaleas, Camellias and Rhododendrons 6-10-4 | West Hartford |
| 8028 | Agrico for Gardens 5-10-5 | Thompsonville |
| 7881 | Agrico Rose Food 5-9-6 | Darien |
| 8049 | Agrico Water Soluble Plant Food 17-17-17 | Stamford |
| AMERICAN BULB CO., Marysville, Ohio | | |
| 8045 | Bulb Food 16-8-5 | Hamden |
| AMERICAN CHEMICAL PAINT CO., Ambler, Pa. | | |
| 7868 | ACP 20-20-20 Gro-Stuf | Greenwich |
| ARMOUR FERTILIZER WORKS, Carteret, N. J. | | |
| 8048 ¹ | Armour Pulverized Sheep Manure 1.25-1-2 | Stamford |
| 8111 | Armour Vertagreen Rose Food 5-10-5 | Buckland |
| ATKINS & DURBROW, INC., Port Colborne, Ont., Canada | | |
| 7756 ² | Driconure 3-2-1 | Danbury |
| ATLAS FISH FERTILIZER CO., San Francisco, Calif. | | |
| 7735 | Atlas Fish Emulsion Fertilizer 5-1-1 | Branford |
| THE BORDEN CO., New York, N. Y. | | |
| 7867 | Borden's "38" | Greenwich |
| BRAINARD SEED CO., Thompsonville, Conn. | | |
| 8030 | For Your Garden Fertilizer Root Crop 5-10-10 | Thompsonville |
| 8031 | For Your Garden General Garden Fertilizer 5-10-5 | Thompsonville |

~ indicates deficiencies.

¹ Sand, 40.38%.

² Sand, 4.67%.

TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS

| Nitrate | Nitrogen, per cent | | | | Phosphoric acid, per cent | | | Potash, per cent | |
|---------|--------------------|---------------|-----------------|-------|---------------------------|-------|-----------------------|------------------|-------|
| | Ammoniacal | Water-soluble | Water-insoluble | Total | Citrate-insoluble | Total | So-called "available" | As muriate | Total |
| 0.68 | 4.36 | 0.24 | 0.72 | 6.00 | 0.73 | 11.20 | 10.47 | 3.94 | 4.62 |
| 0.00 | 4.68 | 0.09 | 0.09 | 4.86 | 0.45 | 11.07 | 10.62 | 4.93 | 6.31 |
| 0.00 | 2.32 | 1.32 | 2.08 | 5.72 | 0.60 | 10.20 | 9.60 | 5.52 | 6.11 |
| 3.77 | 3.68 | 9.88 | 0.05 | 17.38 | 0.08 | 17.65 | 17.57 | 0.48 | 17.65 |
| 0.52 | 1.02 | 12.12 | 7.06 | 20.72 | 1.00 | 9.40 | 8.40 | 3.84 | 4.84 |
| 0.60 | 0.56 | 19.28 | 0.00 | 20.44 | 0.03 | 21.80 | 21.77 | 8.94 | 20.77 |
| 0.25 | 0.00 | 0.08 | 1.35 | 1.34 | 0.43 | 1.85 | 10.27 | 4.00 | 3.51 |
| 0.25 | 5.32 | 0.08 | 1.35 | 7.00 | 0.43 | 10.70 | 10.27 | 4.00 | 4.81 |
| 0.00 | 0.24 | 0.90 | 1.60 | 2.74 | 0.28 | 2.90 | 2.62 | | 1.74 |
| 0.00 | 0.60 | 4.84 | 0.30 | 5.74 | 0.00 | 1.10 | 1.10 | | 1.54 |
| | | | | 39.48 | | | | | |
| 0.30 | 3.52 | 1.80 | 0.00 | 5.62 | 0.25 | 11.24 | 10.99 | 7.17 | 10.01 |
| 0.44 | 3.24 | 1.32 | 0.30 | 5.30 | 0.20 | 11.26 | 11.06 | 5.21 | 6.31 |

TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS

| Station No. | Manufacturer and brand | Place of sampling |
|-------------------|--|-------------------|
| | JOSEPH BRECK & SONS, Boston, Mass. | |
| 8380 ³ | Breck's Garden Gro 5-10-10 | Manchester |
| | CALIFORNIA SPRAY-CHEMICAL CORP., Richmond, Calif. | |
| 7680 | Ortho-Gro Liquid Plant Food 15-5-5 | Cheshire |
| | THE CARAC CORPORATION, Freeport, N. Y. | |
| 8121 | Carac Rose & Plant Fertilizer 22-18-22 | Buckland |
| | CLINTON NURSERIES, Clinton, Conn. | |
| 7709 | New Era African Violet Food 5-12-9 | Clinton |
| 7710 | New Era Instant Rose Food 10-20-10 | Clinton |
| 7743 | New Era Liquid Plant Food 8-12-8 | Danbury |
| 7752 | New Era Plant Food 7-15-8 | Danbury |
| | CONSOLIDATED RENDERING CO., Boston, Mass. | |
| 8052 ⁴ | Corenco Ground Bone 2-22-0 | Stamford |
| 7822 | Corenco Home Garden Fertilizer 5-10-5 | Hamden |
| 7825 | Corenco Landscape Fertilizer 8-6-4 | Hamden |
| 8029 | Corenco Rhododendron, Azalea & Blueberry Special 7-7-7 | Thompsonville |
| 8110 | Corenco Rose Special 5-10-5 | Buckland |
| | DAVISON CHEMICAL CO., Baltimore, Md. | |
| 8451 | Dav-Gro 20-20-20 | Willimantic |
| | DAYTON FERTILIZER CORP., Dayton, N. J. | |
| 8050 | Grand Garden Plant Food 6-10-4 | Stamford |
| 7824 | Grand Garden Rose Food 6-8-6 | Hamden |
| | E. I. duPONT deNEMOURS & CO. INC., Wilmington, Del. | |
| 7968 | DuPont Soluble Plant Food 19-22-16 | New London |

~~~~ indicates deficiencies.

<sup>3</sup> Magnesium guaranteed, 1.2%; found, 1.80%.

<sup>4</sup> Mechanical analysis: Fine, 54.0%; coarse, 46.0%.

TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS

| Nitrate | Nitrogen, per cent |               |                 |             | Phosphoric acid, per cent |              |                       | Potash, per cent |              |
|---------|--------------------|---------------|-----------------|-------------|---------------------------|--------------|-----------------------|------------------|--------------|
|         | Ammoniacal         | Water-soluble | Water-insoluble | Total       | Citrate-insoluble         | Total        | So-called "available" | As muriate       | Total        |
| 0.60    | 3.76               | 0.84          | 0.10            | 5.30        | 0.88                      | 10.90        | 10.02                 | 5.74             | 10.22        |
| 0.00    | 0.92               | 14.52         | 0.00            | 15.44       | 0.00                      | 5.30         | 5.30                  |                  | 5.07         |
| 0.00    | 0.68               | 21.34         | 0.00            | 22.02       | 0.08                      | 16.15        | <u>16.07</u>          |                  | <u>21.24</u> |
| 2.00    | 3.24               | 1.18          | 0.30            | 6.72        | 0.20                      | 13.05        | 12.85                 |                  | 9.58         |
| 1.99    | 4.08               | 4.72          | 0.27            | 11.06       | 0.43                      | 21.40        | 20.97                 |                  | 11.12        |
| 0.00    | 4.00               | 4.84          | 0.00            | 8.84        | 0.00                      | 13.35        | 13.35                 | 8.47             | 9.76         |
| 2.70    | 3.16               | 2.04          | 0.20            | 8.10        | 0.15                      | 17.30        | 17.15                 |                  | 8.22         |
|         |                    |               |                 | 6.74        |                           | 13.85        |                       |                  |              |
| 0.64    | 3.68               | 0.56          | 0.24            | 5.12        | 0.43                      | <u>10.75</u> | 10.32                 | 4.84             | 4.84         |
| 0.00    | 4.76               | 2.02          | 0.68            | <u>7.46</u> | 0.25                      | 6.10         | 5.85                  | 5.79             | 5.90         |
| 1.69    | 4.92               | 0.40          | 0.05            | 7.06        | 0.35                      | 8.48         | 8.13                  | 3.21             | 6.96         |
| 0.00    | 2.72               | 1.21          | 1.19            | 5.12        | 1.05                      | 11.87        | 10.82                 | 4.94             | 5.77         |
| 3.16    | 8.40               | 8.44          | 0.00            | 20.00       | 0.98                      | 22.54        | 21.56                 | 3.15             | <u>19.05</u> |
| 0.63    | 4.48               | 1.04          | 0.11            | 6.26        | 0.30                      | 11.15        | 10.85                 | 2.54             | 4.46         |
| 0.45    | 3.40               | 0.84          | 1.45            | 6.14        | 0.38                      | 9.00         | 8.62                  | 6.04             | 6.04         |
| 5.94    | 4.64               | 9.24          | 0.00            | 19.82       | 0.00                      | 23.85        | 23.85                 |                  | 17.90        |

TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS

| Station No.       | Manufacturer and brand                                            | Place of sampling |
|-------------------|-------------------------------------------------------------------|-------------------|
|                   | EASTERN STATES FARMERS' EXCHANGE, INC.<br>West Springfield, Mass. |                   |
| 7739              | Eastern States Start-N-Gro 16-32-16                               | Bethel            |
|                   | EDGEWOOD FARMS, INC., Marysville, Ohio                            |                   |
| 7964              | Edgewood Farms Rose Food 18-9-5                                   | New London        |
|                   | THE ESPOMA CO., Millville, N. J.                                  |                   |
| 8336              | Espoma 3-2-1                                                      | Milford           |
| 8335              | Holly-Tone 4-6-4                                                  | Milford           |
|                   | FIESTAR INC., New York, N. Y.                                     |                   |
| 8143              | Fiestar 2-2-0                                                     | Bristol           |
|                   | FORWARD HOUSE DIV., New York, N. Y.                               |                   |
| 7869              | Plantrons 12-24-12                                                | Greenwich         |
|                   | GOULARD & OLENA, INC., Skillman, N. J.                            |                   |
| 8379              | G & ORhodo-Azalea-Camellia-Holly-Blue-<br>berry Food 3-20-3       | Manchester        |
| 8381              | G & OSheep & Guano Manure 1.5-1-1                                 | Manchester        |
| 8159              | G & OSpecial Food for Bulbs 5-6-15                                | Ridgefield        |
| 7908              | G & OSulphate of Ammonia 20.75                                    | Hartford          |
|                   | A. H. HOFFMAN, INC., Landisville, Pa.                             |                   |
| 8012 <sup>5</sup> | Hoffman Bone Meal 3-13-0                                          | Thompsonville     |
| 8013 <sup>6</sup> | Hoffman Cow Manure 2-1-1                                          | Thompsonville     |
| 7760              | Hoffman Rose Food 5-10-5                                          | Danbury           |
| 7965 <sup>7</sup> | Hoffman Sheep Manure 1-1-2                                        | New London        |

