# **INSECT IDENTIFICATION LABORATORY**

## **ANNUAL REPORT 1981**

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#### INTRODUCTION

This report summarizes the activity of the Insect Identification Laboratory at Virginia Tech for 1981.

The lab is located in 312 Price Hall. It is staffed by one half-time Laboratory Specialist, Daniel J. Hilburn. Specimens are identified and recorded in the lab, then sent to Extension Entomologists who handle particular commodity groups for control recommendations and additional comments. Specimens may be brought directly to the lab or mailed to:

> Insect Identification Laboratory Extension Entomology 312 Price Hall VPI & SU Blacksburg, VA 24061-5796

Local offices of the Cooperative Extension Service in counties and municipalities are provided with Insect Identification and Diagnosis Request forms, alcohol vials, and mailing tubes for sending insects and insect damaged specimens to the lab.

In many cases no effort is made to identify insects beyond the family level, and common names are used where possible because of their wide recognition.

A total of 2,028 requests were received in 1981, many of them with more than one insect problem per specimen. This causes discrepancies between the number of specimens received and the number of insects identified. The previous record high was in 1979 when 1,770 specimens were received.

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Persons providing identifications and/or control recommendations: Mr. Daniel J. Hilburn.....General Laboratory Specialist Dr.John A. Weidhaas.....Ornamentals Extension Entomologist Dr. William H Robinson .... Household and Structural Wood, Extension Entomologist Fruits and Nuts, Lawn and Turf, Human Dr. James E. Roberts.....Vegetables and Field Crops, Animal Extension Entomologist Dr. William A. Allen.....General Extension Entomologist Mr. Boris Kondratieff.....General Research Assistant Dr. Michael Kosztarab.....Scale Insects Professor of Entomology Dr. Richard D. Fell.....Apiculture and Stinging Insects Assistant Professor of Entomology Mr. John M. Luna.....Alfalfa Extension Entomologist Mr. Taylor Williams.....Grasshoppers Graduate Research Assistant

The following table lists the growth of activities and services provided by the Insect Identification Laboratory and the faculty and staff associated with it since 1967.

Year	Identifications for Extension Agents and the Public	Identifications from Black Light Traps at Ports of Entry	Identified by the USNM thru the IIL
1967	318	a	a
1968	984	130	а
1969	1104	140	а
1970	1245	490	а
1971	1276	1120	100 <sup>b</sup>
1972	970	557	516
1973	1124	683	184
1974	1264	742	316
1975	1430	781	160
1976	1437	457	223
1977	1365	500 <sup>b</sup>	282
1978	1351	550 <sup>b</sup>	89
1979	1770	0	120
1980	1527	0	23
1981	2028	0	89

Number of Specimens Identified

<sup>a</sup>Service not previously provided.

<sup>b</sup>Estimated Figure

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## SPECIMENS RECEIVED BY THE INSECT IDENTIFICATION LABORATORY IN 1981

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL	% of TOTAL
Ornamentals, Shade Trees	10	17	44	58	119	154	128	114	94	75	25	23	856	42%
Household, Structural Wood	28	20	41	74	57	73	59	48	48	51	24	18	546	27%
Vegetables, Field Crops, Forage			1	14	29	43	40	34	19	13	1	1	195	10%
Fruits, Nuts	2	5	9	11	36	45	25	22	10	8	1	1	175	9%
General	2		2	4	30	21	28	28	26	12	6		159	8%
.awn,Turf			1	3	14	10	9	18	21	3	2		81	4%
Stored Products			1	1				3	1		1		7	0.3%
nimal				1	1		1	1			1		5	0.2%
luman						1			1		1		3	0.1%
lpiculture									1				1	0.05%
TOTAL	42	42	 99	166	286	347	290	268	221	162	62	43	2028	
G OF TOTAL	2%	2%	5 <b>%</b>	8%	14%	17%	14%	13%	11%	8%	3%	2%		

