Kentucky Agricultural Experiment Station UNIVERSITY OF KENTUCKY THOMAS P. COOPER, Director

SOME ITEMS OF INTEREST TO KENTUCKY NURSERYMEN FOR THE YEAR ENDED JUNE 30, 1945

W. A. PRICE and HOWARD G. TILSON

Certain information usually included in the annual nursery bulletin has been omitted this year. A summary of requirements for shipping nursery stock to other states, a list of important nursery stock pests together with recommended treatments, and a definition of terms pertaining to the nursery trade can be found in Regulatory Series Bulletin 41, published S'eptember, 1944. Copies of this bulletin can be obtained from the Kentucky Agricultural Experiment Station. The present bulletin contains, however, some current information of great interest to the nurserymen of Kentucky, including a summary of plant pests found in nurseries during the past inspection season, a brief discussion of some important plant pests now demanding attention, a list of nurseries, nursery dealers, and nursery agents who received certificates and permits during 1944-45, and a list of out-of-state nurserymen who qualified to ship nursery stock into Kentucky.

Some of the injurious insects and plant diseases found in Kentucky nurseries during the year were bagworm, elm leaf beetle, oriental fruit moth, euonymus scale, holly leaf miner, white pine bark aphid, maple vein gall, woolly aphis, pine tip moth, iris borer, strawberry crown borer, gladiolus thrips, cedar rust, phloem necrosis, peony blotch, fire blight, iris leafspot, pussy willow canker, gladiolus scab, birch leafspot, and iris root rot. Red spider was also found.

There is every indication that shortage of spray materials and scarcity of available seasonal labor have contributed to the heavy population of common nursery pests. Bagworm and red spider

were especially abundant this year. Though it is expected that the conditions above mentioned will improve before the end of another growing season, some major troubles nevertheless are impending. Several of these will be discussed here.

Japanese Beetle

During the summer of 1944, 66,828 Japanese beetle traps were set by the Bureau of Entomology and Plant Quarantine in the United States—a 59 percent expansion of the trapping program over 1943. Trapping was done in 462 cities in 17 states. Beetles were captured in 112 localities, in 43 of which the number was great enough to warrant soil treatment or quarantine action.

In order to properly present the position of Kentucky with reference to possible Japanese beetle invasion, trapping records from states bordering the commonwealth are given in the following table.

State	Number of Localities	1944 Traps	Japanese Beetles Taken	1943 Traps	Japanese Beetles Taken
Missouri	5 5 15 39 10 31 a 56 3	4,822 10,900 3,304 4,341 10 1,225 5,921 555	5 723 217 763 0 23 495,838 7	2,410 7,138 2,835 4,755 700 1,300 5,485 283	14 338 97 1,375 71 143 94,112

It is evident from the records presented in the foregoing table that some of the infestations are beyond the point of practical control or eradication by soil treatment. Such areas may be considered proper localities for the application of state or federal quarantines.

There was no Japanese beetle trapping in Kentucky during the 1943 or 1944 seasons. Two infestations discovered in Louisville in 1937-38 were treated. Limited trapping was continued through the 1942 season with no established infestations discovered. Plans are now under way for trapping in certain localities in Kentucky during June and July, 1945. These places are Ashland, Barbourville, Bardstown, Bowling Green, Bloomfield, Cadiz, Campbellsville, Cave City, Central City, Corbin, Cumberland, Dawson Springs, Danville, Drakesboro, Elizabethtown, Elkton, Frankfort, Georgetown, Glas-

¹ From December, 1944, report on Japanese beetle trapping by the Bureau of Entomology and Plant Quarantine, U. S. D. A.

gow, Greensburg, Harlan, Harrodsburg, Henderson, Hodgenville, Horse Cave, Hopkinsville, Irvine, Jenkins, Lawrenceburg, Lebanon, Lexington, Louisville, Madisonville, Mammoth Cave Park, Marion, Middlesboro, Mt. Washington, Mayfield, Morton's Gap, Munfordville, Owensboro, Paducah, Paris, Pineville, Princeton, Richmond, Russellville, Smithland, Smith's Grove, Shelbyville, Springfield, Versailles, Whitesburg, Winchester, Louisville Airport, and Lexington Airport. The results of this trapping program in the state will be noted with keen interest.

