



entomology

January 9, 1976

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

TOBACCO

BUDWORMS (*Heliothis virescens*)- NORTH CAROLINA - Losses during 1975 from budworms increased approximately \$45,000 due primarily to increased acreage. Inflationary costs of materials and labor plus severe infestations in some areas increased the average cost for controlling budworms approximately \$1.26/acre in 1975.

	\$/Acre Loss		Total \$ Loss		Cost of Control <sup>a</sup>	
	1974	1975	1974	1975	1974	1975
Budworms	.75	.75	300,000	345,000	800,000	1,500,000

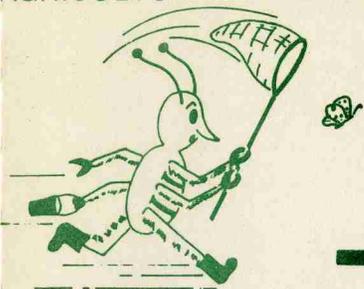
<sup>a</sup>Includes cost of insecticide + cost of application on approximately 460,000 acres.

(Robertson, Reagan; Ext.)



Dr. Knight

17



# entomology

January 16, 1976

TO: County Extension Chairmen and Other Interested Persons

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

SUBJECT: Insect Survey Report

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Raleigh, North Carolina

TOBACCO

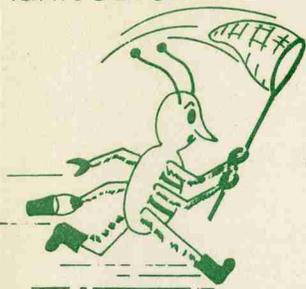
TOBACCO HORNWORM (*Manduca sexta*) and TOMATO HORNWORM (*Manduca quinquemaculata*)  
NORTH CAROLINA - Losses during 1975 from hornworms on tobacco increased approximately 10¢ per acre from the previous year. This increase was the result of increased costs associated with control and increased hornworm activity. The following table gives a comparison of the preceding 3 years.

Hornworms	<u>\$/Acre Loss</u>			<u>Total \$ Loss</u>			<u>Cost of Control</u> <sup>1</sup>		
	1973	1974	1975	1973	1974	1975	1973	1974	1975
	.15	.20	.30	51,000	80,000	138,000	200,000	250,000	460,000

<sup>1</sup>Includes cost of insecticides plus cost of application on approximately 460,000 acres, 1975; 400,000, 1974; and 340,000, 1973.

(Robertson, Reagan; Ext.)





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 JAN 23 1976  
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January 23, 1976

TO: County Extension Chairmen and Other Interested Persons

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

SUBJECT: Insect Survey Report

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Raleigh, North Carolina

## COTTON

BOLL WEEVIL (*Anthonomus grandis*) - NORTH CAROLINA - Estimated losses plus cost of controlling boll weevils declined drastically during 1975. This is entirely due to a 60+ % acreage decrease. Estimated loss plus cost of control on 55,000 acres of cotton harvested in 1975 was \$3 million compared to \$7.1 million on 150,000 acres during 1974. However, per acre costs continued upward. Estimates of loss plus cost of controlling the boll weevil for 1975 averaged \$55.54 per acre and \$47.60 per acre for 1974. (Robertson, Worley, Ext.)





Dr. Knight

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JAN 30 1976  
ENTOMOLOGY DEPT.

January 30, 1976

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

## COTTON

BOLLWORM (Heliothis zea and H. virescens) - NORTH CAROLINA - Total losses plus cost of controlling bollworms on cotton decreased due to a 60+% acreage decrease. Estimated losses plus cost of control on 55,000 acres was \$1.2 million in 1975 compared to \$2.5 million on 150,000 acres in 1974. Per acre estimates rose from \$16.64, 1974 to \$21.80, 1975. There was a significant shift in the species ratio this year with some fields containing 60% H. virescens. The tobacco budworm (H. virescens) is much more difficult to control than the corn earworm (H. zea). (Robertson, Worley; Ext.)



FEB 6 1976

# entomology

February 6, 1976

TO: County Extension Chairmen 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

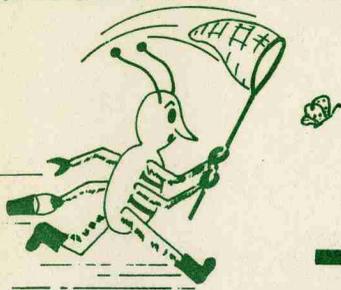
This report is compiled by: Thomas N. Hunt, Survey Entomologist

Raleigh, North Carolina

## PEANUTS

SOUTHERN CORN ROOTWORM (*Diabrotica undecimpunctata howardi*) - NORTH CAROLINA - Estimated losses plus costs of controlling southern corn rootworms in peanuts decreased from 1974. Estimates of loss on 175,000 acres of peanuts decreased from \$975,000 to \$612,500 with cost of controls decreasing from \$350,000 to \$250,000. This is approximately \$1.43 per acre for controls to rootworms in peanuts alone. (Robertson, Ext.)





FEB 13 1976

entomology

February 13, 1976

TO: County Extension Chairmen 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  
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 Raleigh, North Carolina

PEANUTS

SPIDER MITES (*Tetranychus urticae*) - NORTH CAROLINA - Estimated spider mite losses plus cost of control increased 300% from 1974 to 1975. Losses plus control costs on 175,000 acres of peanuts were approximately \$900,000 in 1975 compared to \$270,000 on 170,000 acres in 1974. Heavy rain during late summer in the Northern Coastal Plain effectively controlled the population in many fields during 1974. Late summer of 1975 was dry in the heavily infested counties. (Robertson, Hunt, Ext.)





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FEB 20 1976

ENTOMOLOGY DEPT.

February 20, 1976

TO: County Extension Chairmen 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

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Raleigh, North Carolina

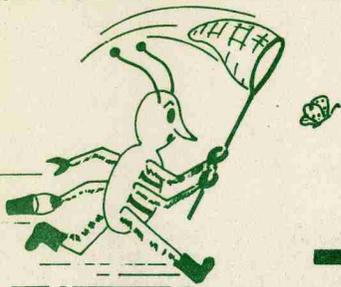
## PEANUTS

POTATO LEAFHOPPER AND TOBACCO THRIPS (*Empoasca fabae* & *Frankliniella fusca*) - NORTH CAROLINA - Estimated cost of control for 175,000 acres of peanuts was \$600,000, about equal to 1974. However, estimated losses increased approximately \$7,000 during 1975 to \$262,500. This rise was largely due to the 5,000 acre increase in planting from 1974 to 1975. (Robertson, Hunt, Ext.)

FEB 27 1976

ENTOMOLOGY DEPT.

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February 27, 1976

TO: County Extension Chairmen and Other Interested Persons

FROM: Thomas N. Hunt, Survey Entomologist

*TNH*

SUBJECT: Insect Survey Report

NORTH CAROLINA COOPERATIVE ECONOMIC INSECT SURVEY AND DETECTION REPORT

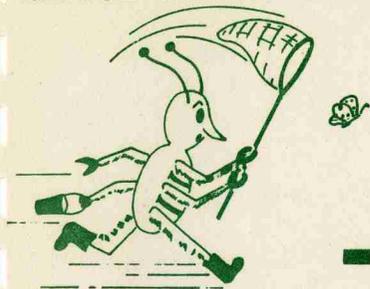
This report is compiled by: Thomas N. Hunt, Survey Entomologist

Raleigh, North Carolina

PEANUTS

CORN EARWORM (*Heliothis zea*) - NORTH CAROLINA - Defoliation by earworms during 1975 increased from 1974. Estimated losses plus cost of controlling earworms on peanuts was \$37,500 in 1975 compared to 0 in 1974. Cost of control also increased from \$35,000 (1974) to \$50,000 (1975) on approximately 175,000 acres of peanuts both years. (Robertson, Hunt, Ext.)





MAR 4 1976

# entomology

March 4, 1976

TO: County Extension Chairmen and Other Interested Persons

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

SUBJECT: Insect Survey Report

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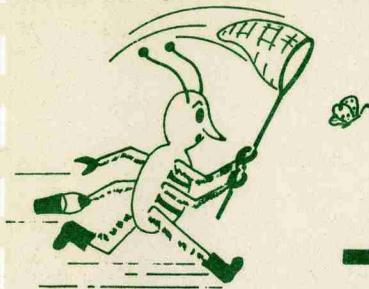
This report is compiled by: Thomas N. Hunt, Survey Entomologist

Raleigh, North Carolina

SMALL GRAIN

APHID (*Rhopalosiphum padi* and *R. maidis*, corn leaf aphid) - NORTH CAROLINA - Approximately 200 acres of barley in 5 fields infested with 1 to 5 aphids per plant in Wake Co. Direct damage minimal but yellow dwarf disease symptoms appearing in spots scattered over each field. (Hunt, Ext.)





MAR 15 1976

# entomology

March 12, 1976

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

FOREST AND SHADE TREES

EASTERN TENT CATERPILLAR (Malacosoma americanum) - NORTH CAROLINA -  
 First observation of the year made on wild cherry 10-11 Mar. in  
 Moore, Montgomery and Wake counties. Webs ranged in size from  
 2-4 sq. in. (Hunt, Ext.)

FORAGES

ALFALFA WEEVIL (Hypera postica) - NORTH CAROLINA - An average  
 of 1 larvae per 10 terminals was observed feeding on alfalfa in  
 Wake County. Damage to date is insignificant, but caution is  
 warranted if warm weather persists. Development was rapid during  
 the recent mild weather of February. (Hunt, Ext.)



15



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RECEIVED

March 19, 1976

MAR 19 1976

TO: County Extension Chairmen and Other Interested Persons

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

SUBJECT: Insect Survey Report

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Raleigh, North Carolina

FOREST AND SHADE

EASTERN TENT CATERPILLAR (*Malacosoma americanum*) - NORTH CAROLINA - Reports continue to be received this week from as far west as Statesville - Winston-Salem area. Webs average 4 sq. in. and are about 1 week earlier than in 1974. There is an average of 2 webs per wild cherry tree. (Johnson, APHIS)

APHIDS (*Cinara* sp.) - NORTH CAROLINA - Heavy population of aphids has been reported from Union County attacking white and loblolly pine. Concern of most homeowners is the sooty-mold-producing fungus associated with the honeydew secreted by the aphids. (Savage, APHIS, Stacey, Ext.)

SOUTHERN PINE BEETLE (*Dendroctonus frontalis*) - NORTH CAROLINA - Salvage July 1 - Dec. 31, 1975, dropped below the July 1 - Dec. 31, 1974, total by 7 million bd. ft. sawtimber and 9,779 cords of pulp. Total salvage from state and federal lands July 1 - Dec. 31, 1975, was 35 million bd. ft. and 96,554 cords. N. C. continues to lead the nation in SPB outbreak related timber salvage. (USFS, Atlanta)



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MAR 26 1976

ENTOMOLOGICAL DEPT.

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March 26, 1976

TO: County Extension Chairmen and Other Interested Persons

FROM: Thomas N. Hunt, Survey Entomologist

*T. N. H.*

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Raleigh, North Carolina

MAN

BROWN RECLUSE (*Loxosceles reclusa*) - NORTH CAROLINA - Collection of 6 adults was made March 23 in a home near Apex, N.C. All spiders were collected from an old stored radio cabinet. This is the location of the only Wake County collection site. First collections in this home were June 13, and July 1, 1972. Known infestations in the state are in several buildings in Winston-Salem, Forsyth County, and Apex, Wake County. (Baker, Ext.)



APR 2 1976


 entomology
   
 EN DEPT. 1

April 2, 1976

TO: County Extension Chairmen and Other Interested Persons

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

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Raleigh, North Carolina

## CORN

SEEDCORN MAGGOT (Hylemya platura) - NORTH CAROLINA - Damage from seedcorn maggot reported from early planted corn in Coastal Plain and as far west as Cleveland Co. A 40-acre Cleveland County field was reported with 50% of the 100 germinating seeds observed infested. This is a common problem during cold springs and in corn planted before soil warms to correct temperature. (Hunt, Ext.)



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APR 9 1976

ENTOMOLOGY DEPT

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 Raleigh, North Carolina

SMALL GRAIN

ENGLISH GRAIN APHID (*Macrosiphum avenae*) - NORTH CAROLINA -  
 Samples from 25 heading wheat fields in Wake, Harnet, Sampson and  
 Lee counties reveal an average aphid population of 3 per plant.  
 Damage insignificant to date. (Hunt, Ext.)





APR 16

ENTOMOLOGY DEPT.

# entomology

April 16, 1976

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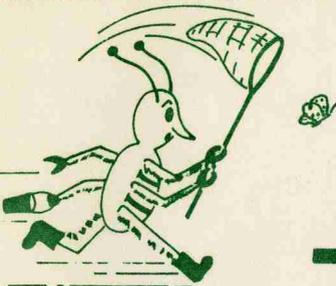
Raleigh, North Carolina

## BLUEBERRIES

BLUEBERRY BUD MITE (*Acalitus vaccincii*) - NORTH CAROLINA - Estimates of percent damaged buds have reached 70% in some fields. An average infestation of 40% damaged buds was reported from the major blueberry counties. Research personnel working in Pender, Bladen and Duplin counties indicate heavier damage this year on the Murphy variety. Traditionally Wolcotts have been the most susceptible variety. (Mainland, Hort.; Hunt, Ext.)



APR 26 1976



# entomology

April 23, 1976

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## ALFALFA

ALFALFA WEEVIL (Hypera postica)- NORTH CAROLINA - Reports from Piedmont and Mountains reveal about average larval infestations of 30% tip infestation with some fields reaching 50%. Insecticide applications have been applied in most Piedmont fields with application in the Mountains planned 26-29 April. (Hunt, Ext.)

## CORN

BILLBUGS (Sphenophorus callosus) - NORTH CAROLINA - Adult billbug injury observed in Bladen County. Damage present on 25% of the plants (5 in.) in a 25-acre field. An average of 2 adults per plant was observed in the heavily infested border rows. Recent reports indicate the southern Coastal Plain area (Bladen, Columbus, Robeson counties) have infestations to 50% plants damaged. (Hunt, Ext.)



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APR 30 1976

April 30, 1976

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Raleigh, North Carolina

## CORN

**BLACK CUTWORM (*Agrotis ipsilon*)** - NORTH CAROLINA - Damage reports from Washington Co. reveal heavy cutworm damage occurring over approx. 550 acres of seedling corn (3-6 in.). Spots to 1.5 acres totaling 20 acres completely destroyed in two 200-acre blocks and 5% stand loss in another 150-acre field. Five to 15% stand loss was also observed in 3 Cumberland Co. fields and 1 Pender Co. field. Larvae were 3rd to 5th instar. (Van Duyn, Krenzer, Hunt, Ext.)

**BILLBUG (*Sphenophorus callosus*)** - NORTH CAROLINA - Adult damage continues severe in many southern Coastal Plain fields. Reports of 25% stand reduction in border rows not uncommon. Drought conditions prohibit rapid plant growth; therefore, feeding more damaging in many cases. Reports received this week from Duplin, Sampson, Bladen and Cumberland Cos. Usual pattern is severe damage in 5-15 border rows. (Van Duyn, Hunt, Ext.)

**SUGARCANE BEETLE (*Euethola rugiceps*)** - NORTH CAROLINA - Adult damage observed in two 6-acre fields south of Fayetteville, Cumberland Co. Estimate of damaged plants is 1% in each field. This is a relatively rare pest of corn in N.C. but is considered an important pest in other southern states. (Hunt, Ext.)



FRUITS

GRAPE FLEA BEETLE (*Altica chalybea*) - NORTH CAROLINA - Larval damage observed defoliating 50%+ of the grape plantings in Pender and New Hanover Cos. Collection of this previously rare grape pest was also made in 1 Johnston Co. planting this week. (Cumbo, N.C.D.A.; Weaver, Dept. of Entomology)

LIGHT TRAPS

EUROPEAN CORN BORER (*Ostrinia nubilalis*) - NORTH CAROLINA - Nightly collections of European corn borer adults have established that the spring overwintering flight is occurring. Egg laying on Irish potatoes will likely continue until mid May. (Irish Potato Pest Alert, N.C.S.U.)

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CORN

BLACK CUTWORM (*Agrotis ipsilon*) - NORTH CAROLINA - Damage reports from Washington Co. reveal heavy cutworm damage occurring over approx. 250 acres of seedling corn (3-6 in.). 2 cuts to 1.2 acres totaling 20 acres completely destroyed in two 500-acre blocks and 22 stand loss in another 150-acre field. Five to 10% stand loss was also observed in 3 Cumberland Co. fields and 1 Pender Co. field. Larvae were 3rd to 5th instar. (Van Dux, Krenzer, Hunt, Ext.)

GRASSHOPPER (*Sphenophorus callosus*) - NORTH CAROLINA - Adult damage continues severe in many southern coastal plain fields. Reports of 25% stand reduction in border rows not uncommon. Drought conditions prohibit rapid plant growth; therefore, feeding more damaging in many cases. Reports received this week from Duplin, Sampson, Hoke and Cumberland Cos. Usual pattern is severe damage in 2-12 border rows. (Van Dux, Hunt, Ext.)

SUBCARBON BEETLE (*Euchroa ferruginea*) - NORTH CAROLINA - Adult damage observed in two 6-acre fields south of Raleigh, Cumberland Co. Estimate of damaged plants is 1% in each field. This year pest of corn in N.C. but is considered an important pest in other southern states. (Hunt, Ext.)

Dr. Knight





# entomology

May 14, 1976

RECEIVED

TO: County Extension Agents and Other Interested Persons

MAY 17 1976

FROM: Thomas N. Hunt, Survey Entomologist

ENTOMOLOGY DEPT.

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## CORN

SOUTHERN CORN BILLBUG (*Sphenophorus callosus*), MAIZE BILLBUG (*Sphenophorus maidis*) - NORTH CAROLINA - Adult billbug damage continues over the entire Coastal Plain. Observations in Wayne, Harnett and Wilson Counties revealed 30-50% stand loss in a 9 ac. (Harnett Co.) and a 10 ac. (Wilson Co.) field. Both fields destroyed and replanted. The maize billbug appears to be the predominant species in Harnett, Wilson, Johnston, Wake and Nash Counties. (Childers, Jernigan, Wells, Ext.)