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## MOST FREQUENTLY RECEIVED INSECTS ORNAMENTALS AND SHADE TREES

	J	F	M	A	M	J	J	A	S	0	N	D	TOTAL
Not an insect <sup>a</sup>	2	3	6	13	6	6	13	12	7	4	1	1	74
Unidentifiable <sup>b</sup>	1	1	2	2	10	12	4	5	4	1		1	43
Boxwood Mite	1	8	3	1	5	1		4	4	1			28
Euonymus Scale			3		1		7	2	7	3	1	2	26
Aphids <sup>C</sup>					4	5	2	3	3	7	2		26
White Peach Scale	1		3		2	1	5	3	1	6	2	1	25
Spider Mites <sup>C</sup>	3	1	2	3	3	2	2	6		2			23
Galls <sup>C</sup>				1	1	7	5	4	2		1		21
Spruce Mite				1	4	2	7		3	2			19
Lady Beetles						4	1		3	4	3		15
Buck Moth Caterpillar						12	2						14
White Pine Aphid			1		1			3			5	4	14
European Hornet								1	6	4			11
Elm Leaf Beetle						5	2	3	1				11
Hickory Leaf-Stem Gall Phylloxera					3	8							11
Round-Headed Borers			2			1	4	1	1	2			11
Pine Bark Adelgid		2		2	1		1			4	1		11
Boxwood Leafminer		2	6							2			10
Maple Bladder Galls					9	1							10
Vein Pocket Gall				2	5	2	1						10
Azala Lacebug					1	1	1	3	2	1	1		10

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	J	F	М	A	М	J	J	A	S	0	N	D	TOTAL
Psocids							6	2	2				10
San Jose Scale						1	2	3	2	1			9
Soft Brown Scale	1			1	1		2		1	1		1	8
Arborviate Leafminer				2	3	1	1	1					8
Boxwood Psyllid					2	4	1				1		8
Spittlebugs					2	4		1	1				8
Wooly Alder Aphid						8							8
Spiny Elm Caterpillar					3	2	2						7
Hemispherical Scale	1			1				1			1	2	6
Mealybugs				1	3	1			1				6
Oak Lecanium					3		2			1			6
Oak Spangles						2	2	1		1			6
Oak Leafier/ Leafroller							2	3		1			6
Japanese Weevil							1	4	1				6
Cottony Camellia Scale	1		1	1		1	1						5
Deodar Weevil	1			2				1		1			5
Termites				2	1	1	1						5
Wheelbug				1	1	3							5
Fiorinia Hemlock Scale			1	1	1			1	1				5
Stink Bugs					1		1	2	1				5
Locust Leafminer					2	1	1	1					5
Walnut Caterpillar						1	2		2				5
Hickory Horned Devil								4		1			5
Noctuids	1				2							1	4

	J	F	М	A	M	J	J	A	S	0	N	D	TOTAL
Pine Needle Scale		1			1				1			1	4
Sap Beetles				2	1		1						4
Horned Oak Gall				1	1		1	1					4
Obscure Scale					2	1	1						4
Long-Horned Beetles <sup>c</sup>					2	1					1		4
Weevil Larvae					2		1					1	4
Cottony Maple Leaf Scale					3	1							4
Oystershell Scale					1	2				1			4
Four-Lined Plant Bug						4							4
Pine Tip Moth							4						4
Pine Sawyer Beetles							1	2	1				4
Catalpa Sphinx							1	1	2				4
Magnolia Scale							1	3					4
Red-Headed Pine Sawfly								2		2			4
Fall Webworm								2	2				4
Azalea Caterpillar								2	2				4
Webworms <sup>C</sup>									3	1			4

## Received 3 times in 1981

Anthomyiid Flies with	Gloomy Scale
fungus disease	Hemlock Woolly Adlgid
Carpenterworm	Holly Leafminer
Cyclamen mite	Insect Eggs <sup>C</sup>
Eastern Tent Caterpillar	<u>Ips</u> spp.
Erineum Mites	Japanese Scale
Eriophyiid Mites	Juniper Leafminer
	Lacebugs
Fall Cankerworm	Leafminers
Eastern Tent Caterpillar Erineum Mites	<u>Ips</u> spp.