From the foregoing figures on numbers of Japanese beetles captured in some of the states bordering Kentucky, it is not difficult to anticipate the possibilities of infestations becoming established within this state in the near future. To expect to stay free from Japanese beetles in Kentucky would be to indulge in wishful thinking. It is, however, desirable to postpone an invasion as long as possible, hoping for more practical control measures with which to combat the infestation when it comes. In this connection an extensive research program is being conducted with new insecticides, including DDT which in preliminary tests appears very promising.

With the return of truck-shipped fruits, produce, nursery stock and other farm commodities, in quantity, the danger of importing Japanese beetle will be greatly increased. The need for extreme caution cannot be too strongly emphasized when importing balled nursery stock from any area not known to be free from Japanese beetle.

White-Fringed Beetle

The areas known to be infested with white-fringed beetle are still restricted to five states—Alabama, Florida, Louisiana, Mississippi, and North Carolina. Much has been learned about the habits of the white-fringed beetle and its vulnerable points since it was first reported from a small area in Florida in 1936. Successful methods of fumigating balled nursery stock to free the soil of all stages of the insect have been devised. Artificial barriers are used to prevent migration of the beetles into greenhouses, cold frames and other areas growing valuable plants. No practical means has as yet been found, however, to grow regular farm crops successfully in heavily infested areas.

Numerous modifications of the Federal quarantine as well as of state quarantines, on account of white-fringed beetle, have been made.

Increased movement of nursery stock and other farm commodities from the infested area is to be expected. For years past, truck loads of balled nursery stock, especially boxwood, have entered Kentucky from North Carolina. The six counties in North Carolina in which white-fringed beetles have been found are located on or near the coast in the southeastern half of the state, in the vicinity of Wilmington. Every truck bringing balled nursery stock from North Carolina or any of the other states infested with white-fringed beetle, should be reported promptly to the office of the State Entomologist. It is desirable to check all shipments of plants and plant products which might constitute a risk of importing white-fringed beetle. Cooperation between the trade and the inspection forces within the various states, provides the only hope of keeping this serious pest in check.

Elm Diseases

The prospect that the elm may continue to be enjoyed by future generations as one of America's most beautiful shade trees is somewhat brighter because of two recent findings of plant pathologists. Seedlings of some old native elms in Kentucky and Ohio are showing resistance to infection by phloem necrosis and in New Jersey there are an American elm and two hybrid elms which have, in tests, shown a degree of immunity to the Dutch elm disease. Nurserymen would do well to secure their elm seed from trees that have shown resistance to both diseases.

White Pine Blister Rust

To date no white pine blister rust has been found in Kentucky. However, a survey during 1945 to determine if there may be any of the disease in the native stands of white pine in eastern Kentucky is planned by the Bureau of Entomology and Plant Quarantine. The disease is caused by a fungus which has as its alternate host Ribes (currant and gooseberry plants). The principal whitepine producing states of the northeast had white pine blister rust over 30 years ago and within recent years the disease has spread through a portion of the northwestern white pine area.

The control program necessitates the elimination of all species of Ribes within the white pine producing areas. Several states, in cooperation with the Bureau of Entomology and Plant Quarantine, have carried on Ribes eradication programs for several years with encouraging results. This is another plant pest problem which may confront Kentucky in the near future.