~~~~ 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

| Nitrate | Nitrogen,
per cent | | | | Phosphoric acid,
per cent | | | Potash,
per cent | |
|---------|-----------------------|-------------------|---------------------|-------|------------------------------|-------|--------------------------|---------------------|-------|
| | Ammoniacal | Water-
soluble | Water-
insoluble | Total | Citrate-
insoluble | Total | So-called
"available" | As
muriate | Total |
| 4.13 | 7.84 | 3.90 | 0.13 | 16.00 | 0.03 | 32.40 | 32.37 | | 17.03 |
| 0.38 | 1.16 | 9.80 | 8.20 | 19.54 | 1.13 | 11.77 | 10.64 | 4.93 | 5.90 |
| 0.00 | 1.48 | 0.90 | 1.54 | 3.92 | 0.35 | 4.70 | 4.35 | 1.25 | 2.65 |
| 0.00 | 2.92 | 0.51 | 1.55 | 4.98 | 0.43 | 6.51 | 6.08 | 3.74 | 5.44 |
| 0.00 | 0.40 | 0.03 | 2.03 | 2.46 | 0.40 | 4.94 | 4.54 | | |
| 0.00 | 11.96 | 0.04 | 0.00 | 12.00 | 0.25 | 24.90 | 24.65 | 11.41 | 12.20 |
| 0.51 | 2.28 | 0.44 | 0.29 | 3.52 | 0.78 | 21.85 | 21.07 | 2.19 | 3.48 |
| | 0.00 | | | 1.14 | | 1.12 | | | 1.67 |
| 0.00 | 3.08 | 1.22 | 1.12 | 5.42 | 0.85 | 7.70 | 6.85 | 14.81 | 15.67 |
| | | | | 21.25 | | | | | |
| | | | | 4.04 | 9.55 | 24.90 | 15.35 | | |
| | 0.00 | | | 2.00 | 0.25 | 1.65 | 1.40 | | 2.85 |
| 0.00 | 4.04 | 0.28 | 1.10 | 5.42 | 0.10 | 11.20 | 11.10 | 5.10 | 5.77 |
| | 0.00 | | | 1.00 | 0.20 | 1.10 | 0.90 | | 2.25 |

TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS

| Station No. | Manufacturer and brand | Place of sampling |
|--|--|-------------------|
| THE HUBBARD-HALL CHEMICAL CO., Waterbury, Conn. | | |
| 7708 | Gro-Fast Rose Food 7-10-5 | Hamden |
| 7969 | Gro-Fast Sol Plant Food 16-20-16 | New London |
| 7676 ⁸ | HH Bone Meal 2-23-0 | New Haven |
| 7887 ⁹ | HH Cow Manure & Inert Matter 2-1-1 | Berlin |
| 7755 | HH Evergreen Food 4-10-4 | Danbury |
| 7707 | HH Plant Food 5-10-5 | Hamden |
| 7886 | HH Rose Food 7-10-5 | Berlin |
| 8107 ¹⁰ | HH Sheep Manure & Inert Matter 1.25-1-1 | Norwich |
| HYDROPONIC CHEMICAL CO. INC., Copley, Ohio | | |
| 7883 | Hyponex African Violet Food 7-6-19 | Darien |
| 7885 | Hyponex All Purpose Plant Food 7-6-19 | Old Greenwich |
| THE HY-TROUS CORP., Boston, Mass. | | |
| 7677 | Hy-Trous Liquid Fertilizer 4-8-4 | New Haven |
| LEBANON CHEMICAL CORP., Lebanon, Pa. | | |
| 7894 | Lebanon Plant Food 5-10-5 | Wethersfield |
| 7907 | Lebanon Rose Food 7-7-7 | Hartford |
| 7882 | Lebanon Spray Gro 20-20-20 | Darien |
| 8435 | Lebanon Uniform 10-6-4 | Hartford |
| MAEGEO DEHYDRATING CO., Lexington, N. C. | | |
| 8434 | Fertal-Gro Cattle Manure 1-1-1 | Hartford |
| MILLER CHEMICAL & FERTILIZER CORP., Baltimore, Md. | | |
| 8332 | VHPF 6-25-15 | West Hartford |
| PARKS-BARNES, INC., Hermosa Beach, Calif. | | |
| 7681 | Black Magic African Violet Blossom Booster 4-10-10 | Cheshire |
| PLANTABBS CORP., Baltimore, Md. | | |
| 7734 | Fulton's Plantabbs 11-15-20 | Branford |