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Maggots<sup>C</sup> Orange-Striped Oakworm Pine Webworm Pink-Striped Oakworm Sawflies<sup>C</sup> Scales Spring Cankerworm Syrphid Flies

Spring Cankerworm Syrphid Flies Rece: Azalea Leafminer Bagworms Borers<sup>C</sup> Bronze Birch Borer Cicadas Clover Mite Dark-Winged Fungus Gnats

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Earwigs European Corn Borer Forest Tent Caterpillar Gall Aphid Gypsy Moth Imperial Moth Caterpillar Introduced Pine Sawfly Iris Borer Japanese Beetle Juniper Bud Mites Juniper Webworm Latania Scale Leaf Beetles

Maple Leafspot Gall

American Dagger Moth Barberry Webworm Beech Blight Aphid Beetle Grub Blister Beetles Bostrichid Borer Boxelder Aphid Boxelder Bug Bumble Bees Calico Scale Carrot Beetle Centipede Common Stalk Borer Cooley Spruce Gall Adelgid Corn Earworm Crape Myrtle Aphid Cyanophyllum Scale Cypress Tip Moth Dermestid Beetles Dogwood Scurfy Scale

Tea Scale Tiger Moth Caterpillars Wax Scale Whiteflies Woolly Aphids<sup>C</sup> Woolly Fold Gall Yellow-Necked Caterpillar

Received 2 Times in 1981

Millipedes Oak Apple Gall Oak Kermes Oak Lacebug Oak Phlloxera Pine Looper Pine Tortoise Scale Raspberry Cane Borer Red-Humped Caterpillar Saddleback Caterpillar Southern Red Mite Sphinx Moth Larvae Spotted Pine Aphid Sycamore Lacebug Tulip Tree Scale Two-Spotted Spider Mite Weevil Feeding White Pine Sawfly White Pine Weevil Willow Aphids Woolly Oak Gall

#### Items Received 1 Time in 1981

Dogwood Stem Gall Dogwood Twig Borer Elm Bark Beetles Elm Borer Elm Calligrapha Beetle Fern Scale Flannal Moth Caterpillar Flat Bark Bug Flat-Headed Borers<sup>C</sup> Flat-Headed Apple Tree Borer Geometrid Larva Giant Bark Aphid Glyptoscelis pubescens Gouty Vein Gall Great Leopard Moth Gregarious Oak Leafminer Hackberry Button Gall Hackberry Psyllid Gall Harlaquin Bug Hemlock Scale

Hickory Tube Galls Horntails Ichneumon Wasp Katydid Eggs Larger Elm Leaf Beetle Leaf-footed Bug Leafhoppers Lecanium Scale Lesser Bulb Flv Luna Moth Mimosa Webworm Minute Brown Scavanger Beetle Mottled Willow Borer Mulberry Whitefly Narcissus Bulb Fly Native Holly Leafminer Oak Leafminer Oak Petiole Gall Painted Hickory Borer Parlatoria sp. Peach Twig Borer Pearslug Sawfly Peony Scale Pine Needleminer Pissodes sp.

Plant Bugs<sup>C</sup> Poplar Tentmaker Prionus Beetle Pyracantha Webworm Red-headed Ash Borer Reduviid Eggs Rhagoletis juniperina Rhododendron Borer Round-Headed Apple Tree Borer Scarab Bettle<sup>C</sup> Seed Bugs Seed Ticks Small Pointed Oak Gall Soldier Beetles Sowbugs Springtails Treehoppers Trogositid Beetle Tumbling Flower Beetle Twig Pruner Ugly Nest Caterpillar Wild Cherry Pouch Gall Willow Potato Gall Window Fly Larva Woolly Beach Leaf Aphid

<sup>a</sup>Symptoms indicated a disease or physiological condition not of insect origin.

<sup>b</sup>Problem could not be diagnosed from the specimen received.

<sup>C</sup>Some species within this broad category were identified and recorded separately.

