



JAN 9 1973

ENTOMOLOGY DEPT.

entomology

January 5, 1973

TO: County Extension Agents and Other Interested Persons

FROM: Thomas N. Hunt, Survey Entomologist *J.N.H.*

SUBJECT: Insect Survey Report

NORTH CAROLINA COOPERATIVE ECONOMIC INSECT SURVEY AND DETECTION REPORT

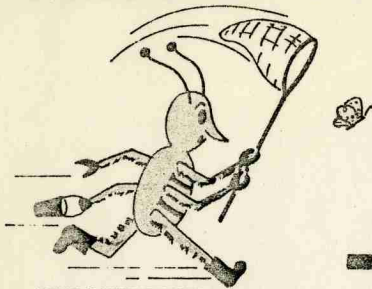
This report is compiled by: Thomas N. Hunt, Survey Entomologist
Raleigh, North Carolina

FOREST AND SHADE TREES

BLACK TURPENTINE BEETLE (Dendroctonus terebrans) - NORTH CAROLINA -
Damage from the black turpentine beetles was reported on white, shortleaf
loblolly, and longleaf pines in Stanly, Caldwell, Moore, Richmond and
Chatham Counties. (North Carolina Forest Service).

BALSAM WOOLLY APHIDS (Adelges piceae) - Recent preliminary surveys
indicated an overall increase in aphid populations within the survey areas
of North Carolina. Suppression activities were initiated on a 40 acre
area within the control zone of Mount Mitchell State Park.





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January 12, 1973

TO: County Extension Agents and Other Interested Persons
 FROM: Thomas N. Hunt, Survey Entomologist *J.N.H.*
 SUBJECT: Insect Survey Report

NORTH CAROLINA COOPERATIVE ECONOMIC INSECT SURVEY AND DETECTION REPORT

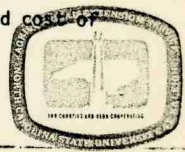
This report is compiled by: Thomas N. Hunt, Survey Entomologist
 Raleigh, North Carolina

TOBACCO

BUDWORMS (Primarily Heliothis virescens) - NORTH CAROLINA - The total losses¹ to budworms were less than in 1971. Approximately \$1,210,000 were lost to budworms during 1972 in North Carolina on 340,000 acres of flue cured tobacco compared to \$1,325,000 during 1971 on 350,000 acres. (Robertson, Ext.)

HORNWORMS (Manduca sexta and Manduca quinquemaculata) - Losses¹ due to hornworms on flue cured tobacco were roughly 57% less than in 1971. Losses during 1972 were reduced from \$587,000 (1971) to \$251,000 (1972). This is a savings of \$336,000. There were 340,000 acres of flue cured tobacco in 1972 compared to 350,000 acres in 1971. (Robertson, Ext.)

¹Includes loss due to insect damage, cost of insecticides and cost of application.





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January 19, 1973

TO: County Extension Agents and Other Interested Persons
 FROM: Thomas N. Hunt, Survey Entomologist J.M.H.
 SUBJECT: Insect Survey Report

TOBACCO

WIREWORMS (Primarily Conoderus vespertinus and Conoderus falli) -
 NORTH CAROLINA - Tobacco losses from wireworms decreased from \$820,000
 in 1971 to \$668,000 in 1972. The greatest reduction was a \$150,000
 decrease in cost of control. These figures represent damage losses
 plus costs of control on 340,000 acres of tobacco. (Robertson, Ext.).

TOBACCO FLEA BEETLE (Epitrix hirtipennis) - NORTH CAROLINA -
 Tobacco farmers lost \$234,000 due to flea beetles during 1972.
 However, this is \$103,500 less than the \$337,500 lost during 1971.
 These figures represent damage losses plus costs of control on 340,000
 acres of tobacco. (Robertson, Ext.).



Dr. Knight

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January 26, 1973

TO: County Extension Agents and Other Interested Persons
 FROM: Thomas N. Hunt, Survey Entomologist J.N.H.
 SUBJECT: Insect Survey Report

NORTH CAROLINA COOPERATIVE ECONOMIC INSECT SURVEY AND DETECTION REPORT

This report is compiled by: Thomas N. Hunt, Survey Entomologist
 Raleigh, North Carolina

COTTON

BOLL WEEVIL (Anthonomus grandis) - NORTH CAROLINA - Losses plus cost of controlling boll weevils on cotton dropped \$755,000 in 1972 from the \$8,155,000 figure of 1971. The 1972 figures represent damage losses plus cost of control on 172,000 acres of cotton harvest in N. C. This is roughly 3,000 less than was harvested in 1971. (Robertson, Ext.).

BOLLWORM (Heliothis sp.) - NORTH CAROLINA - The corn earworm was again the predominant species in cotton in 1972. Losses plus cost of control increased during 1972 from \$1,408,750 to \$2,101,000. The 1972 figures represent damage losses plus cost of control on 172,000 acres of cotton harvested in N. C. This is roughly 3,000 acres less than was harvested in 1971. (Bradley, Robertson, Dept. of Ent., N.C.S.U.).



DETECTION

A SCARAB BEETLE (Ataenius erratus Fall) - NORTH CAROLINA - This beetle was collected from a light trap by Frank Bowen, APHIS, at the New Hanover County airport on July 1, 1970. Determined by O. L. Cartwright, Natural Museum, Washington, D. C. This is a new state record. (Greene, N.C.D.A.).

A SCARAB BEETLE (Maladera castanea) - NORTH CAROLINA - This beetle was collected from a light trap by Frank Bowen, APHIS, at the New Hanover County airport on July 1, 1970. Determined by James F. Greene, N.C.D.A. Previous collections in North Carolina have been restricted to the extreme western counties (Haywood, Buncombe, and Jackson County area). (Greene, N.C.D.A.).

Dr. Knight

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February 2, 1973

TO: County Extension Agents and Other Interested Persons
 FROM: Thomas N. Hunt, Survey Entomologist *TH*
 SUBJECT: Insect Survey Report

NORTH CAROLINA COOPERATIVE ECONOMIC INSECT SURVEY AND DETECTION REPORT

This report is compiled by: Thomas N. Hunt, Survey Entomologist

Raleigh, North Carolina

PEANUTS

SOUTHERN CORN ROOTWORM (*Diabrotica undecimpunctata howardi*)

Cost of Southern Corn Rootworm Control on Peanuts in North Eastern Counties of North Carolina, 1972.

<u>County</u>	<u>Areas Treated in 1972</u>	<u>Cost* in Thousands</u>
Hertford	4,000	28
Halifax	4,000	28
Northampton	9,000	63
Martin	5,000	35
Edgecombe	6,000	42
Bertie	12,000	84
Gates	<u>6,000</u>	<u>42</u>
Total	46,000	322

* Material + application averaged about \$7 per acre.



Dr. K. L. Knight

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February 9, 1973

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TO: County Extension Agents and Other Interested Persons
 FROM: Thomas N. Hunt, Survey Entomologist *T. N. H.*
 SUBJECT: Insect Survey Report

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NORTH CAROLINA COOPERATIVE ECONOMIC INSECT SURVEY AND DETECTION REPORT

This report is compiled by: Thomas N. Hunt, Survey Entomologist
 Raleigh, North Carolina

FOREST AND SHADE TREES

BLACK TURPENTINE BEETLE (Dendroctonus terebrans) - NORTH CAROLINA -
 Estimates for 1972 compiled by the N. C. Forest Service indicate a loss
 of 2,200 trees valued at the stumpage figure of \$5/cord for pulp wood.
 This is roughly a loss of \$8,000. This figure is very conservative, since
 much loss occurred in urban areas. (Hunt, Ext.)

SOUTHERN PINE BEETLE (Dendroctonus frontalis) - NORTH CAROLINA -
 Estimates by the N.C.D.A. for 1972 indicate a loss of 25.6 thousand cords
 of pulp wood and 5.6 million board feet of saw timber from the southern
 pine beetle. With stumpage values of \$5/cord for pulp wood and \$35 per
 MBF, this is a loss of \$324,000. Much of the killed timber is salvageable
 after a southern pine beetle attack.



Insect Survey Report
February 9, 1973
Page 2

FEDERAL AND STATE PLANT PROTECTION PROGRAMS

GYPSY MOTH (Porthetria dispar) - NORTH CAROLINA - Egg mass surveys conducted by Mr. B. Parker, N.C.D.A.; Mr. D. Ledford, N.C.D.A.; and Mr. P. Lockerman, APHIS; and Mr. W. Wescott, APHIS; near the N. C. - Virginia state line on the Outer Banks of Currituck County were negative. Numerous adult catches were made in the Virginia Beach, Virginia - Norfolk, Virginia area during 1972.



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February 16, 1973

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TO: County Extension Agents and Other Interested Persons

FROM: Thomas N. Hunt, Survey Entomologist *T.N.H.*

FEB 19 1973

SUBJECT: Insect Survey Report

ENTOMOLOGY DEPT.

NORTH CAROLINA COOPERATIVE ECONOMIC INSECT SURVEY AND DETECTION REPORT

This report is compiled by: Thomas N. Hunt, Survey Entomologist
Raleigh, North Carolina

MAN AND ANIMALS

BROWN RECLUSE SPIDER (Loxosceles reclusa) - NORTH CAROLINA -

Two brown recluse spiders were collected on separate occasions, June 13 and July 1, 1972, in a residence near Apex, Wake County, by D. L. Baker. Determinations were made by D. L. Stephen, N. C. State University, and confirmed by N. Platnick, Museum of Comparative Zoology, Harvard University. This is only collection in N. C. outside of Forsyth County. (Hunt, Ext.)

FEDERAL AND STATE PLANT PROTECTION PROGRAMS

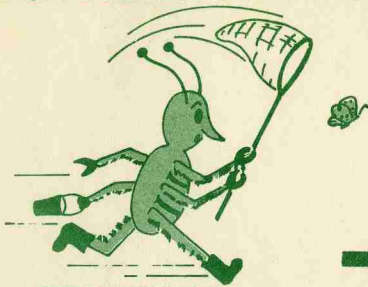
IMPORTED FIRE ANT (Solenopsis saevissima richteri) - NORTH CAROLINA -

One mound has been found in Wilmington, which is the first known infestation in New Hanover County. (Bowen, APHIS).



Dr. Knight

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February 23, 1973

TO: County Extension Agents and Other Interested Persons

RECEIVED

FROM: Thomas N. Hunt, Survey Entomologist JNH

FEB 23 1973

SUBJECT: Insect Survey Report

ENTOMOLOGY DEPT.

NORTH CAROLINA COOPERATIVE ECONOMIC INSECT SURVEY AND DETECTION REPORT

This report is compiled by: Thomas N. Hunt, Survey Entomologist

Raleigh, North Carolina

FOREST AND SHADE TREES

SOUTHERN PINE BEETLE (Dendroctonus frontalis) - NORTH CAROLINA - A southern pine beetle outbreak was detected and evaluated November and December, 1972 on the Grandfather Ranger District, Pisgah National Forest, McDowell County. Aerial and ground evaluation indicated 9 + 3 spots with an estimated 997 actively infested trees per 1000 acres of host type. Brood densities averaged 461 insects per sq. ft. of bark surface. This condition is conducive to continuation of the outbreak in this area. (Division of Forest Pest Mgt., State and Private Forestry, U. S. Forest Service.)

FEDERAL AND STATE PLANT PROTECTION PROGRAMS

IMPORTED FIRE ANT (Solenopsis saevissima richteri)- NORTH CAROLINA - A delimiting survey conducted in New Hanover County for the imported fire ant has been negative. Only 1 mound has been found in this county to date. (Bowen, APHS).





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March 2, 1973

RECEIVED

TO: County Extension Agents and Other Interested Persons
 FROM: Thomas N. Hunt, Survey Entomologist
 SUBJECT: Insect Survey Report

MAR 5 1973

ENTOMOLOGY DEPT.

NORTH CAROLINA COOPERATIVE ECONOMIC INSECT SURVEY AND DETECTION REPORT

This report is compiled by: Thomas N. Hunt, Survey Entomologist
 Raleigh, North Carolina

STORED PRODUCTS

RICE WEEVIL (*Sitophilus oryzae*) - NORTH CAROLINA - Spot checks at 10 feed mills (30 bins sampled) in Sampson, Lenoir, Pitt, Franklin, and Person Counties indicate that the rice weevil is the pest of primary concern in stored corn. Eight of the 10 mills had weevil infestations near the bottom of the bins. Infestations ranged from 5 to 100 per cup of corn.

All owners indicated that bins are swept out and sprayed with 57% EC malathion prior to filling. (Hunt, Ext.)

FOREST AND SHADE TREES

SOUTHERN PINE BEETLE (*Dendroctonus frontalis*) - NORTH CAROLINA - The Southern pine beetle is a problem over state and private lands in 40 N. C. counties. The outbreak increased rapidly in the western half of the state during late fall. More than 3.6 million BF of infested pine has been salvaged since July 1, 1972. (From an article in the Southern Lumberman

December 15, 1972 by P. J. Barry and J. R. Terry, U.S.F.S.)

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS, NORTH CAROLINA STATE UNIVERSITY AT RALEIGH, 100 COUNTIES AND U. S. DEPARTMENT OF AGRICULTURE COOPERATING



Correction: Change imported fire ant (Solenopsis saevissima richteri)
in N. C. Insect Survey Notes of February 16 and February 23, 1973 to
imported fire ant (Solenopsis invicta).



Bright
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March 9, 1973

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MAR 12 1973

TO: County Extension Agents and Other Interested Persons

FROM: Thomas N. Hunt, Survey Entomologist *TNH*

SUBJECT: Insect Survey Report

NORTH CAROLINA COOPERATIVE ECONOMIC INSECT SURVEY AND DETECTION REPORT

This report is compiled by: Thomas N. Hunt, Survey Entomologist

Raleigh, North Carolina

FOREST AND SHADE TREES

SOUTHERN PINE BEETLE (Dendroctonus frontalis) - NORTH CAROLINA - The southern pine beetle outbreak continues to expand on the Tusquittee Ranger District, Nantahala National Forest (Cherokee and Clay Counties). A January, 73 survey indicates a three fold increase in the estimated number of trees per thousand acres of host type since July, 72 (Table 1).

Shortleaf pine, Pinus echinata, continues to be the predominant host species. (State and Private Forestry, Div. of Forest Pest Mgt., U. S. Forest Service)

Table 1. Summary of survey data, Tusquittee Ranger District, Nantahala National Forest, January 1973 (90 percent confidence limits).

Date	Total Acres Surveyed	Spots Per M: Acre Host Type	Red & Faders Per M Acres Host Type	Estimated Infested Trees Per M Acres Host Type	Average Brood Density Per Sq. Ft. of Bark Surface
July 1972	406,520	18.9 + 3.0	77.4 + 22.0	116	465
January 1973	374,300	7.01 + 3.24	317.7 + 234.3	380	303





Knights LD
 MAR 16 1973
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March 16, 1973

TO: County Extension Agents and Other Interested Persons
 FROM: Thomas N. Hunt, Survey Entomologist
 SUBJECT: Insect Survey Report

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NORTH CAROLINA COOPERATIVE ECONOMIC INSECT SURVEY AND DETECTION REPORT

This report is compiled by: Thomas N. Hunt, Survey Entomologist
 Raleigh, North Carolina

HOUSEHOLDS AND STRUCTURES

EASTERN SUBTERRANEAN TERMITE (Reticulitermes flavipes) - NORTH CAROLINA -
 Swarming of winged termites began occurring from homes during late February
 in the Coastal Plain and Piedmont Counties. This is roughly 2 weeks earlier
 than the first reports of 1971.

SOYBEANS

A Cerambycid (Dectes texanus) - NORTH CAROLINA - Damage observed in a
 Pitt County soybean field near Greenville. An infestation in Pitt County
 is not unlikely, however, this is first known report from this county.
 (Barnes, Ext. Soil Science via Van Duyn, Ext. Ent.)





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March 23, 1973

RECEIVED

TO: County Extension Agents and Other Interested Persons

FROM: Thomas S. Hunt, Survey Entomologist

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MAR 23 1973

SUBJECT: Insect Survey Report

NORTH CAROLINA COOPERATIVE ECONOMIC INSECT SURVEY AND DETECTION REPORT

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Raleigh, North Carolina

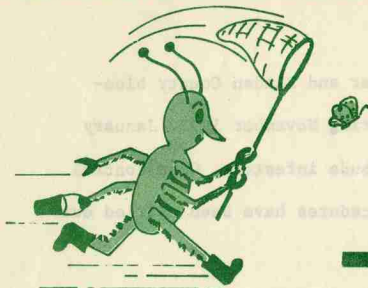
FORAGE LEGUMES

ALFALFA WEEVIL (Hypera postica) - NORTH CAROLINA - Larval threshold levels observed in scattered fields throughout Piedmont during second week of March. Cold weather this week made larvae retreat to litter, however, light mortality is expected. Where chemical controls are warranted, they should be applied about April 1. (Kimbrough, Agronomy, N. C. S. U.)

FOREST AND SHADE TREES

EASTERN TENT CATERPILLAR (Malacosoma americanum) - NORTH CAROLINA - First report of larvae and webbing (roughly 1 in. sq.) observed in Winston-Salem, Forsyth County, and Raleigh, Wake County March 15 and 19, respectively. First report of eastern tent caterpillar in Wake County during 1972 occurred March 16. Hatching above 2000 ft. elevation is usually 2 to 3 weeks later than in Piedmont. Hatching dates of this insect are important as indicators of gypsy moth hatching dates. (Bowers, APHIS; Hunt, Ext.)





Dr. Knight

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March 30, 1973

TO: County Extension Agents and Other Interested Persons

FROM: Thomas N. Hunt, Survey Entomologist

SUBJECT: Insect Survey Report

NORTH CAROLINA COOPERATIVE ECONOMIC INSECT SURVEY AND DETECTION REPORT

This report is compiled by: Thomas N. Hunt, Survey Entomologist

Raleigh, North Carolina

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J.N.H.

SOYBEANS

A CERAMBYCIDAE (Dectes texanus) - NORTH CAROLINA - Damage observed in a Pitt County soybean field near Greenville. Infested weeds (cocklebur) have been observed in the area, however, this is first report of damage to soybeans from this county. (Barnes, Ext. Soil Science via Van Duyn, Ext. Ent.)

FORAGE LEGUMES

ALFALFA WEEVIL (Hypera postica) - NORTH CAROLINA - Larval threshold levels observed in scattered fields throughout Piedmont during second week of March. Cold weather during week of March 19 made larvae retreat to litter, however, light mortality resulted. Where chemical controls are warranted, applications should be made about April 1. (Kimbrough, Agronomy; Hunt, Ext.)

SMALL FRUITS

BLUEBERRY BUD MITE (Acalitus vaccinii) - NORTH CAROLINA - Generally bud mite infestations are slightly higher than in winter of 1971 - 72. Danzig



infestations have been observed in untreated Pender and Bladen County blueberry fields. Counts made in untreated fields during November 1972, January 1973 and March 1973 averaged 51% of the terminal buds infested. Good control has generally been achieved where recommended procedures have been carried out.

FOREST AND SHADE TREES

SOUTHERN PINE BEETLE (Dendroctonus frontalis) - NORTH CAROLINA - New outbreaks of the southern pine beetle occurred on 881,000 acres of National Forest land in western North Carolina. Severe infestations were also observed on the Cherokee Indian Reservation and the adjoining Great Smoky Mountains National Park.

Latest estimates indicate that more than 40 North Carolina counties involving 6.7 million acres of private and public land were under attack by this insect. Salvage for fiscal year 1973 amounted to 5,775,000 board feet and 6,443 cords from state and private lands and 1,390,000 board feet from Federal lands. (Southern Forest Pest Reporter, U. S. F. S., Atlanta, Ga.)

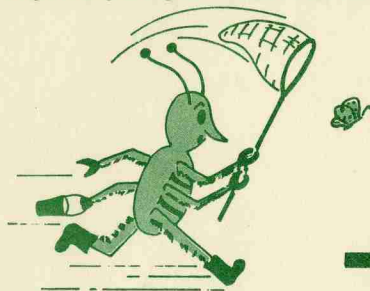
SPECIAL NOTE

Fred E. Whitfield, Assoc. Prof., Ext. Forest Resources, N. C. S. U., has a slide talk on the Gypsy Moth and its Threat to Hardwood Forests that he is willing to loan to County Extension personnel. Interested persons contact Mr. Whitfield at 3028-E Biltmore Hall, N. C. State University, Raleigh, N. C. 27607, phone 737-3386.

bp/315

Dr. Knight

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April 6, 1973

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APR 9 1973

ENTOMOLOGY DEPT

TO: County Extension Agents and Other Interested Persons
 FROM: Thomas N. Hunt, Survey Entomologist
 SUBJECT: Insect Survey Report

NORTH CAROLINA COOPERATIVE ECONOMIC INSECT SURVEY AND DETECTION REPORT

This report is compiled by: Thomas N. Hunt, Survey Entomologist
 Raleigh, North Carolina

FORAGE LEGUMES

ALFALFA WEEVIL (Hypera postica) - NORTH CAROLINA - Samples from 3 Rowan Co. alfalfa fields indicate that larval populations average 5 per plant. Roughly 80% of the foliage had feeding damage. Total loss will occur if these fields are not treated. (Bowers, APHIS).

FOREST AND SHADE TREES

EASTERN TENT CATERPILLAR (Malacosoma americanum) - NORTH CAROLINA - Larvae and webbing have been observed over the entire state. Observations in the mountains were reported April 4 from most mountain counties. First observations in the state were reported from Wake and Forsyth Counties March 16. Eighty-five percent of the wild cherry trees (10+ ft. in height) observed along U. S. 64 from Raleigh, Wake County, to Davie County contained from 1 to 5 webs. (Lott, APHIS, Hunt, Ext.).

bp/315



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APR 16 1973

ENTOMOLOGICAL DEPT.

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April 13, 1973

TO: County Extension Agents and Other Interested Persons

FROM: Thomas N. Hunt, Survey Entomologist *TNH*

SUBJECT: Insect Survey Report

NORTH CAROLINA COOPERATIVE ECONOMIC INSECT SURVEY AND DETECTION REPORT

This report is compiled by: Thomas N. Hunt, Survey Entomologist

Raleigh, North Carolina

BENEFICIAL INSECTS

PARASITE OF THE ALFALFA WEEVIL (Bathyplectes curculionis) - NORTH CAROLINA - This parasite was released during 1971 in Wake, Ashe and Rowan Counties. Samples were taken during 1972 to determine the percent of alfalfa weevil larvae parasitized by B. curculionis. The table below summarizes the results of that survey. (Campbell, Dept. of Ent.)

County	Variety of Alfalfa	Percent Recovery From Larvae
Wake	Cherokee	18.13
Ashe	Du Puits	1.26
Rowan	Weevil Chek	9.8
	Team	5.4
	Cherokee	9.3
Rowan		
Burned ^{a/}	Team	12.7
Burned ^{a/}	Cherokee	6.0

^a Burned Feb. 15, 1971 using LP broadcast flame cultivator.

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J. N. Hunt

APR 24 1973

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April 20, 1973

TO: County Extension Agents and Other Interested Persons

FROM: Thomas N. Hunt, Survey Entomologist *TNH*

SUBJECT: Insect Survey Report

NORTH CAROLINA COOPERATIVE ECONOMIC INSECT SURVEY AND DETECTION REPORT

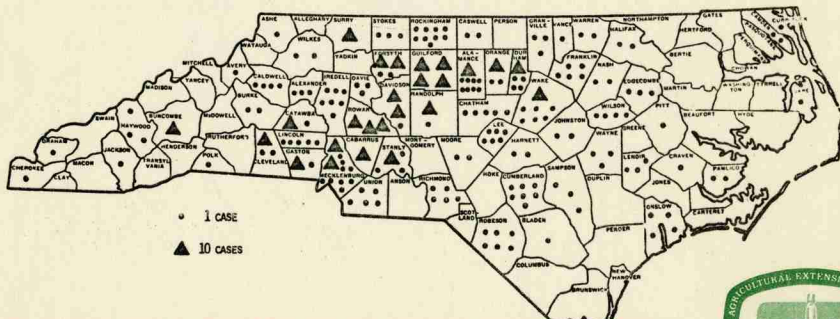
This report is compiled by: Thomas N. Hunt, Survey Entomologist

Raleigh, North Carolina

MAN AND ANIMALS

ROCKY MOUNTAIN SPOTTED FEVER - NORTH CAROLINA - The first 1973 case of this disease was reported during March. The primary vector of this disease in the eastern U. S. is the American dog tick, Dermacentor variabilis. There have been 423 reported cases of Rocky Mountain spotted fever in N. C. during the past 5 years, 121 of these were reported in 1972.

REPORTED CASES OF ROCKY MOUNTAIN SPOTTED FEVER BY COUNTY OF RESIDENCE, 1968-1972



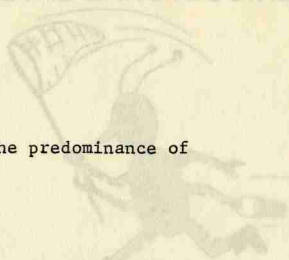
COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS, NORTH CAROLINA STATE UNIVERSITY AT RALEIGH, 100 COUNTIES AND U. S. DEPARTMENT OF AGRICULTURE COOPERATING



Scientists offer the following explanations for the predominance of the disease in the Piedmont crescent.

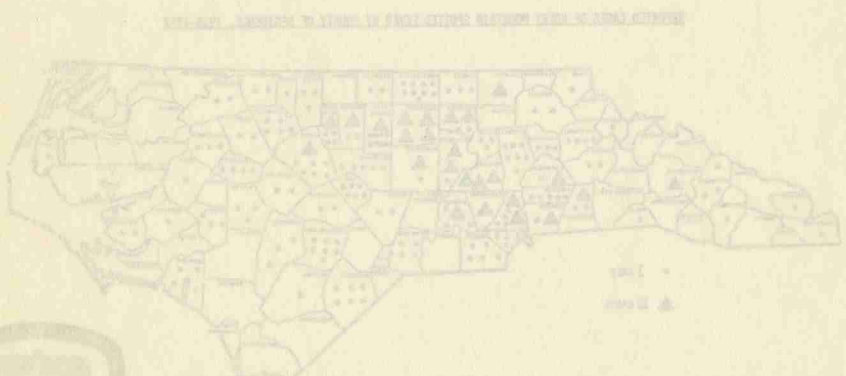
1. The human population density is higher.
2. The encroachment of urbanization upon the natural habitat of the tick increases human exposure. (Div. of Epidemiology, N. C. State Board of Health)

bp/315



FOR THE ANIMALS

NORTH MOUNTAIN SPOTTED FEVER - NORTH CAROLINA - The latest 1973 case of this disease was reported during March. The primary vector of this disease in the eastern U. S. is the American dog tick, *Dermacentor variabilis*. There have been all reported cases of Rocky Mountain spotted fever in N. C. during the past 3 years, 131 of these were reported in 1973.



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April 27, 1973

TO: County Extension Agents and Other Interested Persons

FROM: Thomas N. Hunt, Survey Entomologist *TNH*

SUBJECT: Insect Survey Report

NORTH CAROLINA COOPERATIVE ECONOMIC INSECT SURVEY AND DETECTION REPORT

This report is compiled by: Thomas N. Hunt, Survey Entomologist

Raleigh, North Carolina

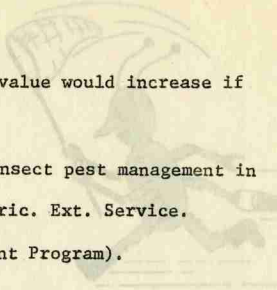
MAN AND ANIMALS

SPECIAL SURVEY CONCERNING BITING INSECTS - NORTH CAROLINA -

A survey of public opinion concerning biting insects was conducted in 3 coastal counties during August, 1972. The more important general conclusions drawn from the responses are:

1. Seventy + percent of the respondents are bothered by biting insects (Carteret Co. - 79.1%, Pamlico Co. - 71.3%, Pender Co. - 86.7%).
2. Mosquitoes (Anopheles sp. and Aedes sp.) are the most widespread and annoying pests in the survey counties.
3. Carteret and Pamlico County respondents felt that mosquitoes were less severe than 10 - 15 years ago.
4. About 80% of the respondents wanted more community effort devoted to biting insect control and expressed a willingness to pay for that control.





5. Most property owners thought that property value would increase if there were fewer biting insects.

(Gerhardt, R. R. et. al. 1973. Public opinion on insect pest management in coastal North Carolina. Misc. Pub. No. 97, N. C. Agric. Ext. Service. Pub. No. UNC - SG - 73 - 03. North Carolina Sea Grant Program).

LIGHT TRAP

EUROPEAN CORN BORER (Ostrinia nubilalis) - NORTH CAROLINA - Collections of corn borer moths began April 18 in Tyrrell County near Columbia. Seven moths have been collected to date. (Armstrong, Ext.).
bp/315

County Extension Agents and Other Interested Persons
This report is compiled by: Thomas W. Hunt, Survey Entomologist
Tyrrell County, North Carolina

ARMSTRONG, EXT.

TYRRELL COUNTY CONCERNING BITING INSECTS - NORTH CAROLINA
A survey of public opinion concerning biting insects was conducted in Tyrrell County during August, 1973. The most important general conclusions drawn from the responses are:
1. Seventy percent of the respondents are bothered by biting insects (Carter Co. - 78.1%, Currituck Co. - 71.1%, Dare Co. - 86.7%).
2. Mosquitoes (Anopheles sp. and Aedes sp.) are the most widespread and annoying pests in the survey counties.
3. Currituck and Dare County respondents felt that mosquitoes were less severe than 10 - 15 years ago.
4. About 80% of the respondents wanted more community effort directed at biting insect control and expressed a willingness to pay for that control.



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MAY 8 1973

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May 4, 1973

TO: County Extension Agents and Other Interested Persons
 FROM: Thomas N. Hunt, Survey Entomologist *TNH*
 SUBJECT: Insect Survey Report
 NORTH CAROLINA COOPERATIVE ECONOMIC INSECT SURVEY AND DETECTION REPORT
 This report is compiled by: Thomas N. Hunt, Survey Entomologist
 Raleigh, North Carolina

FORAGE LEGUMES

ALFALFA WEEVIL (Hypera postica) - NORTH CAROLINA - Survey conducted prior to insecticide treatment revealed 3 - 5 larvae per alfalfa tip in Mountains and Western Piedmont. In fields where treatment was delayed later than April 20, extensive foliage damage occurred. (Brooks, Ext. and Hunt, Ext.)

DECIDUOUS FRUITS AND NUTS

BLACK PEACH APHID (Brachycaudus persicae) - NORTH CAROLINA - Damage to the roots of newly set peach trees observed in the Sandhills region of N. C. (Moore County area). Dead plants were replaced during late winter and symptoms have recently been observed within an 8 acre test at the Sandhills Research Station. There appears to be little varietal difference in susceptibility. (Smith, Dept. of Ent.)



GRAPE ROOT BORER (Vitacea polistiformis) - NORTH CAROLINA - Thirty to 40 vines of scuppernong grapes (variety Chowan and Magnolia) were killed by larval root feeding near Richlands, Onslow County. Extent of damage throughout vineyard is not known at present. Damage has previously been most evident in Rutherford and Cleveland County area on bunch grapes. (Halsey, Ext., Weekman, Ext.)

FOREST AND SHADE TREES

HOLLY LEAFMINER (Phytomyza ilicis) - NORTH CAROLINA - Adults observed on American holly at Pineville, Mecklenburg County on April 17. (Gouger, Bartlett Tree Research Lab.)

ASH BORER (Podosesia syringae fratixi) - NORTH CAROLINA - Adults observed on trunks of ash trees at Pineville, Mecklenburg, County on April 19. (Gouger, Bartlett Tree Research Lab.)

bp/315





Dr. Knight
entomology

May 11, 1973

RECEIVED

MAY 11 1973

ENTOMOLOGY DEPT.

TO: County Extension Agents and Other Interested Persons
 FROM: Thomas N. Hunt, Survey Entomologist *TNH*
 SUBJECT: Insect Survey Report

NORTH CAROLINA COOPERATIVE ECONOMIC INSECT SURVEY AND DETECTION REPORT

This report is compiled by: Thomas N. Hunt, Survey Entomologist
 Raleigh, North Carolina

CORN

BILLBUG (Sphenophorus callosus) - NORTH CAROLINA - Damage to seedling corn has been observed in spots over the Coastal Plain. A 50% stand reduction has occurred in about 10 border rows planted adjacent to a 1972 corn field near New Holland, Hyde County. Seedling corn near fields with a recent corn history should be checked carefully for damage. (Hunt, Ext., Van Duyn, Ext.)