CORN ROOT WEBWORM (*Crambus caliginosellus*) - NORTH CAROLINA - Larval damage more severe this spring than reported in previous years. Stand losses in excess of 5% were observed 3-10 May in a 6 ac. Pender Co. field and in a small Wake Co. field. Identification requests have been submitted from 4 counties in 1976 compared to 0 in 1975.

BLACK CUTWORM (*Agrotus ipsilon*) - NORTH CAROLINA - Damage reports decrease as corn stem size increases. Owners of late planted or late germinating fields report 15% stand loss in a few scattered Robeson and Cumberland Co. fields. (Hunt, Ext.)

WIREWORM (*Melanotus communis*) - NORTH CAROLINA - Larval damage continues in coastal counties with damage reports received this week from Washington and Hyde County area. A 15 ac. Washington Co. field observed with 10-15% of the plants damaged. (Van Duyn, Ext.)

## SOYBEANS

MEXICAN BEAN BEETLE (*Epilachna varivestis*) - NORTH CAROLINA - Adults have been observed in Washington, Robeson and Sampson Counties on seedling soybeans. An average of 2 per 10 ft. of row in 5 Sampson Co. fields has been observed. No economic damage has been reported to date. (Hunt, Ext.)



SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.  
During Week of April 28 - May 4, 1976

County Collected	# of Specimens	Host(s)	Stage(s)	Determination
<u>Southern Field Crops</u>				
Wilson	1	Tobacco	Adults	Vegetable weevil, <i>Listroderes costirostris obliquus</i>
<u>Grains, Soybeans and Forages</u>				
Pender	3	Corn	Adult; larvae and larva	Tobacco thrips, <i>Frankliniella fusca</i> ; black cutworm, <i>Agrotis ipsilon</i> ; and prob. corn root webworm, <i>Crambus</i> prob. <i>caliginosellus</i>
Wayne	1	Corn	Larvae	Black cutworm, <i>Agrotis ipsilon</i>
<u>Forestry, Ornamentals and Turf</u>				
Chatham	1	On short-leaved pine	Adult	Metallic wood borer, <i>Buprestis</i> sp.
Cleveland	1	Water oak	Galls	Cynipid gall wasp, <i>Dryocosmus floridensis</i>
Johnston	1	Gardenia	Injury	undet. Whitefly
Lenoir	1	Oak	Dead adults, crawlers	Lecanium scale, <i>Lecanium "corni complex"</i>
Mecklenburg	1	Azalea	Injury	Azalea lace bug, <i>Stephanitis pyrioides</i>
Pasquotank	1	Camellia	All	Tea scale, <i>Fiorinia theae</i>
Pasquotank	2	Maple	----; and old adults	undet. Aphid; and gloomy scale, <i>Melanaspis tenebricosa</i>
Rowan	1	Willow oak	Old & dead adults	Lecanium scale, <i>Lecanium "corni complex"</i>
Wake	1	Firewood	Adults	False powderpost beetle, <i>Lichenophanes</i> sp.
Wake	1	Christmas cactus	Injury	undet. Mealybug
Wake	1	Camellia	----	Tea scale, <i>Fiorinia theae</i>
Wake	1	Impatiens	All	Twospotted spider mite, <i>Tetranychus urticae</i>
Wake	1	Juniper	All	Spruce spider mite, <i>Oligonychus ununguis</i>
Wake	1	Day lily	Cast skins	undet. Aphid
Wake	1	Silver maple	Galls	Maple bladdergall mite, <i>Vasates quadripedes</i>
Wake	1	Schefflera	All	prob. Twospotted spider mite, <i>Tetranychus</i> prob. <i>urticae</i>
Wayne	1	Loblolly pine	Injury	undet. Spider mite
Yadkin	1	Northern red oak	Larvae	undet. Leafminer fly
<u>Fruits</u>				
Rockingham	1	Strawberry	Injury	Spider mite, <i>Tetranychus atlanticus</i>
Union	1	Strawberry	All	Spider mite, <i>Tetranychus atlanticus</i>

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

Page Two

Week of April 28 - May 4, 1976

Vegetables

Cleveland	2	Green beans	----	undet. Aphid; and seedcorn maggot, <i>Hylemya platura</i>
Johnston	1	Tomato	All	undet. Whitefly

Wood Destroying

Guilford	1	Wall frame	Old injury	Weevil, <i>Hexarthrum ulkei</i>
Jackson	1	In church classroom	Adults	Anobiid beetle, <i>Hemicolus</i> sp.
Martin	1	In home	Alates	Subterranean termite, <i>Reticulitermes virginicus</i>
McDowell	1	Under home	Alates	Subterranean termite, <i>Reticulitermes virginicus</i>
Pamlico	1	In stacked lumber	Worker	Black carpenter ant, <i>Camponotus pennsylvanicus</i>
Wake	1	Porch banister	Queen	Carpenter bee, <i>Xylocopa virginensis</i>

Household & Industrial

Buncombe	1	Dried chili peppers	Injury	undet. Moth
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Miscellaneous & Accidental Household

Martin	1	In kitchen	Adults	Yellow woollybear moth, <i>Diacrisia virginica</i>
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Miscellaneous

Carteret	-	Light trap	Adults	undet. Moths
Catawba	1	On side of house	Larva	Mourningcloak butterfly, <i>Nymphalis antiopa</i>
Davidson	1	Flying around doors	Adults	Mimosa webworm, <i>Homadaula anisocentra</i>
Durham	2	Light trap	Adults	Scarab beetle, <i>Serica</i> sp; and southern pine sawyer, <i>Monochamus titillator</i>
Jackson	1	Home grounds	Dealate queen	Black carpenter ant, <i>Camponotus pennsylvanicus</i>
Montgomery	2	Around house	Adults	undet. Chironomid midges
Pasquotank	1	On side of house	Adults	undet. Chironomid midge
Pasquotank	-	Yellow pan trap	Adults	undet. Mixed insects
Virginia (state)	1	----	----	undet. Millipede
Wake	2	At lights	Adults	Scarab beetle, <i>Phyllophaga</i> sp.; and a tenebrionid beetle, <i>Helops</i> sp.
Wake	1	Burrowing in lawn	Queen	Giant hornet, <i>Vespa crabro germana</i>

SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.  
 During week of May 5-11, 1976

County Collected	# of Specimens	Host(s)	Stage(s)	Determination
<u>Man and Animals</u>				
Bladen	1	Bit person	Adult	Clubionid spider, prob. <i>Marcellina</i> sp.
Nash	1	Poultry lagoon	Adults	Moth fly, <i>Telmatoscopus albipunctatus</i>
<u>Grains, Soybeans and Forages</u>				
Pender	1	Corn	Larvae	Black cutworm, <i>Agrotis ipsilon</i>
Wake	1	Corn	Larvae	prob. Corn root webworm, <i>Crambus</i> prob. <i>caliginosellus</i>
Wilson	1	Corn	Adults	Maize billbug, <i>Sphenophorus maidis</i>
<u>Forestry, Ornamentals and Turf</u>				
---	1	Oak	Gall	Cynipid gall wasp, <i>Callirhytis seminator</i>
Camden	1	Camellia	Eggs	undet. Cricket or Katydid
Carteret	1	Red cedar	All?	Bark beetle, <i>Phloeosinus</i> sp.
Chatham	1	Southern sugar maple	---	undet. Aphid
Cumberland	2	Stewartia	Adults & eggs; and larva	Japanese wax scale, <i>Ceroplastes ceriferus</i> ; and a notodontid moth, <i>Symmerista</i> sp.
Currituck	2	Oak	---	Lecanium scale, <i>Lecanium "corni complex"</i> ; and a cynipid gall wasp, poss. <i>Neuroterus irregularis</i>
Gaston	1	Willow oak	Adults	Treehopper, <i>Platycotis vittata</i>
Moore	1	Reportedly attacking rhododendron & azalea	Adults	Scarab beetle, <i>Serica</i> sp.
Orange	1	Azalea	Injury	Azalea lace bug, <i>Stephanitis pyrioides</i>
Pitt	1	Oak	Dead adults & eggs	Lecanium scale, <i>Lecanium "corni complex"</i>
Polk	1	Rhododendron	All	Flower thrips, <i>Frankliniella tritici</i>
Wake	1	Boxwood	Injury	Boxwood leafminer, <i>Monarthropalpus buxi</i>
Wake	1	Crabapple	All	undet. Aphid
Wake	1	Dracaena	All	Twospotted spider mite, <i>Tetranychus urticae</i>
Wake	2	False aralia	All	False spider mite, <i>Brevipalpus phoenicis</i> ; and brown soft scale, <i>Coccus hesperidum</i>
Wake	1	Birdsnest fern	All	Hemispherical scale, <i>Saissetia coffeae</i>
Wake	1	Hickory	Larva	Forest tent caterpillar, <i>Malacosoma disstria</i>
Wake	1	Japanese holly	Injury	prob. Southern red mite, prob. <i>Oligonychus ilicis</i>
Wake	1	Loblolly pine in greenhouse	All?	Aphid, <i>Cinara</i> sp.

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

Page Two

Week of May 5-11, 1976

Forestry, Ornamentals and Turf (Cont.)

Wake		Scot's pine	Larvae	prob. Nantucket pine tip moth, <i>Rhyacionia</i> prob. <i>frustrana</i>
Wake	1	Rose	All	Twospotted spider mite, <i>Tetranychus urticae</i>
Warren	1	Boxwood	Injury	undet. Spider mite
Wilson	2	Post oak	Galls	Cynipid gall wasps, <i>Neuroterus</i> spp.
<u>Fruits</u>				
Beaufort	1	Grape	Larvae	prob. Grape flea beetle, <i>Altica</i> prob. <i>chalybea</i>
Lenoir	1	Grape	Larvae	prob. Grape flea beetle, <i>Altica</i> prob. <i>chalybea</i>
Transylvania	1	Strawberry	Larva	Black cutworm, <i>Agrotis ipsilon</i>
Wake	1	Persimmon	Prepupae & pupae	Persimmon borer, <i>Sannina uroceriformis</i>
<u>Wood Destroying</u>				
Johnston	1	Exterior siding on home	Larva	Oldhouse borer, <i>Hylotrupes bajulus</i>
<u>Household &amp; Industrial</u>				
Durham	1	On ceiling in home	Larvae & pupae	Casemaking clothes moth, <i>Tinea pellionella</i>
Lenoir	1	In home	Adult	undet. Clothes moth
Nash	2	In poultry house	Adults	Meal moth, <i>Pyralis farinalis</i> ; and an undet. clothes moth
Polk	2	Behind baseboard in home	Adults	Drugstore beetle, <i>Stegobium paniceum</i> ; and a cabinet beetle, <i>Trogoderma sternale</i>
<u>Miscellaneous &amp; Accidental Household</u>				
Edgecombe	1	In home	Adults	undet. Midge
Wake	1	In shipment from Philippines	Immature	undet. Pholcid spider
Wake	1	In home	Adult	Pisaurid spider, <i>Dolomedes</i> prob. <i>tenebrosus</i>
<u>Miscellaneous</u>				
Anson	1	On flowers & shrubs	Adults	Darkwinged fungus gnat, <i>Bradysia</i> sp.
Beaufort	-	Yellow pan trap	Alates	undet. Aphids

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

Page Three

Week of May 5-11, 1976

Miscellaneous (Cont.)

Brunswick	1	On flowers	Prepupae & pupae	Leaf beetle, <i>Chrysomela</i> sp.
Gates	1	On flowers & shrubs	Nymphs	Boxelder bug, <i>Leptocoris trivittatus</i>
Johnston	1	---	Workers	Ant, <i>Formica pallidefulva</i>
Pasquotank	1	Light trap	Adults	European corn borer, <i>Ostrinia nubilalis</i>
Pasquotank	-	Yellow pan trap	Adults	Mixed insects
Pitt	1	Mound at edge of garden	Workers	Florida harvester ant, <i>Pogonomyrmex badius</i>
Wake	1	In yard	Adult	Trapdoor spider, <i>Ummidia</i> sp.
Wake	1	On sidewalk & lawn	Nymphs & adults	Boxelder bug, <i>Leptocoris trivittatus</i>
Wake	1	On clothes on line	Adults	Leaf beetle, <i>Gastrophysa</i> sp.

MAY 20 1976

## entomology

May 21, 1976

TO: County Extension Chairmen 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

## CORN

**WIREWORM** (*Conoderus* sp. and *Melanotus* sp.) - NORTH CAROLINA - A survey conducted in a 1-acre Montgomery County research plot and surrounding fields plus observations throughout the Piedmont indicate that stand reductions to 7% are occurring in the Piedmont. Missing hills often mean wireworm damage rather than planter problems. (Wells, Ext.)

**ARMYWORM** (*Pseudaletia unipuncta*) - NORTH CAROLINA - Foliage feeding observed over a 10-acre Montgomery Co. field. Damage from larvae in the 3rd to 5th stages of development not presently of economic concern. However, low spots (totaling 1 acre) in the field had 10% of the plants damaged. Fields following pasture or a cover crop should be sampled weekly. These larvae spend the day under trash and feed at night or during heavily overcast days. (Reese, Hunt, Ext.)

**BLACK CUTWORM** (*Agrotis ipsilon*) - NORTH CAROLINA - Larval damage of 5% plants cut observed 13-18 May in 4 of 10 Piedmont fields sampled. Samples taken in Harnett, Lee, Montgomery and Chatham counties. Five percent plants cut near ground line warrant an insecticide treatment. (Hunt, Ext.)

## VEGETABLES

**EUROPEAN CORN BORER** (*Ostrinia nubilalis*) - NORTH CAROLINA - European corn borer egg hatching is progressing in Irish potato fields of the N. E. Coastal Plain. Larval feeding evident in some fields. Insecticides needed weekly until 2 weeks after last significant light trap collection.  
 (Irish Potato Pest Alert #7)



SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.  
 During week of May 12-18, 1976

County Collected	# of Specimens	Host(s)	Stage(s)	Determination
<u>Man and Animals</u>				
Virginia state	1	Worm bed	All	Springtail, <i>Onychiurus</i> sp.
<u>Southern Field Crops</u>				
Caldwell	1	Tobacco	Adults	Vegetable weevil, <i>Listroderes costirostris obliquus</i>
Wilson	1	Tobacco	Larvae	Whitefringed beetle, <i>Graphognathus</i> sp.
<u>Grains, Soybeans and Forages</u>				
Granville	1	Corn	Adults	Corn flea beetle, <i>Chaetocnema pulicaria</i>
Greene	1	Corn	Larvae	Wireworm, <i>Melanotus</i> sp.
Pamlico	1	Corn	Larvae	Wireworm, <i>Melanotus</i> sp.
Pamlico	1	Wheat	Larvae	Armyworm, <i>Pseudaletia unipuncta</i>
<u>Forestry, Ornamentals and Turf</u>				
Alamance	1	Hickory	Old galls	Phylloxeran, <i>Phylloxera</i> sp.
Buncombe	1	Hemlock	All	prob. Hemlock rust mite, prob. <i>Nalepella tsugifoliae</i>
Catawba	1	Hickory	Galls	Phylloxeran, <i>Phylloxera</i> sp.
Columbus	1	Rose	All	Flower thrips, <i>Frankliniella tritici</i>
Currituck	2	Red maple	---	Gloomy scale, <i>Melanaspis tenebricosa</i> ; and maple leaf spot gall, ( <i>Cecidomyia</i> ) <i>ocellaris</i>
Davie	1	Rhododendron	Injury	Rhododendron lace bug, <i>Stephanitis rhododendri</i>
Jackson	1	Goldenrod	---	undet. Aphid
Moore	1	Azalea	All	Peony scale, <i>Pseudaonidia paucariae</i>
Orange	1	Camellia	Dead adult & eggs	prob. Japanese wax scale, <i>Ceroplastes</i> prob. <i>ceriferus</i>
Pitt	1	Hickory	Galls	Phylloxeran, <i>Phylloxera</i> sp.
Wake	2	Azalea	All	Southern red mite, <i>Oligonychus ilicis</i> ; and a spider mite, <i>Eotetranychus clitus</i>
Wake	1	Boxwood	Old injury, young larvae	Boxwood leafminer, <i>Monarthropalpus buxi</i>
Wake	1	Dogwood	Young larva	undet. Moth
Wake	3	Gardenia	All	Plant bug, <i>Chlamydatus suavis</i> , undet. whitefly; and undet. mealybug
Wake	1	Willow oak	Larvae	undet. Bagworm
Wake	1	Rose	All	Twospotted spider mite, <i>Tetranychus urticae</i>
Wake	1	Schefflera	Injury	undet. Spider mite
Warren	2	Boxwood	Old injury	undet. Spider mite; and boxwood leafminer, <i>Monarthropalpus buxi</i>
Washington	1	White pine	All	prob. Pine bark aphid, prob. <i>Pineus strobi</i>
Watauga	1	Sugar maple	Nymphs	undet. Psyllid

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

Page Two

Week of May 12-18, 1976

Fruits

Currituck	1	Peach	Larvae	Plum curculio, <i>Conotrachelus nenuphar</i>
Northampton	1	Grape	Galls	undet. Grape tomato gall

Vegetables

Edgecombe	2	Irish potato	Larvae; and ---	undet. Thrips; and undet. aphid
Granville	1	Asparagus	Larvae	prob. Asparagus beetle, <i>Crioceris</i> prob. <i>asparagi</i>
Hoke	1	Field peas	---	undet. Aphid
Lenoir	1	Cucumber	Adults	Thrips, <i>Sericothrips variabilis</i>
Sampson	1	Turnip	Larva	Corn earworm, <i>Heliothis zea</i>

Wood Destroying

Jackson	1	Rafters	Adults	Carpenter bee, <i>Xylocopa virginica</i>
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Household & Industrial

Orange	1	In home	Adult	Wood roach, <i>Parcoblatta</i> sp.
Wake	1	Throughout home	All	Casemaking clothes moth, <i>Tinea pellionella</i>
Wake	1	In bathtub	Alates	Odorous house ant, <i>Tapinoma sessile</i>

Miscellaneous

Beaufort	---	Yellow pan trap	Alates	undet. Aphids
Bertie	1	In peanut field	Larva	Soldier fly, <i>Hermetia illucens</i>
Brunswick	1	On oak	Pupae & adults	Ladybird beetle, <i>Olla abdominalis</i>
Burke	1	In soil	Workers	Ant, <i>Formica subsericea</i>
Cabarrus	1	Mounds in pasture	Workers	Ant, <i>Formica subsericea</i>
Carteret	---	Yellow pan trap	Alates	undet. Aphids
Chowan	1	On peach trees	Adults	Ladybird beetle, <i>Olla abdominalis</i>
Macon	1	In garden	Adults	undet. Earthworm
Montgomery	1	Near base of pecan tree	Pupa	Oakworm, <i>Anisota</i> sp.
Onslow	2	In dead centipede grass	Adult; and larvae	undet. Darkling beetle; and undet. weevil
Pasquotank	---	Light trap	Adults	undet. Mixed insects

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

Page Three

Week of May 12-18, 1976

Miscellaneous (Cont.)

