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Bulletin 618

December 1958

# COMMERCIAL FERTILIZERS

## Report for 1958

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**H. J. FISHER**  
**Chief Chemist**

THE CONNECTICUT AGRICULTURAL EXPERIMENT STATION  
NEW HAVEN

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REPORT ON INSPECTION AND ANALYSIS OF  
COMMERCIAL FERTILIZERS, 1958

H. J. FISHER, Chief Chemist<sup>1</sup>

Connecticut Law And Regulations Regarding  
Commercial Fertilizers

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

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

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

Cottonseed, linseed, peanut and soybean oil meals, when sold or used for fertilizer purposes, must be registered as fertilizers and the specified fees paid thereon. For such products the registration fee is \$10.00 per brand. This fee and the tonnage tax are entirely apart from the registration fee required by the feeding stuffs law for vegetable meals used as feeds (there is no tonnage tax on feeds).

<sup>1</sup>Analyses were made by Messrs. O.L.Nolan, L.G.Keirstead, Sherman Squires and Werner Mueller, Miss Helen Kocaba, Miss Sunrae Agostini and Miss Mary Lucibello; inspection and sampling by Mr. R. Richard Nichols; compilations by Miss Eleanor Hopcraft.

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 1958, 101 firms and individuals registered 400 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  
Gro-Well Cow Manure  
Gro-Well Gro-Manure  
Gro-Well Sheep Manure

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

Yale Special Mixture

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

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

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

AA Fertilizer 0-15-30  
AA Fertilizer 0-20-20  
AA Fertilizer 5-10-5  
AA Fertilizer 5-10-10  
AA Fertilizer 5-10-10 with 1.2 Magnesium  
AA Fertilizer 8-16-16  
AA Fertilizer 10-10-10

AMERICAN AGRICULTURAL CHEMICAL CO., 285 River St., No. Weymouth, Mass.-  
Cont.

AA Ground Phosphate Rock  
AA Lawn & Garden Fertilizer 5-10-5  
Agrico Bulb Food 5-9-6  
Agrico Country Club 6-10-4  
Agrico Country Club 8-6-4  
Agrico Rose Food 5-9-6  
Agrico for Azaleas, Camellias & Rhododendrons 6-10-4  
Agrico for Gardens 5-10-5  
Agrico for Lawns, Trees and Shrubs 6-10-4  
Agrico for New England 5-8-7  
Agrico for New England 8-12-12  
Agrico for Potatoes 5-10-10 with 1.2 Magnesium  
Agrico for Top Dressing 7-7-7  
Agrico for Top Dressing 10-10-10  
Agrico for Turf 6-8-2  
Agrico for Turf 10-6-4  
Agrico No Pest Turf Food 6-10-4  
Agrico Phosphate & Potash 0-15-30  
Agrico Phosphate & Potash 0-20-20  
Agrinite  
Agri-Phos 20% Superphosphate  
Bone Meal  
Cotton Hull Ashes  
Dried Sheep Manure and Inert Matter  
Muriate of Potash  
Precipitated Bone  
Superphosphate, 18% Normal

AMERICAN AGRICULTURAL CHEMICAL CO., 100 Church St., New York, N.Y.

Baker's Castor Pomace (Mfd. by Baker Castor Oil Co., Bayonne, N.J.)  
Phos-Feed Brand Dicalcium Phosphate

AMERICAN BULB CO., Marysville, Ohio

Boost  
Bulb Food  
Rose Food

AMERICAN CYANAMID CO., 30 Rockefeller Plaza, New York, N.Y.

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  
TREBO-PHOS Triple Superphosphate

AMERICAN CYANAMID CO., P.O. Box 672, Princeton, N.J.

Lawn and Garden Cyanamid

ARCHER-DANIELS-MIDLAND CO., P.O. Box 839, Minneapolis, Minn.

Archer Quality 34% Protein Solvent Extracted Linseed Oil Meal  
Archer Quality 44% Protein Solvent Extracted Soybean Oil Meal

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

Armour's Armorganic Plant Food  
 Armour's Big Crop Fertilizer 0-20-20  
 Armour's Big Crop Fertilizer 5-8-7  
 Armour's Big Crop Fertilizer 5-10-5  
 Armour's Big Crop Fertilizer 5-10-10  
 Armour's Big Crop Fertilizer 7-7-7  
 Armour's Big Crop Fertilizer 8-16-16  
 Armour's Big Crop Fertilizer 10-10-10  
 Armour's Big Crop Superphosphate  
 Armour's Bone Meal  
 Armour's Gold Bond Tobacco Grower  
 Armour's Pulverized Sheep Manure  
 Armour's Shredded Cattle Manure  
 Armour's Vertagreen for Acid Loving Plants 5-10-10  
 Armour's Vertagreen Plant Food 5-10-5  
 Armour's Vertagreen Plant Food for Commercial Crops 0-15-30  
 Armour's Vertagreen Plant Food for Commercial Crops 6-12-6  
 Armour's Vertagreen Plant Food for Commercial Crops 6-12-12  
 Armour's Vertagreen Plant Food for Commercial Crops 8-8-8  
 Armour's Vertagreen Plant Food for Turf and Trees 10-6-4  
 Armour's Vertagreen Rose Food 5-10-5  
 Armour's Vertagreen Turf Maker 8-6-2

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

Driconure 3-2-1

## ATLANTIC PROCESSING CO., Promised Land St., Amagansett, N.Y.

Smith's Life Line Fish Meal

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

Bartlett Green Tree Food

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

Borden's "38"

## BRADLEY &amp; BAKER, 1401 Peachtree St., N.E., Atlanta, Ga.

CAL-NITRO (Ammonium Nitrate Limestone)

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

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

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

Brookside Raw Bone  
 Brookside Slaughter House Tankage  
 Natures Nutrients

## THE BUCKEYE CELLULOSE CORP., Cincinnati, Ohio

Buckeye 44% Protein Solvent Extracted Soybean Oil Meal

## CADWELL &amp; JONES, INC., 190 Morgan St., Hartford, Conn.

J & C Fertilizer 10-6-4 (50% Organic)

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

ORTHO-GRO Liquid Plant Food  
 ORTHO Lawn Groom

## THE CARAC CORPORATION, Fairfield Rd., Mountain View, N.J.

Carac Balanced Lawn Fertilizer  
 Carac Burst  
 Carac Evergreen & Shrub Fertilizer  
 Carac 46-0-0 (Hycon) Nitrogen Fertilizer  
 Carac Rose & Plant Fertilizer  
 Carac Stimlon

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

CCC Triple 20 Plant Food

## 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 &amp; COMPANY, 208 William-Oliver Bldg., Atlanta, Ga.

Cocke-Sure Brand 36% Protein Cottonseed Meal  
 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 4-12-16  
 Corenco 5-8-7  
 Corenco 5-10-5  
 Corenco 5-10-5 Home Garden  
 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

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

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 8-16-16  
 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 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 Ammonia  
 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., 101 N. Charles St.,  
 Baltimore, Md.

0-15-30 Davco Granulated Fertilizer  
 0-20-20 Davco Granulated Fertilizer  
 0-25-25 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  
 6-8-8 Davco Granulated Fertilizer with Boron and Manganese  
 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  
 10-10-10 Davco Granulated 3G Fertilizer with Boron and Manganese  
 Davco Granulated 20% Superphosphate

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

Doughten's Lawn Food 9-8-3

E. I. duPONT deNEMOURS & CO., 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 0.2 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 0.6 Magnesium  
 Eastern States 10-5-5 Green Lawn with 1.2 Magnesium  
 Eastern States 10-10-10 with 0.6 Magnesium  
 Eastern States 10-10-10 LC with 1.2 Magnesium  
 Eastern States 10-10-10 SM with 1.2 Magnesium  
 Eastern States Cotton Hull Ash  
 Eastern States Dried Ground Fish  
 Eastern States Start-N-Gro  
 Muriate of Potash  
 Nitrogen Solution 37  
 Superphosphate

ECLIPSE PEAT CO., LTD., American Div., Empire State Bldg., New York, N.Y.  
 Vitamure

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

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

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

F & B Azalea-Camellia-Rhododendron Food 5-10-10  
 F & B Cottonseed Meal  
 F & B Evergreen Food 7-7-7  
 F & B Pure Steamed Bone Meal  
 F & B Rose Food 8-10-4

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

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

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

Fiestar

FORWARD HOUSE, Olin Mathieson Chemical Corp., P.O. Box 991  
 Little Rock, Ark.

Plantrons  
 Rosy Future

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

Green D Azalea Food  
 Green D Evergreen Food  
 Green D Organic 50%  
 Green D Organic 100%  
 Green D Plant Food  
 Green D Rose Food  
 Green D Tomato Food

G D POULTRY, INC., 95 Spring St., Bridgewater, Mass.

GROW Poultry Manure Fertilizer

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

Garden Center of West Hartford Lawn Food

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

Sequestrene 330 Fe Iron Chelate  
 Sequestrene NaFe Iron Chelate

GLORION DIV., Aluminum & Chemical Corp., 22 W. Putnam Ave., Greenwich, Conn.

Glorion 4-8-8 All Purpose  
 Glorion 10-6-4 for Turf

GODFREYS OF FAIRFIELD, 1630 Post Rd., Fairfield, Conn.

Godfreys Lawn & Tree Food

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

Goldenrod Brand 41% Protein Cottonseed Meal - Prime Quality

GOLD KIST PEANUT GROWERS, Moultrie, Ga.

45% Protein Peanut Meal

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

Godfreys Hi-Organic No-Filler 10-6-4  
 G & O Cottonseed Meal 41% Protein  
 G & O Ground Bone Fertilizer  
 G & O Hyganic 10-6-4  
 G & O Muriate of Potash  
 G & O Nitrate of Soda  
 G & O Prizegro 5-10-5  
 G & O Raw Ground Bone  
 G & O Rhodo-Azalea Food  
 G & O Rose Food  
 G & O 20% Superphosphate

GRACE CHEMICAL CO., Div. W.R. Grace & Co., 501 Edway Bldg., Memphis, Tenn.

Grace Urea Prills

GRAND UNION CO., 100 Broadway, E. Patterson, N.J.

Grand Union Brand 6-10-4

HELLER GREENHOUSE LABORATORIES, 218 E. Pikes Peak Ave., Colorado Springs, Colo.

Heller-Gro

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 Ash  
 Green-Gro 6-7-4  
 Horn & Hoof Meal  
 HH Aluminum Sulphate  
 HH Bone Meal  
 HH Evergreen Food  
 HH Golf Course Fertilizer  
 HH Lawn Fertilizer  
 HH Lawn Fertilizer with Chlordane  
 HH Lawn & Tree Food  
 HH Nitro ganic  
 HH Plant Food  
 HH Rose Food  
 HH Sheep Manure & Inert Matter  
 HH Turf & Tree Food  
 HH Weed Kil Lawn Food with 2-4-D Weed Killer  
 Liberty Fertilizer 0-15-30  
 Liberty Fertilizer 0-20-20  
 Liberty Fertilizer 5-5-15  
 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 5-15-30  
 Liberty Fertilizer 7-7-7  
 Liberty Fertilizer 8-6-4  
 Liberty Fertilizer 8-12-12 with 1.2 Magnesium  
 Liberty Fertilizer 8-16-16  
 Liberty Fertilizer 10-10-10  
 Liberty Muriate of Potash  
 Liberty New Super Spud 8-10-10 with 1.2 Magnesium  
 Liberty Super Bacco with 1.2 Magnesium  
 Liberty Super Gro  
 Liberty Super Spud with 1.2 Magnesium  
 Liberty Tobacco Fertilizer 6-3-6  
 Menhaden Dry Ground Fish  
 Nitrate of Potash  
 Old Deerfield "Tru Organic" Lawn & Shrub Fertilizer  
 Precipitated Bone  
 Sulphate of Ammonia  
 Sulphate of Potash  
 Superphosphate 20%  
 Woodruff 8-6-4 Fertilizer

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

Dixie Brand 41% Cottonseed Meal

INTERNATIONAL MINERALS & CHEMICAL CORP., Old Orchard Rd., Skokie, Ill.

Fertilis Plant Food 8-6-2

Fertilis Plant Food with Chlordane

KAPCO DIV., The Summer Fertilizer Co., Inc., 5301 Walnut St.,  
McKeesport, Pa.

Kapco Kap-Organic

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 Toasted Soybean Oil Meal -  
Solvent Extracted

KELLY-WESTERN SEED DIV., P.O. Box 2310, Salt Lake City, Utah

PAX Crabgrass & Soil Pest Control

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

Organi-Green

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

Granulated 20% Superphosphate

Lebanon Azalea-Camellia-Gardenia & Ixora Food

Lebanon Bone Meal

Lebanon Cow Manure

Lebanon Fertilizer 5-10-10

Lebanon Fertilizer 10-6-4

Lebanon Hi Organic

Lebanon Plant Food

Lebanon Rose Food

Lebanon Sheep Manure

Lebanon Turf Organic

Lebanon Uni-Form 10-6-4

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

McARDLE'S SEED CO., 388 Greenwich Ave., Greenwich, Conn.

McArdle's Hi-Organic 10-6-4

MAEGEO DEHYDRATING CO., Lexington, N.C.

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

NATURAL PLANT FOOD CO., 210 W. California 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

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

Meadow Brand Sheep Manure

Old Fox Brand 0-15-30

Old Fox Brand 0-20-20

Old Fox Brand 4-16-20

Old Fox Brand 5-8-7

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

Old Fox Brand 6-8-8 with 1.2 Magnesium

Old Fox Brand 6-8-8 with 1.2 Magnesium (Potash derived from  
Sulphate of Potash)

Old Fox Brand 7-7-7

Old Fox Brand 8-16-16

Old Fox Brand 10-10-10

Old Fox Brand Bone Meal

Old Fox Brand Muriate of Potash

Old Fox Brand Organo

Old Fox Brand Superphosphate

Old Fox Brand Turf Food 8-6-2

Old Fox Brand Turf Food 8-6-2 with chlordane

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

Matheson 5-10-5

Matheson 5-10-10

Matheson 13-13-13

ROBERT B. PETERS CO., 739 N. 7th St., Allentown, Pa.

Peters Special 20-5-30

Peters Special 25-10-10

PLANT PRODUCTS CORP., Kennedy Ave., Blue Point, Long Island, N.Y.

Soluble Fertilizer 32-10-2

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

Platt's Hi-Organic Lawn Fertilizer

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

Ra-Pid-Gro

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

Plant Pen

ROSE MANUFACTURING CO., 160 Main St., Beacon, N.Y.

Tri-Ogen Rose Food

RUHM PHOSPHATE & CHEMICAL CO., 813 So. 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

Scott's Organic

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

Cross Country Azalea Food

Cross Country Bone Meal

Cross Country Bulb Food

Cross Country Cattle Manure

Cross Country Evergreen Food

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 2,4-D

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

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

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

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

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

Sohigro Urea Fertilizer Compound (coated)

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

Sterling Forest Soil - Fertilized

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

Stim-U-Plant African Violet Food

Stim-U-Plant Plant Food Tablets

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

Wizard Brand Cow Manure

Wizard Brand Sheep Manure

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

Golden Vigoro

Golden Vigoro Plus Chlordane

Instand Vigoro 19-28-14

Instant Vigoro 20-10-15

Par-Ex

Vigoro Complete Plant Food

Vigoro for Acid Loving Plants

Vigoro Plus Chlordane

Vigoro Rose Food

I. P. THOMAS DIV., Pennsalt Chemicals, 3 Penn Center, Philadelphia,  
Pa.

Thomas Gran-Form 20% Superphosphate

Thomas 46% Triple Superphosphate

TOWN & COUNTRY PRODUCTS DIV., Garfield Williamson Inc., 1072 Westside  
Ave., Jersey City, N.J.

Green Pride Lawn Food

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

Tencor Triple "46" Superphosphate

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

USS Ammonium Sulfate

UNIVERSAL CHEMICAL CO., Lynn, Mass.

Electra Plant Food

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

Adorna

Adorna Azalea Food 6-10-5

Adorna Tree Food 8-7-7

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

Bovung



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

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

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

WINSON POWERS CO., 4 N. Jerusalem Ave., Hicksville, N.Y.

Winson's Boast

F. H. WOODRUFF & SONS, INC., 9 Depot St., Milford, Conn.

Gro-Sod Lawn Food  
Weed-Nix Lawn Food

S. D. WOODRUFF & SONS, INC., Old Grassy Hill Rd., Orange, Conn.

Woodruff's Landscape Fertilizer 10-6-4  
Woodruff's Landscape Fertilizer 10-6-4 with Heptachlor

YOUNG & HALSTEAD CO., 3 E. Main St., Mt. Kisco, N.Y.

Professional Tree Food 7-7-7

## 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:

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

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

That most Connecticut farmers realize the desirability of using recommended grades is shown by the fact that 76 per cent of the mixed fertilizers sold during the 1957-1958 season were of the recommended ratios and minimum grades.

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 13 less than the year before, and 6,402 less tons of fertilizer were sold. That both of these drops were largely due to the decline in tobacco-growing in this State is shown by the fact that 18 fewer vegetable meal samples and 34 fewer home mixes were submitted and 1,570 fewer tons of vegetable meals were consumed.

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, 1957 and June 30, 1958 (these tonnage figures do not include fertilizer distributed under the Federal Agricultural Conservation Program):

CLASSIFICATION OF FERTILIZER MATERIALS AND FERTILIZER TONNAGE

(Tonnage is for the period July 1, 1957 to June 30, 1958)

	Page	No. of Samples	Tonnage	
<b>I. Containing chiefly nitrogen:</b>				
Nitrate of ammonia . . . . .	23	4	836	
Nitrate of soda . . . . .	23	6	513	
Sulphate of ammonia . . . . .	23	5	124	
Cyanamid . . . . .	24	2	449	
Urea . . . . .	24	9	540	
Castor pomace . . . . .	24	8	1,031	
Cottonseed meal . . . . .	25	73	4,690	
Horn and hoof meal . . . . .	26	4	15	
Linseed oil meal . . . . .	26	14	371	
Peanut meal . . . . .	68	1	35	
Soybean oil meal . . . . .	27	4	255	
Tankage . . . . .	27	1	7	
Other materials . . . . .	27	3	440	
				9,936
<b>II. Containing chiefly phosphoric acid:</b>				
Superphosphate 18% . . . . .	28	1	286	
20% . . . . .	28	15	4,453	
46% . . . . .	28	5	40	
Precipitated bone . . . . .	29	12	256	
Phosphate rock . . . . .	29	2	43	
				5,078
<b>III. Containing chiefly potash:</b>				
Muriate of potash . . . . .	30	9	657	
Sulphate of potash . . . . .	30	4	90	
Sulphate of potash-magnesia . . . . .	..	1	...	
Cotton hull ashes . . . . .	30	12	318	
				1,066
<b>IV. Containing nitrogen and phosphoric acid:</b>				
Dry ground fish . . . . .	32	13	423	
Bone meal . . . . .	32	16	470	
Other materials . . . . .	33	2	1,115	
				2,008
<b>V. Containing nitrogen and potash:</b>				
Nitrate of potash . . . . .	30	7	174	
				174
<b>VI. Mixed fertilizers:</b>				
Commercial mixtures . . . . .	34	242	54,152 <sup>†</sup>	
Special and home mixtures . . . . .	21	15	3,794	
				57,946
<b>VII. Miscellaneous:</b>				
Aluminum sulphate . . . . .	..	...	4	
Borax . . . . .	..	...	14	
Manganese sulphate . . . . .	68	1	...	
Sheep and cattle manure . . . . .	52	22	1,124	
Limestone and similar materials . . . . .	54	7	...	
Fertilizers sold in small packages . . . . .	56	101	...	
Other miscellaneous materials . . . . .	68	25	91	
Check meals and fertilizers . . . . .	22	19	...	
				1,233
<b>Totals</b>		665		77,441

<sup>†</sup> For distribution of this tonnage see next page.

MIXED FERTILIZER TONNAGE

Grades Approved for Connecticut

Grade	Tons	Grade	Tons
0-10-20	13	8- 4- 8	83
0-12-24	28	8- 6- 2	444
0-15-30	3,469	8- 8- 8	92
0-20-20	1,473	8-16-16	2,741
0-25-25	406	10-10-10	11,286
5- 5-15	22	12-12-12	73
5- 8- 7	1,580	12-24-12	16
5-10- 5	2,753	13-13-13	76
5-10-10	10,004	15-15-15	1
6- 3- 6	2,531	16-32-16	2
6- 8- 8	3,709	18-18-18	1
6-12- 6	36	20-20-20	1
6-12-12	91		
		<b>Total</b>	<b>41,031</b>
<u>Other Grades</u>			
(50 tons or more)			
3- 2- 1	61	6- 8- 2	199
3-12-12	67	6- 8- 6	135
4-10- 4	67	6-10- 4	1,920
4-16-20	156	7- 7- 7	1,883
4.75- 4- 0	139	8- 6- 4	1,189
5- 2- 3	65	8-10-10	820
5- 4- 0	542	8-12-12	1,279
5- 5- 0	109	9- 8- 3	75
5-15-30	60	10- 5- 5	866
6- 4- 7	185	10- 6- 4	1,879
6- 7- 4	186	20-10- 5	785
		<b>Total</b>	<b>12,667</b>
(Less than 50 tons)			
2- 2- 0	44	7- 8- 5	5
3- 1- 1	18	7-10- 5	34
3-2.5-1.5	6	9- 7- 4	18
4- 4- 2	45	10- 3- 3	43
4- 6- 4	24	10- 8- 2	5
4- 8- 4	10	12- 4- 4	13
4- 8- 5	7	12- 6- 4	9
4- 8- 8	10	18- 9- 5	12
4-10- 0	26	23-21-17	13
4-12-16	21	24-12-12	26
5- 6- 8	11	32-10- 2	6
5-10- 3	12	Other grades	36
			454
		<b>Grand Total</b>	<b>54,152</b>

I. MATERIALS CHIEFLY VALUABLE FOR NITROGEN

Analyses of the 68 official samples of nitrogenous fertilizers are given in Table 1. Sixty-five of these met their guaranties and three were deficient. The substandard samples included two of sulphate of ammonia and one of tankage.

II. MATERIALS CHIEFLY VALUABLE FOR PHOSPHORIC ACID

Analyses of 13 official samples of 20 per cent superphosphate, one of the 18 per cent grade, two "triple" superphosphates, five samples of precipitated bone, and one sample of phosphate rock, are given in Table 2. All except two samples of 20 per cent and one of 46 per cent superphosphate met their guaranties.

III. MATERIALS CHIEFLY VALUABLE FOR POTASH

Seven official samples of muriate of potash, two of sulphate of potash, and three of cotton hull ashes, were analyzed as shown in Table 3. All samples 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 organic substances, and most of them guarantee only total nitrogen and total phosphoric acid. Six official samples of dry ground fish, 13 of bone meal and two of "Milorganite" (a treated sewage sludge) were analyzed in 1958. The only deficient samples were three bone meals, of which two were low in nitrogen and one low in "available" phosphoric acid. Analyses are given in Table 4.

V. MATERIALS SUPPLYING NITROGEN AND POTASH

The only fertilizer material now on the market falling into this classification is nitrate of potash. Fertilizer grade potassium nitrate is required to contain at least 12 per cent of nitrogen and 44 per cent of potash. Three official samples substantially met or exceeded 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 211 official samples of mixed fertilizers are given in Table 5. Results are summarized as follows:

Total number of samples . . . . .	211	
Samples deficient in:		
one item . . . . .	53	
two items . . . . .	5	58
Percentage of samples meeting all guaranties . . . . .		73
Total guaranties made <sup>1</sup> . . . . .		608
Guaranties not met:		
nitrogen . . . . .	28	
phosphoric acid . . . . .	11	
potash . . . . .	24	63
Percentage met . . . . .		90

<sup>1</sup> One hundred and eighty-six samples with three guaranties and 25 with two guaranties (guaranties of minor elements not included).

Ninety per cent of all guaranties were substantially met or exceeded.

Twenty-two samples guaranteed magnesium (1.2 per cent in 19 cases and 0.6 per cent in three cases) in addition to the major components; all samples met their guaranties, but one contained over six times the guaranteed percentage. One sample guaranteed 0.2 per cent boron and met its claim, while another claiming 0.085 per cent boron and 0.27 per cent manganese contained only 53 per cent as much boron and 18 per cent as much manganese as was guaranteed. Another sample guaranteeing 0.1 per cent each of copper, zinc and iron and 9 per cent sulphur met all claims.

Special and Home Mixtures

Fifteen samples of special and home mixtures were analyzed during the year, mostly for tobacco growers. Because the composition of these 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.

Analyses of 32 samples of mixed fertilizer representing State purchases are listed in Table 5.

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 1957-1958 season 15 met all guaranties, two were deficient in nitrogen, and one each was low in "available" phosphoric acid and potash.

Limestone and similar materials. Because the legal definition of "commercial fertilizers" (G.S. 6733) specifically excludes "marl and lime," no regular inspection of liming materials is made. Occasional samples of limestone, hydrated lime and gypsum ("land plaster") are analyzed for farmers or Federal or State agencies. Analyses of three samples of limestone and two samples each of hydrated lime and gypsum 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 1957-1958 season 101 samples of small package fertilizers were analyzed. Eighty-seven of these, or 86 per cent, met all guaranties, and 95 per cent of the total of 282 guaranties was met; this is a better record than that of the fertilizers sold in 100 lb. bags. Analyses are given in Table 8.

Other miscellaneous materials. Twenty-seven other miscellaneous products were examined. Analyses, which are given in Table 9, include one sample of manganese sulphate which was official.

Check meals and fertilizers. Collaboration was continued with the various check analysis programs: Six soybean oil meal samples received from the American Oil Chemists' Society were analyzed for nitrogen, and the usual fertilizer determinations were made on 13 check fertilizers supplied by the F. S. Royster Guano Company.

#### 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 92 per cent.

	No. of samples	No. of guaranties	Deficiencies
Nitrate of ammonia . . . . .	4	4	0
Nitrate of soda . . . . .	6	6	0
Sulphate of ammonia . . . . .	5	5	2
Cyanamid . . . . .	2	2	0
Urea . . . . .	7	7	0
Castor pomace . . . . .	5	5	0
Cottonseed meal . . . . .	26	26	0
Horn and hoof meal . . . . .	1	1	0
Linseed oil meal . . . . .	6	6	0
Soybean oil meal . . . . .	2	2	0
Miscellaneous nitrogenous materials . . . . .	4	4	1
Superphosphate . . . . .	16	16	3
Precipitated bone . . . . .	5	5	0
Phosphate rock . . . . .	1	1	0
Muriate of potash . . . . .	7	7	0
Nitrate of potash . . . . .	3	6	0
Sulphate of potash . . . . .	2	2	0
Cotton hull ashes . . . . .	5	5	0
Dry ground fish . . . . .	6	9	0
Bone meal . . . . .	13	26	3
"Milorganite" . . . . .	2	4	0
Mixed fertilizer . . . . .	211	637	65
Sheep and cattle manure . . . . .	19	57	4
Small package fertilizers . . . . .	101	282	15
Manganese sulphate . . . . .	1	1	0
Totals . . . . .	460	1,126	93
Per cent guaranties met . . . . .			92

#### TABLE 1. ANALYSES OF MATERIALS SUPPLYING CHIEFLY NITROGEN

No.	Manufacturer or jobber and dealer	Per cent nitrogen	
		F	G
NITRATE OF AMMONIA			
4855	Arcadian Pelleted. Allied Chemical Corp., Hopewell, Va. Sampled at Eastern States Farmers' Exchange, Inc., Bethel . . . . .	33.58	33.50
4491	AEROPRILLS. American Cyanamid Co., New York, N.Y. State purchase, Conn. Reformatory, Cheshire . . . . .	33.55	33.50
4889	AEROPRILLS. American Cyanamid Co., New York, N.Y. Sampled at Eastern States Farmers' Exchange, Inc., Willimantic . . . . .	33.65	33.50
5469	Hi-D. Commercial Solvents Corp., New York, N.Y. Sampled at Armour Fertilizer Works, So. Windsor . . . . .	33.58	33.50
NITRATE OF SODA			
5349	Arcadian. Allied Chemical Corp., Hopewell, Va. Sampled at The Hubbard-Hall Chemical Co., Windsorville. Sodium found, 26.62% . . . . .	16.10	16.00
4408	Chilean, Champion Brand. Chilean Nitrate Sales Corp., New York, N.Y. Sampled at American Sumatra Tobacco Corp., Bloomfield. Sodium found, 26.23% . . . . .	16.12	16.00
4409	Chilean, Champion Brand. Chilean Nitrate Sales Corp., New York, N.Y. Sampled at American Sumatra Tobacco Corp., Bloomfield. Sodium found, 26.01% . . . . .	16.00	16.00
4494	Chilean, Champion Brand. Chilean Nitrate Sales Corp., New York, N.Y. Sampled at Eastern States Farmers' Exchange, Inc., North Haven. Sodium found, 26.69% . . . . .	16.00	16.00
4550	Chilean, Champion Brand. Chilean Nitrate Sales Corp., New York, N.Y. State purchase, Norwich State Hospital, Norwich. Sodium found, 26.00% . . . . .	16.00	16.00
4816	Chilean, Champion Brand. Chilean Nitrate Sales Corp., New York, N.Y. State purchase, Southbury Training School, Southbury. Sodium found, 26.21% . . . . .	16.00	16.00
SULPHATE OF AMMONIA			
4554	Corenco. Consolidated Rendering Co., Boston, Mass. State purchase, Osborn Prison Farm, Enfield . . . . .	20.34	20.50
5353	Hubbard. The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at The Hubbard-Hall Chemical Co., Portland . . . . .	20.08	20.00
5439	Hubbard. The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at The Hubbard-Hall Chemical Co., Windsorville . . . . .	20.54	20.50

— indicates deficiencies.

