

Kentucky Agricultural Experiment Station

UNIVERSITY OF KENTUCKY

THOMAS P. COOPER, Director

Inspection, Certification, and Transportation of Nursery Stock in Kentucky With a Brief Report For the Year Ended June 30, 1942.

W. A. PRICE and HOWARD G. TILSON

New problems have arisen in the nursery industry as a result of the war. Trained labor has been scarce, especially for landscape work. The difficulty of obtaining burlap, nails, certain spray materials, and farming machinery has caused inconvenience. Rationing tires has brought about changes in the method of selling and delivering nursery products. Out of these difficulties, however, some good has come. Itinerant tree truckers and peddlers, formerly so prevalent, have now disappeared almost completely.

Demand for nursery stock has been good. Some nurserymen have had more orders than could be properly filled. With increasing attention directed toward agricultural production and the "Victory Garden" program, nurserymen expect most types of stock to remain in demand through the fall season.

It is the policy of the Kentucky Agricultural Experiment Station, through its Entomologist, to publish an informal bulletin each year containing information regarding production and movement of nursery stock, requirements for interstate shipment of plants, the issuance of nursery inspection certificates, and the granting of permits to nursery dealers and nursery agents. The bulletin also contains a discussion of some of the important destructive insects and diseases recently introduced into this country. A list of licensed nurserymen, dealers and agents is included.

NURSERY STOCK DEFINED

All trees, shrubs, and vines, including ornamentals and evergreens, whether nursery grown or native; roses; strawberry, raspberry and blackberry plants; herbaceous perennial plants and roots; ornamental bulbs, corms, tubers, and rhizomes; and any other plants which may serve as a means for disseminating injurious insects and plant diseases are classed as nursery stock. For regulatory purposes the list of plants classed as nursery stock must be changed from time to time depending upon the introduction and distribution of certain insects and plant diseases.

COOPERATION

All states and territories in North America have laws designed to control the spread of injurious insects and plant diseases. Some of these were enacted in recent years and others are of long standing. Much progress has been made in eliminating unnecessary restrictive features from some of the older laws. The ultimate goal is to have all state, federal, and territorial requirements for shipping nursery stock as nearly uniform as possible.

Progress in attaining the desired uniformity of requirements between states has been slow. There is a very definite trend, however, in that direction and toward better cooperation between nursery inspection officials and nursery growers, dealers, and agents. Nursery inspectors are acting more as advisers to help nurserymen produce higher quality stock. Nurserymen are asking for more information and advice and are not concealing questionable stock. This type of cooperation should be encouraged and extended.

REQUIREMENTS FOR SHIPMENT OF NURSERY STOCK

The U. S. Post Office Department and the express companies require a copy of a valid certificate of inspection to be attached to each package of nursery stock offered for shipment. This requirement is made also by forty-one states, some of which have additional features such as paying fees, filing duplicate inspection certificates, purchasing special tags, and posting bonds.

South Carolina, Florida, Washington, and Louisiana require nurserymen who ship stock into their respective states to file duplicate copies of the invoice with the proper administrative authority. (Louisiana reports non-enforcement of this requirement at the present time.) Thirteen states, Florida, Mississippi, Arkansas, Louisiana, Oklahoma, Washington, Oregon, California, Idaho, Montana, Utah, Arizona, and Colorado, have provisions for postal or destination inspection of incoming nursery stock. California and Arizona maintain border inspection. Washington, Idaho, and Montana require destination inspection, charging \$10.00 per car to licensed nurserymen and 10 per cent of invoice with 50-cent minimum to unlicensed nurserymen. New Jersey, Pennsylvania, Georgia, Louisiana, Oklahoma, and Nevada require special affidavits or statement of nurserymen or dealers within their respective states who receive out-of-state shipments of nursery stock.

To file inspection certificates and bonds, pay fees, secure permit tags, or get information regarding any additional requirements of the various states, it is suggested that correspondence be directed to the officers in charge of inspection regulations in the states concerned. Names of these officers are given on pages 5 and 6 of this bulletin.

| State | State of origin Certificate filed | Nursery- man's filing fee | Agent's fee | Special Posted | |
|-------------------|---|---------------------------------|----------------|----------------|----------------------|
| | | | | tag | bonds |
| Alabama | Yes | \$10.00 or reciprocal | \$1.00 | Yes | None |
| Arizona | No | None | None | No | None |
| Arkansas | Yes | \$5.00 or reciprocal | \$1.00 | Yes | Recip- rocal |
| California | No | None | None | No | None |
| Colorado | Yes | None | None | No | None |
| Connecticut | Yes | None | None | No | None |
| Delaware | No | Reciprocal | None | No | None |
| Florida | Yes | None | None | Yes | None |
| Georgia | No | \$5.00 or reciprocal | \$1.00 | No | None |
| Idaho | Yes | \$5.00 to \$15.00 | None | No | \$1,000 ¹ |
| Illinois | Yes | None | None | No | None |
| Indiana | Yes | \$1.00 | \$1.00 | No | None |
| Iowa | Yes | Reciprocal | None | No | None |