KENTUCKY NURSERYMEN WHO RECEIVED CERTIFICATES OF INSPECTION, 1944-45

Name	Address	Acreage	Kind of Stock
Arterburn, Paul	St. Matthews	2	Ornamental
Bellefonte Nursery, Orval Lycan	Ashland	. 5	Ornamental
Big Sandy Nursery, W. S. Burris Blankenbeker, S. H Carter Nursery,	Buchanan Jeffersontown	3 1/2	Ornamental Ornamental
H. V. Pack Chick, C. D Clark, Joe A	Carter Marion Webster	1	General Ornamental Fruits
Clyffty Evergreen Gardens, D. L. Parson Conger, Charles E Crawford, I. T	Catlettsburg Marion Murray		Ornamental Strawberries Gladioli
Crume Nursery & Land-Scape Co., T. C. Crume Curry, J. G	Florence Hawesville Maysville		General Sweetpotato plants Ornamental
Dischler, Louis, Jr Dixie View Nursery, A. L. Heger	London Florence,		Ornamental General
Dohrman, Wm	P. O. Box 161 Anchorage Florence Covington, R. 3	65 10 65	General
Evans Brothers	Christine Hopkinsville	45 1/2	Fruits General
series, Dan Gardiner Gramse Nursery Grant Gardens,	Louisville, R. 7 Paducah	10 5	General General Ornamental
Dr. Henry Lee Grant Green River Home Nur-	Louisville	10	General
sery, W. A. Sandefur Green, T. W	Robards Bowling Green	4	General
R. L. Haag	Jeffersontown	30	General
Highland Fruit Farm, Truman Taylor Highland Place Nursery,	Waynesburg	1	Strawberry plants
Mrs. Joseph Garrett Hill, William	Versailles Warsaw	10 40 260	General General General
Hillenmeyer Nurseries Humphries' Landscape Service,	Lexington	400	General
A. G. Humphreys Immegart, Fred J Johnston, Allie	Mt. Sterling Newport Calvert City	5 3 2	General General
Keeling, J. W Kelly Nurseries,	Hopkinsville	1	Strawberry plants
Asa Kelly	Fordsville	1/2	Fruits

KENTUCKY NURSERYMEN WHO RECEIVED CERTIFICATES OF INSPECTION, 1944-45

OF	INSPECTION, 1	944-45	
Name	Address	Acreage	Kind of Stock
Kentucky Department of			
Forestry	Frankfort (Fai		
	Grounds)	5	Forest tree
			seedlings
Kirch, Gardens,	T : '11	1	O-mamantal
Louis Kirch	Louisville	1 1	Ornamental
Kistler, Mrs. Belle M	Anchorage	1	Ornamental
Klein Nursery & Floral	Crestwood	35	General
Co., Theo Klein Korfhage Nursery and	Crestwood	50	General
	Shively	10	General
Leeming Nursery	Shively	10	General
Lindburg Nursery	Lexington	4	General
Lindburg Nursery Martin's Nursery,	20111118		
R. F. Martin	Carrollton	30	General
McCutchen's Greenhouses	Paducah		Potted plants
Metcalf Florist	Hopkinsville		Florist stock
Mink's Nursery,			
Wm. H. Mink	Corbin		General
Mt. Pleasant Gardens	Ft. Thomas	10	General
Murray Nursery and			
Florist, W. P. Roberts	Murray		General
Nick's Nursery	Anchorage		General
Patterson, A. C.	Centertown	14	Gladioli
Piper, Bernard B	Clinton		Fruits General
Pomona Nurseries	Bowling Green	ı 10	General
Pullam-Threlkeld	Clare	5	General
Nursery	Harrodehurg	5	
Richardson, C. B	Murray		Sweetpotato plants
Ridgeway Nurseries,	Widilay		Division parameters
Theo Zollinger	St. Matthews	5	General
Sanders Brothers Nursery	Paducah	10	General
Schulz, Jacob Co	Louisville	2	General
Shupe Nursery	Sedalia	5	General
Singer Gardens		nd 1	
Smits Greenhouses	Paris	5	General
Soil Conservation		0.7	T
Nursery	Paducah	25	Forest tree
G : TI'll N	A alalam d	2	seedlings Ornamental
Spring Hill Nursery	Ashland	1	Ornamental
Todd County Nursery		5	Hemlocks
Valentine Nurseries Wakefield Nurseries	Keavy Louisville, R.		General
Walnut Lawn Farm,	Louisville, 1t.	0 00	General
R. L. James	Lexington	6	General
Webb, Clifton	Hawesville		Sweetpotato plants
Webb's Evergreen			
Nursery, R. F. Webb	Warsaw	1	Ornamental
Webb, S. T	Eubank, R. 2	1/2	Strawberry plants
Wettstain, H. C	Lewisport, R.		Sweetpotato plants
Whittinghill, Lonnie M	Love	1	General
Whittinghill, Lonnie M Whittinghill, Samuel D	Love	Manager and Company of the Company o	Fruits
Willadean Nurseries	Sparta	75	General
Yopp Nursery	Paducah	•	General