TABLE 1. ANALYSES OF MATERIALS SUPPLYING CHIEFLY NITROGEN

No.	Manufacturer or jobber and dealer	Per cent nitrogen	
		F	G
5036	USS. United States Steel, Pittsburgh, Pa. Sampled at McArdle's Seed Co., Greenwich . . . .	20.78	21.00
5339	USS. United States Steel, Pittsburgh, Pa. Sampled at Eastern States Farmers' Exchange, Inc., Buckland . . . . .	21.20	21.00
CYANAMID			
5340	AERO. American Cyanamid Co., New York, N. Y. Sampled at Eastern States Farmers' Exchange, Inc. Buckland . . . . .	22.84	21.00
5373	AERO. American Cyanamid Co., New York, N. Y. Sampled at Christensen & Rand, Inc., Wilson . .	21.16	21.00
UREA			
5231	AERO. American Cyanamid Co., New York, N. Y. Sampled at The Hubbard-Hall Chemical Co., North Haven . . . . .	45.60	45.00
4856	Arcadian. Allied Chemical Corp., Hopewell, Va. Sampled at Eastern States Farmers' Exchange, Inc. Bethel . . . . .	45.75	45.00
4931	Arcadian. Allied Chemical Corp., Hopewell, Va. State purchase, Conn. Highway Dept., Portland .	45.80	45.00
5032	Borden's "38". The Borden Co., New York, N. Y. Sampled at McArdle's Seed Co., Greenwich . . . .	38.52	38.00
5248	DU PONT NU GREEN. E. I. duPont deNemours & Co., Wilmington, Del. Sampled at New Haven Rendering Co., West Haven . . . . .	45.58	45.00
5355	DU PONT URAMITE. E. I. duPont deNemours & Co., Wilmington, Del. Sampled at The Hubbard-Hall Chemical Co., Portland . . . . .	38.22	38.00
4555	Sohigro. Sohio Chemical Co., Lima, Ohio. State purchase, Osborn Prison Farm, Enfield . . . . .	45.65	45.00
CASTOR POMACE			
4337	Baker Castor Oil Co., Bayonne, N.J. Sampled at American Sumatra Tobacco Corp., Bloomfield . . .	6.35	4.52
4338	Baker Castor Oil Co., Bayonne, N.J. Sampled at American Sumatra Tobacco Corp., Bloomfield . . .	6.30	4.52
4552	Baker Castor Oil Co., Bayonne, N.J. Sampled at Brainard Seed Co., Thompsonville . . . . .	5.80	4.52
4818	Baker Castor Oil Co., Bayonne, N.J. State purchase, Southbury Training School, Southbury .	6.46	4.52
5440	The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at The Hubbard-Hall Chemical Co., Windsorville . . . . .	5.10	4.50

TABLE 1. ANALYSES OF MATERIALS SUPPLYING CHIEFLY NITROGEN

No.	Manufacturer or jobber and dealer	Per cent nitrogen	
		F	G
COTTONSEED MEAL			
5304	Gro-Well. J. & L. Adikes, Inc., Jamaica, N. Y. Sampled at Silliman's, Inc., New Canaan . . . .	6.82	6.00
4306	Cocke-Sure 41%. Cocke & Co., Atlanta, Ga. Sampled at Cullman Bros., Inc., Simsbury . . . . .	6.53	6.56
4311	Cocke-Sure 41%. Cocke & Co., Atlanta, Ga. Sampled at Cullman Bros., Inc., Simsbury . . . . .	6.68	6.56
4313	Cocke-Sure 41%. Cocke & Co., Atlanta, Ga. Sampled at Cullman Bros., Inc., Simsbury . . . . .	6.96	6.56
4316	Cocke-Sure 41%. Cocke & Co., Atlanta, Ga. Sampled at Hatheway & Steane Corp., West Suffield . . .	6.66	6.56
4317	Cocke-Sure 41%. Cocke & Co., Atlanta, Ga. Sampled at Hatheway & Steane Corp., West Suffield . . .	6.52	6.56
4320	Cocke-Sure 41%. Cocke & Co., Atlanta, Ga. Sampled at Hatheway & Steane Corp., West Suffield . . .	6.62	6.56
4322	Cocke-Sure 41%. Cocke & Co., Atlanta, Ga. Sampled at Hatheway & Steane Corp., West Suffield . . .	6.57	6.56
5442	Cocke-Sure 36%. Cocke & Co., Atlanta, Ga. Sampled at Libner Grain Co., Norwalk . . . . .	5.86	5.76
4940	Corenco. Consolidated Rendering Co., Boston, Mass. Sampled at A. S. Labeniec, Kensington . .	6.48	6.00
5247	Corenco. Consolidated Rendering Co., Boston, Mass. Sampled at New Haven Rendering Co., West Haven . . . . .	6.36	6.00
4335	Golden Rod 41%. Goldenrod Oil Meal Sales Co., Memphis, Tenn. Sampled at American Sumatra Tobacco Corp., Bloomfield . . . . .	6.67	6.56
4336	Golden Rod 41%. Goldenrod Oil Meal Sales Co., Memphis, Tenn. Sampled at American Sumatra Tobacco Corp., Bloomfield . . . . .	6.70	6.56
5039	G & O 41%. Goulard & Olena, Inc., Skillman, N.J. Sampled at McArdle's Seed Co., Greenwich . . .	6.50	6.56
4310	Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn. Sampled at Cullman Bros., Inc., Simsbury	6.52	6.56
4312	Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn. Sampled at Cullman Bros., Inc., Simsbury	6.55	6.56
4314	Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn. Sampled at Cullman Bros., Inc., Granby .	6.66	6.56
4315	Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn. Sampled at Cullman Bros., Inc., Granby .	6.54	6.56
4329	Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn. Sampled at The Hartman Tobacco Co., Bloomfield . . . . .	6.66	6.56

TABLE 1. ANALYSES OF MATERIALS SUPPLYING CHIEFLY NITROGEN

No.	Manufacturer or jobber and dealer	Per cent nitrogen	
		F	G
4330	Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn. Sampled at The Hartman Tobacco Co., Bloomfield . . . . .	6.68	6.56
4331	Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn. Sampled at The Hartman Tobacco Co., Bloomfield . . . . .	6.56	6.56
4332	Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn. Sampled at The Hartman Tobacco Co., Bloomfield . . . . .	6.61	6.56
5022	Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn. Sampled at H. L. Oppenheimer & Sons, West Suffield . . . . .	6.62	6.56
4323	"Lovit Brand" 41%. L. B. Lovitt & Co., Memphis, Tenn. Sampled at L. B. Haas & Co., Hazardville . . . . .	6.50	6.56
4324	"Lovit Brand" 41%. L. B. Lovitt & Co., Memphis, Tenn. Sampled at L. B. Haas & Co., Hazardville . . . . .	6.62	6.56
4325	"Lovit Brand" 41%. L. B. Lovitt & Co., Memphis, Tenn. Sampled at L. B. Haas & Co., Hazardville . . . . .	6.74	6.56
HORN & HOOF MEAL			
4553	The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at L. B. Haas & Co., Hazardville . . . . .	14.02	13.00
LINSEED OIL MEAL			
4327	Archer Quality 34%. Archer-Daniels-Midland Co., Minneapolis, Minn. Sampled at L. B. Haas & Co., Hazardville . . . . .	5.42	5.44
4328	Archer Quality 34%. Archer-Daniels-Midland Co., Minneapolis, Minn. Sampled at L. B. Haas & Co., Hazardville . . . . .	5.39	5.44
4309	Spencer Kellogg's 32%. Spencer Kellogg & Sons, Inc., Buffalo, N.Y. Sampled at Cullman Bros., Inc., Simsbury . . . . .	6.18	5.12
4321	Spencer Kellogg's 32%. Spencer Kellogg & Sons, Inc., Buffalo, N.Y. Sampled at Hatheway & Steane Corp., West Suffield . . . . .	5.72	5.12
4333	Sherwin-Williams 32%. The Sherwin-Williams Co., Cleveland, Ohio. Sampled at The Hartman Tobacco Co., Bloomfield . . . . .	5.73	5.12
4334	Sherwin-Williams 32%. The Sherwin-Williams Co., Cleveland, Ohio. Sampled at The Hartman Tobacco Co., Bloomfield . . . . .	5.92	5.12

