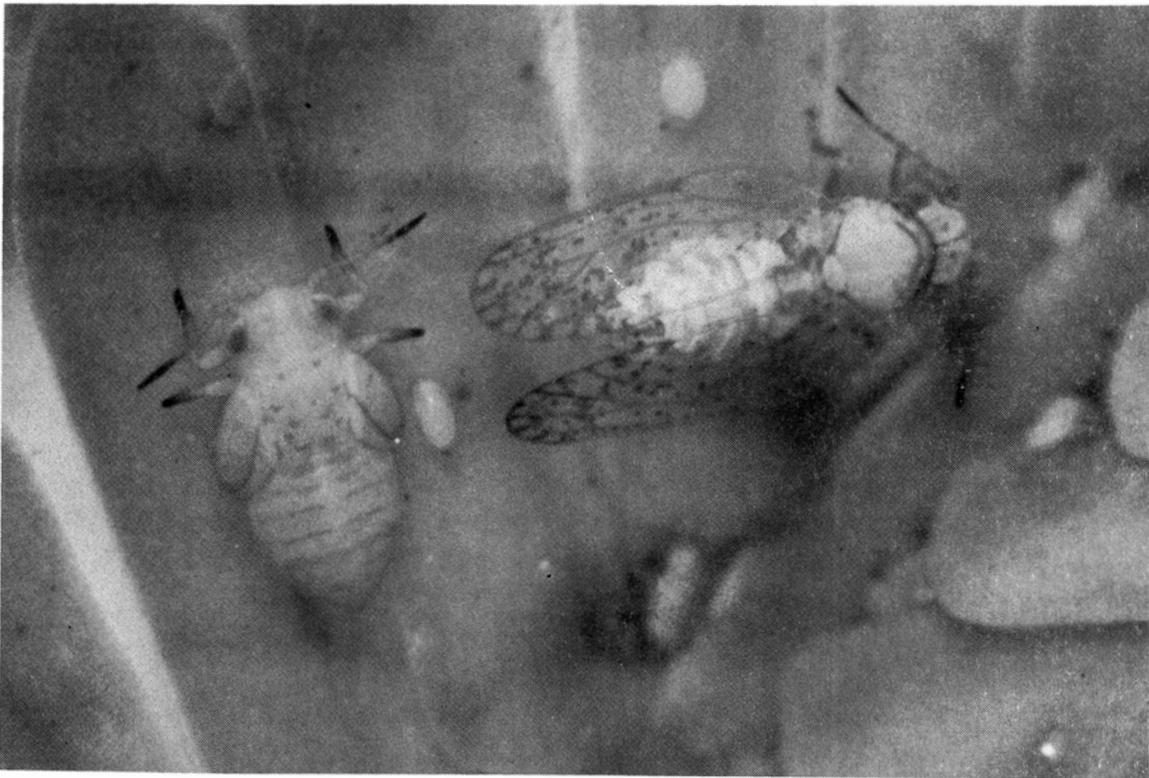




CALIFORNIA PLANT PEST and DISEASE REPORT

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California Department of Food and Agriculture 1220 N Street Sacramento California 95814



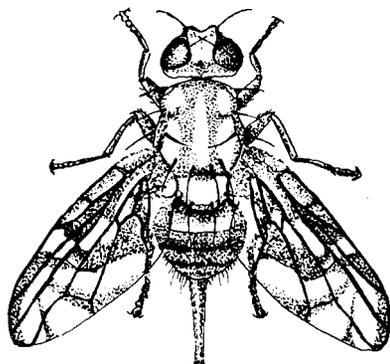
Adult, nymph and eggs of the baileyana psyllid, Acizzia acaciae-baileyanae, (commonly called the cootamundra wattle psyllid in Australia) on Acacia baileyana. The psyllid is a new California and new North American record. See article on page 6.