(List is continued on page 4)

| State | State of origin Certificate filed | Nursery-man's filing fee | Agent's fee | Special tag | Posted bonds |
|----------------------|-----------------------------------|---------------------------------|----------------------|-------------|----------------------|
| Kansas | Yes | Reciprocal | None | No | None |
| Kentucky | Yes | \$5.00 | \$5.00 | No | None |
| Louisiana | Yes | None | None | No | None |
| Maine | Yes | \$1.00 | \$1.00 | No | None |
| Maryland | Yes | Reciprocal | None | No | None |
| Massachusetts | Yes | None | None | No | None |
| Michigan | Yes | \$15.00 or reciprocal | \$1.00 | No | None |
| Minnesota | Yes | Reciprocal | Reciprocal | No | None |
| Mississippi | Yes | Reciprocal | None | No | Reciprocal |
| Missouri | Yes | \$1.00 ² | None | No | None |
| Montana | No | \$25.00 | \$25.00 | No | \$1,000 |
| Nebraska | Yes | \$10.00 or reciprocal | \$1.00 | No | None |
| Nevada | No | None | None | No | None |
| New Hampshire | No | None | None | No | None |
| New Jersey | Yes | Reciprocal | None | No | None |
| New Mexico | Yes | \$10.00 | \$25.00 | Yes | None |
| New York | No | None | None | No | None |
| North Carolina | Yes | Reciprocal | None | No | \$1,000 ³ |
| North Dakota | Yes | Reciprocal | \$10.00 | No | \$500 |
| Ohio | Yes | Reciprocal | None | No | None |
| Oklahoma | Yes | \$10.00 or reciprocal | \$1.00 | Yes | None |
| Oregon | No | None | \$1.00 | No | None |
| Pennsylvania | Yes | None | None | No | None |
| Rhode Island | Yes | None | None | No | None |
| South Carolina | Yes | None | None | Yes | None |
| South Dakota | Yes | \$1.00 | \$1.00 | No | None |
| Tennessee | Yes | None | Reciprocal | No | \$5,000 ³ |
| Texas | Yes | \$5.00 or reciprocal | None | Yes | None |
| Utah | Yes | \$10.00 | None | No | None |
| Vermont | No | None | None | No | None |
| Virginia | No | \$10.00 or reciprocal | \$1.00 or reciprocal | No | None |
| Washington | No | \$5.00 to \$15.00 or reciprocal | \$1.00 | No | None |
| West Virginia | Yes | \$15.00 | \$1.00 | Yes | None |
| Wisconsin | Yes | \$10.00 or reciprocal | Reciprocal | No | None |
| Wyoming | Yes | \$15.00 | None | No | \$500 |

¹ Only for fruit-stock shippers.

² Only to sweetpotato plant shippers.

³ For nurserymen who promise maintenance.

STATE OFFICERS IN CHARGE OF INSPECTION

| | |
|--------------------|---|
| Alabama..... | B. P. Livingston, Chief, Division of Plant Industry, Montgomery. |
| Arizona..... | J. L. E. Lauderdale, State Entomologist, Phoenix. |
| Arkansas..... | Paul H. Millar, Chief Inspector, State Plant Board, Little Rock. |
| California..... | D. B. Mackie, Chief, Bureau of Entomology and Plant Quarantine, Department of Agriculture, Sacramento |
| Colorado..... | F. Herbert Gates, State Entomologist, 20 State Museum, Denver. |
| Connecticut..... | Roger B. Friend, State Entomologist, Box 1106, New Haven. |
| Delaware..... | V. J. Carmine, Secretary, State Board of Agriculture, Dover. |
| Florida..... | Arthur C. Brown, Quarantine Inspector, State Plant Board, Gainesville. |
| Georgia..... | J. H. Girardeau, State Entomologist, Atlanta. |
| Idaho..... | Paul T. Rowell, Director, Bureau of Plant Industry, Boise. |
| Illinois..... | H. F. Seifert, Chief Plant Inspector, 300 State Bank Building, Glen Ellyn. |
| Indiana..... | Frank N. Wallace, State Entomologist, Indianapolis. |
| Iowa..... | Carl J. Drake, State Entomologist, Ames. |
| Kansas, North..... | George A. Dean, Entomologist, Kansas Agricultural College, Manhattan. |
| Kansas, South..... | H. B. Hungerford, Entomologist, Lawrence. |
| Kentucky..... | W. A. Price, State Entomologist, Agricultural Experiment Station, Lexington. |
| Louisiana..... | W. E. Anderson, State Entomologist, Baton Rouge. |
| Maine..... | S. L. Painter, State Horticulturist, Augusta. |
| Maryland..... | E. N. Cory, State Entomologist, College Park. |
| Massachusetts..... | R. H. Allen, Director, Division of Plant Pest Control, State House, Boston. |
| Michigan..... | C. A. Boyer, Bureau Orchard and Nursery Inspection Service, Department of Agriculture, Lansing. |
| Minnesota..... | A. G. Ruggles, State Entomologist, University Farm, St. Paul. |
| Mississippi..... | Clay Lyle, Entomologist, State Plant Board, State College. |
| Missouri..... | J. Allison Denning, State Entomologist, Department of Agriculture, Jefferson City. |
| Montana..... | George L. Knight, Chief, Division of Horticulture, Missoula. |
| Nebraska..... | L. M. Gates, Entomologist, Department of Agriculture and Inspection, Lincoln. |
| Nevada..... | George G. Schweis, Director, Division of Plant Industry, P. O. Box 1027, Reno. |
| New Hampshire..... | W. C. O'Kane, Deputy Commissioner, Department of Agriculture, Durham. |