TABLE 1. ANALYSES OF MATERIALS SUPPLYING CHIEFLY NITROGEN

No.	Manufacturer or jobber and dealer	Per cent nitrogen	
		F	G
SOYBEAN OIL MEAL			
4308	Archer Quality 44%. Archer-Daniels-Midland Co., Minneapolis, Minn. Sampled at Cullman Bros., Inc., Simsbury . . . . .	7.37	7.04
5344	Buckeye 44%. The Buckeye Cellulose Corp., Cincinnati, Ohio. Sampled at The Hubbard-Hall Chemical Co., Windsorville . . . . .	7.20	7.04
MISCELLANEOUS			
4954	Agrinite. American Agricultural Chemical Co., No. Weymouth, Mass. Sampled at Bristol Nurseries, Inc., Bristol . . . . .	7.35	7.00
5425	Slaughter House Tankage. The Brookside Nurseries Inc., Darien, Conn. Sampled at The Brookside Nurseries, Inc., Darien . . . . .	8.78	10.00
4495	PAX. Kelly-Western Seed Co., Salt Lake City, Utah. Sampled at L. Broder & Co., Colchester . . . . .	7.36	7.00
5456	Nitro-Form. Nitro-Form Agricultural Chemicals Co., Woonsocket, R.I. Sampled at Cadwell & Jones, Hartford . . . . .	38.48	38.00

~~~~~ indicates deficiencies.

TABLE 2. ANALYSES OF SUPERPHOSPHATE, ETC.

| Station No.    | Manufacturer or jobber and dealer                                                                                                             | Per cent phosphoric acid |       |       |       |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------|-------|-------|
|                |                                                                                                                                               | Citrate-insoluble        | Total | F     | G     |
| SUPERPHOSPHATE |                                                                                                                                               |                          |       |       |       |
| 4781           | Agri-Phos. American Agricultural Chemical Co., No. Weymouth, Mass. Sampled at P. Cutler, Inc., Colchester . . . . .                           | 0.35                     | 21.20 | 20.85 | 20.00 |
| 4928           | Agri-Phos. American Agricultural Chemical Co., No. Weymouth, Mass. State purchase, Mansfield State Training School, Mansfield Depot . . . . . | 0.25                     | 20.30 | 20.05 | 20.00 |
| 5380           | 18%. American Agricultural Chemical Co., No. Weymouth, Mass. Sampled at Henry Adams, East Granby . . . . .                                    | 0.48                     | 18.90 | 18.42 | 18.00 |
| 4930           | Irebo-Phos. American Cyanamid Co., New York, N. Y. State purchase, Conn. Highway Dept., Portland . . . . .                                    | 0.95                     | 49.40 | 48.45 | 46.00 |
| 5430           | 20%. Armour Fertilizer Works, Carteret, N.J. Sampled at Armour Fertilizer Works, So. Windsor . . . . .                                        | 1.20                     | 20.85 | 19.65 | 20.00 |
| 5241           | 20%. Consolidated Rendering Co., Boston, Mass. Sampled at New Haven Rendering Co., West Haven . . . . .                                       | 0.70                     | 22.20 | 21.50 | 20.00 |
| 4801           | 20%. Consolidated Rendering Co., Boston, Mass. Sampled at A. E. Shedd Co. Inc., Norwich . . . . .                                             | 0.23                     | 21.00 | 20.77 | 20.00 |
| 4810           | 20%. Consolidated Rendering Co., Boston, Mass. State purchase, Osborn Prison Farm, Enfield . . . . .                                          | 1.13                     | 21.80 | 20.67 | 20.00 |
| 5324           | 20%. Davison Chemical Co., Baltimore, Md. Sampled at Checkerboard Feed Store, New Milford . . . . .                                           | 1.45                     | 22.35 | 20.90 | 20.00 |
| 4773           | 20%. Eastern States Farmers' Exchange, Inc., W. Springfield, Mass. Sampled at Cullman Bros., Inc., Simsbury . . . . .                         | 0.13                     | 21.70 | 21.57 | 20.00 |

|                             |                                                                                                                                                       |       |       |       |       |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|-------|-------|
| 4774                        | 20%. Eastern States Farmers' Exchange, Inc., W. Springfield, Mass. Sampled at Cullman Bros., Inc., Granby . . . . .                                   | 0.07  | 21.60 | 21.53 | 20.00 |
| 5348                        | 20%. The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at The Hubbard-Hall Chemical Co., Windsorville . . . . .                                 | 1.00  | 21.70 | 20.70 | 20.00 |
| 5455                        | 20%. Lebanon Chemical Corp., Lebanon, Pa. Sampled at Cadwell & Jones, Inc., Hartford . . . . .                                                        | 0.80  | 21.65 | 20.85 | 20.00 |
| 4782                        | 20%. Old Fox Agricultural Sales, Inc., E. Providence, R. I. Sampled at Putnam Farmers Co-Op. Ass'n. Inc., Putnam . . . . .                            | 0.75  | 20.30 | 19.55 | 20.00 |
| 4839                        | 20%. I. P. Thomas Division, Philadelphia, Pa. State purchase, Fairfield State Hospital, Newtown . . . . .                                             | 0.83  | 21.10 | 20.27 | 20.00 |
| 5388                        | Tencor Triple. U. S. Phosphoric Products Div., Tampa, Fla. Sampled at Ayer & Simmons, Inc., Granby . . . . .                                          | 1.30  | 47.00 | 45.70 | 46.00 |
| PRECIPITATED BONE PHOSPHATE |                                                                                                                                                       |       |       |       |       |
| 4778                        | American Agricultural Chemical Co., No. Weymouth, Mass. Sampled at American Sumatra Tobacco Corp., Bloomfield . . . . .                               | 0.25  | 44.40 | 44.15 | 44.00 |
| 4779                        | American Agricultural Chemical Co., No. Weymouth, Mass. Sampled at American Sumatra Tobacco Corp., Bloomfield . . . . .                               | 0.35  | 44.60 | 44.25 | 44.00 |
| 4515                        | The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Cullman Bros., Inc., Simsbury . . . . .                                                    | 0.20  | 44.00 | 43.80 | 42.00 |
| 4775                        | The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Hatheway & Steane Corp., Suffield . . . . .                                                | 0.30  | 46.40 | 46.10 | 42.00 |
| 4805                        | The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at L. B. Haas & Co., Hazardville . . . . .                                                    | 0.30  | 45.00 | 44.70 | 42.00 |
| PHOSPHATE ROCK              |                                                                                                                                                       |       |       |       |       |
| 5422                        | AA Ground Florida Pebble 31%. American Agricultural Chemical Co., No. Weymouth, Mass. Sampled at The Brookside Nurseries, Inc., Darien, Conn. . . . . | 26.35 | 31.00 | 4.65  | 3.00  |

..... indicates deficiencies.

TABLE 3. ANALYSES OF POTASH SALTS, ETC.

| No.                | Manufacturer or jobber and dealer                                                                                                        | Per cent potash |            |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------------|
|                    |                                                                                                                                          | F               | G          |
| MURIATE OF POTASH  |                                                                                                                                          |                 |            |
| 5271               | American Agricultural Chemical Co., N. Weymouth, Mass. Sampled at The C. W. Campbell Co., Pawcatuck . . . . .                            | 60.84           | 60.00      |
| 4527               | Consolidated Rendering Co., Boston, Mass. State purchase, Conn. Reformatory, Cheshire . . . . .                                          | 60.84           | 60.00      |
| 4809               | Consolidated Rendering Co., Boston, Mass. State purchase, Osborn Prison Farm, Enfield . . . . .                                          | 60.04           | 60.00      |
| 4932               | Consolidated Rendering Co., Boston, Mass. State purchase, Conn. Highway Dept., Portland . . . . .                                        | 61.00           | 60.00      |
| 4528               | Eastern States Farmers' Exchange, Inc., West Springfield, Mass. Sampled at Eastern States Farmers' Exchange, Inc., North Haven . . . . . | 61.12           | 60.00      |
| 4525               | The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at American Sumatra Tobacco Corp., Bloomfield . . . . .                          | 60.40           | 60.00      |
| 5370               | The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at The Hubbard-Hall Chemical Co., Portland . . . . .                             | 60.16           | 60.00      |
| NITRATE OF POTASH  |                                                                                                                                          |                 |            |
| 4487 <sup>1</sup>  | The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Hatheway & Steane Corp., W. Suffield                                          | 46.48           | 44.00      |
| 4488 <sup>2</sup>  | The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at American Sumatra Tobacco Corp., Bloomfield . . . . .                          | 45.80           | 44.00      |
| 4489 <sup>3</sup>  | The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at American Sumatra Tobacco Corp., Bloomfield . . . . .                          | 46.36           | 44.00      |
| SULPHATE OF POTASH |                                                                                                                                          |                 |            |
| 4783               | Consolidated Rendering Co., Boston, Mass. State purchase, Norwich State Hospital, Norwich . . . . .                                      | 50.76           | 48.00      |
| 4401               | The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Cullman Bros., Inc., Simsbury . . . . .                                       | 51.50           | 48.00      |
| COTTON HULL ASHES  |                                                                                                                                          |                 |            |
| 4526               | American Agricultural Chemical Co., N. Weymouth, Mass. Sampled at American Sumatra Tobacco Corp., Bloomfield . . . . .                   | 37.24           | unit basis |
| 4522               | The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Hatheway & Steane Corp., W. Suffield                                          | 38.70           | unit basis |
| 4806               | The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at L. B. Haas & Co., Hazardville . . . . .                                       | 35.38           | unit basis |

<sup>1</sup> Nitrogen guaranteed, 13.0%; found, 13.68%.<sup>2</sup> Nitrogen guaranteed, 13.0%; found, 12.94%.<sup>3</sup> Nitrogen guaranteed, 13.0%; found, 13.76%.



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

| Station No.     | Manufacturer or jobber and dealer                                                                           | Per cent nitrogen |       | Per cent phosphoric acid |       | Mechanical analyses (per cent) |                        |
|-----------------|-------------------------------------------------------------------------------------------------------------|-------------------|-------|--------------------------|-------|--------------------------------|------------------------|
|                 |                                                                                                             | Ammoniacal        | Total | Found                    | Total | Finer than 1/50 inch           | Coarser than 1/50 inch |
| DRY GROUND FISH |                                                                                                             |                   |       |                          |       |                                |                        |
| 4398            | Atlantic Processing Co., Amagansett, N.Y. Sampled at Cullman Bros., Inc., Simsbury . . . . .                | ....              | 10.48 | 8.80                     | 7.25  | ....                           | ....                   |
| 4399            | Atlantic Processing Co., Amagansett, N.Y. Sampled at Cullman Bros., Inc., Simsbury . . . . .                | ....              | 10.30 | 8.80                     | 7.40  | ....                           | ....                   |
| 4400            | Atlantic Processing Co., Amagansett, N.Y. Sampled at Cullman Bros., Inc., Granby . . . . .                  | ....              | 10.41 | 8.80                     | 8.05  | ....                           | ....                   |
| 4402            | The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Hatheway & Steane Corp., West Suffield . . . . . | ....              | 10.60 | 9.50                     | 7.10  | 5.00                           | ....                   |
| 4405            | The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at The Hartman Tobacco Co., Bloomfield . . . . .    | ....              | 10.48 | 9.50                     | 7.50  | 5.00                           | ....                   |
| 4406            | The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at The Hartman Tobacco Co., Bloomfield . . . . .    | ....              | 10.64 | 9.50                     | 7.20  | 5.00                           | ....                   |
| BONE MEAL       |                                                                                                             |                   |       |                          |       |                                |                        |
| 5302            | J. & L. Adikes, Inc., Jamaica, N.Y. Sampled at Silliman's Inc., New Canaan . . . . .                        | 0.00              | 3.04  | 2.25                     | 27.15 | 21.25                          | 61.0 39.0              |
| 5210            | American Agricultural Chemical Co., No. Weymouth, Mass. Sampled at Larsen's Hardware, Manchester . . . . .  | 0.04              | 2.62  | 2.50                     | 26.60 | 25.00                          | 53.0 47.0              |
| 5382            | American Agricultural Chemical Co., No. Weymouth, Mass. Sampled at Henry Adams, East Granby . . . . .       | 0.00              | 1.92  | 1.50                     | 28.20 | 25.00                          | 61.0 39.0              |
| 5192            | Armour Fertilizer Works, Carteret, N.J. Sampled at Armour Fertilizer Works, So. Windsor . . . . .           | 0.00              | 2.48  | 2.30                     | 26.60 | 23.00                          | 59.0 41.0              |
| 5424            | The Brookside Nurseries, Inc., Darien, Conn. Sampled at The Brookside Nurseries, Inc., Darien . . . . .     | 0.00              | 2.55  | .... <sup>1</sup>        | 20.35 | 21.00                          | 4.0 96.0               |

|             |                                                                                                                    |      |      |      |                   |                   |           |
|-------------|--------------------------------------------------------------------------------------------------------------------|------|------|------|-------------------|-------------------|-----------|
| 4822        | Consolidated Rendering Co., Boston, Mass. Sampled at Jackson-Marvin Hdw. Co., Inc., New Haven . . . . .            | 0.02 | 2.53 | 2.00 | 27.90             | 22.00             | 56.0 44.0 |
| 4497        | Faesy & Besthoff, Inc., New York, N.Y. Sampled at Sunshine Feed Store, Plainville . . . . .                        | 0.07 | 2.52 | 2.47 | 28.25             | 23.00             | 64.0 36.0 |
| 5033        | Gouldard & Olena, Inc., Skillman, N.J. Sampled at McArdle's Seed Co., Greenwich . . . . .                          | 0.00 | 5.78 | 4.00 | 20.35             | 22.00             | 1.0 99.0  |
| 5037        | Gouldard & Olena, Inc., Skillman, N.J. Sampled at McArdle's Seed Co., Greenwich . . . . .                          | 0.00 | 2.70 | 2.40 | 21.70             | 20.00             | 53.0 47.0 |
| 4780        | The Hubbard-Hall Chemical Co., Waterbury, Conn. State purchase, Uncas-on-Thames Sanitorium, Norwich . . . . .      | 0.00 | 2.55 | 2.00 | 27.80             | 23.00             | 64.0 36.0 |
| 5256        | The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Willis Distributors, Bridgeport . . . . .               | 0.00 | 2.96 | 2.00 | 25.25             | 23.00             | 62.0 38.0 |
| 5392        | Lebanon Chemical Corp., Lebanon, Pa. Sampled at Cadwell & Jones, Inc., Hartford . . . . .                          | 0.04 | 2.68 | 2.30 | 21.20             | .... <sup>3</sup> | 52.0 48.0 |
| 4834        | Sears, Roebuck & Co., Chicago, Ill. Sampled at Sears, Roebuck & Co., Hamden . . . . .                              | 0.00 | 2.38 | 2.00 | 27.60             | 26.00             | 61.0 39.0 |
| MILORGANITE |                                                                                                                    |      |      |      |                   |                   |           |
| 4498        | Sewerage Commission of the City of Milwaukee, Milwaukee, Wis. Sampled at Sunshine Feed Store, Plainville . . . . . | 0.00 | 5.75 | 5.00 | 4.70 <sup>5</sup> | ....              | ....      |
| 5401        | Sewerage Commission of the City of Milwaukee, Milwaukee, Wis. Sampled at Leon Ezzell, Inc., Stamford . . . . .     | 0.00 | 6.06 | 5.50 | 4.75 <sup>6</sup> | ....              | ....      |

..... indicates deficiencies.

<sup>1</sup> Phosphoric acid not guaranteed.

<sup>2</sup> Nitrogen not guaranteed.

<sup>3</sup> "Available" phosphoric acid: Guaranteed, 15.00%; found, 13.40%.

<sup>4</sup> "Available" phosphoric acid: Guaranteed, 16.00%; found, 17.20%.

<sup>5</sup> "Available" phosphoric acid: Guaranteed, 4.0%; found, 4.0%.

<sup>6</sup> "Available" phosphoric acid: Guaranteed, 4.0%; found, 4.02%.

TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station number | Manufacturer and brand                                                                     | Place of sampling         | CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH |               |                 |         |                           |       |                       |                  |       |           |       |
|----------------|--------------------------------------------------------------------------------------------|---------------------------|--------------------------------------------------|---------------|-----------------|---------|---------------------------|-------|-----------------------|------------------|-------|-----------|-------|
|                |                                                                                            |                           | Nitrogen, per cent                               |               |                 |         | Phosphoric acid, per cent |       |                       | Potash, per cent |       | Magnesium |       |
|                |                                                                                            |                           | Organic                                          |               |                 |         | Total                     | Total | So-called "available" | As muriate       | Total |           |       |
|                |                                                                                            |                           | Ammoniacal                                       | Water-soluble | Water-insoluble | Nitrate |                           |       |                       |                  |       |           |       |
| 4508           | AGRICULTURAL SUPPLY CO., West Haven, Conn.<br>Yale Special Mixture 8-6-2 . . . . .         | Wallingford . . . . .     | 0.00                                             | 4.76          | 3.02            | 0.40    | 8.18                      | 0.23  | 7.60                  | 7.37             | 1.94  | 2.46      | ..... |
| 5343           | ALLIED CHEMICAL CORP., Hopewell, Va.<br>"Arcadian" 12-12-12 Granular Fertilizer . . . . .  | Windsorville . . . . .    | 4.20                                             | 6.68          | 0.80            | 0.14    | <u>11.82</u>              | 0.45  | 12.70                 | 12.25            | 11.02 | 12.31     | ..... |
| 4929'          | AMERICAN AGRICULTURAL CHEMICAL CO., No. Weymouth, Mass.<br>AA Fertilizer 0-20-20 . . . . . | Mansfield Depot . . . . . | .....                                            | .....         | .....           | .....   | .....                     | 0.30  | 20.45                 | 20.15            | 18.31 | 19.05     | ..... |
| 5031           | AA Fertilizer 5-10-5 . . . . .                                                             | Torrington . . . . .      | 0.58                                             | 4.52          | 0.00            | 0.18    | 5.28                      | 0.58  | 10.65                 | 10.07            | 2.96  | 5.54      | ..... |
| 5035           | AA Fertilizer 5-10-5 . . . . .                                                             | Greenwich . . . . .       | 0.27                                             | 4.68          | 0.00            | 0.20    | 5.15                      | 0.78  | 10.80                 | 10.02            | 4.14  | 5.00      | ..... |
| 4504'          | AA Fertilizer 5-10-10 . . . . .                                                            | Norwich . . . . .         | 0.33                                             | 4.66          | 0.06            | 0.09    | 5.14                      | 0.68  | 11.30                 | 10.62            | 8.76  | 10.15     | ..... |
| 4548'          | AA Fertilizer 5-10-10 . . . . .                                                            | Norwich . . . . .         | 0.35                                             | 4.74          | 0.00            | 0.07    | 5.16                      | 0.60  | 11.50                 | 10.90            | 7.86  | 9.97      | ..... |
| 4549'          | AA Fertilizer 5-10-10 . . . . .                                                            | Norwich . . . . .         | 0.28                                             | 4.72          | 0.00            | 0.11    | 5.11                      | 0.68  | 11.45                 | 10.77            | 6.52  | 10.15     | ..... |
| 4939           | AA Fertilizer 5-10-10 with 1.2 Magnesium . . . . .                                         | Kensington . . . . .      | 0.19                                             | 4.80          | 0.14            | 0.12    | 5.25                      | 0.63  | 11.20                 | 10.57            | 7.08  | 10.19     | 1.61  |
| 5383           | AA Fertilizer 8-16-16 . . . . .                                                            | East Granby . . . . .     | 1.96                                             | 5.44          | 0.12            | 0.22    | 7.74                      | 0.38  | 16.55                 | 16.17            | 11.62 | 16.18     | ..... |
| 4941           | AA Fertilizer 10-10-10 . . . . .                                                           | Kensington . . . . .      | 1.75                                             | 7.72          | 0.08            | 0.10    | <u>7.65</u>               | 0.53  | 11.45                 | 10.92            | 3.20  | 10.01     | ..... |
| 5005           | AA Lawn & Garden Fertilizer 5-10-5 . . . . .                                               | Waterbury . . . . .       | 0.00                                             | 4.68          | 0.35            | 0.15    | 5.18                      | 0.63  | 10.70                 | 10.07            | 4.33  | 5.13      | ..... |
| 5381           | Agrico Country Club Fertilizer 8-6-4 . . . . .                                             | East Granby . . . . .     | 0.59                                             | 4.52          | 1.40            | 1.57    | 8.08                      | 0.45  | 6.63                  | 6.18             | 0.93  | 4.08      | ..... |
| 5171           | Agrico Pesticide & Turf Food 6-10-4 . . . . .                                              | Greenwich . . . . .       | 0.84                                             | 5.04          | 0.12            | 0.36    | 6.36                      | 0.55  | 10.55                 | 10.00            | 3.13  | 4.00      | ..... |
| 5376           | Agrico Phosphate & Potash 0-15-30 . . . . .                                                | East Granby . . . . .     | .....                                            | .....         | .....           | .....   | .....                     | 0.20  | 15.55                 | 15.35            | 27.06 | 32.28     | ..... |
| 5377           | Agrico Phosphate & Potash 0-20-20 . . . . .                                                | East Granby . . . . .     | .....                                            | .....         | .....           | .....   | .....                     | 0.35  | 20.30                 | 19.95            | 18.67 | 19.50     | ..... |
| 5257           | Agrico Rose Food 5-9-6 . . . . .                                                           | Bridgeport . . . . .      | 0.00                                             | 2.24          | 1.14            | 2.12    | 5.50                      | 0.50  | 9.28                  | 8.78             | 5.70  | 5.70      | ..... |
| 5034           | Agrico for Azaleas, Camellias & Rhododendrons 6-10-4 . . . . .                             | Greenwich . . . . .       | 0.00                                             | 4.40          | 0.99            | 0.92    | 6.31                      | 1.45  | 11.10                 | 9.65             | 3.01  | 3.64      | ..... |
| 5255           | Agrico for Gardens 5-10-5 . . . . .                                                        | Bridgeport . . . . .      | 0.00                                             | 4.36          | 1.34            | 0.18    | 5.88                      | 0.68  | 10.75                 | 10.07            | 4.50  | 5.22      | ..... |
| 4533           | Agrico for Lawns, Trees & Shrubs 6-10-4 . . . . .                                          | Southington . . . . .     | 0.94                                             | 3.66          | 1.34            | 0.08    | 6.02                      | 0.68  | 11.35                 | 10.67            | 4.01  | 4.18      | ..... |
| 4532           | Agrico for New England 5-8-7 . . . . .                                                     | Southington . . . . .     | 0.00                                             | 4.86          | 0.03            | 0.19    | 5.08                      | 0.43  | 9.25                  | 8.82             | 4.62  | 7.16      | ..... |
| 4514           | Agrico for Potatoes 5-10-10 . . . . .                                                      | Colchester . . . . .      | 1.22                                             | 4.16          | 0.02            | 0.10    | 5.50                      | 0.40  | 11.15                 | 10.75            | 8.87  | 10.86     | 1.71  |
| 4505           | Agrico for Top Dressing 7-7-7 . . . . .                                                    | Colchester . . . . .      | 1.29                                             | 5.48          | 0.00            | 0.04    | 6.81                      | 0.35  | 8.00                  | 7.65             | 4.78  | 7.20      | ..... |
| 5328           | Agrico for Top Dressing 10-10-10 . . . . .                                                 | New Milford . . . . .     | 1.52                                             | 8.12          | 0.36            | 0.06    | 10.06                     | 0.38  | 10.55                 | 10.17            | 9.42  | 10.37     | ..... |
| 5259           | Agrico for Turf 6-8-2 . . . . .                                                            | Bridgeport . . . . .      | 0.20                                             | 2.96          | 0.84            | 1.72    | 5.72                      | 0.87  | 9.38                  | 8.51             | 2.02  | 2.31      | ..... |
| 5212           | Agrico for Turf 10-6-4 . . . . .                                                           | Manchester . . . . .      | 0.40                                             | 3.44          | 2.88            | 3.70    | 10.42                     | 0.40  | 6.60                  | 6.20             | 3.83  | 3.86      | ..... |
| 4960           | ARMOUR FERTILIZER WORKS, Carteret, N. J.<br>Armour Armorganic Plant Food 5-5-0 . . . . .   | Bristol . . . . .         | 0.00                                             | 0.24          | 0.36            | 4.51    | 5.11                      | 1.25  | 6.35                  | 5.10             | ..... | .....     | ..... |
| 5195           | Armour Big Crop Fertilizer 0-20-20 . . . . .                                               | South Windsor . . . . .   | .....                                            | .....         | .....           | .....   | .....                     | 0.58  | 21.60                 | 21.02            | 17.60 | 20.72     | ..... |
| 5428           | Armour Big Crop Fertilizer 5-10-5 . . . . .                                                | South Windsor . . . . .   | 0.00                                             | 3.32          | 1.69            | 0.15    | 5.16                      | 1.18  | 12.60                 | 11.42            | 3.45  | 4.32      | ..... |
| 5433           | Armour Big Crop Fertilizer 5-10-10 . . . . .                                               | South Windsor . . . . .   | 0.32                                             | 4.36          | 0.36            | 0.10    | 5.14                      | 0.58  | 10.58                 | 10.00            | 5.15  | 9.86      | ..... |
| 4530           | Armour Big Crop Fertilizer 7-7-7 . . . . .                                                 | Plainville . . . . .      | 0.70                                             | 5.96          | 0.02            | 0.04    | 6.72                      | 1.28  | 10.35                 | 9.07             | 6.18  | 7.16      | ..... |
| 5427           | Armour Big Crop Fertilizer 8-16-16 . . . . .                                               | South Windsor . . . . .   | 2.44                                             | 5.16          | 1.04            | 0.22    | 8.86                      | 0.63  | 15.00                 | 14.37            | 9.59  | 12.30     | ..... |
| 5194           | Armour Big Crop Fertilizer 10-10-10 . . . . .                                              | South Windsor . . . . .   | 0.07                                             | 8.48          | 1.72            | 0.11    | 10.38                     | 0.70  | 11.20                 | 10.50            | 9.88  | 9.88      | ..... |

..... indicates deficiencies  
' State purchase.

TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station number    | Manufacturer and brand                                                        | Place of sampling       |
|-------------------|-------------------------------------------------------------------------------|-------------------------|
|                   |                                                                               |                         |
| 5431              | Armour Vertagreen Complete Plant Food for<br>Commercial Crops 8-8-8 . . . . . | South Windsor . . . . . |
| 5434              | Armour Vertagreen for Acid Loving Plants<br>5-10-10 . . . . .                 | South Windsor . . . . . |
| 5190              | Armour Vertagreen Plant Food for Commercial<br>Crops 6-12-6 . . . . .         | South Windsor . . . . . |
| 5432              | Armour Vertagreen Plant Food for Commercial<br>Crops 6-12-12 . . . . .        | South Windsor . . . . . |
| 4961              | Armour Vertagreen Plant Food for Turf &<br>Trees 10-6-4 . . . . .             | Bristol . . . . .       |
| 5196              | Armour Vertagreen Rose Food 5-10-5 . . . . .                                  | South Windsor . . . . . |
| 5191              | Armour Vertagreen Turf Maker 8-6-2 . . . . .                                  | South Windsor . . . . . |
|                   | F. A. BARTLETT TREE EXPERT CO., Stamford, Conn.                               |                         |
| 5441              | Bartlett Green Tree Food 6-8-6 . . . . .                                      | Danbury . . . . .       |
|                   | JOSEPH BRECK & SONS CORP., Boston, Mass.                                      |                         |
| 4945              | Breck's Turf-Gro 8-6-2 . . . . .                                              | Bristol . . . . .       |
|                   | THE BROOKSIDE NURSERIES, INC., Darien, Conn.                                  |                         |
| 5423              | Nature's Nutrients 6-6-8 . . . . .                                            | Darien . . . . .        |
|                   | CADWELL & JONES, INC., Hartford, Conn.                                        |                         |
| 5394              | J & C Fertilizer 10-6-4 . . . . .                                             | Hartford . . . . .      |
|                   | CHIGUANO COMPOST CORP., Marion, Conn.                                         |                         |
| 4511              | Chiguano 2-2-2 . . . . .                                                      | Plantsville . . . . .   |
|                   | CONSOLIDATED RENDERING CO., Boston, Mass.                                     |                         |
| 4841 <sup>1</sup> | Corenco 0-15-30 . . . . .                                                     | Newtown . . . . .       |
| 5245              | Corenco 0-15-30 . . . . .                                                     | West Haven . . . . .    |
| 4815 <sup>1</sup> | Corenco 0-20-20 . . . . .                                                     | Southbury . . . . .     |
| 4935 <sup>1</sup> | Corenco 0-20-20 . . . . .                                                     | Middletown . . . . .    |
| 4577 <sup>1</sup> | Corenco 5-8-7 . . . . .                                                       | Enfield . . . . .       |
| 5197              | Corenco 5-8-7 . . . . .                                                       | Wapping . . . . .       |
| 2728 <sup>1</sup> | Corenco 5-10-5 . . . . .                                                      | West Haven . . . . .    |
| 3074 <sup>1</sup> | Corenco 5-10-5 . . . . .                                                      | West Haven . . . . .    |
| 5180              | Corenco 5-10-5 . . . . .                                                      | Cos-Cob . . . . .       |

<sup>1</sup> indicates deficiencies.

<sup>1</sup> State purchase.

| CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH |                       |                   |                     |                       |       |                              |                          |           |                     |      |           |
|--------------------------------------------------|-----------------------|-------------------|---------------------|-----------------------|-------|------------------------------|--------------------------|-----------|---------------------|------|-----------|
| Nitrate                                          | Nitrogen,<br>per cent |                   |                     |                       | Total | Phosphoric acid,<br>per cent |                          |           | Potash,<br>per cent |      | Magnesium |
|                                                  | Ammoniacal            | Organic           |                     | Citrate-<br>insoluble |       | Total                        | So-called<br>"available" | As murate | Total               |      |           |
|                                                  |                       | Water-<br>soluble | Water-<br>insoluble |                       |       |                              |                          |           |                     |      |           |
| 0.20                                             | 4.90                  | 0.00              | 0.20                | 5.30                  | 0.73  | 11.50                        | 10.77                    | 2.03      | 5.22                | .... |           |
| 1.02                                             | 6.48                  | 0.44              | 0.10                | 8.04                  | 0.65  | 9.55                         | 8.90                     | 6.92      | 8.42                | .... |           |
| 0.00                                             | 3.60                  | 0.85              | 1.03                | 5.48                  | 0.88  | 11.05                        | 10.17                    | 8.47      | 11.43               | .... |           |
| 1.05                                             | 4.76                  | 0.26              | 0.01                | 6.08                  | 1.20  | 13.60                        | 12.40                    | 5.09      | <u>5.32</u>         | .... |           |
| 0.63                                             | 4.88                  | 0.12              | 0.37                | 6.00                  | 0.83  | 13.10                        | 12.27                    | 10.80     | 13.12               | .... |           |
| 0.17                                             | 8.14                  | 0.46              | 1.59                | 10.36                 | 0.65  | 7.35                         | 6.70                     | 2.84      | 4.30                | .... |           |
| 0.37                                             | 4.12                  | 0.38              | 0.83                | 5.70                  | 0.93  | 12.00                        | 11.07                    | 4.58      | 5.66                | .... |           |
| 0.65                                             | 2.56                  | 1.44              | 4.09                | 8.74                  | 0.85  | 7.00                         | 6.15                     | 1.69      | 2.22                | .... |           |
| 0.00                                             | 4.96                  | 0.29              | 0.97                | 6.22                  | 0.63  | 9.58                         | 8.95                     | 5.80      | 6.14                | .... |           |
| 0.00                                             | 5.22                  | 0.74              | 1.65                | <u>7.61</u>           | 0.63  | 7.03                         | 6.40                     | ....      | 2.81                | .... |           |
| 0.23                                             | 0.00                  | 0.57              | 5.26                | 6.06                  | 5.35  | 11.95                        | 6.60                     | 1.30      | 8.25                | .... |           |
| 0.00                                             | 5.40                  | 2.09              | 2.69                | 10.18                 | 0.60  | 6.80                         | 6.20                     | 3.52      | 4.38                | .... |           |
| 0.00                                             | 0.12                  | 0.19              | 1.26                | <u>1.57</u>           | 0.73  | 3.85                         | 3.12                     | 0.19      | 2.28                | .... |           |
| ....                                             | ....                  | ....              | ....                | ....                  | 0.50  | 16.70                        | 16.20                    | 22.59     | <u>29.16</u>        | .... |           |
| ....                                             | ....                  | ....              | ....                | ....                  | 0.15  | 15.05                        | 14.90                    | 25.63     | 33.32               | .... |           |
| ....                                             | ....                  | ....              | ....                | ....                  | 0.53  | 20.50                        | 19.97                    | 17.55     | <u>19.05</u>        | .... |           |
| ....                                             | ....                  | ....              | ....                | ....                  | 0.63  | 21.30                        | 20.67                    | 11.62     | <u>18.48</u>        | .... |           |
| 1.02                                             | 3.38                  | 0.52              | 0.13                | 5.05                  | 0.30  | 9.00                         | 8.70                     | 5.99      | <u>7.64</u>         | .... |           |
| 0.89                                             | 3.12                  | 0.86              | 0.17                | 5.04                  | 0.10  | 8.75                         | 8.65                     | 5.76      | 7.20                | .... |           |
| 1.24                                             | 1.56                  | 2.10              | 0.12                | 5.02                  | 0.15  | 10.55                        | 10.40                    | 2.38      | 5.80                | .... |           |
| 1.19                                             | 1.57                  | 1.83              | 0.11                | <u>4.70</u>           | 0.10  | 10.15                        | 10.05                    | 2.27      | 6.72                | .... |           |
| 0.88                                             | 3.72                  | 0.52              | 0.18                | 5.30                  | 0.38  | 10.40                        | 10.02                    | 4.93      | 5.84                | .... |           |

TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station number    | Manufacturer and brand                                          | Place of sampling     |
|-------------------|-----------------------------------------------------------------|-----------------------|
|                   |                                                                 |                       |
| 5246              | Corenco 5-10-5 Rose Special . . . . .                           | West Haven . . . .    |
| 4808 <sup>1</sup> | Corenco 5-10-10 . . . . .                                       | Enfield . . . . .     |
| 4927 <sup>1</sup> | Corenco 5-10-10 . . . . .                                       | Mansfield Depot . .   |
| 4964              | Corenco 5-10-10 . . . . .                                       | Danielson . . . . .   |
| 5244              | Corenco 5-10-10 with 1.2 Magnesium . . . . .                    | West Haven . . . .    |
| 5463              | Corenco 5-10-10 Liquid Fertilizer Concentrate . . . . .         | West Haven . . . .    |
| 5426              | Corenco 6-3-6 Perfection . . . . .                              | East Windsor Hill . . |
| 4493 <sup>1</sup> | Corenco 6-8-8 . . . . .                                         | Cheshire . . . . .    |
| 5374              | Corenco 6-8-8 . . . . .                                         | Wilson . . . . .      |
| 5200              | Corenco 6-8-8 with 1.2 Magnesium . . . . .                      | Wapping . . . . .     |
| 4490 <sup>1</sup> | Corenco 7-7-7 . . . . .                                         | Cheshire . . . . .    |
| 4838 <sup>1</sup> | Corenco 7-7-7 . . . . .                                         | Newtown . . . . .     |
| 4926 <sup>1</sup> | Corenco 7-7-7 . . . . .                                         | Storrs . . . . .      |
| 4963              | Corenco 8-6-4 Landscape . . . . .                               | Danielson . . . . .   |
| 5198              | Corenco 8-6-4 Turf Green . . . . .                              | Wapping . . . . .     |
| 4842 <sup>1</sup> | Corenco 8-16-16 . . . . .                                       | Newtown . . . . .     |
| 5199              | Corenco 8-16-16 . . . . .                                       | Wapping . . . . .     |
| 5391 <sup>1</sup> | Corenco 10-5-5 Liquid Green . . . . .                           | New Britain . . . . . |
| 5462              | Corenco 10-5-5 Liquid Green . . . . .                           | West Haven . . . . .  |
| 4817 <sup>1</sup> | Corenco 10-6-4 Golf & Lawn . . . . .                            | Southbury . . . . .   |
| 5006              | Corenco 10-6-4 Golf & Lawn . . . . .                            | Waterbury . . . . .   |
| 5387              | Corenco 10-6-4 Golf & Lawn . . . . .                            | West Suffield . . . . |
| 4886              | Corenco 10-8-2 Timberline . . . . .                             | Willimantic . . . . . |
| 4840 <sup>1</sup> | Corenco 10-10-10 . . . . .                                      | Newtown . . . . .     |
| 5226              | Corenco 10-10-10 . . . . .                                      | Branford . . . . .    |
| 2726 <sup>1</sup> | Corenco 10-20-10 (Muriate of Potash) . . . . .                  | West Haven . . . . .  |
| 3073 <sup>1</sup> | Corenco 10-20-10 (Muriate of Potash) . . . . .                  | West Haven . . . . .  |
| 2727 <sup>1</sup> | Corenco 10-20-10 (Sulphate of Potash) . . . . .                 | West Haven . . . . .  |
| 5179              | Corenco Organic Turf Fertilizer 4.75-4-0 . . . . .              | Cos-Cob . . . . .     |
| 4850              | Corenco Rhododendron-Azalea & Blueberry Special 7-7-7 . . . . . | Newtown . . . . .     |
| 4571              | Corenco Spurz-On 3-2.5-1.5 . . . . .                            | Thompsonville . . . . |
|                   | THE DAVEY TREE EXPERT CO., Kent, Ohio                           |                       |
| 5189              | Davey Tree Food 12-4-4 . . . . .                                | Old Greenwich . . . . |
|                   | R. G. DAVIS CO., New Haven, Conn.                               |                       |
| 5242              | Organo 10-5-5 . . . . .                                         | West Haven . . . . .  |

..... indicates deficiencies.

<sup>1</sup>State purchase.

| CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH |            |               |                 |       |                           |       |                       |                  |       |           |
|--------------------------------------------------|------------|---------------|-----------------|-------|---------------------------|-------|-----------------------|------------------|-------|-----------|
| Nitrogen, per cent                               |            |               |                 |       | Phosphoric acid, per cent |       |                       | Potash, per cent |       | Magnesium |
| Nitrate                                          | Ammoniacal | Organic       |                 | Total | Citrate-insoluble         | Total | So-called "available" | As muriate       | Total |           |
|                                                  |            | Water-soluble | Water-insoluble |       |                           |       |                       |                  |       |           |
| 0.96                                             | 3.52       | 0.68          | 0.23            | 5.39  | 0.55                      | 11.05 | 10.50                 | 5.21             | 5.77  | ....      |
| 0.33                                             | 2.44       | 1.28          | 1.81            | 5.86  | 1.60                      | 11.95 | 10.35                 | 4.48             | 4.91  | ....      |
| 1.05                                             | 3.52       | 0.68          | 0.00            | 5.25  | 0.13                      | 11.00 | 10.87                 | 8.10             | 10.93 | ....      |
| 0.86                                             | 3.60       | 0.60          | 0.06            | 5.12  | 0.28                      | 10.40 | 10.12                 | 10.15            | 10.44 | ....      |
| 1.13                                             | 3.48       | 0.52          | 0.12            | 5.25  | 0.25                      | 10.65 | 10.40                 | 8.78             | 9.76  | ....      |
| 0.00                                             | 3.52       | 0.62          | 1.24            | 5.38  | 0.18                      | 10.70 | 10.52                 | 5.25             | 9.36  | 1.12      |
| 0.00                                             | 3.52       | 1.46          | 0.08            | 5.06  | 0.03                      | 10.40 | 10.37                 | 8.91             | 9.94  | ....      |
| 0.31                                             | 0.12       | 2.20          | 3.51            | 6.14  | 0.35                      | 4.75  | 4.40                  | 0.36             | 6.28  | ....      |
| 1.07                                             | 4.50       | 0.10          | 0.08            | 5.75  | 0.65                      | 9.05  | 8.40                  | 7.09             | 8.12  | ....      |
| 1.05                                             | 3.96       | 0.76          | 0.27            | 6.04  | 0.15                      | 8.80  | 8.65                  | 6.67             | 8.53  | ....      |
| 0.77                                             | 4.28       | 0.92          | 0.19            | 6.16  | 0.20                      | 8.40  | 8.20                  | 1.00             | 8.45  | 1.93      |
| 0.90                                             | 5.52       | 0.56          | 0.15            | 7.13  | 0.48                      | 7.75  | 7.27                  | 6.61             | 7.23  | ....      |
| 0.26                                             | 5.00       | 1.44          | 0.14            | 6.84  | 0.15                      | 8.20  | 8.05                  | 5.38             | 7.16  | ....      |
| 0.72                                             | 5.60       | 0.42          | 0.17            | 6.91  | 0.15                      | 7.88  | 7.73                  | 6.65             | 7.57  | ....      |
| 0.20                                             | 4.76       | 2.32          | 0.72            | 8.00  | 0.28                      | 6.35  | 6.07                  | 3.08             | 4.05  | ....      |
| 0.12                                             | 4.08       | 1.12          | 3.03            | 8.35  | 0.20                      | 7.10  | 6.90                  | ....             | 4.43  | ....      |