Correspondence should be addressed to the appropriate member of the editorial staff of the California Plant Pest and Disease Report (C.P.P.D.R.):

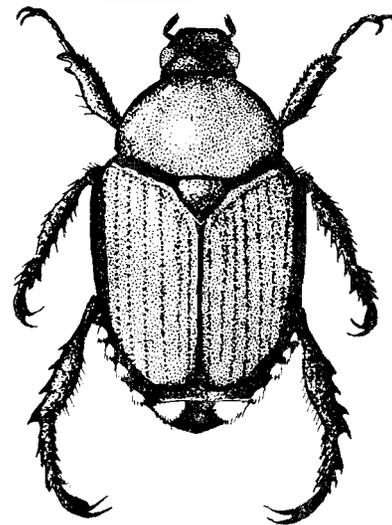
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Entomology Highlights



NOTICE OF RATING CHANGES

The rating on three insect species has been officially changed. See the following list:

1. Asparagus aphid, Brachycorynella (=Brachycolus) asparagi, from "A" to "C".
2. Eucalyptus borer, Phoracantha semipunctata, from "Q" to "B".
3. All ant species of the genus Paratrechina, including P. longicornus, from "Q" or "B" to "C".

SIGNIFICANT FINDS

ORIENTAL FRUIT FLY, Dacus dorsalis -(A)- Two flies have been found through May of this year. Two more flies were found on June 1, but information on these will be covered in the next issue. The January and May finds are outlined in the following reports by John Pozzi:

"Los Angeles County trapper Scott Harris is credited with finding the first Oriental fruit fly (OFF) for 1987. Scott found the fly on January 2, 1987, in a Jackson/methyl eugenol trap that had been placed in an orange tree along Hartland Street in Canoga Park.

Jackson/methyl eugenol trap densities in the area was five traps per square mile. Since the find location is near the Ventura County line, both the Los Angeles and Ventura County Departments of Agriculture will be increasing the trap densities as appropriate to protocol levels for new OFF finds.

CDFA Insect Biosystematist Eric Fisher determined that the fly was a sexually mature male OFF."

"A male Oriental fruit fly was trapped on May 29, 1987, in South Laguna, Orange County. CDFA Agricultural Inspector Mary Edgecomb found the fruit fly while servicing a Jackson/methyl eugenol trap that had been placed in an orange tree at a residence along 5th Avenue.

Jackson/methyl eugenol trap density in the area was five traps per square mile. McPhail and Jackson/methyl eugenol trap densities in an 81-square mile area around the find have been increased as appropriate to protocol levels for new Oriental fruit fly finds. Twenty-five McPhail and Jackson/methyl eugenol traps were placed as feasible in the immediate square mile surrounding the find site. Jackson/methyl eugenol trap densities are at five traps per square mile in the remaining 80 square miles.

CDFA Insect Biosystematist Karen Corwin determined that the Oriental fruit fly was sexually mature."

A TEPHRITID FRUIT FLY, Dacus (Zeugodacus) scutellatus -(Q)- One specimen of this exotic fruit fly has been trapped in Los Angeles County. The following report by John Pozzi outlines the find:

"Los Angeles County trapper Roberto Inocencio found a male Dacus (Zeugodacus) scutellatus, on April 1, 1987, in a Jackson/cue-lure trap at a residence on Via Canada in Rancho Palos Verdes. The trap had been placed in an orange tree.

CDFA Insect Biosystematist Karen Corwin made the determination and reports that little scientific information about this fruit fly is available. It has been found in China, Formosa, India, Japan, and Okinawa. A literature search is in progress by Dr. George Loughner with CDFA's Exotic Pest Analysis.

Jackson/cue-lure trap density in the area of the find was two traps per square mile. In response, the Los Angeles County Department of Agriculture has increased the Jackson/cue-lure and McPhail trap density to 50 and 25 traps, respectively, in the first square mile around the find site. Jackson/cue-lure trap density will be increased to five traps per square mile in eight square miles adjoining it."