Two-hundred and twenty-six insect categories of ornamental and shade tree insects were identified, most composed of a single species. Of these, 90 (40%) were received only once, 93 (41%) were received 2 to 4 times, 22 (10%) were received 5 to 9 times, and 20 (9%) were recieved 10 times or more.

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HOUSEHOLD AND ST	<b>FRUCTURAL</b>	WOOD
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	J	F	М	A	М	J	J	A	S	0	N	D	TOTAL
Carpenter Ants	4	3	1	8	3	4	5	1	1	1		1	32
Carpet Beetles	3		2	4	4	4		3	4	6			30
Indian Meal Moth	2		4	2	3	1	2	1	5	5	1	3	29
Termites	1		1	9	4	2	2	1	2	1			23
Ants <sup>a</sup>	1		2	3	2	2	7	3					20
Springtails	1		1		4	4	3	1	1		2	1	18
Long-Horned Beetles <sup>a</sup>			6	4	1	2	1	1	1	1			17
Elm Leaf Beetle			4	10						1	1		16
Ground Beetles		1			2	7			1	1	1	1	14
Locust Borer		2	2	5	5								14
Old House Borer		1	1		1	4	2	1		2			12
Clothes Moths	1		3		2	2			1	1	1		11
Larger Yellow Ants	1	1		4		3	1						10
Clover Mite			3	5						1	1		10
Saw-Toothed Grain Beetle		1		3	2	1	1		1	1			10
Cigarette Beetle					2			4	2	1		1	10
Moth Flies		1			1	2	3	1					9
Flour Beetles	1			1	1			1				3	7
Bark Beetles		2		1	2				1		1		7
Pavement Ant					1	3	2	1					7
Soldier Beetles					1	1			1	1		3	7
Powder-Post Beetles		1			1		1	1		2	1		7
Larder Beetle	1			1			1			1	2		6
Blow Flies <sup>a</sup>	1						1		1		2	1	6

	J	F	М	A	M	J	J	A	S	0	N	D	TOTAL
Booklice						1	1	1	1	1	1		6
Wood Roaches						3	1			2			6
Bed Bug					2	1		2				1	6
Spiders <sup>a</sup>	1		1		1			1	1				5
Round-Headed Borers		1				1	3						5
Tachinid Flies							2	1	2				5
Smaller Yellow Ant										2	3		5
Aphids	1						1			1		1	4
Yellow Mealyworms	1				1	1			1				4
Millipedes		1	1								1	1	4
Midges			1			2						1	4
Unidentifiable <sup>b</sup>			1			2				1			4
Carpenter Bees			1		1	1					1		4
Darkling Beetles <sup>a</sup>				1		1		1		1			4
Scarab Beetles				2		1	1						4
House Centipede					2	1	1						4
European Hornet						1		1	1	1			4
Flesh Flies						1	2	1					4
Yellowjackets								1		3			4
Fungus Gnats								1	3				4

## Received 3 Times in 1981

Angoumois Grain Moth Anthomyiid Flies with Fungus Disease Braconid Wasps Chestnut Weevil Larvae

Click Beetles Drugstore Beetle Fleas Green June Beetle Grubs 13

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Hornets Ichneumon Wasps Rice Weevil Soldier Flies

Ambrosia Beetles

Boxelder Bugs

Fruit Flies

Horsehair Worm

Crickets

Black Widow Spider Blister Beetles

Flat Grain Beetle

Antlike Flower Beetles

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Spider Wasps Stoneflies Thrips Wolf Spiders

Received 2 Times in 1981

House Fly June Beetle Noctuid Moths Oriental Cockroach Rove Beetles Sowbugs Spider Beetles Stink Bugs Wheelbug

Received 1 time in 1981

Alfalfa Weevil Asiatic Oak Weevil Assasin Bugs Bean Weevil Bee Flies Bostrichid Borer Carrion Beetles Cluster Fly Collitid Bees Corn Earworm Cornfield Ant Crane Fly Damsel Bug Dark Mealworm Earwigs Suropean Corn Borer Flat-Footed Fly Flat-Headed Wood Borer Freshwater Scud Geometrid Moths German Cockroach Grain Mite Halictid Bees Harvest Mite Horntails