| 0.97                                             | 5.94       | 0.98          | 0.12            | 8.01  | 0.30                      | 17.90 | 17.60                 | 11.67            | 16.08 | ....      |
| 1.46                                             | 5.64       | 1.12          | 0.14            | 8.36  | 0.70                      | 17.20 | 16.50                 | 16.27            | 16.27 | ....      |
| 0.00                                             | 8.40       | 1.62          | 0.19            | 10.21 | 0.10                      | 5.98  | 5.88                  | 3.97             | 5.84  | ....      |
| 0.00                                             | 2.40       | 8.04          | 0.10            | 10.54 | 0.00                      | 5.15  | 5.15                  | 4.57             | 5.41  | ....      |
| 0.16                                             | 5.16       | 2.44          | 2.20            | 9.96  | 0.68                      | 7.20  | 6.52                  | 3.25             | 4.30  | ....      |
| 0.00                                             | 5.38       | 3.52          | 0.90            | 9.80  | 0.28                      | 6.68  | 6.40                  | 3.89             | 4.05  | ....      |
| 1.00                                             | 4.36       | 4.40          | 0.29            | 10.05 | 0.15                      | 6.65  | 6.50                  | 4.05             | 4.68  | ....      |
| 0.35                                             | 2.44       | 2.40          | 4.63            | 9.82  | 0.95                      | 9.60  | 8.65                  | 2.19             | 2.72  | ....      |
| 0.96                                             | 8.00       | 0.92          | 0.12            | 10.00 | 0.30                      | 11.00 | 10.70                 | 7.68             | 10.01 | ....      |
| 0.69                                             | 7.92       | 1.24          | 0.17            | 10.02 | 0.23                      | 10.85 | 10.62                 | 9.31             | 10.01 | ....      |
| 2.42                                             | 2.74       | 4.43          | 0.12            | 9.71  | 1.20                      | 21.35 | 20.15                 | 9.60             | 11.00 | ....      |
| 2.12                                             | 2.84       | 4.96          | 0.11            | 10.03 | 1.15                      | 19.60 | 18.45                 | 8.17             | 9.69  | ....      |
| 2.20                                             | 2.64       | 4.53          | 0.13            | 9.50  | 0.25                      | 19.95 | 19.70                 | 0.86             | 10.04 | ....      |
| 0.02                                             | 0.12       | 0.52          | 5.00            | 5.66  | 1.07                      | 5.80  | 4.73                  | ....             | ....  | ....      |
| 0.95                                             | 5.64       | 0.40          | 0.20            | 7.19  | 0.18                      | 7.20  | 7.02                  | 6.12             | 7.30  | ....      |
| 0.00                                             | 0.94       | 0.82          | 1.57            | 3.33  | ....                      | 3.80  | ....                  | 0.58             | 2.40  | ....      |
| 1.33                                             | 10.00      | 0.12          | 0.57            | 12.02 | 0.43                      | 4.50  | 4.07                  | 3.97             | 4.71  | ....      |
| 2.18                                             | 6.00       | 0.60          | 1.44            | 10.22 | 0.20                      | 6.30  | 6.10                  | 5.66             | 5.70  | ....      |

TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station number                                                | Manufacturer and brand                                                  | Place of sampling     | CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH |       |       |                   |       |                           |            |       |                  |       |           |
|---------------------------------------------------------------|-------------------------------------------------------------------------|-----------------------|--------------------------------------------------|-------|-------|-------------------|-------|---------------------------|------------|-------|------------------|-------|-----------|
|                                                               |                                                                         |                       | Nitrogen, per cent                               |       |       |                   |       | Phosphoric acid, per cent |            |       | Potash, per cent |       | Magnesium |
| Organic                                                       |                                                                         |                       |                                                  |       | Total | Citrate-insoluble | Total | So-called "available"     | As muriate | Total | Magnesium        |       |           |
| Nitrate                                                       | Ammoniacal                                                              | Water-soluble         | Water-insoluble                                  | Total |       |                   |       |                           |            |       |                  |       |           |
| DAVISON CHEMICAL CO., Baltimore, Md.                          |                                                                         |                       |                                                  |       |       |                   |       |                           |            |       |                  |       |           |
| 5029                                                          | 0-15-30 Davco Granulated Fertilizer . . .                               | Torrington . . .      | .....                                            | ..... | ..... | .....             | 0.78  | 16.25                     | 15.47      | 28.48 | 28.48            | ..... |           |
| 4802                                                          | 0-20-20 Davco Granulated Fertilizer . . .                               | Norwich . . .         | .....                                            | ..... | ..... | .....             | 0.87  | 23.80                     | 22.93      | 8.53  | 16.92            | ..... |           |
| 4884                                                          | 0-25-25 Davco Granulated Fertilizer . . .                               | Willimantic . . .     | .....                                            | ..... | ..... | .....             | 1.07  | 26.20                     | 25.13      | 21.98 | 26.18            | ..... |           |
| 5326                                                          | 5-10-5 Davco Granulated 3G Fertilizer . . .                             | New Milford . . .     | 0.18                                             | 3.32  | 1.52  | 0.22              | 5.24  | 0.30                      | 10.80      | 10.50 | 1.82             | 5.73  | .....     |
| 4568                                                          | 5-10-5 Davco Turf & Garden Food . . . . .                               | Norwich . . . . .     | 1.49                                             | 3.18  | 0.32  | 0.03              | 5.02  | 0.40                      | 10.45      | 10.05 | 5.02             | 5.22  | .....     |
| 5327                                                          | 5-10-5 Davco Turf & Garden Food . . . . .                               | New Milford . . . . . | 1.48                                             | 4.16  | 0.64  | 0.08              | 6.36  | 0.38                      | 10.80      | 10.42 | 5.59             | 7.50  | .....     |
| 5030                                                          | 5-10-10 Davco Granulated Fertilizer . . . . .                           | Torrington . . . . .  | 1.06                                             | 3.24  | 0.74  | 0.06              | 5.10  | 0.45                      | 10.60      | 10.15 | 7.24             | 10.01 | .....     |
| 5372                                                          | 6-8-8 Davco Granulated Fertilizer . . . . .                             | Wilson . . . . .      | 1.20                                             | 4.56  | 0.72  | 0.00              | 6.48  | 0.35                      | 9.55       | 9.20  | 7.24             | 9.11  | .....     |
| 4883                                                          | 7-7-7 Davco Granulated 3G Fertilizer . . . . .                          | Willimantic . . . . . | 1.76                                             | 4.90  | 0.30  | 0.07              | 7.03  | 0.33                      | 8.75       | 8.42  | 7.10             | 8.25  | .....     |
| 5325                                                          | 8-16-16 Davco Granulated 3G Fertilizer . . . . .                        | New Milford . . . . . | 1.81                                             | 5.04  | 1.10  | 0.07              | 8.02  | 0.53                      | 16.65      | 16.12 | 11.35            | 15.38 | .....     |
| 4885                                                          | 10-6-4 Davco Granulated Fertilizer . . . . .                            | Willimantic . . . . . | 0.73                                             | 8.10  | 0.26  | 0.00              | 9.09  | 0.48                      | 11.55      | 11.07 | 5.06             | 5.57  | .....     |
| 4882                                                          | 10-10-10 Davco Granulated 3G Fertilizer . . . . .                       | Willimantic . . . . . | 2.17                                             | 6.74  | 0.58  | 0.07              | 9.56  | 0.33                      | 10.40      | 10.07 | 8.99             | 10.04 | .....     |
| 5371 <sup>1</sup>                                             | 10-10-10 Davco Granulated Fertilizer with Boron and Manganese . . . . . | Wilson . . . . .      | 0.57                                             | 6.52  | 2.04  | 0.19              | 9.32  | 0.25                      | 10.40      | 10.15 | 9.38             | 10.08 | .....     |
| EASTERN STATES FARMERS' EXCHANGE, INC., W. Springfield, Mass. |                                                                         |                       |                                                  |       |       |                   |       |                           |            |       |                  |       |           |
| 4858 <sup>2</sup>                                             | Eastern States 0-15-30 with 0.2 Boron . . . . .                         | Bethel . . . . .      | .....                                            | ..... | ..... | .....             | 0.83  | 18.30                     | 17.47      | 21.06 | 28.84            | ..... |           |
| 4998                                                          | Eastern States 0-25-25 . . . . .                                        | Putnam . . . . .      | .....                                            | ..... | ..... | .....             | 1.30  | 27.20                     | 25.90      | 23.45 | 27.08            | ..... |           |
| 4888                                                          | Eastern States 5-10-10 SM with 1.2 Magnesium . . . . .                  | Willimantic . . . . . | 1.31                                             | 3.66  | 0.22  | 0.09              | 5.28  | 0.38                      | 10.40      | 10.02 | 9.31             | 10.82 | 2.74      |
| 4859                                                          | Eastern States 8-12-12 LC with 1.2 Magnesium . . . . .                  | Bethel . . . . .      | 2.06                                             | 5.92  | 0.08  | 0.03              | 8.09  | 0.40                      | 12.70      | 12.30 | 0.37             | 12.12 | 1.25      |
| 4857                                                          | Eastern States 8-16-16 with 0.6 Magnesium . . . . .                     | Bethel . . . . .      | 2.15                                             | 5.58  | 0.26  | 0.03              | 8.02  | 0.30                      | 16.90      | 16.60 | 13.08            | 15.07 | 1.19      |
| 4513                                                          | Eastern States 10-5-5 Green Lawn with 1.2 Magnesium . . . . .           | North Haven . . . . . | 1.21                                             | 1.84  | 1.78  | 4.12              | 8.95  | 0.28                      | 6.15       | 5.87  | 4.08             | 5.13  | 7.51      |
| 4512                                                          | Eastern States 10-10-10 with 0.6 Magnesium . . . . .                    | North Haven . . . . . | 2.08                                             | 7.86  | 0.30  | 0.06              | 10.30 | 0.43                      | 11.70      | 11.27 | 5.62             | 10.33 | 1.33      |
| 5209                                                          | Eastern States 10-10-10 LC with 1.2 Magnesium . . . . .                 | Rockville . . . . .   | 0.42                                             | 7.52  | 2.08  | 0.20              | 10.22 | 0.18                      | 10.20      | 10.02 | 1.13             | 10.55 | 2.36      |
| 5208                                                          | Eastern States 10-10-10 SM with 1.2 Magnesium . . . . .                 | Rockville . . . . .   | 2.08                                             | 6.76  | 1.04  | 0.12              | 10.00 | 0.23                      | 10.80      | 10.57 | 7.64             | 10.66 | 1.75      |
| THE ESPOMA CO., Millville, N. J.                              |                                                                         |                       |                                                  |       |       |                   |       |                           |            |       |                  |       |           |
| 5170                                                          | Espoma 3-2-1 . . . . .                                                  | Greenwich . . . . .   | 0.00                                             | 2.20  | 0.59  | 1.50              | 4.29  | 0.38                      | 3.58       | 3.20  | .....            | 2.91  | .....     |
| 5178                                                          | Holly-Tone 4-6-4 . . . . .                                              | Cos-Cob . . . . .     | 0.59                                             | 3.16  | 1.16  | 0.35              | 5.26  | 0.58                      | 7.35       | 6.77  | 4.08             | 5.34  | .....     |
| FIESTAR, INC., New York, N. Y.                                |                                                                         |                       |                                                  |       |       |                   |       |                           |            |       |                  |       |           |
| 5007                                                          | Fiestar 2-2-0 . . . . .                                                 | Waterbury . . . . .   | 0.00                                             | 0.54  | 0.13  | 1.61              | 2.28  | 0.28                      | 3.25       | 2.97  | .....            | ..... | .....     |

..... indicates deficiencies

<sup>1</sup> Boron guar., 0.085%; found, 0.045%; Manganese guar., 0.27%; found, 0.048%.

<sup>2</sup> Boron found, 0.23%.

| CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH |            |               |                 |       |                           |                   |       |                       |            |           |       |
|--------------------------------------------------|------------|---------------|-----------------|-------|---------------------------|-------------------|-------|-----------------------|------------|-----------|-------|
| Nitrogen, per cent                               |            |               |                 |       | Phosphoric acid, per cent |                   |       | Potash, per cent      |            | Magnesium |       |
| Organic                                          |            |               |                 |       | Total                     | Citrate-insoluble | Total | So-called "available" | As muriate |           | Total |
| Nitrate                                          | Ammoniacal | Water-soluble | Water-insoluble | Total |                           |                   |       |                       |            |           |       |
| .....                                            | .....      | .....         | .....           | ..... | .....                     | 0.78              | 16.25 | 15.47                 | 28.48      | 28.48     | ..... |
| .....                                            | .....      | .....         | .....           | ..... | .....                     | 0.87              | 23.80 | 22.93                 | 8.53       | 16.92     | ..... |
| .....                                            | .....      | .....         | .....           | ..... | .....                     | 1.07              | 26.20 | 25.13                 | 21.98      | 26.18     | ..... |
| 0.18                                             | 3.32       | 1.52          | 0.22            | 5.24  | 0.30                      | 10.80             | 10.50 | 1.82                  | 5.73       | .....     |       |
| 1.49                                             | 3.18       | 0.32          | 0.03            | 5.02  | 0.40                      | 10.45             | 10.05 | 5.02                  | 5.22       | .....     |       |
| 1.48                                             | 4.16       | 0.64          | 0.08            | 6.36  | 0.38                      | 10.80             | 10.42 | 5.59                  | 7.50       | .....     |       |
| 1.06                                             | 3.24       | 0.74          | 0.06            | 5.10  | 0.45                      | 10.60             | 10.15 | 7.24                  | 10.01      | .....     |       |
| 1.20                                             | 4.56       | 0.72          | 0.00            | 6.48  | 0.35                      | 9.55              | 9.20  | 7.24                  | 9.11       | .....     |       |
| 1.76                                             | 4.90       | 0.30          | 0.07            | 7.03  | 0.33                      | 8.75              | 8.42  | 7.10                  | 8.25       | .....     |       |
| 1.81                                             | 5.04       | 1.10          | 0.07            | 8.02  | 0.53                      | 16.65             | 16.12 | 11.35                 | 15.38      | .....     |       |
| 0.73                                             | 8.10       | 0.26          | 0.00            | 9.09  | 0.48                      | 11.55             | 11.07 | 5.06                  | 5.57       | .....     |       |
| 2.17                                             | 6.74       | 0.58          | 0.07            | 9.56  | 0.33                      | 10.40             | 10.07 | 8.99                  | 10.04      | .....     |       |
| 0.57                                             | 6.52       | 2.04          | 0.19            | 9.32  | 0.25                      | 10.40             | 10.15 | 9.38                  | 10.08      | .....     |       |
| .....                                            | .....      | .....         | .....           | ..... | .....                     | 0.83              | 18.30 | 17.47                 | 21.06      | 28.84     | ..... |
| .....                                            | .....      | .....         | .....           | ..... | .....                     | 1.30              | 27.20 | 25.90                 | 23.45      | 27.08     | ..... |
| 1.31                                             | 3.66       | 0.22          | 0.09            | 5.28  | 0.38                      | 10.40             | 10.02 | 9.31                  | 10.82      | 2.74      |       |
| 2.06                                             | 5.92       | 0.08          | 0.03            | 8.09  | 0.40                      | 12.70             | 12.30 | 0.37                  | 12.12      | 1.25      |       |
| 2.15                                             | 5.58       | 0.26          | 0.03            | 8.02  | 0.30                      | 16.90             | 16.60 | 13.08                 | 15.07      | 1.19      |       |
| 1.21                                             | 1.84       | 1.78          | 4.12            | 8.95  | 0.28                      | 6.15              | 5.87  | 4.08                  | 5.13       | 7.51      |       |
| 2.08                                             | 7.86       | 0.30          | 0.06            | 10.30 | 0.43                      | 11.70             | 11.27 | 5.62                  | 10.33      | 1.33      |       |
| 0.42                                             | 7.52       | 2.08          | 0.20            | 10.22 | 0.18                      | 10.20             | 10.02 | 1.13                  | 10.55      | 2.36      |       |
| 2.08                                             | 6.76       | 1.04          | 0.12            | 10.00 | 0.23                      | 10.80             | 10.57 | 7.64                  | 10.66      | 1.75      |       |
| 0.00                                             | 2.20       | 0.59          | 1.50            | 4.29  | 0.38                      | 3.58              | 3.20  | .....                 | 2.91       | .....     |       |
| 0.59                                             | 3.16       | 1.16          | 0.35            | 5.26  | 0.58                      | 7.35              | 6.77  | 4.08                  | 5.34       | .....     |       |
| 0.00                                             | 0.54       | 0.13          | 1.61            | 2.28  | 0.28                      | 3.25              | 2.97  | .....                 | .....      | .....     |       |

TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station number    | Manufacturer and brand                                           | Place of sampling       | CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH |            |               |                 |       |                           |       |                       |                  |       |           |  |  |  |
|-------------------|------------------------------------------------------------------|-------------------------|--------------------------------------------------|------------|---------------|-----------------|-------|---------------------------|-------|-----------------------|------------------|-------|-----------|--|--|--|
|                   |                                                                  |                         | Nitrogen, per cent                               |            |               |                 |       | Phosphoric acid, per cent |       |                       | Potash, per cent |       | Magnesium |  |  |  |
|                   |                                                                  |                         | Organic                                          |            |               |                 |       | Citrate-insoluble         | Total | So-called "available" | As muriate       | Total |           |  |  |  |
|                   |                                                                  |                         | Nitrate                                          | Ammoniacal | Water-soluble | Water-insoluble | Total |                           |       |                       |                  |       |           |  |  |  |
|                   | FORWARD HOUSE, Little Rock, Ark.                                 |                         |                                                  |            |               |                 |       |                           |       |                       |                  |       |           |  |  |  |
| 3011 <sup>2</sup> | Plantrons 12-24-12 . . . . .                                     | Cromwell . . . . .      | 0.00                                             | 12.00      | 0.00          | 0.12            | 12.12 | 0.10                      | 24.20 | 24.10                 | 6.00             | 12.20 | ....      |  |  |  |
| 5421              | Rosy Future 10-5-5 . . . . .                                     | Darien . . . . .        | 0.00                                             | 2.32       | 8.04          | 0.00            | 10.36 | 0.00                      | 5.30  | 5.30                  | 4.41             | 5.22  | ....      |  |  |  |
|                   | G-D GARDEN PRODUCTS, INC., Huntington Sta., N. Y.                |                         |                                                  |            |               |                 |       |                           |       |                       |                  |       |           |  |  |  |
| 5236              | Green D 10-6-4 (50% Organic) . . . . .                           | Hamden . . . . .        | 0.64                                             | 4.08       | 2.32          | 2.52            | 9.56  | 0.50                      | 7.90  | 7.40                  | 3.57             | 4.49  | ....      |  |  |  |
| 5238              | Green D 10-6-4 (100% Organic) . . . . .                          | Hamden . . . . .        | 0.61                                             | 0.44       | 4.04          | 5.01            | 10.10 | 0.80                      | 6.80  | 6.00                  | 1.46             | 4.24  | ....      |  |  |  |
|                   | THE GARDEN CENTER, INC., West Hartford, Conn.                    |                         |                                                  |            |               |                 |       |                           |       |                       |                  |       |           |  |  |  |
| 5447              | Garden Center Lawn Food 10-6-4 . . . . .                         | West Hartford . . . . . | 0.59                                             | 4.36       | 3.08          | 2.27            | 10.30 | 0.48                      | 6.28  | 5.80                  | 3.78             | 4.08  | ....      |  |  |  |
|                   | GODFREYS of FAIRFIELD, Fairfield, Conn.                          |                         |                                                  |            |               |                 |       |                           |       |                       |                  |       |           |  |  |  |
| 5443              | Godfreys Lawn & Tree Food 10-6-4 . . . . .                       | Fairfield . . . . .     | 0.00                                             | 4.40       | 3.74          | 2.02            | 10.16 | 0.53                      | 6.73  | 6.20                  | 3.65             | 4.15  | ....      |  |  |  |
|                   | GOULARD & OLENA, INC., Skillman, N. J.                           |                         |                                                  |            |               |                 |       |                           |       |                       |                  |       |           |  |  |  |
| 5303              | G & O Prizegro 5-10-5 . . . . .                                  | New Canaan . . . . .    | 0.21                                             | 3.52       | 0.96          | 1.09            | 5.78  | 0.30                      | 10.13 | 9.83                  | 5.64             | 5.70  | ....      |  |  |  |
| 5301              | G & O Rose Food 7-8-5 . . . . .                                  | New Canaan . . . . .    | 0.00                                             | 4.32       | 1.42          | 1.50            | 7.24  | 1.05                      | 12.73 | 11.68                 | 3.72             | 3.72  | ....      |  |  |  |
|                   | THE HUBBARD-HALL CHEMICAL CO., Waterbury, Conn.                  |                         |                                                  |            |               |                 |       |                           |       |                       |                  |       |           |  |  |  |
| 4942              | Green-Gro Lawn Fertilizer 6-7-4 . . . . .                        | Bristol . . . . .       | 0.54                                             | 4.48       | 0.24          | 1.00            | 6.26  | 0.40                      | 7.67  | 7.27                  | 4.05             | 4.08  | ....      |  |  |  |
| 5297              | HH Evergreen Food 4-10-4 . . . . .                               | Centerbrook . . . . .   | 0.00                                             | 1.88       | 1.22          | 1.38            | 4.48  | 0.33                      | 10.85 | 10.52                 | 1.16             | 4.27  | ....      |  |  |  |
| 5351              | HH Golf Course Fertilizer 10-3-3 . . . . .                       | Portland . . . . .      | 0.00                                             | 0.00       | 2.86          | 7.92            | 10.78 | 0.58                      | 4.73  | 4.15                  | 2.86             | 3.28  | ....      |  |  |  |
| 4887              | HH Lawn Fertilizer 8-6-2 . . . . .                               | Willimantic . . . . .   | 0.48                                             | 3.92       | 2.08          | 1.17            | 7.65  | 0.35                      | 6.63  | 6.28                  | 2.26             | 2.46  | ....      |  |  |  |
| 5354              | HH Lawn Fertilizer 8-6-2 with Chlordane . . . . .                | Portland . . . . .      | 0.69                                             | 3.76       | 2.32          | 1.24            | 8.01  | 0.30                      | 6.80  | 6.50                  | 2.18             | 2.49  | ....      |  |  |  |
| 5232              | HH Lawn & Tree Food 10-5-5 . . . . .                             | North Haven . . . . .   | 0.13                                             | 2.20       | 6.70          | 1.25            | 10.28 | 0.50                      | 6.75  | 6.25                  | 4.97             | 5.03  | ....      |  |  |  |
| 4955              | HH Nitro ganic 5-4-0 . . . . .                                   | Bristol . . . . .       | 0.00                                             | 0.32       | 0.02          | 5.16            | 5.50  | 0.93                      | 5.48  | 4.55                  | ....             | ....  | ....      |  |  |  |
| 5298              | HH Plant Food 5-10-5 . . . . .                                   | Centerbrook . . . . .   | 0.00                                             | 2.16       | 1.60          | 1.42            | 5.18  | 0.33                      | 10.70 | 10.37                 | 4.77             | 5.10  | ....      |  |  |  |
| 5369              | HH Rose Food 7-10-5 . . . . .                                    | Portland . . . . .      | 0.00                                             | 2.16       | 1.60          | 1.42            | 5.18  | 0.33                      | 10.70 | 10.37                 | 4.77             | 5.10  | ....      |  |  |  |
| 4938              | HH Turf & Tree Food 10-6-4 . . . . .                             | Kensington . . . . .    | 0.30                                             | 4.00       | 1.72          | 1.46            | 7.48  | 0.98                      | 12.05 | 11.07                 | 0.64             | 6.11  | ....      |  |  |  |
| 4946              | HH Weed Kil Lawn Food 6-10-4 with 2,4-D<br>Weed Killer . . . . . | Bristol . . . . .       | 0.46                                             | 4.62       | 3.22          | 1.70            | 10.00 | 0.48                      | 7.13  | 6.65                  | 2.97             | 4.55  | ....      |  |  |  |
| 5346              | Liberty Fertilizer 0-15-30 . . . . .                             | Windsorville . . . . .  | 0.38                                             | 4.74       | 0.10          | 0.92            | 6.14  | 1.05                      | 11.50 | 10.45                 | 4.45             | 4.55  | ....      |  |  |  |
| 4529 <sup>1</sup> | Liberty Fertilizer 0-20-20 . . . . .                             | Cheshire . . . . .      | ....                                             | ....       | ....          | ....            | ....  | 0.50                      | 16.30 | 15.80                 | 26.72            | 30.08 | ....      |  |  |  |
| 5001              | Liberty Fertilizer 0-20-20 . . . . .                             | Putnam . . . . .        | ....                                             | ....       | ....          | ....            | ....  | 0.40                      | 20.80 | 20.40                 | 16.32            | 20.97 | ....      |  |  |  |
| 5437              | Liberty Fertilizer 5-5-15 . . . . .                              | Windsorville . . . . .  | ....                                             | ....       | ....          | ....            | ....  | 1.23                      | 22.80 | 21.57                 | 16.35            | 20.20 | ....      |  |  |  |
| 4569              | Liberty Fertilizer 5-8-7 . . . . .                               | Norwich . . . . .       | 1.44                                             | 0.16       | 2.88          | 0.62            | 5.10  | 0.23                      | 4.95  | 4.72                  | 1.45             | 15.30 | ....      |  |  |  |
| 4507              | Liberty Fertilizer 5-10-5 . . . . .                              | Middletown . . . . .    | 0.29                                             | 3.82       | 0.74          | 0.30            | 5.15  | 0.30                      | 8.45  | 8.15                  | 6.04             | 6.52  | ....      |  |  |  |
| 4925 <sup>1</sup> | Liberty Fertilizer 5-10-5 . . . . .                              | Storrs . . . . .        | 0.84                                             | 3.42       | 0.72          | 0.08            | 5.06  | 0.43                      | 11.75 | 11.32                 | 4.85             | 5.13  | ....      |  |  |  |
|                   |                                                                  |                         | 0.77                                             | 4.34       | 0.32          | 0.00            | 5.43  | 0.98                      | 11.55 | 10.57                 | 2.48             | 6.01  | ....      |  |  |  |

..... indicates deficiencies

<sup>1</sup>State purchase

<sup>2</sup>Copper guar., 0.1%; found, 0.14%; Zinc guar., 0.1%; found, 0.12%; Iron guar., 0.1%; found, 0.44%; Sulphur guar., 9.0%; found, 10.4%.

| Station number    | Manufacturer and brand                                           | Place of sampling       | CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH |            |               |                 |       |                           |       |                       |                  |       |           |  |  |  |
|-------------------|------------------------------------------------------------------|-------------------------|--------------------------------------------------|------------|---------------|-----------------|-------|---------------------------|-------|-----------------------|------------------|-------|-----------|--|--|--|
|                   |                                                                  |                         | Nitrogen, per cent                               |            |               |                 |       | Phosphoric acid, per cent |       |                       | Potash, per cent |       | Magnesium |  |  |  |
|                   |                                                                  |                         | Organic                                          |            |               |                 |       | Citrate-insoluble         | Total | So-called "available" | As muriate       | Total |           |  |  |  |
|                   |                                                                  |                         | Nitrate                                          | Ammoniacal | Water-soluble | Water-insoluble | Total |                           |       |                       |                  |       |           |  |  |  |
|                   | FORWARD HOUSE, Little Rock, Ark.                                 |                         |                                                  |            |               |                 |       |                           |       |                       |                  |       |           |  |  |  |
| 3011 <sup>2</sup> | Plantrons 12-24-12 . . . . .                                     | Cromwell . . . . .      | 0.00                                             | 12.00      | 0.00          | 0.12            | 12.12 | 0.10                      | 24.20 | 24.10                 | 6.00             | 12.20 | ....      |  |  |  |
| 5421              | Rosy Future 10-5-5 . . . . .                                     | Darien . . . . .        | 0.00                                             | 2.32       | 8.04          | 0.00            | 10.36 | 0.00                      | 5.30  | 5.30                  | 4.41             | 5.22  | ....      |  |  |  |
|                   | G-D GARDEN PRODUCTS, INC., Huntington Sta., N. Y.                |                         |                                                  |            |               |                 |       |                           |       |                       |                  |       |           |  |  |  |
| 5236              | Green D 10-6-4 (50% Organic) . . . . .                           | Hamden . . . . .        | 0.64                                             | 4.08       | 2.32          | 2.52            | 9.56  | 0.50                      | 7.90  | 7.40                  | 3.57             | 4.49  | ....      |  |  |  |
| 5238              | Green D 10-6-4 (100% Organic) . . . . .                          | Hamden . . . . .        | 0.61                                             | 0.44       | 4.04          | 5.01            | 10.10 | 0.80                      | 6.80  | 6.00                  | 1.46             | 4.24  | ....      |  |  |  |
|                   | THE GARDEN CENTER, INC., West Hartford, Conn.                    |                         |                                                  |            |               |                 |       |                           |       |                       |                  |       |           |  |  |  |
| 5447              | Garden Center Lawn Food 10-6-4 . . . . .                         | West Hartford . . . . . | 0.59                                             | 4.36       | 3.08          | 2.27            | 10.30 | 0.48                      | 6.28  | 5.80                  | 3.78             | 4.08  | ....      |  |  |  |
|                   | GODFREYS of FAIRFIELD, Fairfield, Conn.                          |                         |                                                  |            |               |                 |       |                           |       |                       |                  |       |           |  |  |  |
| 5443              | Godfreys Lawn & Tree Food 10-6-4 . . . . .                       | Fairfield . . . . .     | 0.00                                             | 4.40       | 3.74          | 2.02            | 10.16 | 0.53                      | 6.73  | 6.20                  | 3.65             | 4.15  | ....      |  |  |  |
|                   | GOULARD & OLENA, INC., Skillman, N. J.                           |                         |                                                  |            |               |                 |       |                           |       |                       |                  |       |           |  |  |  |
| 5303              | G & O Prizegro 5-10-5 . . . . .                                  | New Canaan . . . . .    | 0.21                                             | 3.52       | 0.96          | 1.09            | 5.78  | 0.30                      | 10.13 | 9.83                  | 5.64             | 5.70  | ....      |  |  |  |
| 5301              | G & O Rose Food 7-8-5 . . . . .                                  | New Canaan . . . . .    | 0.00                                             | 4.32       | 1.42          | 1.50            | 7.24  | 1.05                      | 12.73 | 11.68                 | 3.72             | 3.72  | ....      |  |  |  |
|                   | THE HUBBARD-HALL CHEMICAL CO., Waterbury, Conn.                  |                         |                                                  |            |               |                 |       |                           |       |                       |                  |       |           |  |  |  |
| 4942              | Green-Gro Lawn Fertilizer 6-7-4 . . . . .                        | Bristol . . . . .       | 0.54                                             | 4.48       | 0.24          | 1.00            | 6.26  | 0.40                      | 7.67  | 7.27                  | 4.05             | 4.08  | ....      |  |  |  |
| 5297              | HH Evergreen Food 4-10-4 . . . . .                               | Centerbrook . . . . .   | 0.00                                             | 1.88       | 1.22          | 1.38            | 4.48  | 0.33                      | 10.85 | 10.52                 | 1.16             | 4.27  | ....      |  |  |  |
| 5351              | HH Golf Course Fertilizer 10-3-3 . . . . .                       | Portland . . . . .      | 0.00                                             | 0.00       | 2.86          | 7.92            | 10.78 | 0.58                      | 4.73  | 4.15                  | 2.86             | 3.28  | ....      |  |  |  |
| 4887              | HH Lawn Fertilizer 8-6-2 . . . . .                               | Willimantic . . . . .   | 0.48                                             | 3.92       | 2.08          | 1.17            | 7.65  | 0.35                      | 6.63  | 6.28                  | 2.26             | 2.46  | ....      |  |  |  |
| 5354              | HH Lawn Fertilizer 8-6-2 with Chlordane . . . . .                | Portland . . . . .      | 0.69                                             | 3.76       | 2.32          | 1.24            | 8.01  | 0.30                      | 6.80  | 6.50                  | 2.18             | 2.49  | ....      |  |  |  |
| 5232              | HH Lawn & Tree Food 10-5-5 . . . . .                             | North Haven . . . . .   | 0.13                                             | 2.20       | 6.70          | 1.25            | 10.28 | 0.50                      | 6.75  | 6.25                  | 4.97             | 5.03  | ....      |  |  |  |
| 4955              | HH Nitro ganic 5-4-0 . . . . .                                   | Bristol . . . . .       | 0.00                                             | 0.32       | 0.02          | 5.16            | 5.50  | 0.93                      | 5.48  | 4.55                  | ....             | ....  | ....      |  |  |  |
| 5298              | HH Plant Food 5-10-5 . . . . .                                   | Centerbrook . . . . .   | 0.00                                             | 2.16       | 1.60          | 1.42            | 5.18  | 0.33                      | 10.70 | 10.37                 | 4.77             | 5.10  | ....      |  |  |  |
| 5369              | HH Rose Food 7-10-5 . . . . .                                    | Portland . . . . .      | 0.00                                             | 2.16       | 1.60          | 1.42            | 5.18  | 0.33                      | 10.70 | 10.37                 | 4.77             | 5.10  | ....      |  |  |  |
| 4938              | HH Turf & Tree Food 10-6-4 . . . . .                             | Kensington . . . . .    | 0.30                                             | 4.00       | 1.72          | 1.46            | 7.48  | 0.98                      | 12.05 | 11.07                 | 0.64             | 6.11  | ....      |  |  |  |
| 4946              | HH Weed Kil Lawn Food 6-10-4 with 2,4-D<br>Weed Killer . . . . . | Bristol . . . . .       | 0.46                                             | 4.62       | 3.22          | 1.70            | 10.00 | 0.48                      | 7.13  | 6.65                  | 2.97             | 4.55  | ....      |  |  |  |
| 5346              | Liberty Fertilizer 0-15-30 . . . . .                             | Windsorville . . . . .  | 0.38                                             | 4.74       | 0.10          | 0.92            | 6.14  | 1.05                      | 11.50 | 10.45                 | 4.45             | 4.55  | ....      |  |  |  |
| 4529 <sup>1</sup> | Liberty Fertilizer 0-20-20 . . . . .                             | Cheshire . . . . .      | ....                                             | ....       | ....          | ....            | ....  | 0.50                      | 16.30 | 15.80                 | 26.72            | 30.08 | ....      |  |  |  |
| 5001              | Liberty Fertilizer 0-20-20 . . . . .                             | Putnam . . . . .        | ....                                             | ....       | ....          | ....            | ....  | 0.40                      | 20.80 | 20.40                 | 16.32            | 20.97 | ....      |  |  |  |
| 5437              | Liberty Fertilizer 5-5-15 . . . . .                              | Windsorville . . . . .  | ....                                             | ....       | ....          | ....            | ....  | 1.23                      | 22.80 | 21.57                 | 16.35            | 20.20 | ....      |  |  |  |
| 4569              | Liberty Fertilizer 5-8-7 . . . . .                               | Norwich . . . . .       | 1.44                                             | 0.16       | 2.88          | 0.62            | 5.10  | 0.23                      | 4.95  | 4.72                  | 1.45             | 15.30 | ....      |  |  |  |
| 4507              | Liberty Fertilizer 5-10-5 . . . . .                              | Middletown . . . . .    | 0.29                                             | 3.82       | 0.74          | 0.30            | 5.15  | 0.30                      | 8.45  | 8.15                  | 6.04             | 6.52  | ....      |  |  |  |
| 4925 <sup>1</sup> | Liberty Fertilizer 5-10-5 . . . . .                              | Storrs . . . . .        | 0.84                                             | 3.42       | 0.72          | 0.08            | 5.06  | 0.43                      | 11.75 | 11.32                 | 4.85             | 5.13  | ....      |  |  |  |
|                   |                                                                  |                         | 0.77                                             | 4.34       | 0.32          | 0.00            | 5.43  | 0.98                      | 11.55 | 10.57                 | 2.48             | 6.01  | ....      |  |  |  |

TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station number                                                               | Manufacturer and brand  | Place of sampling |
|------------------------------------------------------------------------------|-------------------------|-------------------|
|                                                                              |                         |                   |
| 4506 Liberty Fertilizer 5-10-10 . . . . .                                    | Middletown . . . . .    |                   |
| 4544 <sup>1</sup> Liberty Fertilizer 5-10-10 . . . . .                       | Niantic . . . . .       |                   |
| 5347 Liberty Fertilizer 5-10-10 with 1.2<br>Magnesium . . . . .              | Windsorville . . . . .  |                   |
| 5438 Liberty Fertilizer 5-15-30 . . . . .                                    | Windsorville . . . . .  |                   |
| 5375 Liberty Fertilizer 6-8-8 . . . . .                                      | Wilson . . . . .        |                   |
| 4943 Liberty Fertilizer 7-7-7 . . . . .                                      | Bristol . . . . .       |                   |
| 5234 Liberty Fertilizer 8-6-4 . . . . .                                      | North Haven . . . . .   |                   |
| 5345 Liberty Fertilizer 8-12-12 with 1.2<br>Magnesium . . . . .              | Windsorville . . . . .  |                   |
| 4547 <sup>1</sup> Liberty Fertilizer 8-16-16 . . . . .                       | Norwich . . . . .       |                   |
| 4811 <sup>1</sup> Liberty Fertilizer 8-16-16 . . . . .                       | Southbury . . . . .     |                   |
| 5235 Liberty Fertilizer 8-16-16 . . . . .                                    | North Haven . . . . .   |                   |
| 4937 <sup>1</sup> Liberty Fertilizer 10-10-10 . . . . .                      | Middletown . . . . .    |                   |
| 5000 Liberty Fertilizer 10-10-10 . . . . .                                   | Putnam . . . . .        |                   |
| 5017 Liberty Fertilizer 10-10-10 . . . . .                                   | Waterbury . . . . .     |                   |
| 5341 Liberty New Super Spud 8-10-10 with 1.2<br>Magnesium . . . . .          | Windsorville . . . . .  |                   |
| 5435 Liberty Super Bacco 6-4-7 with 1.2<br>Magnesium . . . . .               | Windsorville . . . . .  |                   |
| 4999 Liberty Super Gro 6-12-12 with 1.2<br>Magnesium . . . . .               | Putnam . . . . .        |                   |
| 5342 Liberty Super Spud 6-8-8 with 1.2<br>Magnesium . . . . .                | Windsorville . . . . .  |                   |
| 5352 Liberty Super Spud 6-8-8 with 1.2<br>Magnesium . . . . .                | Portland . . . . .      |                   |
| 5436 Liberty Tobacco Fertilizer 6-3-6 . . . . .                              | Windsorville . . . . .  |                   |
| 5322 Old Deerfield "Tru Organic" Lawn & Shrub<br>Fertilizer 5-4-0 . . . . .  | Ridgefield . . . . .    |                   |
| 4824 Woodruff's Fertilizer 8-6-4 . . . . .                                   | New Haven . . . . .     |                   |
| INTERNATIONAL MINERALS & CHEMICAL CORP., Skokie, Ill.                        |                         |                   |
| 5385 Fertilis Plant Food 8-6-2 with 0.6<br>Magnesium . . . . .               | West Suffield . . . . . |                   |
| 5386 Fertilis Plant Food 8-6-2 with 0.6<br>Magnesium and Chlordane . . . . . | West Suffield . . . . . |                   |
| KAPCO DIVISION, McKeesport, Pa.                                              |                         |                   |
| 5320 Kap-Organic 5-5-0 . . . . .                                             | Ridgefield . . . . .    |                   |

