

Annual Report Of
The Kentucky Plant Pest Control Law
And Its Administration

For the Year Ended June 30, 1962

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by
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Herein is reproduced as it appears on the statute books the Kentucky law relating to the inspection of nurseries and other plant growing businesses; the licensing of growers, dealers and agents of plants; the control of eradication of newly introduced plant pests; and the promulgation of plant pest quarantines.

KENTUCKY REVISED STATUTES - SECTIONS
249.010 to 249.990

249.010 DEFINITIONS. As used in this chapter, unless the context requires otherwise:

- (1) "Commissioner" means the Commissioner of Agriculture, Labor and Statistics.
- (2) "Department" means the Department of Agriculture, Labor and Statistics.
- (3) "Director" means the Director of the Agricultural Experiment Station.

249.020 (1925a-1; 1925a-10) STATE ENTOMOLOGIST: ASSISTANT.

- (1) The Entomologist and Botanist of the Agricultural Experiment Station shall be the State Entomologist.
- (2) The State Entomologist shall serve without pay other than his salary as an officer of the Agricultural Experiment Station. He shall be paid his traveling expenses.
- (3) The State Entomologist shall appoint a deputy entomologist and assistants.

249.030 (1925a-1; 1925a-10) ENTOMOLOGIST MAY MAKE RULES AND PUBLISH DATA.

- (1) The State Entomologist, with the advice and consent of the director and the commissioner, may prescribe, modify and enforce rules, regulations and orders needed to carry out KRS 249.020 to 249.100.
- (2) The State Entomologist may publish bulletins, circulars and reports containing information concerning inspections, insects and plant diseases.
- (3) The rules and regulations and publications shall be printed from time to time and furnished to interested persons.

249.040 (1925a-1) ESTABLISHMENT OF QUARANTINES.

The State Entomologist shall, with the advice and consent of the director and the commissioner, establish and maintain quarantines

against the importation into this state of any trees, plants and parts of plants, whether nursery grown or not, from any state or from any county within the state where such plants or parts of plants are known to be affected with dangerous insect pests or plant diseases. He shall designate in announcements of quarantine the area quarantined, whether it constitutes a part of this state or some other state.

249.050 (1925a-2) INSPECTION OF ARTICLES AND PREMISES: DISEASED PLANTS TO BE DESTROYED.

Whenever the State Entomologist or his deputy has reason to believe or is credibly informed that at any place within the state there has been introduced or offered for sale trees, plants or parts of plants infected or infested with diseases or destructive pests that are likely to spread, he shall investigate the suspected articles and premises. If they are found so infested or infected, he shall notify the owner or possessor, in writing, of the nature of the infestation, specifying the insects or diseases that have been found and demand that within a reasonable specified time the affected articles or premises be disinfected or destroyed by fire under the direction of the State Entomologist, his deputy or assistant and at the expense of the owner or possessor.

249.060 (1925a-8) NURSERIES, DEALERS AND AGENTS TO BE LICENSED.

(1) Every resident nursery or agency selling nursery stock in this state shall annually file credentials with the State Entomologist. If these credentials are satisfactory to the State Entomologist, the director and the commissioner, the State Entomologist shall upon payment of a fee of five dollars by the nursery or agency issue it a license authorizing it to do business in the state.

(2) Every nonresident nursery and every agent, dealer or seller of trees representing nonresident nurseries or dealers shall annually file credentials with the State Entomologist. These credentials shall include the names of nurseries, nurserymen or other persons represented. If these credentials are satisfactory to the State Entomologist, the director and the commissioner, the State Entomologist shall issue the license.*

(3) Any person soliciting orders for or delivering trees or plants in this state shall carry with him a copy of his license from this state, which he shall show to prospective buyers, purchasers, county officials or agents of the State Entomologist on demand.

249.070 (1925a-3; 1925a-4) ENTOMOLOGIST TO INSPECT NURSERIES AND ORDER DESTRUCTION OF PESTS. SHIPMENT OF AFFECTED STOCK PROHIBITED.

(1) All nurseries where trees, vines, plants or other nursery stock are grown and offered for sale shall be inspected by the State Entomologist or by his assistant once each year. He shall notify the owners of such nurseries, in writing, of the presence of any San Jose

* Only resident nurserymen and dealers are required to pay the five dollars license fee.

scale or other dangerous pests on the stock of these nurseries and shall also notify, in writing, the owner of any affected nursery stock to take such measures on or before a certain day for the destruction of insect or fungus enemies of nursery stock as have been shown to be effectual.

(2) The owner of the affected nursery shall, within the time specified, take such steps for the destruction of injurious insects or fungus enemies present as will exterminate them.

(3) No person shall ship or deliver any such nursery stock affected with insects or fungus enemies before treatment.

249.080 (1925a-5) ENTOMOLOGIST TO ISSUE CERTIFICATE FOR STOCK FREE FROM INSECTS AND FUNGUS.

When the State Entomologist examines any trees, vines, plants or other nursery stock and finds the stock free from dangerously injurious insects and fungus enemies, he shall make out and deliver to the owner of the stock a certificate stating that he has inspected the stock and that he believes it to be free from dangerously injurious insects and fungus enemies. He shall keep in his office, for the information of anyone interested, copies of all valid certificates issued by him.

249.090 (1925a-6) SHIPMENTS TO BE ACCOMPANIED BY INSPECTION CERTIFICATES.

Whenever a resident nurseryman or seller of trees, vines, plants or other nursery stock ships or delivers such goods, he shall send on each package so shipped or delivered a printed copy of the certificate issued to him by the State Entomologist stating that the stock has been inspected as required by law and is believed to be free from dangerously injurious insect or fungus enemies.

249.100 (1925a-7) NONRESIDENTS TO FILE AND IMPORTED PLANTS TO BEAR INSPECTION CERTIFICATES.

Every nonresident nurseryman or other person intending to ship into this state trees, plants or parts of plants, whether nursery grown or not, shall file with the State Entomologist a copy of a valid certificate from a state or United States Government inspector showing that the trees, plants or their parts have been inspected and that he is authorized to sell and ship or transport them. All packages of trees, plants or parts of plants shall bear a copy of a certificate of inspection from an official inspector. Transportation companies within the state shall notify the State Entomologist at once when any such trees or plants are received by them without a valid certificate. Nursery stock or other trees, plants or parts of plants shipped into this state in violation of a state or United States Quarantine may be seized and destroyed or returned to the shipper at the expense of the owner or possessor.

249.200 (42g-1; 42g-2) JAPANESE BEETLE CONTROL.

The State Entomologist shall adopt and carry out such measures as he deems advisable to protect crops from the ravages of the Japanese

beetle (Popillia japonica). He may employ help, purchase materials and enforce such regulations as in his discretion are necessary to accomplish the purpose.

249.990 (42f-4; 200; 1923; 1925a-4; 1925a-9) PENALTIES.

(1) Any person who violates any of the provisions of KRS 249.020 to 249.100 or hinders the carrying out of any of the provisions of those sections shall be fined not less than twenty-five dollars nor more than five hundred dollars.

(2) Any fine imposed for a violation of subsection (3) of KRS 249.070 may be recovered in the county in which the nursery is situated or the county to which the nursery stock is shipped.

SUMMARY OF REQUIREMENTS OF KENTUCKY NURSERY INSPECTION LAW

(1) It shall be unlawful to sell or offer for sale uninspected or uncertified nursery stock. A certificate of inspection indicates freedom from certain injurious insects and plant diseases but does not vouch for trueness to variety nor for grade and conditions of any nursery stock.

(2) Growers of nursery stock for sale or shipment shall apply in writing before June 1 of each year to the State Entomologist, Kentucky Agricultural Experiment Station, Lexington, for inspection services.

(3) Every dealer in nursery stock shall secure a nursery dealer's permit. Before this is issued, however, he must furnish an affidavit that he will buy and sell only stock that is certified and will maintain with the State Entomologist a correct and complete list of all sources from which he gets his stock. Landscape architects and tree movers who handle nursery stock are classified as dealers.

(4) Every person who solicits orders for nursery stock shall obtain and carry an agent's permit which is secured only upon request of the nurseryman or dealer to be represented.

(5) All packages or bundles of nursery stock shipped by common carrier must have attached a copy of the inspection certificate or permit.

(6) Certificates and permit may be revoked for cause.

(7) Fees shall be paid as follows: Inspection certificate, \$5; dealer's permit, \$5. Agents' permits and nonresident nurserymen's certificates are furnished without cost. Fees shall accompany application. Application blanks may be obtained from the State Entomologist.

(8) Nonresident nurserymen shall file copies of their state certificate and secure nonresident permits. Every package of nursery stock coming into Kentucky shall have a valid inspection certificate attached to the package. Nonresident nurserymen, dealers and agents

shall carry their Kentucky permits when soliciting orders or delivering nursery stock in Kentucky.