Pasquotank	---	Yellow pan trap	Adults	undet. Mixed insects
Wake	1	On gardenia	All	Theridiid spider, <i>Anelosimus</i> sp.
Wake	1	On porch	Alates	Ant, <i>Nylanderia</i> sp.
Washington	---	Light trap	Adults	undet. Beetles and moths
Wayne	1	In lawn	Adults	Carrot beetle, <i>Bothynus gibbosus</i>
Yadkin	1	On trees	Dead adults	Seedcorn maggot, <i>Hylemya platura</i>

May 12-18, 1976

INSECT CLINIC, N.C.S.U.

MAY 31 1976



# entomology

May 28, 1976

TO: County Extension Chairmen 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

WIREWORM (Conoderus sp. and Melanotus sp.) - NORTH CAROLINA - Heavy damage continues in late planted and/or germinating fields scattered over entire Piedmont and Coastal Plain. Damage to 30% stand reduction observed 25-28 May in 4 of 10 fields sampled. Severe yellow streaking and dead or wilted terminal blades are indicators of wireworm injury. (Hunt, Ext.)

## VEGETABLES

EUROPEAN CORN BORER (Ostrinia nubilalis) - NORTH CAROLINA - Borer damage occurring in most untreated Irish potato fields in northeastern counties. An infestation to 90% of the hills in 1 untreated field was observed in Pasquotank County. (Irish Potato Alert)

TWOSPOTTED SPIDER MITE (Tetranychus urticae) - NORTH CAROLINA - Mite injury observed in Chowan County on a variety of vegetable crops. Damage subeconomic in most fields; however, injury this early in season should be watched closely. (Thompson, Ext.)

## TOBACCO

TOBACCO BUDWORM (*Heliothis virescens*) - NORTH CAROLINA - Surveys in 169 Bladen County fields revealed 24 fields at economic threshold for budworms with 1 field 60% infested. Seven percent was the most frequent infestation level observed. Larvae small and buds closed, resulting in the need to examine buds closely. Controls to date have been adequate. (Walker, Tobacco Pest Mgt., Ext.)

TOBACCO HORNWORM (*Manduca sexta*) - NORTH CAROLINA - One of 169 Bladen County fields sampled was at threshold level for hornworms. (Walker, Ext.)

## BENEFICIAL ORGANISMS AND THEIR ENEMIES

CHALKBROOD (*Ascosphaera apis*) - NORTH CAROLINA - This fungus disease detected for a state record March 3, 1976, in 5 Sampson County bee, *Apis mellifera*, colonies. Collection was made by N.C.D.A. personnel and determination made by U.S.D.A. Biological Environmental Lab. (Greene, N.C.D.A.)



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

During week of May 19-25, 1976

County Collected	# of Specimens	Host(s)	Stage(s)	Determination
<u>Man &amp; Animals</u>				
Scotland	1	Worm bed	All	Springtail, <i>Onychiurus</i> sp.
Wake	1	Worm bed	All	Springtail, <i>Onychiurus</i> sp.
<u>Southern Field Crops</u>				
Durham	2	Tobacco	Adults; and larvae	Tobacco thrips, <i>Frankliniella fusca</i> ; and seedcorn maggot, <i>Hylemya platura</i>
Johnston	3	Tobacco	Adults; adult; and larva	Tobacco thrips, <i>Frankliniella fusca</i> ; grain thrips, <i>Limothrips cerealium</i> ; and seedcorn maggot, <i>Hylemya platura</i>
<u>Grain, Soybeans and Forages</u>				
Forsyth	1	Corn	Larvae	prob. Corn root webworm, <i>Crambus</i> prob. <i>caliginosellus</i>
Lincoln	1	Red clover	All	Spider mite, <i>Tetranychus</i> sp.
Pender	1	Corn	Larvae	prob. Corn root webworm, <i>Crambus</i> prob. <i>caliginosellus</i>
Rowan	3	Corn	Adults	Grass thrips, <i>Anaphothrips obscurus</i> ; tobacco thrips, <i>Frankliniella fusca</i> ; and grain thrips, <i>Limothrips cerealium</i>
<u>Forestry, Ornamentals and Turf</u>				
Buncombe	1	American chestnut	Nymphs & adults	Treehopper, <i>Platycotis vittata</i>
Buncombe	2	Silver maple	Galls	Maple bladdergall mite, <i>Vasates quadripedes</i> ; and an undet. eriophyid gall mite
Buncombe	1	Rhododendron	Larva	undet. Noctuid moth
Burke	1	Oak	Adults	Bark beetle, <i>Pseudopityophthorus</i> sp.
Cumberland	1	Juniper	Old injury	undet. Spider mite
Cumberland	2	Primrose	Adults & eggs; and adult	prob. Twospotted spider mite, <i>Tetranychus</i> prob. <i>urticae</i> ; and privet mite, <i>Brevipalpus obovatus</i>
Duplin	3	Oak	---	Oak lace bug, <i>Corythucha arcuata</i> ; undet. aphid; and an undet. leafhopper
Guilford	2	Japanese holly	Mostly injury	prob. Southern red mite, prob. <i>Oligonychus ilicis</i> ; and latania scale, <i>Hemiberlesia lataniae</i>
Guilford	1	English ivy	All	prob. Twospotted spider mite, <i>Tetranychus</i> prob. <i>urticae</i>
Jackson	1	Dock	---	undet. Aphid
Randolph	1	Shore juniper	Injury	Juniper webworm, <i>Dichomeris marginella</i>
Rowan	1	Hackberry	Gall	undet. Psyllid
Wake	1	Azalea	Mostly injury	undet. Spider mite

Summary of Specimens Processed by Insect Clinic, N.C.S.U.  
 Page Two  
 Week of May 19-25, 1976

Forestry, Ornamentals and Turf (Cont.)

Wake	2	Azalea	---	Spider mite, prob. <i>Eotetranychus alitus</i> ; and azalea lace bug, <i>Stephanitis pyrioides</i>
Wake	2	Camellia	Adults & eggs; and injury	Tea scale, <i>Fiorinia theae</i> ; and pine mouse, <i>Pitymys pinetorum</i>
Wake	2	Hickory	Old galls; and nymphs	Phylloxeran, <i>Phylloxera</i> sp.; and an undet. leafhopper
Wake	1	Silver maple	Galls	Maple bladdergall mite, <i>Vasates quadripedes</i>
Wake	1	Poplar	Galls	Poplar petiole gall aphid, <i>Pemphigus populitransversus</i>
Wake	2	Roses	All	Flower thrips, <i>Frankliniella tritici</i> (2 separate samples)
Wilson	1	African violet	All	Cyclamen mite, <i>Steneotarsonemus pallidus</i>
<u>Fruit</u>				
Guilford	1	Grape	Larvae	prob. Grape flea beetle, <i>Altica</i> prob. <i>chalybea</i>
Jackson	1	Apple	---	undet. Aphid
Lee	1	Pecan	Larva	prob. Pecan weevil, <i>Curculio</i> prob. <i>caryae</i>
Montgomery	2	Grape	Larvae	Eightspotted forester moth, <i>Alypia octomaculata</i> ; and prob. grape flea beetle, <i>Altica</i> prob. <i>chalybea</i>
Wake	1	Cherry	Adult	Shothole borer, <i>Scolytus rugulosus</i>
<u>Wood Destroying</u>				
Bertie	1	In home	Alates	Subterranean termite, <i>Reticulitermes virginicus</i>
Caldwell	1	In home	Alates	Subterranean termite, <i>Reticulitermes virginicus</i>
Franklin	1	In home	Alates	Subterranean termite, <i>Reticulitermes virginicus</i>
Pitt	1	In home	Alates	Subterranean termite, <i>Reticulitermes virginicus</i>
<u>Household &amp; Industrial</u>				
Franklin	1	In home	Alates	Larger yellow ant, <i>Acanthomyops interjectus</i>
Iredell	1	Throughout home	Adults	Lesser mealworm, <i>Alphitobius diaperinus</i>
Wake	1	In home	Adult	Almond moth, <i>Cadra cautella</i>
Yadkin	2	In home	Larvae	Yellow mealworm, <i>Tenebrio molitor</i> ; and prob. black carpet beetle, <i>Attagenus</i> prob. <i>megatoma</i>
<u>Miscellaneous &amp; Accidental Household</u>				
Cleveland	1	On window sill	Adults	undet. Entomobryid springtail
Virginia state	2	In home	Adults	Wharf borer, <i>Nacordes melanura</i> ; and a longhorned beetle, <i>Elaphidion mucronatum</i>
Wake	1	In home	All?	undet. Entomobryid springtail
Yadkin	1	In home	Juvenile	Black rat snake, <i>Elaphe obsoleta</i>

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

Page Three

Week of May 19-25, 1976

Miscellaneous

Anson	3	Plowed field	Adults	Ground beetles: <i>Agonum</i> sp., <i>Amara</i> sp., and <i>Anisodactylus</i> sp.
Caldwell	1	In garden	Adult	Bot fly, <i>Cuterebra</i> sp.
Edgecombe	1	On willow oak	Nymphs	prob. Wheel bug, prob. <i>Arilus cristatus</i>
Granville	1	On clothes on line	Adults	Flower thrips, <i>Frankliniella tritici</i>
Haywood	1	In wound on yellow poplar	Larvae & pupae	Biting midge, prob. <i>Palpomyia</i> sp.
Johnston	2	Rotting sweet potatoes	Larvae	Sap beetle, <i>Carpophilus</i> sp.; and an undet. otitid fly
Lincoln	1	On willow oak	Pupae	Ladybird beetle, <i>Olla abdominalis</i>
Pasquotank	-	Light trap	Adults	Mixed insects
Pasquotank	-	Yellow pan trap	Adults	Mixed insects

JUN 7 1976

BIOLOGY DEPT

## entomology



June 4, 1976

TO: County Extension Chairmen 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

## CORN

FALL ARMYWORM (*Spodoptera frugiperda*) - NORTH CAROLINA - Larval damage observed on corn 28 May '76 in Holly Ridge area of Pender Co. Whorl damage severe in small, scattered spots over the field. Damage very similar to corn earworm injury. Third through 5th instar (stage of development) larvae were received for identification. Detection before mid July of this pest in our state is rare. (Greene, Ext.)

THRIPS (Primarily *Frankliniella fusca* & *Anoplothrips obscurus*) - NORTH CAROLINA - Thrips injury on corn blades drawing attention in most Piedmont counties. Damage reported 31 May - 4 June from 4 fields with 100% of the plants showing damage. Injury from this pest is rarely a problem in corn; however, seedlings (6" or less) may be stunted when poor growing conditions prevail. (Hunt, Ext.)

## TOBACCO

TOBACCO BUDWORM (*Heliothis virescens*) - NORTH CAROLINA - Surveys 31 May - 3 June in 187 Bladen County fields revealed 30% of the plants with budworms. The most frequently reported infestation level was 3%. However, 21 fields were at or above the threshold level. Controls adequate, but many farmers applied treatments before threshold reached. (Kirby, Reagan, Tobacco Pest Mgt., Ext.)



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

During week of May 26 - June 1, 1976

County Collected	# of Specimens	Host(s)	Stage(s)	Determination
<u>Man and Animals</u>				
Alleghany	1	In home	Adults	Bedbug, <i>Cimex adjunctus</i>
<u>Southern Field Crops</u>				
Madison	3	Burley tobacco	Adults; larva; and larvae	Slug, <i>Arion</i> prob. <i>subfuscus</i> ; armyworm, <i>Pseudaletia unipuncta</i> ; and black cutworm, <i>Agrotis ipsilon</i>
Wake	1	Tobacco	Larva	Stalk borer, <i>Papaipema nebris</i>
<u>Grain, Soybeans and Forages</u>				
Caldwell	2	Corn	Adults	Grass thrips, <i>Anaphothrips obscurus</i> ; and tobacco thrips, <i>Frankliniella fusca</i>
Davie	1	Corn	Adults	Grass thrips, <i>Anaphothrips obscurus</i>
Pender	1	Corn	Larvae	undet. Cutworm
Robeson	2	Soybeans	Mostly larvae; and adult	Thrips, <i>Sericothrips variabilis</i> ; and Mexican bean beetle, <i>Epilachna varivestis</i>
Stanly	2	Corn	Adults	Grass thrips, <i>Anaphothrips obscurus</i> ; and tobacco thrips, <i>Frankliniella fusca</i>
<u>Forestry, Ornamentals and Turf</u>				
Anson	1	Milkweed	Adults	Leaf beetle, <i>Chrysochus auratus</i>
Currituck	2	Camellia	All; and injury	Tea scale, <i>Fiorinia theae</i> ; and prob. brown soft scale, prob. <i>Coccus hesperidum</i>
Currituck	1	Camellia, Chinese holly & yew	Injury	Soft scale, <i>Pulvinaria</i> sp. or spp.
Currituck	1	Chinese holly	All	Camellia scale, <i>Lepidosaphes camelliae</i>
Edgecombe	1	Rhododendron	Injury	Bark beetle, <i>Xyleborus</i> sp.
Forsyth	2	Silver maple	Galls; and all	Maple bladdergall mite, <i>Vasates quadripedes</i> ; and woolly alder aphid, <i>Prociphilus tessellatus</i>
Haywood	1	Concolor fir	Larvae	Weevil, <i>Pissodes</i> sp.
Haywood	1	Spruce	---	Aphid, <i>Cinara</i> sp.
Iredell	1	Hickory	Old galls	Phylloxeran, <i>Phylloxera</i> sp.
Lenoir	2	Sycamore	Injury; and larvae	prob. a Nepticulid moth, prob. <i>Nepticula platanelia</i> ; and an undet. pyralid moth

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

Page Two

Week of May 26 - June 1, 1976

Forestry, Ornamentals and Turf (Cont.)

Lincoln	4	Rose	---	Twospotted spider mite, <i>Tetranychus urticae</i> ; flower thrips, <i>Frankliniella tritici</i> ; redbanded leafroller, <i>Argyrotaenia velutinana</i> ; and an undet. geometrid moth
Mecklenburg	1	Silver maple	Galls	Maple bladdergall mite, <i>Vasates quadripedes</i>
Mecklenburg	1	Rhododendron	Adults	Plant bug, <i>Rhinocapsus</i> sp.
Moore	1	Schefflera	All	Spider mite, <i>Tetranychus</i> prob. <i>tenuis</i>
Orange	1	Hollyhock	All	Twospotted spider mite, <i>Tetranychus urticae</i>
Wake	1	Aucuba	All	Privet mite, <i>Brevipalpus obovatus</i>
Wake	1	Boxwood	Injury	Boxwood leafminer, <i>Monarthropalpus buxi</i>
Wake	1	Hemlock	Mostly injury	prob. Hemlock rust mite, prob. <i>Nalepella tsugifoliae</i>
Wake	1	Chinese holly	Dead adults	Tea scale, <i>Piorinia theae</i>
Wake	1	Zoysia grass	Larva	Billbug, <i>Sphenophorus</i> sp.
Wake	1	Rhododendron	Injury	Rhododendron lace bug, <i>Stephanitis rhododendri</i>
Wake	1	Rose	All	Flower thrips, <i>Frankliniella tritici</i>
Wake	1	Schefflera	Injury	undet. Spider mite
Wake	1	Spider plant	All	prob. Hemispherical scale, <i>Saissetia</i> prob. <i>coffea</i>
<u>Fruit</u>				
Chatham	1	Apple	Injury	undet. Aphid
Haywood	2	Strawberry	All; and larva	Spider mite, <i>Tetranychus atlanticus</i> ; and prob. a gelechiid moth, prob. <i>Aristotelia</i> sp.
Johnston	1	Pecan	Injury	Pecan leafroll mite, <i>Aceria caryae</i>
Pasquotank	1	Apple	Larvae	Dogwood borer, <i>Synanthedon scitula</i>
<u>Vegetables</u>				
Franklin	1	Snap beans	Larvae	Seedcorn maggot, <i>Hylemya platura</i>
Franklin	1	Peas	---	undet. Aphid
Harnett	1	Snap beans	Larva	Fuller rose beetle, <i>Pantomorus cervinus</i>
Montgomery	1	Irish potato	Larvae	Colorado potato beetle, <i>Leptinotarsa decemlineata</i>
Wake	1	Tomato	---	undet. Aphid
<u>Wood Destroying</u>				
Forsyth	1	Emerged from wall in home	Adult	Horntail wasp, <i>Sirex</i> sp.
Guilford	1	Picnic table	Larva	Carpenter bee, <i>Xylocopa virginica</i>

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

Page Three

Week of May 26 - June 1, 1976

Household and Industrial

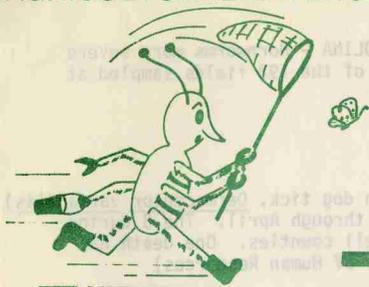
Moore 1 In home Adults undet. Clothes moth

Miscellaneous and Accidental Household

Alleghany 1 In home Adults undet. Sowbug  
 Durham 1 In home All? undet. Springtail

Miscellaneous

Altamance 2 In pasture Adults Trapdoor spider, *Ummidia* sp.; and wolf spider, *Lycosa* sp.  
 Cabarrus 1 "Frame of Larvae undet. Fungus gnat  
                   access door  
                   "                  "  
                   "                  "  
 Granville 1 On base of oak Nymph Wheel bug, *Ariulus cristatus*  
 Pasquotank 1 Golf course Workers Ant, *Lasius neoniger*  
 Pasquotank - Light trap Adults undet. mostly Moths  
 Pasquotank - Yellow pan Adults undet. mixed Insects  
                   trap  
 Pitt 1 On shrubbery Young nymphs undet. Stink bug  
 Pitt 1 In yard Workers Ant, *Pheidole* sp.  
 Wake 1 In yard Alates Larger yellow ant, *Acanthomyops interjectus*  
 Wake 1 On woodpile Queen Yellowjacket wasp, *Vespa squamosa*  
 Wilson 1 In field Queen Ant, *Camponotus americanus*



# entomology

RECEIVED

June 11, 1976

JUN 14 1976

TO: County Extension Chairmen and Other Interested Persons

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

ENTOMOLOGY DEPT.