The fly apparently breeds in wild snake gourd, Trichosanthes cucumeroides. It is often common in citrus groves but it has never been found feeding in the fruit. It is generally considered a minor species where it occurs.

GYPSY MOTH, Lymantria dispar -(A)- Hatching larvae were collected along Slaytop Road, Encino, Los Angeles County on January 27 by T. Lorida.

SOUTHERN GREEN STINKBUG, Nezara viridula -(Q)- Collected May 4 in Sacramento by A. Posadas and H. Bejarano. The bugs were collected from mustard plants.

TULIP TREE SCALE, Toumeyella liriodendri -(A)- Found in January during a tulip tree eradication project survey in Alameda County. The one-property infestation was found in San Leandro by J. Neivey.

TRACHEAL MITE, Acarapis woodi -(A)- The California quarantine on the honey bee tracheal mite, Acarapis woodi, was lifted in July 1986. Within California there are some counties which enforce the mite quarantine and others who do not. Currently, there are sixteen enforcing counties:

Butte	Lake	Shasta	Sutter
Colusa	Modoc	Siskiyou	Tehama
Glenn	Nevada	Solano	Yolo
Lassen	Sacramento	Sonoma	Yuba

Of these sixteen counties, thirteen have their own screening laboratories. Lassen, Modoc and Tehama counties are presently using the services of the Shasta County laboratory for processing their bee samples. Butte, Colusa, Glenn and Sacramento counties are sending their bee samples to the California Department of Food and Agriculture (CDFA) in Sacramento for processing.

The staff at CDFA, under the direction of Tokuwo Kono, have trained thirty county biologists in the techniques used to screen for the tracheal mite. These thirty biologists came from Butte, Colusa, Glenn, Lake, Nevada, Sacramento, San Joaquin, Shasta, Siskiyou, Solano, Sonoma, Sutter, Tulare, Yolo and Yuba counties.

Positive finds of infested honey bees have already been made by the staff in Shasta and Yolo counties. The Shasta County staff has also made a positive find for Tehama County. The following table summarizes all of the county positive finds:

County	Slip. No.	No. of Colonies	Origin	Completion Date	Found by	Det. by
Tehama	772298	62	CA	X-9-86	Livingston	Kono
Shasta	740554	60	SD	XI-7-86	Livingston	Kono
Shasta	740555	60	SD	XI-7-86	Livingston	Kono
Shasta	740556	?	SD	XI-7-86	Livingston	Kono
Shasta	740557	60	SD	XI-7-86	Livingston	Kono
Shasta	740558	60	SD	XI-7-86	Livingston	Kono
Shasta	740592	120	SD	XI-20-86	Livingston	Kono
Shasta	740596	336	Idaho	XI-24-86	Livingston	Kono
Shasta	814876	126	Unk.	XI-24-86	Livingston	Kono
Shasta	814877	126	SD	XI-24-86	Livingston	Kono
Shasta	814879	126	SD	XI-24-86	Livingston	Kono
Shasta	814972	144	Unk.	XI-28-86	Livingston	Kono
Yolo	572410	432	ND	XI-17-86	Del Bondio Deidrick	Eichlin
Yolo	572411	432	ND	XI-17-86	Del Bondio Deidrick	Eichlin
Shasta	814972	144	Unk.	I-28-87	Livingston	Kono
Lake	797412	17	Unk.	II-24-87	Tritchler Morse	Kono
Lake	797413	100	Unk.	II-24-87	Tritchler Morse	Kono
Merced	776034	500	Unk.	III-10-87	E. Pond E. Johnson	Kono
Merced	766836	290	Unk.	III-18-87	T. Kono	Kono & Eichlin
Madera	653532	1100	Unk.	III-27-87	T. Kono	Kono
Stanis.	776485	200	CA	IV-13-87	T. Kono	Kono
S. Barb.	648401	312	CA	IV-22-87	T. Kono	Kono
S. Barb.	648401	432	CA	IV-23-87	T. Kono	Kono
Ventura	641779	500	CA	V-5-87	T. Kono	Kono
San Diego	489011	Unk.	CA	V-5-87	T. Kono	Kono
Ventura	641782	1000	CA	V-8-87	T. Kono	Kono
Madera	485404	1500	Unk.	V-11-87	T. Kono	Kono
Yolo	755357	173	Unk.	V-13-87	Del Bondio	Kono
Yolo	755358	119	Unk.	V-13-87	Del Bondio	Kono
Yolo	755360	312	Unk.	V-13-87	T. Kono	Kono
Yolo	755361	312	Unk.	V-13-87	Del Bondio	Kono
Yolo	755362	312	Unk.	V-13-87	Del Bondio	Kono
Yolo	755363	266	Unk.	V-15-87	Del Bondio	Kono
Yolo	755364	266	Unk.	V-15-87	Del Bondio	Kono
Yolo	653533	456	Unk.	V-20-87	T. Kono	Kono