(9) All certificates and permits automatically expire June 30 following date of issuance.

"NURSERY STOCK" DEFINED

Nursery stock includes all trees, shrubs, vines; roses, strawberry, raspberry and blackberry plants; herbaceous perennial plants and roots; grass "plugs", "sprigs" and sod; ornamental bulbs, corms, tubers and rhizomes; and any part of the above groups of plants capable of disseminating injurious insects and plant diseases. For regulatory purposes the term "Nursery Stock" includes all plants which grow out of doors and live more than one year, whether nursery grown or native.

REQUIREMENTS FOR SHIPMENT OF NURSERY STOCK
INTO OTHER STATES

A summary of the major requirements for shipping nursery stock into other states is given on the following page. It will be noted that most states require the out-of-state shipper to file a copy of his nursery inspection certificate with the proper administrative authority before shipments are made. Only three states require filing fees, except under special conditions, that are noted in a table which follows.

Special shipping tags are required by the following states and will be furnished by them at a nominal cost to the shippers: Arkansas (\$2 per 100 tags); Florida (\$3.24 per 100 tags); and New Mexico (\$1.25 per 100 tags).

A special tag should be secured and attached to each bundle of nursery stock shipped to any of the three states listed.

State	State of Origin Certificate Filed	Nurseryman's Filing Fee	Agent's Fee	Special Tag	Posted Bond
Alabama	Yes	Reciprocal	\$1	No	None
Arizona	No	None	None	No	None
Arkansas	Yes	Reciprocal	\$1	Yes	Reciprocal
California	No	None	None	No	None
Canada	Yes	None	None	Yes ¹	None
Colorado	Yes	None	None	No	None
Connecticut	No	None	None	No	None
Delaware	Yes	None	None	No	None
Florida	Yes	None	None	Yes	None
Georgia	Yes	Reciprocal	\$1	No	None
Idaho	Yes	\$5 to \$15	\$1	No	\$1,000
Illinois	Yes	None	None	No	None
Indiana	Yes	None	\$1	No	None
Iowa	Yes	Reciprocal	None	No	None
Kansas	Yes	Reciprocal	None	No	None
Kentucky	Yes	None	None	No	None
Louisiana	No	None	None	No	None
Maine	Yes	None	None	No	None
Maryland	Yes	Reciprocal	None	No	None
Massachusetts	Yes	None	None	No	None
Michigan	Yes	\$15 or Rec. ²	\$1	No	None
Minnesota	Yes	Reciprocal	Reciprocal	No	None
Mississippi	Yes	Reciprocal	None	No	None
Missouri	Yes	None	None	No	None
Montana	Yes	\$5 to \$25	\$25	No	None
Nebraska	Yes	Reciprocal	\$1	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	\$25	Yes	None
New York	Yes	None	None	No	None
North Carolina	Yes	Reciprocal	None	No	\$1,000 ³
North Dakota	Yes	Reciprocal	None	No	None
Ohio	Yes	Reciprocal	\$1	No	None
Oklahoma	Yes	Reciprocal	\$1	No	None
Oregon	No	None	\$1	No	None
Pennsylvania	Yes	None	None	No	None
Rhode Island	Yes	None	None	No	None
South Carolina	Yes	None	None	No	None
South Dakota	Yes	Reciprocal	\$1	No	None
Tennessee	Yes	Reciprocal	Reciprocal	No	\$5,000 ³
Texas	Yes	Reciprocal	None	No	None
Utah	Yes	\$10 ²	None	No	None
Vermont	No	None	None	No	None
Virginia	No	Reciprocal	Reciprocal	No	None
Washington	No	Reciprocal	\$1	No	None
West Virginia	Yes	None	\$1	No	None
Wisconsin	Yes	None	None	No	None
Wyoming	Yes	Reciprocal	None	No	None

¹Secure special permit and instruction from officer in charge before making shipment.

²For nurserymen who operate through agents.

³For nurserymen who promise maintenance.

PLANT QUARANTINE OFFICIALS OF
THE STATES, TERRITORIES,
DISTRICT OF COLUMBIA,
CANADA, AND MEXICO

Alabama	W. A. Ruffin, Chief, Division of Plant Industry, State Department of Agriculture and Industries, P. O. Box 220, Montgomery 1
Alaska	Hon. James W. Wilson, Commissioner of Agriculture, P. O. Box 1828, Palmer
Arizona	W. T. Mendenhall, State Entomologist, P. O. Box 6189, Phoenix
Arkansas	Carter Seymour, Head, Plant Pathology and Entomology Division, State Plant Board, Little Rock
California	E. A. Breech, Chief, Bureau of Plant Quarantine, State Department of Agriculture, Sacramento 14
Canada	Dr. C. W. Farstad, Director, Division of Plant Protection, Department of Agriculture, Ottawa, Ontario
Colorado	Martin M. Poyner, Chief, Division of Plant Industry, 1525 Sherman Street, Denver 3
Connecticut	Nealy Turner, State Entomologist, Agricultural Experiment Station, Box 1106, New Haven 4
Delaware	W. R. Hickman, Nursery Inspector, State Board of Agriculture, Dover
District of Columbia	J. E. Mabry, Plant Quarantine Division, U. S. Department of Agriculture, Washington 25
Florida	Dr. W. G. Cowperthwaite, Plant Commissioner, State Plant Board, Gainesville
Georgia	W. E. Blasingame, Director of Entomology, State Capitol, Atlanta 3
Hawaii	William C. Look, Chief Plant Inspector, Board of Commissioners of Agriculture and Forestry, P. O. Box 2520, Honolulu 4
Idaho	Leland Fife, Director, Bureau of Plant Industry, State Department of Agriculture, Boise
Illinois	H. F. Seifert, Horticultural Inspection Supervisor, Room 227, Professional Arts Building, Glen Ellyn
Indiana	John J. Favinger, State Entomologist, 311 West Washington Street, Indianapolis 9
Iowa	Wilfred S. Craig, State Entomologist, 251 Science Building, Iowa State College, Ames
Kansas, North	Dr. Herbert Knutson, State Entomologist, State College of Agriculture, Manhattan
South	Dr. Robert E. Beer, State Entomologist, University of Kansas, Lawrence
Kentucky	Dr. Lee H. Townsend, State Entomologist, College of Agriculture and Home Economics, University of Kentucky, Lexington

Louisiana	Richard C. Carlton, State Entomologist, State Department of Agriculture and Immigration, Box 4153, Capitol Station, Baton Rouge 4
Maine	Paul Eastman, Chief, Division of Plant Industry, State Department of Agriculture, Augusta
Maryland	Dr. George S. Langford, State Entomologist, University of Maryland, College Park
Massachusetts	Peter C. Kuzmiski, Assistant Director, Division of Plant Pest Control and Fairs, 41 Tremont Street, Boston 8
Mexico	Ing. Dario Arrieta M., Director General de Defensa Agricola, Balderas Num. 94, Mexico D. F.
Michigan	C. A. Boyer, Chief, Bureau of Plant Industry, State Department of Agriculture, Lansing 13
Minnesota	Dr. Donald M. Coe, Director, Bureau of Plant Industry, State Department of Agriculture, Dairy and Food, University Farm, St. Paul 1
Mississippi	Dr. R. E. Hutchins, Entomologist, State Plant Board, State College
Missouri	Julius R. Anderson, State Entomologist, State Department of Agriculture, Jefferson City
Montana	W. Napton, Chief, Horticulture Inspection and Quarantine Service, State Department of Agriculture, Labor and Industry, Missoula
Nebraska	C. J. Walstrom, State Entomologist, Bureau of Plant Industry, State Department of Agriculture and Inspection, Lincoln 9
Nevada	Lee M. Burge, Director, Division of Plant Industry, State Department of Agriculture, P.O. Box 1027, Reno
New Hampshire	Dr. J. G. Conklin, State Entomologist, Insect and Plant Disease Suppression and Control, State Department of Agriculture, Durham
New Jersey	Frank A. Soraci, Director, Division of Plant Industry, State Department of Agriculture, Trenton 8
New Mexico	Dallas Rierson, Director, Regulatory Activities, College of Agriculture and Mechanic Arts, State College
New York	Henry L. Page, Director, Division of Plant Industry, State Department of Agriculture and Markets, Albany 1
North Carolina	Dr. C. H. Brannon, State Entomologist, State Department of Agriculture, Raleigh
North Dakota	Dr. James R. Dogger, State Entomologist, Department of Entomology, North Dakota Agricultural College, Box 2438, Fargo
Ohio	Harold Porter, Chief, Division of Plant Industry, State Department of Agriculture, Columbus 15
Oklahoma	Clyde A. Bower, Director, Division of Entomology and Plant Industry, Oklahoma State Board of Agriculture, Oklahoma City 5