~~~~~ indicates deficiencies

<sup>1</sup>State purchase.

| CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH |            |               |                 |       |                              |       |                       |                     |       |           |
|--------------------------------------------------|------------|---------------|-----------------|-------|------------------------------|-------|-----------------------|---------------------|-------|-----------|
| Nitrogen,<br>per cent                            |            |               |                 |       | Phosphoric acid,<br>per cent |       |                       | Potash,<br>per cent |       | Magnesium |
| Nitrate                                          | Ammoniacal | Organic       |                 | Total | Citrate-insoluble            | Total | So-called "available" | As muriate          | Total |           |
|                                                  |            | Water-soluble | Water-insoluble |       |                              |       |                       |                     |       |           |
| 0.00                                             | 3.70       | 0.46          | 0.79            | 4.95  | 0.68                         | 11.10 | 10.42                 | 7.33                | 8.76  | ....      |
| 0.82                                             | 4.00       | 0.56          | 0.12            | 5.50  | 0.40                         | 10.90 | 10.50                 | 10.15               | 10.15 | ....      |
| 0.92                                             | 3.78       | 0.54          | 0.06            | 5.30  | 0.43                         | 11.75 | 11.32                 | 9.04                | 10.74 | ....      |
| 0.00                                             | 4.00       | 1.44          | 0.28            | 5.72  | 0.68                         | 11.40 | 10.72                 | 7.00                | 9.50  | 1.62      |
| 2.48                                             | 2.36       | 0.20          | 0.08            | 5.12  | 0.38                         | 16.30 | 15.92                 | 28.86               | 30.86 | ....      |
| 0.90                                             | 4.48       | 0.68          | 0.00            | 6.06  | 0.50                         | 8.70  | 8.20                  | 5.13                | 8.53  | ....      |
| 0.31                                             | 6.06       | 1.00          | 0.08            | 7.45  | 0.23                         | 7.85  | 7.62                  | 5.17                | 7.16  | ....      |
| 0.60                                             | 4.04       | 4.28          | 0.72            | 9.64  | 0.45                         | 7.30  | 6.85                  | 4.48                | 4.87  | ....      |
| 1.99                                             | 5.28       | 0.64          | 0.09            | 8.00  | 0.30                         | 12.75 | 12.45                 | 8.79                | 12.04 | 2.82      |
| 1.07                                             | 6.28       | 0.62          | 0.04            | 8.01  | 0.95                         | 17.35 | 16.40                 | 15.07               | 16.20 | ....      |
| 1.00                                             | 6.20       | 0.80          | 0.06            | 8.06  | 0.95                         | 16.20 | 15.25                 | 11.43               | 16.02 | ....      |
| 0.00                                             | 4.68       | 3.07          | 0.35            | 8.10  | 0.50                         | 15.60 | 15.10                 | 12.40               | 14.80 | ....      |
| 0.55                                             | 8.18       | 1.06          | 0.11            | 9.90  | 0.35                         | 11.25 | 10.90                 | 8.22                | 10.01 | ....      |
| 0.93                                             | 8.40       | 0.54          | 0.03            | 9.90  | 0.30                         | 10.60 | 10.30                 | 8.37                | 10.01 | ....      |
| 0.28                                             | 3.96       | 3.61          | 2.41            | 10.26 | 0.50                         | 11.65 | 11.15                 | 7.65                | 7.96  | ....      |
| 0.00                                             | 6.00       | 1.84          | 0.28            | 8.12  | 0.58                         | 11.10 | 10.52                 | 0.40                | 10.55 | 1.85      |
| 0.58                                             | 0.00       | 2.24          | 3.64            | 6.46  | 0.23                         | 4.73  | 4.50                  | 0.32                | 7.13  | 2.42      |
| 0.62                                             | 4.72       | 0.56          | 0.28            | 6.18  | 0.93                         | 13.10 | 12.17                 | 6.44                | 11.36 | 1.68      |
| 0.00                                             | 5.04       | 0.87          | 0.29            | 6.20  | 0.23                         | 8.75  | 8.52                  | 0.31                | 8.59  | 2.64      |
| 0.56                                             | 4.80       | 0.64          | 0.16            | 6.16  | 0.20                         | 9.00  | 8.80                  | 5.52                | 8.53  | 3.06      |
| 1.26                                             | 0.30       | 2.18          | 2.84            | 6.58  | 0.20                         | 3.20  | 3.00                  | 0.11                | 6.38  | ....      |
| 0.00                                             | 0.12       | 0.48          | 5.04            | 5.64  | 0.78                         | 5.83  | 5.05                  | ....                | ....  | ....      |
| 0.17                                             | 4.10       | 3.10          | 0.75            | 8.12  | 0.33                         | 6.70  | 6.37                  | 3.80                | 4.30  | ....      |
| 0.20                                             | 5.44       | 0.80          | 1.59            | 8.03  | 0.35                         | 6.90  | 6.55                  | 0.16                | 2.94  | 2.27      |
| 0.00                                             | 5.32       | 1.26          | 1.54            | 8.12  | 0.43                         | 6.75  | 6.32                  | 0.19                | 2.40  | 2.40      |
| 0.00                                             | 0.00       | 0.20          | 5.22            | 5.42  | 0.93                         | 6.30  | 5.37                  | ....                | ....  | ....      |

TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station number                                         | Manufacturer and brand                      | Place of sampling | Nitrogen, per cent |               |                 |       | Phosphoric acid, per cent |       |                       | Potash, per cent |       | Magnesium |      |
|--------------------------------------------------------|---------------------------------------------|-------------------|--------------------|---------------|-----------------|-------|---------------------------|-------|-----------------------|------------------|-------|-----------|------|
|                                                        |                                             |                   | Ammoniacal         | Water-soluble | Water-insoluble | Total | Citrate-insoluble         | Total | So-called "available" | As muriate       | Total |           |      |
| LEBANON CHEMICAL CORP., Lebanon, Pa.                   |                                             |                   |                    |               |                 |       |                           |       |                       |                  |       |           |      |
| 5457                                                   | Lebanon Azalea Food 7-7-7                   | Hartford          | 0.35               | 4.56          | 0.96            | 1.47  | 7.34                      | 0.55  | 9.33                  | 8.78             | 8.74  | 8.79      | .... |
| 5395                                                   | Lebanon Fertilizer 5-10-10                  | Hartford          | 1.22               | 3.48          | 0.24            | 0.23  | 5.17                      | 0.50  | 10.95                 | 10.45            | 10.15 | 10.15     | .... |
| 5396                                                   | Lebanon Hi-Organic 8-8-8                    | Hartford          | 0.41               | 4.68          | 0.92            | 2.00  | 8.01                      | 0.33  | 8.60                  | 8.27             | 2.80  | 8.49      | .... |
| 5393                                                   | Lebanon Plant Food 5-10-5                   | Hartford          | 0.00               | 3.36          | 0.01            | 1.93  | 5.30                      | 0.40  | 10.45                 | 10.05            | 4.41  | 5.10      | .... |
| 5454                                                   | Lebanon Turf Organic 5-4-0                  | Hartford          | 0.00               | 0.00          | 1.20            | 4.38  | 5.58                      | 1.18  | 6.55                  | 5.37             | ....  | ....      | .... |
| 5296                                                   | Lebanon Uni-Form 10-6-4                     | Centerbrook       | 0.56               | 2.44          | 3.20            | 3.90  | 10.10                     | 0.48  | 7.23                  | 6.75             | 3.94  | 4.12      | .... |
| LEE PATTEN SEED CO., Jersey City, N. J.                |                                             |                   |                    |               |                 |       |                           |       |                       |                  |       |           |      |
| 5305                                                   | Patco's Lawn Food 9-8-3                     | New Canaan        | 0.00               | 5.00          | 2.88            | 1.37  | 9.25                      | 0.65  | 9.53                  | 8.88             | 3.37  | 4.08      | .... |
| McARDLE'S SEED CO., Greenwich, Conn.                   |                                             |                   |                    |               |                 |       |                           |       |                       |                  |       |           |      |
| 5038                                                   | McArdle's Hi-Organic 10-6-4                 | Greenwich         | 0.00               | 4.72          | 4.78            | 0.84  | 10.34                     | 0.40  | 7.25                  | 6.85             | 4.56  | 5.00      | .... |
| THE MAMLON CO., New Haven, Conn.                       |                                             |                   |                    |               |                 |       |                           |       |                       |                  |       |           |      |
| 5460                                                   | Fer-Mel General Purpose Plant Food 18-18-18 | New Haven         | 0.80               | 4.56          | 13.64           | 0.08  | 19.08                     | 0.05  | 18.15                 | 18.10            | 10.93 | 19.12     | .... |
| 5368                                                   | Fer-Mel Turf & Tree Food 24-12-12           | Portland          | 1.85               | 4.00          | 19.26           | 0.07  | 25.18                     | 0.03  | 12.30                 | 12.27            | 10.32 | 13.27     | .... |
| 5461                                                   | Fer-Mel Turf & Tree Food 24-12-12           | New Haven         | 0.52               | 4.58          | 20.06           | 0.06  | 25.22                     | 0.05  | 12.60                 | 12.55            | 12.04 | 12.10     | .... |
| OLD FOX AGRICULTURAL SALES, INC., E. Providence, R. I. |                                             |                   |                    |               |                 |       |                           |       |                       |                  |       |           |      |
| 5269                                                   | Old Fox Brand 0-15-30                       | Pawcatuck         | ....               | ....          | ....            | ....  | ....                      | 0.18  | 15.05                 | 14.87            | 25.78 | 30.48     | .... |
| 4800                                                   | Old Fox Brand 0-20-20                       | Norwich           | ....               | ....          | ....            | ....  | ....                      | 0.48  | 20.60                 | 20.12            | 18.62 | 22.17     | .... |
| 4510                                                   | Old Fox Brand 5-8-7                         | Putnam            | 0.64               | 2.32          | 0.88            | 0.05  | 3.89                      | 1.13  | 14.10                 | 12.97            | 6.77  | 8.15      | .... |
| 4566                                                   | Old Fox Brand 5-10-10                       | Norwich           | 1.04               | 3.32          | 0.62            | 0.03  | 5.01                      | 0.95  | 10.70                 | 9.75             | 8.51  | 11.66     | .... |
| 5024                                                   | Old Fox Brand 5-10-10 with 1.2 Magnesium    | Wapping           | 0.62               | 3.10          | 0.90            | 0.14  | 4.76                      | 0.80  | 10.90                 | 10.10            | 9.34  | 10.48     | 1.55 |
| 5025                                                   | Old Fox Brand 6-3-6 with 1.2 Magnesium      | Wapping           | 0.00               | 0.90          | 2.65            | 3.27  | 6.82                      | 0.30  | 3.83                  | 3.53             | 0.24  | 6.35      | 2.28 |
| 4567                                                   | Old Fox Brand 7-7-7                         | Norwich           | 0.58               | 5.68          | 0.32            | 0.04  | 6.62                      | 0.78  | 9.90                  | 9.12             | 6.87  | 7.84      | .... |
| 4551                                                   | Old Fox Brand 10-10-10                      | Norwich           | 1.01               | 7.56          | 0.82            | 0.09  | 9.48                      | 0.38  | 11.90                 | 11.52            | 8.34  | 10.26     | .... |
| 5268                                                   | Old Fox Brand Turf Food 8-6-2               | Pawcatuck         | 0.00               | 5.68          | 1.77            | 1.00  | 8.45                      | 0.28  | 7.08                  | 6.80             | 2.60  | 2.75      | .... |
| OLIN MATHIESON CHEMICAL CORP., Baltimore, Md.          |                                             |                   |                    |               |                 |       |                           |       |                       |                  |       |           |      |
| 5417                                                   | Mathieson 5-10-5 Fertilizer                 | Darien            | 0.00               | 4.40          | 0.50            | 0.34  | 5.24                      | 1.05  | 11.05                 | 10.00            | 4.14  | 5.07      | .... |
| 5177                                                   | Mathieson 13-13-13 Fertilizer               | Cos-Cob           | 0.00               | 12.20         | 0.96            | 0.00  | 13.16                     | 0.20  | 14.25                 | 14.05            | 11.46 | 14.14     | .... |
| ROBERT B. PETERS CO., Allentown, Pa.                   |                                             |                   |                    |               |                 |       |                           |       |                       |                  |       |           |      |
| 3009                                                   | Peters Special 20-5-30                      | Cromwell          | 0.26               | 2.21          | 18.17           | 0.03  | 20.67                     | 0.08  | 5.33                  | 5.25             | 28.37 | 30.68     | .... |
| 3010                                                   | Peters Special 25-10-10                     | Cromwell          | 3.42               | 2.72          | 17.71           | 0.03  | 23.88                     | 0.03  | 10.20                 | 10.17            | 7.57  | 10.97     | .... |
| PLANT PRODUCTS CORP., Blue Point, Long Island, N.Y.    |                                             |                   |                    |               |                 |       |                           |       |                       |                  |       |           |      |
| 4933'                                                  | Soluble Fertilizer 32-10-2                  | Portland          | 2.81               | 5.24          | 24.20           | 0.00  | 32.25                     | 0.10  | 11.85                 | 11.75            | 2.19  | 3.35      | .... |

..... indicates deficiencies.  
' State purchase.

| CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH |                    |               |                 |       |                           |       |                       |                  |       |           |  |
|--------------------------------------------------|--------------------|---------------|-----------------|-------|---------------------------|-------|-----------------------|------------------|-------|-----------|--|
| Nitrate                                          | Nitrogen, per cent |               |                 |       | Phosphoric acid, per cent |       |                       | Potash, per cent |       | Magnesium |  |
|                                                  | Ammoniacal         | Water-soluble | Water-insoluble | Total | Citrate-insoluble         | Total | So-called "available" | As muriate       | Total |           |  |
| 0.35                                             | 4.56               | 0.96          | 1.47            | 7.34  | 0.55                      | 9.33  | 8.78                  | 8.74             | 8.79  | ....      |  |
| 1.22                                             | 3.48               | 0.24          | 0.23            | 5.17  | 0.50                      | 10.95 | 10.45                 | 10.15            | 10.15 | ....      |  |
| 0.41                                             | 4.68               | 0.92          | 2.00            | 8.01  | 0.33                      | 8.60  | 8.27                  | 2.80             | 8.49  | ....      |  |
| 0.00                                             | 3.36               | 0.01          | 1.93            | 5.30  | 0.40                      | 10.45 | 10.05                 | 4.41             | 5.10  | ....      |  |
| 0.00                                             | 0.00               | 1.20          | 4.38            | 5.58  | 1.18                      | 6.55  | 5.37                  | ....             | ....  | ....      |  |
| 0.56                                             | 2.44               | 3.20          | 3.90            | 10.10 | 0.48                      | 7.23  | 6.75                  | 3.94             | 4.12  | ....      |  |
| 0.00                                             | 5.00               | 2.88          | 1.37            | 9.25  | 0.65                      | 9.53  | 8.88                  | 3.37             | 4.08  | ....      |  |
| 0.00                                             | 4.72               | 4.78          | 0.84            | 10.34 | 0.40                      | 7.25  | 6.85                  | 4.56             | 5.00  | ....      |  |
| 0.80                                             | 4.56               | 13.64         | 0.08            | 19.08 | 0.05                      | 18.15 | 18.10                 | 10.93            | 19.12 | ....      |  |
| 1.85                                             | 4.00               | 19.26         | 0.07            | 25.18 | 0.03                      | 12.30 | 12.27                 | 10.32            | 13.27 | ....      |  |
| 0.52                                             | 4.58               | 20.06         | 0.06            | 25.22 | 0.05                      | 12.60 | 12.55                 | 12.04            | 12.10 | ....      |  |
| ....                                             | ....               | ....          | ....            | ....  | 0.18                      | 15.05 | 14.87                 | 25.78            | 30.48 | ....      |  |
| ....                                             | ....               | ....          | ....            | ....  | 0.48                      | 20.60 | 20.12                 | 18.62            | 22.17 | ....      |  |
| 0.64                                             | 2.32               | 0.88          | 0.05            | 3.89  | 1.13                      | 14.10 | 12.97                 | 6.77             | 8.15  | ....      |  |
| 1.04                                             | 3.32               | 0.62          | 0.03            | 5.01  | 0.95                      | 10.70 | 9.75                  | 8.51             | 11.66 | ....      |  |
| 0.62                                             | 3.10               | 0.90          | 0.14            | 4.76  | 0.80                      | 10.90 | 10.10                 | 9.34             | 10.48 | 1.55      |  |
| 0.00                                             | 0.90               | 2.65          | 3.27            | 6.82  | 0.30                      | 3.83  | 3.53                  | 0.24             | 6.35  | 2.28      |  |
| 0.58                                             | 5.68               | 0.32          | 0.04            | 6.62  | 0.78                      | 9.90  | 9.12                  | 6.87             | 7.84  | ....      |  |
| 1.01                                             | 7.56               | 0.82          | 0.09            | 9.48  | 0.38                      | 11.90 | 11.52                 | 8.34             | 10.26 | ....      |  |
| 0.00                                             | 5.68               | 1.77          | 1.00            | 8.45  | 0.28                      | 7.08  | 6.80                  | 2.60             | 2.75  | ....      |  |
| 0.00                                             | 4.40               | 0.50          | 0.34            | 5.24  | 1.05                      | 11.05 | 10.00                 | 4.14             | 5.07  | ....      |  |
| 0.00                                             | 12.20              | 0.96          | 0.00            | 13.16 | 0.20                      | 14.25 | 14.05                 | 11.46            | 14.14 | ....      |  |
| 0.26                                             | 2.21               | 18.17         | 0.03            | 20.67 | 0.08                      | 5.33  | 5.25                  | 28.37            | 30.68 | ....      |  |
| 3.42                                             | 2.72               | 17.71         | 0.03            | 23.88 | 0.03                      | 10.20 | 10.17                 | 7.57             | 10.97 | ....      |  |
| 2.81                                             | 5.24               | 24.20         | 0.00            | 32.25 | 0.10                      | 11.85 | 11.75                 | 2.19             | 3.35  | ....      |  |



TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station number | Manufacturer and brand                                           | Place of sampling  | CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH |            |               |                 |       |                           |       |                       |                  |              |           |  |
|----------------|------------------------------------------------------------------|--------------------|--------------------------------------------------|------------|---------------|-----------------|-------|---------------------------|-------|-----------------------|------------------|--------------|-----------|--|
|                |                                                                  |                    | Nitrogen, per cent                               |            |               |                 |       | Phosphoric acid, per cent |       |                       | Potash, per cent |              |           |  |
|                |                                                                  |                    | Organic                                          |            |               |                 |       | Citrate-insoluble         | Total | So-called "available" | As muriate       | Total        | Magnesium |  |
|                |                                                                  |                    | Nitrate                                          | Ammoniacal | Water-soluble | Water-insoluble | Total |                           |       |                       |                  |              |           |  |
|                | THE FRANK S. PLATT CO., Branford, Conn.                          |                    |                                                  |            |               |                 |       |                           |       |                       |                  |              |           |  |
| 5243           | Platt's Hi-Organic Lawn Fertilizer 10-5-5                        | West Haven . . . . | 0.41                                             | 6.16       | 2.56          | 1.29            | 10.42 | 0.25                      | 6.35  | 6.10                  | 5.44             | 5.54         | ....      |  |
|                | RA-PID-GRO CORP., Dansville, N. Y.                               |                    |                                                  |            |               |                 |       |                           |       |                       |                  |              |           |  |
| 4934'          | Ra-Pid-Gro 23-21-17 . . . . .                                    | Middletown . . . . | 5.18                                             | 4.20       | 14.92         | 0.00            | 24.30 | 0.08                      | 21.55 | 21.47                 | ....             | <u>16.27</u> | ....      |  |
|                | ROSE MANUFACTURING CO., Beacon, N. Y.                            |                    |                                                  |            |               |                 |       |                           |       |                       |                  |              |           |  |
| 5172           | Tri-Ogen Rose Food 5-10-5 . . . . .                              | Greenwich . . . .  | 0.92                                             | 3.84       | 0.28          | 0.08            | 5.12  | 0.55                      | 10.85 | 10.30                 | ....             | 5.00         | ....      |  |
|                | O. M. SCOTT & SONS CO., Marysville, Ohio                         |                    |                                                  |            |               |                 |       |                           |       |                       |                  |              |           |  |
| 5004           | Scott's New Turf Builder 20-10-5 . . . . .                       | Waterbury . . . .  | 0.59                                             | 1.08       | 12.82         | 6.39            | 20.88 | 0.83                      | 10.93 | 10.10                 | 4.45             | 5.16         | ....      |  |
| 4823           | Scott's New Weed & Feed 25-0-0 . . . . .                         | New Haven . . . .  | 0.00                                             | 0.12       | 13.10         | 11.78           | 25.00 | ....                      | ....  | ....                  | ....             | ....         | ....      |  |
| 5016           | Scott's Organic 5-2-3 . . . . .                                  | Waterbury . . . .  | 0.00                                             | 0.84       | 1.02          | 4.00            | 5.86  | 0.80                      | 3.45  | 2.65                  | 1.05             | 3.67         | ....      |  |
|                | SEARS, ROEBUCK & CO., Chicago, Ill.                              |                    |                                                  |            |               |                 |       |                           |       |                       |                  |              |           |  |
| 5261           | Cross Country Lawn Food 5-5-0 with Crab-grass Killer . . . . .   | New London . . . . | 0.00                                             | 0.24       | 0.41          | 5.21            | 5.86  | 0.83                      | 8.50  | 7.67                  | ....             | ....         | ....      |  |
| 5350           | Cross Country Organic Lawn Food 5-5-0 . . . . .                  | Portland . . . . . | 0.18                                             | 0.00       | 0.24          | 4.62            | 5.04  | 0.78                      | 6.03  | 5.25                  | ....             | ....         | ....      |  |
| 5260           | Cross Country Organic Lawn Food 5-5-0 with Weed Killer . . . . . | New London . . . . | 0.33                                             | 0.20       | 0.28          | 4.77            | 5.58  | 0.78                      | 5.35  | <u>4.57</u>           | ....             | ....         | ....      |  |
| 4833           | Cross Country Plant Food 5-10-5 . . . . .                        | Hamden . . . . .   | 0.58                                             | 3.70       | 0.66          | 0.10            | 5.04  | 0.43                      | 11.20 | 10.77                 | 4.29             | 5.19         | ....      |  |
|                | M. L. SHOEMAKER, Philadelphia, Pa.                               |                    |                                                  |            |               |                 |       |                           |       |                       |                  |              |           |  |
| 5384           | Shoemaker's Swift-Sure 4-10-0 . . . . .                          | West Suffield . .  | 0.36                                             | 3.00       | 0.67          | 0.29            | 4.32  | 0.83                      | 12.05 | 11.22                 | ....             | ....         | ....      |  |
|                | SWIFT & CO., Baltimore, Md.                                      |                    |                                                  |            |               |                 |       |                           |       |                       |                  |              |           |  |
| 5270           | Golden Vigoro Complete Lawn Food 6-10-4 . . . . .                | Pawcatuck . . . .  | 0.14                                             | 1.68       | 1.84          | 2.96            | 6.62  | 1.40                      | 12.00 | 10.60                 | ....             | 4.02         | ....      |  |
| 5169           | Vigoro Complete Plant Food 6-10-4 . . . . .                      | Greenwich . . . .  | 0.28                                             | 5.08       | 0.38          | 0.19            | 5.93  | 0.90                      | 11.00 | 10.10                 | 3.15             | 4.24         | ....      |  |
|                | UNIVERSAL CHEMICAL CO., West Lynn, Mass.                         |                    |                                                  |            |               |                 |       |                           |       |                       |                  |              |           |  |
| 5367           | Electra Plant Food 5-10-3 . . . . .                              | Portland . . . . . | 0.00                                             | 2.20       | 0.49          | 2.61            | 5.30  | 0.35                      | 10.50 | 10.15                 | 2.80             | 2.86         | ....      |  |
|                | VALLEY FEED & SUPPLY CO. INC., Spring Valley, N. Y.              |                    |                                                  |            |               |                 |       |                           |       |                       |                  |              |           |  |
| 5400           | Adorna 3-1-1 . . . . .                                           | Stamford . . . . . | 0.05                                             | 0.00       | 0.36          | 3.19            | 3.60  | 3.10                      | 5.55  | 2.45                  | 3.73             | 3.73         | ....      |  |
|                | OSCAR F. WARNER, Waterbury, Conn.                                |                    |                                                  |            |               |                 |       |                           |       |                       |                  |              |           |  |
| 5021           | Warner's Grubedizer 8-6-4 . . . . .                              | Waterbury . . . .  | 0.20                                             | 2.14       | 3.36          | 2.17            | 8.87  | 0.90                      | 8.55  | 7.65                  | 4.71             | 4.75         | ....      |  |
| 5020           | Warner's Lawn Food 8-6-4 . . . . .                               | Waterbury . . . .  | 0.00                                             | 1.82       | 4.04          | 2.67            | 8.53  | 0.85                      | 7.90  | 7.05                  | 4.29             | 4.49         | ....      |  |
| 5028           | Warner's Tree Food 12-6-4 . . . . .                              | Waterbury . . . .  | 0.00                                             | 2.08       | 8.20          | 2.00            | 12.28 | 0.68                      | 8.50  | 7.82                  | 4.20             | 4.46         | ....      |  |

..... indicates deficiencies.