CHINCH BUG (Blissus prob. leucopterus) - NORTH CAROLINA - Roughly 100 acres of corn infested with 5 to 50 adults per plant (at ground line) near New Holland, Hyde County. No visible damage observed. (Hunt, Ext., Van Duyn, Ext.)

FOREST AND SHADE TREES

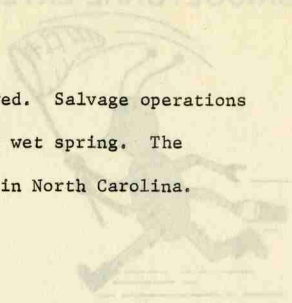
SOUTHERN PINE BEELTE (Dendroctonus frontalis) - NORTH CAROLINA - The southern pine beetle problem continues to be extremely serious. Beetle



INSECT SURVEY REPORT

activity has begun and many new spots are being observed. Salvage operations are continuing although they have been hampered by the wet spring. The attached map shows the current number of active spots in North Carolina. (N. C. Forest Service)

bp/315



RECEIVED

TO: County Extension Agents and Other Interested Persons
FROM: Thomas N. Hunt, Survey Entomologist
SUBJECT: Insect Survey Report
NORTH CAROLINA COOPERATIVE ECONOMIC INSECT SURVEY AND DETECTION REPORT
This report is compiled by Thomas N. Hunt, Survey Entomologist
Raleigh, North Carolina

CORN
BILBAC (agrostis sp.) - NORTH CAROLINA - Damage to seedling corn has been observed in spots over the Coastal Plain. A 500 bushel reduction was reported in about 10 bushel rows planted adjacent to a 100 bushel field near New Holland, Hyde County. Seedling corn near fields with a recent corn history should be checked carefully for damage. (Hunt, Ext., Van Doren, Ext.)
GRASSHOPPER (agrostis sp.) - NORTH CAROLINA - Roughly 100 acres of corn infested with 2 to 25 adults per plant (at ground line) near New Holland, Hyde County. No visible damage observed. (Hunt, Ext., Van Doren, Ext.)

FOREST AND SHADY TREES
NORTHERN PINE BEETLE (agrostis sp.) - NORTH CAROLINA - The southern pine beetle problem continues to be especially serious. Beetle





Dr. Knight

entomology

May 18, 1973

RECEIVED

TO: County Extension Agents and Other Interested Persons

FROM: Thomas N. Hunt, Survey Entomologist *TNH*

MAY 18 1973

SUBJECT: Insect Survey Report

ENTOMOLOGY DEPT.

NORTH CAROLINA COOPERATIVE ECONOMIC INSECT SURVEY AND DETECTION REPORT

This report is compiled by: Thomas N. Hunt, Survey Entomologist

Raleigh, North Carolina

CORN

BILLBUG (Prob. Sphenophorus callosus) - NORTH CAROLINA - Reports of damage to seedling corn continue to be received from the Coastal Plain. Roughly 30 acres were replanted in Sampson County. Damage has been observed in some fields following standard preplant broadcast treatment with aldrin (2 lbs. active/acre). (Falter, Ext.)

COTTON

BOLL WEEVIL (Anthonomus grandis) - NORTH CAROLINA - Overwintering adults continue to be caught throughout Coastal Plain cotton producing counties in Leggett traps. However, little damage is occurring during early stage of cotton development. (Lee, APHIS; Worley, Ext.,; Bradley, Dept. of Ent., N. C. S. U.



SMALL FRUIT

BLUEBERRY BUD MITE (*Acalitus vaccinii*) - NORTH CAROLINA - Generally, 1973 infestation levels in cultivated blueberries are lower than 1972 or 1971 levels in Pender and Bladen Counties. The Duplin County survey indicated a slight increase in the ratio of potential berries to the number of optimum berries (Table 1). This bud mite damage survey has been repeated for 3 years and the following table compares the data.

TABLE 1.

SUMMARY OF BLUEBERRY BUD MITE DAMAGE SURVEY TO THE WOLCOTT VARIETY¹

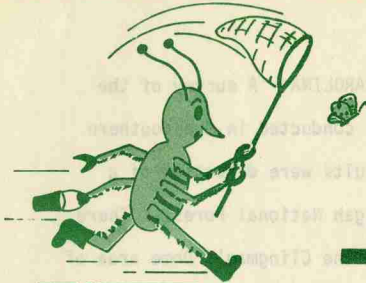
County	% FB with 3 or less pot. berries			% FB with no pot. berries			Ratio pot. berries to opt. berries		
	1971	1973	1973	1971	1972	1973	1971	1972	1973
Pender	72	58	53	39	30	14	1:2.7	1:2.1	1:1.9
Bladen	58	48	27	32	21	7	1:2.1	1:1.7	1:1.3
Duplin	55	40	39	21	7	9	1:1.9	1:1.4	1:1.5

¹ Four fields were sampled per county

FB = Fruit Buds pot. = potential opt. = optimum

bp/315





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MAY 28 1973

ENTOMOLOGY DEPT
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May 25, 1973

TO: County Extension Agents and Other Interested Persons

FROM: Thomas N. Hunt, Survey Entomologist *T.N. Hunt*

SUBJECT: Insect Survey Report

NORTH CAROLINA COOPERATIVE ECONOMIC INSECT SURVEY AND DETECTION REPORT

This report is compiled by: Thomas N. Hunt, Survey Entomologist

Raleigh, North Carolina

COTTON

BOLL WEEVIL (Anthonomus grandis) - NORTH CAROLINA - Leggett trap catches dropped in all areas presumably due to cool weather. Field surveys to date have revealed a very low field population in all areas checked. (Worley, Ext.).

TOBACCO

WHITEFRINGED BEETLE (Graphognathus spp.) - NORTH CAROLINA - Larval damage reported from a 9 ac. Lenoir County tobacco field. Approximately 18,000 of 72,000 plants were dead or heavily damaged. This is roughly a 25% plant loss. (Cox, APHIS).

VEGETABLE WEEVIL (Listroderes costirostris obliquus) - NORTH CAROLINA - Damage from this insect occurs more often in tobacco beds. Scattered reports from the southern Coastal Plain reveal adult damage occurring in field set tobacco this year.



FOREST AND SHADE TREES

BALSAM WOOLLY APHID (Adelges piceae) - NORTH CAROLINA - A survey of the 60,000 acres of Fraser fir, Abies fraseri, type was conducted in the southern Appalachians during 1972. The most significant results were detection of a new infestation in the Shining Rock area of the Pisgah National Forest. There was also a possible but not verified infestation in the Clingman's Dome area of the Great Smoky Mountains National Park. Mount Rogers in Virginia remains the only major uninfested stand of Fraser fir. (Div. of Forest Pest Mgt., U. S. Forest Service, Asheville, N. C.).

PINE SPITTLEBUG (Aphrophora parallela) - NORTH CAROLINA - Observations in Wake, Vance, Granville, Person and Franklin Counties reveal spittlebug nymphs on loblolly pine.

Infestations of 25 spittle masses per tree were common but little damage is expected. (Hunt, Ext.).

SPECIAL NOTE

Interest in Brood XX of the 13 year race of periodical cicada has been displayed by entomologist of the U. S. National Museum. Records of this brood are poor, and they are in the process of improving them. This small brood is supposed to appear in Georgia, N. Western North Carolina (Ashe, Alleghany, Watauga County area) and western Virginia during 1973. If cicadas or "locust" with red eyes are observed in North Carolina, please let me know. Thanks.

Thomas N. Hunt, Survey Entomologist

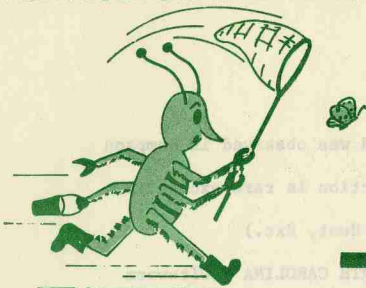
bp/315

SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.

During week of May 21 - 23

County Collected	# of Specimens	Host(s)	Stage(s)	Determination
<u>Southern Field Crops</u> Lenoir	1	Tobacco	Larvae	Whitefringed beetle, <u>Graphognathus</u> sp.
<u>Man and Animals</u> Camden	1	On child	Adult	Lone star tick, <u>Amblyomma americanum</u>
<u>Forestry, Ornamentals and</u> Northampton	1	Turf Azalea	All	Undet. spider mites
Moore?	1	--	All	Undet. aphids
Gates	1	Loblolly pine	Pupae	Undet. pitch gall midges
Wake	1	Juniper	Adults	Undet. diaspidid scales
Camden	1	Swamp bay	Young nymphs	Undet. aphids
Wayne	1 or 2	S. red oak	All?	Undet. aphids
<u>Vegetables</u> Wake	1	Butter beans	Larvae	Prob. seedcorn maggot, prob. <u>Hylemya platura</u>
<u>Wood Destroying Insects</u> Wake	1	Wood in crawl space of house	Larvae	Longhorned beetles, <u>Orthosoma brunneum</u>
<u>Household and Industrial</u> Wake	1	<u>Insects</u> In home	Alates	Larger yellow ants, <u>Acanthomyops interjectus</u>
<u>Miscellaneous & Accidental</u> Caldwell	3	<u>Household</u> In home, on person	Adults	Weevil, <u>Conotrachelus</u> sp.; scarab beetle, <u>Ataenius</u> sp.; and undet. lygaeid bug.
Wake	1	In home	Adult	Wood roach, <u>Parcoblatta</u> sp.
<u>Miscellaneous</u> Wake	1	Crawling on azalea	Adult	Undet. cynipid gall wasp
Union	1	In garden	Adults	Trapdoor spiders, <u>Ummidia</u> sp.

Dr. Knight



entomology

June 1, 1973

TO: County Extension Agents and Other Interested Persons
 FROM: Thomas N. Hunt, Survey Entomologist
 SUBJECT: Insect Survey Report

TH

NORTH CAROLINA COOPERATIVE ECONOMIC INSECT SURVEY AND DETECTION REPORT

This report compiled by: Thomas N. Hunt, Survey Entomologist
 Raleigh, North Carolina

TOBACCO

TOBACCO BUDWORM (Heliothis virescens) - NORTH CAROLINA -

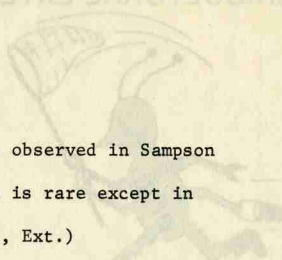
Spot checks and reports from the Bladen and Robeson county area indicate budworms have reached threshold levels in approximately 25% of the tobacco fields. Fields with plants buttoning or near this stage usually have a higher percentage of the plants infested. (Robertson, Ext., Hunt, Ext.)

CORN

CORN BLOTCH LEAFMINER (Agromyza parvicornis) - NORTH CAROLINA -

These fly larvae are causing blade damage to scattered fields of corn in the Coastal Plain. Blade damage observed in 8 fields in the Sampson,





Bladen and Duplin county area. A 60 acre field was observed in Sampson county with a general infestation. Yield reduction is rare except in cases of extreme foliar damage. (Heath, Ext., Hunt, Ext.)

WIREWORMS (Prob. Melanotus communis) - NORTH CAROLINA - Wireworm damage common but light in Washington and Hyde county area. Stand losses of 10% have occasionally been observed. (Van Duyn, Ext.)

Handwritten initials "AJ" in blue ink.

cg/330

TOBACCO BUDWORM (Heliothis virescens) - NORTH CAROLINA

Spot checks and reports from the Bladen and Robeson county area indicate budworms have reached threshold levels in approximately 15% of the tobacco fields. Fields with plants budding or near this stage usually have a higher percentage of the plants infested. (Robertson, Ext., Hunt, Ext.)

COCK BLOTCH LEAFMINER (Agromyza parvicornis) - NORTH CAROLINA

These fly larvae are causing blade damage to scattered fields of corn in the Coastal Plain. Blade damage observed in 8 fields in the Sampson,



SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.

During week of May 24 - 30

County Collected	# of Specimens	Host(s)	Stage(s)	Determination
<u>Southern Field Crops</u>				
Wenatchee	1	Tobacco	Larvae	Whitefringed beetle, <u>Graphognathus</u> sp.
<u>Grain, Soybeans & Forages</u>				
Wenatchee	1	Rye & Barley	Larvae	Armyworm, <u>Pseudaletia unipuncta</u>
Wenatchee	1	Corn	Larvae	Corn blotch leafminer, <u>Agromyza parvicornis</u>
Caswell	1	Oats	Adults	Undet. spittlebugs
Caswell	3	Red clover	Adults	Lesser clover leaf weevil, <u>Hypera nigrirostris</u> ; clover head weevil, <u>Hypera meles</u> ; and poss. red clover seed weevil, <u>Tychius</u> sp.
Wenatchee	1	Corn	Adults	Spring rose beetle, <u>Strigoderma arboricola</u>
<u>Forestry, Ornamentals & Turf</u>				
Wenatchee	1	Holly	Egg masses	Undet. coccid scales
Wenatchee	1	Weeping Willow	Pupae	Leaf beetles, <u>Chrysomela</u> sp.
Wenatchee	1	River birch	All	Undet. eriophyid mites
Wenatchee	1	Yew	Egg masses crawlers	Undet. coccid scales
Durham	1	Elm	?All	Undet. eriophyid mites
Wenatchee	1	Norway spruce	All	Undet. spider mites
Camden	1	Swamp bay	Nymphs	Phylloxerans, ? <u>Phylloxera</u> sp.
Durham	1	Schefflera	All	Undet. spider mites
Orange	1	Pfizer juniper	All	Undet. spider mites
Duplin	1	Rose	Adults	Spring rose beetle, <u>Strigoderma arboricola</u>
Wenatchee	1	Rose	Adults	Eastern flower thrips, <u>Frankliniella tritici</u>
Wenatchee	1	Schefflera	All	Undet. spider mites
<u>Household and Industrial Insects</u>				
Wenatchee	1	Dry cereals and crackers	Adults	Drugstore beetle, <u>Stegobium paniceum</u>
Wenatchee	1	Oyster bar	Larvae	Hide beetle, <u>Dermestes maculatus</u>
Wenatchee	1	Kitchen cabinets	Adults	Merchant grain beetle, <u>Oryzaephilus mercator</u>
Wenatchee	1	On ceiling in home	Adults	Angoumois grain moth, <u>Sitotraga cerealella</u>

Summary of Specimens Processed by Insect Clinic, N.C.S.U.

Page 2

Week of May 24-30

<u>Fruit</u>				
Chowan	1	Cherry	Pupae	Leaf beetles, <u>Chrysomela</u> sp.
Pender	1	Strawberry	Larvae	Fuller rose beetle, <u>Pantomorus cervinus</u>
<u>Misc.</u>				
Rowan	1	On trees in yard	Adults	Darkwinged fungus gnats, <u>Bradysia</u> sp.
Edgecombe?	1	---	Adult	Saltmarsh caterpillar, <u>Estigmene acrea</u>
Wake	1	On lawn	Adult	Walnut sphinx, <u>Cressonia juglandis</u>
Hoke	1	Dead on centipede grass lawn	Adults	Undet. eurydesmid millipedes
Northampton	1	Shrubby	Adult	Regal moth, <u>Citheronia regalis</u>
Wake	1	Rotting oak log	Larvae	Rottenwood caterpillar, <u>Scolecocampa liburnia</u>



Dr. Knight

entomology

June 8, 1973

TO: County Extension Agents and Other Interested Persons

FROM: Thomas N. Hunt, Survey Entomologist

SUBJECT: Insect Survey Report

NORTH CAROLINA COOPERATIVE ECONOMIC INSECT SURVEY AND DETECTION REPORT

This report is compiled by: Thomas N. Hunt, Survey Entomologist

Raleigh, North Carolina

CORN

ARMYWORM (Pseudaletia unipuncta) - NORTH CAROLINA - Reports of armyworm larval damage to no till corn, conventional corn, small grains and pastures received from Rowan County. Stand loss was very severe in several fields and chemical treatments were necessary in fields throughout the county (McNeely, Rowan Co., Ext.)

EUROPEAN CORN BORER (Ostrinia nubilalis) - NORTH CAROLINA - Larval damage occurring again this year in localized corn fields throughout the Coastal Plain. Infested fields observed in Hyde, Johnston, Wilson, Lenoir and Sampson Counties. Checks in 5 infested Coastal Plain fields revealed 15% of the plants observed infested. Damage is similar to corn earworm damage, in whorl but closer observation reveals secretions or frass on the stalk or midribs. (O'Neal, Hyde Co., Ext., Hunt, Ext.)



STALK BORER (Papaipema nebris) - NORTH CAROLINA - Light stalk borer damage observed in a Hyde County corn field. This insect is commonly found in weeds, however, extensive damage was observed last year in the Iredell and Rowan County area in no till corn. (O'Neal, Hyde Co., Ext., Hunt, Ext.)

COTTON

BOLL WEEVIL (Anthonomus grandis) - NORTH CAROLINA - Adult collections from Leggett traps doubled in most counties during the week of May 27 - June 2. This is primarily due to return to warm weather. The table below gives the average catches to date and the counties being trapped. Traps in the diapause control areas have consistently produced less adult weevils. North Carolina cotton is still in the presquare stage. (Cotton Pest Mgt. Prog.)

Mean # Boll Weevils Captured/Trap

	North Carolina				
	<u>Northampton</u>	<u>Nash</u>	<u>Edgecombe</u>	<u>Robeson</u>	<u>Cleveland</u>
4/29-5/05	--	1.06	0.78	--	1.50
5/06-5/12	--	1.46	2.00	7.62	6.00
5/13-5/19	--	4.81	6.56	30.36	--
5/20-5/26	1.7	4.23	1.91	15.41	3.37
5/27-6/02	3.19	6.45	4.54	34.34	--

SMALL FRUITS

BLUEBERRY MAGGOT (Rhagoletis mendax) - NORTH CAROLINA - The first adult blueberry maggots of the season were collected this week from sticky traps near Burgaw, Pender Co. Control practices are under way in most fields. (Weaver, Dept. Ent.)

SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.

During week of May 31 - June 6

County Collected	# of Specimens	Host(s)	Stage(s)	Determination
<u>Southern Field Crops</u>				
Cumberland ?	2	In tobacco field	Adults	Carrot beetle, <i>Bothynus gibbosus</i> ; and spring rose beetle, <i>Strigoderma arboricola</i>
<u>Grain, Soybeans and Forages</u>				
Bladen	2	Corn	Young larvae	Corn earworm, <i>Heliothis zea</i> ; and prob. southern cornstalk borer, prob. <i>Diatraea crambidoides</i>
Sampson	1	Corn	Larvae	Corn blotch leafminer, <i>Agromyza parvicornis</i>
Martin	1	Corn	Larvae & pupae	Corn blotch leafminer, <i>Agromyza parvicornis</i>
Jones	1	Corn	---	Corn blotch leafminer, <i>Agromyza parvicornis</i>
Hyde	2	Corn	Larvae	European corn borer, <i>Ostrinia nubilalis</i> ; and stalk borer, <i>Papaipema nebris</i>
<u>Forestry, Ornamentals and Turf</u>				
Rowan	1	Sycamore	Young larvae	Prob. Sycamore lace bug, prob. <i>Corythucha ciliata</i>
Cumberland	1	Maple	All	Woolly alder aphid, <i>Prociphilus tessellatus</i>
Granville	1	Boxwood	Old injury	Boxwood leafminer, <i>Monarthropalpus burti</i>
Union	1	Hickory	All	Phylloxerans, <i>Phylloxera</i> sp.
Wake	2	Silver maple	All	Woolly alder aphid, <i>Prociphilus tessellatus</i> ; and maple bladdergall mite, <i>Vasates quadripes</i>
Wake	1	Silver maple	All	Woolly alder aphid, <i>Prociphilus tessellatus</i>
Rowan	1	Sycamore	Adults	Sycamore lace bug, <i>Corythucha ciliata</i>
Wake	1	Juniper	All	Undet. spider mites
Wake	1	Silver maple	Galls	Maple bladdergall mites, <i>Vasates quadripes</i>
Yadkin	1	Post oak	Galls	Cynipid wasps, prob. <i>Neuroterus</i> sp.
Halifax	1	Juniper	---	Undet. spider mites
Wake	1	Euonymus	Nymphs & Adults	Undet. diaspidid scales
Wake	1	Hickory	Old galls	Phylloxerans, <i>Phylloxera</i> sp.
Wake	1	Yucca	All	Thrips, <i>Bagnallietella yuccae</i>
Wake	1	Juniper	All	Undet. spider mites
Durham	1	Dogwood	Old galls	Prob. Dogwood clubgall midge, prob. <i>Mycodiplosis clavula</i>
Wake	1	Schefflera	All	Undet. spider mites
?Buncombe	1	Holly	Adults	Undet. coccid scales

Summary of Specimens Processed by Insect Clinic, N.C.S.U.

Page 2

Week of May 31 - June 6

Vegetables

Columbus 1 Irish potatoes
tomatoes,
squash Larvae & pupae

European corn borer, *Ostrinia nubilalis*Wood Destroying

Burke 1 In home Adult
Wake 1 Swarming Alates
from oak
stump

Pine sawyer, *Monoctonus* sp.
Subterranean termites, *Reticulitermes virginicus*

Household & Industrial Insects

Wake 1 In home Nymphs
Cumberland 1 In house Nymphs & adults
Wake 1 On wall Pupa
in home

German cockroach, *Blatella germanica*
Smoky brown cockroach, *Periplaneta fuliginosa*
Casemaking clothes moth, *Tinea pellionella*

Miscellaneous & Accidental Household

Wake 1 Throughout All
home
Guilford 1 On window ---
sills
Bladen 1 In home Adult
?Buncombe 1 In home, Adult
supposedly
bit or stung
person on neck

Undet. prob. entomobryid springtails

Prob. entomobryid springtails

Dobsonfly, *Chauliodes* sp.
Greenhouse stone cricket, *Tachycines asynamorus*

Fruit

Chatham 1 Grapefruit Adults
Harnett 1 Pecan All
Pasquotank 1 Pecan Old pupal cases
Cleveland 1 In Adults
pheromone
trap

Undet. coccid scales

Giant bark aphid, *Longistigma caryae*
Pecan leaf casebearer, *Aerobasis juglandis*
Apple maggot, *Rhagoletis pomonella*

Miscellaneous

Durham 1 On ground Adults
Washington 1 On tree Adult

Wharf borer, *Nacordes melanura*
Banded woollybear, *Isia isabella*

Dr. Knight



entomology

June 15, 1973

TO: County Extension Agents and Other Interested Persons

FROM: Thomas N. Hunt, Survey Entomologist *TNH*

SUBJECT: Insect Survey Report

This report is compiled by: Thomas N. Hunt, Survey Entomologist
 Raleigh, North Carolina

CORN

CORN EARWORM - (Heliothis zea) - NORTH CAROLINA - Corn earworm damage in whorls of corn is usually very common in Southern Coastal Plain during early June, however, checks of 50 plants in 25 fields along Highway 50 between Raleigh and Kenansville, Duplin County, reveal less than 5% of the whorled damage. (Hunt, Ext.)

FOREST AND SHADE TREES

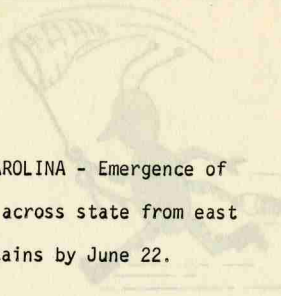
FALL CANKERWORM - (Alsophila pometaria) - NORTH CAROLINA - Activity of fall cankerworms is resumed for the third consecutive year on the Coweeta Hydrological Experiment Station, Macon County. Third to fourth instar larvae were defoliating roughly 75 acres of hardwood on a watershed, interfering with long range water run-off experiments. Peak defoliation is expected the first or second week of July. (Berry, Forest Pest Mgt., U. S. Forest Service, Asheville; Angel, N. C. D. A.)



FEDERAL AND STATE PLANT PROTECTION PROGRAMS

JAPANESE BEETLE (Popillia japonica) - NORTH CAROLINA - Emergence of adults has occurred in Coastal Plain and continues across state from east to west. Beetles should be on grape vines in Mountains by June 22.

bp/330



June 12, 1913

TO: County Extension Agents and Other Interested Persons
FROM: Thomas W. Hunt, Survey Entomologist
SUBJECT: Insect Survey Report
This report is compiled by: Thomas W. Hunt, Survey Entomologist
Raleigh, North Carolina

CORN

CORN EARWORM - (Heliothis zea) - NORTH CAROLINA - Corn earworm damage in whorls of corn is usually very common in Southern Coastal Plain during early June, however, checks of 50 plants in 50 fields along Highway 50 between Raleigh and Kenesawville, Duplin County, reveal less than 5% of the whorls damaged. (Incl. Ext.)
FOREST AND SHADE TREES

PALM CANE WORM - (Alseodiplosis pomonaria) - NORTH CAROLINA - Activity of (a) cane worms is resumed for the third consecutive year on the Coastal (b) Agricultural Experiment Station, Mason County. Third to fourth instar larvae were detesting roughly 75 acres of hardwood on a watershed, interfering with long range water run-off experiments. Peak defoliation is expected the first or second week of July. (Berry, Forest Pest Mgt., U. S. Forest Service, Asheville, N.C. D. A.)



SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.

During week of June 7-13

County Collected	# of Specimens	Host(s)	Stage(s)	Determination
<u>Southern Field Crops</u>				
Wilson	1	Tobacco	Larva	Tobacco budworm, <i>Heliothis virescens</i>
<u>Grain, Soybeans and Forages</u>				
Guilford	4	Corn	Adults; adults; larva; larva	Grass thrips, <i>Anaphothrips obscurus</i> ; toothed flea beetle <i>Chaetocnema denticulata</i> ; prob. corn root webworm, <i>Crambus</i> prob. <i>caliginosellus</i> ; undet. arctiid moth
Perquimans	1	Corn	Adults	Dusky sap beetle, <i>Carpophilus lugubris</i>
<u>Forestry, Ornamentals and Turf</u>				
Wake	1	Loblolly pine	Larvae	Diprionid sawflies, <i>Neodiprion</i> prob. <i>p. pratti</i>
Alamance	1	Silver maple	All	Woolly alder aphid, <i>Prociphilus tessellatus</i>
Buncombe	1	Tree	Larvae	Mourningcloak butterfly, <i>Nymphalis antiopa</i>
Catawba	1	Post oak	Galls	Cynipid wasps, prob. <i>Neuroterus</i> sp.
Wake	1	Silver maple	All	Woolly alder aphid, <i>Prociphilus tessellatus</i>
Guilford	1	Service berry	Larva	Longhorned beetle, <i>Prionus</i> sp.
Wake	1	Euonymus	All	Undet. diaspidid scales
Wake	1	Rose	All	Eastern flower thrips, <i>Frankliniella tritici</i>
Beaufort	1	Rose	Adult	Leafhopper, <i>Oncometopia</i> sp.
Wake	1	Rose	All	Undet. spider mites
Wake	1	Pine cones	?Larvae	Pyralid moths, prob. <i>Dioryctria</i> sp.
Sampson	1	Flowers	Adults	Japanese weevil, <i>Pseudocneorhinus bifasciatus</i>
Catawba	1	White pine	Old injury	Prob. Pine bark aphid, prob. <i>Pineus strobi</i>
Granville	1	Elm	Larvae	Elm leaf beetle, <i>Pyrralta luteola</i>
<u>Vegetables (Commercial & Garden)</u>				
Beaufort	1	Irish potato	Larvae & pupae	European corn borer, <i>Ostrinia nubilalis</i>
Wake	1	Tomato	Young nymphs	Undet. coreid bugs
Sampson	1	Vegetables	Adults	Japanese weevil, <i>Pseudocneorhinus bifasciatus</i>
Currituck	1	Irish potato	Larvae	European corn borer, <i>Ostrinia nubilalis</i>

Summary of Specimens Processed by Insect Clinic, N.C.S.U.

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June 7-13

Wood Destroying Insects

Lincoln	1	2x4 studs in 2 yr. old home	Larvae	Oldhouse borer, <i>Hylotrupes bajulus</i>
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Household & Industrial Insects

Moore	3	In home	Adults	Cigarette beetle, <i>Lasioderma serricorne</i> ; red flour beetle, <i>Tribolium castaneum</i> ; and a cabinet beetle, <i>Trogoderma</i> prob. <i>sternale</i>
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Miscellaneous & Accidental Household

Robeson	1	In and around homes	Adults	Soldier flies, <i>Hermetia illucens</i>
Washington	1	In home	Adult	Crab spider, <i>Xysticus</i> sp.
Brunswick	1	In home	Adult	Filistatid spider, <i>Filistata hibernalis</i>
Wake	1	In building	Adult	Undet. sap beetle

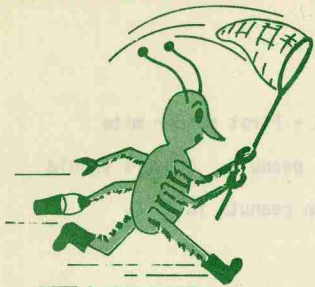
Fruit

Alamance	1	Pecan	All	Undet. eriophyid mites
Johnston	1	Pear	Larvae	Fall webworm, <i>Hyphantria cunea</i>

Miscellaneous

Lee	1	Hole in ground	Adult	Trapdoor spider, <i>Ummidia</i> sp.
Wake	1	---	Adult	Dobsonfly, <i>Nigronia</i> sp.

Dr. Knight



entomology

June 22, 1973

TO: County Extension Agents and Other Interested Persons

FROM: Thomas N. Hunt, Survey Entomologist *T.N.H.*

SUBJECT: Insect Survey Report

NORTH CAROLINA COOPERATIVE ECONOMIC INSECT SURVEY AND DETECTION REPORT

This report is compiled by: Thomas N. Hunt, Survey Entomologist

Raleigh, North Carolina

COTTON

BOLL WEEVIL (Anthonomus grandis) - NORTH CAROLINA - Leggett trap catches were reduced June 10-16 roughly 75% in Robeson and Edgecombe Counties due to cotton square production. Reports from Dillon County, South Carolina area reveal that chemical applications for boll weevil control have begun. (Cotton Pest Mgt. Prog., Ogle, Hercules).

Mean # Boll Weevils Captured/Trap

	North Carolina				
	Northampton	Nash	Edgecombe	Robeson	Cleveland
4/29-5/05	--	1.06	0.78	--	1.50
5/06-5/12	--	1.46	2.00	7.62	6.00
5/13-5/19	--	4.81	6.56	30.36	--
5/20-5/26	1.7	4.23	1.91	15.41	3.37
5/27-6/02	3.19	6.45	4.54	34.34	--
6/03-6/09	3.36	16.14	17.83	20.07	--
6/10-6/16	2.89	7.51	6.89	7.10	30.09



PEANUTS

SPIDER MITES (Tetranychus urticae) - NORTH CAROLINA - First spider mite damage of the season reported from Northampton County on peanuts. Growers should be aware of the fact that Azodrin is now clear for use on peanuts in N. C. (Harrell, Ext., Northampton Co., Weekman, Ext.)

TOBACCO

TOBACCO BUDWORM (Heliothis virescens) - NORTH CAROLINA - Damage very severe in southern Coastal Plain tobacco fields. Counts in 30 fields across Sampson, Duplin, and Johnson Counties revealed that 15% of the fields have been above the threshold level. Threshold level is 10% of the plants infested. Fifty+% of the Coastal Plain tobacco fields are buttoning or flowering. Very little leaf damage from budworms will occur in flowering fields. (Hunt, Ext.)

FOREST AND SHADE TREES

BARKLICE (Psocidae: Psocus venosus) - Nymphs and adult (winged) barklice are attracting the attention of many homeowners across the entire Coastal Plain and Piedmont. These small insects (often confused with aphids) congregate on the trunk of trees feeding on fungi and other organic matter.

No economic damage has been attached to them other than occasionally a nuisance around buildings. (Stephan, Ext.)

FALL WEBWORM (Hyphantria cunea) - NORTH CAROLINA - Larvae and silk nests observed June 12, 1973 in Wake, Vance, Northampton and Johnston Counties infesting persimmon, pear and other undetermined trees. Most infestations observed were in the second instar (stage of development). (Greene, N.C.D.A.)

FOREST TENT CATERPILLAR (Malacosoma disstria) - NORTH CAROLINA - Site of the 1972 tent caterpillar infestation in Bertie County was visited on

SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.