The infested hives, found in three of these regulated counties, have been moved to non-regulated counties in California. The Tehama County beekeepers moved their bees to Ventura County; the Shasta County beekeepers moved their bees to the Chowchilla area in Madera County; and the Yolo County beekeeper moved his hives to Napa County. The latest find in Lake County has also been moved to a different location. All of these positive determinations were made by Tokuwo Kono, and in his absence, by Tom Eichlin.

WHITE GARDEN SNAIL, Theba pisana -(A)- A sharp eye by a CDFA trapper has turned up a new, small infestation of this snail pest in San Diego. This report by John Pozzi gives details:

"White garden snail was found on April 3, 1987, at a new location in San Diego County.

While performing normal trapping duties, CDFA Agricultural Aide Rita Green spotted white garden snail at a residence on Hawaii Avenue in the city of San Diego. In response CDFA White Garden Snail Eradication Project personnel made a delimiting survey of the area and thanks to Rita's early detection found that the infestation was confined to one residential block.

The latest white garden snail find is near San Diego Bay and is approximately 10 miles south from the Encanto area infestation. Eradication treatment for the Hawaii Avenue find is scheduled to begin April 7."

Seven other routine collections of this snail were made during this period by Williams, Routhier, Brauningner, Villelhas, Drieshmayer and Green.

NEW STATE AND NORTH AMERICAN RECORDS

AN ACACIA PSYLLID, Acizzia acaciae-baileyanae -(Q)- A new homopterous insect, in the Family Psyllidae, has been found for the first time in California. The insect is in all probability an Australian species called Acizzia acaciae-baileyanae. The specimens have been sent to Washington D.C. for positive identification but there is little cause to doubt the accuracy of the initial identification at this time.

This psyllid was collected essentially simultaneously from two separate locations in the state by separate individuals. The insect was first brought to our attention by Richard Tassan of the U.C. Berkeley Biological Control Department late last week. He called this office to inquire about a psyllid from Albany, Alameda County, that he had not seen on acacia trees before. It was suggested that he send specimens here for identification as soon as possible. In the mean time, specimens arrived in the

laboratory from Vacaville, Solano County on June 4, collected by Erwin and Lyon of Solano County. Specimens sent in by Dick Tassan arrived on June 5th. Identification was made this morning and Douglass Miller, psyllid specialist at the SEL Laboratory in Beltsville was consulted by phone.

Since it turns out that both collections were made on the same day, May 28, the two collections will be considered co-records for new State and North American records.

The new psyllid is closely related to the common acacia psyllid, Acizzia (Psylla), uncatoides also from Australia, but which has caused considerable injury to acacia trees in California over the years. The current economic status of the new psyllid is not known, and its economic potential in California remains to be seen. It was collected from Acacia baileyana in Vacaville and from Acacia dealbata in Albany. It is known from A. baileyana and A. podalyriaefolia in Australia and New Zealand. It is apparently not known anywhere else in the World at this time. It has also been described under the name Psyllia uncata Ferris and Klyver.