~ 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

| Nitrate | Nitrogen, per cent | | | | Phosphoric acid, per cent | | | Potash, per cent | |
|---------|--------------------|---------------|-----------------|-------|---------------------------|-------|-----------------------|------------------|-------|
| | Ammoniacal | Water-soluble | Water-insoluble | Total | Citrate-insoluble | Total | So-called "available" | As muriate | Total |
| 0.56 | 4.36 | 1.54 | 1.52 | 7.98 | 1.30 | 12.40 | 11.10 | 1.77 | 6.59 |
| 2.72 | 5.04 | 8.24 | 0.00 | 16.00 | 0.02 | 19.75 | 19.73 | 15.54 | 16.80 |
| | 0.08 | | | 3.22 | | 25.65 | | | |
| | 0.00 | | | 2.78 | | 1.72 | | | 1.86 |
| 0.41 | 1.76 | 1.18 | 1.27 | 4.62 | 0.53 | 12.90 | 12.37 | 3.78 | 4.21 |
| 0.00 | 2.28 | 2.61 | 0.87 | 5.76 | 0.80 | 11.00 | 10.20 | 5.29 | 5.38 |
| 0.00 | 4.40 | 1.74 | 1.86 | 8.00 | 1.23 | 13.10 | 11.87 | 0.53 | 6.65 |
| | 0.00 | | | 1.38 | | 1.30 | | | 3.57 |
| 5.48 | 1.28 | 0.72 | 0.00 | 7.48 | 0.18 | 8.20 | 8.02 | | 21.35 |
| 5.46 | 1.32 | 0.52 | 0.10 | 7.40 | 0.25 | 7.10 | 6.85 | | 20.58 |
| 0.90 | 1.36 | 0.56 | 0.00 | 2.82 | 0.00 | 7.25 | 7.25 | | 3.76 |
| 0.00 | 3.52 | 1.52 | 0.16 | 5.20 | 0.20 | 11.07 | 10.87 | 5.55 | 6.31 |
| 0.27 | 5.76 | 1.28 | 1.45 | 8.76 | 0.33 | 9.20 | 8.87 | 7.49 | 8.56 |
| 0.50 | 7.68 | 11.60 | 0.22 | 20.00 | 0.05 | 21.00 | 20.95 | 18.31 | 22.72 |
| 0.98 | 2.80 | 3.27 | 2.95 | 10.00 | 0.38 | 6.39 | 6.01 | 2.28 | 4.81 |
| | 0.00 | | | 1.00 | 0.10 | 1.10 | 1.00 | | 1.74 |
| 4.48 | 1.76 | 0.76 | 0.00 | 7.00 | 0.18 | 29.18 | 29.00 | | 16.80 |
| 0.00 | 0.16 | 4.40 | 0.00 | 4.56 | 0.00 | 10.85 | 10.85 | | 11.85 |
| 8.02 | 1.72 | 2.02 | 0.00 | 11.76 | 0.05 | 18.70 | 18.65 | | 28.30 |

TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS

| Station No. | Manufacturer and brand | Place of sampling |
|--------------------|---|-------------------|
| | PLANT SHINE CO., Div. Schultz Co., St. Louis, Mo. | |
| 7905 | Schultz Instant Plant Food 20-30-20 | Hartford |
| | RA-PID-GRO CORP., Dansville, N. Y. | |
| 7736 | Ra-Pid-Gro 23-21-17 | Branford |
| | THE RENARD CO., Yonkers, N. Y. | |
| 7751 | Plant Pen 5-0-0 | Danbury |
| | ROSE MANUFACTURING CO., Beacon, N. Y. | |
| 7821 | African Violet Food 6-12-6 | Hamden |
| 8082 | Tri-Ogen Rose Food 5-10-5 | Stamford |
| | ROSS DANIELS, INC., Des Moines, Iowa | |
| 8161 | Ross Rose Plant Food Cartridge 15-25-10 | Ridgefield |
| 8160 | Ross Starter Plant Food Cartridge 9-46-15 | Ridgefield |
| | SEARS, ROEBUCK & CO., Chicago, Ill. | |
| 8374 | Cross Country Azalea-Camellia Food 8-8-8 | Manchester |
| 8375 | Cross Country Cattle Manure 1.5-1-2 | Manchester |
| 8083 | Cross Country Evergreen Food 10-6-4 | Stamford |
| 7962 | Cross Country Instant Rose Food 20-20-20 | New London |
| 7714 | Cross Country Instant Tomato Food 15-30-15 | Hamden |
| 7961 | Cross Country Liquid Plant Food 15-10-5 | New London |
| 7963 | Cross Country Plant Food 5-10-5 | New London |
| 7712 | Cross Country Rose Food 5-10-5 | Hamden |
| 7713 ¹¹ | Cross Country Sheep Manure 1.5-.75-2 | Hamden |
| | STERN'S NURSERIES, INC., Geneva, N. Y. | |
| 8051 | Stern's Miracid 30-10-10 | Stamford |
| 7761 | Stern's Miracle-Gro 15-30-15 | Danbury |

~~~~ indicates deficiencies.

<sup>11</sup> Sand, 16.21%.

TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS

| Nitrate | Nitrogen, per cent |               |                 |              | Phosphoric acid, per cent |       |                       | Potash, per cent |       |
|---------|--------------------|---------------|-----------------|--------------|---------------------------|-------|-----------------------|------------------|-------|
|         | Ammoniacal         | Water-soluble | Water-insoluble | Total        | Citrate-insoluble         | Total | So-called "available" | As muriate       | Total |
| 1.12    | 2.60               | 16.12         | 0.16            | 20.00        | 0.05                      | 29.60 | <u>29.55</u>          |                  | 22.00 |
| 4.40    | 4.00               | 15.60         | 0.00            | 24.00        | 0.00                      | 19.50 | <u>19.50</u>          |                  | 16.98 |
|         |                    |               |                 | 7.82         |                           |       |                       |                  |       |
| 0.00    | 6.84               | 0.18          | 0.30            | 7.32         | 0.13                      | 13.60 | 13.47                 | 3.63             | 6.52  |
| 0.00    | 3.24               | 1.65          | 0.19            | 5.08         | 0.55                      | 11.48 | 10.93                 | 0.32             | 5.94  |
| 0.54    | 5.36               | 11.04         | 0.00            | 16.94        | 0.03                      | 28.50 | 28.47                 |                  | 11.54 |
| 0.00    | 10.04              | 0.02          | 0.00            | 10.06        | 0.05                      | 52.70 | 52.65                 |                  | 16.50 |
| 0.72    | 6.48               | 0.72          | 0.10            | 8.02         | 0.43                      | 8.87  | 8.44                  | 6.18             | 7.84  |
|         | 0.00               |               |                 | 2.62         | 0.50                      | 2.46  | 1.96                  |                  | 2.85  |
| 0.35    | 9.36               | 0.40          | 0.09            | 10.20        | 0.23                      | 6.45  | 6.22                  | 3.36             | 4.49  |
| 5.07    | 2.60               | 14.23         | 0.00            | 21.90        | 0.05                      | 21.60 | 21.55                 |                  | 20.02 |
| 0.26    | 6.28               | 10.00         | 0.00            | 16.54        | 0.08                      | 30.40 | 30.32                 | 13.67            | 16.87 |
| 0.00    | 3.48               | 11.02         | 0.00            | <u>14.50</u> | 0.00                      | 10.32 | 10.32                 | 3.85             | 5.10  |
| 0.00    | 4.32               | 0.77          | 0.17            | 5.26         | 0.18                      | 10.77 | 10.59                 | 4.89             | 5.90  |
| 0.72    | 3.88               | 0.68          | 0.28            | 5.56         | 0.30                      | 10.45 | 10.15                 | 4.24             | 5.13  |
|         | 0.20               |               |                 | 2.66         | 0.48                      | 2.30  | 1.82                  |                  | 3.17  |
| 0.87    | 2.92               | 27.84         | 0.00            | 31.63        | 0.05                      | 9.73  | <u>9.68</u>           | 5.84             | 10.15 |
| 0.36    | 7.08               | 7.98          | 0.00            | 15.42        | 0.10                      | 30.70 | 30.60                 | 13.32            | 15.07 |

TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS

| Station No.        | Manufacturer and brand                          | Place of sampling |
|--------------------|-------------------------------------------------|-------------------|
|                    | STIM-U-PLANT LABORATORIES, Columbus, Ohio       |                   |
| 7884               | Stim-U-Plant African Violet Food 5-8-7          | Old Greenwich     |
|                    | SWIFT & CO., Baltimore, Md.                     |                   |
| 7904               | Instant Vigoro 20-10-15                         | Wethersfield      |
| 8153               | Vigoro Complete Plant Food 6-10-4               | Hamden            |
| 8081               | Vigoro for Acid-Loving Plants 5-10-10           | Stamford          |
| 7744               | Vigoro Rose Food 6-10-4                         | Danbury           |
|                    | SWISS FARMS, Philmont, N. Y.                    |                   |