During Week of June 14-20, 1973

County Collected	# of Specimens	Host(s)	Stage(s)	Determination
<u>Southern Field Crops</u>				
Hertford	1	Tobacco	Larvae	Tobacco budworm, <i>Heliothis virescens</i>
Robeson	2	Cotton	Larvae	Obliquebanded leafroller, <i>Choristoneura rosaceana</i> ; and a tortricid moth, <i>Platynota</i> sp.
<u>Man and Animals</u>				
Randolph	1	In milk house & milking parlor	Puparium & adult	Rat-tailed maggot, <i>Eristalis</i> sp.
<u>Grain, Soybeans and Forages</u>				
Pender	2	Corn	Larvae & pupa	Corn earworm, <i>Heliothis zea</i> ; and European corn borer, <i>Ostrinia nubilalis</i>
Lenoir	1	Soybeans	Larvae	Nymphalid butterflies, <i>Vanessa</i> sp.
Guilford	2	Corn	Larvae	Corn earworm, <i>Heliothis zea</i> ; and European corn borer, <i>Ostrinia nubilalis</i>
<u>Forestry, Ornamentals and Turf</u>				
Catawba	2	White pine	Pupae & adults	Scolytid beetles, <i>Ips grandicollis</i> and <i>Pityogenes</i> sp.
Hyde	1	On bark of walnut	Larvae	Underwing moths, <i>Catocala</i> sp.
Wake	1	Juniper	All	Undet. spider mites
Edgecombe	2	White oak	Nymphs & adults; larvae	Oak lace bug, <i>Corythucha arcuata</i> ; and a notodontid moth, <i>Nadata gibbosa</i>
Wake	1	Euonymus	Adults	Undet. diaspidid scales
Pamlico	1	In yard	Adults	June beetles, <i>Polyphylla</i> sp.
Wake	1	Schefflera	All	Undet. spider mites
Wake	1	Palm	All	Undet. false spider mites
Wake	1	Euonymus	Adults	Undet. diaspidid scales
Burke	1	Juniper	Old injury	Juniper webworm, <i>Dichomeris marginella</i>
Wake	1	Sycamore	Nymphs & adults	Sycamore lace bug, <i>Corythucha ciliata</i>
Guilford	1	Oak	Nymphs & adults	Oak lace bug, <i>Corythucha arcuata</i>
Wake	1	Juniper	Old injury	Undet. spider mites

Summary of Specimens Processed by Insect Clinic, N.C.S.U.

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Week of June 14-20, 1973

Vegetables

Currituck	2	Cabbage	Larvae	Imported cabbageworm, <i>Pieris rapae</i> ; and diamondback moth, <i>Plutella xylostella</i>
Wake	1	Squash	Young larvae	Prob. squash vine borer, prob. <i>Melittia cucurbitae</i>
Orange	1	Tomato	Larvae	Tomato fruitworm, <i>Heliothis zea</i>
?Wilson	1	Lima beans	Larvae	Limabean vine borer, <i>Monoptilota pergratialis</i>
Orange	1	Squash	Larvae	Cucumber beetles, <i>Acalymma</i> or <i>Diabrotica</i> sp.

Household & Industrial Insects

Durham	1	Around soap & detergent	Adults	Cowpea weevil, <i>Callosobruchus maculatus</i>
?Vance	1	Department store	Adults	American spider beetle, <i>Mezium americanum</i>
Columbus	1	----	Adult	American cockroach, <i>Periplaneta americana</i>
Gaston	2	Kitchen shelves	Adults	Red flour beetle, <i>Tribolium castaneum</i> ; and cabinet beetle, <i>Trogoderma sternale</i>

Miscellaneous & Accidental Household

Wake	1	Doorway of home	Adult	Wolf spider, <i>Lycosa</i> sp.
Pitt	2	Around house	Adults	Filistatid spider, <i>Filistata hibernalis</i> ; and wolf spider, <i>Lycosa</i> sp.
<u>Fruit</u>				
Beaufort	1	Grape	Larvae	Undet. grape tomato gall
Wake	1	Grape	Young larvae	Undet. sawflies
Robeson	1	Apple	Larvae	Bagworm, <i>Thyridopteryx ephemeraeformis</i>
Guilford	1	Blueberry	Larvae	Cranberry fruitworm, <i>Acrobasis vaccinii</i>
Wake	1	Blueberry	Larvae	Cranberry fruitworm, <i>Acrobasis vaccinii</i>
Johnston	1	Plum	Old injury	Tenthredinid sawfly, <i>Caliroa</i> sp.
Gates	1	Pecan	All, in galls	Phylloxerans, <i>Phylloxera</i> sp.
Wake	1	Magoon grape	Adults & eggs	Prob. grape phylloxera, prob. <i>Phylloxera vitifoliae</i>

Summary of Specimens Processed by Insect Clinic, N.C.S.U.

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Week of June 14-20, 1973

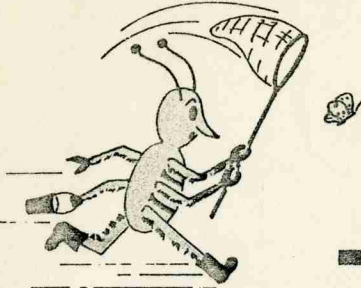
Misc.

Guilford	2	In or on bases of trees	Pupa & adult	Cutworm, poss. <i>Agrotis</i> sp.; and pleasing fungus beetle, <i>Megalodachme fasciata</i>
Cleveland	1	On apple leaf	Adult	Lady beetle, <i>Stethorus</i> sp.
Wake	1	Fell out of tree onto car	Adult	Giant stag beetle, <i>Lucanus elaphus</i>
Wayne	1	Yard trees	Adults	Barklice, <i>Psocus venosus</i>
Cumberland	2	Under pine straw mulch	Adult	Ground beetles, <i>Scarites</i> sp. and <i>Harpalus</i> (<i>Pseudophonus</i>) sp.
Wake	1	----	Adults	Greenhouse millipede, <i>Oxidus gracilis</i>
Hertford	1	Vegetable garden	Adults	Greenhouse millipede, <i>Oxidus gracilis</i>
Stanly	1	On trunks of trees	Nymphs & adults	Barklice, <i>Psocus venosus</i>
Wake	1	On trunk of tree	Nymphs & adults	Barklice, <i>Psocus venosus</i>
Lincoln	1	On trunk of holly	Nymphs	Undet. psocids
Wake	1	At lights	Adult	Giant stag beetle, <i>Lucanus elaphus</i>
Wilson	1	On trunks & limbs of water oaks	Nymphs & adults	Barklice, <i>Psocus venosus</i>
Montgomery	1	On limbs of water oak	Nymphs & adults	Barklice, <i>Psocus venosus</i>
Chatham	1	On bark of maple	Nymphs	Barklice, <i>Psocus venosus</i>
Orange	1	On bark of black cherry	Nymphs	Barklice, <i>Psocus venosus</i>
Wake	1	On trunk of pecan	Adults	Barklice, <i>Psocus venosus</i>

Week of June 14-20, 1973

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Summary of specimens processed by insect clinic, N.C.S.U.



entomology

June 29, 1973

TO: County Extension Agents and Other Interested Persons
 FROM: Thomas N. Hunt, Survey Entomologist *T.N.H.*
 SUBJECT: Insect Survey Report

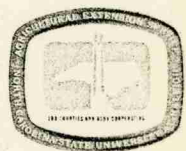
This report is compiled by: Thomas N. Hunt, Survey Entomologist,
 Raleigh, North Carolina

MAN AND ANIMALS

ROCKY MOUNTAIN SPOTTED FEVER - (vector Dermacentor variabilis,
 the American dog tick) - NORTH CAROLINA - The first 1973 report of this
 disease occurred during March (Insect Survey Note, April 20, 1973).

Below is the total number of cases which have occurred through May.
 (Div. of Epidemiology, N. C. State Board of Health)

<u>County</u>	<u>Cases</u>
Alamance	1
Cabarrus	2
Forsyth	1
Guilford	2
Mecklenburg	2
Polk	1
Rowan	3
Sampson	1
Total	<u>13</u>



FOREST AND SHADE TREES

SOUTHERN PINE BEETLE - (Dendroctonus frontalis) - NORTH CAROLINA -

The cumulative figures for July 1, 1972 through April 30, 1973 indicate that roughly 16 million board feet of timber and 22.5 million cords of pulpwood have been salvaged from state and privately owned lands due to beetle attack. In addition, 1.7 million board feet and 466 thousand cords of wood have been salvaged from federal lands in N. C. The majority of this activity is in the Piedmont and Mountain areas of the state. (Forest Pest Mgt., U. S. Forest Service, Atlanta, Ga.)

FEDERAL AND STATE PLANT PROTECTION PROGRAMS

JAPANESE BEETLE - (Popillia japonica) - NORTH CAROLINA - Farmers have expressed concern over defoliation by Japanese beetle adults on soybeans and cotton in Coastal Plain counties. Damage observed this week in 100 soybean fields in the Sampson, Wilson, Jones and Onslow County area do not warrant treatment for this insect. Heaviest population observed was in a Greene Co. soybean field averaging 2 beetles per 6 foot sample. Defoliation in this field was estimated at less than 1%. (Hunt, Ext., Ganyard, U.S.D.A.)

SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.

During week of June 21-27

County Collected	# of Specimens	Host(s)	Stage(s)	Determination
<u>Southern Field Crops</u>				
?Madison	1	Supposedly attacking burley tobacco	Adults	Ground beetle, <i>Anisodactylus (Anadaptus)</i> sp.
Edgecombe	1	Cotton	Larvae	European corn borer, <i>Ostrinia nubilalis</i>
Northampton	1	Peanuts	All	Undet. spider mites
Halifax	1	Tobacco	Larvae	Black cutworm, <i>Agrotis ipsilon</i>
Wake	1	Peanut seeds in lab	Larvae	Undet. muscid flies
<u>Man and Animals</u>				
Cleveland	1	Bit person	Nymph	Prob. Wheel bug, prob. <i>Arius cristatus</i>
<u>Grains, Soybeans and Forages</u>				
Wake	1	Sweet corn	Adults	Corn flea beetle, <i>Chaetocnema pulicaria</i>
Hyde	1	Soybeans	Adults	Undet. harpaline ground beetles
<u>Forestry, Ornamentals and Turf</u>				
Moore	1	Boxwood	?Old injury	Undet. spider mites
Gaston	1	Silver maple	Galls	Maple bladdergall mite, <i>Vasates quadripes</i>
Catawba	2	Black walnut	Gall; and nymphs and adults	Undet. eriophyid mites; and undet. lace bugs
Wake	1	Aralia	All?	Undet. spider mites
Wake	1	Cactus	Old injury	Undet. false spider mites
Onslow	1	Boxwood	All	Undet. spider mites
Greene	1	Pines	Larvae	Undet. pamphiliid sawflies
Wake	2	Maples	Galls; and larvae	Maple bladdergall mite, <i>Vasates quadripes</i> ; and bagworm, <i>Thyridopteryx ephemeraeformis</i>
Robeson	1	Boxwood	?Old injury	Undet. spider mites
Wake	1	Euonymus	Adults	Undet. diaspidid scales
Cherokee	1	Rhododendron	Nymphs	Undet. katydid
Wake	1	Sycamore	Adults	Sycamore lace bug, <i>Corythucha ciliata</i>
Wayne	1	Willow	Albin galls	Undet. eriophyid mites
Wake	1	Fescue lawn	Larvae	Undet. grass moth
Halifax	1	Loblolly pine	Nymphs & dead adults	Undet. coccid scales
?Robeson	1	White pine	Old injury	Prob. pine bark aphid, prob. <i>Pineus strobi</i>

Summary of Specimens Processed by Insect Clinic, N.C.S.U.

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Week of June 21-27

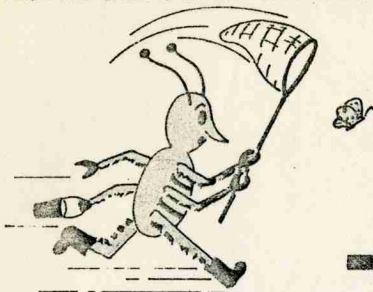
Durham	1	Azalea	Larva	Undet. geometrid moth
Guilford	1	Azalea	Larvae	Azalea leafminer, <i>Graecillaria azalea</i>
Wake	1	Pyracantha	Adults	Hawthorn lace bug, <i>Corythucha cydoniae</i>
<u>Vegetables</u>				
Chowan	1	Watermelon	All	Undet. spider mites
Guilford	1	Tomato	Larvae	Undet. schizophoran flies
<u>Wood Destroying Insects</u>				
Rutherford	1	Oak and poplar lumber	Adults	Ambrosia beetles, <i>Monarthrum</i> sp.
Clay	1	Bored through sheetrock wall in new home	Adult	Pine sawyer, <i>Monochamus carolinensis</i>
<u>Household and Industrial Insects</u>				
Wake	1	In kitchen sink	Adult	Cabinet beetle, <i>Trogoderma sternale</i>
Onslow	1	In attic of home	Larvae	Cabinet beetles, <i>Trogoderma</i> sp.
Rowan	1	In clothes closet	Adults	Almond moth, <i>Cadra cautella</i>
<u>Miscellaneous and Accidental Household</u>				
Wake	1	In home	Adult	Soldier fly, <i>Hermetia illucens</i>
Avery	1	Around logs in home	Adult	Undet. fungus gnat
Sampson	1	In home	?All	Undet. prob. entomobryid springtails
Caldwell	--	On floor in home, prob. out of spider webs	Adults	Undet. spp.
<u>Fruit</u>				
Beaufort	1	Grape	Larvae	Undet. midge blister gall
Martin	1	Grape	Larvae in galls	Undet. grape tomato gall
Greene	1	Pecan	All	Undet. eriophyid mites
<u>Misc.</u>				
Burke	2	---	Nymph; and adult	Prob. Wheel bug, prob. <i>Arilus cristatus</i> ; and pine sawyer, <i>Monochamus</i> sp.
Orange	1	Reportedly boring in beam on porch	Adult	Undet. psenine sphecid wasp

Summary of Specimens Processed by Insect Clinic, NCSD

Page 3

Week of June 21-27

Wayne	1	Around base of dogwood	Adults	Undet. sowbugs
Davie	1	On holly	Nymphs & adults	Barklice, <i>Psocus venosus</i>
Cumberland	1	On tobacco	Adult	Tree cricket, <i>Oecanthus</i> sp.
Wake	1	Trunk of oak	Nymphs & adults	Barklice, <i>Psocus venosus</i>
Wake	1	Trunks of oaks	Nymphs & adults	Barklice, <i>Psocus venosus</i>
Gaston	1	Trunk of oak	Nymphs & adults	Barklice, <i>Psocus venosus</i>
Lincoln	1	Trunk of maple	Nymphs & adults	Barklice, <i>Psocus venosus</i>
Guilford	1	Trunk of apple	Nymphs & adults	Barklice, <i>Psocus venosus</i>
Watauga	1	Along roadside	Nymphs	Undet. millipedes
Wake	1	In pile of cut leaves & twigs	Workers & soldiers	Prob. Eastern subterranean termite, <i>Reticulitermes</i> prob. <i>flavipes</i>
Wake	1	Flying over lawn	Adult	Scarab beetle, <i>Euphoria</i> sp.



entomology

July 13, 1973

TO: County Extension Agents and Other Interested Persons
 FROM: Thomas N. Hunt, Survey Entomologist
 SUBJECT: Insect Survey Report

This report is compiled by: Thomas N. Hunt, Survey Entomologist
 Raleigh, North Carolina

COTTON

BOLL WEEVIL (*Anthonomus grandis*) - NORTH CAROLINA -

The percentage of weevil damaged squares decreased over the entire Coastal Plain due to reduced numbers of overwintering adult weevils. The damage due to adults of the F1 generation (1st generation of the season) has not appeared to date. Treatment not warranted until new damage becomes evident.

(Worley, Cotton Pest Mgt.)

BOLLWORM (*Heliothis zea*) - NORTH CAROLINA - Scouts have observed eggs in scattered fields over the Coastal Plain on terminals of cotton. Counts are low in all areas, however weekly scouting is advisable due to the ability of this insect to build up rapidly. (Bradley, Dept. of Ent.) (Worley, Cotton Pest Mgt.)



PEANUTS

TWOSPOTTED SPIDER MITE (*Tetranychus urticae*) - NORTH CAROLINA - Spot infestations continue to be reported from Northampton county area. Damage and population expansion are subject to a rapid increase, should dry conditions become prevalent. (Long, Ext. Northampton Co.)

SOYBEANS

MEXICAN BEAN BEETLE (*Epilachna varivestis*) - NORTH CAROLINA - Light adult and larval damage observed in 50% of the 40 soybean fields visited in Harnett, Johnston, Sampson and Duplin counties. Highest populations observed were 1 adult per ft. of row and 3 larvae per ft. of row. No field was observed near the threshold level of 40% defoliation prior to bloom. (Hunt, Ext.).

SMALL FRUITS

BLUEBERRY MAGGOT (*Rhagoletis mendax*) - NORTH CAROLINA - Blueberry maggot adult catches are greater this year than in 1972. Peak emergence occurred during week of June 19 with 60 catches. This is more maggots than were caught during the entire 1972 trapping season. (Sorensen, Ext.)

FEDERAL AND STATE PLANT PROTECTION PROGRAMS

JAPANESE BEETLE (*Popillia japonica*) - NORTH CAROLINA - Damage in excess of 10% was observed in 10% of the 40 soybean fields visited in Harnett, Johnston, Sampson and Duplin counties. The Japanese beetle population will drop in the Coastal Plain after mid July; therefore, very few soybean fields will receive defoliation from these beetles near the threshold level of 40% prior to bloom. (Hunt, Ext.)

SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.

During Week of June 28-July 4

County Collected	# of Specimens	Host(s)	Stage(s)	Determination
<u>Southern Field Crops</u>				
Pitt	1	Tobacco	Adults	Weevils, <i>Trichobaris</i> sp.
<u>Man and Animals</u>				
Pamlico	1	Bit person	Adult	Undet. assassin bug
Cumberland	1	Horse	Adult	Undet. horsefly
Clinton	1	On child	Adult	American dog tick, <i>Dermacentor variabilis</i>
<u>Forestry, Ornamentals and Turf</u>				
Alamance	1	Clematis	Larva	Undet. clearwing moth
Beaufort	1	Rose	All	Undet. spider mites
Robeson	1	Boxwood, mint, azalea	Adults	Japanese weevil, <i>Pseudocneorhinus bifasciatus</i>
Madison	1	Willow	Old injury	Undet. leaf beetles
Wake	1	Magnolia	Adults	Undet. coccid scales
Wake	1	Boxwood	Old injury	Undet. spider mites
Scotland	1	Juniper	Old injury	Undet. spider mites
Madison	1	Hickory	Larvae	Uglynest caterpillar, <i>Archips cerasivoranus</i>
Martin	1	Juniper	---	Undet. spider mites
Wake	1	Euonymus	Adults	Undet. diaspidid scales
Wake	1	Red maple	Adults	Undet. diaspidid scales
Robeson	1	Basket oak	Adults	Oak lace bug, <i>Corythucha arcuata</i>
Wake	1	Juniper & dogwood	Larvae	Bagworm, <i>Thyridopteryx ephemeriformis</i>
Columbus	1	Lawn	Adults	Twolined spispittlebug, <i>Prosapia</i> sp.
Buncombe	1	White pine	All	Prob. white pine aphid, <i>Cinara</i> prob. <i>strobi</i>
Polk	1	Scot's pine	Larva	Pyralid moth, <i>Dioryctria</i> sp.
Wake	1	Juniper	Larvae	Bagworm, <i>Thyridopteryx ephemeriformis</i>
Northampton	1	Marigolds	Adults	Japanese weevils, <i>Pseudocneorhinus bifasciatus</i>
<u>Vegetables (Commercial & Garden)</u>				
Alamance	1	Tomato	Young larvae	Armyworm, <i>Spodoptera</i> sp.
Gaston	1	Onion	Larvae	Undet. sphinx moth (hornworm)

Wood Destroying Insects

Gaston	2	Bored through panelling in new home	Adults	Southern pine sawyer, <i>Monochamus titillator</i> ; and a pine sawyer, <i>Monochamus carolinensis</i>
Wayne	3	Green pine lumber	Adults	Black turpentine beetle, <i>Dendroctonus terebrans</i> ; Ips beetles, <i>Ips calligraphus</i> ; and pinhole borers, <i>Platypus flavicornis</i>

Household & Industrial Insects

?Wilson	1	On walls in home	Old cases	Casemaking clothes moth, <i>Tinea pellionella</i>
Montgomery	1	On bed in home	?All	Booklice, <i>Liposcelis</i>

Fruit

Catawba	1	Concord grapes	Larvae	Prob. grape root borer, <i>Vitacea</i> prob. <i>polistiformis</i>
Watauga	2	Strawberries	Larvae; and eggs & larvae	Tenthredinid sawflies, <i>Empria</i> prob. <i>maculata</i> ; and undet. chrysomeline leaf beetles
Bladen	1	Grape	Larva	Undet. sphinx moth
Wake	1	Grape	Larvae	Grape leaffolder, <i>Desmia funeralis</i>
Richmond	1	Pecan	Old galls	Phylloxerans, <i>Phylloxera</i> sp.

Misc.

---	1	---	Adult	Eastern Hercules beetle, <i>Dynastes tityus</i>
Alamance	1	Underside of leaf blisters on oak	Nymphs & adults	Undet. pseudocaeciliid barklice
Rowan	1	Dying on pecan leaves	Adults	Undet. flesh or blowflies
Stanly	1	Under barrel	Adults	Greenhouse millipedes, <i>Oxidus gracilis</i>
Durham	1	In soil around azalea roots	Larva	Bronzed cutworm, <i>Nephelodes minians</i>
Wake	1	Crawling on person	Larva	Ground beetle, <i>Galeritula</i> sp.
Durham	1	On willow oak	Nymphs & adults	Barklice, <i>Psocus venosus</i>
Pender	1	On beach	Egg case	Undet. whelk (snail)
Caldwell	1	On lawn	Larva	Tiger swallowtail, <i>Papilio glaucus</i>

SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.

During Week of July 5-11, 1973

County Collected	# of Specimens	Host(s)	Stage(s)	Determination
<u>Southern Field Crops</u>				
Martin	1	Peanuts	?All	Undet. aphids
<u>Man and Animals</u>				
Wake	1	Bit chihuahua	Adult	Giant stag beetle, <i>Lucanus elaphus</i>
Lee	1	Beef cattle	Adults	Horsefly, <i>Chlorotabanus crepuscularis</i>
<u>Grain, Soybeans and Forages</u>				
Columbus	1	Corn silks	Adults	Japanese beetle, <i>Popillia japonica</i>
Alexander	1	Corn, unopened tassels	Adults	Sap beetles, <i>Glischrochilus</i> sp.
<u>Forestry, Ornamentals & Turf</u>				
Henderson	2	Silver maple	?all	Maple bladdergall mite, <i>Vasates quadripes</i> ; and another undet. eriophyid mite
Beaufort	2	Ligustrum	Adults	Japanese weevil <i>Pseudocneorhinus bifasciatus</i> ; and ligustrum weevil, <i>Ochyromera ligustri</i>
Wayne	1	Juniper	Larvae	Bagworms, <i>Thyridopteryx ephemeriformis</i>
Wake	1	Willow	Larvae & adults	Leaf beetles, <i>Plagioderia</i> sp.
Rowan	1	Elm	Adults	Larger elm leaf beetle, <i>Monocesta coryli</i>
Watauga	1	Mountain ash	Larvae	Mountain ash sawfly, <i>Pristiphora geniculata</i>
Wake	1	Lawn	Adults	Twolined spittlebug, <i>Prosapia</i> sp.
Wake	1	Beech	All	Prob. beech blight aphid, prob. <i>Prociphilus imbricator</i>
Wake	1	Pine	Larvae	Redheaded pine sawfly, <i>Neodiprion lecontei</i>
Stokes	1	White pine	Larvae	Prob. white pine weevil, <i>Pissodes</i> prob. <i>strobi</i>
Iredell	1	Silver maple	Galls	Maple bladdergall mite, <i>Vasates quadripes</i>
Wake	1	Sunflower roots	Adults	Carrot beetle, <i>Bothynus gibbosus</i>
Mecklenburg	1	Many plants	Worker	Prob. Eastern subterranean termites, prob. <i>Reticulitermes flavipes</i>

Summary of Specimens Processed by Insect Clinic, N.C.S.U.

Page 2

Week of July 5-11, 1973

Vegetables (Commercial & Garden)

Sampson	3	Turnips	Adults	Fleahoppers, <i>Halticus</i> sp.; and flea beetles, <i>Phyllotreta</i> sp.
Wake	2	Snap beans	All	Undet. spider mites and mealybugs

Wood Destroying Insects

Hyde	1	Dead pine	Larva	Pine sawyer, <i>Monochamus</i> sp.
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Miscellaneous & Accidental Household

Wake	1	In home	Adult	Brown recluse spider, <i>Loxosceles reclusa</i>
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Fruit

Alamance	1	Pecan	Larva	Whitemarked tussock moth, <i>Hemerocampa leucostigma</i>
Pender	1	Muscadine grape	Larvae	Undet. bagworms
Robeson	1	Pecan	Larva	Underwing moth, <i>Catocala</i> sp.

Misc.

Wilson	1	Resting on juniper	Adult	Leopard moth, <i>Epantheria scribonia</i>
Craven	1	On red oak	Adults	Cicadas, <i>Cicada hieroglyphica</i>
Wake	1	On patio	Adult	Fishing spider, <i>Dolomedes</i> prob. <i>tenebrosus</i>
Alleghany	1	At lights	Adults	June beetles, <i>Polyphylla</i> sp.
Edgecombe	1	Resting on pole	Adult	Leopard moth, <i>Epantheria scribonia</i>
Cumberland	1	Flowers	Adult	Clearwing sphinx moth, <i>Hemaris</i> sp.
Wake	1	At lights	Adult	Eastern Hercules beetle, <i>Dynastes tityus</i>



Dr. Knight

entomology

July 20, 1973

TO: County Extension Agents and Other Interested Persons
 FROM: Thomas N. Hunt, Survey Entomologist *T. N. Hunt*
 SUBJECT: Insect Survey Report

This report is compiled by: Thomas N. Hunt, Survey Entomologist
 Raleigh, North Carolina

SOYBEANS

BEET ARMYWORM (Spodoptera exigua) - NORTH CAROLINA - Severe defoliation reported from late planted soybeans in a Pamlico County and a Pasquotank County field. Chemical controls have been applied, however late instars (stages) of this pest are very difficult to control with insecticides. (Falter, Ext.)

BENEFICIAL INSECTS

A FALL CANKERWORM EGG PARASITE (Telenomus alsophilae vier. a small wasp) - NORTH CAROLINA - Fall cankerworm egg mass surveys conducted on the Coweeta Hydrological Exp. Station (Macon County) for the past 3 years have shown a sharp increase in this egg parasite. The percentage parasitization has increased from 6% in 1971 to 30% in 1972 and currently 50%. (Forest Pest Mgt., U. S. Forest Service, Asheville, N. C.)



VEGETABLES

EUROPEAN CORN BORER (Ostrinia nubialis) - NORTH CAROLINA - European corn borer larval damage heavier than previous 2 years in commercially grown bell peppers in Central Coastal Plain (Harnett and Sampson County area). One 10 acre field abandoned. (Scott, Ext.)

MAN AND ANIMALS

BROWN RECLUSE SPIDER (Loxosceles reclusa) - NORTH CAROLINA - One adult male was collected from an ice chest on July 6, 1973, near Apex, Wake County. Two adult males were collected in this home during 1972 for first collection east of Winston-Salem. (Baker, Ext.)

FEDERAL AND STATE PLANT PROTECTION PROGRAMS

GYPSY MOTH (Porthetria dispar) - NORTH CAROLINA - The first adult male of the season has been positively identified from a sexlure trap on U. S. 17 south of Williamston in Martin County. Other suspects have been collected and await confirmation of the identification. (Elder, N. C. D. A.)



SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.

During Week of July 12-18

County Collected	# of Specimens	Host(s)	Stage(s)	Determination
<u>Man & Animals</u>				
?Cumberland	1	On person	Adult	Brown dog tick, <i>Rhipicephalus sanguineus</i>
Jackson	1	Stung person	Larva	Buck moth, <i>Hemileuca maia</i>
<u>Grain, Soybeans & Forages</u>				
Pasquotank	2	Soybeans	Young larvae	Beet armyworm, <i>Spodoptera exigua</i> ; and undet. loopers
Pamlico	1	Soybeans	Larvae	Beet armyworm, <i>Spodoptera exigua</i>
Pamlico	2	Soybeans	Larvae	Beet armyworm, <i>Spodoptera exigua</i> ; and cabbage looper, <i>Trichoplusia ni</i>
<u>Forestry, Ornamentals & Turf</u>				
Cleveland	1	Privet and Abelia	Adults	Japanese weevil, <i>Pseudocneorhinus bifasciatus</i>
Wilson	2	Loblolly pine	Adults	Pinhole borer, <i>Platypus flavicornis</i> ; and Ips beetle, <i>Ips calligraphus</i>
Moore	1	Red maple	Adults	Undet. diaspidid scales
Wake	1	Amaryllis	All	Undet. mealy bugs
Wake	1	Iris	Larvae	Iris borer, <i>Macronoctua onusta</i>
Durham	1	Silver maple	Galls	Maple bladdergall mite, <i>Vasates quadripes</i>
Durham	1	Silver maple and cedar	Old cocoons	Bagworm, <i>Thyridopteryx ephemeraeformis</i>
Wake	1	Azalea	Old injury	Azalea lace bug, <i>Stephanitis pyrioides</i>
Guilford	1	Nesting in boxwoods	All	Yellowjackets, <i>Vespula</i> sp.
Wayne	1	Spanish fir	All	Undet. spider mites
Beaufort	1	Pine	Larvae	Pine tip moth, <i>Rhyacionia</i> sp.
Wake	1	Birch	Galls	Undet. eriophyid mites
Haywood	1	Scarlet oak	Larvae	Prob. oak webworm, <i>Archips</i> prob. <i>fervidanus</i>
Wake	1	Willow	All	Undet. aphids
Yadkin	3	White oak	Various	Undet. diaspidid scales; oak lace bug, <i>Corythucha arcuata</i> ; and a noctuid moth, <i>Charadra deridens</i>
<u>Vegetables (Commercial & Garden)</u>				
Wake	1	Tomato	All	Undet. spider mites
Pender	1	Tomato	Adults	Leaffooted bug, <i>Leptoglossus phyllopus</i>
Edgecombe	1	Lima beans	Old injury	Undet. stink bugs
<u>Wood Destroying Insects</u>				
Lincoln	1	Pine 2x4	Adult	Pine sawyer, <i>Monochamus carolinensis</i>
Northampton	1	Dead oak wood	Larvae & pupa	Longhorned beetle, prob. <i>Xylotrechus</i> sp.

Summary of Specimens Processed by Insect Clinic, N.C.S.U.

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Week of July 12-18, 1973

Household & Industrial Insects

Caswell	1	In attic of home	Oothecae
Yadkin	1	Sugar cured pork	Adults

American cockroach, <i>Periplaneta americana</i>
Redlegged ham beetle, <i>Necrobia rufipes</i>

Miscellaneous & Accidental Household

Wake	1	In apartment	Adult
<u>Fruit</u>			
Granville	1	Pecan	Gall
Durham	1	Grape	Larvae in galls
Vance	1	Pecan	Galls
Beaufort	1	Apple	Old injury

Undet. pseudoscorpion
Undet. eriophyid mites
Grape tube gall, (<i>Cecidomyia</i>) <i>viticola</i>
Undet. eriophyid mites
Undet. spider mites

Misc.

Wake	1	At lights	Adults
Nash	2	On trees	Adults
Wake	1	On side of house	Larva
Avery	1	---	Adult
Lincoln	1	Under concrete slab	Adults
Wake	1	In dog pen	Adult
Harnett	1	On porch	Adult

Scarab beetles, <i>Cyclocephala</i> sp.
Giant stag beetle, <i>Lucanus elaphus</i> ; and dobsonfly, <i>Corydalus cornutus</i>
Whitemarked tussock moth, <i>Hemerocampa leucostigma</i>
Sphinx moth, <i>Paonias</i> sp.
Undet. rove beetles
Flatworm, <i>Bipalium kewense</i>
Flatworm, <i>Bipalium kewense</i>

Dr. Knight



entomology

July 27, 1973

TO: County Extension Agents and Other Interested Persons

FROM: Thomas N. Hunt, Survey Entomologist

JN H.

SUBJECT: Insect Survey Report

This report is compiled by: Thomas N. Hunt, Survey Entomologist
Raleigh, North Carolina

SOYBEANS

CORN EARWORM (*Heliothis zea*) - NORTH CAROLINA - Larvae appearing in eastern Coastal Plain soybean fields. Little damage has occurred to date; however, frequent sampling is warranted to determine extent of infestation in each field. Farmers should concentrate on soybeans with open canopies. (Van Duyn, Ext., Hunt, Ext.)