Lacewing Larger Elm Leaf Beetle Lesser Mealworms Little Black Ant Maggots<sup>a</sup> March Flies Mediterranean Flour Moth Megachilid Bees Minute Fungus Beetles Mites Mole Cricket Moth Borers Northern Fowl Mite Not an Insect<sup>C</sup> Pales Weevil Paper Wasps Pine Sawyer Beetle Potter Wasp Praying Mantid Egg Case Sepsid Flies Sphecid Wasps Syrphid Flies Tephridid Fruit Fly Tortoise Beetle Wharf Borer

<sup>a</sup>Some species within this broad category were identified and recorded separately.

<sup>b</sup>Problem could not be diagnosed from the specimen received.

<sup>C</sup>Symptoms indicated a disease or physiological condition not of insect origin.

One-hundred and twenty-eight insect categories of household and structural wood insects were identified. Of these, 50 (39%) were received only once, 47 (37%) were received 2 to 4 times, 15 (12%) were received 5 to 9 times, and 16 (12%) were received 10 times or more.

	J	F	М	Ā	М	J	J	A	S	0	N	D	TOTAL
Not an insect <sup>a</sup>				1	2	5	6	4					18
Unidentifiable <sup>b</sup>				2	2		2	3	1	2			12
Aphids <sup>C</sup>						2	2	2	1	2			9
Cabbage Maggot				3	2	3				1			9
Squash Bug						1	2	4		1			8
Common Stalk Borer					1	4	2						7
European Corn Borer						2	3		2				7
Wireworms			1	1	1	1			1			1	6
Flea Beetles						3	2			1			6
Potato Leafhopper						1	2	3					6
Corn Earworm						2		2	1				5
Seedcorn Maggot				2	2								4

#### VEGETABLES, FIELD CROPS, AND FORAGE

#### Received 3 Times in 1981

Cereal Leaf BeetleMelanoplus viridipesGarden WebwormMitesHarlequin BugNorthern Corn RootwormLady BeetlesSyrphid FliesLesser Corn Stalk BorerWhitefliesWhite Grubs

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Alfalfa Blotch Leafminer Ants Carrot Weevil Colorado Potato Beetle Corn Sap Beetle Cucumber Beetle Cutworms Fall Armyworm Ground Beetles Horsehair Worm Potato Tuberworm Sap Beetles Slugs Sod Webworms Soldier Fies Southern Corn Stalk Borer Stink Bugs Thrips

Received 1 Time in 1981

Alfalfa Weevil Anthophorid Bees Assasin Bugs Bean Weevil Braconid Wasps Burrower Bug Chalcid Wasps Corn Root Aphid Corn Root Webworm Cowpea Curculio Crane Fly Larvae Eastern Tent Caterpillar Fruit Flies Fungus Gnats Gall Grass Sawfly Japanese Beetle Japanese Weevil Leaf-Footed Bugs Leafminer Lesser Housefly

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Locust Leafminer Long-Horned Beetles Mexican Bean Beetle Onion Maggot Otitid Larvae Parasitic Wasps<sup>C</sup> Pea Weevil Pepper Maggot Plant Bugs Potato Leafhopper Potato Scab Gnat Rove Beetles Salt Marsh Caterpillar Sphinx Moth Caterpillars Springtails Squash Vine Borer Strawberry Root Weevil Three-Lined Potato Beetle Trips Tomato Fruitworm Tomato Hornworm

<sup>a</sup>Symptoms indicated a disease or physiological condition not of insect origin.

<sup>b</sup>Problem could not be diagnosed from the specimen received.

<sup>C</sup>Some species within this broad category were identified and recorded separately.

Eighty-three insect categories of vegetable, field crop, and forage insects were identified. Of these, 42 (51%) were received only once, 30 (36%) were received 2 to 4 times, 9 (11%) were received 5 to 9 times, 2 (2%) none were received 10 times or more.