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

FALL ARMYWORM (Spodoptera frugiperda) - NORTH CAROLINA - Larval damage observed this week in another Coastal Plain county on corn. Damage has been observed in Pender and Wilson counties to date. Scattered plants infested in the 10-acre Wilson County field; treatment at present unwarranted. Fall armyworm infestations not usually expected in N. C. until mid-July. (Hunt, Ext.)

BILLBUG (Prob. Sphenophorus callosus) - NORTH CAROLINA - Larval injury reported from 6 southern Coastal Plain counties this week. Infestations to 80% of the stalks reported from three 15-acre fields in Duplin, Bladen and Robeson counties (1 field per county). (Wilkins, Hunt, Ext.)

TOBACCO

TOBACCO BUDWORM (Heliothis virescens) - NORTH CAROLINA - Surveys 7-10 June in 193 Bladen County fields revealed 13% of the fields at threshold, a 2% rise from last week. The most frequently reported infestation level was 7.5%, a rise of 4.5% from last week. The highest infestation level detected was 20%.

In Lenoir County, 112 fields were surveyed 7-10 June indicating less than 1% of the fields at threshold. Infestation very low for this time of year. Controls good in both counties. (Kirby, Harper, Reagan, Tob. Pest Mgt., Ext.)



TOBACCO HORNWORM (Manduca sexta) - NORTH CAROLINA - Hornworms more severe this year than last year in Bladen County with 5% of the 193 fields sampled at threshold. (Kirby, Reagan, Tob. Pest Mgt., Ext.)

MAN AND ANIMALS

ROCKY MOUNTAIN SPOTTED FEVER (Vector American dog tick, Dermacentor variabilis) NORTH CAROLINA - There have been 4 reported cases through April. The 3 during April were reported from Moore, Iredell and Caldwell counties. One death has also been reported from Rocky Mount. (N. C. Dept. of Human Resources)

LATE NOTE

WHITEFRINGED BEETLE (Graphognathus) - NORTH CAROLINA - Larval damage reported from a 1.5-acre Edgecombe County tobacco field. Roughly 40% of the plants in 1/5 of the field heavily damaged. No legal chemical controls are available at present. (Warren, Reagan, Ext.)

Subject: Insect Survey Report

NORTH CAROLINA COOPERATIVE ECONOMIC INSECT SURVEY AND DETECTION REPORT

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

Raleigh, North Carolina

CORN

FALL ARMYWORM (Spodoptera frugiperda) - NORTH CAROLINA - Larval damage observed this week in another Coastal Plain county on corn. Damage has been observed in Pender and Wilson counties to date. Scattered plants infested in the 10-acre Wilson County field; treatment at present unwarrented. Fall armyworm infestations not usually expected in N. C. until mid-July. (Hunt, Ext.)

BILBUB (prob. Sphenophorus celticus) - NORTH CAROLINA - Larval injury reported from 5 southern Coastal Plain counties this week. Infestations to 80% of the stalks reported from three 15-acre fields in Duplin, Bladen and Robeson counties (1 field per county). (Wilkins, Hunt, Ext.)

TOBACCO

TOBACCO BUDWORM (Heliothis virescens) - NORTH CAROLINA - Surveys 7-10 June in 193 Bladen County fields revealed 13% of the fields at threshold, a 3% rise from last week. The most frequently reported infestation level was 7.5% a rise of 4.5% from last week. The highest infestation level detected was 20%.

In Lenoir County, 112 fields were surveyed 7-10 June indicating less than 1% of the fields at threshold. Infestation very low for this time of year. Control good in both counties. (Kirby, Harper, Reagan, Tob. Pest Mgt., Ext.)



SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.  
 During week of June 2-8, 1976

County Collected	# of Specimens	Host(s)	Stage(s)	Determination
<u>Man and Animals</u>				
Lee	1	Child	Adult	Lone star tick, <i>Amblyomma americanum</i>
<u>Southern Field Crops</u>				
Duplin	5	On tobacco, prob. not injuring Tobacco	Adults	Mixed insects
Edgecombe	1	Tobacco	Larvae	Whitefringed beetle, <i>Graphognathus</i> sp.
<u>Grains, Soybeans and Forages</u>				
Alamance	4	Corn	Adults	Grass thrips, <i>Anaphothrips obscurus</i> ; tobacco thrips, <i>Frankliniella fusca</i> ; thrips, <i>Aptinothrips rufus</i> ; and thrips, <i>Plesiothrips perplexeus</i>
Duplin	2	Corn	Adults; and young larvae	Spring rose beetle, <i>Strigoderma arboricola</i> ; and billbug, <i>Sphenophorus</i> sp.
Halifax	1	Corn	Larva & adult	Corn earworm, <i>Heliothis zea</i>
Hertford	1	Corn	Young larvae	Corn earworm, <i>Heliothis zea</i>
Lincoln	5	Corn	---	Grass thrips, <i>Anaphothrips obscurus</i> ; tobacco thrips, <i>Frankliniella fusca</i> ; thrips, <i>Frankliniella tenuicornis</i> ; thrips, <i>Plesiothrips perplexeus</i> ; and armyworm, <i>Pseudaletia unipuncta</i>
Orange	3	Corn	Adults	Grass thrips, <i>Anaphothrips obscurus</i> ; tobacco thrips, <i>Frankliniella fusca</i> ; and thrips, <i>Frankliniella tenuicornis</i>
Sampson	2	Corn	Adults; and larva	Tobacco thrips, <i>Frankliniella fusca</i> ; and prob. corn root webworm, <i>Crambus</i> prob. <i>caliginosellus</i>
Surry	2	Corn	Adults	Grass thrips, <i>Anaphothrips obscurus</i> ; and thrips, <i>Plesiothrips perplexeus</i>
<u>Forestry, Ornamentals and Turf</u>				
Bladen	1	Weeds	Adults	Flea beetle, <i>Altica</i> sp.
Burke	1	Holly	Larvae	undet. Clearwing moth
Cumberland	2	Pine	Adults	Bark beetle, <i>Ips calligraphus</i> ; and pinhole borer, <i>Platypus flavicornis</i>
Durham	1	"Liriope and other plants"	Adults	Larger elm leaf beetle, <i>Monocesta coryli</i>
Gaston	1	Juniper	All	Spruce spider mite, <i>Oligonychus ununguis</i>

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

Page Two

Week of June 2-8, 1976

## Forestry, Ornamentals and Turf (Cont.)

Guilford	1	Silver maple	All?	Woolly alder aphid, <i>Prociphilus tessellatus</i>
Harnett	1	Rose	Adult	Flower thrips, <i>Frankliniella tritici</i>
Iredell	1	Oak	Larvae	Leafminer moth, <i>Cameraria</i> sp.
Johnston	1	Marigold	All	Twospotted spider mite, <i>Tetranychus urticae</i>
Johnston	1	Schefflera	Mostly injury	prob. Twospotted spider mite, <i>Tetranychus</i> prob. <i>urticae</i>
Lenoir	1	Rose	Mostly injury	prob. Twospotted spider mite, <i>Tetranychus</i> prob. <i>urticae</i>
Stanly	2	African violet	All	Cyclamen mite, <i>Steneotarsonemus pallidus</i> ; and undet. mealybug
Transylvania	1	Rhododendron	Larvae	Flea beetle, <i>Altica</i> sp.
Wake	3	Aucuba	All	Twospotted spider mite, <i>Tetranychus urticae</i> ; privet mite, <i>Brevipalpus obovatus</i> ; and ivy scale, <i>Aspidiotus hederæ</i>
Wake	1	Dogwood	Larvae	prob. Dogwood twig borer, <i>Oberea</i> prob. <i>tripunctata</i>
Wake	4	Day lily	Adults	Tobacco thrips, <i>Frankliniella fusca</i> ; flower thrips, <i>Frankliniella tritici</i> ; thrips, <i>Frankliniella hemerocallis</i> ; and thrips, <i>Taeniothrips vulgatissimus</i>
Wake	2	Red maple	Adults & crawlers	Gloomy scale, <i>Melanaspis tenebricosa</i> ; and lecanium scale, <i>Lecanium</i> prob. <i>nigrofasciatum</i>
Wake	1	Oak	Galls	Cynipid gall wasp, <i>Dryocosmus floridensis</i>
Wake	1	Pin oak	Adults	Obscure scale, <i>Melanaspis obscura</i>
Wake	1	Piggyback plant	All	prob. Twospotted spider mite, <i>Tetranychus</i> prob. <i>urticae</i>
Wake	1	Rose	All	prob. Twospotted spider mite, <i>Tetranychus</i> prob. <i>urticae</i>
Wake	1	Wisteria	Adults	Plant bug, <i>Lopidea reuteri</i>
<u>Fruits</u>				
Bertie	1	Strawberry	Adults	undet. Whitefly
Chatham	1	Cherry	Adult	Shothole borer, <i>Scolytus rugulosus</i>
Henderson	1	Apple	Larva	undet. Geometrid moth
Johnston	1	Blackberry	All	Spider mite, <i>Eotetranychus clitus</i>
Madison	1	Grape	Larvae	prob. Grape flea beetle, <i>Altica</i> prob. <i>chalybea</i>
Madison	1	Strawberry	Mostly injury	Spider mite, <i>Tetranychus atlanticus</i>
Mecklenburg	1	Filbert	Adult	Scarab beetle, <i>Pachystethus</i> sp.
Wake	1	Apple	Larva	Underwing moth, <i>Catocala grynea</i>

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

Page Three

Week of June 2-8, 1976

Vegetables

Bladen	1	Onion	All?	Onion thrips, <i>Thrips tabaci</i>
Burke	1	Snap beans	---	undet. Aphid
Duplin	1	Beans	Adults	Bean leaf beetle, <i>Ceratomyza trifurcata</i>
Jones	1	String beans	All?	Spider mite, <i>Tetranychus lobosus</i>
Union	1	Broccoli	Larva	Diamondback moth, <i>Plutella xylostella</i>
Wake	1	Cabbage	---	undet. Aphid

Wood Destroying

New Hanover	2	In homes	Alates	Drywood termites, <i>Incisitermes snyderi</i> (2 separate samples)
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Household & Industrial

Bladen	1	In home	Adults	Almond moth, <i>Cadra cautella</i>
Henderson	1	In home	Adults	undet. Humpbacked fly
Mecklenburg	1	In home	Adults	Indian meal moth, <i>Plodia interpunctella</i>
New Hanover	1	In home	Adults	prob. Black carpet beetle, <i>Attagenus prob. megatoma</i>
New Hanover	1	Fish food, dried beans	Adults	Cigarette beetle, <i>Lasioderma serricorne</i>
Tyrrell	2	In clothes closet	Adults	Cabinet beetle, <i>Trogoderma</i> sp.; and cowpea weevil, <i>Callosobruchus maculatus</i>

Miscellaneous & Accidental Household

Guilford	1	In apart- ments	All?	undet. Springtail
Pitt	1	In home	Adults	undet. Sphaerocerid fly

Miscellaneous

Cumberland	1	In pine	Adult	Ostomid beetle, <i>Tennochila</i> sp.
Durham	1	In African violet soil	All?	undet. Earthworm
Iredell	1	On side of house	All	Baldfaced hornet, <i>Vespa maculata</i>
Lenoir	1	In yard	Queen	Ant, <i>Camponotus americanus</i>
Madison	1	On grape	Young nymphs	undet. Stink bug
Pasquotank	-	Light trap	Adults	undet. Moths & beetles
Pasquotank	-	Yellow pan trap	Adults	undet. Thrips & flies
Randolph	1	On pecan trunk	Adults	Lesser mealworm, <i>Alphitobius diaperinus</i>
Stanly	1	"...found over several homes."	Adults	Burrower bug, <i>Sehirus cinctus</i>
Tyrrell	1	At base of corn stalk	Adult	Ground beetle, <i>Bradyoellus</i> sp.



entomology

June 18, 1976

RECEIVED

TO: County Extension Chairmen and Other Interested Persons

JUN 21 1976

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

ENTOMOLOGY DEPT.

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

COMMON STALK BORER (Papaipema nebris) - NORTH CAROLINA - Approximately 10% of a 20-acre Rockingham Co. no-till corn field was heavily infested with larvae feeding in whorl. Controls were necessary in areas of heavy weed residues. Reports of this pest were also received this week from Lincoln and Wake counties. Damage usually restricted to corn near heavy weed growth. (Shoulars, Stoudemire, Ext.)

CORN ROOT APHID (Aphis maidiradicis) - NORTH CAROLINA - A severe infestation of corn root aphids was observed in a 15-acre Johnston Co. no-till corn field, resulting in 40% of the plants dead or stunted. Counts revealed 80% of the plants infested. (Woodard, Ext.)

SOYBEANS

WIREWORM (Conoderus sp.) - NORTH CAROLINA - Severe wireworm damage to germinating and seedling soybeans reported this week from Beaufort Co. Approximately 5 acres replanted. This is extremely rare in N.C. (Van Duyn, Ext.)

VEGETABLES

PICKLEWORM (Diaphania nitidalis) - NORTH CAROLINA - Larval damage observed on squash fruit 16 June at Castle Hayne. This is first detection of the season and approximately 2 weeks ahead of normal. (Smith, Dept. of Ent.)



## TOBACCO

TOBACCO BUDWORM (*Heliothis virescens*) - NORTH CAROLINA - Surveys 14-17 June in 188 Bladen Co. fields revealed 2 of the fields at threshold, a 12% decline from last week. The most frequently reported infestation level was 4%. The highest infestation level detected was 10%. Controls good in Bladen Co. (Kirby, Reagan, Tob. Pest Mgt., Ext.)

TOBACCO HORNWORM (*Manduca sexta*) - NORTH CAROLINA - None of the 188 Bladen Co. fields sampled reached threshold. The highest infestation level detected was 8%.

One of the 229 Lenoir Co. fields sampled reached threshold. The highest infestation level detected was 10%. (Kirby, Harper, Reagan, Tob. Pest Mgt., Ext.)

## MAN AND ANIMALS

ROCKY MOUNTAIN SPOTTED FEVER (Vector American dog tick, *Dermacentor variabilis*) - NORTH CAROLINA - Reported cases of the disease during 1976 increased during May to a total of 24. During 1976, 2 deaths have been recorded, one each from Ahoskie and Rocky Mount. (N.C. Dept. of Human Resources)

## BENEFICIAL INSECTS

HONEY BEES (*Apis mellifera*) - NORTH CAROLINA - The total 1976 honey production is expected to be down about 20% in N.C. due to the April freezes which severely reduced honey sources, particularly gallberry. Production in the Piedmont is up, but not sufficiently to offset the Coastal Plain reductions. The Mountain production about same as 1975. (Ambrose, Ext.)

CORN ROOT WORM (*Diabrotica undecimpunctata*) - NORTH CAROLINA - A severe infestation of corn root worms was observed in a 18-acre Johnston Co. corn field, resulting in 80% of the plants dead or stunted. Counts revealed 80% of the plants infested. (Woodard, Ext.)

WIREWORM (*Conoderus* sp.) - NORTH CAROLINA - Severe wireworm damage to germinating and seedling soybeans reported this week from Beaufort Co. Approximately 2 acres infested. This is extremely rare in N.C. (Van Duzen, Ext.)

PINKWORM (*Diatraea nitidiflora*) - NORTH CAROLINA - Leafy damage observed on peach trees in June at Castle Hayne. This is first detection of the season and approximately 2 weeks ahead of normal. (Smith, Dept. of Ent.)



SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.  
 During week of June 9-15, 1976

County Collected	# of Specimens	Host(s)	Stage(s)	Determination
<u>Man and Animals</u>				
Beaufort	1	Worm bed	All	Springtail, <i>Onychiurus</i> sp.
Bladen	1	Human	Adults	Lone star tick, <i>Amblyomma americanum</i>
Columbus	2	Worm bed	All	Springtail, <i>Onychiurus</i> sp.; and black scavenger fly, <i>Scatopse fuscipes</i>
Rowan	1	Child	Adult	American dog tick, <i>Dermacentor variabilis</i>
<u>Southern Field Crops</u>				
Alamance	1	In tobacco field	Adult	Ground beetle, <i>Anisotarsus</i> sp.
<u>Grains, Soybeans and Forages</u>				
Cleveland	-	Corn	Old injury	undet. Thrips
Duplin	1	Corn	Young larvae	Billbug, <i>Sphenophorus</i> sp.
Guilford	1	Corn	Adults	Grass thrips, <i>Anaphothrips obscurus</i>
Lee	1	In soybean field	Adults	Spring rose beetle, <i>Strigoderma arboricola</i>
Lincoln	1	Corn	Larvae	Stalk borer, <i>Papaipema nebris</i>
Sampson	2	Corn	Larvae	Corn earworm, <i>Heliothis zea</i> ; and European corn borer, <i>Ostrinia nubilalis</i>
Wilson	1	In corn field	Adult	Ground beetle, <i>Anisotarsus</i> sp.
<u>Forestry, Ornamentals and Turf</u>				
Bladen	2	Aucuba	All	Privet mite, <i>Brevipalpus obovatus</i> ; and ivy scale, <i>Aspidiotus hederæ</i>
Brunswick	1	Spartina	Larvae	Ctenuchid moth, <i>Cisseps</i> prob. <i>fulvicollis</i>
Chatham	1	Aucuba	All	prob. Privet mite, <i>Brevipalpus</i> prob. <i>obovatus</i>
Cumberland	1	Lawn	All?	undet. Ground pearl
Durham	1	Hickory	Old galls	Phylloxeran, <i>Phylloxera</i> sp.
Durham	1	Iris	Larva	Iris borer, <i>Macronoctua omusta</i>
Granville	1	Elm	Adults	Larger elm leaf beetle, <i>Monocesta coryli</i>
Haywood	2	Juniper	Mostly injury; and all	prob. Spruce spider mite, <i>Oligonychus</i> prob. <i>ununguis</i> ; and an undet. eriophyid bud mite
Jones	1	Black cherry	Larvae	Geometrid moth, prob. <i>Hydria undulata</i>
Lenoir	2	Oak	---; and larva	Aphid, prob. <i>Stegophylla</i> sp.; and a noctuid moth, <i>Acrioneta</i> sp.