COTTON

BOLL WEEVIL (*Anthonomus grandis*) - NORTH CAROLINA - In the Rich Square area of Northampton county, punctured squares averaged 10% in the 346 fields scouted. (Ganyard, USDA)

DECIDUOUS FRUITS & VEGETABLES

ANNUAL CICADA (*Tibicen* sp.) - NORTH CAROLINA - Adult population averaging 1 per tree observed in a 100 acre apple orchard near Moravian Falls, Wilkes county. Infestation more than twice as heavy as 1972. No damage observed to



date. (Yeargan, Dept. of Entomology, N.C.S.U.)

MAN AND ANIMALS

ROCKY MOUNTAIN SPOTTED FEVER (*Dermacentor variabilis* - the American dog tick) - NORTH CAROLINA - Thirty-nine cases of Rocky Mountain Spotted Fever were reported during June and 20 more cases during the first 3 weeks of July. The enclosed map gives the total number of cases reported in 1973 which have occurred through July 23. (Div. of Epidemiology, N. C. State Board of Health)

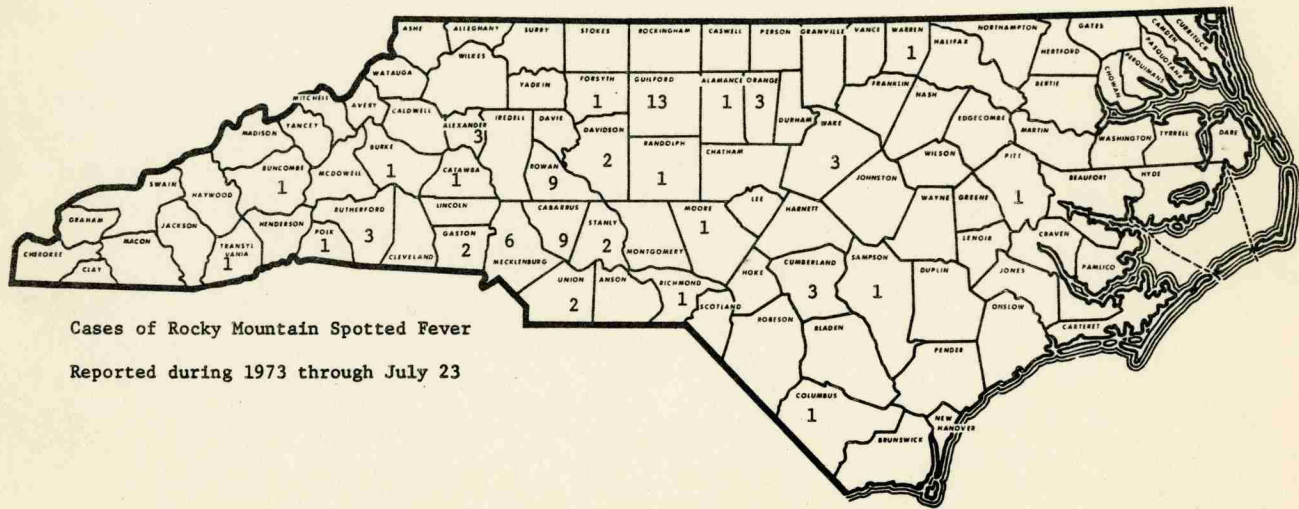
FACE FLY (*Musca autumnalis*) - NORTH CAROLINA - Surveys to date revealed face flies occur in 5 counties which had no record of infestation. New county records include Stanly, Montgomery, Moore, Randolph and Alamance counties. All herds (total 130 head) visited had infestations of 5 to 35 (averaged 15 per head) adult flies per head. (Hunt, Ext.)

FEDERAL AND STATE PLANT PROTECTION PROGRAMS

IMPORTED FIRE ANT (*Solenopsis richteri*) - NORTH CAROLINA - A recent mound survey in Pamlico county revealed active mounds on N.E. side of Hwy. 55 just east of Stonewell. This is an extension of the infestation outside the proposed quarantine line in Pamlico county. (Miller, N.C.D.A., Lockerman, APHIS)

GYPSY MOTH (*Porthetria dispar*) - NORTH CAROLINA - The number of gypsy moth adult male catches in sex lure traps increased rapidly after the initial collection July 11 near Williamston, Martin county. Catches to date are summarized below. (Alford, N.C.D.A.)

County	Adult ♂ Collected in Sexlure Traps
Martin, near Williamston	1
Jackson, near Cherokee	1
Currituck, Bells Island	2
Currituck, 2 mi. S. of Corolla	3
Dare, Duck to Salvo	13
Mecklenburg, Charlotte	2
Warren, Lake Gaston shore	1
Bladen, White Lake	1
	24



Cases of Rocky Mountain Spotted Fever
Reported during 1973 through July 23

SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.

During Week of July 19-25, 1973

County Collected	# of Specimens	Host(s)	Stage(s)	Determination
<u>Southern Field Crops</u>				
Wayne	2	Tobacco	Larvae	Tobacco budworm, <i>Heliothis virescens</i> ; and cabbage looper, <i>Trichoplusia ni</i>
<u>Man and Animals</u>				
Stanly, Moore,	4	On fresh cow manure	Adults	Face fly, <i>Musca autumnalis</i>
Randolph, Montgomery				
Alamance	1	Fresh cow manure	Adult	Face fly, <i>Musca autumnalis</i>
Sampson	1	In human bed	Adult	American dog tick, <i>Dermacentor variabilis</i>
<u>Grain, Soybeans and Forages</u>				
Columbus	1	Soybeans	Larvae	Lesser cornstalk borer, <i>Elasmopalpus lignosellus</i>
<u>Forestry, Ornamentals and Turf</u>				
Gaston	1	Walnut	Larvae	Tenthredinid sawflies, <i>Eriocampa juglandis</i>
Wake	1	Poss. black gum	Gall	Undet. eriophyid mites
Northampton	1	Maple	Old injury	Undet. spider mites
Mitchell	1	Magnolia	Injury	Undet. leafcutter bee
Avery	1	Fraser fir	Old injury	Undet. aphids
Washington	1	Boxwoods	Old injury	Undet. spider mites
Carteret	1	Sea oats	All	Chinch bugs, <i>Blissus</i> sp.
Northampton	1	Post oak	Old galls	Cynipid gall wasps, prob. <i>Neuroterus</i> sp.
Poss.	1	Dead fig twigs	All	Bark beetles, <i>Stephanoderes obscurus</i>
<u>Pasquotank</u>				
Wayne	1	Herbs	Larva	Black swallowtail, <i>Papilio polyxenes asterius</i>
Cleveland	1	Privet and abelia	Adults	Japanese weevil, <i>Pseudocneorhinus bifasciatus</i>
Wake	1	Juniper	Old injury	Undet. spider mites
<u>Vegetables (Commercial & Garden)</u>				
Gates	1	Snap and butter beans	All	Undet. spider mites
?Wayne	1	Snap and butter beans	Nymphs	Undet. stink bugs
Pamlico	1	Vegetables	Old injury	Undet. leafminers
Pasquotank	1	Beans	Larvae	Lesser cornstalk borer, <i>Elasmopalpus lignosellus</i>
Durham	1	Tomato	Workers	Eastern subterranean termite, <i>Reticulitermes flavipes</i>

SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.

Page two

Week of July 19-25, 1973

Household & Industrial Insects

Sampson	1	On wall in home	Larvae
Bertie	1	In wet bag of pepper	Larvae

A casemaking clothes moth, prob. *Praeacedes* sp.
Soldier flies, *Hermetia illucens*

Miscellaneous & Accidental Household

Rutherford	1	In basement	Adult
Chatham	1	Around fireplace in home	Larvae
Burke	1	Floor joist	Adults

Regal moth, *Citheronia regalis*
Soldier fly, *Hermetia illucens*
Organ-pipe mud dauber, *Trypoxylon* sp.

Fruit

Pasquotank	1	Pecan	Nymphs
Montgomery	1	Pecan	Larvae
Burke	2	Apple	?All
Durham	1	Apple	Adult
Wake	1	Grape	Larvae
Mecklenburg	1	Pecan	Larva
Pender	1	Muscadine grapes	Adults
Vance	1	Grape	Gall

Undet. spittlebugs
Walnut caterpillar, *Datana integerrima*
Twospotted spider mite, *Tetranychus urticae*;
and an undet. rust mite
Leaf beetle, *Colaspis* sp.
Grape curculio, *Craponius inaequalis*
Underwing moth, *Catoaca* sp.
Prob. grape colaspis, *Colaspis* prob. *brunnea*
Grape tube gall, (*Cecidomyia*) *viticola*

Misc.

Wake	1	Supposedly coughed up by a cat	Adult
Avery	1	Home grounds	Adult
Gaston	1	Flying over lawn	Adult
Rutherford	2	On porch	Larvae
Pasquotank	1	On boy's leg	Adult
Lee	1	At lights	Adult
Surry	1	In yard	Larva
Wake	2	Flying	Adults
?Davie	1	---	Alates
Chatham	1	Dug up in yard	Pupa

Flatworm, *Bipalium kewense*
June beetle, *Polyphylla* sp.
Velvet ant, *Dasymutilla* sp.
Undet. stenomid and oecophorid moths
Flatworm, *Bipalium kewense*
Leopard moth, *Epantheria scribonia*
Hickory horned devil, *Citheronia regalis*
Dobsonfly, *Chauliodes* sp.; and undet. tiphiid wasp
Ants, prob. *Aphaenogaster* sp.
Imperial moth, *Eacles imperialis*



Dr. Knight

entomology

August 3, 1973

TO: County Extension Agents and Other Interested Persons

FROM: Thomas N. Hunt, Survey Entomologist

T. N. Hunt

SUBJECT: Insect Survey Report

This report is compiled by: Thomas N. Hunt, Survey Entomologist

Raleigh, North Carolina

CORN, SORGHUM

LESSER CORNSTALK BORER (Elasmopalpus lignosellus) - NORTH CAROLINA - Severe damage occurring to young (8 in. tall or less) grain sorghum, soybeans, and garden beans in scattered Coastal Plain fields and gardens.

One 6 ac. grain sorghum field in Cumberland County observed with 95% loss. Farmer broadcast soybeans in the field. (Jernigan, Ext. Cumberland Co.; Weaver, Dept. of Ent.)

SOYBEANS

LESSER CORNSTALK BORER (Elasmopalpus lignosellus) - NORTH CAROLINA - See note under CORN, SORGHUM in this report.

CORN EARWORM (Heliothis zea) - NORTH CAROLINA - Corn earworm adults observed in 15 soybean fields in Wake and Harnett County area. This indicates that fields in the counties south of Wake should find larvae (podworm)



in next 2 weeks. Fields with open canopies that are near bloom stage should be observed more closely than closed canopy fields. (Hunt, Ext. Ent.)

TOBACCO

TOBACCO BUDWORM (Heliothis virescens) - NORTH CAROLINA - Ask any tobacco farmer, budworm levels were higher in 1973 than in recent years. Roughly, 3 times as many fields were at or above threshold in 1973 than in 1972. The general budworm population level was at least twice as high as each corresponding weekly period in 1972. (Tobacco Pest Mgt. Prog.)

VEGETABLES

LESSER CORNSTALK BORER (Elasmopalpus lignosellus) - NORTH CAROLINA - See note under CORN, SORGHUM in this report.

MAN AND ANIMALS

FACE FLY (Musca autumnalis) - NORTH CAROLINA - Surveys this week revealed face fly infestations on cattle in Durham, Person, and Caswell Co. Our records indicate that these are new county records. Approximately 150 head were observed in 3 herds, populations per animals ranged from 5-75 in this 3 county area. Herds were also observed in Harnett and Cumberland Co., but no suspicious flies were seen. (Hunt, Ext. Ent.)

bp/330



SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.

During Week of July 26 - August 1, 1973

County Collected	# of Specimens	Host(s)	Stage(s)	Determination
<u>Man & Animals</u>				
Pamlico	1	On people	Larvae	Prob. American dog tick, prob. <i>Dermacentor variabilis</i>
Cumberland	1	In human stool	Larva	Soldier fly, <i>Hermetia illucens</i>
<u>Grain, Soybeans & Forages</u>				
Hyde	1	Soybeans	Larvae	Yellowstriped armyworm, <i>Spodoptera ornithogalli</i>
Pamlico	1	Corn	Larva & pupae	European corn borer, <i>Ostrinia nubilalis</i>
Cumberland	1	Grain sorghum	Larvae	Lesser cornstalk borer, <i>Elasmopalpus lignosellus</i>
Hyde	2	Soybeans	Larvae	Beet armyworm, <i>Spodoptera exigua</i> ; and lesser cornstalk borer, <i>Elasmopalpus lignosellus</i>
Mecklenburg	1	Soybeans	Larvae	Green cloverworm, <i>Plathypena scabra</i>
<u>Forestry, Ornamentals & Turf</u>				
Orange	2	Linden	Larvae	Tussock moth, <i>Halisidota</i> sp.; and an undet. pyraustid moth
Orange	1	Juniper	Old injury	Undet. spider mites
Washington	1	White ash	All	Undet. aphids
Duplin	1	Oak	Larvae	Bagworms, prob. <i>Thyridopteryx ephemeraeformis</i>
Guilford	2	Beech	Old injury	Undet. eriophyid mites; and undet. leaf-tieing caterpillars
Wake	1	Boxwood	Young larvae	Boxwood leafminer, <i>Monarthropalpus buxi</i>
Warren	1	Boxwood	Young larvae	Boxwood leafminer, <i>Monarthropalpus buxi</i>
Dare	1	Sea oats	Adults	Bark beetles, <i>Hypothenemus</i> prob. <i>eruditus</i>
Cleveland	1	Red maple	All	Undet. diaspidid scales
Wake	2	Silver maple	Larvae; and all	Olethreutid moth, <i>Episimus</i> prob. <i>tyrius</i> ; and undet. spider mites
Pasquotank	1	Maple	Larva	Olethreutid moth, <i>Episimus</i> prob. <i>tyrius</i>
Durham	2	In lawn	Adults	Scarab beetles, <i>Phyllophaga</i> sp. and <i>Cyclocephala</i> sp.
New Hanover	1	Vine	Adults	Leaf beetles, <i>Octotoma plicatula</i>
Orange	1	Holly	Adults	Two-lined spittlebug, <i>Prosapia</i> sp.
Franklin	1	Pine	Larvae	Redheaded pine sawfly, <i>Neodiprion lecontei</i>
Person	1	Boxwood	Old injury	Undet. spider mites
Cumberland	1	Red maple	Adults	Undet. diaspidid scales
<u>Vegetables (Commercial & Garden)</u>				
Edgecombe	1	Tomato, pepper & eggplant	Nymph	Prob. a leaf-footed bug, prob. <i>Leptoglossus</i> sp.
Durham	1	Green beans	Larvae	Lesser cornstalk borer, <i>Elasmopalpus lignosellus</i>
Johnston	1	Sweet potato	Larvae	Spring rose beetle, <i>Strigoderma arboricola</i>
Watauga	1	Cucumbers & potatoes	Adults	Prob. tarnished plant bugs, <i>Lygus</i> prob. <i>lineolaris</i>

Summary of Specimens Processed by Insect Clinic, N.C.S.U.

Page Two

Week of July 26 - August 1, 1973

Wood Destroying Insects

Moore	2	White pine (dead)	Larvae; & adult	Pine sawyers, <i>Monochamus</i> sp., and a Pissodes weevil, <i>Pissodes</i> sp.
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Household & Industrial Insects

Durham	1	In attic	Adult	Cabinet beetle, <i>Trogoderma inclusum</i>
Watauga	1	In apartment	Alates	Ants, <i>Lasius</i> sp.
Alamance	1	Among stored goods	Larvae & puparia	Blow flies, <i>Phaenicia</i> prob. <i>pallescens</i>
Wake	1	In basement	Alates	Silky ant, <i>Formica fusca</i>

Miscellaneous & Accidental Household

Edgecombe	1	In home	Adult	Scarab beetle, <i>Phileurus</i> sp.
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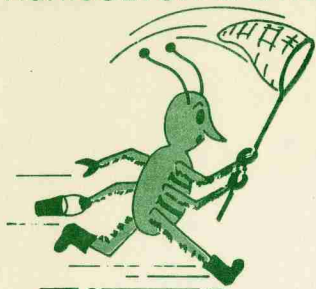
Fruit

Mitchell	1	Cherry, peach, black walnut	Larvae	Fall webworm, <i>Hyphantria cunea</i>
Granville	1	Pecan	Old injury	Undet. spittlebugs
Wilkes	1	Apple orchard	Adults	Cicadas, <i>Tibicen</i> sp.
Moore	1	Flowering peach	Larvae	Peachtree borer, <i>Sanninoidea exitiosa</i>

Misc.

Wake	1	On snow fence	Larvae	Undet. bagworms
Maryland state	1	---	Adult	Saltmarsh caterpillar, <i>Estigmene acrea</i>
Buncombe	1	On alantans	Adults	Undet. stilt bugs
Wake	1	In carport	Larvae	American dagger moth, <i>Acrionicta americana</i>
Wayne	1	Near railroad	Adult	Luna moth, <i>Tropea luna</i>
Northampton	1	At lights	Adults	Citheroniid moths, <i>Anisota</i> sp.
Iredell	1	On car	Adult	Arctiid moth, <i>Haploa</i> prob. <i>olymene</i>
Jackson	1	On screen door	Adult	Luna moth, <i>Tropea luna</i>
Wake	1	Around outside of home	Adults	Greenhouse millipede, <i>Oxidus gracilis</i>

Dr. Knight



80
80
116
238
828

entomology

August 10, 1973

TO: County Extension Agents and Other Interested Persons
 FROM: Thomas N. Hunt, Survey Entomologist *T.N.H.*
 SUBJECT: Insect Survey Report

This report is compiled by: Thomas N. Hunt, Survey Entomologist
 Raleigh, North Carolina

CORN

EUROPEAN CORN BORER (Ostrinia nubilalis) - NORTH CAROLINA - Spot checks throughout Coastal Plain reveal generally light damage. However, infestations to 9 larvae per stalk reported from Robeson County on 200 - 300 acres of field corn. Fallen ears and very weak stalks were common in the area. (Meares, APHIS).

COTTON

BOLLWORM (Heliothis zea) - NORTH CAROLINA - Light trap collections revealed increased activity August 3-5 in Northampton County. This indicates that egg laying is underway in cotton and soybeans in the northern Coastal Plain.

Below are the catches from the light trap in the Potecasi Community, Northampton Co.



Moths

July 31	60
Aug. 1	90
Aug. 2	116
Aug. 3	236
Aug. 4	665
Aug. 5	266



(Harrell, Co. Ext. Newsletter, Northampton Co.)

SOYBEANS

PODWORM (Heliothis zea) - NORTH CAROLINA - Light trap catches indicate egg laying on soybeans in progress in the northern Coastal Plain counties. Field surveys are necessary during next 2 weeks to determine need for controls. Fields which are blooming and have open canopies are most likely to have infestations at or above the threshold level. See Cotton note in this report.

MAN AND ANIMALS

FACE FLY (Musca autumnalis) - NORTH CAROLINA - Continuation of the face fly survey revealed infestations on 2 Scotland County herds (total of 40 head) which averaged 15 flies per head (range 5-35 per head). No face flies were observed on 150 head in 3 Hoke County herds. Scotland County is a new county record. (Hunt, Ext., N. C. S. U.).

FEDERAL AND STATE PLANT PROTECTION PROGRAMS

GYPSY MOTH (Porthetria dispar) - NORTH CAROLINA - Five male gypsy moths have been collected from sexlure traps and identified by USDA taxonomists in Carteret (1), Perquimans (1), Dare (1), and Swain (2) Counties. These collections bring the total 1973 North Carolina catches to 29 in 23 sites. Most of the collections have been concentrated in the Northeastern counties. (N.C.D.A.)

bp/330

SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.

During Week of August 2-8, 1973

County	# of Collected Specimens	Host(s)	Stage(s)	Determination
<u>Man & Animals</u>				
Durham, Caswell, & Person	1	Fresh manure	Adults	Face flies, <i>Musca autumnalis</i>
Beaufort	1	Stung child	Larva	Saddleback caterpillar, <i>Sibine stimulea</i>
Wayne	1	Passed in human stool	Larva	Soldier fly, <i>Hermetia illucens</i>
<u>Grain, Soybeans & Forages</u>				
Washington	1	Sorghum	Larvae	Sorghum webworm, <i>Celama sorghiella</i>
Columbus	1	Corn	Larvae	Syrphid flies, <i>Mesograpta</i> prob. <i>polita</i>
Pender	1	Corn	Old injury	Undet. aphids
<u>Forestry, Ornamentals & Turf</u>				
Rowan	1	Japanese lanterns	All	Undet. spider mites
Edgecombe	1	Willow	All	Undet. aphids
Bladen	1	Boxwood	Old injury	Undet. spider mites
Wilson	1	Locust	Larvae	Mimosa webworm, <i>Homadaula anisocentra</i>
Catawba	1	Dogwood	Larvae	Redhumped caterpillar, <i>Schizura concinna</i>
Rowan	1	Japanese holly	Adults	Twolined spittlebug, <i>Prosapia</i> sp.
Gaston	1	Sugar maple	Larvae	Longhorned beetle, prob. <i>Elaphidion</i> sp.
Wake	1	Pine seedling in greenhouse	Young larvae	Armyworms, <i>Spodoptera</i> sp.
?Halifax	1	White oak	Larvae	Oak leafminers, <i>Cameraria</i> sp.
Caldwell	1	Azalea	Larva	Azalea caterpillar, <i>Datana major</i>
Sampson	1	Silver maple	Galls	Maple bladdergall mite, <i>Vasates quadripes</i>
Wilmington	1	In ground under grass	Adults	Click beetles, <i>Heteroderes</i> sp.
Avery	1	Fraser fir	Old injury	Balsam twig aphid, <i>Mindarus abietinus</i>
Henderson	1	Silver maple	Larva	Obliquebanded leafroller, <i>Choristoneura rosaceana</i>
Columbus	1	Ragweed	Adults	Carrot beetle, <i>Bothynus gibbosus</i>
Bladen	1	Shrubbery	Larva	Woollybear, <i>Diacrisia</i> sp.
<u>Vegetables (Commercial & Garden)</u>				
Wake	1	Butter beans	All	Undet. spider mites
Cabarrus or Rowan	1	Tomato	All	Undet. whiteflies
Bladen	1	Lima beans	Larvae	Lesser cornstalk borer, <i>Elasmopalpus lignosellus</i>
Wake	1	Tomato	All	Undet. spider mites

Summary of Specimens Processed by Insect Clinic, N.C.S.U.

Page Two

Week of August 2-8, 1973

Wood Destroying Insects

Durham	1	2x4 in home	?All	Oldhouse borer, <i>Hylotrupes bajulus</i>
Lincoln	1	In home	Adult	Rustic borer, <i>Xylotrechus colonus</i>

Household & Industrial Insects

Nash	1	On kitchen floor	Larvae	Blow flies, <i>Phaenicia</i> prob. <i>pallescens</i>
Wake	1	In home	Larvae	Murky meal caterpillar, <i>Aglossa caprealis</i>
Orange	4	Tulip bulbs stored in basement	Adults; adults; larvae; larvae	Foreign grain beetle, <i>Ahasverus advena</i> ; sap beetles, <i>Carpophilus freemani</i> ; undet. otitid flies; and undet. prob. tineid moths

Miscellaneous & Accidental Household

Duplin	1	In telephone book	Pupa	Undet. prob. olethreutid moth
Wake	1	Between pages of magazine	Pupae	Codling moth, <i>Laspeyresia pomonella</i>
Edgecombe	1	In home	Adult	Flatworm, <i>Bipalium kewense</i>

Fruit

Wilkes	1	Apple	Young larvae	Armyworms, <i>Spodoptera</i> sp.
Burke	1	Blueberry	Young larvae in galls	Blueberry stem gall, ? <i>Loxaulus vaccinii</i>
Cleveland	1	Plum	Adults	Undet. diaspidid scales
Richmond	1	Peach	Old injury	Undet. lace bugs
Moore	1	Apple	?All	Prob. woolly apple aphid, prob. <i>Eriosoma lanigerum</i>
Beaufort	1	Apple	Old injury	Undet. spider mites
Cleveland	1	Bunch grapes	Adults	Grape root borer, <i>Vitacea polistiformis</i>
Moore	1	Pecan seedlings	Larvae	Phycitid moth, <i>Acrobasis caryivorella</i>

Misc.

Ashe	1	Moving across lawn	Larvae	Undet. darkwinged fungus gnats
Pasquotank	1	On posts in water along	Larvae	Undet. prob. crane flies
Northampton	1	On sidewalk	Adult	Regal moth, <i>Citheronia regalis</i>
Edgecombe	1	On side of building	Adult	Noctuid moth, <i>Euthisanotia</i> sp.
Duplin	1	On porch	Adult	Giant stag beetle, <i>Lucanus elaphus</i>
Warren	1	---	Adult	Velvet ant, <i>Dasymutilla occidentalis</i>
Guilford	1	In vegetable garden	Adults	Greenhouse millipede, <i>Oridius gracilis</i>
Pitt	1	In a mass under a carport	Larvae	Undet. darkwinged fungus gnats

SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.

During Week of August 2-8, 1973

County	# of Collected Specimens	Host(s)	Stage(s)	Determination
<u>Man & Animals</u>				
Durham, Caswell, & Person	1	Fresh manure	Adults	Face flies, <i>Musca autumnalis</i>
Beaufort	1	Stung child	Larva	Saddleback caterpillar, <i>Sibine stimulea</i>
Wayne	1	Passed in human stool	Larva	Soldier fly, <i>Hermetia illucens</i>
<u>Grain, Soybeans & Forages</u>				
Washington	1	Sorghum	Larvae	Sorghum webworm, <i>Celana sorghiella</i>
Columbus	1	Corn	Larvae	Syrphid flies, <i>Mesograpta</i> prob. <i>polita</i>
Pender	1	Corn	Old injury	Undet. aphids
<u>Forestry, Ornamentals & Turf</u>				
Rowan	1	Japanese lanterns	All	Undet. spider mites
Edgecombe	1	Willow	All	Undet. aphids
Bladen	1	Boxwood	Old injury	Undet. spider mites
Wilson	1	Locust	Larvae	Mimosa webworm, <i>Homadaula avisocentra</i>
Catawba	1	Dogwood	Larvae	Redhumped caterpillar, <i>Schizura concinna</i>
Rowan	1	Japanese holly	Adults	Twolined spittlebug, <i>Prosapia</i> sp.
Gaston	1	Sugar maple	Larvae	Longhorned beetle, prob. <i>Elaphidion</i> sp.
Wake	1	Pine seedling in greenhouse	Young larvae	Armyworms, <i>Spodoptera</i> sp.
?Halifax	1	White oak	Larvae	Oak leafminers, <i>Cameraria</i> sp.
Caldwell	1	Azalea	Larva	Azalea caterpillar, <i>Datana major</i>
Sampson	1	Silver maple	Galls	Maple bladdergall mite, <i>Vasates quadripes</i>
Wilmington	1	In ground under grass	Adults	Click beetles, <i>Heteroderes</i> sp.
Avery	1	Fraser fir	Old injury	Balsam twig aphid, <i>Mindarus abietinus</i>
Henderson	1	Silver maple	Larva	Obliquebanded leafroller, <i>Choristoneura rosaceana</i>
Columbus	1	Ragweed	Adults	Carrot beetle, <i>Bothynus gibbosus</i>
Bladen	1	Shrubbery	Larva	Woollybear, <i>Diacrista</i> sp.
<u>Vegetables (Commercial & Garden)</u>				
Wake	1	Butter beans	All	Undet. spider mites
Cabarrus	1	Tomato	All	Undet. whiteflies
or Rowan				
Bladen	1	Lima beans	Larvae	Lesser cornstalk borer, <i>Elasmopalpus lignosellus</i>
Wake	1	Tomato	All	Undet. spider mites

Summary of Specimens Processed by Insect Clinic, N.C.S.U.

Page Two

Week of August 2-8, 1973

Wood Destroying Insects

Durham	1	2x4 in home	?All	Oldhouse borer, <i>Hylotrupes bajulus</i>
Lincoln	1	In home	Adult	Rustic borer, <i>Xylotrechus colonus</i>

Household & Industrial Insects

Nash	1	On kitchen floor	Larvae	Blow flies, <i>Phaenicia</i> prob. <i>pallescens</i>
Wake	1	In home	Larvae	Murky meal caterpillar, <i>Aglossa caprealis</i>
Orange	4	Tulip bulbs stored in basement	Adults; adults; larvae; larvae	Foreign grain beetle, <i>Ahasverus advena</i> ; sap beetles, <i>Carpophilus freemani</i> ; undet. otitid flies; and undet. prob. teneid moths

Miscellaneous & Accidental Household

Duplin	1	In telephone book	Pupa	Undet. prob. olethreutid moth
Wake	1	Between pages of magazine	Pupae	Codling moth, <i>Laspeyresia pomonella</i>
Edgecombe	1	In home	Adult	Flatworm, <i>Bipalium kewense</i>

Fruit

Wilkes	1	Apple	Young larvae	Armyworms, <i>Spodoptera</i> sp.
Burke	1	Blueberry	Young larvae in galls	Blueberry stem gall, <i>Toxaulus vaccinii</i>
Cleveland	1	Plum	Adults	Undet. diaspidid scales
Richmond	1	Peach	Old injury	Undet. lace bugs
Moore	1	Apple	?All	Prob. woolly apple aphid, prob. <i>Eriosoma lanigerum</i>
Beaufort	1	Apple	Old injury	Undet. spider mites
Cleveland	1	Bunch grapes	Adults	Grape root borer, <i>Vitacea polistiformis</i>
Moore	1	Pecan seedlings	Larvae	Phycitid moth, <i>Acrobasis caryivorella</i>

Misc.

Ashe	1	Moving across lawn	Larvae	Undet. darkwinged fungus gnats
Pasquotank	1	On posts in water along waterline	Larvae	Undet. prob. crane flies
Northampton	1	On sidewalk	Adult	Regal moth, <i>Citheronia regalis</i>
Edgecombe	1	On side of building	Adult	Noctuid moth, <i>Euthisanotia</i> sp.
Duplin	1	On porch	Adult	Giant stag beetle, <i>Lucanus elaphus</i>
Warren	1	---	Adult	Velvet ant, <i>Dasymutilla occidentalis</i>
Guilford	1	In vegetable garden	Adults	Greenhouse millipede, <i>Oxidus gracilis</i>
Pitt	1	In a mass under a carport	Larvae	Undet. darkwinged fungus gnats

Summary of Specimens Processed by Insect Clinic, N.C.S.U.

Page Three

Week of August 2-8, 1973

Gaston	1	In swimming pool	All	Undet. isotomid springtails
Orange	1	Outside of house	Adults	Greenhouse millipede, <i>Oxidus gracilis</i>
Wake	3	On screen porch	Adult; adult; larva	Sphinx moth, <i>Eumorpha</i> sp.; noctuid moth, <i>Amphipyra pyramidoides</i> ; and an undet. noctuid moth

Dr. Knight



entomology

August 17, 1973

TO: County Extension Agents and Other Interested Persons
 FROM: Thomas N. Hunt, Survey Entomologist *T.N.H.*
 SUBJECT: Insect Survey Report

This report is compiled by: Thomas N. Hunt, Survey Entomologist
 Raleigh, North Carolina

SOYBEANS

BEET ARMYWORM (*Spodoptera exigua*) - NORTH CAROLINA - Roughly 1500 acres have been treated 1 or more times for control of beet armyworm larvae in the Pasquotank County area. Defoliation in some fields has been above or near the threshold level for 6 weeks.

Populations of 75+ per 5 ft. of row have been observed in some spots in southern Pasquotank County.

This is the most severe beet armyworm damage ever known to occur in North Carolina. (Van Duyn, Ext. Ent.)

CORN EARWORM (*Heliothis zea*) - NORTH CAROLINA - Larvae in second and third stage of development (instar) are appearing (August 14) on soybeans as far north as Harnett County. Entomologists at N. C. State University expect a population



increase within 1 week. High egg counts on cotton and high light trap collections indicate an increased population on soybeans from the 1972 infestation levels. See the note under COTTON.

COTTON

CORN EARWORM (Heliothis zea) - NORTH CAROLINA - Scouting reports from Rich Square area of Northampton County reveal an average of 48 larvae and 80 eggs per 100 terminals in roughly 50 fields surveyed.

These counts are higher than similar counts made in 1972. However, good control has been achieved to date in all but a few scattered fields. (Ganyard, USDA).

BEE T ARMYWORM (Spodoptera exigua) - NORTH CAROLINA - A few larvae have been observed on cotton squares and blooms in several fields visited in Northampton, Edgecombe and Halifax Counties. The situation is not expected to be critical to the 1973 crop. However, this pest is very injurious to cotton and soybeans further south (Alabama, Mississippi, etc.) and is expanding both population and distribution in North Carolina. See SOYBEANS in this note. (Ganyard, USDA; Hunt, Ext. Ent.)