Oregon	Hugh Taylor, Chief, Division of Plant Industry, State Department of Agriculture, Agricultural Building, Salem
Pennsylvania	Dr. T. L. Guyton, Director, Bureau of Plant Industry, State Department of Agriculture, Harrisburg
Puerto Rico	Juan Lojo, Chief, Plant Quarantine Service, Department of Agriculture and Commerce, San Juan
Rhode Island	Rudolph D'Andrea, Acting Chief, Division of Entomology and Plant Industry, State Department of Agriculture and Conservation, State House, Providence 2
South Carolina	L. H. Senn, Assistant State Entomologist, State Crop Pest Commission, Clemson
South Dakota	Doyle T. Busby, Director, Division of Plant Industry, Department of Agriculture, Pierre
Tennessee	Howard L. Bruer, State Entomologist and Plant Pathologist, Department of Agriculture, Box 9039, Melrose Station, Nashville 4
Texas	Charles Chapman, Chief, Division of Plant Quarantine, State Department of Agriculture, Austin
Utah	Earl Hutchings, State Supervising Inspector, State Department of Agriculture, Salt Lake City
Vermont	John W. Scott, Director, Division Plant Pest Control, State Department of Agriculture, Montpelier
Virginia	C. R. Willey, State Entomologist and Director Division of Plant Industry, 1112 State Office Building, Richmond 19
Washington	William H. Shaw, Supervisor of Horticulture, State Department of Agriculture, Olympia
West Virginia	F. Waldo Craig, Entomologist, State Department of Agriculture, Charleston 5
Wisconsin	A. R. Kurtz, State Entomologist, State Department of Agriculture, 448 West Washington Avenue, Madison 3
Wyoming	Everett Spackman, State Entomologist, State Department of Agriculture, Cheyenne

INTERSTATE SHIPMENT OF BARBERRY
AND MAHONIA RESTRICTED

Federal Quarantine Number 38, because of Black Stem Rust, was amended by the Secretary of Agriculture to become effective February 11, 1950. Among the important changes in regulations are: (1) the elimination of the requirement to place a special permit tag on each package of barberry, mahonia or mahoberberis shipped interstate; (2) shipments of seeds and fruits of approved species and varieties when produced within the eradication states can be moved under certificate only if going to another eradication state. Seed or fruit produced outside the eradication states cannot be shipped into any of the eradication states.

The requirements of Federal Quarantine Number 38 are summarized as follows: (1) The eradication states are: Colorado, Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Montana, Nebraska, North Dakota, Ohio, Pennsylvania, South Dakota, Virginia, Washington, West Virginia, Wisconsin and Wyoming; (2) Barberry, mahonia and mahoberberis, in any variety, can be shipped interstate (to any state) only under certificate issued by the Plant Pest Control Branch; (3) Application for Federal certificate must be filed in duplicate not later than May 15 each year with the Quarantine Division of Plant Disease Control, Washington 25, D. C.; (4) Only species and varieties known to be rust resistant and approved by the Branch will be acceptable for certification. The list of approved species and varieties is revised from time to time as new varieties prove to be resistant to stem rust. Species and varieties not known to be resistant to rust cannot be shipped interstate and growers who have such rust susceptible species will be required to destroy them before permits to ship approved varieties are granted; (5) The following species and varieties of barberry, mahonia and mahoberberis are designated as rust resistant:

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Berberis ariod-calida</u>	
B. <u>beaniana</u>	Bean's Barberry
B. <u>buxifolia</u>	Magellan Barberry
B. <u>buxifolia nana</u>	Dwarf Magellan Barberry
B. <u>calliantha</u>	- - - - -
B. <u>candidula</u>	Paleleaf Barberry
B. <u>chenaulti</u>	Chenault Barberry
B. <u>circumserrata</u>	Cutleaf Barberry
B. <u>concinna</u>	Dainty Barberry
B. <u>darwini</u>	Darwin Barberry
B. <u>formosana</u>	- - - - -
B. <u>franchetiana</u>	- - - - -
B. <u>gagnepaini</u>	Black Barberry
B. <u>gilgiana</u>	Wildfire Barberry
B. <u>horvathi</u>	- - - - -
B. <u>hybrido-gagnepaini</u>	False Black Barberry
B. <u>insignis</u>	- - - - -
B. <u>julianae</u>	Wintergreen Barberry
B. <u>koreana</u>	Korean Barberry
B. <u>lempergiana</u>	- - - - -
B. <u>lepidifolia</u>	- - - - -
B. <u>linearifolia</u>	- - - - -
B. <u>linearifolia</u> var. Orange King .	Jasperbells Barberry
B. <u>lologensis</u>	- - - - -
B. <u>manipurana</u>	- - - - -
B. <u>pallens</u>	Pallid Barberry
B. <u>potanini</u>	Longspine Barberry
B. <u>renton</u>	- - - - -
B. <u>replicata</u>	Curlleaf Barberry
B. <u>sanguinea</u>	Red-pedicel Barberry
B. <u>sargentiana</u>	Sargent Barberry
B. <u>stenophylla</u>	Rosemary Barberry

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<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Berberis ariod-calida</u>	
B. <u>stenophylla diversifolia</u>	- - - - -
B. <u>stenophylla gracilis</u>	- - - - -
B. <u>stenophylla irwini</u>	Irwin Barberry
B. <u>stenophylla nana compacta</u>	Coralina Barberry
B. <u>telomaica artisejala</u>	- - - - -
B. <u>thunbergi D. C.</u>	Japanese Barberry
B. <u>thunbergi atropurpurea</u>	Redleaf Japanese Barberry
B. <u>thunbergi atropurpurea erecta</u>	- - - - -
B. <u>thunbergi atropurpurea nana</u>	- - - - -
B. <u>thunbergi erecta</u>	Truehedge Columberry
B. <u>thunbergi "globe"</u>	- - - - -
B. <u>thunbergi "golden"</u>	- - - - -
B. <u>thunbergi maximowiczi</u>	Coral Japanese Barberry
B. <u>thunbergi minor</u>	Box Barberry
B. <u>thunbergi pluriflora</u>	Flame Barberry
B. <u>thunbergi "thornless"</u>	- - - - -
B. <u>thunbergi "variegata"</u>	- - - - -
B. <u>thunbergi xanthocarpa</u>	- - - - -
B. <u>triacanthophora</u>	Threespine Barberry
B. <u>verruculosa</u>	Warty Barberry
B. <u>virgatorum</u>	- - - - -
B. <u>workingensis</u>	- - - - -
B. <u>xanthoxylon hort</u>	- - - - -
<u>Mahoberberis aqui-candidula</u>	
M. <u>Aqui-sargentiae</u>	- - - - -
M. <u>miethkeana</u>	- - - - -
<u>Mahonia aquifolium</u>	<u>Oregongrape Mahonia</u>
M. <u>bealei</u>	Leatherleaf Mahonia
M. <u>compacta</u>	- - - - -
M. <u>dictyota</u>	Netvein Mahonia
M. <u>fortunei</u>	Chinese Mahonia
M. <u>lomarifolia</u>	- - - - -
M. <u>nervosa</u>	Cascades Mahonia
M. <u>pinnata</u>	Cluster Mahonia
M. <u>repens</u>	Creeping Mahonia

PLANT IMPORTATION

Under provisions of Federal Quarantine Number 37 certain limitations are placed on the importation of plants and seeds from foreign countries. Anyone wishing to import nursery stock, plants or seeds must first obtain a permit from the Plant Quarantine Branch, U.S.D.A., 209 River Street, Hoboken, New Jersey. In applying for a permit to import plant material the following information is required: (a) The name and location of the producer from whom the plants or seeds are to be secured; (b) the name and address of the person or firm to which the seeds or plants are to be shipped; (c) the number and genus of the plants or seeds for which the permit is desired.

All restricted plants imported under the conditions listed above are limited in size and age to the youngest and smallest which can be successfully freed from soil about their roots, transported to the United States and established in this country with a reasonable degree of success. Certain classes of plants permitted entry under quarantine 37 are required to be grown by the importer under post entry inspection regulations. Such plants are not released to the trade until such time as their freedom from plant diseases and insect pests has been established. The plants are therefore grown for one or more years in a place where the state inspector may have access to them for inspection purposes for such time as appears necessary. When their freedom from pests and diseases has been established, the plants under quarantine are released.

OAK WILT

Oak wilt disease (Endoconidiophora fagacearum) is now well established in the woodlands of Kentucky. The disease is caused by a fungus organism that can be identified by plant pathologists in one to two year old vascular tissue from infected trees.

Varieties of the red and black groups seem to become infected with oak wilt more readily than white and burr oaks, although all species and varieties of oaks are susceptible to the disease.