| | |
|-------------------------|---|
| New Jersey..... | Harry B. Weiss, Chief, Bureau of Plant Industry, Trenton. |
| New Mexico..... | R. F. Crawford, Head of Biology, College of Agriculture and Mechanic Arts, State College. |
| New York..... | A. B. Buchholz, Director, Bureau of Plant Industry, Department of Agriculture and Markets, Albany. |
| North Carolina..... | C. H. Brannon, State Entomologist, Department of Agriculture, Raleigh. |
| North Dakota..... | J. A. Munro, State Entomologist, Fargo. |
| Ohio..... | John W. Baringer, Specialist in Charge, Insect and Plant Disease Control, Department of Agriculture, Columbus. |
| Oklahoma..... | Thomas B. Gordon, Chief Nursery Inspector, State Board of Agriculture, Oklahoma City. |
| Oregon..... | Frank McKennon, Chief, Division of Plant Industry, Agricultural Building, Salem. |
| Pennsylvania..... | R. H. Bell, Director, Bureau of Plant Industry, Harrisburg. |
| Rhode Island..... | Brayton Eddy, State Entomologist, State House, Providence. |
| South Carolina..... | Franklin Sherman, Chief, Division of Entomology and Zoology, Clemson College. |
| South Dakota..... | Charles S. Weller, Chief, Division of Horticulture and Entomology, Pierre. |
| Tennessee..... | G. M. Bentley, State Entomologist and Plant Pathologist, 65 Biology Building, University of Tennessee, Knoxville. |
| Texas..... | J. M. Del Curto, Chief, Division of Plant Quarantine, Department of Agriculture, Austin. |
| Utah..... | Earl Hutchings, State Agricultural Inspector, State Board of Agriculture, Salt Lake City. |
| Vermont..... | M. B. Cummings, State Nursery Inspector, Burlington. |
| Virginia..... | G. T. French, State Entomologist, 1112 State Office Building, Richmond. |
| Washington..... | J. I. Griner, Supervisor of Horticulture, Department of Agriculture, Olympia. |
| West Virginia..... | F. Waldo Craig, Department of Agriculture, Charleston. |
| Wisconsin..... | E. L. Chambers, State Entomologist, Department of Agriculture, Madison. |
| Wyoming..... | B. Thomas Snipes, State Entomologist, State Department of Agriculture, Powell. |
| U. S. D. A..... | P. N. Annand, Chief, Bureau of Entomology and Plant Quarantine, Washington, D. C. |
| Dominion of Canada..... | L. S. McLaine, Secretary, Destructive Insect and Pest Act Advisory Board, Department of Agriculture, Ottawa. |

JAPANESE BEETLE

We are fortunate in Kentucky to have avoided thus far any large infestation of Japanese beetle. In the heavily infested areas in other states the damage to lawns, fruits, vegetables, flowers, and crops is severe and costly. The infested area includes the District of Columbia; the entire states of Connecticut, Delaware, Massachusetts, New Jersey, and Rhode Island; and parts of Maine, Ohio, New Hampshire, Vermont, New York, Pennsylvania, Virginia, Maryland, West Virginia, Indiana, Missouri, North Carolina, Georgia, South Carolina, Illinois, and Michigan.

Beginning in 1936, the Kentucky Agricultural Experiment Station in cooperation with the Bureau of Entomology and Plant Quarantine, U. S. Department of Agriculture, has maintained a summer trapping program to determine the presence and extent of the spread of the Japanese beetle within the state. The trapping record is as follows:

1936— 2 beetles in Louisville and 1 in Lexington
1937—10 beetles in Louisville and 1 in Lexington
1938—62 beetles in Louisville and 1 in Lexington
1939—13 beetles in Louisville
1940— 4 beetles in Louisville
1941— 1 beetle in Louisville

The results from the application of lead arsenate to the infested area in Louisville during September, 1938 (see Kentucky Regulatory Series Bulletin No. 19, 1939), are clearly shown in the reduction from 62 beetles in 1938 to only 1 beetle in 1941.

PHONY PEACH DISEASE

Since 1935 an intensive program of inspection of all peach-growing sections within the state has been carried. Nine trees infected with the virus causing phony peach disease have been found and destroyed. In 1939 an infected tree was found in Webster county in the same orchard where an infected tree was found in 1937. This was the only case where the disease had recurred in Kentucky. No infected trees have been found since 1939; and if no diseased trees are found during the 1942 inspection period, Kentucky will probably be declared free of phony peach disease.

WHITE FRINGED BEETLE

White fringed beetle infestation is still restricted to a small area in Florida, Alabama, Mississippi, and Louisiana. The highly destructive habits of the white fringed beetle make it imperative that we exercise every precaution against the further spread of the pest. Every year we can prevent new areas becoming infested we shall gain valuable time in our search for ways and means of combating this destructive pest.

Research is being conducted to find weak points in the life history and habits of white fringed beetle whereby control measures can be more effectively applied. Sanitary measures and fumigation have already made it possible to grow and ship products from within the heavily infested area with very little danger of spreading the infestation.

The inspection of properties in Kentucky to which plants from the infested areas have been shipped will be continued. No beetles have yet been found within the borders of the state.

ELM DISEASE

A comparatively new disease of elms that threatens to be even more destructive than Dutch elm disease has appeared in a number of midwestern and southern states including Kentucky, Ohio, Illinois, Indiana, Missouri, Tennessee, and West Virginia. The disease is called phloem necrosis, because the phloem tissue of affected trees is killed.

The first symptoms of this disease are the curling of leaves at the tips of branches, followed by yellowing and premature dropping of leaves. The leaves throughout the tree are affected. (Trees attacked by Dutch elm disease or wilt have only one or two branches affected.) The cambium layer is discolored first at the base of the trunk and in the root system. Later the bark cracks at the base of the trunk and can be peeled off. Moderately discolored phloem tissue in diseased trees has a faint odor resembling that of wintergreen.

Phloem necrosis is believed to be caused by a virus. The means by which the virus is transmitted from diseased to healthy elms has not yet been determined.

No cure for this disease has been discovered. It is, there-

fore, recommended that diseased trees be grubbed out and burned in order to prevent the spread of the trouble to healthy trees in the vicinity.

GRASSHOPPERS

Several nurseries experienced grasshopper damage during the summer of 1940, and rather severe injury in 1941. Conditions to date indicate that there may be heavy damage by this pest throughout the state in 1942.

Grasshoppers are usually content to feed in meadows, pastures and along roadsides as long as the grass is green and tender. But when the grass begins to dry and becomes tough they migrate to fields where plants are more succulent. The insects usually start feeding on the edge of the planting and gradually move deeper into the field, consuming the plants as they go. In nurseries the insects feed primarily upon the foliage of trees and shrubs. Damage is sometimes done to the bark of evergreens, shrubs, and fruit trees.