The new psyllid is similar to the common acacia psyllid but is smaller, has more heavily maculated or spotted wings, and has distinctive male claspers and proctiger.

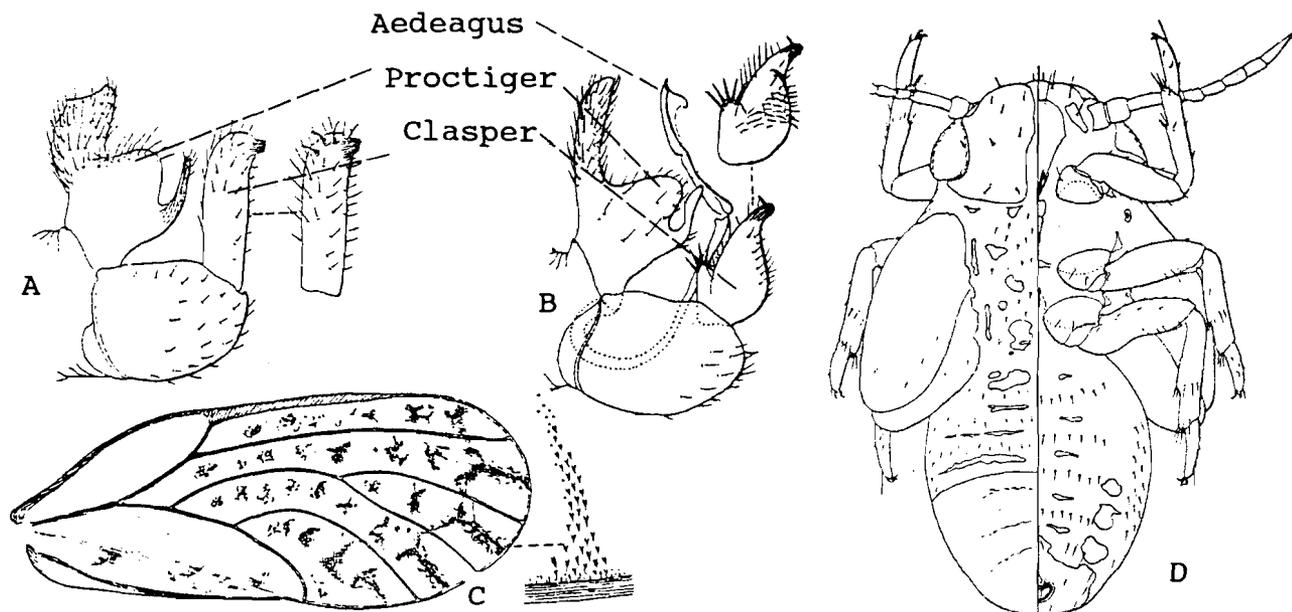


Plate 1 Fig. A, Male terminalia of Acizzia acaciae-baileyanae. Fig. B., Male terminalia of Acizzia uncatoides. Fig. C, Wing of A. acaciae-baileyanae. Fig D., nymph of A. acaciae-baileyanae.

NEW STATE RECORDS

Two new leafhoppers have been recorded from California. Both species are either native to the area or have moved into California via natural spread from the south and east. They are probably not of economic concern, but their presence in California is of scientific interest. The species are:

- a. Sanctanus sonorus, collected at Seeley, Imperial County on October 3, 1986 on Sorghum. Collection was by Robert Flock.
- b. Stirellus sp. probably bicolor, collected at Bard, Imperial County, California on February 12, 1987 on Bermuda grass. Collections were by Flock and Seitz.

This is the first time either genus has been collected in California.

VIOLET GALL MIDGE, Mayetiola violicola -(C)- This gall forming cecidomyiid fly was found infesting violet leaves at a Hayward, Alameda County residence. The collection was made by S. Jones on April 30.