	J	F	М	A	M	J	J	A	S	0	N	D	TOTAL
San Jose Scale		1		2	1	4	1	4	3	1			17
Aphids <sup>a</sup>					7	4	3		1				15
Grape Flea Beetle				1	8	3							12
Not an insect <sup>b</sup>			1		1	4	2			1			9
Walnut Caterpillar							2	2	2			1	7
Plum Curculio						3	1	3					7
Rosey Apple Aphids					2	3							5
Eriophyid Mites						4	1						5
Mites <sup>a</sup>						1	4						5
European Hornet							1	1	1	1			4
Grape Tomato Gall					2	2							4
Lady Beetles						4							4
Galls <sup>a</sup>					1	2		1					4
Locust Leafminer					2	2							4
Flea Beetles				2		1	1						4
Anthomyiid Flies with fungus disease				1	2	1							4

FRUITS AND NUTS

Received 3 Times in 1981

Catfacing	Sap Beetles							
Eastern Tent Caterpillar	Unidentifiable <sup>C</sup>							
Grape Cane Borer	White Peach Scale							

Received 2 Times in 1981

Bark Beetles<sup>a</sup> Casebearer Eight-Spotted Forester Grape Sawfly Hornets Ξ.

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Northern Walnut Husk Fly Scarab Beetles<sup>a</sup> Shot-Hole Borer

Soldier Flies Yellow-Necked Caterpillar

Received 1 Time in 1981

Anthomyiid Maggots Bagworms Black Walnut Leaf Pouch Gall Blues Centipedes Chestnut Weevil Codling Moth Corn Earworm Dark Mealworm European Red Mite Flesh Flies Fruit Flies Fungus Gnats Grape Leaf Skeletonizer Grape Phylloxera Grape Plume Moth Grape Scale Grape Tube Gall Grapevine Root Borer Hickory Shuckworm Hopila spp. Insect Eggs<sup>a</sup> Japanese Beetle

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Japanese Weevils June Beetles Leaf Beetles<sup>a</sup> Leaftiers Lesser Peach Tree Borer Midges Moth Flies Noctuid Caterpillars Pear Psylla Praying Mantid Egg Case Prominent Caterpillars Psocids Raspberry Cane Borer Round-Headed Apple Tree Borer Sawflies Skippers Soldier Beetles Sphinx Moth Larvae Syrphid Flies Thrips Tiger Moth Caterpillars Wheelbug Whiteflies Wireworms

<sup>a</sup>Some species within this broad category were identified and recorded separately.

<sup>D</sup>Symptoms indicated a disease or physiological condition not of insect origin.

<sup>°</sup>Problem could not be diagnosed from the specimen received.

Seventy-nine insect categories of fruit and nut insects were identified. Of these 47 (59%) were received only once, 23 (29%) were received 2 to 4 times, 6 (8%) were received 5 to 9 times, and 3 (4%) were received 10 times or more.

	J	F	M	A	M	J	J	A	S	0	N	D	TOTAL
Anthomyiid Flies with fungus disease				1	7								8
Bee Flies						2		4					6
Wheelbug						2	1	1		1			5
Unidentifiable <sup>a</sup>					1	1	1		1	1			5
Not an insect <sup>b</sup>							1	2	1	1			5
Sphinx Moths						2	1		1				4
Cocoons				1				1	1		1		4
Rec	eiv	ed	3 T	ime	s i	n 1	981						
Assasin Bugs Buck Moth Caterpillar Horsehair Worm					Ich Noc		mon d M						
Rec	eiv	ed	2 T	ime	s i	n 1	981						
Carrion Beetles Great Leopard Moth Io Moth Caterpillar Katydid Eggs Lacebugs Long-Horned Beetles Prionus Beetle Grub Rat-Tailed Maggots					Sol Spi Spi Sti Syr Tip	die der der nk phi hii	Wa Bug d F d W	lie sps s lie asp	S			11a	r
Re	ecei	vec	1	Tin	le i	n 1	981						
Andrenid Bees Ants Apantesis Tiger Moth Aphids Araneid Spider Aulacid Wasps Bagworm Black and Yellow Argiop Spider	be				Bli Bra But Car	ste con ter pen	Swa r B id fly iter We	Was Was Ch Be	les ps rys es	<b>b</b>		ter	fly