NURSERY DEALERS

Alexander, I. P.	Campbellsville
Barnett, A. E.	Murray
Bezold, Anthony	Newport
Bomar-Summers	Louisville
Bomar-Summers	Touisville
Bunton Seed Co.	Louisville
Dixie Gardens	Lexington
Grant. W. T. Co.	Louisville
Green, H. L. Co., Inc.	Louisville
Haupt, Fred	Louisville
Hines, W. T.	Bowling Green
Kresge, S. S. Co., No. 56	Louisville
Kresge, S. S. Co., No. 30	Louisvine
Kresge, S. S. Co. Kresge, S. S. Co.	Lexington
Kresge, S. S. Co.	Covington
Kresge S S Co	Newport
Kresge, S. S. Co. Kresge, S. S. Co.	Owensboro
Kresge, S. S. Co.	Paducah
Kresge, S. S. Co., No. 2609 Kress, S. H. and Co.	Louisville
Kross S H and Co	Honkinsville
Vrogg C H and Co	Winchester
Kress, S. H. and Co.	Achland
Kress, S. H. and Co. Lose Brothers	Tiillo
Lose Brothers	Louisville
Martin G I.	Livermore
McCrory Store	Louisville
McCullough The J Chas Seed Co.	Cincinnati, Unio
Montgomery Ward and Co.	Hopkinsville
Murphy, G. C. Co.	Ashland
Murphy, G. C. Co.	Maysville
Murphy, G. C. Co	Dikoville
Murphy, G. C. Co.	Deintarille
Murphy, G. C. Co.	Pallitsville
Newberry, J. J. Co.	Owensboro
Nowborns T T Co	Henderson
Newberry, J. J. Co.	Louisville
Newberry, J. J. Co.	Frankfort
Newberry, J. J. Co. Newberry, J. J. Co.	Paris
Newberry I J Co	Winchester
Newberry, J. J. Co.	Harlan
Newberry, J. J. Co.	Hazard
Newberry, J. J. Co.	Shelbyville
Newberry, J. J. Co.	Elizabethtown
Newberry, J. J. Co.	Elizabethtown
Newberry, J. J. Co.	Glasgow
Newherry J J Co.	Cynthiana
Newherry J. J. Co.	Central City
Newberry J J Co.	Corpin
Newberry I I Co	Mayneid
Newberry, J. J. Co.	Harrodsburg
Newberry, J. J. Co.	Mt Sterling
Newperry, J. J. Co.	Vergailles
Newberry, J. J. Co.	Dimerille
Newberry, J. J. Co.	Pinevine
Newberry, J. J. Co.	Lebanon
Newberry, J. J. Co.	Richmond
Newberry J. J. Co.	Lawrenceburg
Newberry, J. J. Co.	Danville
Newberry, J. J. Co.	Bardstown
Ostrander, John O.	Louisville
Pinotti, Tony	Louisville
Devell Good Stone	Louisville
Powerl Seed Store	Frlancer
Powers, J. W.	Erianger

NURSERY DEALERS—Continued

Purcell Co., The Ray, Carl Co., Inc.	St. Matthews
Renfrow, H. E. Riesenberg, Stephen G.	T etonie
Riesenberg, Stephen G. Ruysenaars, John C.	Louisville
Scott Stores	Middleshoro
Scott Stores	
Scott Stores	
Scott Stores	
Sears, Roebuck and Co.	Owensboro
Stoke, Louis, Jr.	Louisville
Tipton, Richard	
Woolworth, F. W. Co.	Paducah
Woolworth, F. W. Co.	Owensboro
Woolworth, F. W. Co.	Henderson
Woolworth, F. W. Co.	
Woolworth, F. W. Co.	Hopkinsville
Woolworth, F. W. Co.	Mayfield
Woolworth, F. W. Co.	Madisonville
Woolworth, F. W. Co., No. 34	Louisville
Woolworth, F. W. Co.	
Woolworth, F. W. Co.	
Woolworth, F. W. Co.	Newport
Woolworth, F. W. Co.	Frankfort
Woolworth, F. W. Co	Richmond
Woolworth, F. W. Co.	Danville
Woolworth, F. W. Co.	Darly III
Woolworth, F. W. Co.	Maysville
Woolworth, F. W. Co., No. 1702	Louisville
Woolworth, F. W. Co., No. 1988	
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NONRESIDENT NURSERYMEN