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

Page Two

Week of June 9-15, 1976

Forestry, Ornamentals and Turf (Cont.)

Montgomery	1	Azalea	All	Spider mite, <i>Eotetranychus clitus</i>
Montgomery	1	Willow oak	All	undet. Spider mite
Orange	1	Rose	All	Twospotted spider mite, <i>Tetranychus urticae</i>
Orange	1	Weeping willow	Galls	undet. Eriophyid gall mite
Pasquotank	1	Oak	Old adults	Lecanium scale, <i>Lecanium</i> sp.
Swain	1	Maple	All?	Woolly alder aphid, <i>Prociphilus tessellatus</i>
Swain	2	Willow	Adults	Imported willow leaf beetle, <i>Plagiodera versicolora</i> ; and a leaf beetle, <i>Chrysomela</i> sp.
Tennessee state	1	Colorado blue spruce	Mostly injury	Spruce spider mite, <i>Oligonychus ununguis</i>
Wake	2	Boxwood	All; and old injury	undet. Eriophyid gall mite; and boxwood leafminer, <i>Monarthropalpus buxi</i>
Wake	1	Clematis	All	undet. Aphid
Wake	2	Clematis	---; and all	undet. Aphid; and flower thrips, <i>Frankliniella tritici</i>
Wake	1	Fatsia	Old injury	undet. Spider mite
Wake	1	Gloxinia	All	undet. Mealybug
Wake	1	Chinese holly	Dead adults	Tea scale, <i>Fiorinia theae</i>
Wake	1	Ligustrum	Adults	Ligustrum weevil, <i>Ochromera ligustri</i>
Wake	1	Day lily	Adult	Thrips, <i>Frankliniella hemerocallis</i>
Wake	1	Piggyback plant	Adult	Thrips, <i>Sericothrips variabilis</i>
<u>Fruits</u>				
Camden	1	Pecan	Larva	Underwing moth, <i>Catocala</i> sp.
Orange	3	Apple	---	Schoene spider mite, <i>Tetranychus schoeni</i> ; undet. aphid; and an undet. leafroller moth
Wake	3	Strawberry	All; all?; and ---	Thrips, <i>Sericothrips variabilis</i> ; undet. whitefly; and undet. aphid
<u>Vegetables</u>				
Duplin	1	Southern peas	Larvae	Serpentine leafminer, <i>Liriomyza</i> sp.
Jones	2	Tomato	Nymphs; and ---	undet. Whitefly; and undet. aphid
Wake	2	Tomato	All	Spider mites, <i>Tetranychus</i> spp.
Wilkes	1	Snap beans	All	prob. Twospotted spider mite, <i>Tetranychus</i> prob. <i>urticae</i>

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

Page Three

Week of June 9-15, 1976

Wood Destroying

Johnston	1	Porch post	Adults	Oldhouse borer, <i>Hylotrupes bajulus</i>
Stanly	1	Studs in home	Adults	Deathwatch beetle, <i>Xyletinus</i> sp.

Household & Industrial

Caldwell	1	On carpet & clothing in home	Adults	prob. Black carpet beetle, <i>Attagenus</i> prob. <i>megatoma</i>
Durham	1	Wool carpet	All	Casemaking clothes moth, <i>Tinea pellionella</i>
Henderson	1	Old bee comb	Larvae	Larder beetle, <i>Dermestes lardarius</i>
Orange	1	In home	Adult	Smokybrown cockroach, <i>Periplaneta fuliginosa</i>
Rutherford	1	In home	Adults	Moth fly, <i>Psychoda alternata</i>
Surry	1	Attic vent	Feces	undet. Bat
Wake	1	Torula yeast	All	undet. Minute brown scavenger beetle
Wake	1	In outer wall of home	Nest debris	undet. Ant

Miscellaneous & Accidental Household

Nash	1	In storage room	Adult	Pisaurid spider, <i>Dolomedes</i> sp.
<u>Miscellaneous</u>				
Alamance	1	---	Larva	Tiger swallowtail butterfly, <i>Papilio glaucus</i>
Buncombe	1	On concrete apron near lawn	All	Springtail, prob. <i>Proisotoma</i> sp.
Catawba	1	On peach	Adult	Soldier beetle, <i>Chauliognathus</i> sp.
Cleveland	1	Around well	Alates	Ant, <i>Camponotus americanus</i>
Cleveland	1	Under potato vines	Cocoons	Ant, prob. <i>Formica</i> sp.
Guilford	1	On arborvitae	Nymph	Boxelder bug, <i>Leptocoris trivittatus</i>
Orange	1	Near edge of garden	Workers	Ant, <i>Formica subsericea</i>
Pasquotank	-	Light trap	Adults	undet. Moths & beetles
Pasquotank	-	Yellow pan trap	Adults	undet. Bugs, flies & wasps
Swain	1	On willow	Adults	Ladybird beetle, <i>Neoharmonia venusta</i>
Wake	1	In lawn	Queen	Ant, <i>Camponotus americanus</i>



# entomology

RECEIVED

JUN 28 1976

June 25, 1976

TO: County Extension Chairmen 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

## COTTON

THRIPS (Frankliniella fusca and F. tritici) - NORTH CAROLINA - Severe thrips injury observed in 5 problem Cleveland County cotton fields where no systemic insecticide was used. Some fields were observed in which replanting had occurred due to a combination of thrips injury and poor growing conditions. (Robertson, Ext.)

## TOBACCO

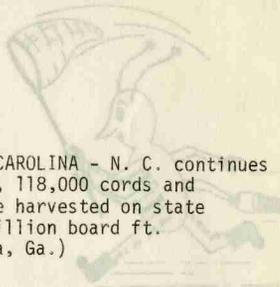
TOBACCO BUDWORM (Heliothis virescens) - NORTH CAROLINA - Surveys 21-24 June in 193 Bladen County fields revealed 2 of the fields at threshold. The most frequently reported infestation level was 5%. The highest infestation level detected was 13%. Controls good. (Kirby, Reagan, Tob. Pest Mgt., Ext.)

TOBACCO HORNWORM (Manduca sexta) - NORTH CAROLINA - One of the 193 Bladen County fields sampled reached threshold. The highest infestation level detected was 13%. The most frequently reported infestation level was 3%.

One of the 172 Lenoir County fields sampled reached threshold. (Kirby, Harper, Reagan, Tob. Pest Mgt., Ext.)

## FOREST AND SHADE

SOUTHERN PINE BEETLE (*Dendroctonus frontalis*) - NORTH CAROLINA - N. C. continues to lead the southeast in volume salvaged. July-March 1976, 118,000 cords and 46 million board ft. of "beetle killed" forest products were harvested on state and federal lands. This compares to 184,000 cords and 71 million board ft. salvaged during the same period of 1975. (U.S.F.S., Atlanta, Ga.)



JUN 28 1976

June 28, 1976

TO: County Extension Chairman 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

COTTON

THRIPS (*Frankliniella fusca* and *F. tritici*) - NORTH CAROLINA - Severe thrips injury observed in 5 plots in Cleveland County cotton fields where no systemic insecticide was used. Some fields were observed in which reporting had occurred due to a combination of thrips injury and poor growing conditions. (Robertson, Ext.)

TOBACCO

TOBACCO BUDWORM (*Heliothis virescens*) - NORTH CAROLINA - Surveys 27-28 June in 197 Bladen County fields revealed 2 of the fields at threshold. The most frequently reported infestation level was 2%. The highest infestation level detected was 13%. Control good. (Kirby, Resgmt. Top. Pest Mgt., Ext.)

TOBACCO HORNWORM (*Manduca sexta*) - NORTH CAROLINA - One of the 197 Bladen County fields sampled reached threshold. The highest infestation level detected was 12%. The most frequently reported infestation level was 2%.

One of the 122 Lenoir County fields sampled reached threshold. (Kirby, Resgmt. Resgmt. Top. Pest Mgt., Ext.)



SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.  
 During week of June 16-22, 1976

County Collected	# of Specimens	Host(s)	Stage(s)	Determination
<u>Man and Animals</u>				
Durham	1	Biting people	Adults	Flower thrips, <i>Frankliniella tritici</i>
Jackson	1	Honey comb	Larvae	Greater wax moth, <i>Galleria mellonella</i>
<u>Southern Field Crops</u>				
Haywood	2	Tobacco	Larvae	Black cutworm, <i>Agrotis ipsilon</i> ; and wireworm, <i>Melanotus</i> sp.
Madison	1	Tobacco	Larvae	Variegated cutworm, <i>Peridroma saucia</i>
<u>Grains, Soybeans and Forages</u>				
Buncombe	2	Alfalfa	Adults; and larvae	Tobacco thrips, <i>Frankliniella fusca</i> ; and an undet. agromyzid leafminer fly
Forsyth	2	Corn	Larvae	Corn earworm, <i>Heliothis zea</i> ; and European corn borer, <i>Ostrinia nubilalis</i>
Johnston	6	Corn	---	Thrips: <i>Frankliniella tenuicornis</i> , <i>Haplothrips graminis</i> , <i>Plesiothrips perplexus</i> ; corn earworm, <i>Heliothis zea</i> ; wireworm, <i>Conoderus lividus</i> ; antique sap beetle, <i>Carpophilus antiquus</i>
Rockingham	1	Corn	Larvae	Stalk borer, <i>Papaipema nebris</i>
<u>Forestry, Ornamentals and Turf</u>				
Alexander	1	Lawn	Larvae	Sod webworm, <i>Acrolophus</i> sp.
Ashe	1	Maple	---	Woolly alder aphid, <i>Prociphilus tessellatus</i>
Avery	1	Rhododendron	Larva	Flea beetle, <i>Altia</i> sp.
Bladen	1	Shore juniper	Adults	Spruce spider mite, <i>Oligonychus ununguis</i>
Bladen	2	Pitcher plants	---	undet. <i>Olethreutid</i> moth; and a sphecid wasp, <i>Isodontia mexicana</i>
Craven	1	Azalea	Adults	Japanese weevil, <i>Pseudocneorhinus bifasciatus</i>
Craven	2	Pine	Old injury; and larvae & pupae	undet. Spider mite; Nantucket pine tip moth, <i>Rhyacionia frustrana</i>
Edgecombe	1	White pine	---	prob. Pine bark aphid, prob. <i>Pineus strobi</i>
Forsyth	1	Elm	Adults	Larger elm leaf beetle, <i>Monocesta coryli</i>
Graham	1	Maple	---	Woolly alder aphid, <i>Prociphilus tessellatus</i>
Granville	1	Boxwood	Old injury	Boxwood leafminer, <i>Monarthropalpus buxi</i>
Guilford	1	Sunflowers	Adult	Coreid bug, <i>Acanthocephala femorata</i>
Halifax	2	Boxwood	Old injury; and adults	undet. Spider mite; and Japanese wax scale, <i>Ceroplastes ceriferus</i>

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

Page Two

Week of June 16-22, 1976

Forestry, Ornamentals and Turf (Cont.)

Henderson	1	Silver maple	---	Woolly alder aphid, <i>Prociphilus tessellatus</i>
Johnston	1	Geranium	All	White peach scale, <i>Pseudaulacaspis pentagona</i>
Lenoir	1	Mushrooms	Larvae	undet. prob. Darkwinged fungus gnat
Pitt	1	White pine	---	White pine aphid, <i>Cinara strobil</i>
Rowan	2	Gardenia	Mostly injury	undet. Whitefly and aphid
South Carolina	1	White pine	Larvae	prob. White pine weevil, <i>Pissodes prob. strobil</i>
Stanly	1	White pine	All	prob. Pine bark aphid, prob. <i>Pineus strobil</i>
Vance	1	Clematis	Injury	undet. Aphid
Wake	1	Euonymus	Adults	Euonymus scale, <i>Unaspis euonymi</i>
Wake	2	False aralia	All	prob. Twospotted spider mite, <i>Tetranychus</i> prob. <i>urticae</i> ; and a soft scale, <i>Saissetia</i> prob. <i>miranda</i>
Wake	1	Elm	Adult	Weevil, <i>Magdalis</i> sp.
Wake	1	Hickory	Larvae	Thrips, <i>Liothrips</i> sp.
Wake	1	Silver maple	All?	Carpenter ant, <i>Camponotus nearcticus</i>
Wake	1	Sycamore	Adults	Sycamore lace bug, <i>Corythucha ciliata</i>
Wake	1	Violet	All	Twospotted spider mite, <i>Tetranychus urticae</i>
Wake	1	Wax-myrtle	Larvae	Olethreutid leaf-tier moth, <i>Strepsicrates smithiana indentana</i>
Wilkes	1	Maple	Cocoons	Puss caterpillar, <i>Megalopyge opercularis</i>
<u>Fruits</u>				
Gaston	1	Apple	Injury	undet. Aphid
Wake	2	Pecan	Larvae	False powderpost beetle, <i>Xylobiops basilaris</i> ; and a longhorned beetle, prob. <i>Elaphidion mucronatum</i>
Wake	1	Greenhouse strawberry	Mostly injury	Spider mite, <i>Tetranychus</i> prob. <i>atlanticus</i>
<u>Vegetables</u>				
Sampson	1	In pepper field	Young larva	undet. Weevil
Scotland	1	Beans, okra, peas & Irish potato	Larvae	Whitefringed beetle, <i>Graphognathus</i> sp.
Stokes	2	Snap beans	Larvae; and ---	Thrips, prob. <i>Sericothrips variabilis</i> ; and an undet. aphid
Wake	4	Snap beans	---	Carmine spider mite, <i>Tetranychus cinnabarinus</i> ; thrips, <i>Sericothrips variabilis</i> ; and undet. aphids
Wake	1	Irish potato	Injury	prob. European corn borer, prob. <i>Ostrinia nubilalis</i>

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

Page Three

Week of June 16-22, 1976

Wood Destroying

Ashe	1	On spring-house	Alates	Subterranean termite, <i>Reticulitermes virginicus</i>
Davidson	1	In insulation in basement	Workers & queens	Black carpenter ant, <i>Camponotus pennsylvanicus</i>

Household & Industrial

Alamance	1	In ceiling of home	Injury	Southern flying squirrel, <i>Glaucomys volans</i>
Anson	1	Under carpet in home	Adults	Carpet beetle, <i>Trogoderma sternale</i>
Cleveland	1	Around sink in kitchen	Adults	Cowpea weevil, <i>Callosobruchus maculatus</i>
Lee	1	On egg cases at hatchery	All?	undet. Trogiid booklouse
Wake	1	Throughout apartment	Adult	Cigarette beetle, <i>Lasioderma serricorne</i>
Wake	2	In home	Adults	Sawtoothed grain beetle, <i>Oryzaephilus surinamensis</i> ; and a minute brown scavenger beetle, <i>Cartodere constricta</i>
Wake	1	In home	Alate queens	Ant, <i>Nylanderia</i> sp.

Miscellaneous and Accidental Household

Cumberland	1	In home	Adult	undet. Entomobryid springtail
Durham	1	In operating room	Adult	undet. Entomobryid springtail
Pasquotank	1	In home	Adult	Pisaurid spider, <i>Dolomedes</i> sp.

Miscellaneous

Bladen	1	Around yard & fields	Adults	undet. Darkwinged fungus gnat
Cleveland	1	In yard	Larva	Tiger swallowtail, <i>Papilio glaucus</i>
Craven	3	In crop of bobwhite quail	---	undet. snail; undet. moth cocoon; and green-striped mapleworm, <i>Dryocampa rubicunda</i>
Johnston	1	On boxes	Nymph	Wheel bug, <i>Arilus cristatus</i>
Pasquotank	-	Light trap	Adults	mixed Moths
Pasquotank	-	Yellow pan trap	Adults	mixed Insects
Polk	1	Supposedly biting people	Adult	Colydiid beetle, <i>Namunaria guttulata</i>

SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.  
 Page Four  
 Week of June 16-22, 1976

Miscellaneous (Cont.)

Richmond 2

Union 1

Vance 1

Under old newspapers  
 In yard  
 In vegetable garden

Flatworm, *Bipalium kewense*; and an undet. earthworm  
 Ant, *Camponotus americanus*  
 Ground beetle, *Anisotarsus* sp.

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Dr. Knight

JUL 6 1976

ENTOMOLOGICAL DEPT

entomology

July 2, 1976



TO: County Extension Chairmen 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

CORN

TWO SPOTTED SPIDER MITE (*Tetranychus urticae*) - NORTH CAROLINA - Damage reported this week from Robeson, Chowan and Edgecombe Counties. Observation in 2 Edgecombe Co. fields revealed 1/4 - 1 acre in each field severely infested to mid stalk and webbing apparent to tassel. Infestation spread into field from border rows and was associated with light soils. Symptoms similar to drought stress without blade curl. (Warren, Vaughn, Ext.)

SOYBEAN

MEXICAN BEAN BEETLE (*Epilachna varivestis*) - NORTH CAROLINA - Larval populations building in 4 of 10 southern Coastal Plain fields. Damage estimates ranged from 5 to 25% foliage loss in the infested fields. Close observation is warranted where heavy larval populations are occurring this early (15+ larvae and beetles per 6 ft. sample). (Hunt, Ext.)

PEANUTS

SPIDER MITES (*Tetranychus* sp.) - NORTH CAROLINA - Observation in 10 Edgecombe County fields indicated that mite damage is present in most peanut fields of the area.



However, recent rains in the county have held the population in check to date as no population buildup was evident. (Hunt, Ext.)