The first symptoms in the red and black oaks are shown by the appearance of leaves on the upper branches. They show dull light green color and curl upward. Later the leaves may turn yellow or reddish brown before falling. All leaves may fall within a month after first symptoms occur. In white and burr oaks the disease develops more slowly with one or more branches near the top showing disease symptoms first.

Spread of the disease from diseased to healthy trees within native stands of oaks can occur through natural root grafts or unions. During recent years it has been proven that certain insects are capable of carrying the disease from tree to tree and that even squirrels might possibly spread the disease.

As the oak wilt fungus develops under the bark of infected trees, fungus cushions or mats are formed. These mats enlarge and thicken, thereby creating sufficient pressure to crack the bark and separate it from the wood. As soon as the cracks are formed they are invaded by several species of sap beetles known as Nitidulids. These beetles, as well as the common fruit flies, are attracted by the characteristic odor of the fungus. After crawling over the fungus mats and becoming contaminated with spores of the fungus, the insects move on to other trees and wherever there is a wound in the tree the contaminated insect is capable of bringing the spores of oak wilt into contact with the sap wood of uninfected oaks, thereby starting new infections.

There seems to be some association between the long distance spread of oak wilt and the activities and travel of man since so many of the

new disease finds have been along highways and other heavily traveled lanes.

Oak wilt is known to occur in Arkansas, Illinois, Indiana, Iowa, Kansas, Kentucky, Minnesota, Maryland, Michigan, Missouri, Nebraska, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and Wisconsin. Nurserymen, foresters and all others interested in preventing the loss of oaks should be on the alert for this trouble. Samples of twigs from oaks showing symptoms of the disease should be sent to the Southeastern Forest Experiment Station, Federal Building, Asheville, North Carolina.

Six twigs or branches about six to eight inches long and one-half to one inch in diameter are best for laboratory examination. The twigs should be alive or just recently dead but not completely dry. Do not send leaves, dead branches or decayed wood. The twigs should be tied in a bundle, wrapped in paper so as to prevent excessive drying but should not be wrapped in wet moss or cotton. Labels should be attached in such a manner as to couple the laboratory report with the tree from which the twigs were taken.

The oak wilt survey and control program in Kentucky is under the supervision of the Kentucky Division of Forestry, Department of Conservation. In its annual report on "Oak Wilt in Kentucky" some interesting and encouraging figures are given. Since 1951 a total of 54 counties have had oak wilt but in 1959 only 35 of these counties had centers of oak wilt infection. Oak wilt centers of infection decreased from 674 in 1958 to 549 in 1959. This progress was reported along with an increase in areal survey. All oaks identified as oak wilt infected have been removed and the stumps chemically treated. This method has been proved as the most effective in cutting down spread of the disease.

ELM PHLOEM NECROSIS AND DUTCH ELM DISEASE

Elm phloem necrosis has occurred in several localities in Kentucky over a period of ten years or more. Dutch elm disease is of much more recent occurrence having been found in only a few localities within the Commonwealth within the past five or six years. Although no cure is known for these maladies, measures can be taken to protect healthy trees from infection.

Dutch elm disease or phloem necrosis should be suspected whenever elm foliage suddenly wilts and the dry, dead leaves adhere to the branches or when the leaves of an entire branch or the top turn yellow and fall prematurely. To further identify the diseases, cut through the bark at ground level, or below, and pry the bark from the wood so the inner bark will show. If the inner bark surface is yellow or butterscotch in color, phloem necrosis is indicated. If a portion of the inner bark is confined in a bottle or the closed hands for a few minutes, a faint odor of wintergreen can be detected from phloem-necrosis-diseased bark.

To test for Dutch elm disease remove several small branches having wilted, yellow or dying leaves. If the cross sections where cuts are made show several brown spots or discolorations in one or more annual rings of wood, the trouble is probably Dutch elm disease.

Both diseases are spread by insects. Elm phloem necrosis is spread by a leafhopper (Scaphoidens luteolus). Dutch elm disease is spread by elm bark beetle, principally the smaller European elm bark beetle (Scolytus multistriatus).

Prevention of spread of these diseases to healthy trees is based upon the control of insect carriers. This can be accomplished by sprays containing DDT, provided they are correctly formulated, properly applied and used at the right time. To control the carrier of elm phloem necrosis, it is necessary to spray thoroughly all leaf surfaces. The first spray should be applied when elm leaves are full grown, usually May 15 to June 1 in Kentucky. The second sprays should be applied when the second new growth appears, usually one to two months later. Use formula A or B as given below for both sprays and dilute to make 200 gallons.

To control the insect which carries Dutch elm disease, it is necessary to spray thoroughly all bark surfaces of the trees to be protected. Apply the first spray before the appearance of elm flowers or leaves. This period is usually the latter part of March for Kentucky. A second spray should be applied from two and one-half to three months after the first treatment. For first treatment use Formula A or B diluted to make 100 gallons. If a mist blower is employed, use Formula C diluted to make 20 gallons. For second treatment use either formula at one-half strength recommended for first treatment.

Formula A - Dissolve 16 pounds of technical DDT in a mixture of 2½ gallons of Benzene and 1 gallon of Velsicol AR - 50. To this solution add 1 pint of Triton X - 100.

Formula B - Dissolve 16 pounds of technical DDT in 4 gallons of Xylene. To this add 1 pint of Triton X - 100.

Formula C - Dissolve 20 pounds of the technical DDT in a mixture of 5 gallons of Xylene and 2½ gallons of Acme white oil. To this solution add 1½ pints of Triton X - 100.

If red spiders or spider mites build up to damaging populations which will sometimes be the case after repeated treatments with DDT, add one-half gallon of Acme white oil to each 100 gallons of Formula A or B for foliage treatment.

EUROPEAN CHAFER
(Amphimallon majalis Razoum)

The European chafer situation has changed very little within the past year. This is another of the recently introduced plant pests of

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special concern to nurserymen because of its development within the soil. The grubs while feeding on the roots of plants could be so easily transported in B & B nursery stock.

Attention was called to some rather severe turf injury in sections of Newark, New York, in the spring of 1940. It was not until the spring of 1942 that positive identification was made of the species and this constitutes the first authentic record of the occurrence of the species in North America. The European Chafer is known to occur in several countries on the continent of Europe and is reported to be especially destructive in some areas.

Since 1942 scouting and survey work has been carried on by New York and surrounding state agencies and by the Pest Control Branch, Agricultural Research Service, to determine the extent of the infested area. To date one infestation has been found in New Haven County, Connecticut, at the town of Meriden. A small infested area was recently discovered in the town of Capon Bridge, Hampshire County, West Virginia. Infestations are known to exist in the counties of Chemung, Erie, Monroe, Niagara, Onondaga, Ontario, Seneca and Wayne, New York.

Soil treatments using three to five pounds of dieldrin or other equivalent insecticides per acre have been applied to most chafer infested areas in New York state as well as those infested spots in Connecticut and West Virginia.

The major difficulty in attempts to eradicate European chafer infestations is an adequate method of discovering newly infested spots before heavy populations are built up by the insect. Recently a trap using black light has resulted in increased efficiency with the survey and detection work.

WHITE-FRINGED BEETLE

Graphognathus leucoloma striatus (Buchanan)

Some progress has been made during the past two years in the overall effort to roll back and finally eradicate the white-fringed beetle from the United States. It has been determined that an over-all eradication effort is practical but will be a long range job at considerable expense and effort.

One of the major problems to large scale insect eradication and control programs is the propaganda from organized groups such as the organic gardeners, bird societies and some advocates of "Don't disturb the balance in Nature". Members of the Department of Interior (Fish and Wildlife) are working with the USDA in order to help allay some of these fears.

At Fulton, along a railroad and only a few yards from the Tennessee-Kentucky line, one white-fringed beetle was found late in the summer of 1960. Intensive searching in all directions from the point of find has

failed to locate any additional beetles. Immediately following the finding of this one white-fringed beetle at Fulton an area of approximately fifteen acres was soil treated, using thirty pounds of ten percent dieldrin per acre. During 1961, additional surveys were made in this and other areas likely to have been exposed to white-fringed beetle infestation, with negative results.

At a quarantine hearing at Memphis, Tennessee in December 1961 it was recommended that Kentucky still be considered among the white-fringed beetle non-infested states. This proposal was apparently followed since Kentucky was not included under any of the white-fringed beetle quarantine revisions and extensions.

JAPANESE BEETLE
(Popillia japonica Newman)

We are at a crucial point in our Japanese beetle control program in Kentucky. For twenty-two years we have been successful in eradicating or suppressing all known infestations in Kentucky to the point of little or no danger of spread.