Arcadia Rose Co. Armstrong Nurseries	Ontario, California
Arp Nursery Co	
Baker Nurseries	
Bass Pecan Co.	Lumberton, Mississippi
Baxter Nursery Co.	
Bobbink and Atkins	
Bountiful Ridge Nurseries	
Boyd Nursery Co.	McMinnville, Tennessee
Breedlove Nurseries	Tyler, Texas
Brown Brothers Co.	
Cedar Grove Nursery Co	Smithville, Tennessee
Central New York Nurseries	
Chase Nursery Co	Chase, Alabama
Commercial Nursery Co	Decherd, Tennessee
Conard-Pyle Co., The	West Grove, Pennsylvania
Couch Bros. Nursery Co	
Cumberland Valley Nurseries	McMinnville, Tennessee
Davis, E. C. & Co	
Davis, W. F	Van Fleet, Mississippi
Dixie Rose Nursery	Tyler, Texas

NONRESIDENT NURSERYMEN—Continued

Economy Nursery Co.	Little Silver New Jersey
Emlang Nurgariag	Ctorrongrillo Michigan
Emlong Nurseries	Stevensville, Wichigan
Emmons and Co.	Newark, New York
Emmons and Co. Empire Nursery Products Co., Inc.	Newark, New York
Evergreen Nursery Co. Field, Henry Seed & Nursery Co. Forest Nursery Co., Inc.	Sturgeon Bay, Wisconsin
Field, Henry Seed & Nursery Co.	Shenandoah, Iowa
Forest Nursery Co Inc	McMinnville Tennessee
Fruitland Nurseries	Augusto Coorgio
Fulton Numanar Co	Cmithailla Managasia
Fulton Nursery Co. Gillett Fern and Flower Farm	Siminville, Tennessee
Gillett Fern and Flower Farm	Southwick, Massachusetts
Gilliatt Florist	Shelby, North Carolina
Graham-Charlton, Inc.	Geneva, New York
Haley Nursery Co.	
Harding Bros. Nursery	Daylight Tennessee
Hill, D., Nursery Co.	Dunden Illinois
Howard Rose Co	Homot Colifornia
Howard Rose Co. Howell Nurseries	
Howell Nurseries	Knoxville, Tennessee
Huntsville Wholesale Nurseries, The	Huntsville, Alabama
Ideal Nursery and Orchard Co.	Smithville, Tennessee
Intra-State Nurseries	Hamburg, lowa
Jackson and Perkins Co.	Newark New York
John's	Anonka Florida
Kahn, S.	Staten Island New York
Kelly Brothers Nurseries, Inc.	Deparille New York
The County Diviners Nuiseries, Inc.	Dansville, New York
Klyn, Gerard K. Knight and Bostwick, Inc.	Mentor, Onio
Knight and Bostwick, Inc.	Newark, New York
Kohankie, Henry & Son	Painesville, Ohio
Maloney Bros. Nursery Co., Inc.	Dansville, New York
Maple Lawn Gardens	Tamaroa, Illinois
Mason Kentucky Wonder Nursery Co	Smithville Tennessee
May Earl E Seed Co	Shenandoah Towa
May, Earl E., Seed Co. McIlhenny, E. A.	Avory Island Louisiana
McClung Prothers Page Nurgery	Avery Island, Louisland
McClung Brothers Rose Nursery Mellen Evergreen Products	
Mellen Evergreen Products	Wellen, Wisconsin
Missouri Nurseries	Louisiana, Missouri
Moore, Wm. C. and Co., Inc.	Newark, New York
Mount Arbor Nurseries	Shenandoah, Iowa
Mulford Hewett P and Co	Lehanon Ohio
National Nurseries, The Naughton Farms, Inc. New Fruit Nursery Co.	Biloxi Mississippi
Naughton Farms Inc	Wayahachie Toyas
New Fruit Nursery Co	Smithwillo Tonnoggo
Nicollet County Nursery	Ct Doton Minnogoto
Openso Name Co	
Onarga Nursery Co.	Onarga, Illinois
Onarga Nursery Co. Owen, T. G. & Son, Inc.	Columbus, Mississippi
Paramount Nurseries	West Grove, Pennsylvania
Pharr Nurseries	Pharr, Texas
Pine Creek Nursery Co.	Smithville. Tennessee
Pinkston Farms Ponzer, Ben Nursery	Parrott Georgia
Ponzer, Ben Nursery	Rolla Missouri
Portland Nursery	Portland Tonnoggo
Portland Nursery Potter, H. R. Co. Quaker Hill, Inc.	Madigen Tennessee
Ougles Will Inc	Mauron, Tennessee
Description of N	Newark, New York
Rosemont Nurseries	Tyler, Texas
Rosemont Nurseries Scarff's Sons, W. N.	New Carlisle, Ohio
Schifferli, F. E. Nurseries	Fredonia, New York
Semmes Nurseries	Crichton, Alabama
Shumway, R. H. Seedsman	Rockford, Illnois