#### TOBACCO

GREEN PEACH APHID (*Myzus persicae*) - NORTH CAROLINA - Surveys 28 June - 1 July in 283 Lenoir Co. fields revealed 56 of the fields at or above threshold (25% plants heavily infested). The highest infestation level detected was 75% plants heavily infested. (Harper, Reagan, Tob. Pest Mgt., Ext.)

TOBACCO HORNWORM (*Manduca sexta*) - NORTH CAROLINA - Two of the 283 Lenoir Co. fields scouted reached threshold. The highest infestation level detected was an equivalent of 5 large nonparasitized worms per 50 plants (10%).

Six of the 196 Bladen Co. fields scouted reached threshold. The heaviest infestation was 60%, and 8% was the most frequent infestation. Hornworm populations are increasing. (Harper, Kirby, Reagan, Tob. Pest. Mgt., Ext.)

#### ORNAMENTALS

JAPANESE BEETLE (*Popillia japonica*) - NORTH CAROLINA - Twenty-four baited traps in Lincoln Co. reveal that catches began 1 June with an average catch of about 15 per trap/week. Current collections are averaging 50+/trap/week. Collections are expected to continue until early August. (N. C. Dept. of Agric.)



SUMMARY OF SPECIMENS PROCESSED BY INSECT CLINIC, N.C.S.U.,  
During week of June 23-29, 1976

County Collected	# of Specimens	Host(s)	Stage(s)	Determination
<u>Man and Animals</u>				
Burke	1	Gangrenous human foot	Larvae	Flesh fly, prob. <i>Sarcophaga</i> sp.
Durham	1	Egyptian sand rat	All?	undet. Mite
Transylvania	1	Worm beds	All	Springtail, <i>Onychiurus</i> sp.
<u>Southern Field Crops</u>				
Beaufort	1	Tobacco	Larva	Saltmarsh caterpillar, <i>Estigmene acrea</i>
Davidson	1	Peanuts	All	Tobacco thrips, <i>Frankliniella fusca</i>
<u>Grains, Soybeans and Forages</u>				
Alamance	5	Corn	---	Tobacco thrips, <i>Frankliniella fusca</i> ; thrips, <i>Frankliniella tenuicornis</i> ; thrips, <i>Frankliniella</i> sp.; black cutworm, <i>Agrotis ipsilon</i> ; and corn earworm, <i>Heliothis zea</i>
Ashe	1	Corn	Adults	Grass thrips, <i>Anaphothrips obscurus</i>
Edgecombe	2	Corn	All	Twospotted spider mites, <i>Tetranychus urticae</i> ; and carmine spider mite, <i>Tetranychus cinnabarinus</i>
Robeson	1	Corn	Workers	prob. Eastern subterranean termite, <i>Reticulitermes</i> prob. <i>flavipes</i>
<u>Forestry, Ornamentals and Turf</u>				
Avery	1	Rhododendron	Injury	Flea beetle, prob. <i>Altica</i> sp.
Buncombe	2	Boxwood	Old injury	Boxwood psyllid, <i>Psylla buxi</i> ; and boxwood leafminer, <i>Monarthropalpus buxi</i>
Chatham	1	Ash log	Adults	Bark beetle, <i>Leperisimus</i> sp.
Chatham	1	Boxwood	Old injury	Boxwood leafminer, <i>Monarthropalpus buxi</i>
Chatham	1	Elm	Adults	Larger elm leaf beetle, <i>Monocesta coryli</i>
Chatham	3	Sycamore	---	undet. Thrips; undet. leafhopper; and an undet. leaf folder moth
Dare	1	Piggyback plant	All	prob. Twospotted spider mite, <i>Tetranychus</i> prob. <i>urticae</i>
Franklin	1	Scarlet sage	Workers	prob. Eastern subterranean termite, <i>Reticulitermes</i> prob. <i>flavipes</i>
Guilford	1	Boxwood	Old injury	Boxwood psyllid, <i>Psylla buxi</i>
Halifax	1	On white pine (may not be a pest)	Eggs	undet. prob. Stink bug

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

Page Two

Week of June 23-29, 1976

Forestry, Ornamentals and Turf (Cont.)

Henderson	1	Oak	Dead adults	Lecanium scale, <i>Lecanium "corni" complex</i>
Jackson	1	Rhododendron	Adults	Rhododendron lace bug, <i>Stephanitis rhododendri</i>
Lincoln	1	Juniper	Injury	prob. Spruce spider mite, prob. <i>Oligonychus ununguis</i>
Montgomery	1	Euonymus	Adults	Euonymus scale, <i>Unaspis euonymi</i>
Orange	1	Juniper	Injury	prob. Spruce spider mite, prob. <i>Oligonychus ununguis</i>
Pamlico	1	Bushes	Larva	Elm sawfly, <i>Cimbex americana</i>
Pitt	1	Shrubs	Adult	Japanese weevil, <i>Pseudocneorhinus bifasciatus</i>
Pitt	1	Japanese holly	Old injury	undet. Spider mite
Randolph	1	Boxwood	Old injury	undet. Spider mite
Scotland	3	Pine	Adults	Weevil, <i>Cossonus corticola</i> ; pinhole borer, <i>Platypus flavicornis</i> ; and a bark beetle, <i>Ips calligraphus</i>
Stanly	1	Flower bed	Adults	Achatinid snail, <i>Opeas</i> sp.
Stanly	1	Willow oak	Injury	undet. Spider mite
Wake	1	Azalea	Injury	Azalea lace bug, <i>Stephanitis pyrioides</i>
Wake	1	Crape myrtle	---	Crapemyrtle aphid, <i>Tinocallis kahawaluokalani</i>
Wake	1	Euonymus	Dead adults	Euonymus scale, <i>Unaspis euonymi</i>
Wake	1	Forsythia	Injury	undet. Aphid
Wake	1	Greenbrier	Old injury	undet. prob. Gracillariid moth
Wake	1	Holly	Injury	undet. Flatid planthopper
Wake	1	Juniper	Injury	prob. Spruce spider mite, prob. <i>Oligonychus ununguis</i>
Wake	2	Silver maple	Galls; and all	prob. Maple bladdergall mite, <i>Vasates</i> prob. <i>quadripedes</i> ; and gloomy scale, <i>Melanaspis tenebricosa</i>
Wake	2	Marigold	Nymphs	Issid planthopper, <i>Acanalonia conica</i> ; and an undet. flatid planthopper
Wake	1	Schefflera	Old injury	undet. Spider mite
Wake	2	Schefflera	All	prob. Twospotted spider mite, <i>Tetranychus</i> prob. <i>urticae</i> ; and brown soft scale, <i>Coccus hesperidum</i>
Wake	1	Tulip poplar	Injury	undet. Aphid
Wake	1	Yard plants	Injury	undet. Slug
<u>Fruits</u>				
Chatham	1	Pear	Adults	Larger elm leaf beetle, <i>Monocesta coryli</i>
New Hanover	1	Blueberry	Larvae	Longhorned beetle, <i>Oberea</i> sp.
<u>Vegetables</u>				
Haywood	1	Cabbage	Larvae	Cabbage maggot, <i>Hylemya brassicae</i>
Northampton	1	Butter beans	All	prob. Twospotted spider mite, <i>Tetranychus</i> prob. <i>urticae</i>

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

Page Three

Week of June 23-29, 1976

Vegetables (Cont.)

Robeson	1	Bell peppers	Workers	prob. Eastern subterranean termite, <i>Reticulitermes</i> prob. <i>flavipes</i>
Vance	1	Snap beans	All	Carmine spider mite, <i>Tetranychus cinnabarinus</i>
Wake	2	Tomato	All; and ---	Carmine spider mite, <i>Tetranychus cinnabarinus</i> ; and an undet. aphid
Wayne	1	Butter beans	All	Carmine spider mite, <i>Tetranychus cinnabarinus</i>

Wood Destroying

Dare	1	In motel	Adults	Wharf borer, <i>Nacerdes melanura</i>
------	---	----------	--------	---------------------------------------

Household & Industrial

Pasquotank	1	In home	Adult	American cockroach, <i>Periplaneta americana</i>
Wake	1	Flour	Adults	Cigarette beetle, <i>Lasioderma serricornis</i>

Miscellaneous & Accidental Household

Alexander	1	In shed	Adult	Trapdoor spider, <i>Ummidia</i> sp.
Gates	2	In home	Immature; and adult	Gnaphosid spiders, <i>Herpyllus</i> sp. and prob. <i>Drassyllus</i> sp.
Pasquotank	1	In home	Adults	Greenhouse millipede, <i>Oxidus gracilis</i>

Miscellaneous

Cabarrus	1	On cherry tree	Adult	Crinkled flannel moth, <i>Megalopyge crispata</i>
Cleveland	1	In gardens	Adults	Greenhouse millipede, <i>Oxidus gracilis</i>
Durham	1	Under house	Adults	Greenhouse stone cricket, <i>Tachycines asynamorus</i>
Edgecombe	1	---	Adult	Leopard moth, <i>Epantheria scribonia</i>
Johnston	1	Oak stump	Larva	Eastern hercules beetle, <i>Dynastes tityus</i>
Pender	1	On maple	Egg cases	Mantid, <i>Brunneria borealis</i>
Wake	1	On bushes and trees	Larvae to adults	Ladybird beetle, <i>Olla abdominalis</i>

Dr. Knight  
7/9/76

JUL 12 1976

entomology



July 9, 1976

TO: County Extension Chairmen 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

CORN

TWO SPOTTED SPIDER MITE (*Tetranychus urticae*) - NORTH CAROLINA - Spider mite injury reports received 5-9 July indicate that the problem in field corn is no longer restricted to the northern peanut growing counties. Reports received this week of severe spot infestations to 1/2 acre in 2 Sampson Co. fields. Observations in Edgecombe, Chowan, Northampton and Halifax Cos. indicate that population growth has subsided and a decline is evident in most fields. Hot and humid weather is very conducive to the development of a fungal disease which will destroy the mites. Control by miticides is erratic due to application difficulties. (Bailey, Wells, Ext.)

JAPANESE BEETLE (*Popillia Japonica*) - NORTH CAROLINA - Concerns of the need to control Japanese beetle adults have been received. Greatest damage by this insect on corn is due to reduction of pollination. Populations must reach 5+ beetles per ear in field corn 5 days or less after first silks for this insect to significantly reduce yields. (Hunt, Ext.)

TOBACCO

GREEN PEACH APHID (*Myzus persicae*) - NORTH CAROLINA - Surveys 2 July - 8 July in 187 Lenoir Co. fields revealed 2 of the fields at or above threshold (25% plants heavily infested). Highest infestation level detected was 85% plants heavily



infested. Surveys 2 July - 8 July in 193 Bladen Co. fields revealed 11 of the fields at or above threshold. Highest infestation level detected was 40% plants heavily infested. However, a population decline was observed in Bladen and Lenoir Cos. 2-8 July as compared to 28 June-1 July. This decline attributed to hot weather. (Harper, Kirby, Reagan, Tob. Pest Mgt., Ext.)

Aphid populations increased (2 July) in 70% of the 150 Vance and Person Co. fields sampled.

TOBACCO HORNWORM (*Manduca sexta*) - NORTH CAROLINA - Eight of 193 Bladen Co. fields scouted reached threshold and 1 of 187 Lenoir Co. fields scouted reach threshold. The highest infestation levels detected were 25% (Bladen Co.) and 10% (Lenoir Co.). Control good. (Kirby, Reagan, Tob. Pest Mgt., Ext.)

TOBACCO BUDWORM (*Heliothis virescens*) - NORTH CAROLINA - Damaging infestations declining in all areas of the state. Parasitization is high reaching 70% in some fields (Baumhover, ARS, USDA).

#### VEGETABLES

TWO SPOTTED SPIDER MITE (*Tetranychus urticae*) - NORTH CAROLINA - Extensive damage observed on sweet corn the week of 28 June - 2 July in Chowan County. High mite populations (hundreds per blade, and webbing on leaves, silks, tassels, grasses, etc.) with severe damage were found in most of the 15 fields observed. Growers have abandoned fields due to mite damage to husks. Mite damage also observed in adjacent fields of cotton, watermelons and field corn. Symptoms in all cases include speckling, yellowing and bronzing of foliage with the presence of mites, eggs and webbing. (Sorensen, Van Duyen, Thompson, Ext., Kennedy, Dept. of Ent.)

#### ORNAMENTALS

JAPANESE BEETLE (*Popillia japonica*) - NORTH CAROLINA - Severe defoliation occurring in Stanly, Gaston and Lincoln Counties. Eighty % defoliation of 8 ft. ornamental trees observed in Stanly Co. Applications of Sevin on such trees resulted in gallons of dead beetles/tree. First adults appearing in Ashe and Alleghany Co. area. (Blackmore, Ext., Johnson, PPQ).

#### MAN AND ANIMALS

FACE FLIES (*Musca autumnalis*) - NORTH CAROLINA - Counts of face flies in Buncombe, Macon, Haywood, Montgomery, Iredell and Wake Counties indicate a high population, 35+ per head in Mountains and western Piedmont. Reports from northern Piedmont also indicate infestations of 35+ per head.

An eastward spread is evident with 3 infested herds observed 28 June in Wake Co. and 1 infested herd of 4 herds checked in Harnett Co. No observations were made in 1974 while looking in the same herds. (Hunt, Ext.)

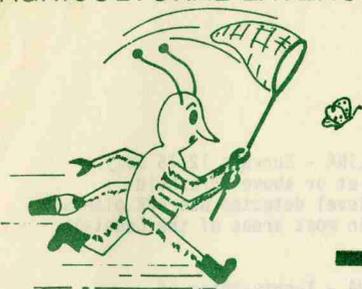
COMPARISON SUMMARY OF NUMBER OF SPECIMENS PROCESSED BY THE INSECT CLINIC, NCSU, FOR PRECEDING TWO WEEKS.

	<u>Week of June 23-29</u>	<u>Week of June 30-July 6</u>
Man and Animals	3	2
Southern Field Crops	2	2
Grain, Soybeans and Forages	9	4
Forestry, Ornamentals and Turf	43	20
Fruit	2	2
Vegetables	7	23
Wood Destroying Insects	1	1
Household and Industrial Insects	2	6
Miscellaneous & Accidental Household	4	6
Miscellaneous	$\frac{7}{75}$	$\frac{7}{73}$

Note: First lesser cornstalk borer larvae of the year collected from corn. Usual occurrence is late July where dry conditions prevail.

Dr. Knight

K



# entomology

RECEIVED

July 16, 1976

JUL 16 1976

TO: County Extension Chairmen and Other Interested Persons

ENTOMOLOGY DEPT.

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

CORN

TWOSPOTTED SPIDER MITE (*Tetranychus urticae*) - NORTH CAROLINA - Population collapsing in infested corn fields over the northern Coastal counties. Observations and reports in 10 Edgecombe and Halifax County fields (5 known to be infested) indicate that diseases have eliminated the threat to field corn. (Hunt, Ext.)

PEANUTS

TWOSPOTTED SPIDER MITE (*Tetranychus urticae*) - NORTH CAROLINA - Damage minor in most of the 25 Northampton and Halifax County fields observed 12-15 July. However, mite damage existed in 15 fields indicating a problem could develop in some areas should dry conditions continue. (Hunt, Ext.)

COTTON

BOLL WEEVIL (*Anthonomus grandis*) - NORTH CAROLINA - Weevil population low as a whole with a few hot spots in Northampton and Halifax counties. Damaged squares average below 10% with a few fields reaching 20%. (Robertson, Harrell, Ext.)



## TOBACCO

GREEN PEACH APHID (*Myzus persicae*) - NORTH CAROLINA - Surveys 12-15 July in 193 Bladen County fields revealed 3 of the fields at or above threshold (25% plants heavily infested). Highest infestation level detected was 42% plants heavily infested. Population continues to decrease in most areas of the Coastal Plain. (Kirby, Reagan, Tobacco Pest Mgt.)

TOBACCO HORNWORM (*Manduca sexta*) - NORTH CAROLINA - Twenty-three of 193 Bladen County fields scouted 12-15 July reached threshold. The highest infestation level detected was 10%, indicating a lower more general infestation than 2-8 July. Controls good. (Kirby, Reagan, Tobacco Pest Mgt.)

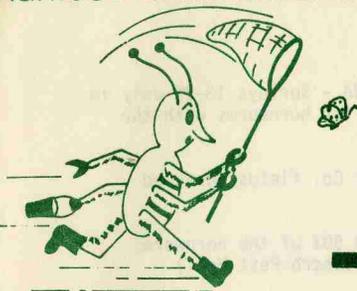
## LIGHT TRAP

Collection of corn earworms has averaged less than 10 per night 12 July in Northampton County area. Ovipositing in cotton and soybeans expected to begin building in next 2 weeks. (Harrell, Hunt, Ext.)

COMPARISON SUMMARY OF NUMBER OF INSECT SPECIMENS PROCESSED BY THE PLANT DISEASE AND INSECT CLINIC, NCSU, FOR PRECEDING TWO WEEKS.

	Week of June 30-July 6	Week of July 7-13, 1976
Man and Animals	2	--
Southern Field Crops	2	--
Grain, Soybeans and Forages	4	8
Forestry, Ornamentals and Turf	20	29
Fruit	2	7
Vegetables	23	15
Wood Destroying Insects	1	2
Household and Industrial Insects	6	9
Miscellaneous & Accidental Household	6	2
Miscellaneous	7	7
	73	79





# entomology

RECEIVED

July 23, 1976

JUL 26 1976

TO: County Extension Chairmen and Other Interested Persons

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

ENTOMOLOGY DEPT.

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

SOYBEANS

GENERAL NOTE - NORTH CAROLINA - Surveys conducted 19-22 July in 25 widely scattered Coastal Plain fields indicated low levels of defoliators such as green cloverworms, Mexican bean beetles and bean leaf beetles. None of the fields were at threshold. No velvetbean caterpillars or corn earworm larvae have been detected to date. Reports and observations in the Piedmont still indicate that Japanese beetles are the predominant defoliator; however, none of the fields observed had reached threshold (35% defoliation). (Wells, Hunt, Ext.)

COTTON

BOLL WEEVIL (*Anthonomus grandis*) - NORTH CAROLINA - Percent damaged squares continue low in most areas of the Coastal Plain. Scouting in 50 Edgecombe Co. fields revealed less than 5% damage. (Harrell, Robertson, Ext.)