' State purchase.

| CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH |            |               |                 |       |                           |                   |             |                       |              |       |           |
|--------------------------------------------------|------------|---------------|-----------------|-------|---------------------------|-------------------|-------------|-----------------------|--------------|-------|-----------|
| Nitrogen, per cent                               |            |               |                 |       | Phosphoric acid, per cent |                   |             | Potash, per cent      |              |       |           |
| Nitrate                                          | Ammoniacal | Organic       |                 |       | Total                     | Citrate-insoluble | Total       | So-called "available" | As muriate   | Total | Magnesium |
|                                                  |            | Water-soluble | Water-insoluble | Total |                           |                   |             |                       |              |       |           |
| 0.41                                             | 6.16       | 2.56          | 1.29            | 10.42 | 0.25                      | 6.35              | 6.10        | 5.44                  | 5.54         | ....  |           |
| 5.18                                             | 4.20       | 14.92         | 0.00            | 24.30 | 0.08                      | 21.55             | 21.47       | ....                  | <u>16.27</u> | ....  |           |
| 0.92                                             | 3.84       | 0.28          | 0.08            | 5.12  | 0.55                      | 10.85             | 10.30       | ....                  | 5.00         | ....  |           |
| 0.59                                             | 1.08       | 12.82         | 6.39            | 20.88 | 0.83                      | 10.93             | 10.10       | 4.45                  | 5.16         | ....  |           |
| 0.00                                             | 0.12       | 13.10         | 11.78           | 25.00 | ....                      | ....              | ....        | ....                  | ....         | ....  |           |
| 0.00                                             | 0.84       | 1.02          | 4.00            | 5.86  | 0.80                      | 3.45              | 2.65        | 1.05                  | 3.67         | ....  |           |
| 0.00                                             | 0.24       | 0.41          | 5.21            | 5.86  | 0.83                      | 8.50              | 7.67        | ....                  | ....         | ....  |           |
| 0.18                                             | 0.00       | 0.24          | 4.62            | 5.04  | 0.78                      | 6.03              | 5.25        | ....                  | ....         | ....  |           |
| 0.33                                             | 0.20       | 0.28          | 4.77            | 5.58  | 0.78                      | 5.35              | <u>4.57</u> | ....                  | ....         | ....  |           |
| 0.58                                             | 3.70       | 0.66          | 0.10            | 5.04  | 0.43                      | 11.20             | 10.77       | 4.29                  | 5.19         | ....  |           |
| 0.36                                             | 3.00       | 0.67          | 0.29            | 4.32  | 0.83                      | 12.05             | 11.22       | ....                  | ....         | ....  |           |
| 0.14                                             | 1.68       | 1.84          | 2.96            | 6.62  | 1.40                      | 12.00             | 10.60       | ....                  | 4.02         | ....  |           |
| 0.28                                             | 5.08       | 0.38          | 0.19            | 5.93  | 0.90                      | 11.00             | 10.10       | 3.15                  | 4.24         | ....  |           |
| 0.00                                             | 2.20       | 0.49          | 2.61            | 5.30  | 0.35                      | 10.50             | 10.15       | 2.80                  | 2.86         | ....  |           |
| 0.05                                             | 0.00       | 0.36          | 3.19            | 3.60  | 3.10                      | 5.55              | 2.45        | 3.73                  | 3.73         | ....  |           |
| 0.20                                             | 2.14       | 3.36          | 2.17            | 8.87  | 0.90                      | 8.55              | 7.65        | 4.71                  | 4.75         | ....  |           |
| 0.00                                             | 1.82       | 4.04          | 2.67            | 8.53  | 0.85                      | 7.90              | 7.05        | 4.29                  | 4.49         | ....  |           |
| 0.00                                             | 2.08       | 8.20          | 2.00            | 12.28 | 0.68                      | 8.50              | 7.82        | 4.20                  | 4.46         | ....  |           |

TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station number | Manufacturer and brand                           | Place of sampling    |
|----------------|--------------------------------------------------|----------------------|
|                |                                                  |                      |
|                | GARFIELD WILLIAMSON, INC., Jersey City, N. J.    |                      |
| 5254           | Wonderlawn Lawn Food 10-6-4 . . . . .            | Bridgeport . . . . . |
|                | F. H. WOODRUFF & SONS, Milford, Conn.            |                      |
| 4851           | Gro-Sod Lawn Food 10-6-4 . . . . .               | Newtown . . . . .    |
| 5446           | Gro-Sod Lawn Food 10-6-4 . . . . .               | Milford . . . . .    |
| 5445           | Weed-Nix Lawn Food 6-10-4 with 2,4-D . . . . .   | Milford . . . . .    |
|                | S. D. WOODRUFF & SONS, INC., Orange, Conn.       |                      |
| 4860           | Woodruff's Landscape Fertilizer 10-6-4 . . . . . | Bethel . . . . .     |

~~~~~ indicates deficiencies.

| CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH |                    |               |                 |             |                           |       |                       |                  |       |           |
|--------------------------------------------------|--------------------|---------------|-----------------|-------------|---------------------------|-------|-----------------------|------------------|-------|-----------|
| Nitrate                                          | Nitrogen, per cent |               |                 |             | Phosphoric acid, per cent |       |                       | Potash, per cent |       | Magnesium |
|                                                  | Ammoniacal         | Organic       |                 | Total       | Citratesoluble            | Total | So-called "available" | As muriate       | Total |           |
|                                                  |                    | Water-soluble | Water-insoluble |             |                           |       |                       |                  |       |           |
| 0.29                                             | 6.28               | 2.40          | 1.09            | 10.06       | 0.25                      | 7.00  | 6.75                  | 3.97             | 4.39  | ....      |
| 0.13                                             | 3.94               | 3.84          | 1.96            | <u>9.87</u> | 0.63                      | 6.70  | 6.07                  | 4.04             | 4.21  | ....      |
| 1.60                                             | 5.72               | 1.60          | 1.76            | 10.68       | 0.40                      | 7.33  | 6.93                  | 4.21             | 5.19  | ....      |
| 0.00                                             | 5.04               | 0.50          | 0.92            | 6.46        | 1.25                      | 11.00 | <u>9.75</u>           | 4.25             | 4.59  | ....      |
| 0.60                                             | 4.44               | 2.86          | 1.70            | <u>9.60</u> | 0.60                      | 7.50  | 6.90                  | 4.44             | 5.28  | ....      |

TABLE 6. ANALYSES OF SHEEP MANURE, ETC.

| Station No. | Manufacturer, brand and dealer                                                                                                                      | Nitrogen, per cent |               |                 |             |                  | Phosphoric acid, per cent |             |                  |                             | Potash, per cent |                  |               |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------|-----------------|-------------|------------------|---------------------------|-------------|------------------|-----------------------------|------------------|------------------|---------------|
|             |                                                                                                                                                     | Ammoniacal         | Water-soluble | Water-insoluble | Total found | Total guaranteed | Citrate-insoluble         | Total found | Total guaranteed | So-called "available" found | Total found      | Total guaranteed | Sand per cent |
| 5321        | Gro-Well Gro-Manure. J. & L. Adikes, Inc., Jamaica, N. Y. Sampled at Young's Feed Store, Ridgefield . . . . .                                       | 0.20               | 0.51          | 1.15            | 1.86        | 1.00             | ....                      | 1.70        | 1.00             | ....                        | 1.14             | 1.00             | 44.33         |
| 4531        | Dried Sheep Manure & Inert Matter. American Agricultural Chemical Co., No. Weymouth, Mass. Sampled at Louis Perillo Coal Co., Southington . . . . . | 0.00               | 0.38          | 1.24            | 1.62        | 1.25             | ....                      | 1.30        | 1.00             | ....                        | 1.67             | 2.00             | 51.16         |
| 4496        | Armour Pulverized Sheep Manure. Armour Fertilizer Works, Carteret, N.J. Sampled at Sunshine Feed Store, Plainville . .                              | 0.00               | 0.24          | 1.10            | 1.34        | 1.25             | ....                      | 1.80        | 1.00             | ....                        | 4.46             | 2.00             | 40.78         |
| 5193        | Armour Shredded Cattle Manure. Armour Fertilizer Works, Carteret, N.J. Sampled at Armour Fertilizer Works, S. Windsor                               | 0.20               | 0.02          | 1.96            | 2.18        | 2.00             | 0.30                      | 1.40        | 1.00             | 1.10                        | 2.37             | 2.00             | 17.98         |
| 5258        | Driconure. Atkins & Durbrow, Inc., Port Colborne, Ontario, Canada. Sampled at Willis Distributors, Bridgeport . . . . .                             | 0.48               | 1.08          | 2.22            | 3.78        | 3.00             | 0.50                      | 3.45        | ....             | 2.95 <sup>1</sup>           | 2.40             | 1.00             | 7.53          |
| 5366        | Driconure. Atkins & Durbrow, Inc., Port Colborne, Ontario, Canada. Sampled at The Hubbard-Hall Chemical Co., Portland .                             | 0.44               | 0.78          | 2.22            | 3.44        | 3.00             | 0.45                      | 3.20        | ....             | 2.75 <sup>1</sup>           | 2.62             | 1.00             | 8.66          |
| 4509        | Corenco Sheep Manure. Consolidated Rendering Co., Boston, Mass. Sampled at A. E. Hall, Wallingford . . . . .                                        | 0.00               | 0.35          | 1.51            | 1.86        | 1.25             | 0.45                      | 2.30        | ....             | 1.85 <sup>2</sup>           | 3.13             | 2.00             | 26.18         |
| 4944        | HH Sheep Manure & Inert Matter. The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Farmers Feed & Supply Co., Bristol                       | 0.00               | 0.22          | 1.25            | 1.47        | 1.25             | 0.45                      | 1.45        | ....             | 1.00 <sup>2</sup>           | 2.02             | 1.00             | 38.27         |
| 5273        | Lincor Cow Manure. Lewis International Co., Newark, N. J. Sampled at Sillimans, Inc., New Canaan . . . . .                                          | 0.40               | 0.62          | 0.96            | 1.98        | 1.00             | ....                      | 1.73        | 1.00             | ....                        | 1.04             | 1.00             | 47.62         |
| 5415        | Lincor Garden Manure. Lewis International Co., Newark, N. J. Sampled at The Planters Barn, Darien . . . . .                                         | 0.00               | 1.00          | 0.28            | 1.28        | 1.00             | ....                      | 1.23        | 1.00             | ....                        | 0.98             | 1.00             | 62.13         |
| 5416        | Lincor Sheep Manure. Lewis International Co., Newark, N. J. Sampled at The Planters Barn, Darien . . . . .                                          | 0.32               | 0.53          | 1.05            | 1.90        | 1.00             | ....                      | 1.85        | 1.00             | ....                        | 1.36             | 1.00             | 39.89         |
| 5207        | Fertal-Gro Cow Manure. Maegeo Dehydrating Co., Lexington, N.C. Sampled at E-V Farmers Exchange, Inc., Rockville . . . . .                           | 0.04               | 0.78          | 1.22            | 2.04        | 2.00             | ....                      | 1.00        | 1.00             | ....                        | 8.32             | 7.00             | 8.00          |
| 5023        | Fertal-Gro Cow Manure. Maegeo Dehydrating Co., Lexington, N.C. Sampled at Cadwell & Jones, Inc., Hartford . . . . .                                 | 0.00               | 0.71          | 1.09            | 1.80        | 2.00             | ....                      | 0.93        | 1.00             | ....                        | 8.08             | 7.00             | 10.94         |
| 4784        | Meadow Brand Sheep Manure. Old Fox Agricultural Chemical Co. E. Providence, R.I. Sampled at A. E. Shedd Co. Inc., Norwich                           | 0.00               | 0.61          | 0.92            | 1.53        | 1.40             | ....                      | 0.35        | 0.35             | ....                        | 4.08             | 2.00             | 46.63         |
| 4832        | Cross Country Cattle Manure. Sears, Roebuck & Co., Chicago, Ill. Sampled at Sears, Roebuck & Co., Hamden . . . . .                                  | 0.00               | 0.25          | 1.69            | 1.94        | 1.50             | 0.23                      | 1.12        | ....             | 0.89 <sup>2</sup>           | 3.20             | 2.00             | 21.50         |
| 4831        | Cross Country Sheep Manure. Sears, Roebuck & Co., Chicago, Ill. Sampled at Sears, Roebuck & Co., Hamden . . . . .                                   | 0.04               | 0.09          | 1.87            | 2.00        | 1.50             | 0.35                      | 1.08        | ....             | 0.73 <sup>2</sup>           | 3.17             | 2.00             | 24.56         |
| 4804        | Wizard Brand Cow Manure. St. Louis National Stock Yards Co., National Stock Yards, Ill. Sampled at Brainard Seed Co., Thompsonville . . . . .       | 0.08               | 0.24          | 1.69            | 2.01        | 2.00             | 0.28                      | 1.33        | ....             | 1.05 <sup>2</sup>           | 2.02             | 2.00             | 28.06         |
| 4803        | Wizard Brand Sheep Manure. St. Louis National Stock Yards Co., National Stock Yards, Ill. Sampled at Brainard Seed Co., Thompsonville . . . . .     | 0.00               | 0.23          | 1.57            | 1.80        | 2.00             | 0.28                      | 1.50        | ....             | 1.22 <sup>2</sup>           | 2.43             | 2.00             | 27.13         |
| 5015        | Bovung. Walker-Gordon Laboratory Co., Plainsboro, N. J. Sampled at H. S. Coe & Co. Inc., Waterbury . . . . .                                        | 0.06               | 0.51          | 1.50            | 2.07        | 2.00             | 0.38                      | 1.58        | ....             | 1.20 <sup>2</sup>           | 2.28             | 2.00             | 1.60          |

..... indicates deficiencies.

<sup>1</sup>Guaranteed 2.0%.

<sup>2</sup>Guaranteed 1.0%.

TABLE 6. ANALYSES OF SHEEP MANURE, ETC.

| Station No. | Manufacturer, brand and dealer                                                                                                                      | Nitrogen, per cent |               |                 |             |                  | Phosphoric acid, per cent |             |                  |                             | Potash, per cent |                  |               |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------|-----------------|-------------|------------------|---------------------------|-------------|------------------|-----------------------------|------------------|------------------|---------------|
|             |                                                                                                                                                     | Ammoniacal         | Water-soluble | Water-insoluble | Total found | Total guaranteed | Citrate-insoluble         | Total found | Total guaranteed | So-called "available" found | Total found      | Total guaranteed | Sand per cent |
| 5321        | Gro-Well Gro-Manure. J. & L. Adikes, Inc., Jamaica, N. Y. Sampled at Young's Feed Store, Ridgefield . . . . .                                       | 0.20               | 0.51          | 1.15            | 1.86        | 1.00             | ....                      | 1.70        | 1.00             | ....                        | 1.14             | 1.00             | 44.33         |
| 4531        | Dried Sheep Manure & Inert Matter. American Agricultural Chemical Co., No. Weymouth, Mass. Sampled at Louis Perillo Coal Co., Southington . . . . . | 0.00               | 0.38          | 1.24            | 1.62        | 1.25             | ....                      | 1.30        | 1.00             | ....                        | 1.67             | 2.00             | 51.16         |
| 4496        | Armour Pulverized Sheep Manure. Armour Fertilizer Works, Carteret, N.J. Sampled at Sunshine Feed Store, Plainville . .                              | 0.00               | 0.24          | 1.10            | 1.34        | 1.25             | ....                      | 1.80        | 1.00             | ....                        | 4.46             | 2.00             | 40.78         |
| 5193        | Armour Shredded Cattle Manure. Armour Fertilizer Works, Carteret, N.J. Sampled at Armour Fertilizer Works, S. Windsor                               | 0.20               | 0.02          | 1.96            | 2.18        | 2.00             | 0.30                      | 1.40        | 1.00             | 1.10                        | 2.37             | 2.00             | 17.98         |
| 5258        | Driconure. Atkins & Durbrow, Inc., Port Colborne, Ontario, Canada. Sampled at Willis Distributors, Bridgeport . . . . .                             | 0.48               | 1.08          | 2.22            | 3.78        | 3.00             | 0.50                      | 3.45        | ....             | 2.95 <sup>1</sup>           | 2.40             | 1.00             | 7.53          |
| 5366        | Driconure. Atkins & Durbrow, Inc., Port Colborne, Ontario, Canada. Sampled at The Hubbard-Hall Chemical Co., Portland .                             | 0.44               | 0.78          | 2.22            | 3.44        | 3.00             | 0.45                      | 3.20        | ....             | 2.75 <sup>1</sup>           | 2.62             | 1.00             | 8.66          |
| 4509        | Corenco Sheep Manure. Consolidated Rendering Co., Boston, Mass. Sampled at A. E. Hall, Wallingford . . . . .                                        | 0.00               | 0.35          | 1.51            | 1.86        | 1.25             | 0.45                      | 2.30        | ....             | 1.85 <sup>2</sup>           | 3.13             | 2.00             | 26.18         |
| 4944        | HH Sheep Manure & Inert Matter. The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Farmers Feed & Supply Co., Bristol                       | 0.00               | 0.22          | 1.25            | 1.47        | 1.25             | 0.45                      | 1.45        | ....             | 1.00 <sup>2</sup>           | 2.02             | 1.00             | 38.27         |
| 5273        | Lincor Cow Manure. Lewis International Co., Newark, N. J. Sampled at Sillimans, Inc., New Canaan . . . . .                                          | 0.40               | 0.62          | 0.96            | 1.98        | 1.00             | ....                      | 1.73        | 1.00             | ....                        | 1.04             | 1.00             | 47.62         |
| 5415        | Lincor Garden Manure. Lewis International Co., Newark, N. J. Sampled at The Planters Barn, Darien . . . . .                                         | 0.00               | 1.00          | 0.28            | 1.28        | 1.00             | ....                      | 1.23        | 1.00             | ....                        | 0.98             | 1.00             | 62.13         |
| 5416        | Lincor Sheep Manure. Lewis International Co., Newark, N. J. Sampled at The Planters Barn, Darien . . . . .                                          | 0.32               | 0.53          | 1.05            | 1.90        | 1.00             | ....                      | 1.85        | 1.00             | ....                        | 1.36             | 1.00             | 39.89         |
| 5207        | Fertal-Gro Cow Manure. Maegeo Dehydrating Co., Lexington, N.C. Sampled at E-V Farmers Exchange, Inc., Rockville . . . . .                           | 0.04               | 0.78          | 1.22            | 2.04        | 2.00             | ....                      | 1.00        | 1.00             | ....                        | 8.32             | 7.00             | 8.00          |
| 5023        | Fertal-Gro Cow Manure. Maegeo Dehydrating Co., Lexington, N.C. Sampled at Cadwell & Jones, Inc., Hartford . . . . .                                 | 0.00               | 0.71          | 1.09            | 1.80        | 2.00             | ....                      | 0.93        | 1.00             | ....                        | 8.08             | 7.00             | 10.94         |
| 4784        | Meadow Brand Sheep Manure. Old Fox Agricultural Chemical Co. E. Providence, R.I. Sampled at A. E. Shedd Co. Inc., Norwich                           | 0.00               | 0.61          | 0.92            | 1.53        | 1.40             | ....                      | 0.35        | 0.35             | ....                        | 4.08             | 2.00             | 46.63         |
| 4832        | Cross Country Cattle Manure. Sears, Roebuck & Co., Chicago, Ill. Sampled at Sears, Roebuck & Co., Hamden . . . . .                                  | 0.00               | 0.25          | 1.69            | 1.94        | 1.50             | 0.23                      | 1.12        | ....             | 0.89 <sup>2</sup>           | 3.20             | 2.00             | 21.50         |
| 4831        | Cross Country Sheep Manure. Sears, Roebuck & Co., Chicago, Ill. Sampled at Sears, Roebuck & Co., Hamden . . . . .                                   | 0.04               | 0.09          | 1.87            | 2.00        | 1.50             | 0.35                      | 1.08        | ....             | 0.73 <sup>2</sup>           | 3.17             | 2.00             | 24.56         |
| 4804        | Wizard Brand Cow Manure. St. Louis National Stock Yards Co., National Stock Yards, Ill. Sampled at Brainard Seed Co., Thompsonville . . . . .       | 0.08               | 0.24          | 1.69            | 2.01        | 2.00             | 0.28                      | 1.33        | ....             | 1.05 <sup>2</sup>           | 2.02             | 2.00             | 28.06         |
| 4803        | Wizard Brand Sheep Manure. St. Louis National Stock Yards Co., National Stock Yards, Ill. Sampled at Brainard Seed Co., Thompsonville . . . . .     | 0.00               | 0.23          | 1.57            | 1.80        | 2.00             | 0.28                      | 1.50        | ....             | 1.22 <sup>2</sup>           | 2.43             | 2.00             | 27.13         |
| 5015        | Bovung. Walker-Gordon Laboratory Co., Plainsboro, N. J. Sampled at H. S. Coe & Co. Inc., Waterbury . . . . .                                        | 0.06               | 0.51          | 1.50            | 2.07        | 2.00             | 0.38                      | 1.58        | ....             | 1.20 <sup>2</sup>           | 2.28             | 2.00             | 1.60          |

..... indicates deficiencies.

<sup>1</sup>Guaranteed 2.0%.

<sup>2</sup>Guaranteed 1.0%.

TABLE 7. ANALYSES OF LIMESTONE AND SIMILAR MATERIALS

|      | Manufacturer or dealer, brand and place of sampling                                                                 | Calcium oxide,<br>per cent |       | Magnesium oxide,<br>per cent |       |
|------|---------------------------------------------------------------------------------------------------------------------|----------------------------|-------|------------------------------|-------|
|      |                                                                                                                     | F                          | G     | F                            | G     |
|      |                                                                                                                     |                            |       |                              |       |
| 3999 | LEE LIME CORPORATION, Lee, Mass.<br>Double Strength Lee Lime. Sampled at Cullman Bros., Inc.,<br>Hartford . . . . . | 45.80                      | 43.00 | 31.48                        | 30.00 |
|      | MANUFACTURER UNKNOWN                                                                                                |                            |       |                              |       |
| 3777 | Limestone. Sampled at Raymond L. Beaudry, West Redding . . . . .                                                    | 29.15                      | ..... | 18.50                        | ..... |
| 3778 | Limestone. Sampled at Raymond L. Beaudry, West Redding . . . . .                                                    | 28.79                      | ..... | 18.33                        | ..... |
| 5682 | Limestone. Sampled at Cheshire Nursery, Cheshire . . . . .                                                          | 30.13                      | ..... | 21.47                        | ..... |
|      | NEW ENGLAND LIME CO., Canaan, Conn.                                                                                 |                            |       |                              |       |
| 3235 | Hydrated Lime. Sampled at The Hatheway-Steane Corporation,<br>Suffield . . . . .                                    | 44.79                      | ..... | 30.35                        | ..... |
|      | UNITED STATES GYPSUM CO., Chicago, Ill.                                                                             |                            |       |                              |       |
| 3055 | Land Plaster. Sampled at Cullman Bros., Inc., Hartford . . . . .                                                    | 32.34                      | 30.00 | .....                        | ..... |
| 4000 | Land Plaster. Sampled at Cullman Bros., Inc., Hartford . . . . .                                                    | 33.54                      | 30.00 | 0.30                         | Trace |

TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS

| Station No.       | Manufacturer and brand                                               | Place of sampling       | Nitrogen, per cent |         |      |       | Phosphoric acid, per cent |       |                       | Potash, per cent |       |
|-------------------|----------------------------------------------------------------------|-------------------------|--------------------|---------|------|-------|---------------------------|-------|-----------------------|------------------|-------|
|                   |                                                                      |                         | Ammoniacal         | Organic |      | Total | Citrate-insoluble         | Total | So-called "available" | As muriate       | Total |
|                   | J. & L. ADIKES, INC., Jamaica, N. Y.                                 |                         |                    |         |      |       |                           |       |                       |                  |       |
| 5418 <sup>1</sup> | Gro-Well Bone Meal 2.25-21.25-0 . . . . .                            | Darien . . . . .        | 0.00               | 0.61    | 1.07 | 1.68  | 0.00                      | 27.85 | 0.00                  | 0.00             | 0.00  |
| 5329 <sup>2</sup> | Gro-Well Cow Manure 1-1-1 . . . . .                                  | New Canaan . . . . .    | 0.00               | 0.61    | 1.07 | 1.68  | 0.00                      | 1.15  | 0.00                  | 0.00             | 1.58  |
|                   | ALASKA FERTILIZER CO., Seattle, Wash.                                |                         |                    |         |      |       |                           |       |                       |                  |       |
| 5307              | Alaska 100% Organic Deodorized Fish Fertilizer 0.5-0.2-0.2 . . . . . | New Canaan . . . . .    | 0.00               | 4.14    | 0.80 | 5.38  | 0.00                      | 2.75  | 2.75                  | 2.26             | 3.21  |
|                   | AMERICAN AGRICULTURAL CHEMICAL CO., No. Weymouth, Mass.              |                         |                    |         |      |       |                           |       |                       |                  |       |
| 5240              | Agrico for Broadleaf Evergreens 6-10-4 . . . . .                     | Hamden . . . . .        | 1.98               | 0.36    | 1.36 | 8.42  | 0.90                      | 11.20 | 10.30                 | 3.32             | 3.32  |
| 5019              | Agrico for Gardens 5-10-5 . . . . .                                  | Waterbury . . . . .     | 0.40               | 0.28    | 0.10 | 5.40  | 0.65                      | 11.10 | 10.45                 | 5.05             | 5.73  |
| 4881              | Agrico for Lawns, Trees & Shrubs 6-10-4 . . . . .                    | Bethel . . . . .        | 0.38               | 0.16    | 0.53 | 6.35  | 0.83                      | 10.90 | 10.07                 | 3.81             | 4.00  |
| 5002              | Agrico Rose Food 5-9-6 . . . . .                                     | Putnam . . . . .        | 0.36               | 0.80    | 2.23 | 5.53  | 0.78                      | 9.80  | 9.02                  | 4.83             | 6.01  |
|                   | AMERICAN CYANAMID CO., Princeton, N. J.                              |                         |                    |         |      |       |                           |       |                       |                  |       |
| 5402              | Lawn & Garden Cyanamid 21-0-0 . . . . .                              | Stamford . . . . .      | 0.00               | 0.00    | 0.00 | 21.16 | 0.00                      | 0.00  | 0.00                  | 0.00             | 0.00  |
|                   | ARMOUR FERTILIZER WORKS, Carteret, N. J.                             |                         |                    |         |      |       |                           |       |                       |                  |       |
| 5403 <sup>3</sup> | Armour Sheep Manure 1.25-1-2 . . . . .                               | Stamford . . . . .      | 0.00               | 0.24    | 1.26 | 1.50  | 0.00                      | 1.70  | 0.00                  | 0.00             | 3.92  |
| 4957              | Armour Vertagreen Plant Food 5-10-5 . . . . .                        | Bristol . . . . .       | 0.26               | 0.12    | 0.11 | 5.01  | 0.83                      | 12.00 | 11.17                 | 0.17             | 5.57  |
| 4962              | Armour Vertagreen Rose Food 5-10-5 . . . . .                         | Bristol . . . . .       | 0.00               | 0.32    | 1.16 | 6.00  | 0.95                      | 11.07 | 10.12                 | 0.28             | 5.73  |
|                   | ASSOCIATED SEED GROWERS, INC., Cambridge, N. Y.                      |                         |                    |         |      |       |                           |       |                       |                  |       |
| 5237 <sup>4</sup> | Asgrow Steamed Bone Meal 2-16-23 . . . . .                           | Hamden . . . . .        | 0.00               | 0.00    | 0.00 | 2.36  | 9.60                      | 29.20 | 19.60                 | 0.00             | 0.00  |
|                   | ATKINS & DURBROW, INC., Port Colborne, Ontario, Canada               |                         |                    |         |      |       |                           |       |                       |                  |       |
| 4825 <sup>5</sup> | Driconure 3-2-1 . . . . .                                            | New Haven . . . . .     | 0.00               | 1.25    | 1.86 | 3.43  | 0.38                      | 3.18  | 2.80                  | 0.00             | 2.40  |
|                   | ATLAS FISH FERTILIZER CO., San Francisco, Calif.                     |                         |                    |         |      |       |                           |       |                       |                  |       |
| 5333              | Atlas Fish Emulsion Fertilizer 5-1-1 . . . . .                       | New Canaan . . . . .    | 0.44               | 4.72    | 0.50 | 5.94  | 0.08                      | 1.55  | 1.47                  | 1.36             | 1.36  |
|                   | THE BORDEN CO., New York, N. Y.                                      |                         |                    |         |      |       |                           |       |                       |                  |       |
| 5263              | Borden's "38" . . . . .                                              | New London . . . . .    | 0.00               | 0.00    | 0.00 | 38.12 | 0.00                      | 0.00  | 0.00                  | 0.00             | 0.00  |
|                   | BRAINARD SEED CO., Thompsonville, Conn.                              |                         |                    |         |      |       |                           |       |                       |                  |       |
| 4572              | For Your Garden Castor Pomace 5-2-1 . . . . .                        | Thompsonville . . . . . | 0.00               | 0.00    | 0.00 | 6.20  | 0.13                      | 2.30  | 2.17                  | 0.00             | 1.14  |

~~~~~ indicates deficiencies.