An effective control for grasshoppers is the use of a poisoned bait. The bait recommended for the species now prevalent in Kentucky is made by mixing (while dry) 100 pounds of wheat bran with 5 pounds of paris green or white arsenic. Two gallons of fresh (not used) lubricating oil such as is used for automobile crankcases is added and the whole is mixed thoroughly. The oil recommended is rated 20 to 30 S. A. E., the latter being preferred in very hot, dry weather. The bait should be broadcast by hand at the rate of 10 to 12 pounds of dry weight per acre. Scatter the bait between six and eight o'clock in the morning in the places where the grasshoppers are found.

Do not look for results until about three days after applying the bait. Two or three applications may be necessary. Dead grasshoppers will be found under trash and litter—few of them die in the open spaces. A complete kill should not be expected, but those that are left will cause less damage than could have been expected without the poisoning.

If the bait is properly prepared it will be flaky and free from lumps and balls. This type of bait is of little danger to grazing livestock, poultry, or birds when uniformly spread at the recommended rate.

**INSECTS AND DISEASES IN THE ORDER OF THEIR
FREQUENCY OF APPEARANCE IN KENTUCKY
NURSERIES 1941-42**

| Diseases | Insects |
|----------------------|-------------------------|
| Cedar rust | Bagworm |
| Gladiolus scab | Red spider |
| Delphinium crown rot | Oriental fruit moth |
| Gladiolus basal rot | Strawberry crown borer |
| Fire blight | Grasshopper |
| Cherry leafspot | San Jose scale |
| Juniper twig blight | Aphids |
| Willow canker | Gladiolus thrips |
| Rose blackspot | Dahlia leafhopper |
| Iris leafspot | White pine bark aphid |
| Chrysanthemum mosaic | Holly leaf miner |
| | Obscure scale |
| | Pine needle scale |
| | Apple leaf skeletonizer |
| | Mealy bug |
| | Euonymus scale |
| | Pine tip moth |
| | Thrips |

**KENTUCKY NURSERYMEN WHO RECEIVED CERTIFICATES OF
INSPECTION, 1941-42**

| Name | Address | Acreage | Kind of Stock |
|---|--------------------------------------|---------|--------------------|
| Bagwell, Harlan | Murray | | Sweetpotato plants |
| Barnett, B. W. | Hardin, R. 1 | 1 | Gladioli |
| Bellefonte Nursery, Orval Lycan | Ashland | 5 | General |
| Berea College | Berea | 1 | Ornamental |
| Blankenbaker, S. H. | Jeffersontown | 3 | General |
| Bourbon Nurseries, J. S. Wilson | Paris | 5 | General |
| Boyle Gardens, Mrs. Lillian Vance | Owensboro | 5 | Ornamental |
| Brown, A. J. | 110 Lackawanna Road, Lexington | 1/2 | Gladioli |
| Burnett, F. M., and Sons.... | Oakland | 1 | Strawberry plants |
| Burris, W. S. | Buchanan | 1/4 | General |
| Byrn Landscape Service, Inc. | Mayfield | 1/2 | General |
| Carter Nursery, H. V. Pack | Carter | 1/2 | General |
| Chick, C. D. | Marion | 1/2 | Ornamental |
| Clark, Joe A. | Webster | 1/2 | Fruits |
| Clinton Nursery, O. Piper | Clinton | 1 | Fruits |
| Lockwood Nursery & Landscape Garden, Mrs. Lon Compton | Lockwood | 1 | General |
| Conger, Charles E. | Marion | 1/2 | Strawberry plants |
| Crawford, I. T. | Murray | 1 | Gladioli |

KENTUCKY NURSERYMEN—Continued

| Name | Address | Acreage | Kind of Stock |
|---|---------------------------------------|---------|--------------------|
| Crume Nursery & Landscape Co., T. C. Crume | Florence | 15 | General |
| Curry, J. G. | Hawesville | | Sweetpotato plants |
| Dieterich, C. P., & Bro. | Maysville | 1 | Ornamental |
| Dixie View Nurseries, A. L. Heger | Covington, Box 423 | 65 | General |
| Donaldson Nurseries, J. F. Donaldson | Sparta and Warsaw | 70 | General |
| Dressman, J. A. | Covington, R. 3 | ¼ | Tulip bulbs |
| Durrett, Lydian, Florist | Louisville, R. 4 | 2 | Ornamental |
| Evans Brothers | Christine | ½ | Fruits |
| Fike Nurseries, J. W. Fike | Hopkinsville | 35 | General |
| Gardener, Boone, Nursery, Dan Gardner | Louisville | 10 | General |
| Gramse Nursery, Mrs. R. A. Gramse | Paducah | 4 | General |
| Grant Gardens, Dr. H. L. Grant | Louisville | 2 | Ornamental |
| Green River Home Nursery, W. A. Sandefur | Robards | 10 | General |
| Green, T. W. | Bowling Green | 2 | General |
| Haag Nursery, R. L. Haag | Jeffersontown | 30 | General |
| Highland Place Nursery, Mrs. Joseph M. Garrett | Versailles | 10 | General |
| Hillenmeyer Nurseries | Lexington | 275 | General |
| Humphreys' Landscape Service, A. G. Humphreys | Mt. Sterling | 5 | General |
| Immegart's Nursery Fred J. Immegart | 250 S. Alexandria Pike Newport | 2 | General |
| Johnston, Allie | Calvert City | 1 | General |
| Junior Club Nursery, A. C. Herrin | Shopville | ½ | Fruits |
| Kelly, Asa | Fordsville | ½ | Fruits |
| Kentucky Forest Service Nursery | Louisville | 30 | Native trees |
| Kirch Gardens, Louis Kirch | 818 Perennial Drive, Louisville | 1 | Ornamental |
| Kirksville Chapter F. F. A., S. E. Wheeler | Kirksville | ½ | Ornamental |
| Klein Nursery & Floral Co., Theo. R. Klein | Crestwood | 35 | General |
| Korfhage, Louis J. | Shively | 10 | General |
| Leeming Nursery, W. H. Leming | Shively | 15 | General |