| 7903               | Instant Action Rose Food 6-15-11                | Wethersfield      |
|                    | WALKER-GORDON LABORATORY CO., Plainsboro, N. J. |                   |
| 7823 <sup>12</sup> | Bovung 2-1-1                                    | Hamden            |

<sup>12</sup> Sand, 2.14%.

TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS

| Nitrate | Nitrogen, per cent |               |                 |       | Phosphoric acid, per cent |       |                       | Potash, per cent |       |
|---------|--------------------|---------------|-----------------|-------|---------------------------|-------|-----------------------|------------------|-------|
|         | Ammoniacal         | Water-soluble | Water-insoluble | Total | Citrate-insoluble         | Total | So-called "available" | As muriate       | Total |
| 2.52    | 3.88               | 0.64          | 0.00            | 7.04  | 0.23                      | 11.45 | 11.22                 |                  | 10.22 |
| 2.90    | 7.24               | 11.40         | 0.00            | 21.54 | 0.05                      | 13.40 | 13.35                 | 9.55             | 15.18 |
| 0.00    | 4.96               | 0.92          | 0.14            | 6.02  | 0.60                      | 11.90 | 11.30                 | 3.25             | 4.30  |
| 0.20    | 4.36               | 0.50          | 0.10            | 5.16  | 0.58                      | 11.22 | 10.64                 | 7.73             | 10.22 |
| 0.94    | 2.80               | 0.68          | 1.94            | 6.36  | 1.13                      | 12.91 | 11.78                 | 4.57             | 5.10  |
| 3.44    | 2.44               | 0.96          | 0.00            | 6.84  | 0.10                      | 13.65 | 13.55                 |                  | 14.81 |
|         | 0.00               |               |                 | 2.18  | 0.20                      | 1.37  | 1.17                  |                  | 2.22  |

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                 | 1.27     | 21.46 <sup>2</sup> | 4.75 | 16.08           |
| 8145        | Fertilizer                                         | 8.64           | 7.65                  |                                   |                             | 3.64                 |          |                    |      |                 |
| 8147        | Fertilizer                                         | 5.16           | 10.55                 |                                   |                             | 6.65                 |          |                    |      |                 |
| 7547        | Fertilizer - pesticide mixture <sup>1</sup>        | 0.00           | trace                 |                                   |                             | 61.92                |          |                    |      |                 |
| 6070        | Manganese sulfate                                  | 1.10           | 0.75                  |                                   |                             | 0.03                 | 46.66    |                    |      |                 |
| 8323        | Muriate of potash                                  | 12.46          | 22.32                 | 18.06                             | 4.26                        | 0.12                 | 24.14    |                    |      |                 |
| 7790        | "Naugro" <sup>3</sup>                              | 2.90           | 6.27                  | 0.03                              | 24.22                       | 2.65                 |          | 0.01               |      |                 |
| 8197        | Phosphate rock                                     | 2.96           | 0.85                  |                                   |                             | 5.44                 |          |                    |      |                 |
| 8554        | Plant food tablets 10-23-12 <sup>4</sup>           | 17.20          | 8.10                  | 0.30                              | 7.80                        | 5.44                 |          |                    |      |                 |
| 8801        | Poultry litter                                     |                |                       |                                   |                             |                      |          |                    |      |                 |
| 8488        | Residue from coking process <sup>5</sup>           |                |                       |                                   |                             |                      |          |                    |      |                 |
| 6310        | Tobacco dust                                       |                |                       |                                   |                             |                      |          |                    |      |                 |
| 6504        | Vermiculite-treated fertilizer 15-5-5 <sup>6</sup> |                |                       |                                   |                             |                      |          |                    |      |                 |

<sup>1</sup> Chlordane: Guaranteed, 22.2%; found, 1.06%.

<sup>2</sup> Guaranteed, 23-24%.

<sup>3</sup> Fat, 1.03%.

<sup>4</sup> Chlorine, trace.

<sup>5</sup> Calcium, 0.15%; magnesium, 0.10%; zinc, 0.10%; lead, 150, copper, 100, chromium, 50, and tin, 50, parts per million.

<sup>6</sup> 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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| Adikes, J. & L., Inc., Jamaica, L. I., N. Y.                 | 4                                      |
| Agricultural Gypsum Co., Chicago, Ill.                       | 62                                     |
| Agricultural Products Co., Providence, R. I.                 | 4, 36                                  |
| Agricultural Supply Co., West Haven, Conn.                   | 4, 36                                  |