<sup>1</sup>Mechanical analysis: Fine, 52.0%; coarse, 48.0%.

<sup>2</sup>Sand, 30.98%.

<sup>3</sup>Sand, 31.29%.

<sup>4</sup>Mechanical analysis: Fine, 57.0%; coarse, 43.0%.

<sup>5</sup>Sand, 1.83%.

TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS

| Nitrate | Nitrogen, per cent |         |      |       | Phosphoric acid, per cent |       |                       | Potash, per cent |       |
|---------|--------------------|---------|------|-------|---------------------------|-------|-----------------------|------------------|-------|
|         | Ammoniacal         | Organic |      | Total | Citrate-insoluble         | Total | So-called "available" | As muriate       | Total |
| 0.00    | 0.00               | 0.61    | 1.07 | 1.68  | 0.00                      | 27.85 | 0.00                  | 0.00             | 0.00  |
| 0.00    | 0.00               | 0.61    | 1.07 | 1.68  | 0.00                      | 1.15  | 0.00                  | 0.00             | 1.58  |
| 0.00    | 0.44               | 4.14    | 0.80 | 5.38  | 0.00                      | 2.75  | 2.75                  | 2.26             | 3.21  |
| 1.98    | 4.72               | 0.36    | 1.36 | 8.42  | 0.90                      | 11.20 | 10.30                 | 3.32             | 3.32  |
| 0.40    | 4.62               | 0.28    | 0.10 | 5.40  | 0.65                      | 11.10 | 10.45                 | 5.05             | 5.73  |
| 0.38    | 5.28               | 0.16    | 0.53 | 6.35  | 0.83                      | 10.90 | 10.07                 | 3.81             | 4.00  |
| 0.36    | 2.14               | 0.80    | 2.23 | 5.53  | 0.78                      | 9.80  | 9.02                  | 4.83             | 6.01  |
| 0.00    | 0.00               | 0.00    | 0.00 | 21.16 | 0.00                      | 0.00  | 0.00                  | 0.00             | 0.00  |
| 0.26    | 4.52               | 0.12    | 0.11 | 5.01  | 0.83                      | 12.00 | 11.17                 | 0.17             | 5.57  |
| 0.00    | 4.52               | 0.32    | 1.16 | 6.00  | 0.95                      | 11.07 | 10.12                 | 0.28             | 5.73  |
| 0.00    | 0.00               | 0.00    | 0.00 | 2.36  | 9.60                      | 29.20 | 19.60                 | 0.00             | 0.00  |
| 0.00    | 0.32               | 1.25    | 1.86 | 3.43  | 0.38                      | 3.18  | 2.80                  | 0.00             | 2.40  |
| 0.44    | 0.28               | 4.72    | 0.50 | 5.94  | 0.08                      | 1.55  | 1.47                  | 1.36             | 1.36  |
| 0.00    | 0.00               | 0.00    | 0.00 | 38.12 | 0.00                      | 0.00  | 0.00                  | 0.00             | 0.00  |
| 0.00    | 0.00               | 0.00    | 0.00 | 6.20  | 0.13                      | 2.30  | 2.17                  | 0.00             | 1.14  |

TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS

| Station No.       | Manufacturer and brand                                             | Place of sampling       |
|-------------------|--------------------------------------------------------------------|-------------------------|
|                   | CALIFORNIA SPRAY-CHEMICAL CORP., Richmond, Calif.                  |                         |
| 4959              | Ortho-Gro Liquid Plant Food 10-5-5 . . . . .                       | Bristol . . . . .       |
|                   | THE CARAC CORPORATION, Mt. View, Wayne, N. J.                      |                         |
| 5337              | Carac Rose & Plant Fertilizer 22-18-22 . .                         | Buckland . . . . .      |
|                   | CLINTON NURSERIES, Clinton, Conn.                                  |                         |
| 4545              | New Era African Violet Food 5-12-9 . . . . .                       | Niantic . . . . .       |
| 5267              | New Era Instant Rose Food 10-20-10 . . . . .                       | New London . . . . .    |
| 5251              | New Era Rose Food 5-10-5 . . . . .                                 | Bridgeport . . . . .    |
|                   | CONSOLIDATED RENDERING CO., Boston, Mass.                          |                         |
| 4820              | Corenco Home Garden Fertilizer 5-10-5 . .                          | Seymour . . . . .       |
| 4854              | Corenco Rhododendron-Azalea & Blueberry<br>Special 7-7-7 . . . . . | Newtown . . . . .       |
| 4821              | Corenco Rose Special Fertilizer 5-10-5 . .                         | Seymour . . . . .       |
| 5306 <sup>4</sup> | Corenco Sheep Manure 2-1-2 . . . . .                               | New Canaan . . . . .    |
|                   | E. I. duPONT deNEMOURS & CO. INC., Wilmington, Del.                |                         |
| 5449              | DuPont Soluble Plant Food 19-22-16 . . . . .                       | West Hartford . . . . . |
|                   | EASTERN STATES FARMERS' EXCHANGE, INC., W. Springfield, Mass.      |                         |
| 4890              | Eastern States Start-N-Gro 16-32-16 . . . .                        | Willimantic . . . . .   |
|                   | THE ESPOMA CO., Millville, N. J.                                   |                         |
| 5229              | Espoma 3-2-1 . . . . .                                             | Branford . . . . .      |
| 5227              | Espoma Garden Fertilizer 4-6-6 . . . . .                           | Branford . . . . .      |
| 5419              | Espoma Rose Food 6-6-4 . . . . .                                   | Darien . . . . .        |
| 5330              | Holly-Tone 4-6-4 . . . . .                                         | New Canaan . . . . .    |
|                   | EXCELL LABORATORIES, INC., Chicago, Ill.                           |                         |
| 4576              | New Plant Life 2-1-2 . . . . .                                     | Thompsonville . . . . . |
|                   | FAESY & BESTHOFF, INC., New York, N.Y.                             |                         |
| 5174              | F & B Evergreen Food 7-7-7 . . . . .                               | Greenwich . . . . .     |
| 5228 <sup>7</sup> | F & B Nutritional Iron 30% . . . . .                               | Branford . . . . .      |
| 4861 <sup>8</sup> | F & B Pure Steamed Bone Meal 2.47-23-0 . .                         | Bethel . . . . .        |
| 5230              | F & B Starter-Grower Soluble Fertilizer<br>15-30-15 . . . . .      | Branford . . . . .      |

<sup>4</sup> indicates deficiencies.

<sup>6</sup> Sand, 11.14%.

<sup>7</sup> Iron, 29.65%.

<sup>8</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         | Organic       |                 | Total | Citrate-insoluble         | Total | So-called "available" | As muriate       | Total        |
|         |                    | Water-soluble | Water-insoluble |       |                           |       |                       |                  |              |
| 0.00    | 1.31               | 9.41          | 0.00            | 10.72 | 0.03                      | 5.10  | 5.07                  | ....             | 5.03         |
| 1.00    | 1.60               | 19.56         | 0.00            | 22.16 | 0.08                      | 16.40 | <u>16.32</u>          | ....             | <u>21.64</u> |
| 2.84    | 3.22               | 0.08          | 0.10            | 6.24  | 0.15                      | 13.60 | 13.45                 | ....             | 10.15        |
| 2.78    | 4.60               | 3.64          | 0.12            | 11.14 | 0.13                      | 21.65 | 21.52                 | ....             | 11.39        |
| 0.30    | 4.00               | 0.84          | 0.34            | 5.48  | 0.78                      | 11.40 | 10.62                 | 4.97             | 5.41         |
| 1.06    | 3.48               | 0.54          | 0.13            | 5.21  | 0.53                      | 11.30 | 10.77                 | 4.04             | 5.38         |
| 0.81    | 5.68               | 0.68          | 0.15            | 7.32  | 0.23                      | 8.20  | 7.97                  | 5.98             | 7.61         |
| 0.00    | 2.20               | 1.47          | 1.36            | 5.03  | 0.90                      | 13.90 | 13.00                 | 4.78             | 5.00         |
| ....    | 0.08               | 0.40          | 1.84            | 2.32  | 0.30                      | 2.05  | 1.75                  | ....             | 3.26         |
| 5.11    | 5.32               | 8.88          | 0.11            | 19.42 | 0.07                      | 22.25 | 22.18                 | ....             | 17.33        |
| 4.78    | 8.00               | 3.54          | 0.00            | 16.32 | 0.03                      | 32.05 | 32.02                 | ....             | 16.02        |
| 0.26    | 1.92               | 0.12          | 2.00            | 4.30  | 0.43                      | 3.25  | 2.82                  | ....             | 1.74         |
| 0.39    | 0.08               | 2.24          | 1.39            | 4.10  | 0.43                      | 6.50  | 6.07                  | 4.86             | <u>4.86</u>  |
| 0.31    | 4.24               | 0.16          | 2.05            | 6.76  | 0.25                      | 7.25  | 7.00                  | 4.22             | 4.94         |
| 0.00    | 1.88               | 0.78          | 2.01            | 4.67  | 0.55                      | 5.63  | <u>5.08</u>           | 2.74             | 4.18         |
| 1.34    | 1.05               | 0.15          | 0.00            | 2.54  | 0.07                      | 1.55  | 1.48                  | ....             | 2.43         |
| 0.00    | 3.20               | 2.26          | 2.34            | 7.80  | 0.30                      | 8.20  | 7.90                  | 5.43             | <u>6.44</u>  |
| ....    | ....               | ....          | ....            | ....  | ....                      | ....  | ....                  | ....             | ....         |
| ....    | 0.02               | ....          | ....            | 2.92  | ....                      | 27.40 | ....                  | ....             | ....         |
| 1.50    | 6.52               | 8.72          | 0.00            | 16.74 | 0.05                      | 30.10 | 30.05                 | 13.09            | 16.32        |

TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS

| Station No.        | Manufacturer and brand                                   | Place of sampling       | Nitrogen, per cent |            |         |      | Phosphoric acid, per cent |                   |       | Potash, per cent      |            |       |
|--------------------|----------------------------------------------------------|-------------------------|--------------------|------------|---------|------|---------------------------|-------------------|-------|-----------------------|------------|-------|
|                    |                                                          |                         | Nitrate            | Ammoniacal | Organic |      | Total                     | Citrate-insoluble | Total | So-called "available" | As muriate | Total |
|                    | FERRO CORPORATION, Cleveland, Ohio                       |                         |                    |            |         |      |                           |                   |       |                       |            |       |
| 5214 <sup>9</sup>  | Ferro F.T.E. . . . .                                     | Manchester . . . . .    | ....               | ....       | ....    | .... | ....                      | ....              | ....  | ....                  | ....       | ....  |
|                    | FORWARD HOUSE, Little Rock, Ark.                         |                         |                    |            |         |      |                           |                   |       |                       |            |       |
| 5335 <sup>10</sup> | Plantrons 12-24-12 . . . . .                             | Buckland . . . . .      | 0.00               | 12.20      | 0.40    | 0.30 | 12.90                     | 0.25              | 24.75 | 24.50                 | 9.99       | 12.12 |
|                    | GEIGY AGRICULTURAL CHEMICALS, Yonkers, N. Y.             |                         |                    |            |         |      |                           |                   |       |                       |            |       |
| 5216 <sup>11</sup> | Geigy Sequestrene NaFe Iron Chelate 12% . . . . .        | Manchester . . . . .    | ....               | ....       | ....    | .... | ....                      | ....              | ....  | ....                  | ....       | ....  |
|                    | GLORION DIV. ALUMINUM & CHEMICAL CORP., Greenwich, Conn. |                         |                    |            |         |      |                           |                   |       |                       |            |       |
| 4948               | Glorion 4-8-8 . . . . .                                  | Bristol . . . . .       | 0.53               | 2.70       | 0.30    | 0.47 | 4.00                      | 1.23              | 9.80  | 8.57                  | 4.83       | 8.42  |
|                    | GOULARD & OLENA, INC., Skillman, N. J.                   |                         |                    |            |         |      |                           |                   |       |                       |            |       |
| 5211               | G & O Evergreen Tree & Shrub Food 9-7-4 . . . . .        | Rockville . . . . .     | 0.91               | 4.68       | 1.96    | 1.53 | 9.08                      | 0.48              | 7.50  | 7.02                  | 5.67       | 5.70  |
| 5336 <sup>12</sup> | G & O Ground Bone 2.40-20-0 . . . . .                    | Buckland . . . . .      | ....               | 0.12       | ....    | .... | 2.90                      | ....              | 25.15 | ....                  | ....       | ....  |
| 5338               | G & O Prime Cottonseed Meal 6.56 . . . . .               | Buckland . . . . .      | ....               | ....       | ....    | .... | 6.66                      | ....              | ....  | ....                  | ....       | ....  |
| 5332               | G & O Rose Food 7-8-5 . . . . .                          | New Canaan . . . . .    | 0.28               | 4.72       | 1.12    | 1.10 | 7.22                      | 1.28              | 10.95 | 9.67                  | 5.40       | 6.21  |
| 5217               | G & O Special Food for Bulbs 5-6-15 . . . . .            | Manchester . . . . .    | 0.00               | 3.52       | 0.78    | 1.20 | 5.50                      | 0.23              | 7.55  | 7.32                  | 13.57      | 15.30 |
| 5300               | G & O Superphosphate 20% . . . . .                       | Centerbrook . . . . .   | ....               | ....       | ....    | .... | ....                      | 1.00              | 21.50 | 20.50                 | ....       | ....  |
| 5218 <sup>13</sup> | Sheep & Guano Manure 1.5-1-1 . . . . .                   | Manchester . . . . .    | ....               | 0.00       | ....    | .... | 1.67                      | 0.20              | 1.20  | 1.00                  | ....       | 3.07  |
|                    | HELLER GREENHOUSE LABORATORIES, Colorado Springs, Colo.  |                         |                    |            |         |      |                           |                   |       |                       |            |       |
| 5176               | Heller-Gro 15-15-15 . . . . .                            | Greenwich . . . . .     | 2.72               | 3.60       | 8.80    | 0.03 | 15.15                     | 0.10              | 15.10 | 15.00                 | ....       | 15.78 |
|                    | A. H. HOFFMAN, INC., Landisville, Pa.                    |                         |                    |            |         |      |                           |                   |       |                       |            |       |
| 5319               | Hoffman Azalea & Evergreen Food 4-6-10 . . . . .         | New Canaan . . . . .    | 0.00               | 2.56       | 1.88    | 0.88 | 5.32                      | 0.30              | 7.20  | 6.90                  | ....       | 8.72  |
| 5252 <sup>14</sup> | Hoffman Bone Meal 3-13-0 . . . . .                       | Bridgeport . . . . .    | ....               | 0.00       | ....    | .... | 6.70                      | 7.50              | 18.40 | 10.90                 | ....       | ....  |
| 4807 <sup>15</sup> | Hoffman Cow Manure 2-1-1 . . . . .                       | Thompsonville . . . . . | ....               | 0.08       | 0.44    | 1.52 | 2.04                      | 0.25              | 1.33  | 1.08                  | ....       | 2.53  |
| 4575               | Hoffman Rose Food 5-10-5 . . . . .                       | Thompsonville . . . . . | 0.00               | 3.94       | 0.28    | 0.88 | 5.10                      | 0.28              | 11.30 | 11.02                 | 3.53       | 5.07  |
| 5262 <sup>16</sup> | Hoffman Sheep Manure 1-1-2 . . . . .                     | New London . . . . .    | ....               | 0.00       | 0.51    | 1.03 | 1.54                      | 0.35              | 1.80  | 1.45                  | ....       | 4.30  |

..... indicates deficiencies.

<sup>9</sup>Manganese guar., 2.52; found, 2.74; Iron guar., 7.0; found, 6.92; Zinc guar., 3.20; found, 4.10; Copper guar., 3.2; found, 3.31; Boron guar., 0.62; found, 0.46; Molybdenum guar., 0.13; found, 0.12.

<sup>10</sup>Copper guar., 0.1; found, 0.11; Zinc guar., 0.1; found, 0.11; Iron guar., 0.1; found, 0.43; Sulphur guar., 9.0; found, 10.01.

<sup>11</sup>Iron found, 12.06.

<sup>12</sup>Mechanical analysis: Fine, 37.0%; coarse, 63.0%.

<sup>13</sup>Sand, 39.57%.

<sup>14</sup>Mechanical analysis: Fine, 4.0%; coarse, 96.0%.

<sup>15</sup>Sand, 1.63%.

<sup>16</sup>Sand, 35.49%.

TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS

| Station No.        | Manufacturer and brand                                   | Place of sampling       | Nitrogen, per cent |            |         |      | Phosphoric acid, per cent |                   |       | Potash, per cent      |            |       |
|--------------------|----------------------------------------------------------|-------------------------|--------------------|------------|---------|------|---------------------------|-------------------|-------|-----------------------|------------|-------|
|                    |                                                          |                         | Nitrate            | Ammoniacal | Organic |      | Total                     | Citrate-insoluble | Total | So-called "available" | As muriate | Total |
|                    | FERRO CORPORATION, Cleveland, Ohio                       |                         |                    |            |         |      |                           |                   |       |                       |            |       |
| 5214 <sup>9</sup>  | Ferro F.T.E. . . . .                                     | Manchester . . . . .    | ....               | ....       | ....    | .... | ....                      | ....              | ....  | ....                  | ....       | ....  |
|                    | FORWARD HOUSE, Little Rock, Ark.                         |                         |                    |            |         |      |                           |                   |       |                       |            |       |
| 5335 <sup>10</sup> | Plantrons 12-24-12 . . . . .                             | Buckland . . . . .      | 0.00               | 12.20      | 0.40    | 0.30 | 12.90                     | 0.25              | 24.75 | 24.50                 | 9.99       | 12.12 |
|                    | GEIGY AGRICULTURAL CHEMICALS, Yonkers, N. Y.             |                         |                    |            |         |      |                           |                   |       |                       |            |       |
| 5216 <sup>11</sup> | Geigy Sequestrene NaFe Iron Chelate 12% . . . . .        | Manchester . . . . .    | ....               | ....       | ....    | .... | ....                      | ....              | ....  | ....                  | ....       | ....  |
|                    | GLORION DIV. ALUMINUM & CHEMICAL CORP., Greenwich, Conn. |                         |                    |            |         |      |                           |                   |       |                       |            |       |
| 4948               | Glorion 4-8-8 . . . . .                                  | Bristol . . . . .       | 0.53               | 2.70       | 0.30    | 0.47 | 4.00                      | 1.23              | 9.80  | 8.57                  | 4.83       | 8.42  |
|                    | GOULARD & OLENA, INC., Skillman, N. J.                   |                         |                    |            |         |      |                           |                   |       |                       |            |       |
| 5211               | G & O Evergreen Tree & Shrub Food 9-7-4 . . . . .        | Rockville . . . . .     | 0.91               | 4.68       | 1.96    | 1.53 | 9.08                      | 0.48              | 7.50  | 7.02                  | 5.67       | 5.70  |
| 5336 <sup>12</sup> | G & O Ground Bone 2.40-20-0 . . . . .                    | Buckland . . . . .      | ....               | 0.12       | ....    | .... | 2.90                      | ....              | 25.15 | ....                  | ....       | ....  |
| 5338               | G & O Prime Cottonseed Meal 6.56 . . . . .               | Buckland . . . . .      | ....               | ....       | ....    | .... | 6.66                      | ....              | ....  | ....                  | ....       | ....  |
| 5332               | G & O Rose Food 7-8-5 . . . . .                          | New Canaan . . . . .    | 0.28               | 4.72       | 1.12    | 1.10 | 7.22                      | 1.28              | 10.95 | 9.67                  | 5.40       | 6.21  |
| 5217               | G & O Special Food for Bulbs 5-6-15 . . . . .            | Manchester . . . . .    | 0.00               | 3.52       | 0.78    | 1.20 | 5.50                      | 0.23              | 7.55  | 7.32                  | 13.57      | 15.30 |
| 5300               | G & O Superphosphate 20% . . . . .                       | Centerbrook . . . . .   | ....               | ....       | ....    | .... | ....                      | 1.00              | 21.50 | 20.50                 | ....       | ....  |
| 5218 <sup>13</sup> | Sheep & Guano Manure 1.5-1-1 . . . . .                   | Manchester . . . . .    | ....               | 0.00       | ....    | .... | 1.67                      | 0.20              | 1.20  | 1.00                  | ....       | 3.07  |
|                    | HELLER GREENHOUSE LABORATORIES, Colorado Springs, Colo.  |                         |                    |            |         |      |                           |                   |       |                       |            |       |
| 5176               | Heller-Gro 15-15-15 . . . . .                            | Greenwich . . . . .     | 2.72               | 3.60       | 8.80    | 0.03 | 15.15                     | 0.10              | 15.10 | 15.00                 | ....       | 15.78 |
|                    | A. H. HOFFMAN, INC., Landisville, Pa.                    |                         |                    |            |         |      |                           |                   |       |                       |            |       |
| 5319               | Hoffman Azalea & Evergreen Food 4-6-10 . . . . .         | New Canaan . . . . .    | 0.00               | 2.56       | 1.88    | 0.88 | 5.32                      | 0.30              | 7.20  | 6.90                  | ....       | 8.72  |
| 5252 <sup>14</sup> | Hoffman Bone Meal 3-13-0 . . . . .                       | Bridgeport . . . . .    | ....               | 0.00       | ....    | .... | 6.70                      | 7.50              | 18.40 | 10.90                 | ....       | ....  |
| 4807 <sup>15</sup> | Hoffman Cow Manure 2-1-1 . . . . .                       | Thompsonville . . . . . | ....               | 0.08       | 0.44    | 1.52 | 2.04                      | 0.25              | 1.33  | 1.08                  | ....       | 2.53  |
| 4575               | Hoffman Rose Food 5-10-5 . . . . .                       | Thompsonville . . . . . | 0.00               | 3.94       | 0.28    | 0.88 | 5.10                      | 0.28              | 11.30 | 11.02                 | 3.53       | 5.07  |
| 5262 <sup>16</sup> | Hoffman Sheep Manure 1-1-2 . . . . .                     | New London . . . . .    | ....               | 0.00       | 0.51    | 1.03 | 1.54                      | 0.35              | 1.80  | 1.45                  | ....       | 4.30  |

TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS

| Station No.                                        | Manufacturer and brand                                        | Place of sampling       | Nitrogen, per cent |         | Phosphoric acid, per cent |       | Potash, per cent |       |       |       |       |       |
|----------------------------------------------------|---------------------------------------------------------------|-------------------------|--------------------|---------|---------------------------|-------|------------------|-------|-------|-------|-------|-------|
|                                                    |                                                               |                         | Ammoniacal         | Organic | Citrate-insoluble         | Total | As muriate       | Total |       |       |       |       |
| THE HUBBARD-HALL CHEMICAL CO., Waterbury, Conn.    |                                                               |                         |                    |         |                           |       |                  |       |       |       |       |       |
| 4947                                               | Green-Gro Bristol Nurseries Mum Gro 5-10-10                   | Bristol . . . . .       | 0.29               | 3.94    | 1.06                      | 0.21  | 5.50             | 0.50  | 12.20 | 11.70 | 8.71  | 9.90  |
| 5323 <sup>17</sup>                                 | Gro-Fast Bone Meal 2-23-0 . . . . .                           | Ridgefield . . . . .    | ....               | 0.12    | ....                      | ....  | 2.10             | ....  | 28.00 | ....  | ....  | ....  |
| 4958                                               | Gro-Fast Evergreen Food 4-10-4 . . . . .                      | Bristol . . . . .       | 0.24               | 1.52    | 1.40                      | 1.37  | 4.53             | 0.35  | 11.18 | 10.83 | 0.32  | 4.36  |
| 4819                                               | Gro-Fast Plant Food 5-10-5 . . . . .                          | Seymour . . . . .       | 0.39               | 2.48    | 1.94                      | 1.23  | 6.04             | 0.88  | 11.30 | 10.42 | 5.25  | 5.25  |
| 4965                                               | Gro-Fast Rose Food 7-10-5 . . . . .                           | Danielson . . . . .     | 0.00               | 3.18    | 2.63                      | 1.79  | 7.60             | 1.28  | 14.30 | 13.02 | 0.27  | 5.10  |
| 5250 <sup>18</sup>                                 | Gro-Fast Sheep Manure 1.25-1-2 . . . . .                      | Bridgeport . . . . .    | ....               | 0.04    | 0.18                      | 1.50  | 1.72             | ....  | 1.45  | ....  | ....  | 3.73  |
| 4956 <sup>19</sup>                                 | HH Aluminum Sulphate 9% . . . . .                             | Bristol . . . . .       | ....               | ....    | ....                      | ....  | ....             | ....  | ....  | ....  | ....  | ....  |
| 4892 <sup>20</sup>                                 | HH Bone Meal 2-23-0 . . . . .                                 | Willimantic . . . . .   | ....               | 0.00    | ....                      | ....  | 3.19             | ....  | 25.60 | ....  | ....  | ....  |
| 4924 <sup>21</sup>                                 | HH Cow Manure & Inert Matter 2-1-1 . . . . .                  | Willimantic . . . . .   | ....               | 0.06    | 0.27                      | 1.71  | 2.04             | ....  | 1.18  | ....  | ....  | 1.83  |
| 5444                                               | HH Evergreen Food 4-10-4 . . . . .                            | Fairfield . . . . .     | 0.00               | 1.72    | 1.64                      | 1.30  | 4.66             | 0.50  | 11.00 | 10.50 | 0.62  | 3.82  |
| 4996 <sup>22</sup>                                 | HH Sheep Manure & Inert Matter 1.25-1-1 . . . . .             | Danielson . . . . .     | ....               | 0.14    | 0.07                      | 1.26  | 1.47             | ....  | 1.15  | ....  | ....  | 1.58  |
| HYDROPONIC CHEMICAL CO. INC., Copley, Ohio         |                                                               |                         |                    |         |                           |       |                  |       |       |       |       |       |
| 5003                                               | Hyponex Plant Food 7-6-19 . . . . .                           | Putnam . . . . .        | 6.08               | 1.12    | 0.30                      | 0.03  | 7.53             | 0.13  | 7.40  | 7.27  | ....  | 20.65 |
| THE HY-TROUS CORP., Boston, Mass.                  |                                                               |                         |                    |         |                           |       |                  |       |       |       |       |       |
| 4574                                               | Hy-Trous Liquid Fertilizer 4-8-4 . . . . .                    | Thompsonville . . . . . | 1.25               | 1.66    | 1.00                      | 0.00  | 3.91             | 0.07  | 7.90  | 7.83  | ....  | 4.43  |
| LEBANON CHEMICAL CORP., Lebanon, Pa.               |                                                               |                         |                    |         |                           |       |                  |       |       |       |       |       |
| 5398                                               | Lebanon Azalea-Camellia-Gardenia & Ixora Food 7-7-7 . . . . . | Hartford . . . . .      | 0.10               | 4.12    | 1.31                      | 1.51  | 7.04             | 0.35  | 7.78  | 7.43  | 8.13  | 8.25  |
| 5453                                               | Lebanon Hi-Organic 8-8-8 . . . . .                            | West Hartford . . . . . | 0.00               | 4.40    | 0.94                      | 2.76  | 8.10             | 0.80  | 8.87  | 8.07  | 6.70  | 6.70  |
| 5399                                               | Lebanon Rose Food 7-7-7 . . . . .                             | Hartford . . . . .      | 0.00               | 4.36    | 1.05                      | 2.09  | 7.50             | 0.55  | 8.90  | 8.35  | 8.83  | 8.83  |
| 5458 <sup>23</sup>                                 | Lebanon Sheep Manure 1.5-1-2 . . . . .                        | Hartford . . . . .      | ....               | 0.00    | 0.32                      | 2.04  | 2.36             | 0.68  | 1.78  | 1.10  | ....  | 3.44  |
| 5420                                               | Lebanon Spray-Gro 20-20-20 . . . . .                          | Darien . . . . .        | 0.51               | 9.00    | 10.32                     | 0.21  | 20.04            | 0.08  | 20.75 | 20.67 | 17.85 | 20.65 |
| 5459                                               | Lebanon Uni-Form 10-6-4 . . . . .                             | West Hartford . . . . . | 0.26               | 4.28    | 1.20                      | 4.34  | 10.08            | 0.63  | 7.20  | 6.57  | 4.24  | 4.24  |
| MAEGEO DEHYDRATING CO., Lexington, N. C.           |                                                               |                         |                    |         |                           |       |                  |       |       |       |       |       |
| 5397 <sup>24</sup>                                 | Fertal-Gro Cattle Manure 1-1-1 . . . . .                      | Hartford . . . . .      | ....               | 0.00    | 1.00                      | 0.52  | 1.52             | 0.15  | 0.85  | 0.70  | ....  | 1.39  |
| MILLER CHEMICAL & FERTILIZER CORP., Baltimore, Md. |                                                               |                         |                    |         |                           |       |                  |       |       |       |       |       |
| 5448                                               | Vhpf Soluble Plant Food 6-25-15 . . . . .                     | West Hartford . . . . . | 3.46               | 0.56    | 2.64                      | 0.00  | 6.66             | 0.18  | 27.50 | 27.32 | ....  | 18.35 |

indicates deficiencies.