KENTUCKY NURSERYMEN—Continued

| Name | Address | Acreage | Kind of Stock |
|--|---|---------|--------------------|
| Limestone Gardens, Mr. and Mrs. F. W. Galloway | Washington | 2 | Ornamental |
| Lindberg Nursery & Landscape Co. | Versailles | 5 | General |
| Louisville Nurseries | St. Matthews | 50 | General |
| Martin's Nursery, Robert Martin | Carrollton | 20 | General |
| McCutcheon Green- houses, W. F. Mc- Cutcheon | Paducah | | Greenhouse |
| Metcalf Greenhouses | Hopkinsville | | Greenhouse |
| Mt. Airy Nursery, Mrs. Dalton Brown | Harrodsburg | 2 | General |
| Mt. Pleasant Gardens | 1810 N. Ft. Thomas Ave., Ft. Thomas | 10 | General |
| Murray Nursery & Florist, Mrs. W. P. Roberts | Murray | 4 | General |
| Nick's Nursery, Nick & Jeff Verburg | Anchorage | 2 | General |
| Piper, B. B. | Clinton | 1/2 | Fruits |
| Pleasant View Green- houses, T. L. Metcalf | Madisonville | | Roses |
| Pomona Nurseries | Bowling Green | 15 | General |
| Pullam-Threlkeld Nursery | Clay | 5 | General |
| Renfro, H. E. | Beaver Dam | 1/4 | Fruits |
| Reynolds, A. D. & Son | Harrodsburg | 2 | General |
| Richardson Plant Co. | Murray | | Sweetpotato plants |
| Ridgeway Nurseries Theo. Zollinger, | St. Mathews | 7 | General |
| Roberts, B. E. | Benton | | Sweetpotato plants |
| Ross, R. M. | Paducah, R. 4 | | Strawberry plants |
| Rottgering Greenhouses | Paducah | 1/2 | Ornamental |
| Sanders Brothers Nursery | Paducah | 10 | General |
| Schneidman Green- houses | Paducah | 15 | Ornamental |
| Schulz, Jacob, Co. | Louisville | 3 | General |
| Shacklette, Dr. W. J. | Hodgenville | 1/4 | Ornamental |
| Shupe Nursery | Sedalia | 10 | General |
| Singer Gardens | Stamping Ground | 2 | Ornamental |
| Smith, Bert R. | Bowling Green | 1/4 | Chrysanthemums |
| Smiths Greenhouses, Jan Smits | Paris | 5 | General |
| Soil Conservation Nursery | Paducah | 60 | Tree seedlings |
| Tapscott Florist | Owensboro | 5 | General |
| Todd County Nursery, J. M. Green | Trenton | 1 | General |
| Walker, Kingsley, Co. | Louisville | 5 | Ornamental |
| Walnut Lawn Farm | Lexington | 6 | General |
| Webb, Clifton | Hawesville | | Sweetpotato plants |

KENTUCKY NURSERYMEN—Continued

| Name | Address | Acreage | Kind of Stock |
|--------------------------------------|------------|---------|--------------------|
| Webb's Evergreen Nursery, R. F. Webb | Warsaw | 1½ | Ornamental |
| Webb, S. T. | Waynesburg | ½ | Strawberry plants |
| Westerman, W. H. | Erlanger | ½ | Ornamental |
| Wettstain, H. C. | Chambers | | Sweetpotato plants |
| Whittinghill, Lonnie M. | Love | ½ | General |
| Whittinghill, Samuel D. | Love | ¼ | Fruits |
| Willadean Nurseries, Alvin Kidwell | Sparta | 75 | General |
| Williams, E. C. | Almo, R. 2 | | Sweetpotato plants |
| Yopp Nursery, M. J. Yopp | Paducah | 15 | General |

NURSERY DEALERS

| | |
|--------------------------------------|---------------------|
| Alexander, I. P. | Campbellsville, Ky. |
| Bacon, J., and Sons | Louisville, Ky. |
| Barnes, Marshall | Lexington, Ky. |
| Barnett's Nursery | Murray, Ky. |
| Bomar-Summers Co. | Louisville, Ky. |
| Bunton Seed Co. | Louisville, Ky. |
| Cantrell, Clarence | Smithville, Tenn. |
| Cottle, Dollie | West Liberty, Ky. |
| Dixie Garden Nursery, Arnold Bickers | Lexington, Ky. |
| Evans Gardens | Lexington, Ky. |
| Gallaher Drug Co., The | Ashland, Ky. |
| Grant, W. T. Co. | Louisville, Ky. |
| Grant, W. T. Co. | Paducah, Ky. |
| Green, H. L. Co. | Louisville, Ky. |
| Hall Seed Co. | Louisville, Ky. |
| Haupt, Fred, Florist | Louisville, Ky. |
| Hawkins, S. C. | Bloomfield, Ky. |
| Hoagland and Masters Seed Co. | Louisville, Ky. |
| Kaufman-Straus Co. | Louisville, Ky. |
| Kresge, S. S. Co., No. 1 | Louisville, Ky. |
| Kresge, S. S. Co., No. 1 | Lexington, Ky. |
| Kresge, S. S. Co. | Covington, Ky. |
| Kresge, S. S. Co. | Newport, Ky. |
| Kresge, S. S. Co. | Owensboro, Ky. |
| Kresge, S. S. Co., No. 2 | Lexington, Ky. |
| Kresge, S. S. Co. | Paducah, Ky. |
| Kresge, S. S. Co., No. 2 | Louisville, Ky. |
| Kress, S. H. and Co. | Ashland, Ky. |
| Kress, S. H. and Co. | Hopkinsville, Ky. |
| Kress, S. H. and Co. | Winchester, Ky. |
| Landrus and Yantis | Lexington, Ky. |
| Lose Brothers | Louisville, Ky. |
| McCrary Stores Corporation | Louisville, Ky. |
| McCullough, The J. Chas., Seed Co. | Cincinnati, Ohio |
| McElroy, The H. A. Co. | Bowling Green, Ky. |
| McElroy, The H. A. Co. | Glasgow, Ky. |
| McElroy, The H. A. Co. | Madisonville, Ky. |
| McElroy, The H. A. Co. | Somerset, Ky. |