Indiana, Ohio, West Virginia, Virginia and North Carolina have abandoned all or a portion of their respective states to the status of Japanese beetle infested and are placed under Federal quarantine and regulation. This will make the job of holding the line against infestation in Kentucky increasingly difficult and expensive. It has been proposed by USDA personnel that several Kentucky counties, which border these above mentioned states, be placed under Federal quarantine. During a prior conference with Federal Japanese beetle control personnel it was proposed, and mutually agreeable, that the area known as part of Greater Cincinnati, which is on the Kentucky side of the Ohio River, should properly be placed under Federal Japanese beetle quarantine and regulation. We have expressed to the USDA our protest at placing any part of Kentucky, other than the Greater Cincinnati area, under Japanese beetle quarantine and regulation. We feel survey and suppression can be done to better advantage and that artificial spread to the major agricultural areas of Kentucky will be much slower if we are permitted to carry on our suppression program without the restriction of quarantine. We are awaiting the decision from Washington.

THE VEGETABLE WEEVIL
(Listroderes costirostris obliquus Klug)

For the second time we have received specimens of the vegetable weevil since 1955. In each case the insect was feeding on tobacco plants in the bed or young plants in the field. The use of DDT, as is usually recommended for flea beetle control, kills the vegetable weevil very readily in tobacco.

The vegetable weevil is known to occur in several of the southern

states from which we received vegetable and bedding plants. Nurserymen and greenhouse operators should be on the lookout for this pest and send any suspicious specimens to the State Entomologist for positive identification. The vegetable weevil, both adult and larvae, are most active during cool weather, spring or late fall.

The adult female, (there are no males) is a typical curculio or snout beetle of medium size. It is short, 9 mm. long and 4 mm. wide. The color is a dull, grayish brown and each wing cover has a pale gray mark.

DDT used at the rate of four pounds of 50 percent wettable powder per 100 gallons of water has given excellent kill of both larvae and adults.

SOYBEAN CYST NEMATODE (Heterodera glycines Ichinohe)

Since finding the soybean cyst nematode in the southwestern part of Fulton County in 1957 we have become quite familiar with this plant pest. The first record of the pest in this country was 1954 when it was discovered in the bulb growing section of North Carolina. Since that time it has been found in Tennessee, Missouri, Arkansas, Mississippi, Illinois, and Virginia. Although eight states are involved the known land area infested with the soybean cyst nematode is quite small.

Nurserymen will continue to be concerned with soybean cyst nematode because of the severe quarantine restrictions imposed on any plant or plant material which carries soil or which has been in contact with soil. This restriction applies to local as well as interstate movement of material from regulated areas.

Considerable research work is being done in order to help neutralize the destructive potential of this plant pest. No practical method of chemically eradicating spot infestations of soybean cyst nematode are yet known. The most practical approach to control at present is through the use of non-host crops in infested soil coupled with quarantine regulations in order to prevent artificial spread of the pest. The outlook is encouraging for varieties of soybeans which are resistant to the nematode.

WITCHWEED (Striga asiatica)

Nurserymen are concerned with witchweed because of the strict quarantine regulations governing the movement of B & B stock from areas where the parasitic weed is known to exist. The weed does not attack directly any of the usual nursery crops.

Because of the serious threat to corn, sorghum, and several grasses which are parasitized by witchweed, it has become necessary to place

restrictions on the movement of everything which carries soil in any form from areas infested or even thought to be infested with witchweed.

Only a small area in North and South Carolina is known to be infested with witchweed. The infested properties are receiving chemical and cultural treatments designed to eliminate this parasitic weed. The fact that the weed seeds are so numerous and so small makes the job of eradication difficult. Also the ability of the seeds to lie dormant indefinitely and still grow poses another real problem.

THE IMPORTED FIRE ANT
(Solenopsis saevissima richteri Forel)

The imported fire ant is believed to have reached this country as a stowaway on a boat from South America about 1918. Because of its close resemblance to some of our native ant species it was not identified as a separate species until 1930. It was first found around the bay front of Mobile, Alabama.

The imported fire ant closely resembles the darker forms of our native fire ants. The adult workers vary in color from dark brown to reddish-brown or black with an orange colored band at the base of the abdomen. The size varies from one-eighth to one-fourth inch long. Only the queens and males have wings.

The natural spread is by newly fertilized queens each of which finds a nesting place, sheds her wings and starts digging a brood chamber and building a new mound. She continues laying eggs, 10 to 15 the first days and more later, until the colony is well established. The eggs hatch in 8 to 12 days into dirty-white grubs which change to pupae in 6 to 12 days. The pupae are pale, shiny white and about the shape and size of adult workers. In another 9 to 12 days the adult workers emerge from the pupae cases. The workers care for the young brood, forage for food, maintain and enlarge the mound and protect the nest from enemies.

The fully developed mound averages about one foot high and two feet across. The honeycombed galleries are built within the cone and reach a depth of about three feet. There are an average of 25,000 ants in a well developed mound. More than 100 mounds per acre of land are not uncommon in heavily infested areas.

Imported fire ants damage many crops by sucking the juices from their roots, stems, seeds and tender shoots. Some of our most important farm crops and nursery crops are among those damaged by fire ants. The ants also attack the young of animals and birds, both wild and domestic. Ground nesting and low nesting birds, rabbits and the young of other small wild animals fall victim to the foraging fire ant workers. Newly born pigs, lambs and calves have been reported as killed by fire ants on many farms in heavily infested areas. The fire ants will also invade houses in search of food. Their favorite foods from the pantry

include meats, butter, cheese, nuts and bread. They show little interest in household sweets.

The painfulness of the fire ant sting is out of all proportion to the ant's size. The sting of a single ant is usually not serious although it may cause an open sore followed by a scar. Persons who are sensitive to the venom of bees, ants, wasps, etc. if stung by several fire ants may suffer chest pains, nausea and even lapse into a coma. Imported fire ants are vicious when disturbed. They have been known to rout field workers in heavily infested areas. Children who disturb the mounds of fire ants may be severely stung since the fighting instinct of the ants makes them a serious enemy to man and animals.

The imported fire ant now infests the states of Alabama, Georgia, Louisiana and Mississippi rather generally. The states of Texas, Arkansas, Florida, North Carolina and South Carolina are infested to a lesser extent. Shelby County, Tennessee, had an imported fire ant infestation discovered in 1950. The State of Tennessee applied insecticide to the infested area forthwith and the infestation was apparently eradicated. A recent report has been received by the State Entomologist that an imported fire ant infestation has been recently identified in Missouri, that portion of the state adjoining both Arkansas and Tennessee. More than 20 million acres are not infested in the United States.

The most effective control measures for eliminating imported fire ant mounds seem to be dieldrin, heptachlor, chlordane and aldrin. Two teacupfuls of five percent dieldrin granular spread uniformly over the mound and a 20 foot area around the mound will successfully eliminate the ants. Large scale treatments by use of airplanes and other power driven equipment have proven successful in heavily infested areas. The job of eradicating fire ants from an area is quite similar to our work of treating an area for the eradication of Japanese beetle.

The joint Federal-State imported fire ant eradication program has resulted in the insecticidal treatment of 1,648,934 acres in nine southern states. Treatments have been completed in all known infestations in 75 counties.

Nurserymen and others should be on the alert for imported fire ant in Kentucky. The importation of plants with soil about the roots is one of the easiest ways of importing the fire ant.

INSPECTION REQUIREMENTS FOR CERTAIN CLASSES
OF PLANT MATERIAL

Gladiolus Corms

Two inspections are required for certification of gladiolus corms. The first inspection is made during the blooming and the second inspection during storage after the corms have been cleaned.

Sweetpotato Plants

Some state laws establish the requirements that sweetpotato plants should be free from black rot, stem rot and sweetpotato weevil before they are shipped into the respective states. Only sweet potatoes which are certified as free from sweetpotato weevil should be bedded. A request for inspection service should be sent to the State Entomologist in advance of bedding time giving approximate date of bedding and drawing of first plants.

Native or Collected Plants

There seems to be a growing demand for certain native or collected plants. Where it is desired to offer for sale this type of plant material, the plants should be collected and "lined out" or "heeled in" and held for inspection. Notice should be forwarded to the State Entomologist giving the date when the plants will be ready for inspection and the location of the plant yard.

For general inspection requirements see "Summary of Requirements of Kentucky Nursery Inspection Law" and "Nursery Stock" defined on previous pages.

Voluntary Certification

Plant certification requirements are not uniform throughout the forty-eight states. Some states require the inspection of greenhouse plants, bulbs, corms, rhizomes, tubers, annual flowering plants and garden vegetable plants. Kentucky does not require inspection on any of these plants or materials. Dealers can merchandise this material, under the provisions of the Kentucky law, without applying or obtaining a state permit. A grower of any of the above mentioned plants who wishes to ship to other states or who wishes to have inspection and certification for any other reason can have inspection in the usual manner by applying to the State Entomologist. As in the case of required inspection a fee of \$5 is charged for voluntary inspection.