NONRESIDENT NURSERYMEN—Continued

Shenandoah Nurseries, The	
Southern States Nurseries	
Southland Gardens, Inc.	
Spring Hill Nurseries Co	
Springdale Farms	Portland, Tennessee
Standard Nursery Co	McMinnville, Tennessee
Starks Nurseries & Orchard Co	Louisiana, Missouri
Stern's Nurseries	Geneva, New York
Stringer H R	Memphis, Tennessee
Stuart, C. W. and Co.	Newark, New York
Stumpp and Walter Co	New York, New York
Sunny Ridge Nursery	
Tennessee Nursery Co.	
Texas Nursery Co.	
Universal Bulb Corporation	Yonkers, New York
Ustler Brothers	
Valentine Nurseries	
Verhalen Nursery Co	Scottsville, Texas
Wayside Gardens Co.	Mentor, Ohio
Western Maine Forest Nursery	Fryeburg, Maine
Wilson County Nursery Co	Martha, Tennessee
Wilson's, C. Nursery	
Winter Garden Ornamental Nursery	

NURSERY AGENTS REPRESENTING NONRESIDENTS NURSERIES

Name	Address	Nursery Represented
Allen, E. H.	Smithville, Tenn.	Standard Nursery Co., McMinnville, Tenn.
Boner, George W.	Berea, Ky	Quaker Hill, Inc., Newark, N. Y.
Braun, Mrs. Alice	JLouisville, Ky	Quaker Hill, Inc., Newark, N. Y.
Brown, J. B	Baxter, Tenn	Baxter Nursery Co., Baxter, Tenn.
Brown, W. J	Augusta, Ky.	Empire Nursery Products Co., Newark, N. Y.
Christian, W. W.	McMinnville, Tenn	Couch Bros. Nursey Co., McMinnville, Tenn.
Filitreau, Ida C	Louisville, Ky	C. W. Stuart & Co., Newark, N. Y.
Fleming, John H.	Virgie, Ky	Quaker Hill, Inc., Newark, N. Y.
Fuston, S. D	Murfreesboro, Tenn	Standard Nursery Co., McMinnville, Tenn.
		Pine Creek Nursery Co., Smithville, Tenn.
		Standard Nursery Co., McMinnville, Tenn.
		Quaker Hill, Inc., Newark, N. Y.
		Commercial Nursery Co., Decherd, Tenn.
		Ideal Nursery & Orchard Co., Smithville, Tenn.
Smith, Albert N.	Evansville, Ind	Quaker Hill, Inc., Newark, N. Y.
		Quaker Hill, Inc., Newark, N. Y.
		Cedar Grove Nursery, Smithville, Tenn.

SUMMARY OF NURSERY INSPECTION

Inspections of growing stock	83
Inspections of fruit stock only	6
Inspections of perennials, bulbs, etc.	7
Inspections of pereinfials, builds, etc.	6
Inspections of sweetpotato plants	3
Inspections of greenhouses	
Acres of all nursery stock	11072
Acres of fruit stock only	372
Square feet of sweetpotato plant beds	11,220
Kentucky growers certificates issued	73
Nonresident nurserymen's licenses issued	104
Nursery dealer permits issued	89
Nursery dealer permits issued	17
Nonresident nursery agents permits issued	17 344
Miles traveled, July 1, 1944, to June 30, 1945	190
Number of counties visited	120