NEW COUNTY RECORDS

WOOLLY WHITEFLY, Aleurothrixus floccosus -(A)- Found for the first time in San Luis Obispo and San Bernardino Counties. The San Bernardino find was made January 8, by John Snodgrass in Serranos. In response to this find, survey teams found a larger infestation in the towns of Chino, Upland, Loma Linda, Ontario, Montclair and Grand Terrace.

The find in San Luis Obispo marks the northern most California locality for this troublesome citrus pest. The San Luis infestations occur on door yard plants; there is no commercial citrus near the infestation. The following report by CDFA Economic Entomologist Rod Clark outlines the finds:

"On the 7th of April, Art Gilbert, Rod Clark and Russ Maly were training new county trappers in a park when woolly whitefly was found on some orange trees. After a positive confirmation from the lab in Sacramento, San Luis Obispo County personnel surveyed within one square mile of the find. Ten woolly whitefly locations were found within the center square mile. About 116 inspections were made in the San Luis Obispo area with 32 sites being positive. The infestation covers about three square miles of San Luis Obispo. It has been found south of Foothill Boulevard and Slack Street, north of Orcutt Road, east of Higuera Street and on both sides of Johnson Avenue to the east.

Negative surveys were done in Laguna Lakes area, east of San Luis Obispo. Four nurseries within San Luis Obispo and a citrus nursery in Nipomo were surveyed with negative results. A broad survey was done in Nipomo, Oceano, Arroyo Grande, Grover City and Pismo Beach with negative results.

The infestation seems to be limited to the town of San Luis Obispo. More in-depth surveys would need to be performed in other cities to have confidence with the preliminary negative results."

SOUTHERN GREEN STINKBUG, Nezara viridula -(Q)- Collected for the first time from San Diego County, outside the 10th Street terminal at the Port of San Diego. The collection was made by Coyne and Dearie on March 9. This is a significant range extension for this pest in California.

COMSTOCK MEALYBUG, Pseudococcus comstocki -(A)- This potentially serious pest of citrus and deciduous fruit crops has been found for the first time in Kings County at Corcoran. The discovery was made on May 6, 1987, by Kings County Agricultural and Standards Inspector III Lloyd Bookout, who spotted the mealybug in a mulberry tree. Lloyd is a trapping supervisor and was reviewing trapping activities in the area at the time of the find.

Comstock mealybug has been detected in Kern, Stanislaus, and Tulare Counties. The pest is being controlled successfully by natural enemies in these three counties.

AUSTRALIAN SOD FLY, Inopus rubiceps -(B)- Listed in the last issue as occurring in San Francisco, San Mateo, Alameda, Monterey and Sonoma counties. We have overlooked the fact that this insect is also known from Santa Cruz County where it was first collected in 1984 at Santa Cruz. It had not been picked up as a new county record at that time. Our apologies Marilyn!

A NATIVE FRUIT FLY, Trypeta augustigena -(C)- Collected for the first time from San Diego County at Oceanside on March 2 by Ted Olsen in McPhail Trap.

PURPLE SCALE, Lepidosaphes beckii -(B)- Survey teams delimiting the woolly whitefly infestation in San Luis Obispo have also found this scale pest of citrus. The first official find was made on April 17 by G. Jordon on an orange tree. Delimitation surveys are now underway.

AN ASH PSYLLID, Psyllopsis fraxinicola -(C)- This uncommon psyllid has been collected for the first time from Solano County where it was found on Raywood ash trees in Fairfield on May 20 by Bill Lyon. The psyllid is so uncommon in California that it has not been collected since the early 1920's, when it was collected

at Stanford University and in the Sierra Foothills of Madera County. The psyllid occurs in the Pacific Northwest and through most of the eastern United States and Europe. It is restricted almost completely to the genus Fraxinus. It is probably not of economic concern.