<sup>17</sup>Mechanical analysis: Fine, 61.0%; coarse, 39.0%.

<sup>18</sup>Sand, 29.39%.

<sup>19</sup>Aluminum Sulphate, 9.66%.

<sup>20</sup>Mechanical analysis: Fine, 69.0%; coarse, 31.0%.

<sup>21</sup>Sand, 42.94%.

<sup>22</sup>Sand, 4.04%.

<sup>23</sup>Sand, 26.32%.

<sup>24</sup>Sand, 8.32%.

TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS

| Nitrate | Ammoniacal | Organic       |                 |       | Phosphoric acid, per cent |       |                       | Potash, per cent |       |
|---------|------------|---------------|-----------------|-------|---------------------------|-------|-----------------------|------------------|-------|
|         |            | Water-soluble | Water-insoluble | Total | Citrate-insoluble         | Total | So-called "available" | As muriate       | Total |
| 0.29    | 3.94       | 1.06          | 0.21            | 5.50  | 0.50                      | 12.20 | 11.70                 | 8.71             | 9.90  |
| ....    | 0.12       | ....          | ....            | 2.10  | ....                      | 28.00 | ....                  | ....             | ....  |
| 0.24    | 1.52       | 1.40          | 1.37            | 4.53  | 0.35                      | 11.18 | 10.83                 | 0.32             | 4.36  |
| 0.39    | 2.48       | 1.94          | 1.23            | 6.04  | 0.88                      | 11.30 | 10.42                 | 5.25             | 5.25  |
| 0.00    | 3.18       | 2.63          | 1.79            | 7.60  | 1.28                      | 14.30 | 13.02                 | 0.27             | 5.10  |
| ....    | 0.04       | 0.18          | 1.50            | 1.72  | ....                      | 1.45  | ....                  | ....             | 3.73  |
| ....    | ....       | ....          | ....            | ....  | ....                      | ....  | ....                  | ....             | ....  |
| ....    | 0.00       | ....          | ....            | 3.19  | ....                      | 25.60 | ....                  | ....             | ....  |
| ....    | 0.06       | 0.27          | 1.71            | 2.04  | ....                      | 1.18  | ....                  | ....             | 1.83  |
| 0.00    | 1.72       | 1.64          | 1.30            | 4.66  | 0.50                      | 11.00 | 10.50                 | 0.62             | 3.82  |
| ....    | 0.14       | 0.07          | 1.26            | 1.47  | ....                      | 1.15  | ....                  | ....             | 1.58  |
| 6.08    | 1.12       | 0.30          | 0.03            | 7.53  | 0.13                      | 7.40  | 7.27                  | ....             | 20.65 |
| 1.25    | 1.66       | 1.00          | 0.00            | 3.91  | 0.07                      | 7.90  | 7.83                  | ....             | 4.43  |
| 0.10    | 4.12       | 1.31          | 1.51            | 7.04  | 0.35                      | 7.78  | 7.43                  | 8.13             | 8.25  |
| 0.00    | 4.40       | 0.94          | 2.76            | 8.10  | 0.80                      | 8.87  | 8.07                  | 6.70             | 6.70  |
| 0.00    | 4.36       | 1.05          | 2.09            | 7.50  | 0.55                      | 8.90  | 8.35                  | 8.83             | 8.83  |
| ....    | 0.00       | 0.32          | 2.04            | 2.36  | 0.68                      | 1.78  | 1.10                  | ....             | 3.44  |
| 0.51    | 9.00       | 10.32         | 0.21            | 20.04 | 0.08                      | 20.75 | 20.67                 | 17.85            | 20.65 |
| 0.26    | 4.28       | 1.20          | 4.34            | 10.08 | 0.63                      | 7.20  | 6.57                  | 4.24             | 4.24  |
| ....    | 0.00       | 1.00          | 0.52            | 1.52  | 0.15                      | 0.85  | 0.70                  | ....             | 1.39  |
| 3.46    | 0.56       | 2.64          | 0.00            | 6.66  | 0.18                      | 27.50 | 27.32                 | ....             | 18.35 |



TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS

| Station No.        | Manufacturer and brand                             | Place of sampling | Nitrogen, per cent |            |         |       | Phosphoric acid, per cent |       |                       | Potash, per cent |       |       |
|--------------------|----------------------------------------------------|-------------------|--------------------|------------|---------|-------|---------------------------|-------|-----------------------|------------------|-------|-------|
|                    |                                                    |                   | Nitrate            | Ammoniacal | Organic | Total | Citrate-insoluble         | Total | So-called "available" | As muriate       | Total |       |
|                    | PARKS-BARNES, INC., Hermosa Beach, Calif.          |                   |                    |            |         |       |                           |       |                       |                  |       |       |
| 5414               | Black Magic African Violet Blossom Booster 4-10-10 | Stamford          | 0.00               | 0.44       | 4.34    | 0.00  | 4.78                      | 0.08  | 11.75                 | 11.67            | ....  | 9.98  |
| 5253               | Black Magic Liquid Fertilizer 10-5-5               | Bridgeport        | 0.20               | 1.00       | 9.68    | 0.12  | 11.00                     | 0.00  | 6.20                  | 6.20             | ....  | 5.44  |
| 4997               | Black Magic Plant Food 2-3-2                       | Danielson         | 0.12               | 0.02       | 0.14    | 2.25  | 2.53                      | 0.45  | 3.75                  | 3.30             | 0.09  | 3.51  |
|                    | PLANTABBS CORP., Baltimore, Md.                    |                   |                    |            |         |       |                           |       |                       |                  |       |       |
| 5173               | Plantabbs 11-15-20                                 | Greenwich         | 7.70               | 3.44       | 0.36    | 0.00  | 11.50                     | 0.13  | 17.85                 | 17.72            | ....  | 28.22 |
|                    | RA-PID-GRO CORP., Dansville, N. Y.                 |                   |                    |            |         |       |                           |       |                       |                  |       |       |
| 4573               | Ra-Pid-Gro 23-21-17                                | Thompsonville     | 4.59               | 4.00       | 14.56   | 0.00  | 23.15                     | 0.07  | 21.05                 | 20.98            | ....  | 17.28 |
|                    | THE RENARD CO., Yonkers, N. Y.                     |                   |                    |            |         |       |                           |       |                       |                  |       |       |
| 5299               | Plant Pen 5-0-0                                    | Centerbrook       | ....               | ....       | ....    | ....  | 5.56                      | ....  | ....                  | ....             | ....  | ....  |
|                    | ROSE MANUFACTURING CO., Beacon, N. Y.              |                   |                    |            |         |       |                           |       |                       |                  |       |       |
| 5175               | House Plant Food 6-12-6                            | Greenwich         | 0.05               | 6.44       | 5.74    | 0.09  | 12.32                     | 0.65  | 22.40                 | 21.75            | 8.31  | 12.38 |
|                    | SEARS, ROEBUCK & CO., Chicago, Ill.                |                   |                    |            |         |       |                           |       |                       |                  |       |       |
| 5265               | Cross Country Azalea-Camellia Food 7-7-7           | New London        | 0.00               | 6.08       | 1.26    | 0.16  | 7.50                      | 0.18  | 7.40                  | 7.22             | 5.44  | 7.84  |
| 5264               | Cross Country Bulb Food 4-12-8                     | New London        | 0.00               | 3.48       | 0.71    | 0.13  | 4.32                      | 0.33  | 12.60                 | 12.27            | 5.40  | 8.49  |
| 5266 <sup>25</sup> | Cross Country Cattle Manure 1.5-1-2                | New London        | ....               | 0.18       | 0.59    | 1.17  | 1.94                      | 0.15  | 0.95                  | 0.80             | ....  | 3.35  |
| 4835               | Cross Country Evergreen Food 10-6-4                | Hamden            | 0.00               | 9.16       | 0.30    | 0.10  | 9.56                      | 0.28  | 7.40                  | 7.12             | 2.62  | 4.30  |
| 4836               | Cross Country Instant Rose Food 20-20-20           | Hamden            | 0.36               | 6.12       | 14.12   | 0.00  | 20.60                     | 0.10  | 20.60                 | 20.50            | 14.04 | 21.17 |
| 4837               | Cross Country Instant Tomato Food 15-30-15         | Hamden            | 0.00               | 6.22       | 10.15   | 0.00  | 16.37                     | 0.05  | 29.20                 | 29.15            | 11.30 | 16.98 |
| 5390               | Cross Country Rose Food 5-10-5                     | Manchester        | 0.33               | 4.32       | 0.16    | 0.24  | 5.05                      | 0.43  | 10.75                 | 10.32            | 4.32  | 5.07  |
| 5389 <sup>26</sup> | Cross Country Sheep Manure 1.5-1-2                 | Manchester        | ....               | 0.12       | 0.20    | 2.02  | 2.34                      | 0.50  | 1.65                  | 1.15             | ....  | 3.20  |
|                    | STERN'S NURSERIES, INC., Geneva, N. Y.             |                   |                    |            |         |       |                           |       |                       |                  |       |       |
| 4853               | Stern's Miracid 30-10-10                           | Newtown           | 0.00               | 4.56       | 25.44   | 0.00  | 30.00                     | 0.00  | 10.50                 | 10.50            | 4.49  | 10.55 |
| 5239               | Stern's Miracid 30-10-10                           | Hamden            | 0.00               | 4.88       | 26.05   | 0.07  | 31.00                     | 0.05  | 10.70                 | 10.65            | 2.54  | 10.08 |
| 4826               | Stern's Miracle-Gro 15-30-15                       | New Haven         | 0.00               | 6.92       | 8.38    | 0.00  | 15.30                     | 0.15  | 32.33                 | 32.18            | 14.14 | 15.74 |
|                    | WENDELL S. STILL, Selden, Long Island, N. Y.       |                   |                    |            |         |       |                           |       |                       |                  |       |       |
| 5215 <sup>27</sup> | Farmanure 2-1-1                                    | Manchester        | ....               | 0.24       | 2.32    | 1.82  | 4.38                      | 0.35  | 2.80                  | 2.45             | ....  | 2.06  |

..... indicates deficiencies.

<sup>25</sup>Sand, 20.22%.

<sup>26</sup>Sand, 23.79%.

<sup>27</sup>Sand, 0.89%.

TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS

| Station No.        | Manufacturer and brand                             | Place of sampling | Nitrogen, per cent |            |         |       | Phosphoric acid, per cent |       |                       | Potash, per cent |       |       |
|--------------------|----------------------------------------------------|-------------------|--------------------|------------|---------|-------|---------------------------|-------|-----------------------|------------------|-------|-------|
|                    |                                                    |                   | Nitrate            | Ammoniacal | Organic | Total | Citrate-insoluble         | Total | So-called "available" | As muriate       | Total |       |
|                    | PARKS-BARNES, INC., Hermosa Beach, Calif.          |                   |                    |            |         |       |                           |       |                       |                  |       |       |
| 5414               | Black Magic African Violet Blossom Booster 4-10-10 | Stamford          | 0.00               | 0.44       | 4.34    | 0.00  | 4.78                      | 0.08  | 11.75                 | 11.67            | ....  | 9.98  |
| 5253               | Black Magic Liquid Fertilizer 10-5-5               | Bridgeport        | 0.20               | 1.00       | 9.68    | 0.12  | 11.00                     | 0.00  | 6.20                  | 6.20             | ....  | 5.44  |
| 4997               | Black Magic Plant Food 2-3-2                       | Danielson         | 0.12               | 0.02       | 0.14    | 2.25  | 2.53                      | 0.45  | 3.75                  | 3.30             | 0.09  | 3.51  |
|                    | PLANTABBS CORP., Baltimore, Md.                    |                   |                    |            |         |       |                           |       |                       |                  |       |       |
| 5173               | Plantabbs 11-15-20                                 | Greenwich         | 7.70               | 3.44       | 0.36    | 0.00  | 11.50                     | 0.13  | 17.85                 | 17.72            | ....  | 28.22 |
|                    | RA-PID-GRO CORP., Dansville, N. Y.                 |                   |                    |            |         |       |                           |       |                       |                  |       |       |
| 4573               | Ra-Pid-Gro 23-21-17                                | Thompsonville     | 4.59               | 4.00       | 14.56   | 0.00  | 23.15                     | 0.07  | 21.05                 | 20.98            | ....  | 17.28 |
|                    | THE RENARD CO., Yonkers, N. Y.                     |                   |                    |            |         |       |                           |       |                       |                  |       |       |
| 5299               | Plant Pen 5-0-0                                    | Centerbrook       | ....               | ....       | ....    | ....  | 5.56                      | ....  | ....                  | ....             | ....  | ....  |
|                    | ROSE MANUFACTURING CO., Beacon, N. Y.              |                   |                    |            |         |       |                           |       |                       |                  |       |       |
| 5175               | House Plant Food 6-12-6                            | Greenwich         | 0.05               | 6.44       | 5.74    | 0.09  | 12.32                     | 0.65  | 22.40                 | 21.75            | 8.31  | 12.38 |
|                    | SEARS, ROEBUCK & CO., Chicago, Ill.                |                   |                    |            |         |       |                           |       |                       |                  |       |       |
| 5265               | Cross Country Azalea-Camellia Food 7-7-7           | New London        | 0.00               | 6.08       | 1.26    | 0.16  | 7.50                      | 0.18  | 7.40                  | 7.22             | 5.44  | 7.84  |
| 5264               | Cross Country Bulb Food 4-12-8                     | New London        | 0.00               | 3.48       | 0.71    | 0.13  | 4.32                      | 0.33  | 12.60                 | 12.27            | 5.40  | 8.49  |
| 5266 <sup>25</sup> | Cross Country Cattle Manure 1.5-1-2                | New London        | ....               | 0.18       | 0.59    | 1.17  | 1.94                      | 0.15  | 0.95                  | 0.80             | ....  | 3.35  |
| 4835               | Cross Country Evergreen Food 10-6-4                | Hamden            | 0.00               | 9.16       | 0.30    | 0.10  | 9.56                      | 0.28  | 7.40                  | 7.12             | 2.62  | 4.30  |
| 4836               | Cross Country Instant Rose Food 20-20-20           | Hamden            | 0.36               | 6.12       | 14.12   | 0.00  | 20.60                     | 0.10  | 20.60                 | 20.50            | 14.04 | 21.17 |
| 4837               | Cross Country Instant Tomato Food 15-30-15         | Hamden            | 0.00               | 6.22       | 10.15   | 0.00  | 16.37                     | 0.05  | 29.20                 | 29.15            | 11.30 | 16.98 |
| 5390               | Cross Country Rose Food 5-10-5                     | Manchester        | 0.33               | 4.32       | 0.16    | 0.24  | 5.05                      | 0.43  | 10.75                 | 10.32            | 4.32  | 5.07  |
| 5389 <sup>26</sup> | Cross Country Sheep Manure 1.5-1-2                 | Manchester        | ....               | 0.12       | 0.20    | 2.02  | 2.34                      | 0.50  | 1.65                  | 1.15             | ....  | 3.20  |
|                    | STERN'S NURSERIES, INC., Geneva, N. Y.             |                   |                    |            |         |       |                           |       |                       |                  |       |       |
| 4853               | Stern's Miracid 30-10-10                           | Newtown           | 0.00               | 4.56       | 25.44   | 0.00  | 30.00                     | 0.00  | 10.50                 | 10.50            | 4.49  | 10.55 |
| 5239               | Stern's Miracid 30-10-10                           | Hamden            | 0.00               | 4.88       | 26.05   | 0.07  | 31.00                     | 0.05  | 10.70                 | 10.65            | 2.54  | 10.08 |
| 4826               | Stern's Miracle-Gro 15-30-15                       | New Haven         | 0.00               | 6.92       | 8.38    | 0.00  | 15.30                     | 0.15  | 32.33                 | 32.18            | 14.14 | 15.74 |
|                    | WENDELL S. STILL, Selden, Long Island, N. Y.       |                   |                    |            |         |       |                           |       |                       |                  |       |       |
| 5215 <sup>27</sup> | Farmanure 2-1-1                                    | Manchester        | ....               | 0.24       | 2.32    | 1.82  | 4.38                      | 0.35  | 2.80                  | 2.45             | ....  | 2.06  |

TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS

| Station No.        | Manufacturer and brand                                                                  | Place of sampling | Nitrogen, per cent |            |         |       | Phosphoric acid, per cent |       |                       | Potash, per cent |       |             |
|--------------------|-----------------------------------------------------------------------------------------|-------------------|--------------------|------------|---------|-------|---------------------------|-------|-----------------------|------------------|-------|-------------|
|                    |                                                                                         |                   | Nitrate            | Ammoniacal | Organic | Total | Citrate-insoluble         | Total | So-called "available" | As muriate       | Total |             |
|                    | STIM-U-PLANT LABORATORIES, Columbus, Ohio                                               |                   |                    |            |         |       |                           |       |                       |                  |       |             |
| 5213               | Stim-U-Plant African Violet Food 5-8-7 . .                                              | Manchester . . .  | 2.96               | 4.32       | 0.12    | 0.00  | 7.40                      | 0.10  | 11.00                 | 10.90            | ....  | 9.14        |
|                    | SUDBURY LABORATORY, Sudbury, Mass.                                                      |                   |                    |            |         |       |                           |       |                       |                  |       |             |
| 5450               | Unit X of Sudbury Tailor-Made Fertilizer<br>40% Nitrogen . . . . .                      | West Hartford . . | ....               | ....       | ....    | ....  | 45.86                     | ....  | ....                  | ....             | ....  | ....        |
| 5451               | Unit Y of Sudbury Tailor-Made Fertilizer<br>40% P <sub>2</sub> O <sub>5</sub> . . . . . | West Hartford . . | ....               | ....       | ....    | ....  | ....                      | 0.00  | 47.80                 | 47.80            | ....  | ....        |
| 5452               | Unit Z of Sudbury Tailor-made Fertilizer<br>40% Potash . . . . .                        | West Hartford . . | ....               | ....       | ....    | ....  | ....                      | ....  | ....                  | ....             | ....  | 46.40       |
|                    | SWIFT & CO., Baltimore, Md.                                                             |                   |                    |            |         |       |                           |       |                       |                  |       |             |
| 4891               | Instant Vigoro 19-28-14 . . . . .                                                       | Willimantic . . . | 4.70               | 5.72       | 8.54    | 0.04  | 19.00                     | 0.05  | 26.70                 | <u>26.65</u>     | ....  | 15.33       |
| 4546               | Vigoro Complete Plant Food 6-10-4 . . . . .                                             | Niantic . . . . . | 0.36               | 5.00       | 0.26    | 0.17  | <u>5.79</u>               | 0.60  | 11.90                 | <u>11.30</u>     | 3.45  | 4.75        |
| 5018               | Vigoro Complete Plant Food for Camellias,<br>Azaleas 5-10-10 . . . . .                  | Waterbury . . . . | 0.32               | 3.94       | 0.30    | 0.77  | 5.33                      | 0.55  | 10.60                 | 10.05            | 4.66  | <u>9.34</u> |
|                    | WALKER-GORDON LABORATORY CO., Plainsboro, N. J.                                         |                   |                    |            |         |       |                           |       |                       |                  |       |             |
| 4852 <sup>2f</sup> | Bovung 2-1-1 . . . . .                                                                  | Newtown . . . . . | ....               | 0.26       | 0.26    | 1.49  | 2.01                      | 0.33  | 1.20                  | 0.87             | ....  | 2.43        |

..... indicates deficiencies.

<sup>2f</sup>Sand, 1.49%.

TABLE 8. ANALYSES OF SMALL PACKAGE FERTILIZERS

| Nitrate | Ammoniacal | Nitrogen, per cent |                 |             | Total | Phosphoric acid, per cent |              |                       | Potash, per cent |       |
|---------|------------|--------------------|-----------------|-------------|-------|---------------------------|--------------|-----------------------|------------------|-------|
|         |            | Water-soluble      | Water-insoluble | Organic     |       | Citrate-insoluble         | Total        | So-called "available" | As muriate       | Total |
| 2.96    | 4.32       | 0.12               | 0.00            | 7.40        | 0.10  | 11.00                     | 10.90        | ....                  | 9.14             |       |
| ....    | ....       | ....               | ....            | 45.86       | ....  | ....                      | ....         | ....                  | ....             |       |
| ....    | ....       | ....               | ....            | ....        | 0.00  | 47.80                     | 47.80        | ....                  | ....             |       |
| ....    | ....       | ....               | ....            | ....        | ....  | ....                      | ....         | ....                  | 46.40            |       |
| 4.70    | 5.72       | 8.54               | 0.04            | 19.00       | 0.05  | 26.70                     | <u>26.65</u> | ....                  | 15.33            |       |
| 0.36    | 5.00       | 0.26               | 0.17            | <u>5.79</u> | 0.60  | 11.90                     | <u>11.30</u> | 3.45                  | 4.75             |       |
| 0.32    | 3.94       | 0.30               | 0.77            | 5.33        | 0.55  | 10.60                     | 10.05        | 4.66                  | <u>9.34</u>      |       |
| ....    | 0.26       | 0.26               | 1.49            | 2.01        | 0.33  | 1.20                      | 0.87         | ....                  | 2.43             |       |

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

| Station No. | Material                                    | Total nitrogen     | Ammonia nitrogen | Total phosphoric acid | Insoluble phosphoric acid | "Available" phosphoric acid | Water-soluble potash | Chlorine | Moisture | Calcium | Magnesium         | Manganese          |
|-------------|---------------------------------------------|--------------------|------------------|-----------------------|---------------------------|-----------------------------|----------------------|----------|----------|---------|-------------------|--------------------|
| 4014        | "Adco"                                      | 11.83              | 11.78            | ...                   | ...                       | ...                         | ...                  | ...      | ...      | ...     | ...               | ...                |
| 4269        | Bone Black                                  | 0.19               | ...              | 38.00                 | ...                       | ...                         | 0.16                 | ...      | ...      | ...     | ...               | ...                |
| 4052        | Bone Sawings                                | 3.23               | ...              | 26.30                 | ...                       | ...                         | ...                  | ...      | ...      | ...     | ...               | ...                |
| 3838        | Compost                                     | 1.78               | ...              | 3.55                  | ...                       | ...                         | 2.53                 | ...      | ...      | ...     | ...               | ...                |
| 4291        | Digested Sludge from Sewage Treatment Plant | 2.02               | ...              | 2.20                  | ...                       | ...                         | 0.13                 | ...      | ...      | ...     | ...               | ...                |
| 3998        | Fertilizer                                  | 19.72 <sup>1</sup> | 0.00             | 0.00                  | ...                       | ...                         | 0.13                 | ...      | ...      | ...     | 2.66 <sup>4</sup> | ...                |
| 5331        | Fertilizer                                  | 6.71               | ...              | 9.58                  | ...                       | ...                         | 7.50                 | ...      | ...      | ...     | ...               | ...                |
| 4691        | Fertilizer to Feed Roses                    | 5.00 <sup>2</sup>  | 2.78             | 8.35                  | 0.33                      | 8.02                        | 8.08                 | 5.12     | ...      | ...     | ...               | ...                |
| 1001        | 45% Protein Peanut Meal                     | 6.98               | ...              | 1.40                  | ...                       | ...                         | 1.51                 | ...      | 7.61     | 0.20    | 0.16              | ...                |
| 3765        | German Peat Moss                            | 0.62               | ...              | 0.15                  | ...                       | ...                         | 0.16                 | ...      | ...      | ...     | ...               | ...                |
| 5272        | G.P.M. Glaucanite Green                     | ...                | ...              | ...                   | ...                       | ...                         | ...                  | ...      | ...      | ...     | ...               | ...                |
| 3803        | Sand Potash Mineral                         | ...                | ...              | ...                   | ...                       | ...                         | ...                  | ...      | ...      | ...     | ...               | ...                |
| 3803        | Guar Bean Meal                              | 3.83               | ...              | 1.03                  | ...                       | ...                         | 1.86                 | ...      | ...      | ...     | ...               | ...                |
| 2071        | "Humu-Sure"                                 | 1.62               | ...              | 0.68                  | ...                       | ...                         | 5.07                 | ...      | ...      | ...     | ...               | ...                |
| 3854        | "Humu-Sure"                                 | 1.78               | ...              | 0.73                  | ...                       | ...                         | 5.10                 | ...      | ...      | ...     | ...               | ...                |
| 6020        | Manganese Sulphate                          | ...                | ...              | ...                   | ...                       | ...                         | ...                  | ...      | ...      | ...     | ...               | 23.09 <sup>5</sup> |
| 4535        | Manure                                      | 0.43               | ...              | 0.38                  | ...                       | ...                         | 0.20                 | ...      | 75.00    | ...     | ...               | ...                |
| 3837        | Plastic Waste                               | 29.90 <sup>6</sup> | 0.00             | ...                   | ...                       | ...                         | ...                  | ...      | ...      | ...     | ...               | ...                |
| 4520        | Poultry Manure                              | 2.02               | ...              | 4.00                  | ...                       | ...                         | 1.74                 | ...      | ...      | ...     | ...               | ...                |
| 4521        | Poultry Manure                              | 2.08               | ...              | 4.25                  | ...                       | ...                         | 1.86                 | ...      | ...      | ...     | ...               | ...                |
| 4880        | Poultry Manure                              | 1.36               | ...              | 3.65                  | ...                       | ...                         | 1.58                 | ...      | ...      | ...     | ...               | ...                |

|      |                                                               |                    |       |       |      |       |       |      |     |     |                   |     |
|------|---------------------------------------------------------------|--------------------|-------|-------|------|-------|-------|------|-----|-----|-------------------|-----|
| 5334 | Poultry Manure and Inert Matter                               | 2.18               | 0.32  | 0.35  | ...  | ...   | 2.15  | ...  | ... | ... | ...               | ... |
| 4589 | "Sea-Coll"                                                    | 0.04               | ...   | 20.25 | ...  | ...   | ...   | ...  | ... | ... | ...               | ... |
| 5219 | "Seacrop Organic Soil Conditioner Blended Liquefied Seaweeds" | 0.26               | ...   | 0.10  | ...  | ...   | 0.25  | ...  | ... | ... | ...               | ... |
| 4588 | Sewage Sludge                                                 | 2.38 <sup>8</sup>  | ...   | 0.75  | ...  | ...   | 0.09  | ...  | ... | ... | ...               | ... |
| 4846 | 32-10-2 Fertilizer Soluble                                    | 32.40 <sup>8</sup> | 11.96 | 10.30 | 0.10 | 10.20 | 1.58  | 0.72 | ... | ... | 0.38 <sup>4</sup> | ... |
| 3856 | Tobacco Stems                                                 | 2.98               | ...   | 0.83  | ...  | ...   | 11.02 | ...  | ... | ... | ...               | ... |
| 5013 | "Wonderlawn" 10-6-4                                           | 9.38 <sup>8</sup>  | 6.30  | 8.13  | 0.53 | 7.60  | 4.21  | 1.52 | ... | ... | ...               | ... |

..... indicates deficiencies.

<sup>1</sup>Nitrate nitrogen, 0.00%; soluble organic nitrogen, 1.16%; insoluble nitrogen, 18.56%.

<sup>2</sup>Nitrate nitrogen, 0.27%; soluble organic nitrogen, 0.62%; active insoluble nitrogen, 0.98%; inactive insoluble nitrogen, 0.35%.

<sup>3</sup>Water-soluble, 0.00%; insoluble nitrogen, 0.62%; ash, 1.18%; fiber, 33.08%; pH, 5.4.

<sup>4</sup>Guaranteed 0.60%.

<sup>5</sup>Guaranteed 23.65%.

<sup>6</sup>Nitrate nitrogen, 0.00%; soluble organic nitrogen, 26.20%; active insoluble nitrogen, 1.63%; inactive insoluble nitrogen, 2.07%.

<sup>7</sup>Soluble organic nitrogen, 0.48%; insoluble nitrogen, 1.38%; sand, 9.12%.

<sup>8</sup>Nitrate nitrogen, 0.00%; soluble organic nitrogen, 20.38%; insoluble nitrogen, 0.06%.  
"Guaranteed 1.21%.

"pH 6.7.

"Nitrate nitrogen, 0.11%; soluble organic nitrogen, 1.81%; insoluble nitrogen, 1.27%.

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