DECIDUOUS FRUITS AND NUTS

GRAPE ROOT BORER (Vitacea polistiformis) - NORTH CAROLINA - A survey is underway to detect the presence of this pest in the muscadine growing area of North Carolina. To date, the survey has revealed infestations in Richmond, Lenoir, Anson, Moore, Franklin and Robeson Counties. These are new county records. (Hunt, Ext. Ent.; Batten, Scott, N.C.D.A.)

FEDERAL AND STATE PLANT PROTECTION

GYPSY MOTH (Porthetria dispar) - NORTH CAROLINA - Five male gypsy moths have been collected from sexlure traps in Avery Co., Linville Falls(3); Pasquotank Co. (1); Orange Co., Chapel Hill (1). These collections bring the total 1973 N. C. catches to 33 in 26 sites. (Alford, N.C.D.A.).

SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.

During Week of August 9-15, 1973

County Collected	# of Specimens	Host(s)	Stage(s)	Determination
<u>Southern Field Crops</u>				
Jones	1	Tobacco	Larva	Prob. potato tuberworm, prob. <i>Phthorimaea operculella</i>
Pender	2	Peanuts	Larvae	Corn earworm, <i>Heliothis zea</i> ; and lesser cornstalk borer, <i>Elasmopalpus lignosellus</i>
<u>Man & Animals</u>				
Wake	1	Bit person	Adult	Jumping spider, <i>Phidippus</i> sp.
Burke	1	On man	Adult	American dog tick, <i>Dermacentor variabilis</i>
<u>Grain, Soybeans & Forages</u>				
Pamlico	1	Corn	Larvae & pupa	European cornborer, <i>Ostrinia nubilalis</i>
Pamlico	3	Soybeans	Young larvae	Beet armyworm, <i>Spodoptera exigua</i> ; corn earworm, <i>Heliothis zea</i> ; undet. loopers
Bladen	2	Corn & soybeans	Adults	American grasshopper, <i>Schistocerca americana</i> ; and differential grasshopper, <i>Melanoplus differentialis</i>
Beaufort	1	Corn	Larva	Southern cornstalk borer, <i>Diatraea crambidoides</i>
<u>Forestry, Ornamentals & Turf</u>				
Orange	1	Elm	Larvae	Larger elm leaf beetle, <i>Monocesta coryli</i>
Cherokee	2	Lawn	Young larvae	Undet. white grubs and grass moths
Davie	1	S. Sugar maple	Galls	
Franklin	1	Boxwoods	Crawlers	Wax scales, <i>Ceroplastes</i> sp.
Wake	1	Lilac	Old injury	Prob. lilac borer, prob. <i>Podosesia s. syringae</i>
Wake	1	Euonymus	Adults	Undet. diapidid scales
Guilford	1	Beech	?All	Prob. beech blight aphid, prob. <i>Prociphilus imbricator</i>
Wake	1	Crapemyrtle	?All	Prob. crapemyrtle aphid, prob. <i>Tinocallis kahawaluokalani</i>
Wake	1	Short-leaved pine	Larvae	Undet. gall midges
Cabarrus or Rowan	1	Boxwood	Young larvae	Boxwood leafminer, <i>Monarthropalpus buxi</i>
Lincoln	1	Live oak	Larvae	Gall wasp, <i>Andricus foliatus</i>
Bladen	1	Oak	Young larvae	Notodontid moth, <i>Datana</i> sp.
Wake	1	Maple	Young larvae	Greenstriped mapleworm, <i>Anisota rubicunda</i>
<u>Vegetables (Commercial & Garden)</u>				
Columbus	1	Squash & fall beans	Larvae	Lesser cornstalk borer, <i>Elasmopalpus lignosellus</i>
Wake	1	Butternut squash	Larvae	Pickleworm, <i>Diaphania nitidalis</i>
Lincoln	1	Tomatoes, corn, okra, squash, cucumber, etc.	Nymph	Undet. earwig

Summary of Specimens Processed by Insect Clinic, N.C.S.U.

Page Two

August 9-15, 1973

Wood Destroying Insects

Rowan	1	Pine panelling in new home	Adults	Southern pine sawyer, <i>Monochamus titillator</i>
Guilford	1	On dead dogwood	Adults	Redheaded ash borer, <i>Neoclytus acuminatus</i>
Wake	3	On trunk of dead hickory	Adults	

Household & Industrial Insects

Wake	1	Kitchen cabinets	Adults	Sawtoothed grain beetles, <i>Onyzaephilus surinamensis</i>
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Miscellaneous & Accidental Household

Cumberland	1	In home	Nymph	Undet. assassin bug
Richmond	1	In home	Adult	Prob. pickleworm, prob. <i>Diaphania nitidalis</i>
Wake	1	In apartment	Adult	Wolf spider, <i>Lycosa</i> sp.

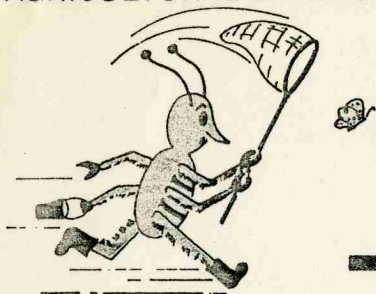
Fruit

South

Carolina	1	Pecan	Galls	Gall midges, prob. <i>Caryomyia</i> sp.
Caswell	1	Pecan	Nymphs	Undet. spittlebugs
Cleveland	1	Apple	Adults	Undet. diaspidid scales
Mecklenburg	1	Crabapple	Old injury	Woolly apple aphid, <i>Eriosoma lanigerum</i>
Scotland	1	Apple	All	Undet. diaspidid scales

Misc.

Watauga	1	On dead maple	Adult	Ichneumonid wasp, <i>Megarhyssa</i> sp.
Bladen	1	In yard	Worker	Black carpenter ant, <i>Camponotus pennsylvanicus</i>
Wake	1	Outside home	Adult	Carrion beetle, <i>Silpha americana</i>
Yancey	1	On outside of building	Larva	Tiger swallowtail, <i>Papilio glaucus</i>
Bladen	1	Resting on shrubbery	Adult	Polyphemus moth, <i>Antheraea polyphemus</i>
Avery	1	Resting on yard tree	Adult	Sphinx moth, <i>Eumorpha</i> sp.
Watauga	1	On trunks of yellow poplar	All	Barklice, <i>Psocus venosus</i>
Currituck	1	In yard	Adults	Velvet ants, <i>Dasymutilla occidentalis</i>
Randolph	1	Supposedly biting people	Adults	Undet. flower flies



entomology

August 24, 1973

TO: County Extension Agents and Other Interested Persons
 FROM: Thomas N. Hunt, Survey Entomologist *T.N.H.*
 SUBJECT: Insect Survey Report

This report is compiled by: Thomas N. Hunt, Survey Entomologist
 Raleigh, North Carolina

CORN, SORGHUM

FALL ARMYWORM (Spodoptera frugiperda) - NORTH CAROLINA - Damage very severe in at least 2 fields of grain sorghum totaling 13 acres in Pasquotank Co.

(Van Duyn, Ext.)

PEANUTS

CORN EARWORM (Heliothis zea) - NORTH CAROLINA - Peanut fields in upper Chowan Co. are generally infested with corn earworm larvae. Observations in scattered fields in Martin, Washington, and Chowan Counties revealed 1 to 3 larvae/ft. of row. Foliar damage could be observed in many fields not sampled. (Van Duyn, Ext.)

SOYBEANS

CORN EARWORM, PODWORM (Heliothis zea) - NORTH CAROLINA - Larval populations very high in many Coastal Plain counties.



Infestation levels of economic importance (1 per ft. of row or greater) were observed in fields with both closed and open canopy types; however, more larvae occurred in the open fields which were at peak bloom August 13 - 17. This rule should only be used as a guide in sampling and not for treatment. Generally, counts taken August 20 - 24 in Jones, Onslow, Duplin, Washington, Hyde and Tyrrell Co. indicated that most larvae were in the 1st, 2nd and 3rd instar (stage of development). Small larvae (3rd instar or less) averaged 21 per 20 ft. of row and large larvae (4th instar or greater) averaged 12 per 20 ft. of row in all fields sampled in Duplin, Jones and Onslow Co.

The Gum Neck area of Tyrrell Co. and fields in Chowan Co. had the highest counts observed. Two fields sampled in the Gum Neck area had an average of 75+ larvae/5 ft. of row and individual samples revealed 140 young larvae (mostly 2nd instar) per 5 ft. sample.

However, many fields have very low numbers, but farmers should continue sampling into September because active moths are still being observed in all areas sampled. Disease and predators are active in most fields. (Van Duyn, Ext., Hunt, Ext.)

VELVETBEAN CATERPILLAR (Anticarsia gemmatalis) - NORTH CAROLINA - Low numbers of larvae are generally infesting soybeans over entire Coastal Plain. These defoliators have been occurring in soybeans for past 3 years during early September. These insects do not overwinter in North Carolina, but migrate up the coast from Florida. This is the earliest general infestation entomologists at N.C.S.U. have observed in North Carolina. (Van Duyn, Ext., Hunt, Ext.)

DECIDUOUS FRUITS AND VEGETABLES

GRAPE ROOTBORER (Vitacea polistiformis) - NORTH CAROLINA - Pupal skins were collected for the first time from a Pender Co. vineyard this week. A distribution

survey being conducted in North Carolina has revealed 7 counties previously thought uninfested. These counties are Richmond, Anson, Moore, Robeson, Lenoir, Pender and Franklin. (Sessions, N.C.D.A., Hunt, Ext.)

SWEETPOTATO HORNWORM (Agrius cingulatus) - NORTH CAROLINA - Approximately 60 ac. of sweet potatoes severely defoliated in Cumberland Co. Grower is planning to treat within a very few days. (Woodard, Ext., Cumberland Co.)

bp/330

D. Knight

entomology



August 31, 1973

TO: County Extension Agents and Other Interested Persons,
 FROM: Thomas N. Hunt, Survey Entomologist *T. N. Hunt*

SUBJECT: Insect Survey Report

This report is compiled by: Thomas N. Hunt, Survey Entomologist
 Raleigh, North Carolina

SOYBEANS

CORN EARWORM, PODWORM (Heliothis zea) - NORTH CAROLINA - Larval populations remain high in all Coastal Plain Counties. However, the percentage of large larvae (4th instar or greater) is far higher in all soybean fields except those reaching peak bloom within last week. Counts were taken in Wayne, Craven, Lenoir, Pitt, Greene, and Wilson Counties this week. Below are the results of samples in 30 fields.

Corn Earworm Survey in Coastal Plain Soybeans, Aug. 1973

	Avg. No.		Avg. No.	
	Small larvae per 20 ft. of row	Small larvae per 1 ft. of row	Large larvae per 20 ft. of row	Large larvae per 1 ft. of row
Open Canopy (Bloomed early Aug.)	2.7	.14	14.7	.74



Corn Earworm Survey (cont')

	Avg. No.		Avg. No.	
	Small larvae per 20 ft. of row	Small larvae per 1 ft. of row	Large larvae per 20 ft. of row	Large larvae per 1 ft. of row
Open Canopy (Bloom in last 2 wks.)	18.4	.92	14.0	.70
Closed Canopy (Bloom late July - early Aug.)	0.3	.02	3.1	.15

Counts in Northern and Southern Coastal Plain very similar to these data. These data strongly indicate that larvae are pupating very rapidly in most beans except those which are still blooming.

Unless fields are inspected immediately before chemicals are applied, many farmers will treat fields with no worms still present.

SOYBEANS WHICH ARE PAST BLOOM WILL NOT BE REINFESTED BY CORN EARWORMS.

Light trap collections indicate that a decrease in the number of egg laying adults is occurring. Counts have dropped from 434, August 20; 441, August 21 to 67, August 27; 82, August 28. There is a possibility that the adults from the present pupae and large larvae will be a threat to the very late blooming beans. Should this materialize, you will be kept up to date through the Insect Survey Notes. (Floore, Hunt, Ext.)

DECIDUOUS FRUITS AND NUTS

GRAPE ROOTBORER (Vitacea polistiformis) - NORTH CAROLINA - Surveys this week revealed a positive collection from 2 Jones County vineyards. This is a new County record and brings the total number of new county records for this pest to 8. (Hunt, Ext.)

FOREST AND SHADE TREES

ORANGE-STRIPED OAKWORM (Anisota senatoria) - NORTH CAROLINA - First and second instar larvae observed on willow oak at Pineville - Mecklenburg

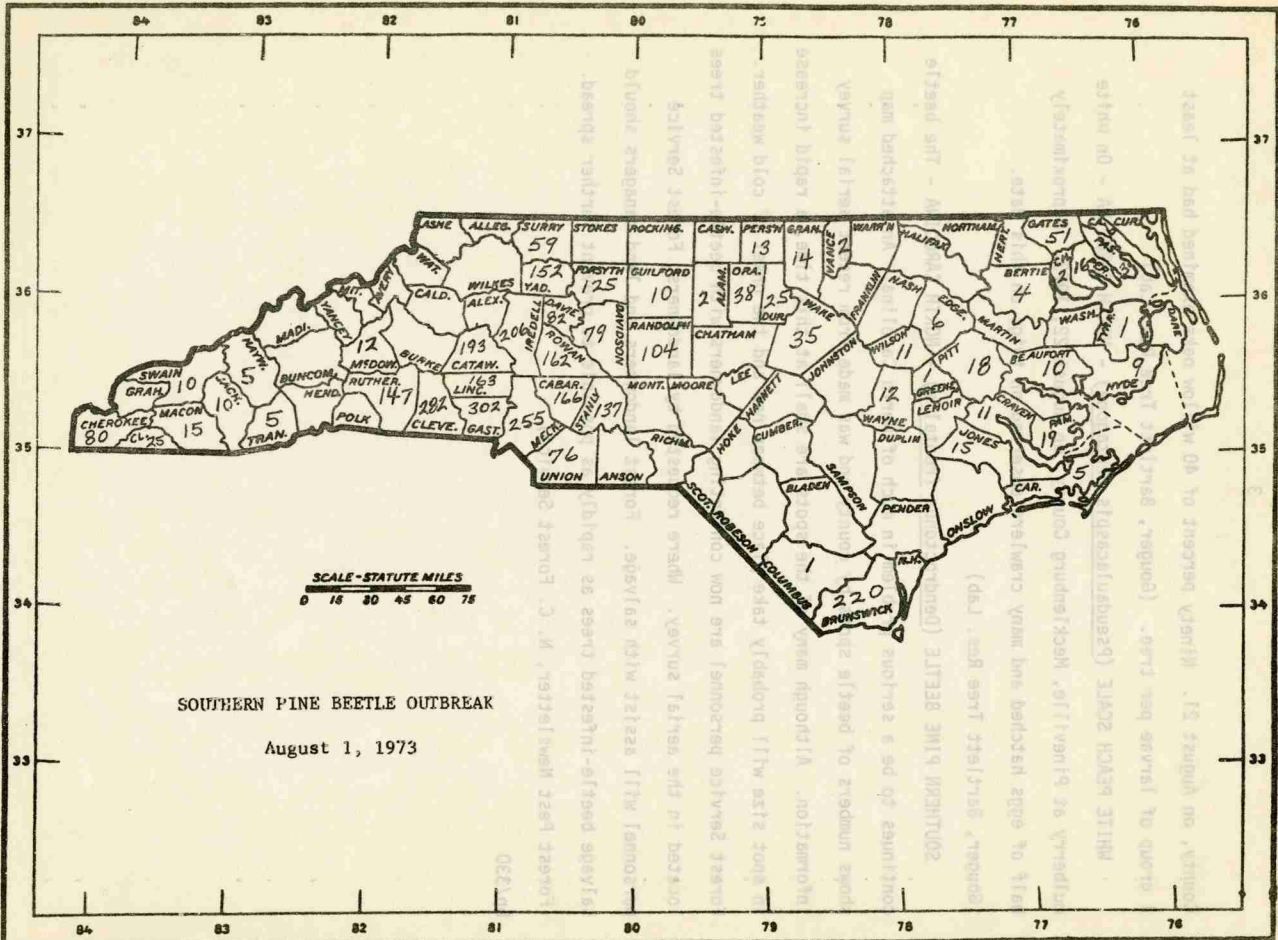
County, on August 21. Ninety percent of 40 willow oaks examined had at least 1 group of larvae per tree. (Gouger, Bartlett Tree Res. Lab)

WHITE PEACH SCALE (Pseudaulacaspis pentagona) - NORTH CAROLINA - On white mulberry at Pineville, Mecklenburg County, on August 22, 1973. Approximately half of eggs hatched and many crawlers observed on twigs on this date. (Gouger, Bartlett Tree Res. Lab)

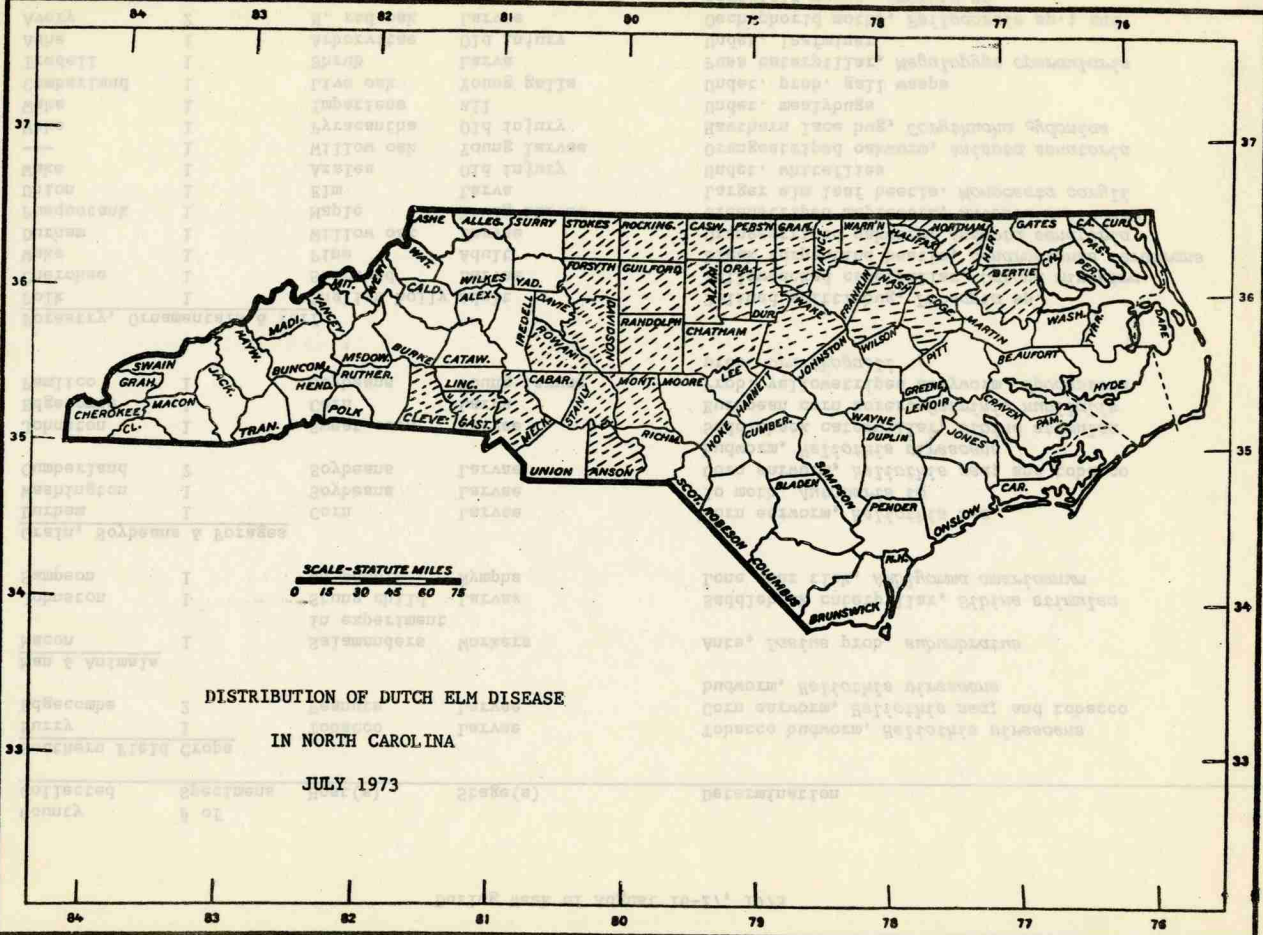
SOUTHERN PINE BEETLE (Dendroctonus frontalis) - NORTH CAROLINA - The beetle continues to be a serious problem in much of North Carolina. An attached map shows numbers of beetle spots by county and was made from recent aerial survey information. Although many of the spots are small at this time, a rapid increase in spot size will probably take place between now and the onset of cold weather. Forest Service personnel are now contacting landowners with beetle-infested trees located in the aerial survey. Where requested by landowners, Forest Service personnel will assist with salvage. Forest landowners and land managers should salvage beetle-infested trees as rapidly as possible to prevent further spread. (Forest Pest Newsletter, N. C. Forest Service)

bp/330

NORTH CAROLINA



NORTH CAROLINA



SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.

During Week of August 16-27, 1973

County Collected	# of Specimens	Host(s)	Stage(s)	Determination
<u>Southern Field Crops</u>				
Surry	1	Tobacco	Larvae	Tobacco budworm, <i>Heliothis virescens</i>
Edgecombe	2	Peanuts	Larvae	Corn earworm, <i>Heliothis zea</i> ; and tobacco budworm, <i>Heliothis virescens</i>
<u>Man & Animals</u>				
Macon	1	Salamanders in experiment	Workers	Ants, <i>Lasius</i> prob. <i>subumbratus</i>
Johnston	1	Stung child	Larvae	Saddleback caterpillar, <i>Sibine stimulea</i>
Sampson	1	On people	Nymphs	Lone star tick, <i>Amblyomma americanum</i>
<u>Grain, Soybeans & Forages</u>				
Durham	1	Corn	Larvae	Corn earworm, <i>Heliothis zea</i>
Washington	1	Soybeans	Larvae	Io moth, <i>Automeris io</i>
Cumberland	2	Soybeans	Larvae	Corn earworm, <i>Heliothis zea</i> ; and tobacco budworm, <i>Heliothis virescens</i>
Johnston	1	Sweet corn	Larvae	Saddleback caterpillar, <i>Sibine stimulea</i>
Edgecombe	1	Corn	Larva	European corn borer, <i>Ostrinia nubilalis</i>
Pamlico	1	Soybeans	Young larvae	Prob. yellowstriped armyworm, <i>Spodoptera</i> prob. <i>ornithogalli</i>
<u>Forestry, Ornamentals & Turf</u>				
Polk	1	English holly	Adult	2-lined spittlebug, <i>Prosapia</i> sp.
Cherokee	1	Sourwood	Larvae	Yellownecked caterpillar, <i>Datana ministra</i>
Wake	1	Pine	Adult	Black turpentine beetle, <i>Dendroctonus terebrans</i>
Durham	1	Willow oak	Larvae	Orangestriped oakworm, <i>Anisota senatoria</i>
Pasquotank	1	Maple	Young larvae	Greenstriped mapleworm, <i>Anisota rubicunda</i>
Union	1	Elm	Larva	Larger elm leaf beetle. <i>Monocesta coryli</i>
Wake	1	Azalea	Old injury	Undet. whiteflies
---	1	Willow oak	Young larvae	Orangestriped oakworm, <i>Anisota senatoria</i>
Wake	1	Pyracantha	Old injury	Hawthorn lace bug, <i>Corythucha cydoniae</i>
Wake	1	Impatiens	All	Undet. mealybugs
Cumberland	1	Live oak	Young galls	Undet. prob. gall wasps
Iredell	1	Shrub	Larva	Puss caterpillar, <i>Megalopyge opercularis</i>
Ashe	1	Arborvitae	Old injury	Undet. leafminer
Avery	2	N. red oak	Larvae	Oecophorid moths, <i>Psilocorsis</i> sp.; and tortricid moths, <i>Amorbia</i> sp.
Cumberland	1	Oak	Larva	Prob. yellownecked caterpillar, <i>Datana</i> prob. <i>ministra</i>

Summary of Specimens Processed by Insect Clinic, N.C.S.U.

Page Two

August 16-27, 1973

Forestry, Ornamentals, & Turf (cont.)

Wake	1	Red maple	Adults	Undet. diaspidid scales
Cumberland	2	Willow oak	All; adults	Undet. spider mites; and undet diaspidid scales
Pitt	1	Elm	All	Elm leaf beetle, <i>Pyrrhalta luteola</i>
Currituck	1	Crapemyrtle	Mostly old injury	Prob. crapemyrtle aphid, prob. <i>Tinocallis kahawaluokalani</i>
---	1	Boxwood	Adult	Prob. boxwood psyllid, prob. <i>Psylla buxi</i>
Orange	1	Willow	Larvae	Tentredinid sawflies, <i>Nematus</i> sp.
Wilson	1	White pine	Adults	Bark beetles, <i>Pityophthorus</i> sp.
Durham	1	Redbud	Adults	Bostrichid beetle, <i>Xylobiops basilaris</i>

Vegetables (Commercial & Garden)

Martin	1	Cabbage & collards	Larvae	Diamondback moth, <i>Plutella xylostella</i>
Lenoir	1	Lima beans	Larva	Limabean vine borer, <i>Monoptilota pergratialis</i>
Duplin	1	Butterbeans	Larvae	Limabean vine borer, <i>Monoptilota pergratialis</i>

Wood Destroying Insects

Currituck	2	Fig, dead branches	Mostly old injury	Bark beetle, <i>Stephanoderes obscurus</i> ; and undet. longhorned beetles
Georgia State	2	Banak molding	Adults	Powderpost beetles, <i>Lyctus brunneus</i> ; and false powderpost beetles, <i>Prostephanus punctatus</i>
Virginia State	1	Banak molding	Adult	Powderpost beetle, <i>Lyctus africanus</i>

Household & Industrial Insects

Cumberland	1	Stored peanuts	All	Almond moth, <i>Cadra cautella</i>
Rowan	1	On clothing	All	Booklice, <i>Liposcelis</i> sp.
Wake	1	In kitchen	Adults	Brownbanded cockroach, <i>Supella longipalpa</i>

Miscellaneous & Accidental Household

Richmond	1	In home	Adult	Bush cricket, <i>Phyllolalpus</i> sp.
Mecklenburg	1	In home	Larvae & adults	Soldier flies, <i>Hermetia illuensis</i>
Wake	1	On wall in home	Adult	Clubionid spider, <i>Trachelas</i> sp.

Fruit

Wake	1	Muscadine grapes	Larva	Grape curculio, <i>Craponius inaequalis</i>
Watauga	1	Blueberry	Larvae	Notodontid moth, <i>Datana</i> prob. <i>drexelii</i>
Currituck	1	Fig, live branches	Larvae	Longhorned beetles, prob. <i>Elaphidion</i> sp.

Summary of Specimens Processed by Insect Clinic, N.C.S.U.

Page Three

August 16-27, 1973

Fruit (cont.)

Beaufort 3 Apple Old injury

Misc.

Harnett 1 In grain bin Young
 Lincoln 1 On screen door Adult
 Nash 1 On lawn Adult
 Bertie 1 In yard Adult
 Gaston 1 Lawn Adult
 Durham 1 Over lawn Adults
 McDowell 1 In swine pen Larvae
 Pender 1 In farm pond Larvae
 Beaufort 1 On plant in Workers
 Johnston 1 Under bark Dead adult
 Edgecombe 1 On flowers Worker
 Franklin 1 On trunk Larvae
 of maple
 Rowan 1 On lawn Adult
 Caswell 1 On lawn Larva

Plum curculio, *Conotrachelus nenuphar*; codling moth, *Laspeyresia pomonella*; apple maggot, *Rhagoletis pomonella*

Rat snake, *Elaphe obsoleta*
 Sphinx moth, *Paonias* sp.
 Scoliid wasp, *Scolia dubia*
 Velvet ant, *Dasymutilla occidentalis*
 Scoliid wasp, *Scolia dubia*
 Scoliid wasp, *Scolia dubia*
 Soldier flies, *Hermetia illucens*
 Undet. midges
 Carpenter ants, *Camponotus* sp.
 Longhorned beetle, *Enaphalodes atomarius*

Bumblebee, *Bombus* sp.
 Undet. bagworms
 Scoliid wasp, *Scolia dubia*
 Arctiid moth, *Euchaetias egle*

August 16-27, 1973

Page Three

Summary of Specimens Processed by Insect Clinic, N.C.S.U.

Dr. Knight



entomology

September 7, 1973

TO: County Extension Agents and Other Interested Persons

FROM: Thomas N. Hunt, Survey Entomologist

SUBJECT: Insect Survey Report

This report is compiled by: Thomas N. Hunt, Survey Entomologist

CORN

EUROPEAN CORN BORER (Ostrinia nubilalis) - NORTH CAROLINA - European corn borer damage is severe in some scattered fields and light generally over the entire state. Populations range from a 1% infestation to an estimated 80% infestation in some fields. Severe infestations have been observed in Northampton, Edgecombe, and Sampson Counties. Most corn is mature, therefore, harvest before severe lodging occurs is best solution in heavily infested fields. (Upton, Ext., Sampson Co; Long, Ext., Northampton Co.; Lemons, Ext., Edgecombe Co.)

TOBACCO

TOBACCO MOTH (Ephestia elutella) - NORTH CAROLINA - Reports have been received from Wake, Bladen, Duplin, Pitt, and Wayne Counties concerning heavy larval infestations in curing tobacco. Source of the infestations can usually be traced to stored 1972 tobacco. (Puckett, Dept. of Ent.; Sasser, Ext., Bladen Co; Hunt, Ext.)



SOYBEANS

CORN EARWORM (Heliothis zea) - NORTH CAROLINA - Very few larvae were found this week in soybeans across the Coastal Plain except those fields which are blooming or have bloomed in past 2 weeks. Spot checks revealed more large larvae (4th instar or larger) than small larvae (3rd instar or less) in all fields. Damage from corn earworms is over in 75+% of the Coastal Plain soybeans. No reinfestation will occur. Fields which are blooming or have not yet bloomed should be sampled during their blooming period. (Hunt, Ext.)

PEANUTS

CORN EARWORMS (Heliothis zea) - NORTH CAROLINA - Damage from corn earworm larvae is very wide spread in the North Coastal Plain. Infestations of economic concern were reported from the Chowan, Northampton, and Martin County area last week. This week Halifax and Edgecombe counties report defoliation in scattered fields. (Peedin, Ext., Halifax Co; Perry, Ext., Edgecombe Co.)

BEET ARMYWORM (Spodoptera exigua) and FALL ARMYWORM (Spodoptera frugiperda) - NORTH CAROLINA - A combination of beet armyworm and fall armyworm larvae are defoliating peanuts in Halifax County. If you have defoliation by armyworms which is of economic concern in your area, I would like very much to have a brief report concerning acres involved, extent of damage, treatments applied, etc. (Hunt, Ext.)

bp/330



SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.

During Week of August 28 - September 5, 1973

County Collected	# of Specimens	Host(s)	Stage(s)	Determination
<u>Southern Field Crops</u>				
Halifax	4	Peanuts	Larvae	Corn earworm, <i>Heliothis zea</i> ; Fall armyworm, <i>Spodoptera frugiperda</i> ; beet armyworm, <i>S. exiguus</i> ; lesser cornstalk borer, <i>Elasmopalpus lignosellus</i>
Bladen	1	Peanuts	All	Undet. spider mites
Hertford	1	Cotton	Larva	Tobacco budworm, <i>Heliothis virescens</i>
<u>Man & Animals</u>				
Wake	1	Stung lady	Larva	Saddleback caterpillar, <i>Sibine stimulea</i>
Halifax	1	Stung man	Larva	Puss caterpillar, <i>Megalopyge opercularis</i>
<u>Grain, Soybeans & Forages</u>				
Pender	2	Soybeans	Larvae	Corn earworm, <i>Heliothis zea</i> ; and soybean looper, <i>Pseudoplusia includens</i>
Jones	1	Soybeans	Larvae	Silverspotted skipper, <i>Epargyreus clarus</i>
Sampson	11 (eleven)	Corn	--	Thrips, <i>Frankliniella tenuicornis</i> ; corn leaf aphid, <i>Rhopalosiphum maidis</i> ; European corn borer, <i>Ostrinia nubilalis</i> ; corn earworm, <i>Heliothis zea</i> ; fall armyworm, <i>Spodoptera frugiperda</i> ; rice weevil, <i>Sitophilus oryzae</i> ; dusky sap beetle, <i>Carpophilus lugubris</i> ; antique sap beetle, <i>Carpophilus antiquus</i> ; corn sap beetle, <i>C. dimidiatus</i> ; sap beetle, <i>C. freemani</i> ; and sap beetle, <i>C. hemipterus</i>
Duplin	2	Bermuda grass	Larvae	Black cutworm, <i>Agrotis ipsilon</i> ; and undet. skippers
Robeson	2	Soybeans	Larvae	Corn earworm, <i>Heliothis zea</i> ; and velvetbean caterpillar, <i>Anticarsia gemmatalis</i>
Pender	9	Soybeans	Larvae (7); Adults (last 2)	Corn earworm, <i>Heliothis zea</i> ; yellowstriped armyworm, <i>Spodoptera ornithogalli</i> ; granulate cutworm, <i>Feltia subterranea</i> ; green cloverworm, <i>Plathypena scabra</i> ; soybean looper, <i>Pseudoplusia includens</i> ; prob. yellow woollybear, <i>Diacrisia</i> prob. <i>virginica</i> ; undet. geometrid moth; bean leaf beetle, <i>Cerotoma trifurcata</i> ; leaf beetle, <i>Lema sexpunctata</i>
Harnett	2	Soybeans	Larvae	Nymphalid butterfly, <i>Vanessa</i> sp.; and undet. pyraustid moth
Edgecombe	1	Soybeans	Young larvae	Armyworm, <i>Spodoptera</i> sp.