TOBACCO

GREEN PEACH APHID (*Myzus persicae*) - NORTH CAROLINA - Surveys 18-22 July in 193 Bladen Co. and 239 Lenoir Co. fields revealed zero fields at threshold. Harvest and dry, hot weather have killed the aphids in about all fields. (Kirby, Harper, Reagan, Tobacco Pest Mgt.)



TOBACCO HORNWORM (Manduca sexta) - NORTH CAROLINA - Surveys 18-22 July in 193 Bladen Co. fields revealed 0 fields at threshold for hornworms with the highest infestation level detected at 7%.

No hornworm problems were detected in 239 Lenoir Co. fields surveyed 18-22 July.

The incidence of diseases and parasites exceeded 50% of the hornworms observed in Lenoir County. (Harper, Kirby, Reagan, Tobacco Pest Mgt.)

#### FORAGE

ARMYWORM (Pseudaletia unipuncta) - NORTH CAROLINA - Heavy populations of young larvae (primarily 3rd instar or less) damaged Coastal Bermuda on McNair Farms in Scotland Co.; approximately 1,100 acres treated and good control achieved with 1 application of insecticide. (Lane, McNair Farms)

#### LIGHT TRAP

CORN EARWORM (Heliothis zea) - NORTH CAROLINA - Counts in the Northampton Co. area have increased from an average of 10 per night to 15 per night, indicating that movement from corn to cotton and soybeans is increasing. Egg laying on these crops is expected for next 2 weeks. (Harrell, Robertson, Ext.)

#### COMPARISON SUMMARY OF NUMBER OF INSECT SPECIMENS PROCESSED BY THE PLANT DISEASE AND INSECT CLINIC, NCSU, FOR PRECEDING TWO WEEKS.

	Week of July 7-13, 1976	Week of July 14-20, 1976
Man and Animals	--	1
Southern Field Crops	--	--
Grain, Soybeans and Forages	8	1
Forestry, Ornamentals and Turf	29	36
Fruit	7	4
Vegetables	15	20
Wood Destroying Insects	2	2
Household and Industrial Insects	9	5
Miscellaneous & Accidental Household	2	2
Miscellaneous	7	9
	<u>79</u>	<u>80</u>

JUL 30 1976

## entomology



July 30, 1976

TO: County Extension Chairmen 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

## SOYBEANS

BEET ARMYWORM (*Spodoptera exigua*) - NORTH CAROLINA - Defoliation to 5% (1 larvae per 5 ft. of row) has been observed on 20-30 acres of soybeans in Tyrrell County. Light infestations have also been reported from Halifax County on late planted beans. (Kerr, First Colony Farm, Van Duyn, Ext.)

## COTTON

BOLL WEEVIL (*Anthonomus grandis*) - NORTH CAROLINA - The percent punctured squares climbed slightly from last week. A few fields in the Northampton, Edgecombe County area reaching threshold levels of 10% or greater. Highest percent defoliation detected was 14%. (Harrell, Robertson, Ext.)

## TOBACCO

TOBACCO HORNWORM (*Manduca sexta*) - NORTH CAROLINA - Tobacco harvest is nearing completion in most Coastal Plain counties. Damage from hornworms has dropped below threshold in all 193 fields sampled 26-29 July. Five percent was the highest infestation level detected. (Kirby, Reagan, Tobacco Pest Mgt.)



RECEIVED  
AUG 6 1976

ENTOMOLOGY DEPT

entomology

August 6, 1976

TO: County Extension Chairmen 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 *TNH.*

Raleigh, North Carolina

SOYBEANS

CORN EARWORM (*Heliothis zea*) - NORTH CAROLINA - Earworm moths observed 2-5 August in southern Coastal Plain soybean fields. Checks in 20 fields scattered across Harnett, Sampson, Duplin, and Cumberland counties revealed moths in every field entered. Fifty percent of the 7 soybean fields sampled in Edgecombe, Halifax, and Northampton counties had moths at detectable levels. No larvae have been detected to date; however, weekly scouting should be underway. (Hunt, Wells, Ext.)

FORAGE

ARMYWORM (*Pseudaletia unipuncta*) - NORTH CAROLINA - Damage continues in the Coastal Plain on grass crops from "true" armyworms, particularly coastal Bermuda. Infestations range from very light to 30 per sq. ft. of soil surface in some spots.

Fields of 20 acres have been observed which were in part or totally stripped in Duplin, Robeson, Pender, and Harnett counties 30 July - 4 August. Reports have been received from 10 fields during the time period mentioned above. These insects prefer grass crops and to date control has been adequate with carbaryl insecticides. Few reports of fall armyworms have been received this year compared to 1975. For proper controls, identification is very important. (Fedoronko, APHIS; Hunt, Williford, Falter, Kimbrough, Ext.)



SMALL FRUITS

SHARPNosed LEAFHOPPER (*Scaphytopius magdalensis*) - NORTH CAROLINA - Collections with suction sampler from approximately 150 ft. of row in plantings on both "high ground" and "low ground" reveal a preference of the blueberry stunt vector for the "low ground" plantings. Collections 13-30 July revealed 39 "low ground" - 21 "high ground." This is the greatest total number of this vector collected since this survey was initiated in 1972. Symptoms of stunt were evident in 25% of the 5-acre, 3-year-old Duplin County planting, which served as the "low ground" collection site.

COMPARISON SUMMARY OF NUMBER OF INSECT SPECIMENS PROCESSED BY THE PLANT DISEASE AND INSECT CLINIC, NCSU, FOR PRECEDING TWO WEEKS.

	Week of July 21-27, 1976	Week of July 28-Aug. 2, 1976
Man and Animals	2	1
Southern Field Crops	--	--
Grain, Soybeans and Forages	3	2
Forestry, Ornamentals and Turf	35	18
Fruit	7	2
Vegetables	3	14
Wood Destroying Insects	--	2
Household and Industrial Insects	5	14
Miscellaneous & Accidental Household	4	2
Miscellaneous	$\frac{8}{67}$	$\frac{7}{62}$





# entomology

RECEIVED

August 13, 1976

AUG 13 1976

TO: County Extension Chairmen 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

SOYBEANS

CORN EARWORM (Heliothis zea) - NORTH CAROLINA - Larvae 1st to 3rd instar (stage of development) were detected 9-11 Aug. in counties south of Edgecombe County. Past experience would indicate that larvae can be expected in Halifax, Northampton, Hertford, and other northeastern counties 13-17 Aug. No damage has occurred to date; however, should present weather conditions prevail, pod injury is likely 16-19 Aug. in open canopy fields. Of the 15 open, blooming fields sampled 9-11 Aug., 30% were at the threshold of 2 larvae per ft. of row. Note threshold change from 1 to 2 per ft. Recent research in several southeastern states, including N.C., substantiates this change. Insecticide application should be delayed past bloom if possible to eliminate reinfestation because moths are still present in most fields. (Hunt, Van Duyn, Ext.)

BEAN LEAF BEETLE (Cerotoma trifurcata) - NORTH CAROLINA - Defoliation by bean leaf beetles resulted in approximately 120 acres of soybeans treated on First Colony Farms in Tyrrell Co. Treatment has also been necessary for control of this insect in Hyde Co., but extent of injury is unknown at present time. (Van Duyn, Ext.)

VELVETBEAN CATERPILLAR (Anticarsia gemmatilis) - NORTH CAROLINA - Larvae have been detected in low numbers in Washington Co. Damage from this defoliator is sporadic in N. C. but can be very destructive, especially on double-cropped



soybeans. Scouting should be conducted weekly, paying attention to defoliating worms; velvetbean caterpillars have 5 pair of prolegs. Greencloverworms have 4 pair. (Van Duyn, Hunt, Ext.)



VBC



GCW

FORAGE

ARMYWORM (*Pseudaletia unipuncta*) - NORTH CAROLINA - Extremely heavy infestation (30+/sq. ft. of soil surface) continued into the 3rd week in coastal Bermuda over the entire southern Coastal Plain. Damage from 8 to 100% defoliation observed in 5 Sampson Co. fields ranging from 3 to 40 acres. Eight Columbus Co. fields (2-5 acres) were damaged; in addition, numerous observations were made in fescue pastures and golf courses in other southern counties. Properly applied carbaryl did an excellent job in 6 fields observed shortly after treatment. Aerial applicators often miss around trees and edges.

Reports this week from Beaufort and Tyrrell counties indicate that damage is also occurring in corn. About 100 acres were damaged in Tyrrell Co. and some additional damage was observed in Beaufort Co. (Glover, Griffin, Pilch, and McCullen, Ext.)

#### FEDERAL AND STATE PLANT PROTECTION PROGRAM

IMPORTED FIRE ANT (*Solenopsis invicta*) - NORTH CAROLINA - One mound of imported fire ants detected in Beaufort Co. near Aurora. This is a new county record. Infestations now occur in 14 N. C. counties. (Parker, N.C.D.A.; Griffin, Ext.)

#### LIGHT TRAP

CORN EARWORM (*Heliothis zea*) - NORTH CAROLINA

Date	Avg. Catch <sup>1</sup>
28 July	81
30 July	114
2 Aug.	200-900
4 Aug.	500+
6 Aug.	500+
9 Aug.	500+
11 Aug.	500+

$\frac{1}{8}$  traps checked in Northampton, Edgecombe, Halifax cos.



COMPARISON SUMMARY OF NUMBER OF INSECT SPECIMENS PROCESSED BY THE PLANT DISEASE  
AND INSECT CLINIC, NCSU, FOR PRECEDING TWO WEEKS.

	<u>Week of July 28-Aug. 2, 1976</u>	<u>Week of Aug. 4-10, 1976</u>
Man and Animals	1	3
Southern Field Crops	--	1
Grain, Soybeans and Forages	2	13
Forestry, Ornamentals and Turf	18	30
Fruit	2	1
Vegetables	14	12
Wood Destroying Insects	2	--
Household and Industrial Insects	14	8
Miscellaneous & Accidental Household	2	4
Miscellaneous	<u>7</u>	<u>10</u>
	62	82

AUG 20 1976

## entomology

August 20, 1976

TO: County Extension Chairmen 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

## CORN

ARMYWORM (*Pseudaletia unipuncta*) - NORTH CAROLINA - Heavy "true" armyworm damage to late corn continues with reports from Pitt, Onslow, Halifax, and Edgecombe counties. Total acreage estimates were unavailable due to spotty nature of the infestations (spots 1/4 to 1 acre in size). Most of the fields were in the dough stage. Due to the spotty nature of these infestations, the late stage of the worm, and the maturity of the crop, no controls were recommended. (Riddick, Van Duyn, Hunt, Ext.)

## COTTON

BOLLWORM (*Heliothis zea*) - NORTH CAROLINA - Egg counts from cotton terminals were extremely high in the Halifax, Edgecombe, Northampton County area 13 Aug. Counts of 100 eggs per 100 terminals were observed.

Bollworm "hatchout" heavy (to 20% damage) in some fields which have had interrupted aerial spray treatments due to high winds. (Hunt, Robertson, Ext.)

## PEANUTS

POTATO LEAFHOPPER (*Empoasca fabae*) - NORTH CAROLINA - Damage moderate to severe in northern Coastal Plain peanut fields. Foliage damage to 90% of the

plants with some "hopper burn" observed in the Scotland Neck area 18 Aug. Damage usually restricted to light soils of the northern Coastal Plain. Damage most severe in past 10 years with severe damage observed on heavy as well as light soils. (Robertson, Hunt, Ext.)

CORN EARWORM (Heliothis zea) - NORTH CAROLINA - Corn earworm larvae have begun defoliating peanuts in Halifax Co. area. Detectable damage observed this week in about 25% of the 15 fields observed. Scouting should be initiated in all peanut fields and continued for next 3 weeks. (Robertson, Hunt, Ext.)

#### SOYBEANS

CORN EARWORM (Heliothis zea) - NORTH CAROLINA - Larval (3-5 instar) populations extremely high (16-18 Aug.) in open canopied fields observed in Johnston, Wilson, Wayne, Duplin, Harnett, Sampson, Bladen, Washington, and Beaufort counties. Populations of 6 per foot (3 times threshold level) have been observed and foliage damage is occurring. Counts in 20 fields past bloom with open canopies revealed 15 at or above the threshold of 2 corn earworms per foot. Some closed canopy fields are reaching the threshold level. If severe populations exist in the open canopy fields in your area, the closed canopy fields should be scouted. Complaints of poor control are often traced to poor application. Growers should insist on 3 gallons of water per acre aerially applied. (Hunt, Van Duyn, Ext.)

#### LIGHT TRAP

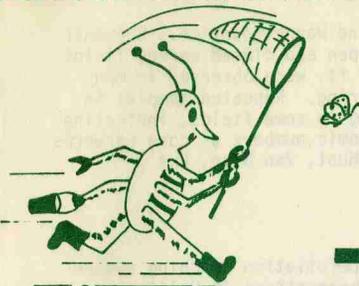
CORN EARWORM (Heliothis zea) - NORTH CAROLINA - Counts dropped substantially this week, 16-19 Aug., from 500+ per night to less than 200 in most northern Coastal Plain traps. In central and southern Coastal Plain traps, counts dropped from 80 per night to less than 50 per night, indicating that the heavy egg laying is over in cotton and soybeans.

#### COMPARISON SUMMARY OF NUMBER OF INSECT SPECIMENS PROCESSED BY THE PLANT DISEASE AND INSECT CLINIC, NCSU, FOR PRECEDING TWO WEEKS.

	Week of Aug. 4-10, 1976	Week of Aug. 11-17, 1976
Man and Animals	3	--
Southern Field Crops	1	3
Grain, Soybeans and Forages	13	8
Forestry, Ornamentals and Turf	30	24
Fruit	1	5
Vegetables	12	13
Wood Destroying Insects	--	2
Household and Industrial Insects	8	5
Miscellaneous & Accidental Household	4	3
Miscellaneous	10	18
	82	87

AUG 27 1976

ENTOMOLOGY DEPT.  
*entomology*



August 27, 1976

TO: County Extension Chairmen 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

SORGHUM

CORN EARWORM (*Heliothis zea*) - NORTH CAROLINA - Severe head damage has been observed and reported from Piedmont and Coastal Plain sorghum fields. Populations of 6 per head were observed in a 20-acre Washington Co. field and a 15-acre Chatham Co. field. Of 5 fields (total 200 acres) sampled 23-26 Aug., all fields had an average of 2 or more worms per head. We recommend control when an average of 2 corn earworms or 2 fall armyworms (or a combination of species) per head exists. (Hunt, Van Duyn, Ext.)

COTTON

BOLLWORM (*Heliothis zea*) - NORTH CAROLINA - Percent bolls infested in the Edgecombe-Northampton Co. area increased 18-24 Aug. with about 20% of the 15 fields sampled at 10% infested. Hotspots to 20% bolls infested were reported from the Gaston and Red Oak area. (Robertson, Hunt, Ext.)

SOYBEANS

CORN EARWORM (*Heliothis zea*) - NORTH CAROLINA - Larvae are reaching the most destructive stage (1-2 in. long) in 50% of the infested soybean fields. A total of 25 fields were observed 23-26 Aug. in Johnston, Wilson, Washington, Hyde, Martin,



Edgecombe, Pitt, Halifax, Sampson, Duplin, Harnett, and Wayne counties. Economic infestations (2 per ft. of row) exist in 50% of the open and closed canopy fields with small pods (1/2 in. long). Populations to 6 per ft. were observed in many open canopy fields and extensive defoliation is occurring. Repeated samples in known fields indicate that the population is declining in some fields, indicating that pupation in the soil is beginning. Be sure economic numbers of corn earworms are present when aerial applications are expected. (Hunt, Van Duyn, Ext.)

## PEANUTS

CORN EARWORM (*Heliothis zea*) - NORTH CAROLINA - Defoliation reaching severe stage (30%) in some northern Coastal Plain fields. Observations in Halifax, Edgecombe, Beaufort, and Northampton counties indicate earworms present in every field sampled. Defoliation and stem damage approaching 25% in 5 of 10 fields sampled. Damage is expected for next 2 weeks. (Hunt, Ext.)

## LIGHT TRAP

CORN EARWORM (*Heliothis zea*) - NORTH CAROLINA

Date	Avg. Catch <sup>1</sup>
13 Aug.	500+/day
16 Aug.	500+/day
18 Aug.	500/day
20 Aug.	325/day
23 Aug.	240/day

1/8 traps checked in Northampton, Edgecombe, Halifax cos. (Harrell, Ext.)

## COMPARISON SUMMARY OF NUMBER OF INSECT SPECIMENS PROCESSED BY THE PLANT DISEASE AND INSECT CLINIC, NCSU, FOR PRECEDING TWO WEEKS.

	Week of Aug. 11-17, 1976	Week of Aug. 18-24, 1976
Man and Animals	--	3
Southern Field Crops	3	--
Grain, Soybeans and Forages	8	1
Forestry, Ornamentals and Turf	24	21
Fruit	5	4
Vegetables	13	13
Wood Destroying Insects	2	2
Household and Industrial Insects	5	6
Miscellaneous & Accidental Household	3	3
Miscellaneous	18	6
	81	59

Dr. Kniacht

K



# entomology

RECEIVED

September 3, 1976

SEP 3 1976

TO: County Extension Chairmen and Other Interested Persons

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

ENTOMOLOGY DEPT.

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

SOYBEANS

CORN EARWORM (Heliothis zea) - NORTH CAROLINA - In most soybean fields, peak damage will be over by September 10. Populations in 40% of the fields at threshold level which were observed in northern and central Coastal Plain were made up of large larvae. Pupation is rapidly occurring over the entire state. In the southern counties (Duplin, Columbus, Sampson, Robeson), the population in many fields has dropped below threshold level. Each year farmers treat fields with no corn earworms. I suggest they be warned to scout immediately prior to an insecticide application. (Hunt, Ext.)

PEANUTS

CORN EARWORM (Heliothis zea) - NORTH CAROLINA - Defoliation continues in the Hertford, Northampton, Bertie County area and in the Bladen County area where treatments were not applied.