Raspberry Plants

Two inspections are required for certification of raspberry plants. These inspections are made during summer months and must be at least thirty days apart. Raspberry plant growers wishing inspection services should notify the State Entomologist by June 1.

Strawberry Plants

Growers wishing to offer strawberry plants for sale should take into account the dual inspection requirements. Notice should be given to the State Entomologist by the middle of April if inspection services are desired. Also those growers who wish to grow plants under the strawberry virus disease control program should consult the Kentucky Seed Improvement Association and secure a copy of the requirements for growing plants under that program. Those growers who fulfill the requirements of the Kentucky Seed Improvement Association will obtain certification as to freedom from virus diseases and the strawberry root-knot nematode. In addition to the plant certification issued by the Kentucky Seed Improvement Association, it is necessary for strawberry plant growers to continue to secure a certificate of inspection from the State Entomologist which is based on the dual inspection looking toward freedom from the general insects and plant diseases to which strawberry plants are subject. These two inspection and certification programs are separate and independent of each other. The certificate of inspection issued by the State Entomologist is required under sections 249.070 and 249.080 KRS for any strawberry plant grower in Kentucky who offers plants for sale within the Commonwealth or who offers strawberry plants for shipment to another state by any common carrier.

The strawberry plant certification program, under the supervision of the Kentucky Seed Improvement Association, is a voluntary program designed to help control virus diseases and root-knot nematodes in strawberry plants. It is also designed to help keep varieties of strawberries true to name.

NURSERY DEALERS

<u>NAME</u>	<u>ADDRESS</u>
Alexander Landscape Service	Campbellsville
Applegates Market	Greenup
Apple House Market	Central City
Atlantic & Pacific Tea Company (2 permits)	Ashland
Atlantic & Pacific Tea Company	Barbourville
Atlantic & Pacific Tea Company	Bardstown
Atlantic & Pacific Tea Company	Bowling Green
Atlantic & Pacific Tea Company	Campbellsville
Atlantic & Pacific Tea Company	Central City
Atlantic & Pacific Tea Company	Corbin
Atlantic & Pacific Tea Company	Covington
Atlantic & Pacific Tea Company	Cumberland
Atlantic & Pacific Tea Company	Cynthiana
Atlantic & Pacific Tea Company	Danville
Atlantic & Pacific Tea Company	Elizabethtown
Atlantic & Pacific Tea Company	Frankfort
Atlantic & Pacific Tea Company	Fulton
Atlantic & Pacific Tea Company	Georgetown
Atlantic & Pacific Tea Company	Glasgow
Atlantic & Pacific Tea Company	Harlan
Atlantic & Pacific Tea Company	Harrodsburg
Atlantic & Pacific Tea Company	Hazard
Atlantic & Pacific Tea Company	Henderson
Atlantic & Pacific Tea Company	Hopkinsville
Atlantic & Pacific Tea Company	Irvine
Atlantic & Pacific Tea Company	Jackson
Atlantic & Pacific Tea Company	Lancaster
Atlantic & Pacific Tea Company	Lawrenceburg
Atlantic & Pacific Tea Company	Lebanon
Atlantic & Pacific Tea Company (4 permits)	Lexington
Atlantic & Pacific Tea Company (18 permits)	Louisville
Atlantic & Pacific Tea Company	Madisonville
Atlantic & Pacific Tea Company	Mayfield
Atlantic & Pacific Tea Company	Maysville
Atlantic & Pacific Tea Company	Middlesboro
Atlantic & Pacific Tea Company	Murray
Atlantic & Pacific Tea Company	Neon
Atlantic & Pacific Tea Company (2 permit)	Newport
Atlantic & Pacific Tea Company	Owensboro
Atlantic & Pacific Tea Company	Paducah
Atlantic & Pacific Tea Company	Paris
Atlantic & Pacific Tea Company	Pikeville
Atlantic & Pacific Tea Company	Pineville
Atlantic & Pacific Tea Company	Princeton
Atlantic & Pacific Tea Company	Richmond
Atlantic & Pacific Tea Company	Shelbyville
Atlantic & Pacific Tea Company	Shively
Atlantic & Pacific Tea Company	Somerset

<u>NAME</u>		<u>ADDRESS</u>
Atlantic & Pacific Tea Company		St. Matthews
Atlantic & Pacific Tea Company		Stanford
Atlantic & Pacific Tea Company		Valley Station
Atlantic & Pacific Tea Company		Versailles
Atlantic & Pacific Tea Company		Whitesburg
Atlantic & Pacific Tea Company		Winchester
Bailey, Robert	Route 1	Mt. Sterling
Baldridge's 5¢, 10¢ and 25¢ Store		Fulton
Balltrips Market		Harlan
Begley's Drug Company	(4 permits)	Lexington
Begley's Drug Company		London
Begley's Drug Company		Richmond
Begley's Drug Company		Winchester
Blocks Drug Store		Vanceburg
Bluegrass Landscaping Company	4625 Lowe Road	Louisville 20
Booker, Philip C.	7912 Manslick Road	Louisville
Bowling, Joseph W., Jr.	306 Penruth Avenue	Louisville
Brown's Supply Company		Burkesville
Bunker Hill Pottery	Box 403	Burnside
Bunton Seed Company	300 E. Jefferson	Louisville
Butts and Sons, A. C.		Fulton
Caldwell Nursery	Route 1	Kevil
Campbell's Open Air Market	(2 permits)	Bowling Green
Capito, Joe	319 Macon Avenue	Louisville
Cayce-Yost Company, Inc.		Hopkinsville
Clyde's Shopping Center		Paintsville
Colonial Store, Inc.		Covington
Colonial Store, Inc.		Erlanger
Colonial Store, Inc.		Florence
Colonial Store, Inc.		Ft. Thomas
Colonial Store, Inc.		Latonia
Colonial Store, Inc.	(2 permits)	Lexington
Colonial Store, Inc.		Newport
Consolidated Sales Company	1407 W. Jefferson	Louisville
Davey Tree Expert Co., The	117 S. Water St.	Kent, Ohio
Davis, Chas. Joseph	4401 Stoltz St.	Louisville
Dixie Food Marts, Inc.	2022 Clay	Henderson
Dixie Garden Nursery	Box 101	Lexington
Downtown Super Market		Monticello
Drive-In-Market, Inc.	1914 Monmouth St.	Newport
Drury, Oliver	Route #1	Harrodsburg
Dudley's Market	108 West Main St.	Bowling Green
Duncans Superette		Providence
Durhams 5¢ & 10¢ Store		Burkesville
Durhams 5¢ & 10¢ Store		Tompkinsville
Durrett, Earl	Route #3	Greensburg
Economy Stores Company		Springfield
Edmonton 5¢ & 10¢ Store		Edmonton
Estes, Arthur L.		Milton, Tenn.
E'Town Seed & Garden Supply	124 E. Dixie Ave.	Elizabethtown
Evans, Herndon J.	220 Clinton Road	Lexington

<u>NAME</u>		<u>ADDRESS</u>
Jackson Florist	3124 Madison Ave.	Covington
Johnny's Dollar Saver Market	(2 permits)	Owensboro
Karcher, Theodore B.	3125 Poplar Level	Louisville
Kays, Thomas E.	3717 Cane Run Rd.	Louisville
Kentucky Pottery Sales	2100 Triplett St.	Owensboro
Kermits Super Market		Whitesburg
Kidd Brothers		Barbourville
Kresge, S. S., Company	624 Madison Avenue	Covington
Kresge, S. S., Company	250 W. Main Street	Lexington
Kresge, S. S., Company	(4 permits)	Louisville
Kresge, S. S., Company	812 Monmouth St.	Newport
Kresge, S. S., Company	100 E. Main Street	Owensboro
Kresge, S. S., Company	318 Broadway	Paducah
Kresge, S. S., Company	Dixie Highway	Pleasure Ridge Park
Kress, S. H., & Company	1422 Winchester Ave.	Ashland
Kress, S. H., & Company	164 Clinton Rd.	Hopkinsville
Kress, S. H., & Company	5 Cleveland St.	Winchester
Kroger Company	(2 permits)	Ashland
Kroger Company		Bardstown
Kroger Company		Bowling Green
Kroger Company		Campbellsville
Kroger Company		Carrollton
Kroger Company		Covington
Kroger Company		Cynthiana
Kroger Company		Danville
Kroger Company		Dayton
Kroger Company		Elizabethtown
Kroger Company		Elsmere
Kroger Company		Fort Thomas
Kroger Company		Frankfort
Kroger Company		Franklin
Kroger Company		Georgetown
Kroger Company		Harrodsburg
Kroger Company		Henderson
Kroger Company		Hopkinsville
Kroger Company		Irvine
Kroger Company		Lebanon
Kroger Company	(5 permits)	Lexington
Kroger Company		London
Kroger Company	(20 permits)	Louisville
Kroger Company		Ludlow
Kroger Company		Madisonville
Kroger Company		Maysville
Kroger Company		Middlesboro
Kroger Company		Mt. Sterling
Kroger Company	(2 permits)	Newport
Kroger Company		Nicholasville
Kroger Company		Owensboro
Kroger Company		Paducah
Kroger Company		Paintsville