Summary of Specimens Processed by Insect Clinic, N.C.S.U.

Page Two

During Week of August 28 - September 5, 1973

Forestry, Ornamentals & Turf

Cumberland	1	Willow oak & Water oak	Mostly old injury	Undet. spider mites
Yadkin	1	White pine	Eggs & nymphs	Prob. pine bark aphid, prob. <i>Pineus strobi</i>
Iredell	1	Crapemyrtle	Mostly old injury	Prob. crapemyrtle aphid, prob. <i>Tinocallis kahawaluokalani</i>
Durham	1	Juniper	Old injury	Undet. spider mites
Wake	1	Lupine in greenhouse	Larvae	Cabbage looper, <i>Trichoplusia ni</i>
Jackson	1	Walnut	Larva	Hickory horned devil, <i>Citheronia regalis</i>
Madison	1	Chestnut	Larvae	Orangestriped oakworm, <i>Anisota senatoria</i>
Caldwell	1	Aspen	Larva	Puss caterpillar, <i>Megalopyge opercularis</i>
Orange	1	Pyracantha	?All	Aphids, <i>Eriosoma</i> sp.
Avery	1	Red oak	Old injury	Undet. moths
Lincoln	1	St. Augustine grass	All	Chinch bugs, <i>Blissus</i> sp.
Buncombe	2	Azalea	?All; and old injury	Undet. whiteflies; and azalea lace bug, <i>Stephanitis pyrioides</i>
Buncombe	2	Rhododendron	All; and old injury	Greenhouse thrips, <i>Heliothrips haemorrhoidalis</i> ; and undet. clearwing moth
Scotland	1	Azalea	Larvae	Unicorn caterpillar, <i>Schizura unicornis</i>
Pitt	1	Maple	Larva & adult	Greenstriped mapleworm, <i>Anisota rubicunda</i>
Lincoln	2	Fescue 31	Larvae	Undet. grass moth; and armyworm, <i>Pseudaletia unipuncta</i>
Wake	1	Balsam fir	?All	Undet. gall aphids
Duplin	1	Red maple	Larvae	Greenstriped mapleworm, <i>Anisota rubicunda</i>
Franklin	1	Elm	Larvae	Larger elm leaf beetle, <i>Monocesta coryli</i>
Wake	1	Redbud	Larva	False unicorn caterpillar, <i>Schizura ipomoeae</i>
Columbus	1	All over yard	Shed skins	Cicadas, <i>Tibicen</i> sp.
Mecklenburg	1	Oak	Larvae	Orangestriped oakworm, <i>Anisota senatoria</i>
Watauga	1	Oak	Larvae	Arctiid moth, <i>Halisidota</i> sp.
Wake	1	Azalea	Old injury	Undet. spider mites
Wake	1	Magnolia	Adults	Undet. coccid scales
Harnett	1	Dogwood	Larvae	Prob. dogwood twig borer, <i>Oberea</i> prob. <i>tripunctata</i>
Transylvania	1	Pine	Young larvae	Prob. redheaded pine sawfly, <i>Neodiprion</i> prob. <i>lecontei</i>
Alleghany	1	White pine	Adults	Bark beetles, <i>Pityogenes</i> sp.
Wake	2	Roses	Larvae; & adults	Tobacco budworm, <i>Heliothis virescens</i> ; and thrips, <i>Taeniothrips vulgatissimus</i>
Bladen	2	Boxwood	--	Undet. spider mites & undet. coccid scales
Durham	1	Crapemyrtle	All	Crapemyrtle aphid, <i>Tinocallis kahawaluokalani</i>
Iredell	1	Crapemyrtle	All	Crapemyrtle aphid, <i>Tinocallis kahawaluokalani</i>
Jackson	1	Walnut	Larva	Hickory horned devil, <i>Citheronia regalis</i>
Wake	1	Redbud	Larva	Puss caterpillar, <i>Megalopyge opercularis</i>
Du...		M. gold		Comp...e t ps, rod...lot ps & nin

Summary of Specimens Processed by Insect Clinic, N.C.S.U.
 Page Three
 During Week of August 28 - September 5, 1973

Vegetables (Commercial & Garden)

Pasquotank	3	Squash	Larvae, larvae, adult	Squash vine borer, <i>Melittia cucurbitae</i> ; pickleworm, <i>Diaphania nitidalis</i> ; horned squash bug, <i>Anasa armigera</i>
Washington	1	Collards	Adults	Harlequin bug, <i>Murgantia histrionica</i>
Wake	1	Tomato	All	Undet. whiteflies

Wood Destroying Insects

Wake	1	Through floor into bookcase	Workers	Prob. subterranean termites, prob. <i>Reticulitermes</i> sp.
Lenoir	1	On wood near home foundation	Workers	Subterranean termites, <i>Reticulitermes</i> sp.

Household & Industrial Insects

Wake	1	In basement	Adults	Greenhouse millipede, <i>Oxidus gracilis</i>
Graham	1	In closet area	Workers & alates	Ants, <i>Crematogaster</i> sp.
Franklin	1	Stored wheat	Pupae	Indian meal moth, <i>Plodia interpunctella</i>
Jones	1	Stored Irish potatoes	Nymphs & adults	Ringlegged earwig, <i>Euborellia annulipes</i>
Warren	1	In kitchen	Adults	Sawtoothed grain beetle, <i>Oryzaephilus surinamensis</i>
Wake	1	In home	Adults	Angoumois grain moth, <i>Sitotroga cerealella</i>
Lincoln	2	Stored wheat	Adults	Hairy fungus beetle, <i>Typhaea stercorea</i> ; and foreign grain beetle, <i>Ahasverus advena</i>
Cumberland	1	Around base-boards in home	Larvae	Clothes moth, prob. <i>Praeacedes</i> sp.
Dare	1	On ceiling in home	Larvae	Indian meal moth, <i>Plodia interpunctella</i>
Alamance	1	Under rug in home	Adults	Lesser mealworm, <i>Alphitobius diaperinus</i>

Miscellaneous & Accidental Household

Wake	1	In home	Adult	Fuller rose beetle, <i>Pantomorus cervinus</i>
Montgomery	1	In home	Adults	Soldier flies, <i>Hermetia illucens</i>
Sampson	1	In home	Adults	Soldier flies, <i>Hermetia illucens</i>
Durham	1	In home	Adult	Mole cricket, <i>Grylotalpa</i> sp.

Fruit

Moore	1	At base of grapevine	Larva	Undet. sphinx moth
?Haywood	1	Blueberry	Larvae	Tussock moth, <i>Hemerocampa antiqua</i>
Wake	1	Cherry	Adults	Shothole borer, <i>Scolytus rugulosus</i>

Summary of Specimens Processed by Insect Clinic, N.C.S.U.

Page Four

During Week of August 28 - September 5, 1973

Misc.

Rowan	1	On lawn	Larva	Hickory horned devil, <i>Citheronia regalis</i>
Alamance	1	On porches	Adults	Darkwinged fungus gnats, <i>Bradysia</i> sp.
Sampson	1	Attacking	Adult	Stink bug, <i>Stiretrus anchorago</i>
Wake	1	Mexican bean	beetle	
Wake	1	In garden	Adults	Tiger beetles, <i>Megacephala carolina</i>
Chatham	1	Around	Adults	Darkwinged fungus gnats, <i>Bradysia</i> sp.
		buildings		
Wake	1	On window	Adult	Flatworm, <i>Bipalium kewense</i>
?Duplin	1	--	Larva	Puss caterpillar, <i>Megalopyge opercularis</i>
Gaston	1	On building	Adults	Darkwinged fungus gnats, <i>Bradysia</i> sp.
Durham	1	In yards	Adults	Darkwinged fungus gnats, <i>Bradysia</i> sp.
?Halifax	1	--	Adult	Undet. sphinx moth
Lincoln	1	In lawn	Adults	Scoliid wasps, <i>Scolia dubia</i>
Cleveland	1	Outside	Adult	Undet. wolf spider
		of home		
Wake	1	At light	Adult	Weevil, <i>Curculio</i> sp.



Dr. Knight
entomology

September 14, 1973

TO: County Extension Agents and Other Interested Persons

FROM: Thomas N. Hunt, Survey Entomologist *Thot*

SUBJECT: Insect Survey Report

This report is compiled by: Thomas N. Hunt, Survey Entomologist

Raleigh, North Carolina

SOYBEANS

MEXICAN BEAN BEETLE (Epilachna varivestis) - NORTH CAROLINA - Observations of 508 soybean fields in Johnston, Wayne, Lenoir, Craven, Pitt, Greene, Wilson, Edgecombe, Martin, Washington, Chowan, Hertford, Pasquotank, Northampton, and Halifax Counties revealed 20 fields with Mexican bean beetle damage. Defoliation ranged from 5% of a 1/2 acre spot to 70% of a 2 acre spot. Counts ranged from an average of 7 adults and 3 larvae per 5 ft. of row to 25 adults and 155 larvae per 5 ft. of row. Most damaged fields suffered less than 10% defoliation. Of these fields observed, the most severe infestations occurred in Wilson County (on Hwy. 264 W. of Wilson), Lenoir County (on Hwy. 70 W. of Kinston) and in Johnston County (on Hwy. 42 E. of Clayton). (Hunt, Ext.)



VELVET BEAN CATERPILLAR (Anticarsia gemmatalis) - NORTH CAROLINA - A population build-up is occurring throughout the Coastal Plain. Recent reports indicate that the Washington-Tyrrell County area and the Southern Coastal Plain area have the potential for a problem. This worm is similar to the green clover worm but has 5 pairs of prolegs and goes "wild" when touched.

VEGETABLES

CORN EARWORM (Heliothis zea) - NORTH CAROLINA - Observed heavy egg laying in 5 blooming field pea "patches", 1 in Hertford County, 2 in Johnston County and 2 in Wake County. Rough counts revealed at least 1 adult moth per plant in the Hertford County "patch". Larvae should be attacking pea pods in 2 weeks. (Hunt, Ext.)

FOREST AND SHADE TREES

GYPSY MOTH (Porthetria dispar) - NORTH CAROLINA - Three more male gypsy moths have been collected from sex lure traps in Henderson County, Hendersonville (2); Pasquotank, Elizabeth City (1). These collections bring the total 1973 N. C. catches to 36 in 28 sites, the majority of which have been collected on outer banks, Dare County. (Elder, N.C.D.A.)

ORANGESTRIPED OAKWORM (Anisota senatoria) - NORTH CAROLINA - This annually annoying pest of oak yard trees is very numerous in Wake County. Very little damage has occurred except on an occasional small tree.

bp/330



Summary of Specimens Processed By Insect Clinic, N.C.S.U.
 page two
 During Week of September 6-12, 1973

Miscellaneous & Accidental Household

Wake 1 In store Adult
 Carteret 1 In home Larvae

Mole cricket, *Gryllotalpa* sp.
 Soldier flies, *Hermetia illucens*

Household & Industrial Insects

---- 1 Wool rug ?All
 Wake 1 Throughout Adults
 home
 Wake 1 Throughout All
 home
 McDowell 1 1 room All
 McDowell 1 Throughout All
 home
 Burke 1 In home Fragment of
 worker

Casemaking clothes moth, *Tinea pellionella*
 Sawtoothed grain beetle, *Oryzaephilus surinamensis*
 Booklice, *Liposcelis* sp.
 Booklice, *Liposcelis* sp.
 Acarid mites, *Tyrophagus* sp.

Fruit

Iredell 2 Apple Larva & old injury

Oriental fruit moth, *Grapholitha molesta*; and
 apple maggot, *Rhagoletis pomonella*

Misc.

Moore 1 On rail fence Egg cocoon
 ---- Adult
 ?Cherokee 1 On car Larva
 Henderson 1 In bags of Adults
 Lenoir 1 stored tobacco seed
 Rowan 1 On pier Shed skins
 posts
 Guilford 1 In carport Adult
 Bladen 1 On cedar Adult
 Henderson 1 In lawn Adult
 Lincoln Several Prob. at Adults
 lights
 Wayne 1 Under Larva
 carport
 ?Columbus 2 ---- Larva; & adult
 Wayne 1 Under trash Workers
 along pond

Prob. orb weaver spider
 Orb weaver spider, *Micrathena* sp.
 Hag moth, *Phobetrion pithectium*
 Lathridiid beetles, *Melanophthalma* sp.
 Undet. dragonflies
 Cicada killer, *Sphecius speciosus*
 Sphinx moth, *Eumorpha* sp.
 Scoliid wasp, *Scolia dubia*
 Undet. spp.
 Hickory horned devil, *Citheronia regalis*
 Hickory horned devil, *Citheronia regalis*; and
 cicada, *Tibicen* sp.
 Ants, *Formica* sp.

SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.

During Week of September 6-12, 1973

County Collected	# of Specimens	Host(s)	Stage(s)	Determination
<u>Southern Field Crops</u>				
Edgecombe	1	Peanuts	Larva	Beet armyworm, <i>Spodoptera exigua</i>
<u>Grain, Soybeans & Forages</u>				
Bladen	4	Corn	Larvae (2); Adults (2)	Corn earworm, <i>Heliothis zea</i> ; fall armyworm, <i>Spodoptera frugiperda</i> ; sap beetles, <i>Carpophilus freemani</i> ; grain beetle, <i>Cathartus</i> sp.
Iredell	1	Corn	Larvae	Corn earworm, <i>Heliothis zea</i>
Edgecombe	1	Soybeans	Larva	Armyworm, <i>Spodoptera</i> sp.
<u>Forestry, Ornamentals & Turf</u>				
Caswell	2	Prob. redbud	Larvae	Hackberry leaf slug, <i>Norape cretata</i> ; and redbud leaf folder, <i>Fascista cercerisella</i>
Granville	1	Birch	Larvae	Yellownecked caterpillar, <i>Datana ministra</i>
Jones	1	St. Augustine grass	Larvae	Green June beetle, <i>Cotinis nitida</i>
Martin	1	Maple	Larvae	Greenstriped mapleworm, <i>Anisota rubicunda</i>
Currituck	1	Crapemyrtle	Larva	Undet. sphinx moth
Wake	1	Chickasaw plum	Adults	Lace bug, <i>Corythucha</i> prob. <i>associata</i>
Union et al.	1	Oak	Larvae	Orangestriped oakworm, <i>Anisota senatoria</i>
Wake	1	Deodar cedar	Larvae	Redheaded pine sawfly, <i>Neodiprion lecontei</i>
Forsyth	1	Maple	Larva	Puss caterpillar, <i>Megalopyge opercularis</i>
<u>Vegetables (Commercial & Garden)</u>				
Washington	1	Snap beans	Old injury	Prob. lesser cornstalk borer, prob. <i>Elasmopalpus lignosellus</i>
Martin	1	Butter bean	Nymphs	Undet. stink bugs
Sampson	2	Southern peas	Larvae	Lesser cornstalk borer, <i>Elasmopalpus lignosellus</i> ; and armyworm, <i>Spodoptera</i> sp.
Lenoir	1	Butter beans	Old injury	Limabean vine borer, <i>Monoptilota pergratialis</i>
Watauga	1	Pumpkins & squash	Larvae	Pickleworm, <i>Diaphania nitidalis</i>
<u>Wood Destroying Insects</u>				
Duplin	1	Plywood sheeting	Larva	Oldhouse borer, <i>Hylotrupes bajulus</i>

Dr. Knight

entomology



September 21, 1973

TO: County Extension Agents and Other Interested Persons

FROM: Thomas N. Hunt, Survey Entomologist *TNH*

SUBJECT: Insect Survey Report

This report is compiled by: Thomas N. Hunt, Survey Entomologist
Raleigh, North Carolina

SOYBEANS

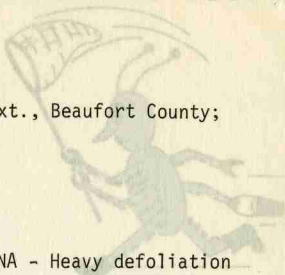
BEET ARMYWORM (Spodoptera exigua) - NORTH CAROLINA - Beet armyworm larval infestations still occurring in localized areas across Coastal Plain. Infestation defoliating soybeans, cotton, garden vegetables and 1 larva was collected from greenhouse tomatoes. (Hunt, Ext.; Sorensen, Ext.)

MEXICAN BEAN BEETLE (Epilachna varivestis) - NORTH CAROLINA - Infestations continue to build in some Coastal Plain soybean fields. Roughly 4% of the 500+ fields observed in the Northern and Central Coastal Plain had noticeable defoliation. The majority of this 4% were early beans with filled pods. Control is less important once the beans have completely filled out. (Hunt, Ext.)

VEGETABLES

LESSER CORNSTALK BORER (Elasmopalpus lignosellus) - NORTH CAROLINA - Larval infestations to 50% of the plants occurring on snap bean plantings





in Washington, Beaufort and Wayne Counties. (Grainger, Ext., Beaufort County; Godwin, Ext., Wayne County).

TURF

FALL ARMYWORM (Spodoptera frugiperda) - NORTH CAROLINA - Heavy defoliation of a Transylvania County lawn reported. Both larvae and pupae collected. Earlier infestations this year occurred in Coastal Plain on late corn and sorghum. (Purser, Ext., Transylvania County; Hunt, Ext.)

FEDERAL AND STATE PLANT PROTECTION PROGRAMS

JAPANESE BEETLE (Popillia japonica) - NORTH CAROLINA - Reports received from mountains of severe larval damage to turf in Clay County (a golf course), Avery County (golf course), and Swain County (a lawn). All the greens of the Clay County golf course have been damaged and 70 larvae/sq. ft. were counted in some areas of the Avery County course. (Johnston, APHIS; Bowers, APHIS; Garland, Ext.)

bp/330



SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.

During Week of September 13 - 19, 1973

County Collected	# of Specimens	Host(s)	Stage(s)	Determination
<u>Man & Animals</u>				
McDowell	1	Stung lady	Larvae	Puss caterpillar, <i>Megalopyge opercularis</i>
Wake	1	Stung man	Larvae	Saddleback caterpillar, <i>Sibine stimulea</i>
Wake	1	Stung man	Larvae	Saddleback caterpillar, <i>Sibine stimulea</i>
Wake	1	Stung man	Workers	Yellowjacket wasps, <i>Vespa maculifrons</i>
<u>Grain, Soybeans and Forages</u>				
Edgecombe	1	Soybeans	Larva	Noctuid moth, <i>Anomis erosa</i>
Robeson	1	Soybeans	Larva	Corn earworm, <i>Heliothis zea</i>
Edgecombe	1	Soybeans	Larva	Undet. pyraustid moth
Edgecombe	1	Soybeans	Larva	Nymphalid butterfly, <i>Vanessa</i> sp.
Wake	2	Gamagrass	Larvae	Sorghum webworm, <i>Celana sorghiella</i> ; and undet. phycitid moth
<u>Forestry, Ornamentals and Turf</u>				
Beaufort	1	Hickory	Galls	Prob. hickory tube gall, prob. <i>Caryomyia tubicola</i>
Carteret	1	Centipede grass	Adults	Undet. ground pearls
Catawba	2	Willow oak	Larvae	Yellownecked caterpillar, <i>Datana ministra</i> ; and yellowstriped armyworm, <i>Spodoptera ornithogalli</i>
Durham	1	Holly	Adults	Twolined spittlebug, <i>Prosapia</i> sp.
Halifax	1	Elm	Old injury	Elm leaf beetle, <i>Pyrrhalta luteola</i>
Pamlico	1	Prob. poplar	Larvae	Notodontid moths, <i>Ichthyura</i> sp.
Sampson	1	Cocklebur	Larvae & pupae	European corn borers, <i>Ostrinia nubilalis</i>
Swain	1	Lawn	Larvae	Japanese beetle, <i>Popillia japonica</i>
Wake	1	Azalea	Larvae	Azalea caterpillar, <i>Datana major</i>
Wake	2	Palm	All	Undet. spider mites and undet. diaspidid scales
Wake	1	Palm	Old injury	Prob. undet. false spider mites
Wake	1	Canna	Larvae	Saddleback caterpillar, <i>Sibine stimulea</i>
Wake	1	Pignut hickory	Adult	Pinhole borer, <i>Platypus compositus</i>
Wilson	2	Oak	Larvae; & galls	Oecophorid moth, <i>Peilocorsis</i> sp.; and undet. gall wasps
Jackson	1	Ornamentals	All	Undet. mealybugs
Transylvania	1	Lawn	Larvae & pupae	Fall armyworm, <i>Spodoptera frugiperda</i>
Richmond	1	Boxwood	Young larvae	Boxwood leafminer, <i>Monarthropalpus buxi</i>
McDowell	1	Elm	Larvae	Puss caterpillar, <i>Megalopyge opercularis</i>
Iredell	2	Dahlia	---	Cocklebur weevil, <i>Rhodobaenus tredecimpunctatus</i> ; and treehoppers, <i>Entylia</i> sp.
Wake	1	Mimosa	Larvae	Hackberry leaf slug, <i>Norape cretata</i>
Currituck	1	Magnolia	Adults	Undet. coccid scales
Bladen	1	Boxwood	?All	Undet. coccid scales

Summary of Specimens Processed by Insect Clinic, N.C.S.U.

Page Two

Week of September 13 - 19, 1973

Lee	1	Oak	Galls	Undet. gall wasps
Lee	1	Hickory	Galls	Prob. hickory tube gall, prob. <i>Caryomyia tubicola</i>

Vegetables (Commercial & Garden)

Wayne	1	Snap beans	Larva	Lesser cornstalk borer, <i>Elasmopalpus lignosellus</i>
Beaufort	1	Snap beans	Larva	Lesser cornstalk borer, <i>Elasmopalpus lignosellus</i>
Burke	1	Field peas	Nymphs	Leaffooted bugs, <i>Leptoglossus</i> sp.
Sampson	1	Greenhouse tomatoes	Larva	Beet armyworm, <i>Spodoptera exigua</i>

Household & Industrial Insects

Rowan	1	In bathroom	Adults	Moth flies, <i>Telmatoecopus albipunctatus</i>
Edgecombe	1	In dog food	Adults	Red flour beetle, <i>Tribolium castaneum</i>
Edgecombe	1	In kitchen cabinet	Larvae	Indian meal moth, <i>Plodia interpunctella</i>
Transylvania	1	In home	Dead adults	Prob. greenhouse millipede, prob. <i>Oxidus gracilis</i>
Wake	1	Kitchen shelves	Adults	Red flour beetle, <i>Tribolium castaneum</i>

Miscellaneous & Accidental Household

Edgecombe	1	Around kitchen door	Adults	Soldier flies, <i>Hermetia illucens</i>
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Fruit

Onslow	3	Muscadine grapes	Larvae; larvae; adult	Virginiacreeper sphinx moth, <i>Darapsa myron</i> ; grapeleaf skeletonizer; <i>Harrisina americana</i> ; Asiatic oak weevil; <i>Cyrtepistomus castaneus</i>
Caldwell	1	Persimmon	Larva	Arctiid moth, <i>Halisidota</i> sp.
Durham	2	Apple	Old injury	Undet. cicada; and woolly apple aphid, <i>Eriosoma lanigerum</i>
Union	1	Pecan	All	Acarid mites, <i>Tyrophagus</i> sp.
Wake	1	Prob. plum	Larva	Saddleback caterpillar, <i>Sibine stimulea</i>

Misc.

Gaston	1	In lawn	Larva	Hickory horned devil, <i>Citheronia regalis</i>
Yancey	2	On lawn	Larvae	Hickory horned devil, <i>Citheronia regalis</i> ; and imperial moth, <i>Eacles imperialis</i>
Orange	1	In yard	?All	Slugs, <i>Limax</i> sp.
Duplin	1	Under house	Prepupal larvae	Undet. noctuid moths
Rowan	1	On willow tree	All	Barklice, <i>Psocus venosus</i>
Randolph	1	On doorstep	Larva	Pandora sphinx moth, <i>Eumorphia pandorus</i>

Summary of Specimens Processed by Insect Clinic, N.C.S.U.

Page Three

During week of September 13 - 19, 1973

Bladen	1	In yard	Larva	Hickory horned devil, <i>Citheronia regalis</i>
Cabarrus	1	On sidewalk	Adult	Flatworm, <i>Bipalium kewense</i>
Chatham	1	In yard	Larvae	Hickory horned devil, <i>Citheronia regalis</i>
Cherokee	1	White pine	Larva	Undet. flies
Currituck	1	On plant box and chest	Pupae	Undet. saturniid moth
?Jackson	1	----	Larva	Imperial moth, <i>Eacles imperialis</i>
?McDowell	1	----	Larva	Hickory horned devil, <i>Citheronia regalis</i>
New Hanover	1	In parking lot	Adult	Velvet ant, <i>Dasydytilla occidentalis</i>
Richmond	1	On car tire	Adult	Arctiid moth, <i>Epantheria scribonia</i>
Rowan	1	Around home	Adults	Darkwinged fungus gnats, <i>Bradysia</i> sp.
Wake	1	In lawn	Adults	Undet. millipedes
Wake	1	In garage	Adult	Glowworm, <i>Phengodes</i> sp.

Dr. Knight



entomology

September 28, 1973

TO: County Extension Agents and Other Interested Persons

FROM: Thomas N. Hunt, Survey Entomologist *TNH*

SUBJECT: Insect Survey Report

This report is compiled by: Thomas N. Hunt, Survey Entomologist

Raleigh, North Carolina

CORN

RICE WEEVIL (Sitophilus oryzae) - NORTH CAROLINA - Observations and reports indicate that rice weevil adults are infesting corn in many Coastal Plain fields. Observations in Northampton Co., Wilson Co., Onslow Co., and reports from Cumberland and Johnston Counties confirm that widespread infestations are occurring. However, such infestations have occurred for several years in North Carolina. Growers should consider the degree of their infestation and the length of time they plan to store the corn before deciding to control or not. (Hunt, Ext.; Kimbrough, Ext.)

SOYBEAN

MEXICAN BEAN BEETLE (Epilachna varivestis) - NORTH CAROLINA - Only 2% of the 632 Central Coastal Plain soybean fields visited September 12-September 25 had



-2-

observable Mexican bean beetle damage. Four fields were observed in which treatment should have been considered. Defoliated spots ranged from 0.5 ac to 30 ac, but averaged 5.7 ac. Counties and number of fields visited in each were: Wilson - 55, Greene - 60, Pitt - 55, Craven - 177, Lenoir - 53, Wayne - 39, Jones - 86, Onslow - 34, Duplin - 73. (Hunt, Ext.)

FOREST AND SHADE TREES

SOUTHERN PINE BEETLE (Dendroctonus frontalis) - NORTH CAROLINA - Infestations near urban areas of central North Carolina have attracted much attention recently in the newspapers. However, the level of infestation in the Uwharrie National Forest decreased substantially (July 73) since the summer of 1972. This decrease could be only a seasonal decline and should not be interpreted as a collapse of the outbreak. (U.S. Forest Service, Div. of Forest Pest Mgt., Asheville, N. C.)

bp/330



SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.

During Week of September 22-28, 1973

County Collected	# of Specimens	Host(s)	Stage(s)	Determination
<u>Man & Animals</u>				
Cumberland	1	In stool of child	Larvae & puparia	Humpbacked flies, prob. <i>Megaselia</i> sp.
Wake	1	In bedroom	Adults	Brown dog tick, <i>Rhipicephalus sanguineus</i>
Wake	1	Baby gray squirrel	Young larva	Rodent bot fly, <i>Cuterebra</i> sp.
<u>Grain, Soybeans & Forages</u>				
Edgecombe	1	Soybeans	Larva	Prob. garden webworm, <i>Loxostege</i> prob. <i>similalis</i>
Edgecombe	1	Plume-grass	Larvae	Sorghum webworm, <i>Celama sorghiella</i>
Haywood	1	Corn	Larva	European corn borer, <i>Ostrinia nubilalis</i>
<u>Forestry, Ornamentals & Turf</u>				
Anson	1	Elm	Larva	Puss caterpillar, <i>Megalopyge opercularis</i>
Avery	1	Hemlock seedlings	Larva	White grub, <i>Polyphylla</i> sp.
Burke	2	Dying pine	Adults	Bark beetles, <i>Ips grandicollis</i> and <i>Ips avulsus</i>
Catawba	1	Chinese chestnut	Nymphs & adults	Treehoppers, <i>Platycotis vittata</i>
Catawba	1	Lawn	Larvae	Japanese beetle, <i>Popillia japonica</i>
Chowan	1	Live oak	Galls	Undet. gall wasps
Currituck	1	Oak	Larva	Carpenterworm, <i>Prionoxystus robiniae</i>
Davie	1	Mountain laurel	Larvae	Notodontid moth, <i>Heterocampa</i> sp.
Duplin	1	Canna	Larva	Spring rose beetle, <i>Strigoderma arboricola</i>
Duplin	1	Long leaf pine	Adult	Bark beetle, <i>Pityophthorus</i> sp.
Edgecombe	1	Oak	Larva	Notodontid moth, <i>Heterocampa</i> prob. <i>umbrata</i>
Hertford	1	Pine	Larva	Imperial moth, <i>Eacles imperialis</i>
Hertford	1	Azalea	Larvae	Azalea caterpillar, <i>Datana major</i>
Johnston	1	Liriope	All	Undet. diaspidid scales
Lincoln	1	Lawn	Adults	Undet. grass moths
Martin	1	Holly	Adults	Twolined spittlebug, <i>Prosapia</i> sp.
Mecklenburg	2	Poplar	Larvae	Prob. poplar tentmaker, <i>Ichthyura</i> prob. <i>inclusa</i> ; and nymphalid butterfly, <i>Limnitis</i> sp.
Pasquotank	1	Pin oak	Larvae	Epipaschiid moths, <i>Tetralopha</i> sp.
Pasquotank	2	Holly	Adults	Fuller rose beetle, <i>Pantomorus cervinus</i> ; and Japanese weevil, <i>Pseudocneorhinus bifasciatus</i>
Swain	1	Trees	Larvae	Undet. microlepidoptera
Union	1	Oak	Adult	Pinhole borer, <i>Platypus quadridentatus</i>
Wake	1	Maple	Larva	Puss caterpillar, <i>Megalopyge opercularis</i>
Wake	1	Oak	Larva	Noctuid moth, <i>Zale</i> sp.
Wake	1	Partridge pea	Larvae	Undet. seed beetles
Wilson	1	Althaea	All	Corizid bugs, <i>Niesthrea louisianica</i>

Summary of Specimens Processed by Insect Clinic, N.C.S.U.

Page Two

September 22-28, 1973

Fruit

Onslow	1	Pecan	Nymphs	Undet. spittlebugs
Rowan	1	Pecan	Old injury	Undet. spittlebugs

Vegetables (Commercial & Garden)

Moore	1	Field peas	Larvae	Lesser cornstalk borer, <i>Elasmopalpus lignosellus</i>
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Wood Destroying Insects

Columbus	1	Floor in home	Workers & alates	Carpenter ants, <i>Camponotus</i> prob. <i>ferrugineus</i>
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Household & Industrial Insects

Alamance	1	Around lights in home	Adults	Rice weevil, <i>Sitophilus oryzae</i>
Catawba	1	Throughout home	Adults	Lesser mealworm, <i>Alphitobius diaperinus</i>
Martin	1	On floor	Larvae	Casemaking clothes moth, <i>Tinea pellionella</i>
Moore	1	Rug stored in garage	Adults	Lesser mealworm, <i>Alphitobius diaperinus</i>
Wake	2	Corn recently sent from Brazil	Adults	Rice weevil, <i>Sitophilus oryzae</i> ; and cucujid beetle, <i>Cathartus</i> sp.
Wake	1	In commode water tank	Larvae	Moth flies, prob. <i>Telmatoctopus albipunctatus</i>
Wake	2	Stored corn	All	Rice weevil, <i>Sitophilus oryzae</i> ; and Angoumois grain moth, <i>Sitotroga cerealella</i>

Miscellaneous & Accidental Household

Harnett	1	On and under carpets	Larvae & puparia	Soldier flies, <i>Hermetia illucens</i>
Surry	1	In house	Adult	Cricket, <i>Camptonotus</i> sp.
Wake	1	In home	Adults	Ground beetles, prob. <i>Harpalus</i> sp.
Wayne	1	Under and entering home	Larvae	Soldier flies, <i>Hermetia illucens</i>

Misc.