| "Agrinite"                                                   | 28                                     |
| Allied Chemical Corp., Nitrogen Div., Hopewell, Va.          | 4, 24, 25                              |
| American Agricultural Chemical Co., North Weymouth, Mass.    | 5, 28, 30, 31, 32, 34, 36, 58, 64      |
| American Bulb Co., Marysville, Ohio                          | 5, 64                                  |
| American Chemical Paint Co., Ambler, Pa.                     | 64                                     |
| American Cyanamid Co., New York, N. Y.                       | 24, 25, 30                             |
| American Cyanamid Co., Princeton, N. J.                      | 5                                      |
| Ammonium nitrate                                             | 23, 24                                 |
| Ammonium sulphate                                            | 16, 21, 23, 24                         |
| Archer-Daniels-Midland Co., Minneapolis, Minn.               | 5, 28                                  |
| Armour Fertilizer Works, Carteret, N. J.                     | 6, 24, 30, 34, 38, 58, 64              |
| Atkins & Durbrow, Inc., Port Colborne, Ont., Canada          | 6, 64                                  |
| Atlas Fish Fertilizer Co., San Francisco, Calif.             | 64                                     |
| Bartlett Tree Expert Co., F. A., Stamford, Conn.             | 6, 38                                  |
| Bennett & Clayton Co., Inc., Cranbury, N. J.                 | 6, 38                                  |
| Blood, dried                                                 | 21, 29                                 |
| Bone meal                                                    | 21, 23, 34, 68                         |
| Bone, precipitated                                           | 23, 31                                 |
| Borden Co., Chemical Div., The, New York, N. Y.              | 6, 64                                  |
| "Bovung"                                                     | 16, 60, 74                             |
| Bradley & Baker, New York, N. Y.                             | 6, 28                                  |
| Brainard Seed Co., Thompsonville, Conn.                      | 64                                     |
| Breck, Joseph, & Sons Corp., Boston, Mass.                   | 6, 28, 40, 66                          |
| Brookside Nurseries, Inc., Darien, Conn.                     | 7, 29, 34, 40                          |
| Buckeye Cellulose Corp., The, Cincinnati, Ohio               | 7                                      |
| Cadwell & Jones, Inc., Hartford, Conn.                       | 7, 40                                  |
| California Spray-Chemical Corp., Richmond, Calif.            | 7, 66                                  |
| "Cal-Nitro"                                                  | 28                                     |
| Canada Linseed Oil Mills Ltd., The, Montreal, P. Q., Canada  | 7, 28                                  |
| Carac Corp., The, Freeport, N. Y.                            | 66                                     |
| Carbola Chemical Co., Inc., Natural Bridge, N. Y.            | 7                                      |
| Castor pomace                                                | 23, 25                                 |
| Cattle manure                                                | 13, 15, 16, 22, 23, 58, 64, 68, 70, 74 |
| Chamberlin & Barclay, Inc., Cranbury, N. J.                  | 7, 40                                  |
| Check meals and fertilizers                                  | 22                                     |
| Chicken manure                                               | 76                                     |
| "Chiguano"                                                   | 7, 58                                  |
| Chiguano Compost Corp., Marion, Conn.                        | 7, 58                                  |
| Chilean Nitrate Sales Corp., New York, N. Y.                 | 7, 24                                  |
| Chlordane in fertilizers                                     | 76                                     |
| Clinton Nurseries, Clinton, Conn.                            | 66                                     |
| Cloro-Spray Corp., Philadelphia, Pa.                         | 7                                      |
| Cocke & Co., Atlanta, Ga.                                    | 7, 26                                  |
| Commercial Solvents Corp., New York, N. Y.                   | 7                                      |
| Consolidated Rendering Co., Boston, Mass.                    | 7, 26, 30, 32, 35, 40, 58, 66          |
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| Cotton hull ashes                                            | 21, 23, 33                             |
| Cottonseed meal                                              | 15, 16, 23, 26                         |
| Cyanamid                                                     | 23, 24                                 |
| Davey Tree Expert Co., The, Kent, Ohio                       | 8, 42, 58                              |
| Davis Co., R. G., New Haven, Conn.                           | 8, 42                                  |
| Davison Chemical Co. Div., W. R. Grace & Co., Baltimore, Md. | 8, 30, 42, 66                          |
| Dayton Fertilizer Corp., Dayton, N. J.                       | 9, 44, 66                              |
| Doughten Seed Co., Jersey City, N. J.                        | 9                                      |
| duPont deNemours & Co., E. I., Wilmington, Del.              | 9, 25, 29, 66                          |
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| Gregory-Doyle, Inc., Huntington Station, N. Y.                  | 10, 48                                     |
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| Sterling Forest Peat Humus Co., Inc., New York, N. Y.         | 15                     |
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