<u>NAME</u>		<u>ADDRESS</u>
Kroger Company		Paris
Kroger Company		Pikeville
Kroger Company		Prestonsburg
Kroger Company		Radcliff
Kroger Company		Richmond
Kroger Company		Russellville
Kroger Company		Shelbyville
Kroger Company		Shively
Kroger Company		Somerset
Kroger Company		Valley Station
Kroger Company		Versailles
Kroger Company		Winchester
Krotzki's Flower Center	3300 Preston Hwy.	Louisville
Kuhn's 5¢, 10¢ & 25¢ Store		Franklin
Kuhn Brothers Co., Inc.		Lawrenceburg
Kuhn Brothers Co., Inc.		Murray
Kuhn Brothers Co., Inc.		Owensboro
Kuhn Brothers Co., Inc.		Russellville
K. Y. Housewares, Inc.	5200 Crittenden Dr.	Louisville 13
Lawson, Richard L.	407 N. Picadome Pk.	Lexington
Long, Neville	1044 Inca Trail	Frankfort
Lose Brothers, Inc.	(2 permits)	Louisville
Lose Brothers, Inc.	Shelbyville Road	Middletown
Louise Florist	311 W. Mt. Vernon	Somerset
Mangum, F. L.	1524 Winchester	Ashland
Max Super Market		Pineville
McCreary, John R.	1110-9th Street	Carrollton
McCrary Stores	110 East Main St.	Lexington
McCrary Stores	428-30 S. 4th St.	Louisville
McLoney, Douglas, & Son Co.		Cynthiana
Meisner, Allen L.	4058 Richland Ave.	Louisville
Miller Bros. Grocery	1706 Harrodsburg Rd.	Lexington
Miller's Evergreen Gardens		Rock Camp, Ohio
Mills, G. F. 5¢ to \$1.00 Store	1016 E. 4th Street	Owensboro
Montgomery Ward & Company		Hopkinsville
Montgomery Ward & Company		Maysville
Montgomery Ward & Company		Middlesboro
Monticello Flower & Gift Shop		Monticello
Morehous, Robert L., Jr.	Box 340, Rt. 2	Anchorage
Moren, Rufus, Food Market		London
Murphy, G. C., Company	1537 Winchester	Ashland
Murphy, G. C., Company	Dixie Manor	Louisville
Murphy, G. C., Company	2-4 West Second	Maysville
Murphy, G. C., Company	507 Court Street	Paintsville
Murphy, G. C., Company	323½-325½ Main St.	Pikeville
Newberry, J. J., Company		Bardstown
Newberry, J. J., Company		Central City
Newberry, J. J., Company		Corbin
Newberry, J. J., Company		Cynthiana
Newberry, J. J., Company		Danville
Newberry, J. J., Company		Elizabethtown

<u>NAME</u>		<u>ADDRESS</u>
Newberry, J. J., Company		Frankfort
Newberry, J. J., Company		Glasgow
Newberry, J. J., Company		Harlan
Newberry, J. J., Company		Harrodsburg
Newberry, J. J., Company	(2 permits)	Hazard
Newberry, J. J., Company		Henderson
Newberry, J. J., Company		Lawrenceburg
Newberry, J. J., Company		Lebanon
Newberry, J. J., Company		Mayfield
Newberry, J. J., Company		Mt. Sterling
Newberry, J. J., Company		Owensboro
Newberry, J. J., Company		Paris
Newberry, J. J., Company		Pineville
Newberry, J. J., Company		Richmond
Newberry, J. J., Company		Shelbyville
Newberry, J. J., Company		Somerset
Newberry, J. J., Company		Winchester
Nunn, James L.		Sullivan
O'Dell's Garden Center	Route 1	Hodgenville
Parkers Food Market		Murray
Patrick's Flowers		Williamsburg
Patterson Nursery	226 W. Dixie Ave.	Elizabethtown
Payne, Chester L.	P. O. Box 411	Lexington
PDQ Markets, Inc.		Lexington
Piggly-Wiggly Market		Corbin
Pine Hill Garden Center	Route 3	Frankfort
Posey's Food Market	West 9th Street	Hopkinsville
Radcliff Company	4840 Dixie Hwy.	Louisville
Rapson Tree Service	926 Vine Street	Louisville 4
Rawlings, Chas., Chester		
Chandler, Joe Gilbert		Frankfort
Reed's Key Market		Springfield
Rice, Ralph C.	28 Scott Drive	Florence
Riedel's 5¢ & 10¢ Store		Springfield
Roberts, Harry B.		Warsaw
Roberts, Mrs. L. V.	Box 683	Monticello
Rose's 5¢, 10¢ & 25¢ Stores	(2 permits)	Louisville
Rowlands Hardware & Seed Store	1114 E. 4th Street	Owensboro
Samuel's Food Market		Clinton
Sansom, James Thomas	Route 3	Providence
Saveway Super Market, Inc.		Owenton
Saylor, C. J.		Berea
Scott Store	919 College St.	Bowling Green
Scott Store	Main & Eversole	Harlan
Scott Store	138 Main Street	Hazard
Scott Store	2010-12 Cumberland	Middlesboro
Sears Roebuck & Company	1010-20 State St.	Bowling Green
Sears Roebuck & Company	13 W. Seventh St.	Covington
Sears Roebuck & Company	213 E. Main St.	Lexington
Sears Roebuck & Company	820 W. Broadway	Louisville
Sears Roebuck & Company	312 E. Second St.	Owensboro

<u>NAME</u>		<u>ADDRESS</u>
Woolworth, F. W., Company		Covington
Woolworth, F. W., Company		Danville
Woolworth, F. W., Company		Frankfort
Woolworth, F. W., Company		Henderson
Woolworth, F. W., Company		Hopkinsville
Woolworth, F. W., Company	(3 permits)	Lexington
Woolworth, F. W., Company	(9 permits)	Louisville
Woolworth, F. W., Company		Madisonville
Woolworth, F. W., Company		Mayfield
Woolworth, F. W., Company		Middlesboro
Woolworth, F. W., Company		Newport
Woolworth, F. W., Company		Paducah
Woolworth, F. W., Company		St. Matthews
Woolworth, F. W., Company		Valley Station
Wright Farm Service		Georgetown
Young, Foley H.		Winchester
Young, Virgil	Route 1	Demossville
Zayre of Louisville, Inc.	5300 Dixie Highway	Louisville

KENTUCKY NURSERYMEN WHO RECEIVED CERTIFICATES
OF INSPECTION, 1961-62

<u>NAME</u>	<u>ADDRESS</u>	<u>ACREAGE</u>	<u>KIND OF STOCK</u>
Adkins Plant Farm	Hawesville		Sweet Potato
Alberts Orchid Company	4318 Westport Rd., Louisville		Orchids
Arrow Wood Nurseries	Warsaw	50	General
Arterburn, Paul, Nursery	Box 7072, St. Matthews	10	General
Ball, A. E.	Route 1, Rush	2	General
Basinger, W. H.	Hawesville		Sweet Potato
Baxter's Nursery	Route 1, Keavy	10	General
Baxter, L. M.	Route 1, Keavy	2	Ornamental
Bayne Iris Gardens	Mt. Olivet	$\frac{1}{2}$	Iris
Bellefonte Nursery	Ashland	12	General
Berea College	Berea	5	General
Blue Star Nursery	Millersburg	30	General
Bolton, Paul	1282 Fern Valley Rd., Louisville	2	General
Brashear Flower Shop and Greenhouses	Hazard	1	Ornamental
Brown, Mrs. Robert A.	4500 Hillside Dr., Louisville	$\frac{1}{2}$	Iris and Hemerocallis
Cardinal Hill Nursery	Glenn's Creek Pike, Frankfort	8	General
Carpenter, Carl	115 East 19th St., Owensboro	$\frac{1}{2}$	Iris and Hemerocallis
Cheatham, Mrs. Tracy H.	345 S. Fourth St., Danville	$\frac{1}{2}$	Perennials
Cherokee Tree Expert Co.	4528 Bardstown Rd., Louisville	6	General
Cherry, The Florist	527 Broadway, Paducah		Greenhouse
Chick's Nursery	Marion	2	General
Chowning, Kelly T.	716 Aurora, Lexington	10	General
Church, Archibald, III	Route 2, Maysville	3	Ornamental
Clay Nurseries	Clay and Sturgis	40	General
Cole's Nursery	Evansville Rd., Henderson	10	General
Crume, J. Marvin	Sparta	1	Ornamental
Crume, T. C., Nursery and Landscape Company	U. S. 42, Florence	50	General
Cummings Plant Farm	1716 W. Eight St., Owensboro	3	Vegetable Plants
Cunningham, A. L.	Princeton		Vegetable and Bedding Plants
Donaldson Nurseries	Sparta	3	General
Drake Gardens	3611 Norbourne Blvd., Louisville 7	$\frac{1}{2}$	Iris
Dressman, J. A.	Route 5, Covington		Tulip-Hyacinth Bulbs
Durbin, Hubert Mrs.	4006 Brookfield, Louisville 7	$\frac{1}{2}$	Iris and Hemerocallis