GENERAL

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Cast Skin Centipedes Checkered Beetle Chestnut Weevil Larvae Cigarette Beetle Clothes Moths Dark Mealworm Dobsonfly Earwigs European Hornet Eved Elater Fall Cankerworm Fruit Flies Geometrid Moth<sup>C</sup> Green June Beetle Grubs Hag Moth Caterpillar Harvester Ants Hopila spp. Hornets Imperial Moth Caterpillar Ivory-Marked Beetle Jumping Spider Leaf Beetles Larger Yellow Ant Leaf-Footed Bugs Long-Legged Flies Luna Moth

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Megrhyssa sp. Midges Mole Cricket Oakworm Moths Orthosia bicolorago Palestriped Flea Beetle Predaceous Diving Beetle Psyllid Pyralid Moths Rhinocerus Beetle Red Admiral Butterfly Rice Weevil Royal Walnut Moth Saddle Back Caterpillar Scoliid Wasps Scorpion Scorpion Flies Skin Beetle Sphecid Wasps Termites Tiger Beetles Tipulid Larvae Tolype velleda Treehoppers Velvet Ant Walnut Scale Weevil Larvae Yellowjackets

<sup>a</sup>Problem could not be disgnosed from the specimen received.

<sup>b</sup>Symptoms indicated a disease or physiological conditions not of insect origin.

<sup>C</sup>Some species within this broad category were identified and recorded separately.

Ninety-seven insect categories of general insects were identified. Of these, 69 (71%) were received only once, 23 (24%) were received 2 to 4 times, 5 (5%) were received 5 to 9 times, and none were received 10 times or more.

	J	F	M	A	M	J	J	A	S	0	N	D	TOTAL
Scoliid Wasps								11	7				18
Colletid Bees			1		5								6
Cicada Killer Wasp							2	3					5
Ground Beetles					1	3							4
White Grubs <sup>a</sup>				1				1		1	1		4
	Receiv	red	3 T	ime	s i	n 1	981						
Cicada Nymphs	Not an Insect <sup>b</sup>												
	Receiv	red	2 T	ime	s i	n 1	981						
Burrowing Webworm European Hornet Green June Beetle	Japanese Beetle Scarab Beetles <sup>a</sup> Unidentifiable <sup>C</sup>												
	Recei	vec	1	Tim	e i	n 1	981						
Anthophorid Bees Ants Black Cutworm Black Turfgrass Ata Braconid Wasps Bronze Cutworm Cereal Leaf Beetles Chalcid Wasps Chinch Bug Crane Flies Elm Leaf Beetle Field Skipper			Ichneumon Wasps Lady Beetles Long-Horned Beetle Millipedes Skippers Sod Webworm Soldier Flies Solitary Bees <sup>a</sup> Sphecid Wasps Stink Bugs True Armyworm Velvet Ant Walnut Caterpillar										

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<sup>a</sup>Some species within this broad category were identified and recorded separately.

LAWN AND TURF

<sup>b</sup>Symptoms indicated a disease or physiological condition not of insect origin.

<sup>C</sup>Problem could not be diagnosed from the specimen received.

Thirty-eight insect categories of lawn and turf insects were identified. Of these, 25 (66%) were received only once, 8 (21%) were received 2 to 4 times, 4 (11%) were received 5 to 9 times, and 1 (3%) was received 10 times or more.

STORED PRODUCTS

Received 2 Times in 1981

Cigarette Beetle

Received 1 Time in 1981

Booklice Cadelle Dark Mealworm Drugstore Beetle Rice Weevil

Mealybugs

ANIMAL

Received 1 Time in 1981

Flour Beetles Lesser Mealworm Lone Star Tick Wart

HUMAN

Received 1 Time in 1981

Crab Lice

7

9

Cuterebra sp.

#### APICULTURE

One insect was identified. The sender reported that it was attacking a hive of bees. It was a dirty-old-drone!

EXTENSION DIVISION · VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY · BLACKSBURG, VIRGINIA 24061

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