NURSERY DEALERS—Continued

| | |
|--|---------------------|
| McElroy, The H. A. Co. | Morganfield, Ky. |
| McElroy, The H. A. Co. | Providence, Ky. |
| McElroy, The H. A. Co. | Murray, Ky. |
| McElroy, The H. A. Co. | Princeton, Ky. |
| MacRae, Roderick | Linnville, N. C. |
| Michler, Charles | Lexington, Ky. |
| Mountjoy, John C. | Midway, Ky. |
| Murphy, G. C. Co. | Ashland, Ky. |
| Murphy, G. C. Co. | Maysville, Ky. |
| Murphy, G. C. Co. | Pikeville, Ky. |
| Murphy, G. C. Co. | Paintsville, Ky. |
| Newberry, J. J. Co. | Owensboro, Ky. |
| Newberry, J. J. Co. | Elizabethtown, Ky. |
| Newberry, J. J. Co. | Henderson, Ky. |
| Newberry, J. J. Co. | Glasgow, Ky. |
| Newberry, J. J. Co. | Louisville, Ky. |
| Newberry, J. J. Co. | Cynthiana, Ky. |
| Newberry, J. J. Co. | Frankfort, Ky. |
| Newberry, J. J. Co. | Corbin, Ky. |
| Newberry, J. J. Co. | Somerset, Ky. |
| Newberry, J. J. Co. | Mayfield, Ky. |
| Newberry, J. J. Co. | Paris, Ky. |
| Newberry, J. J. Co. | Mt. Sterling, Ky. |
| Newberry, J. J. Co. | Winchester, Ky. |
| Newberry, J. J. Co. | Versailles, Ky. |
| Newberry, J. J. Co. | Harlan, Ky. |
| Newberry, J. J. Co. | Richmond, Ky. |
| Newberry, J. J. Co. | Hazard, Ky. |
| Newberry, J. J. Co. | Lawrenceburg, Ky. |
| Newberry, J. J. Co. | Shelbyville, Ky. |
| Newberry, J. J. Co. | Danville, Ky. |
| Newberry, J. J. Co. | Central City, Ky. |
| Newberry, J. J. Co. | Harrodsburg, Ky. |
| Newberry, J. J. Co. | Lebanon, Ky. |
| Nickles, B. J. | Frankfort, Ky. |
| Ostrander, John O. | Louisville, Ky. |
| Owens, R. W. | Newland, N. C. |
| Powell Seed Store | Louisville, Ky. |
| Purcell Company | Lexington, Ky. |
| Ray, Carl, Co. | St. Matthews, Ky. |
| Ruysenaars, John C. | Louisville, Ky. |
| Scott Stores | Harlan, Ky. |
| Scott Stores | Hazard, Ky. |
| Scott Stores | Bowling Green, Ky. |
| Scott Stores | Ashland, Ky. |
| Scott Stores | Middlesboro, Ky. |
| Scott Stores | Louisville, Ky. |
| Sears, Roebuck and Co. | Jeffersonville, Ky. |
| Setters, James R. | Lexington, Ky. |
| Snyder, Ben, Inc. | Louisville, Ky. |
| Snyder, Ben, Inc. | Louisville, Ky. |
| Stoke, Louis, Jr. | Louisville, Ky. |
| Tacke, Frank Y. | Lexington, Ky. |
| Thomas, Ray R. | Louisville, Ky. |
| Waddy Gardens | Waddy, Ky. |
| Whispering Willow Gardens, Fred D. Fightmaster | Lexington, Ky. |
| Woolworth, F. W. Co. | Paducah, Ky. |
| Woolworth, F. W. Co. | Owensboro, Ky. |
| Woolworth, F. W. Co. | Henderson, Ky. |

NURSERY DEALERS—Continued

| | |
|---------------------------|--------------------|
| Woolworth, F. W. Co. | Bowling Green, Ky. |
| Woolworth, F. W. Co. | Madisonville, Ky. |
| Woolworth, F. W. Co. | Hopkinsville, Ky. |
| Woolworth, F. W. Co. | Mayfield, Ky. |
| Woolworth, F. W. Co. | Louisville, Ky. |
| Woolworth, F. W. Co. | Lexington, Ky. |
| Woolworth, F. W. Co. | Covington, Ky. |
| Woolworth, F. W. Co. | Newport, Ky. |
| Woolworth, F. W. Co. | Frankfort, Ky. |
| Woolworth, F. W. Co. | Richmond, Ky. |
| Woolworth, F. W. Co. | Danville, Ky. |
| Woolworth, F. W. Co. | St. Matthews, Ky. |
| Woolworth, F. W. Co. | Ashland, Ky. |
| Woolworth, F. W. Co. | Maysville, Ky. |
| Woolworth, F. W. Co. | Louisville, Ky. |