<u>NAME</u>	<u>ADDRESS</u>	<u>ACREAGE</u>	<u>KIND OF STOCK</u>
Durrett, Lydian	Preston Highway, Louisville	3	General
Elkhorn Nursery, C.W.H. Wood	Route 4, Lexington	10	General
El Rancho Nursery	Route 3, Hazel	2	General
Evergreens, Inc.	275 N. Hubbards Lane, Louisville 7	10	General
Farrington, O. M.	276 Swigert St., Lexington	15	Gladiola
Fike Nurseries	Hopkinsville	65	General
Florence Nursery	P.O. Box 507, Florence	4	Ornamental
Fortner, D. D.	Morgantown	$\frac{1}{2}$	Ornamental
Gardiner, Boone, Nurseries	9409 Shelbyville Rd., Louisville 7	35	General
Gordon, Fred L.	5402 New Cut Road, Louisville	15	General
Gramse Nursery, The	Route 4, Paducah	4	General
Gramse Nursery, Roy	Route 7, Paducah	6	General
Haag, R. L., Nurseries	Jeffersontown	15	General
Hallenburg, Nursery, Inc.	Route 2, Anchorage	5	General
Harvill, A. M.	Route 2, Princeton	10	General
Haverly's Green Acres Farms	Route 1, Keavy	1	Ornamental
Hays, Charles	Route 1, Simcoe Lane Louisville	$\frac{1}{2}$	Ornamental
Highbaugh Farms Nursery	St. Matthews	30	General
Hillenmeyer Nurseries	Sandersville Road, Lexington	290	General
Hill's Nursery	Warsaw	55	General
Hopperton Nursery, Inc.	Warsaw	75	General
Howell, Linzie	Box 172, Pikeville	$\frac{1}{2}$	Fruits
Humphrey's Landscape Ser.	Mt. Sterling	35	General
Humphries, Earl F.	Box 204, Pewee Valley	10	General
Humphries, Stanley H.	Route 1, Brownsboro, Louisville 7	2	Ornamental
Johnson, Clyde E.	Ashland	25	General
Johnson's Nursery	Route 6, Benton	5	General
Jones, Irby S.	10200 Brentlinger Ln., Fern Creek	$\frac{1}{2}$	Ornamental
Kentucky Div. Forestry	Dawson Springs and Gilbertsville Dam	3	Tree Seedlings
Kenzig, E. A.	1439 Belmar Drive, Louisville 13	$\frac{1}{2}$	Iris
Klein, Theo, Nurseries	Crestwood	60	General
Korfhage Florist & Nursery	4404 Dixie Highway, Louisville 16	15	General
Leichhardt Hillview Nursery	Nashville Road Bowling Green	30	General
Lillard's Nursery	6129 Taylor Mill Rd., Covington	16	General
Lillard's Nursery	Route 2, Jeffersontown	40	General

<u>NAME</u>	<u>ADDRESS</u>	<u>ACREAGE</u>	<u>KIND OF STOCK</u>
Lucas Nursery	106 Jane Hill Rd., Ashland	$\frac{1}{2}$	Ornamental
Martin's Nursery	Carrollton	35	General
McCutchen Meadows Farm	Auburn		Greenhouse & Veg. Plants
McCutchen's Flowers	Box 68, Russellville	1	Ornamental
McCreary, John R.	1110 Ninth Street, Carrollton	$\frac{1}{2}$	Ornamental
Metcalfe Floral Company	Hopkinsville	2	General
Metcalfe Wholesale Florist	Hopkinsville		Greenhouse
Minish & Potts	Crestwood	6	General
Mink's Nursery	London	5	General
Monteith Nursery	324 Constance, Hebron	1	General
Murdock, L. W.	Farmington	1	Rosa Multiflora
Nick's Nursery	Route 2, Anchorage	35	General
Nunn, Mrs. James L.	Sullivan	$\frac{1}{2}$	Perennials
Oak Grove Nursery	2121 Phelps Street, Ashland	2	Ornamental
Outer Belt Nurseries	7902 Shepherdsville, Louisville 19	5	General
Pack's Nursery	Box 225, Danville	15	General
Paintsville Nursery	Lowmanville	12	General
Peyton's Nursery	Hodgenville	3	General
Pfile, Earl E.	Route 1, Fern Creek	$\frac{1}{2}$	Ornamental
Phillips, James D.	Box 496, Crestwood	5	General
Pine Acres Nursery	110 McKnight Street, Ashland	1	Ornamental
Pleasant Acres Nut Nursery	Route 2, Walton	$\frac{1}{2}$	Nuts
Ray, Carl, Company	8600 La Grange Rd., Lyndon	25	General
Reynolds Nursery	Route 1, Bondville	50	General
Rickard, F. W.	Winchester	4	General
Rottgering's	2600 Old Cairo Rd., Paducah	3	General
Sanders Brothers Nursery	Route 4, Paducah	40	General
Sanders, James, Nursery	4123 Schneidman Rd., Paducah	10	General
Sanders, Lawrence, Nursery	721 Kentucky Avenue, Paducah	15	General
Schevetto's Nursery	Anchorage	8	General
Schultz, W. T., and J. T. Hardin	P. O. Box 242, Louisville 18	2	General
Shady Lane Gardens	250 Lookout Avenue, Frankfort	5	General
Shaw's Gardens	Henderson	6	General
Shupe Nurseries	Sedalia	3	General
Singer Gardens	Stamping Ground	35	General
Smit's Greenhouses	Second Street, Paris	1	Ornamental
Strauss Perennial Gardens	4301 Westport Road, Louisville	2	General

<u>NAME</u>	<u>ADDRESS</u>	<u>ACREAGE</u>	<u>KIND OF STOCK</u>
Straw, William T.	Carlisle	2	General
Tudor's Evergreen Nursery	Central City	2	Ornamental
Veeley's Nursery	3801 Camp Ground Rd., Louisville	8	General
Village Nursery, The	Route 1, Simcoe Lane, Louisville	4	General
Walker, Kingsley, Nursery	1127 Standiford Ave., Louisville	3	General
Wallitsch Nurseries	2608 Hikes Lane, Louisville	10	General
Watkins, LeRoy, Nursery	Route 3, Owensboro	25	General
Wayside Nursery	Robards	3	General
Wheeler's Nursery	Calhoun Rd., Owensboro	2	General
Whittenback's Nursery	Route 5, London	1	General
Wildwood Nursery and Greenhouses	29th Street, Ashland	2	Ornamental
Wilhoite, Mrs. J. W.	Route 3, Frankfort	$\frac{1}{2}$	Perennials
Willadean Nurseries	Sparta	50	General

SUMMARY OF INSPECTION AND REGULATORY WORK, 1961-62

The production sale and transportation of ornamental plant material has shown steady increase during the post war period. Recognition of this increase has resulted in the expansion of the research, teaching and extension programs in ornamental horticulture at the University. The pest risk problems attendant to this increase has been recognized and efforts have been made to meet these problems also. The large number of nonresident certificates, nursery stock dealer's permits and agent's permits issued gives an indication of the interstate movement of nursery stock, with the attendant pest risk involved. Our research and control efforts are based on the known plant pests but it is the unknown pests which pose the threat involved in this large quantity of nursery stock and other plant material movement.

Nursery stock acreage has shown an increase of 279.25 acres during the past two years. A partial summary of the years' work is reflected in the following figures.

Inspections of growing stock	135
Inspections of bulbs, perennials, etc.	14
Inspections of greenhouses	6
Acres of all field grown stock	1,665
Acres of bulbs, perennials, etc.	22
Kentucky grower's certificates issued	119
Nonresident nurserymen's licenses issued	28
Nursery stock dealer's permits issued	491
Nonresident nursery stock agent's permits issued	48
Miles traveled during inspection - regulatory activities	16,254
Number of counties visited	120

1.8M--12-62