Thirty % defoliation was observed in 3 of 10 fields sampled in the northern Coastal Plain counties. Many small larvae remain in peanuts, indicating damage is likely to continue for about 10 more days. When scouting, pay particular attention to the folded terminals, because the small larvae prefer this tender growth. (Hunt, Ext.)



PASTURE AND LAWNS

FALL ARMYWORM (*Spodoptera frugiperda*) - NORTH CAROLINA - Fall armyworms have been reported from 3 Piedmont counties damaging golf courses, pastures, and lawns. Davidson County reported heavy damage to an elementary school lawn. These are the first reports of pure fall armyworm populations in grass received this season by this office. Rye seeding is underway in many areas. This crop and coastal Bermuda are very attractive to this insect. Accurate identification is important due to difficulty in controlling this pest as compared to the "true" armyworm. (Hunt, Ext.)

COTTON NOTE

Insect problems are generally under control. Damage from boll weevil has been very light with only a small percentage of the acreage receiving economic loss.

BOLLWORM (*Heliothis zea*) - NORTH CAROLINA - Some fields reached threshold of 10%. However, in view of the extremely heavy oviposition (egg laying), 100% of terminals in some fields, control has been excellent. (Hunt, Bachelor, Ext.)

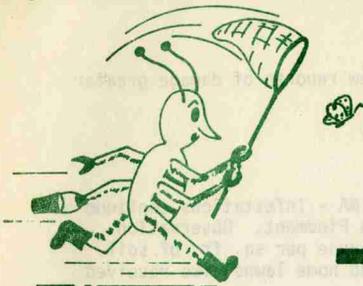
LIGHT TRAP

The corn earworm catch is down to insignificant numbers in all areas of the state. Oviposition (egg laying) is over on soybeans, cotton, etc., for this generation. The late flight, late September - early October, is never as heavy and most fields have matured beyond susceptible stage. Therefore, damage occurs only on very late host crops. (Hunt, Ext.)

COMPARISON SUMMARY OF NUMBER OF INSECT SPECIMENS PROCESSED BY THE PLANT DISEASE AND INSECT CLINIC, NCSU, FOR PRECEDING TWO WEEKS.

	Week of Aug. 18-24, 1976	Week of Aug. 25-31, 1976
Man and Animals	3	--
Southern Field Crops	--	--
Grain, Soybeans and Forages	1	9
Forestry, Ornamentals and Turf	21	21
Fruit	4	2
Vegetables	13	9
Wood Destroying Insects	2	1
Household and Industrial Insects	6	6
Miscellaneous & Accidental Household	3	4
Miscellaneous	6	21
	59	73

Dr. Knight K



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RECEIVED

September 10, 1976

SEP 10 1976

TO: County Extension Chairmen and Other Interested Persons

ENTOMOLOGY DEPT.

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

## CORN AND SORGHUM

LESSER CORNSTALK BORER (Elasmopalpus lignosellus) - NORTH CAROLINA - Lesser cornstalk borer observed damaging 25% of the plants in 2 Cleveland Co. sorghum fields. Scattered reports from Piedmont and Coastal Plain also received from home gardens, commercial vegetables and late-planted soybeans. (Spencer, Van Duyn, Ext.)

FALL ARMYWORM (Spodoptera frugiperda) - NORTH CAROLINA - Damage in the whorl of late-planted sorghum and corn continues. Infestation of 25% of the plants (corn earworm and fall armyworm) observed this week in fields scattered over the Piedmont and Coastal Plain. (Nolley, Harper, Hunt, Ext.)

## SOYBEANS

CORN EARWORM (Heliothis zea) - NORTH CAROLINA - Observations of 30 fields in Johnston, Wilson, Pitt, Greene, Edgecombe, Sampson, Bladen, Cumberland, Harnett, Wayne and Lenoir counties revealed 20-30% of the open canopy soybean fields with a combination of defoliation and pod damage. Defoliation and pod loss by earworms to 80% was observed where no controls were applied. This is the heaviest damage experienced in recent years. Generally, the corn earworms have pupated in the soil; the problem is over in most fields. (Hunt, Ext.)



COTTON

Generally, insect control remains good with few reports of damage greater than the thresholds for weevils or bollworms.

PASTURE AND TURF

ARMYWORM (*Pseudaletia unipuncta*)- NORTH CAROLINA - Infestations continue to be reported in pastures and lawns from the northern Piedmont. Observation in a fescue pasture in Granville Co. revealed 15 larvae per sq. ft. of soil surface area. Reports of damage to golf courses and home lawns also received from the area. (Gantt, Hunt, Ext.)

COMPARISON SUMMARY OF NUMBER OF INSECT SPECIMENS PROCESSED BY THE PLANT DISEASE AND INSECT CLINIC, NCSU, FOR PRECEDING TWO WEEKS.

	<u>Week of Aug. 25-31, 1976</u>	<u>Week of Sept. 1-7, 1976</u>
Man and Animals	--	--
Southern Field Crops	--	--
Grain, Soybeans and Forages	9	8
Forestry, Ornamentals and Turf	21	22
Fruit	2	--
Vegetables	9	2
Wood Destroying Insects	1	--
Household and Industrial Insects	6	4
Miscellaneous & Accidental Household	4	1
Miscellaneous	21	6
	73	43

Dr. Knidt

K.

AGRICULTURAL EXTENSION SERVICE

INSECT SURVEY NOTES



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September 17, 1976

RECEIVED  
SEP 17 1976  
ENTOMOLOGY DEPT.

TO: County Extension Chairmen 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

SOYBEANS

VELVETBEAN CATERPILLAR (*Anticarsia gemmatalis*) - NORTH CAROLINA - Infestations of velvetbean caterpillars building in some late planted soybeans. Ten acres treated in Washington County during week of 13-17 September. Damage is most prevalent in beans after small grain, and complete defoliation can occur very quickly. "Wheat beans" in Washington, Beaufort, Hyde, Pamlico, and Tyrrell counties have a high probability of damage from this pest. (Van Duyn, Ext.)

VEGETABLES

PEPPER WEEVIL (*Anthonomus eugenii*) - NORTH CAROLINA - Surveys for the pepper weevil in 35-40 Duplin, Wayne, Johnston, and Sampson County bell pepper fields revealed negative results. A state record for this pest was confirmed in N. C. during 1975. Survey in 1975 revealed 28 infested fields in the above mentioned counties. (APHIS, USDA, NCDA)

ORNAMENTALS

AZALEA CATERPILLAR (*Dantana major*) - NORTH CAROLINA - Damage from these gregarious caterpillars reported widespread on home plantings. Reports received from Piedmont and Coastal Plain with a concentration in the Wilmington area. (Hunt, Ext.)



FEDERAL AND STATE PROGRAMS

GYPSY MOTH (*Porthetria dispar*) - NORTH CAROLINA - Three male moths collected in sex-lure trap in Avery County 23-27 August. Two separate collections made 13-15 September in Greensboro. This is total collection to date. (Hoffman, Weatherman, NCDA)

COMPARISON SUMMARY OF NUMBER OF INSECT SPECIMENS PROCESSED BY THE PLANT DISEASE AND INSECT CLINIC, NCSU, FOR PRECEDING TWO WEEKS.

	<u>Week of Sept. 1-7, 1976</u>	<u>Week of Sept. 8-14, 1976</u>
Man and Animals	--	3
Southern Field Crops	--	--
Grain, Soybeans and Forages	8	7
Forestry, Ornamentals and Turf	22	25
Fruit	--	3
Vegetables	2	--
Wood Destroying Insects	--	1
Household and Industrial Insects	4	2
Miscellaneous & Accidental Household	1	4
Miscellaneous	6 43	13 58

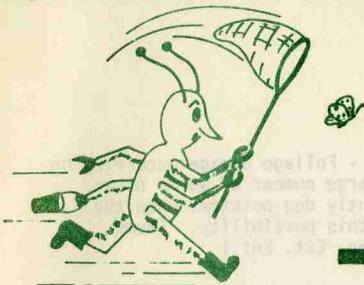


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Dr. Knight

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INSECT SURVEY NOTES



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SEP 24 1976

September 24, 1976

AG DEPT.

TO: County Extension Chairmen 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 AND SORGHUM

FALL ARMYWORM (*Spodoptera frugiperda*) - NORTH CAROLINA - Fall armyworms from 0.5-1.5 inches continue to damage sorghum and late corn. Spot damage (0.5-3 acres) observed this week in Alamance, Person, and Wake counties. (Swann, Hunt, Ext.)

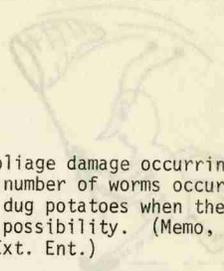
EUROPEAN CORN BORER (*Ostrinia nubilalis*) - NORTH CAROLINA - Damage from this corn borer is reported annually. However, observations and reports to date have revealed less than average stalk breakage from this pest. I would appreciate any estimates of stalk breakage from borers in your geographic area. (Hunt, Ext.)

RICE WEEVIL (*Sitophilus oryzae*) - NORTH CAROLINA - Observations in eastern and southern Coastal Plain indicate egg laying and larval development of rice weevils is occurring in standing corn. Counts of 50 ears in 25 fields in Beaufort, Hyde, and Duplin counties revealed 30% of the ears with a rice weevil infestation. (Hunt, Van Duyn, Ext.)

SOYBEANS

CORN EARWORM (*Heliothis zea*) - NORTH CAROLINA - Most damage from the corn earworm in soybeans is over except in very late fields. Damage was reported this week from Rowan and Cleveland counties. Infestations above the threshold (2 per row ft.) were reported from a total of 25 acres in these 2 counties. Infestations in other counties are likely occurring in the very late bean crop. (McNeely, Dameron, Ext.)





VEGETABLES - SWEET POTATOES

CORN EARWORM (Heliothis zea) - NORTH CAROLINA - Foliage damage occurring on sweet potatoes in Johnston County area. Where a large number of worms occur on the foliage, they will continue to feed on recently dug potatoes when the foliage is removed. Producers should be aware of this possibility. (Memo, 17 September to sweet potato workers, K. A. Sorensen, Ext. Ent.)

PEANUTS

CORN EARWORM (Heliothis zea) - NORTH CAROLINA - Digging underway in Beaufort and Bertie County area. Foliage damage continues to occur in only a small percentage of the acreage. Controls for earworms not justified this late in most peanut fields. (Hunt, Ext.)

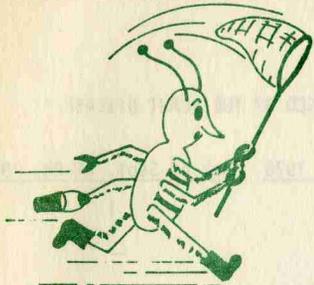
COMPARISON SUMMARY OF NUMBER OF INSECT SPECIMENS PROCESSED BY THE PLANT DISEASE AND INSECT CLINIC, NCSU, FOR PRECEDING TWO WEEKS.

	<u>Week of Sept. 8-14, 1976</u>	<u>Week of Sept. 15-21, 1976</u>
Man and Animals	3	5
Southern Field Crops	--	--
Grain, Soybeans and Forages	7	1
Forestry, Ornamentals and Turf	25	21
Fruit	3	6
Vegetables	--	7
Wood Destroying Insects	1	1
Household and Industrial Insects	2	1
Miscellaneous & Accidental Household	4	5
Miscellaneous	13	8
	<u>58</u>	<u>55</u>



Dr. Knight

K



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SEP 30 1976

October 1, 1976

ENTOMOLOGY DEPT

TO: County Extension Chairmen 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

SOYBEANS

A POTENTIAL FLY PEST (Rivellia quadrifasciata) - NORTH CAROLINA - A potential pest of soybeans has been detected by John Van Duyn and identified by D. L. Stephan in Washington and Hyde counties. The tiny maggot of this fly has been observed damaging the nodules of soybeans in some southern states, particularly Louisiana. Reports to 38% nodule damage per plant have been recorded. The adults of this fly (which do no damage) have annually been observed on soybean foliage over the entire Coastal Plain. Close examination of roots in Washington and Hyde counties revealed larval feeding in the nodules of some soybean plants. A comprehensive survey in 1977 is planned to determine extent of larval damage. (Van Duyn, Hunt, Ext.)



COMPARISON SUMMARY OF NUMBER OF INSECT SPECIMENS PROCESSED BY THE PLANT DISEASE AND INSECT CLINIC, NCSU, FOR PRECEDING TWO WEEKS.

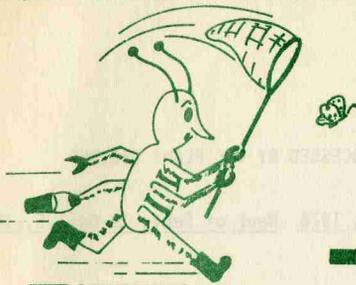
	<u>Week of Sept. 15-21, 1976</u>	<u>Week of Sept. 22-28, 1976</u>
Man and Animals	5	1
Southern Field Crops	--	--
Grain, Soybeans and Forages	1	5
Forestry, Ornamentals and Turf	21	18
Fruit	6	1
Vegetables	7	2
Wood Destroying Insects	1	1
Household and Industrial Insects	1	9
Miscellaneous & Accidental Household	5	7
Miscellaneous	<u>8</u>	<u>7</u>
	<u>55</u>	<u>51</u>

A POTENTIAL FLY PEST (*Gnats*) has been detected by John Van Dine and identified by J. L. Stegman in Washington and Hyde counties. The fly pupae of this fly have been reported damaging the number of soybeans in some southern states. Reports to the NCSU indicate that the fly (which do no damage) have usually been observed in the fields of this fly over the entire Coastal Plain. Close examination of roots in Washington and Hyde counties revealed larval feeding in the nodules of some soybean plants. A comparative survey in 1977 is planned to determine extent of damage. (See Daily News, Oct. 1976)

AGRICULTURAL EXTENSION SERVICE

INSECT SURVEY NOTES

Dr. Knight K.



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OCT 8 1976

ENTOMOLOGY DEPT.

October 8, 1976

TO: County Extension Chairmen 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

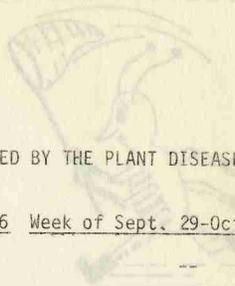
Raleigh, North Carolina

PASTURE

GREEN JUNE BEETLE (Cotinis nitida) and JAPANESE BEETLE (Popillia japonica) - NORTH CAROLINA - Larval damage on 25 acres of clover-fescue pasture in southern Wake County. Spots of 1/4 acre in size observed with 25 grubs per square foot. Average infestation for the 25 acres was 5 per square foot. Treatments applied to entire acreage. (Hunt, Ext.)

NOTE: This will be the last weekly survey note for 1976. Reports will resume May 1977. Thanks for your outstanding cooperation.





COMPARISON SUMMARY OF NUMBER OF INSECT SPECIMENS PROCESSED BY THE PLANT DISEASE AND INSECT CLINIC, NCSU, FOR PRECEDING TWO WEEKS.

	<u>Week of Sept. 22-28, 1976</u>	<u>Week of Sept. 29-Oct. 5, 1976</u>
Man and Animals	1	---
Southern Field Crops	---	---
Grain, Soybeans and Forages	5	5
Forestry, Ornamentals and Turf	18	24
Fruit	1	2
Vegetables	2	2
Wood Destroying Insects	1	1
Household and Industrial Insects	9	5
Miscellaneous & Accidental Household	7	8
Miscellaneous	7	9
	<u>51</u>	<u>56</u>

GREEN LINK BEETLE (Larva) - Larval damage on 25 acres of downy mildew pasture in western North Carolina - Spots of 1/4 acre in size observed with 25 grubs per square foot. Average infestation for the 25 acres was 7 per square foot. Treatments applied to entire acreage. (Burt, Ext.)

Note: This will be the last weekly survey report for 1976. Reports will resume in 1977. Thank for your outstanding cooperation.

Dr. Knight

INSECT SURVEY NOTES  
RECEIVED

OCT 14 1976

ENTOMOLOGY DEPT.

entomology



October 15, 1976

TO: County Extension Chairmen 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

CORN

EUROPEAN CORN BORER (*Ostrinia nubilalis*) - NORTH CAROLINA - Corn stalk breakage most severe in the southwestern Coastal Plain counties of Robeson, Hoke, and Columbus. Observations in 8 known infested fields scattered over Robeson and Hoke counties revealed 32% - 96% of the stalks broken as a result of borer damage. About 15% of the infested stalks had broken below the ear. The lodging rate in these counties is significantly higher than the 5% state average. (Baxley, APHIS, Williford, Ext.)



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OCT 22 1976

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October 22, 1976

TO: County Extension Chairmen 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

SOYBEANS

GREEN STINK BUG (Acrosternum hilare) and BROWN STINK BUG (Euschistus servus) - NORTH CAROLINA - The number of adults and nymphs reached 1.5 per foot of row in 2 of 15 Bragg soybean fields sampled near Harrells, Sampson County. Damage was minimal because of crop maturity and treatments were not recommended. (Hunt, Ext.)



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OCT 29 1976

ENTOMOLOGY DEPT

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October 29, 1976

TO: County Extension Chairmen 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

SOYBEAN

VELVETBEAN CATERPILLAR (*Anticarsia gemmatilis*) - NORTH CAROLINA -  
Larvae detected on foliage in 5 of 15 fields surveyed 25-27 October.  
Populations averaged 1 per 5 plants in the infested fields. However,  
1 field had 1 larva per plant. Since beans were near maturity, no  
treatments were recommended. (Hunt, Ext.)

NOTE:

Per paragraph 1, State Survey Coordinator Functions of the 1976 Cooperative Economic Insect Survey Work Plan, the next insect survey report from North Carolina will be November 26, 1976.



K

NOV 24 1976

ENTOMOLOGICAL DEPT.

entomology



November 24, 1976

TO: County Extension Chairmen and Other Interested Persons

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

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

SOYBEANS

IMPORTED FIRE ANT (*Solenopsis invicta*) - NORTH CAROLINA - Surveys were conducted in 50 soybean fields in southern Columbus County. Approximately 450 acres were observed. The average infestation was 10 identifiable mounds per acre, ranging from 1-35 mounds per acre. Loss from combine skipping to avoid mounds was evident in some fields, but estimates are not available at this time (Hunt, Ext.)