NON-RESIDENT NURSERYMEN

| | |
|---|-----------------------------|
| Allegan County Soil Conservation Service..... | Allegan, Michigan |
| American Bulb Co. | Chicago, Illinois |
| Arcadia Rose Co. | Newark, New York |
| Armstrong Nurseries | Ontario, California |
| Arp Nursery Co. | Tyler, Texas |
| Banner, George M. and Lum C. | Newland, North Carolina |
| Bass Pecan Co. | Lumberton, Mississippi |
| Baxter Nurseries | Baxter, Tennessee |
| Blountville Nurseries | Blountville, Tennessee |
| Bobbink and Atkins | East Rutherford, New Jersey |
| Bountiful Ridge Nurseries | Princess Anne, Maryland |
| Boyd Nursery Co. | McMinnville, Tennessee |
| Breedlove Nurseries | Tyler, Texas |
| Buchrucker, Fred C. and Son | St. Louis, Missouri |
| Byrn Landscape Service, Inc. | Dickson, Tennessee |
| Canterbury Nursery | Easton, Maryland |
| Cartwright Nurseries | Collierville, Tennessee |
| Cedar Grove Nursery Co. | Smithville, Tennessee |
| Central New York Nurseries | Geneva, New York |
| Chase Nursery Co. | Chase, Alabama |
| Commercial Nursery Co. | Decherd, Tennessee |
| Conard-Pyle Co. | West Grove, Pennsylvania |
| Consolidated Water Power and Paper Co. | Wisconsin Rapids, Wis. |
| Couch Brothers Nursery Co. | McMinnville, Tennessee |
| Cumberland Plateau Nursery Co..... | Smithville, Tennessee |
| Cumberland Valley Nurseries, Inc. | McMinnville, Tennessee |
| C. E. Davis and Co. | Hagan, Virginia |
| Dixie Rose Nursery | Tyler, Texas |
| J. M. Donoho and Son | Portland, Tennessee |
| Dreer, Henry A., Inc. | Riverton, New Jersey |
| Economy Nursery Co. | Little Silver, New Jersey |
| Emlong Nurseries, Inc. | Stevensville, Michigan |
| Emmons and Co., Inc. | Newark, New York |
| Empire State Nursery Co. | Newark, New York |
| Evergreen Nursery Co. | Sturgeon Bay, Wisconsin |
| Flower City Rose Co. | Manchester, Connecticut |
| Forest Nursery Co. | McMinnville, Tennessee |
| Fraser Nurseries, Inc. | Birmingham, Alabama |
| Fruitland Nurseries | Augusta, Georgia |
| Gillett Fern and Flower Farm | Southwick, Massachusetts |

NON-RESIDENT NURSERYMEN—Continued

| | |
|--|---------------------------------|
| Graham Charlton, Inc. (Geneva Nursery Co.) | Geneva, New York |
| Haley Nursery Co. | Smithville, Tennessee |
| Harding Brothers Nursery | Daylight, Tennessee |
| Harrison's Nurseries, Inc. | Berlin, Maryland |
| Heller Brothers Co. | New Castle, Indiana |
| Hermitage Nurseries | Smithville, Tennessee |
| Hicks Nurseries | Westbury, Long Island, New York |
| Hill, D., Nursery Co. | Dundee, Illinois |
| Home Nursery Co. | Fort Gay, West Virginia |
| Hooker Brothers | Rochester, New York |
| Hope Nursery Co. | Scottsville, Texas |
| Howard Rose Co. | Hemet, California |
| Howell Nurseries | Knoxville, Tennessee |
| Huntsville Wholesale Nurseries | Huntsville, Alabama |
| Ideal Nursery and Orchard Co. | Smithville, Tennessee |
| Inter-State Nurseries | Hamburg, Iowa |
| Jackson and Perkins Co. | Newark, New York |
| John's | Apopka, Florida |
| Johnson Truck Farm | Ironwood, Michigan |
| Kahn, S. | Staten Island, New York |
| Kallay Brothers Co., The | Painesville, Ohio |
| Klyn, Gerard K. | Mentor, Ohio |
| Keltonburg Nursery Co. | Smithville, Tennessee |
| Kingsville Nurseries, Inc. | Kingsville, Maryland |
| Knight and Bostwick, Inc. | Newark, New York |
| Kohankie, Henry, and Son | Painesville, Ohio |
| Lacy, S. B. | Newland, North Carolina |
| Lakeside Fern Co. | Apopka, Florida |
| Leonard, A. M., and Son | Piqua, Ohio |
| Maloney Brothers Nursery Co. | Dansville, New York |
| Maple Lawn Gardens | Tamoroa, Illinois |
| Mason Kentucky Wonder Nursery Co. | Smithville, Tenn. |
| May, Earl E., Seed Co. | Shenandoah, Iowa |
| McIlhenny, E. A. | Avery Island, Louisiana |
| Moore, William C., and Co. | Newark, New York |
| Mount Arbor Nurseries | Shenandoah, Iowa |
| Mulford, Hewett P. and Co. | Lebanon, Ohio |
| Naperville Nurseries | Naperville, Illinois |
| Naughton Farms | Waxahachie, Texas |
| Onarga Nursery Co. | Onarga, Illinois |
| Owen, T. G., and Son, Inc. | Columbus, Mississippi |
| Paramount Nurseries | West Grove, Pennsylvania |
| Park Nursery Co., The | Plenna, Alabama |
| Pine Creek Nursery Co. | Smithville, Tennessee |
| Pleasant Valley Nursery Co. | Smithville, Tennessee |
| Potter, H. R. Co. | Madison, Tennessee |
| Princeton Nurseries | Princeton, New Jersey |
| Quaker Hill, Inc. | Newark, New York |
| Riordan, W. A., and Son | Detroit, Michigan |
| Rosemont Nurseries | Tyler, Texas |
| Scarf's W. N. and Son | New Carlisle, Ohio |
| Scholtz Greenhouses | Charlotte, North Carolina |
| Shenandoah Nurseries, The | Shenandoah, Iowa |
| Shumway, R. H. | Rockford, Illinois |
| Sisk, J. C., Nursery Co. | Winchester, Tennessee |
| Slatton Nursery Co. | McMinnville, Tennessee |
| Smith Brothers Nursery Co. | Concord, Georgia |
| Soil Conservation Service Nursery | Washington, Indiana |