Alamance	1	---	Larvae	Tobacco budworm, <i>Heliothis virescens</i>
Duplin	1	In branch of long leaf pine	Larva	Undet. clerid beetles
Guilford	1	In holes in pine siding	Larvae	Murky meal moth, <i>Aglossa caprealis</i>
Guilford	1	On Japanese holly	Nymphs	Barklice, <i>Psocus</i> prob. <i>venosus</i>
Iredell	1	On sidewalk	Larvae	Soldier beetles, <i>Chauliognathus</i> sp.
?Surry	1	---	Larva	Hag moth, <i>Phobetron pithecium</i>

Summary of Specimens Processed by Insect Clinic, N.C.S.U.

Page Three

Week of September 22-28, 1973

Wake	1	In garage	Adult	Wheel bug, <i>Arius cristatus</i>
Wake	1	Supposedly in quart of milk	Larva	Oriental fruit moth, <i>Grapholitha molesta</i>
Wake	1	On ground	Larva	Hickory horned devil, <i>Citheronia regalis</i>

Dr. Knight



entomology

October 5, 1973

TO: County Extension Agents and Other Interested Persons
 FROM: Thomas N. Hunt, Survey Entomologist *TNH*
 SUBJECT: Insect Survey Report

This report is compiled by: Thomas N. Hunt, Survey Entomologist
 Raleigh, North Carolina

CORN

RICE WEEVIL (Sitophilus oryzae) - NORTH CAROLINA - Reports continue this week from the Coastal Plain concerning heavy adult infestations in unharvested corn and around outdoor lights. This situation could contribute significantly to storage loss in some areas if untreated corn is held until warm weather next spring. The problem is not general at this time but warrants a field survey prior to harvesting. (Hunt, Ext.)

SOYBEANS

A CERAMBYCIDAE (Decetes texanus) - NORTH CAROLINA - Observations in Hyde County indicate that larval girdling is occurring on very early soybeans. Girdling will become evident in infested fields when stems become dry. Infestations will begin



showing up in Washington, Beaufort, Hyde, and Tyrrell County area in early maturing varieties such as Dare, York, and Bragg within next 2 weeks. (Richardson, Dept. of Ent.)

BENEFICIAL INSECTS

MONARCH BUTTERFLY (Danaus plexippus) - NORTH CAROLINA - Seasonal migration has been spectacular in North Carolina mountains near Asheville this year. Newspaper reports and APHIS inspectors report sighting groups of several hundred flying south 20 - 30 feet high. (Bowers, APHIS; Terrell, Asheville Citizen).

FEDERAL AND STATE PLANT PROTECTION PROGRAMS

GYPSY MOTH (Porthetria dispar) - NORTH CAROLINA - A sex lure trap near Winston-Salem, Forsyth County, was found to contain 4 male gypsy moths. This collection brings the total 1973 North Carolina catches to 37 in 27 sites. Catches this year were made from Jackson County in west to Dare County in east. Keep your eyes and ears open next year because we must detect a larval infestation when small if we have any chance to contain it. (Alford, NCDA; Hunt, Ext.)

bp/330



SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.

During Week of September 27 - October 3, 1973

County Collected	# of Specimens	Host(s)	Stage(s)	Determination
<u>Forestry, Ornamentals & Turf</u>				
Alamance	1	Marigold, in pith	Larvae	Tumbling flower beetle, prob. <i>Mordellistena</i> sp.
Beaufort	1	Azalea & "first breath of spring"	Adults	Fuller rose beetle, <i>Pantomorus cervinus</i>
Beaufort	1	Rose buds	Young larva	Tobacco budworm, <i>Heliothis virescens</i>
Buncombe	1	Lawn	Adults	Undet. grass moths
Cabarrus	1	Post oak	Adults in galls	Gall wasps, <i>Disholcaspis</i> prob. <i>spongiosa</i>
Caldwell	1	Chinese chestnut	Adults	Treehopper, <i>Platycotis vittata</i>
Carteret	1	Oak	Larva	Puss caterpillar, <i>Megalopyge opercularis</i>
Edgecombe	1	Juniper	Old injury	Undet. spider mites
Guilford	1	Walnuts	Larvae	Prob. walnut husk fly, <i>Rhagoletis</i> prob. <i>completa</i>
Henderson	1	?Rhododendron	Larva	June beetle, <i>Polyphylla</i> sp.
Iredell	1	"Laurel tree"	Larva	Notodontid moth, <i>Heterocampa</i> prob. <i>umbrata</i>
Orange	1	Boxwood	Old injury	Undet. spider mites
Rowan	1	Daffodil bulbs	Larva	Narcissus bulb fly, <i>Merodon equestris</i>
Rowan	2	Juniper	?All; and adults	Undet. spider mites; and undet diaspidid scales
Wake	1	Holly, camellia, & podocarpus	Nymphs & adults	Wax scales, <i>Ceroplastes</i> sp.
Wake	1	Euonymus	?All	Undet. diaspidid scales
<u>Vegetables (Commercial & Garden)</u>				
Iredell	1	Vegetables	Larvae	Fall armyworm, <i>Spodoptera frugiperda</i>
Virginia state	1	Eggplant, Irish potato, & pepper	Larvae	European corn borer, <i>Ostrinia nubilalis</i>
<u>Wood Destroying Insects</u>				
Duplin	2	Lightning-struck loblolly pine	Adults	Pinhole borer, <i>Platypus flavicornis</i> ; and bark beetle, <i>Pityophthorus</i> sp.
Nash	3	Dying pine	Adults; adult; larva	Pinhole borer, <i>Platypus flavicornis</i> ; bark beetle, <i>Hylastes</i> sp.; pine sawyer, <i>Monochamus</i> sp.
<u>Fruit</u>				
Forsyth	1	Pecan	Larva	Hag moth, <i>Phobetron pithecium</i>
McDowell	1	Apples on tree	Adults	Earwig, <i>Doru aculeatum</i>

Summary of Specimens Processed by Insect Clinic, N.C.S.U.

Page Two

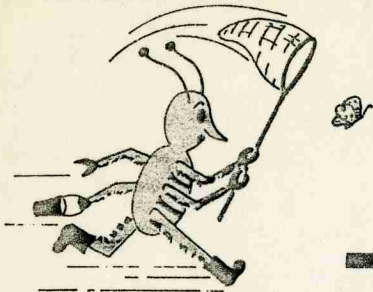
Week of September 27 - October 3, 1973

Household & Industrial Insects

Duplin	1	Mounds in yard, stung people	Workers	A fire ant, <i>Solenopsis</i> sp.
Johnston	1	Stung man	Larva	Puss caterpillar, <i>Megalopyge opercularis</i>
Alamance	1	In home	Larvae	Indian meal moth, <i>Plodia interpunctella</i>
Buncombe	1	In pantry	Adults	Almond moth, <i>Cadra cautella</i>
Cherokee	1	Around sofa	Adults	Cigarette beetle, <i>Lasioderma serricorne</i>
Cleveland	1	In box of cereal	Larva	Cabinet beetle, <i>Trogoderma</i> sp.
Durham	1	On walls and ceiling	Larvae	Casemaking clothes moth, <i>Tinea pellionella</i>
Rowan	1	Kitchen cabinets	Adults	Cigarette beetle, <i>Lasioderma serricorne</i>
?Tyrrell	1	Brandied fruit	Larvae	Undet. soldier flies
Wake	1	In home	Adult	Smokybrown cockroach, <i>Periplaneta fuliginosa</i>
Wake	1	Potato flour	All	Spider beetles, <i>Gibbium psyllodes</i>
Wake	5	In home	Adults	Drugstore beetle, <i>Stegobium paniceum</i> ; cigarette beetle, <i>Lasioderma serricorne</i> ; red flour beetle, <i>Tribolium castaneum</i> ; merchant grain beetle, <i>Oryzaephilus mercator</i> ; sawtoothed grain beetle, <i>Oryzaephilus surinamensis</i>
<u>Miscellaneous & Accidental Household</u>				
Madison	2	In new home	Adults	Ground beetle, <i>Harpalus caliginosus</i> and <i>Harpalus</i> sp.
Richmond	1	On bedspread	?Nymph	Centipede, <i>Scolopendra</i> sp.
Robeson	1	In building	Adults	Ground beetle, prob. <i>Harpalus</i> sp.
Wake	1	In living room	Larva	Soldier beetle, <i>Chauliognathus</i> sp.
Wake	3	In home	Adults	Ground beetle, <i>Harpalus caliginosus</i> ; hairy fungus beetle, <i>Typhaea stercorea</i> ; and undet. rove beetle
<u>Misc.</u>				
Harnett	1	By doorstep	Adult	Wheel bug, <i>Ariulus cristatus</i>
?Haywood	1	On maple	Adult	Ichneumonid wasp, <i>Megarhyssa</i> sp.
Nash	1	In garage	Larva	Banded woollybear, <i>Isia isabella</i>
Nash	4	In dying pine	Adults; adults; adults; larva	Weevil, <i>Cossonus corticola</i> ; darkling beetle, <i>Corticus</i> sp.; undet. histerid beetle; undet. ostomid beetle
New Hanover	1	On person	Larva	Undet. green lacewing
Rowan	1	In lawn	Adult	Undet. noctuid moth

DATE: SEP 27 - OCT 3 1973

SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.



entomology

October 12, 1973

TO: County Extension Agents and Other Interested Persons

FROM: Thomas N. Hunt, Survey Entomologist *TNH*

SUBJECT: Insect Survey Report

This report is compiled by: Thomas N. Hunt, Survey Entomologist

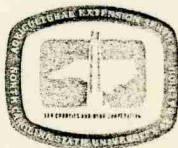
Raleigh, North Carolina

SOYBEANS

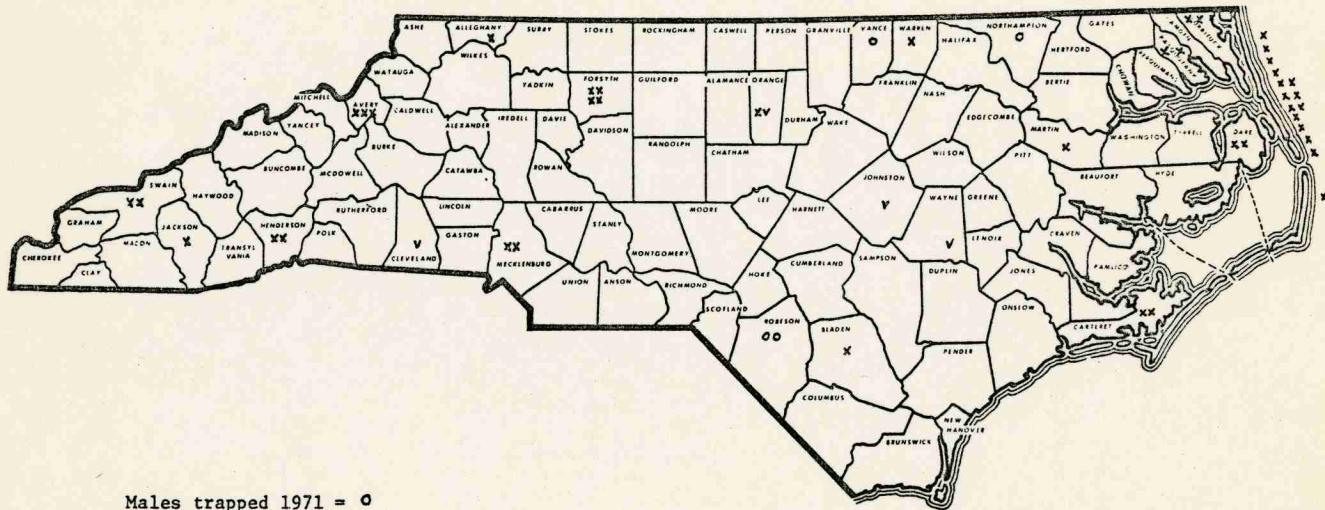
VELVETBEAN CATERPILLAR (Anticarsia germatalis) - NORTH CAROLINA - Larval defoliation in mature soybeans very common in Coastal Plain. Twenty five of 75 fields surveyed in Duplin, Wayne, Sampson and Johnston Counties had an average population of 31 larvae per 5 ft sample and all fields had larvae present. No loss will result from defoliations except very late soybeans. (Vaughn, Ext.: Hunt, Ext. Van Duyn, Ext.)

FEDERAL AND STATE PLANT PROTECTION PROGRAMS

GYPSY MOTH (Porthetria dispar) - NORTH CAROLINA - The moth trapping season is over in N. C. This season's catch totaled 40 moths with a concentration in Dare, Currituck, Camden, Pasquotank Co. area. Roughly half of the 1973 catch came from these northeastern counties (see enclosed map). (N.C.D.A., Div. of Ent.)



Total adult gypsy moth (Porthetria dispar) males collect in N. C.



Males trapped 1971 = ○

Males trapped 1972 = ✓

Males trapped 1973 = ✕

SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.

During Week of October 4 - October 10, 1973

County Collected	# of Specimens	Host(s)	Stage(s)	Determination
<u>Man and Animals</u>				
Duplin	1	Bit child	Adult	Wheel bug, <i>Arius cristatus</i>
?Johnston	1	Bit person	Adult	Crab spider, <i>Xysticus</i> sp.
<u>Southern Field Crops</u>				
Pender	1	Stored tobacco	Larvae	Dark mealworm, <i>Tenebrio obscurus</i>
<u>Grain, Soybeans and Forages</u>				
Duplin	1	Soybeans	Larvae	Velvetbean caterpillar, <i>Anticarsia gemmatilis</i>
Pasquotank	2	Soybeans	Larvae; old injury	Velvetbean caterpillar, <i>Anticarsia gemmatilis</i> ; and prob. threecornered alfalfa hopper, prob. <i>Spissistilus festinus</i>
Wayne	1	Soybeans	Larvae	Velvetbean caterpillar, <i>Anticarsia gemmatilis</i>
<u>Forestry, Ornamentals and Turf</u>				
Durham	1	Pine	Adults	Pinhole borers, <i>Platypus flavicornis</i>
Onslow	1	Tuliptree	Dead adults, crawlers	Prob. tuliptree scale, prob. <i>Toumeyella liriodendri</i>
Rockingham	1	Oak	Larva	Noctuid moth, prob. <i>Acrionicta</i> sp.
Wake	1	Althaea	All	Corizid bugs, <i>Wiesthrea louisianica</i>
Wake	?1	Aucuba, palm, pittosporum	All	Undet. mealybug(s)
Wake	?1	Areca palm, dieffenbachia	All	Undet. coccid scale(s)
Wake	1	Areca palm	Adults	Undet. diaspidid scale
<u>Vegetables (Commercial and Garden)</u>				
Sampson	1	Squash	Larva	Melonworm, <i>Diaphania hyalinata</i>
<u>Household and Industrial Insects</u>				
Cherokee	1	In home	Adults	Angoumois grain moth, <i>Sitotroga cerealella</i>
Duplin	1	Around kitchen sink	Adults	Cowpea weevil, <i>Callosobruchus maculatus</i>
Hertford	1	In home	Puparia	Undet. prob. flesh flies
Hoke	2	In cabinets	Adults	Cigarette beetle, <i>Lasioderma serricorne</i> ; and merchant grain beetle, <i>Oryzaephilus mercator</i>

Summary of Specimens Processed by Insect Clinic, N.C.S.U.

Page Two

Week of October 4 - October 10, 1973

Household and Industrial Insects continued

Iredell	1	In kitchen	All	Merchant grain beetle, <i>Oryzaephilus mercator</i>
Wayne	1	In home	Adults	Undet. pseudocaeciliid barklice

Miscellaneous and Accidental Household

Durham	1	On carpet	Larva	Notodontid moth, prob. <i>Misogada unicolor</i>
Stokes	1	In home	Larvae	Soldier beetle, <i>Chauliognathus</i> sp.

Fruit

Warren	1	Peach	All	Undet. diaspidid scale
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Miscellaneous

Burke	1	In lawn	Larva	Soldier beetle, <i>Chauliognathus</i> sp.
Columbus	1	Around yard	Larvae	Noctuid moth, <i>Noropsis hieroglyphica</i>
Durham	1	In dead pine	Larva	Undet. ostomid beetle
Franklin	1	--	Adults	Lasiocampid moth, <i>Artace</i> sp.
Pasquotank	1	On soybean leaves	Larva in cocoon	Notodontid moth <i>Ichthyura</i> sp.
Robeson	1	In yard	Workers, alates	Ant, <i>Lasius neoniger</i>
Surry	1	In yard	Larvae	Soldier beetle, <i>Chauliognathus</i> sp.
Wake	1	On porch steps	Larva	Undet. limacodid moth



entomology

October 19, 1973

TO: County Extension Agents and Other Interested Persons

FROM: Thomas N. Hunt, Survey Entomologist *TNH*

SUBJECT: Insect Survey Report

This report is compiled by: Thomas N. Hunt, Survey Entomologist
Raleigh, North Carolina

SOYBEANS

VELVETBEAN CATERPILLAR (Anticarsia gemmatalis) - NORTH CAROLINA - Severe defoliation concerning growers in some areas. Populations of 50+ per 5 ft. sample are occurring in many fields over entire Coastal Plain. Natural foliage drop is occurring in most fields, therefore, little yield reduction is expected. (Hunt, Ext.)

FOREST AND SHADE TREES

SOUTHERN PINE BEETLE (Dendroctonus frontalis) - NORTH CAROLINA - The cumulative figures for July 1, 1973 through August 31, 1973 indicate that 4.8 million bd. ft. of timber and 9,150 cds. of pulpwood have been salvaged from state and privately owned lands due to beetle attack in North Carolina.



In addition, 442 thousand bd. ft. and 296 cds. of wood have been salvaged from federal lands. The majority of this activity continues in the Piedmont and Mountain areas of the state. (S. E. Forest Pest Status Report, U.S.F.S.)

FEDERAL AND STATE PLANT PROTECTION PROGRAMS

GYPSY MOTH (*Porthetria dispar*) - NORTH CAROLINA - Corrections -

Some errors were made during data transfer in the survey office on the distribution map contained in Insect Survey Note October 12, 1973.

Dare Co. - Add one 1971 collection.

Add one 1972 collection.

Currituck Co. - Subtract one 1973 collection.

Carteret Co. - Change one 1973 collection to a 1972 collection.

Davie Co. - Add one 1972 collection.

McDowell Co. - Add one 1971 collection.

I suggest you make these changes on your distribution map.

bp/330



SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.

During Week of October 11-17, 1973

County Collected	# of Specimens	Host(s)	Stage(s)	Determination
<u>Southern Field Crops</u>				
Pender	2	Stored cured tobacco	Larvae; adults	Tobacco moth, <i>Ephestia elutella</i> ; and foreign grain beetle, <i>Ahasverus advena</i>
<u>Grain, Soybeans & Forages</u>				
Duplin	2	Soybeans	Larvae	Velvetbean caterpillar, <i>Anticarsia gemmatalis</i> ; and green cloverworm, <i>Plathypena scabra</i>
Greene	1	Abruzzi rye	Larvae	Fall armyworm, <i>Spodoptera frugiperda</i>
Iredell	1	Soybeans	Larvae	Velvetbean caterpillar, <i>Anticarsia gemmatalis</i>
Yadkin	2	Soybeans	Larvae	Velvetbean caterpillar, <i>Anticarsia gemmatalis</i> ; and undet. geometrid moth
<u>Forestry, Ornamentals & Turf</u>				
Burke	1	Silver maple	?All	Undet. aphids
Catawba	1	Maple	Newborn larvae	Undet. poss. noctuid moth
Chatham	1	Boxwood	Young larvae	Boxwood leafminer, <i>Monarthropalpus buxi</i>
Gaston	1	?Asparagus-fern	?All	Undet. coccid scales
Granville	1	Weeping willow	All	Aphids, <i>Pterocomma</i> sp.
Moore	1	Weeds	Larva	Sphinx moth, <i>Xylophanes tersa</i>
Wake	1	Powderpuff tree	Larvae	Mimosa webworm, <i>Homadaula anisocentra</i>
<u>Vegetables (Commercial & Garden)</u>				
Columbus	2	Cabbage	Larvae	Corn earworm, <i>Heliothis zea</i> ; and cabbage looper, <i>Trichoplusia ni</i>
<u>Wood Destroying Insects</u>				
Currituck	1	Tree, at site of injury	Workers	Carpenter ant, <i>Camponotus nearcticus</i>
Forsyth	1	--	Injury	Oldhouse borer, <i>Hylotrupes bajulus</i>
Pitt	1	Dying white pine	Adults	Pinhole borer, <i>Platypus flavicornis</i>
Rowan	1	Floor and rug backing	Workers & soldiers	Prob. Eastern subterranean termite, <i>Reticulitermes</i> prob. <i>flavipes</i>
Wilkes	1	--	Larvae	Oldhouse borer, <i>Hylotrupes bajulus</i>
<u>Household & Industrial Insects</u>				
Durham	1	Barley cereal	?All	Booklice, <i>Liposcelis</i> sp.
Iredell	1	Under baseboard in home	Larvae	Murky meal caterpillar, <i>Aglossa caprealis</i>

Summary of Specimens Processed by Insect Clinic, N.C.S.U.

Page Two

Week of October 11-17, 1973

Miscellaneous & Accidental Household

Scotland 1 In utility room Adult
Swain 1 In home Adult

Misc.

Craven 1 -- Adults
Edgecombe 1 Supposedly on Larva
field peas
Jackson 1 On turnip greens Immature
Nash or 1 In yard Adult
Edgecombe

Flatworm, *Bipalium kewense*
Cricket, *Camptonotus* sp.

Pinhole borer, *Platypus flavicornis*
Sphinx moth, *Xylophanes tersa*
Undet. mermithid nematode
Greenhouse stone cricket, *Tachycineta asynamoros*

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Dr. Knight

entomology

October 26, 1973

TO: County Extension Agents and Other Interested Persons

FROM: Thomas N. Hunt, Survey Entomologist *TNH*

SUBJECT: Insect Survey Report

This report is compiled by: Thomas N. Hunt, Survey Entomologist
Raleigh, North Carolina

FEDERAL AND STATE PLANT PROTECTION PROGRAM

IMPORTED FIRE ANT (Solenopsis invicta) - NORTH CAROLINA - All stages of development of the red imported fire ant were collected south of Pink Hill in Duplin County. A short survey of the area indicated that 25+ large mounds exist within 1/4 mile of the collection site. This is the first established infestation known to occur in the county.

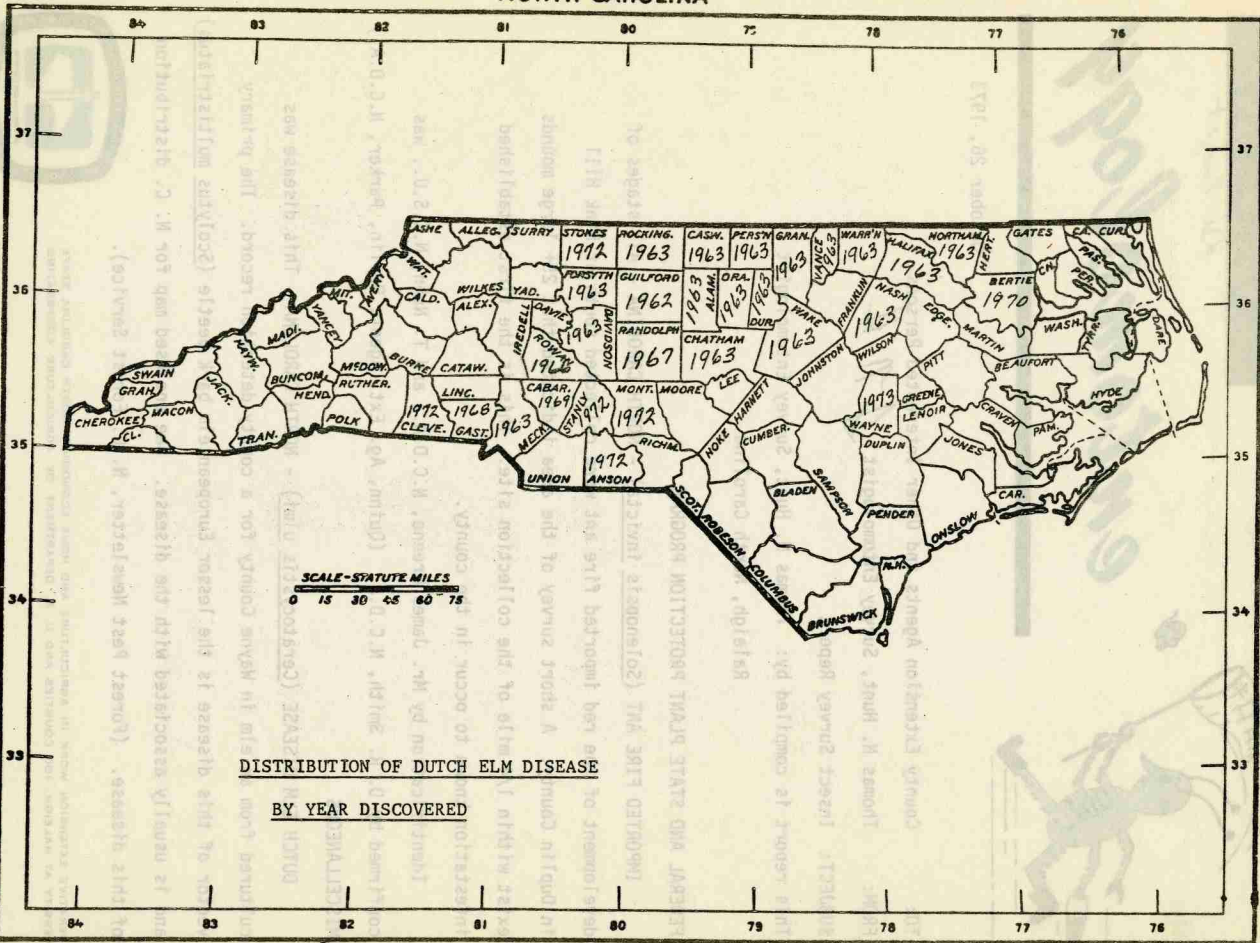
Identification by Mr. James Greene, N.C.D.A., and T. Nuhn, N.C.S.U., was confirmed by D. R. Smith, N.C.D.A. (Quinn, Ag. Ext. Agent; Duplin, Parker, N.C.D.A.)

MISCELLANEOUS

DUTCH ELM DISEASE (Ceratocystis ulmi) - NORTH CAROLINA - This disease was cultured from an elm in Wayne County for a county detection record. The primary vector of this disease is the lessor European elm bark beetle (Scolytus multistriatus) and is usually associated with the disease. See enclosed map for N. C. distribution of this disease. (Forest Pest Newsletter, N. C. Forest Service).



NORTH CAROLINA



SCALE - STATUTE MILES
0 15 30 45 60 75

DISTRIBUTION OF DUTCH ELM DISEASE

BY YEAR DISCOVERED

SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.

During Week of October 18-24, 1973

County Collected	# of Specimens	Host(s)	Stage(s)	Determination
<u>Grain, Soybeans & Forages</u>				
Lincoln	1	Soybeans	Larvae	Velvetbean caterpillar, <i>Anticarsia gemmatalis</i>
<u>Forestry, Ornamentals & Turf</u>				
Bladen	2	Pine, in roots	Adults	Bark beetles, <i>Hylastes</i> sp. and <i>Xyleborus</i> sp.
Currituck	1	Shrub	Adults	Undet. diaspidid scales
Durham	1	Japanese holly	All	Undet. false spider mites
Lincoln	1	Dogwood	Larva	Prob. dogwood twig borer, <i>Oberea</i> prob. <i>tripunctata</i>
McDowell	1	White pine	?All	Prob. white pine aphid, <i>Cinara</i> prob. <i>strobi</i>
Pitt	1	Japanese holly	All	Undet. false spider mites
Wake	1	Loblolly pine	Old injury	Pamphiliid sawfly, prob. <i>Cephalacia</i> sp.
Wake	1	Willow	?All	Aphid, <i>Pterocomma</i> sp.
<u>Fruit</u>				
Alamance	1	Pecan	Adult	Twig girdler, <i>Oncideres cingulata</i>
Iredell	1	Pecan	Larvae	Prob. pecan weevil, <i>Curculio</i> prob. <i>caryae</i>
Wake	1	Avocado	Larvae	Undet. whitefly
<u>Vegetables (Commercial & Garden)</u>				
Camden	1	Cabbage	Larvae	Corn earworm, <i>Heliothis zea</i>
<u>Household & Industrial Insects</u>				
Guilford	1	In home	Larva	Indian meal moth, <i>Plodia interpunctella</i>
Rowan	1	Clothing & walls	Larva	Casemaking clothes moth, <i>Tinea pellionella</i>
Wake	1	In home	Nymphs	Brown dog tick, <i>Rhipicephalus sanguineus</i>
Connecticut state	1	In home	Adults	Cigarette beetle, <i>Lasioderma serricorne</i>
<u>Miscellaneous & Accidental Household</u>				
Bertie	1	On rug in home	Larvae	Weevil, <i>Curculio</i> sp.
Henderson	1	In bathroom	Adults	Anobiid beetle, <i>Coelostethus notatus</i>
McDowell	1	In home	Immature	Black rat snake, <i>Elaphe o. obsoleta</i>
Robeson	1	In radio station	Adult	Katydid, <i>Belocephalus</i> sp.

Summary of Specimens Processed by Insect Clinic, N.C.S.U.

Page Two

Week of October 18-24, 1973

Misc.				
Buncombe	1	In yard	Adult	Cricket, <i>Phyllopalpus</i> sp.
Columbus	1	In yard	Adult	Sweetpotato hornworm, <i>Agrius cingulatus</i>
Forsyth	1	In graveyard	Adult	Trapdoor spider, <i>Ummidia</i> sp.
Franklin	1	Supposedly on a chinese holly	Prepupal larva	Imperial moth, <i>Eacles imperialis</i>
Lee	1	Behind window shutter	Old cocoon mass	Mimosa webworm, <i>Homadaula anisocentra</i>
Nash	2	Rotten sweet potatoes	Larvae	Soldier flies, <i>Hermetia illucens</i> and undet. sp.
Pitt	1	On sidewalk	Adult	Lasiocampid moth, <i>Tolyte</i> sp.
Robeson	1	In pet watering dish	Adult	Undet. horsehair worm
Rockingham	1	In yard	Adults	Cigarette beetle, <i>Lasioderma serricorne</i>
Wake	1	In old cavities in rotted house siding	Mostly old nests	Undet. Psenine sphecid wasps
Wake	1	Along roadside	Adults	Cricket, <i>Gryllus</i> sp.
Wake	1	Flew into truck	Adult	Prob. Melonworm, prob. <i>Diaphania hyalinata</i>
Washington	2	Around base of oak	Workers	Giant hornet, <i>Vespa crabro germana</i> ; and baldfaced hornet, <i>Dolichovespula maculata</i>
Wilson	1	---	Immature	Eastern fence lizard, <i>Sceloporus undulatus hyacinthus</i>



entomology

Grape Root Borer Distribution Survey, 1973

by
T. N. Hunt, Survey Entomologist, N.C.S.U.

August 12 - October 1, 1973



Grape Root Borer Distribution Survey, 1973

Introduction

Larvae of the grape root borer, *Vitacea polistiformis*, are severely damaging and limiting the yield of muscadine and bunch grapes in some North Carolina vineyards. The potential damage from this pest is great because of the difficulty of control. The grape root borer is known to occur throughout the eastern United States, and has attracted the attention of North Carolina bunch grape growers in the Rutherford-Cleveland County area for several years. More recently, muscadine grape growers in Bladen and Onslow Counties have experienced heavy damage and death of vines in localized spots. This survey was conducted to establish the geographic distribution of this pest in the major muscadine grape area of the state (Figure 1). This report also contains seasonal abundance data collected by Dr. K. A. Sorensen, Extension Entomologist, N.C.S.U.