NON-RESIDENT NURSERYMEN—Continued

| | |
|---|---------------------------|
| Soil Conservation Service Nursery | Zanesville, Ohio |
| Southern Nursery and Landscape Co. | Winchester, Tennessee |
| Southern States Nurseries | Macclenny, Florida |
| Southland Gardens, Inc. | Mobile, Alabama |
| Southland Rose Nurseries | Tyler, Texas |
| Spring Hill Nurseries | Tipp City, Ohio |
| Standard Nursery Co. | McMinnville, Tennessee |
| Stark Brothers Nurseries | Louisiana, Missouri |
| Stell Rose Nursery | Tyler, Texas |
| Stephenson, W. V., and Sons | Jacksonville, Florida |
| Stern's Nurseries | Geneva, New York |
| Storrs and Harrison, Inc. | Painesville, Ohio |
| Story Rose Fields | Tyler, Texas |
| Stuart, C. W. and Co. | Newark, New York |
| Studley, Walter A., Nursery | Fennville, Michigan |
| Stumpp and Walter Co. | New York, New York |
| Tennessee Nursery Co. | Cleveland, Tennessee |
| Texas Nursery Co. | Sherman, Texas |
| Tri-State Nurseries | Ironton, Ohio |
| Universal Bulb Co. | New York, New York |
| Upton Nursery and Landscape Co. | Goodrich, Michigan |
| Ustler Brothers | Apopka, Florida |
| Valentine Nurseries | Cosby, Tennessee |
| Vaughan's Seed Store | Western Springs, Illinois |
| Washington Heights Nurseries | Knoxville, Tennessee |
| Waxahachie Nursery Co. | Waxahachie, Texas |
| Wayside Gardens | Mentor, Ohio |
| West Hill Nurseries | Fredonia, New York |
| Whitten Nurseries, The | Bridgeman, Michigan |
| Willis Nursery Co., The | Ottawa, Kansas |
| Wilson County Nursery Co. | Martha, Tennessee |
| Winter Garden Ornamental Nurseries, Inc.... | Winter Garden, Florida |

NURSERY AGENTS REPRESENTING NON-RESIDENT NURSERIES

| Name | Address | Nursery Represented |
|--------------------|---------------------|---|
| Brown, J. B. | Baxter, Tenn. | Baxter Nursery, Baxter, Tenn. |
| Brown, W. J. | Augusta, Ky. | Empire State Nursery Co., Newark, New York |
| Burton, J. E. | McMinnville, Tenn. | Standard Nursery Co., McMinnville, Tenn. |
| Cantrell, Burnie | Smithville, Tenn. | Couch Brothers Nursery Co., McMinnville, Tenn. |
| Cantrell, W. T. | Smithville, Tenn. | Keltonburg Nursery Co., Smithville, Tenn. |
| Carr, B. L. | Ashland, Ky. | Ideal Nursery and Orchard Co., Smithville, Tenn. |
| Christian, W. M. | McMinnville, Tenn. | H. R. Potter Nursery, Madison, Tenn. |
| Cox, L. N. | McMinnville, Tenn. | Couch Brothers Nursery Co., McMinnville, Tenn. |
| Fleming, J. H. | Pikeville, Ky. | Quaker Hill, Inc., Newark, New York |
| Fuston, S. D. | Murfreesboro, Tenn. | Standard Nursery Co., McMinnville, Tenn. |
| Gipson, L. O. | Albertsville, Ala. | Southern Nursery and Landscape Co., Winchester, Tenn. |
| Hammer, W. B. | McMinnville, Tenn. | Hardin Brothers Nursery, Daylight, Tenn. |
| McKnight, Paul | Murfreesboro, Tenn. | Standard Nursery Co., McMinnville, Tenn. |
| Maynard, George E. | Silver Point, Tenn. | Pleasant Valley Nursery Co., Smithville, Tenn. |
| Medley, Bailey | McMinnville, Tenn. | Standard Nursery Co., McMinnville, Tenn. |
| Methvin, G. L. | McMinnville, Tenn. | Standard Nursery Co., McMinnville, Tenn. |
| Sanders, R. H. | Central City, Ky. | Pine Creek Nursery, Smithville, Tenn. |
| Stroud, J. W. | Clinton, Ky. | Stark Brothers Nursery, Louisiana, Mo. |
| Thompson, Sim | Murfreesboro, Tenn. | Standard Nursery Co., McMinnville, Tenn. |
| Warren, George R. | McMinnville, Tenn. | Cumberland Valley Nurseries, Smithville, Tenn. |

SUMMARY OF NURSERY INSPECTION AND CERTIFICATION

| | |
|--|--------|
| Inspections of growing stock | 113 |
| Inspections of fruit stock only | 8 |
| Inspections of perennials, bulbs, etc. | 10 |
| Inspections of strawberry plants | 12 |
| Inspections of sweetpotato plants | 9 |
| Inspections of greenhouses | 3 |
| Acres of all nursery stock | 1,031 |
| Acres of fruit stock only | 4.25 |
| Acres of bulbs, perennials, etc. | 16.75 |
| Acres of strawberry plants | 17.50 |
| Square feet of sweetpotato plant beds | 28,540 |
| Kentucky growers' certificates issued | 87 |
| Non-resident nurserymen's licenses issued | 130 |
| Nursery dealers' permits issued | 112 |
| Non-resident nursery agents' permits issued | 20 |
| Miles traveled, July 1, 1941, to June 30, 1942 | 20,971 |
| Number of counties visited | 120 |

VIOLATIONS

During the year, one person was apprehended, tried, and convicted of violating the Kentucky Nursery Inspection Law.

1500-6-42