Method

The Agricultural Extension Service and the North Carolina Department of Agriculture, Division of Entomology, cooperated to survey every county in the coastal plain which contained 20 or more acres of commercial muscadine grapes and was not known to be infested with grape root borers. County agents supplied names and detailed directions to the vineyards. Upon receiving these directions, a N.C.D.A. Inspector or the Extension Survey Entomologist surveyed each commercial vineyard in that county until a positive collection (pupal skin, adult) was made or all commercial vineyards in that county had been examined. The ground around dead and severely weakened vines was examined very closely for pupal skins. In the event few severely weakened vines occurred 25 widely scattered vines were examined per vineyard.

Survey records and any collections were sent to the Extension Survey Entomologist for positive identification and inclusion in the Insect Clinic collection. Any questionable specimens were referred to Dr. H. H. Neunzig, Department of Entomology, N.C.S.U. Otherwise determinations were made by Tom Hunt, Extension Survey Entomologist.

Seasonal distribution was determined by Dr. Sorensen at Richland, Onslow County and Shelby, Cleveland County. The ground around 181 vines at Richland and 273 vines at Shelby were examined weekly for pupal skins. All pupal skins observed were collected during each examination.

Results

This survey revealed that widespread infestations do occur in the Coastal Plain and the lower Piedmont areas. Seven new county records were established, with collections from Anson, Richmond, Moore, Robeson, Lenoir, Jones and Pender. This brings the total number of known infested counties to 16 (Figure 2).

The survey further indicated that infestations are most prevalent in vineyards 5 or more years old. Many counties have only very young vineyards and this fact had a very definite effect on the results of this survey. There is a strong possibility that more infestations would have been revealed had all counties had older vineyards.

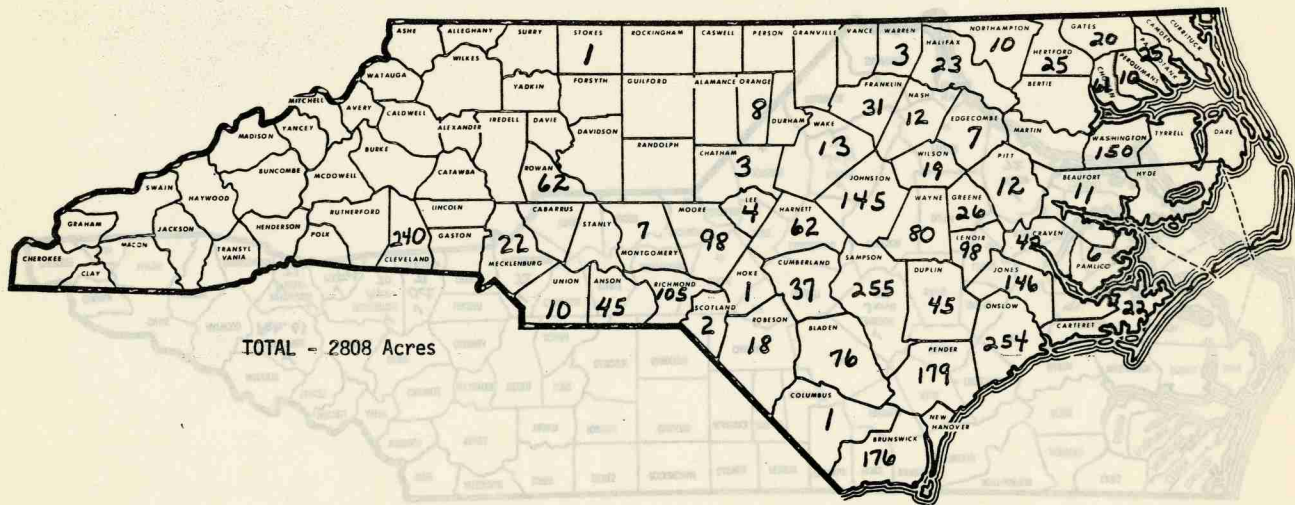
Peak emergence corresponded very closely at both Richland and Shelby with activity occurring primarily during mid-August (Figures 3 and 4).

A by product of the survey was a list of the major growers and locations from the counties surveyed.

Figure 1

MUSCADINE GRAPE ACREAGE - 1973

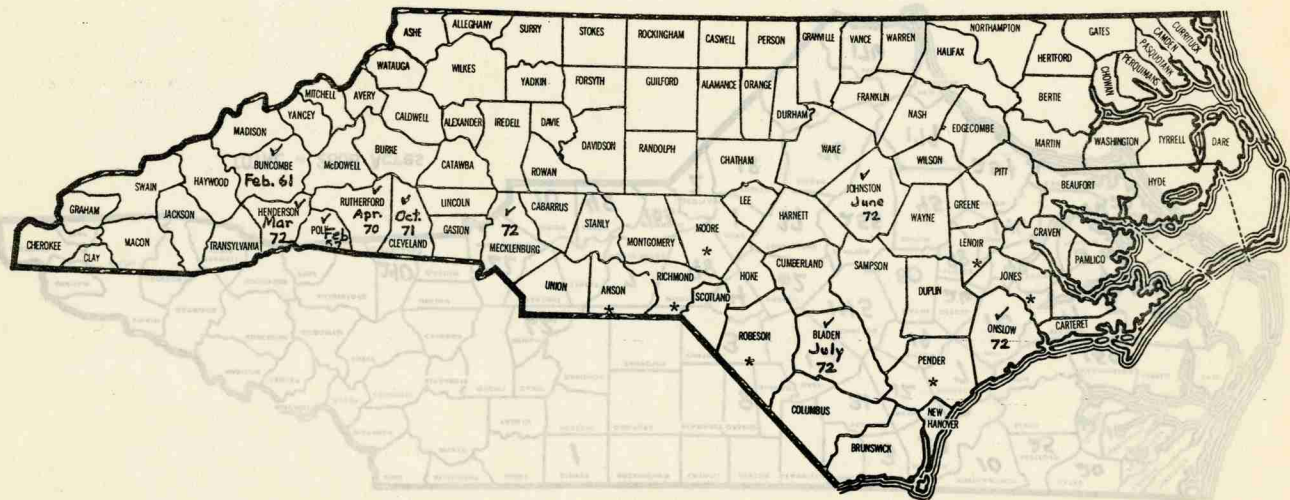
(N. C. Grape Growers Survey)



GRAPE WOOL BROWN DISINTEGRATION 2004/11 1933

Figure 2

GRAPE ROOT BORER DISTRIBUTION SURVEY, 1973



* Counties in which pupal skins or adults were collected in this survey.

✓ Counties in which pupal skins, adults or larvae were collected and date of collection.

Patterns of larval root borer in experimental vineyard - 1973
 Richlands, N. C. (1973)

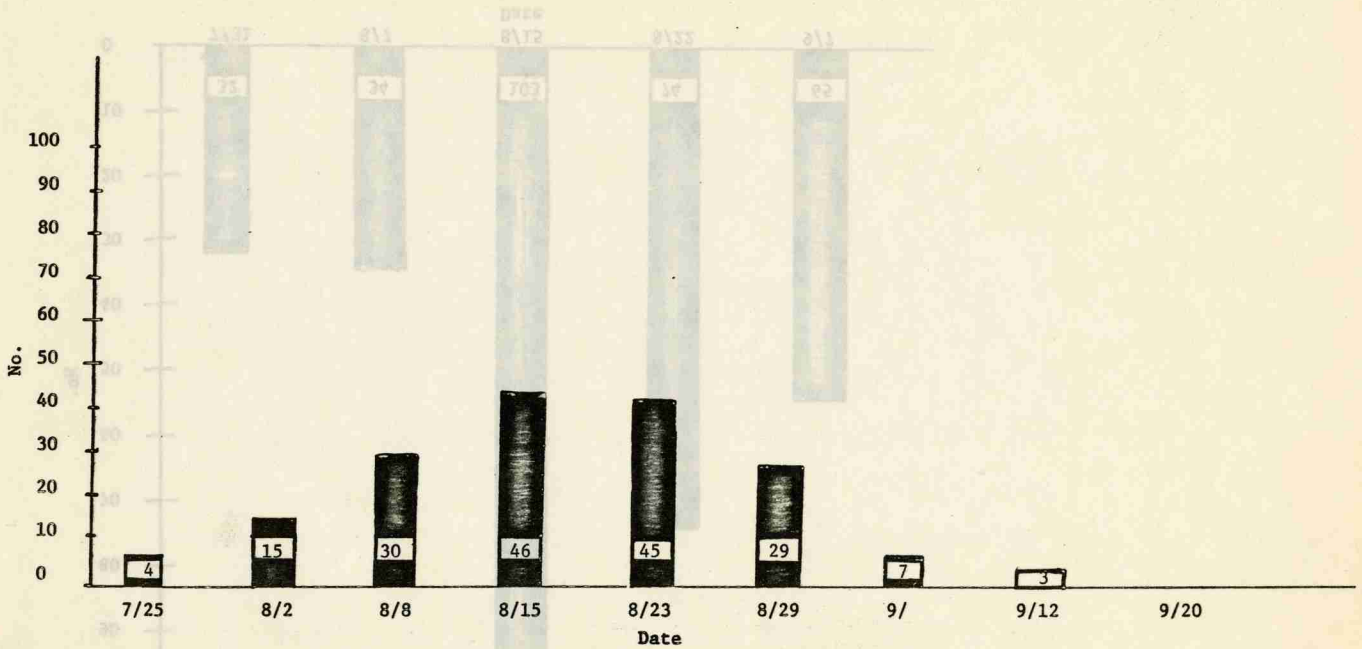


Figure 3. Seasonal occurrence of grape root borer based on recorded number of observed pupal skins. Richlands, N. C. 1973.

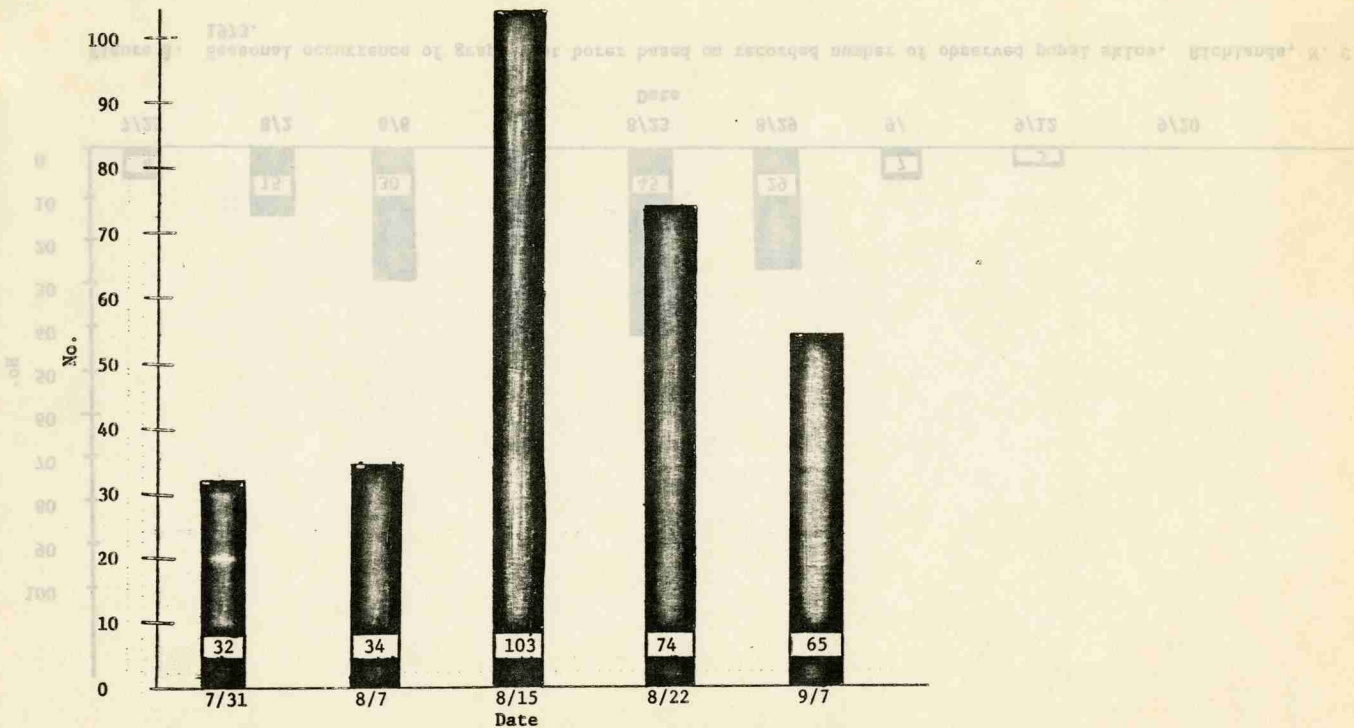
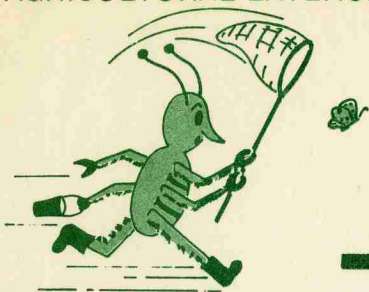


Figure 4 - Seasonal occurrences of grape root borer based on recorded number of pupal skins. Shelby, N.C. 1973.

AGRICULTURAL EXTENSION SERVICE

INSECT SURVEY NOTES



entomology

FACE FLY DISTRIBUTION IN NORTH CAROLINA, 1973

by

T. N. Hunt, Survey Entomologist, N.C.S.U.

T.N.H.

July 18 - October 6, 1973

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS, NORTH CAROLINA STATE UNIVERSITY AT RALEIGH. 100 COUNTIES AND U. S. DEPARTMENT OF AGRICULTURE COOPERATING



Face Fly Distribution in North Carolina, 1973

The face fly (*Musca autumnalis* DeGeer) became established in the north-western counties of North Carolina during the late 1950's and early 1960's. The distribution spread from there to all the Mountain and western Piedmont counties by 1962. A survey conducted by Dr. R. C. Axtell and Mr. D. A. Mount, Department of Entomology, N.C.S.U. in 1962 located infestations as far east as Iredell and Rowan Counties. By 1970 a band of infested counties extended east along the Virginia line to Person County.¹ The documented distribution remained as described above until 1972, when Dr. John Falter, N.C.S.U., collected face flies from cattle near Pittsboro, Chatham County. This development prompted the following survey which was undertaken to revise the distribution of this pest in North Carolina and to arrive at an estimate of population density across the state.

Method

Herd examination began in Chatham County and continued in a wide north-south band until no flies meeting both habitual and physical characteristics of the face fly could be observed in North Carolina. Sampling continued eastward and westward until inconclusive results were repeatedly obtained.

Herds were selected along state and federal highways on the basis of accessibility, and only cattle 100+ yards from barns or other similar concentration areas were sampled. Forty-nine herds were visited from Sampson County to Graham County. Sweep collections were taken from fresh manure when flies were observed on the cattle in counties previously thought to be uninfested. Suspicious flies were counted on the faces of 20 or less cattle, depending on the size of the herd.

¹Cooperative Economic Insect Report. 1970. United States Department of Agriculture, APHIS, 20(45): 768.

Identifications were made by D. L. Stephan, Insect Clinic, N.C.S.U.

This survey was initiated 18 July 1973 and periodic sampling in conjunction with other activities continued until 6 September 1973.

Results

Flies meeting the field characteristics of face flies were present in 27 of 30 herds visited in and west of Person, Durham, Chatham, Lee, Moore and Montgomery Counties. Sweep collections were positive in 8 counties which had no previous record of this pest (Figure 1). Nine herds were observed in Granville, Wake, Johnston, Scotland and Sampson Counties with animals having 1-10 suspicious flies on their faces. However, sweep collections were negative. The author suspects that light infestations occur as far east as Warren, Franklin, Wilson, Wayne, Sampson and Bladen Counties, depending on the cattle industry.

Infestations were generally heavier in the mountains and western Piedmont Counties; however, a herd in Durham County and one in Person County averaged 35 ± 10 flies per head. The heaviest infestation observed averaged 65 ± 15 flies per head (range 50-100) on a holstein herd (Table 1).

Table 1

NORTH CAROLINA FACE FLY SURVEY, 18 JULY - 6 SEPTEMBER, 1973

County	Town	# Cattle in Herd	# Cattle/ sample	Flies Counted* Range	Average
Richmond	Rockingham	20	20	0	0
Richmond	Norman	50	20	0	0
Scotland	Laurinburg	10	10	5-20	10
Robeson	S. Lumberton	5	5	0	0
Hoke	N. Raeford	40	20	0	0
Cumberland	Fayetteville	12	12	0	0
Harnett	Lillington	12	12	0	0
Sampson	Suttontown	12	12	1 cow had 5 flies	
Johnston	E. Smithfield	5	5	0	0
Johnston	Newton Grove	30	20	2 cows had 3 flies each	
Johnston	Clayton	14	14	0	0
Johnston	Clayton	6	6	0	0
Wake	Fuquay	15	15	0	0
Wake	S. Raleigh	20	20	1 cow had 10 flies	
Wake	N. Raleigh	15	15	0	0
Wake	Zebulon	8	8	10-15 flies on 1 steer	
Granville	Wilton	12	12	10 flies on 3 cattle	
Granville	Clay	40	20	1-10	3
Granville	Grissom	14	14	10-30	13
**Person	Roxboro	40	20	25-50	35 ± 10
Caswell	Yanceyville	20	20	0-20	8
**Durham	Bahama	200	20	5-75	35 ± 10
Chatham	Pittsboro	35	20	10-30	15
**Randolph	Asheboro	30	20	5-25	10
**Stanley	Albemarle	2	2	10-15	12
**Montgomery	Biscoe	60	20	15-25	18

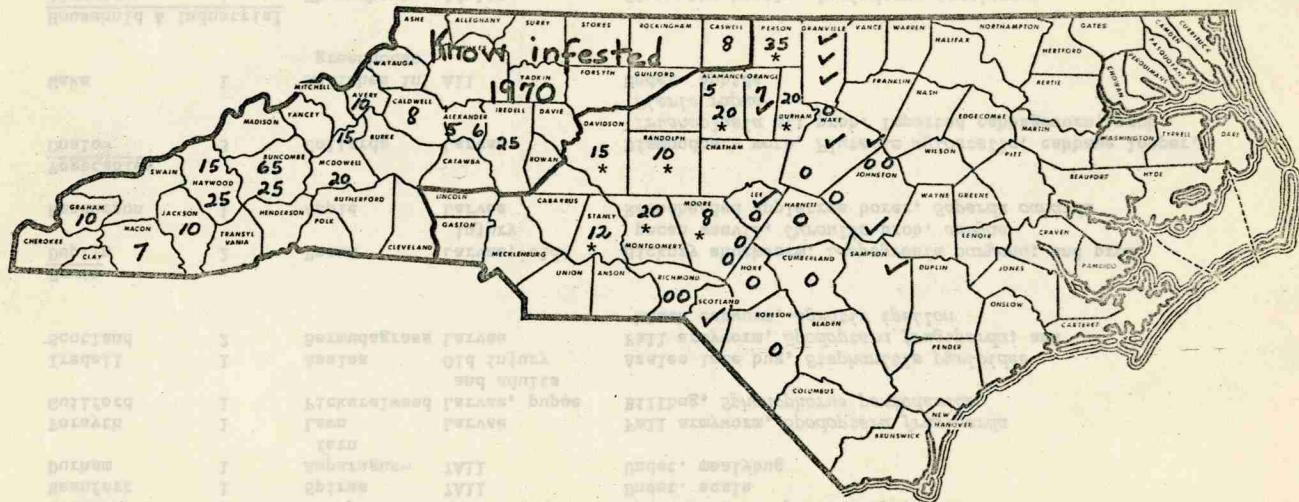
County	Town	# Cattle in Herd	# Cattle/ sample	Flies Counted* Range	Average
**Moore	Carthage	10	10	5-10	8
**Moore	Eastwood	10	10	0	0
**Moore	Eastwood	40	20	0	0
Lee	Sanford	9	9	1-10	8
Lee	Vass	10	10	0	0
Orange	Chapel Hill	20	20	5-10	7
**Alamance	Graham	40	20	5-35	20 + 5
Alamance	Altamahaw	40	20	5-15	7
**Davidson	S. of Thomasville	6	6	10-30	15
Iredell	E. of Statesville	30	20	20-35	25 + 5
Alexander	Taylorsville	4	4	1-5	3
Alexander	Taylorsville	4	4	5-10	7
Caldwell	Lenoir	4	4	5-10	8
Avery	Newland	5	5	10-20	17
McDowell	Ashford	14	14	10-25	15
McDowell	Woodlawn	5	5	15-35	20 + 5
Buncombe	Leciester	9	9	5-40	25 + 5
Buncombe	Leciester	40	20	50-100	65 + 15
Haywood	Waynesville	11	11	25-30	28 + 5
Haywood	Waynesville	25	20	5-25	15
Jackson	Dillsboro	4	4	5-15	8
Macon	Franklin	8	8	5-10	6
Graham	Robinsville	7	7	5-15	12

* Only flies with characteristic habit, shape and size of place flies were counted.

** Collection positive for new county record.

Figure 1

FACE FLY SURVEY, 1973



- Arabic # = Average # suspicious flies per head per herd.
- ✓ = Suspicious flies observed but sweep collection from manure negative.
- * = Suspicious flies observed and sweep collection from manure positive for new county record.
- 0 = No suspicious flies observed.

SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.
 During Week of October 25-31, 1973

County Collected	# of Specimens	Host(s)	Stage(s)	Determination
<u>Man & Animals</u>				
Wake	1	Cow manure	Larvae	Undet. soldier fly
<u>Forestry, Ornamentals & Turf</u>				
Alamance	1	Holly	Adults	Wax scale, <i>Ceroplastes</i> sp.
Beaufort	1	Spirea	?All	Undet. scale
Durham	1	Asparagus-fern	?All	Undet. mealybug
Forsyth	1	Lawn	Larvae	Fall armyworm, <i>Spodoptera frugiperda</i>
Guilford	1	Pickereelweed	Larvae, pupae and adults	Billbug, <i>Sphenophorus pontederiae</i>
Iredell	1	Azalea	Old injury	Azalea lace bug, <i>Stephanitis pyrioides</i>
Scotland	2	Bermudagrass	Larvae	Fall armyworm, <i>Spodoptera frugiperda</i> ; and black cutworm, <i>Agrotis ipsilon</i>
<u>Fruit</u>				
Duplin	2	Pecan	Larvae; old injury	Hickory shuckworm, <i>Laspeyresia caryana</i> ; and prob. pecan weevil, <i>Curculio</i> prob. <i>caryae</i>
Henderson	1	Apple	Larvae	Roundheaded appletree borer, <i>Saperda candida</i>
<u>Vegetables</u>				
Onslow	3	Collards	Larvae	Diamondback moth, <i>Plutella xylostella</i> ; cabbage looper, <i>Trichoplusia ni</i> ; prob. Imported cabbageworm, prob. <i>Pieris rapae</i>
Wake	1	Radishes in greenhouse	All	Undet. aphids
<u>Household & Industrial</u>				
Alamance	1	Throughout home	Adults	Cigarette beetle, <i>Lasioderma serricornis</i>
Alamance	1	On walls in home	Larvae	Indian meal moth, <i>Plodia interpunctella</i>
Alexander	6	In home	Adults	Face fly, <i>Musca autumnalis</i> ; black blowfly, <i>Phormia regina</i> ; cluster fly, <i>Pollenia rudis</i> ; blow fly, <i>Calliphora</i> sp; blow fly, <i>Phaenicia</i> sp.; muscid fly, prob. <i>Pararicia</i> sp.
Brunswick	1	In commode	Larvae	Moth fly, prob. <i>Telmatoscopus albipunctatus</i>
Cleveland	1	In home	Adults	Rice weevil, <i>Sitophilus oryzae</i>
Rowan	1	Bathroom & kitchen	All	German cockroach, <i>Blattella germanica</i>
Wake	1	In basement	Adult	Indian meal moth. <i>Plodia interpunctella</i>

Summary of Specimens Processed by Insect Clinic, N.C.S.U.

Page Two

Week of October 25-31, 1973

Miscellaneous & Accidental Household

Alexander or Burke Guilford	1	In poultry house	Adults	Thrips, <i>Elaphrothrips</i> sp.
	2	In home	Adults	Noctuid moth, prob. <i>Choephora fungorum</i> ; and undet. green lacewing
<u>Misc.</u>				
Mecklenburg	1	On tree trunks	All	Barklice, <i>Peocus venosus</i>
Robeson	1	In tobacco field	Adult	Katydid, <i>Beloecephalus</i> sp.
Robeson	1	On crab- apple	Adults	Barklice, <i>Peocus venosus</i>
?Rockingham	1	---	Oothecum	Chinese mantid, <i>Tenodera aridifolia sinensis</i>
Swain	1	---	Pupa	Undet. noctuid moth
Wake	1	In soil of houseplants	?All	Undet. springtails
Wake	1	On fence	All	Undet. aphids
Wake	1	On rug hanging outdoors	Adult	Sweetpotato hornworm, <i>Agrius cingulatus</i>
Wake	1	On person	Larva	Undet. green lacewing
Wake	1	On ground	Larva	Tiger swallowtail, <i>Papilio glaucus</i>
Yancey	1	---	Larva & drone	Giant hornet, <i>Vespa crabro germana</i>

SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.
During Week of November 1-7, 1973

County	# of Collected	Specimens	Host(s)	Stage(s)	Determination
<u>Grain, Soybeans & Forage</u>					
Pasquotank	1		Soybeans	Old injury	Prob. threecornered alfalfa hopper, prob. <i>Spissistilus festinus</i>
<u>Forestry, Ornamentals & Turf</u>					
Cleveland	1		Holly	Adults	Wax scale, <i>Ceroplastes</i> sp.
Gates	1		Hemlock	Adults	Wax scale, <i>Ceroplastes</i> sp.
Guilford	2		Dahlia	Larvae	Mordellid beetle, prob. <i>Mordellistena</i> sp.; and languriid beetle, prob. <i>Languria</i> sp.
Iredell	1		Boxwood	Larvae	Boxwood leafminer, <i>Monarthropalpus buwi</i>
Wake	1		Lawn	Larva	Masked chafer, <i>Cyclocephala</i> sp.
Wayne	1		Camellia	Adults	Wax scale, <i>Ceroplastes</i> sp.
Virginia state	1		Post oak	Adults in galls	Gall wasps, <i>Callirhytis</i> prob. <i>tubicola</i>
<u>Vegetables (Commercial & Garden)</u>					
Johnston	1		Sweet potato	Larva	Wireworm, <i>Melanotus</i> sp.
<u>Household & Industrial</u>					
Catawba	2		Stored Irish potatoes	All; and injury	Undet. mealybugs; and poss. potato tuberworm, poss. <i>Phthorimaea operculella</i> .
Cumberland	1		Walls and ceiling in home	Larvae	Indian meal moth, <i>Plodia interpunctella</i>
Davidson	1		In home	Larvae & adults	Almond moth, <i>Cadra cautella</i>
New Hanover	2		In grain boxcars	Adults; & larvae	Rice weevil, <i>Sitophilus oryzae</i> ; & soldier fly, <i>Hermetia illucens</i>
Vance	1		Throughout home	Adults	Cigarette beetle, <i>Lasioderma serricorne</i>
Wake	1		In home	Adults	Cigarette beetle, <i>Lasioderma serricorne</i>
<u>Miscellaneous & Accidental Household</u>					
?Harnett	1		On ceiling in new building	Young larvae	Undet. moth
Jackson	1		On wall in home	Adult	Orbweaver spider, <i>Araneus</i> prob. <i>marmoreus</i>
Wake	1		Entering home	Adults	Sap beetle, <i>Carpophilus humeralis</i>
Wake	1		In home	?All	Undet. psylliposid booklice
<u>Misc.</u>					
Burke	1		---	Larva	Undet. green lacewing
Caldwell	1		In pasture	Adult	Wheel bug, <i>Arilus cristatus</i>
Guilford	1		In or near dahlia	Larvae; & adult	Undet. cecidomyiid fly; and undet. rove beetle
Henderson	1		Around tree roots	Larva	Firefly, <i>Photuris</i> sp.
Wake	1		Swarming on porch	Workers & alates	Smaller yellow ant, <i>Acanthomyops claviger</i>
Wake	1		On lawn	Adult	Slug, <i>Limax</i> sp.
Wake	1		In parking lot	Adult	Sweetpotato hornworm, <i>Agrius cingulatus</i>



entomology

November 16, 1973

TO: County Extension Agents and Other Interested Persons

FROM: Thomas N. Hunt, Survey Entomologist *T.N.H.*

SUBJECT: Insect Survey Report

This report is compiled by: Thomas N. Hunt, Survey Entomologist
Raleigh, North Carolina

PEANUTS

SOUTHERN CORN ROOTWORM (Diabrotica undecimpunctata howardi) - The estimated number of acres with rootworm damage in Martin, Gates, Hertford, Bertie, Halifax, and Edgecombe Counties dropped from 18,000 acres in 1972 to 5,000 this year.

Roughly 37,000 acres were treated for this pest in these counties during 1972, and 45,500 acres were treated this year. At \$7/acre this is a treatment cost of \$318,500 for rootworm control.





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November 30, 1973

TO: County Extension Agents and Other Interested Persons

FROM: Thomas N. Hunt, Survey Entomologist *T.N.H.*

SUBJECT: Insect Survey Report

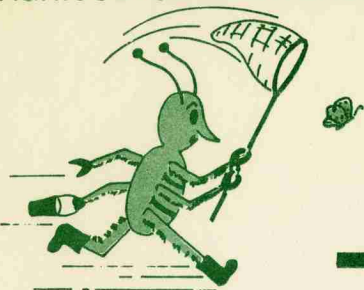
This report is compiled by: Thomas N. Hunt, Survey Entomologist
Raleigh, North Carolina

PEANUTS

TWOSPOTTED SPIDER MITE (Tetranychus urticae) - Spider mite damage to peanuts continued to be severe again this year in Northampton and Halifax Counties. Damage increased about twofold in Martin and Edgecombe Counties.

Summer rains held the pest in check until late August and September in most localities. Approximately 37,000 acres were treated for spider mite control in this area; Halifax, 8000 ac.; Martin, 2000 ac; Edgecombe, 7000 ac.; and Northampton, 20,000 ac. Roughly 88,500 acres of peanuts are grown in these counties annually.





entomology

December 7, 1973

TO: County Extension Agents and Other Interested Persons
 FROM: Thomas N. Hunt, Survey Entomologist *T.N.H.*
 SUBJECT: Insect Survey Report

This report is compiled by: Thomas N. Hunt, Survey Entomologist
 Raleigh, North Carolina

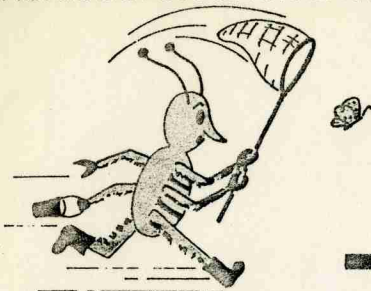
SOYBEANS

A CERAMBYCIDAE (Dectes texanus) - The infestation of the soybean stem borer is more wide spread in the Washington, Hyde, Tyrell county area this year. However, damage (lodged soybean plants) has been light due to the rapid harvest this season. Approximately 90% of the soybeans in the area were harvested by November 30.

FEDERAL AND STATE PLANT PROTECTION PROGRAM

GYPSY MOTH (Porthetria dispar) - An egg mass collected by Division of Entomology, N.C.D.A. personnel has been identified by D. Wiseman, U.S. National Museum as positive for gypsy moth. The collection was made near the N. C. School of the Arts, Winston-Salem, Forsyth County. This is the first stage of this pest to be collected in N.C. other than numerous male moths. (Ahlstrom, N.C.D.A.)





entomology

December 14, 1973

TO: County Extension Agents and Other Interested Persons

FROM: Thomas N. Hunt, Survey Entomologist *TNH*

SUBJECT: Insect Survey Report

This report is compiled by: Thomas N. Hunt, Survey Entomologist
Raleigh, N. C.

ALFALFA WEEVIL PARASITES (Bathyplectes curculionis and Tetrastichus incertus) -

Surveys conducted during April in 2 Rowan and 2 Haywood County alfalfa fields revealed that established populations of these alfalfa weevil parasites occur in both counties. Of the 3000 alfalfa weevil larvae examined from the Rowan County fields, 15.8% were parasitized by B. curculionis. This was a substantial increase in percent parasitization from 1972. T. incertus is present in the alfalfa weevil population but less than 1% recovery was attained from the Rowan County weevil population. Both B. curculionis and T. incertus were released in Rowan County during 1971, but none were released in Haywood County. However, 1.3% of the weevil larvae collected were parasitized by B. curculionis and less than 1% were parasitized by T. incertus. These may be migrants from an east Tennessee release site. In any event, both are new county records.