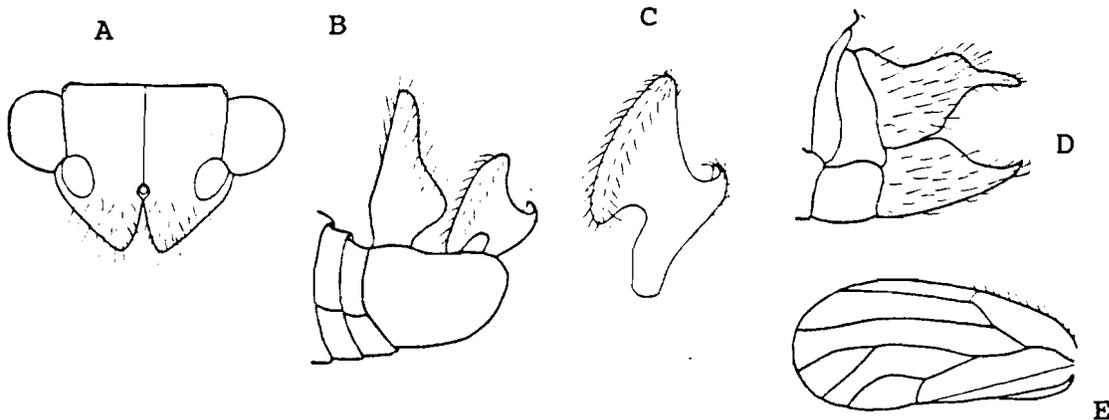


Plate 2. Psyllopsis fraxinicola Fig. A., Anterior view of head. Fig. B., Lateral view of male terminalia. Fig. C., Male clasper. Fig. D., Female terminalia. Fig. E., forewing.

OTHER FINDS OF SIGNIFICANCE

An unusually large number of "B" rated pests have shown up in the state during this time period. Some of these pests are of limited distribution and are rarely seen. They have definitely made their presence known, however, as can be seen by the following entries.

EUONYMUS SCALE, Unaspis euonymi -(B)- Collected from Maytens (Maytenus) plants in Sacramento, Sacramento County. This is a California host record collected by Al Schimiger of the State Buildings and Grounds Department.

NANTUCKET PINETIP MOTH, Rhyacionia frustrana -(B)- Collected several times from Sunol, Alameda County by Curtner, Neklason and Peters during April and at Fresno, Fresno County during March by F. Ruder and D. Tanaguchi.

CAROB MOTH, Spectrobates ceratoniae -(B)- Turned into the Stanislaus County Commissioner. The pest was found by a Modesto homeowner infesting dates purchased at a roadside stand near Indio, Riverside County.

STRIPED MEALYBUG, Ferrisia virgata -(B)- Collected several times from the Sacramento-Carmichael area of Sacramento County by Keith Miller and Phil Siebert during May. The mealybug was found feeding on mulberry, ash and Chinese pistachio trees planted in door yards and as street trees. This particular strain of mealybug is potentially a serious pest of deciduous trees in the Northern California area. It was first found in Sacramento just a few years ago (1978) and just now appears to be extending its range considerably.

PITTOSPORUM PIT SCALE, Asterolecanium arabidis -(B)- Found infesting mock orange shrubs in Merced, Merced County. The collection was made by Linda Buckholz.

HOLLY SCALE, Dynaspidiotus britannicus -(B)- Found infesting Ruscus plants at a Nursery in Pajaro, Monterey County by Bohn & Oliver on March 11.

PITTOSPORUM DIASPIDID, Parlatoria pittospori - (B)- Found by J. Garibaldi on black pine at Hayward, Alameda County on February 25.

A CYCAD WEEVIL, Tranes sp. -(Q)- Immature forms of this weevil were found in the trunk of a dead cycad palm (Encephalartos manikensis) at Montecito, Santa Barbara County. The collection was by Pierce and Davidson on February 6.

A LONGHORNED BEETLE, Teratoclytus plavilstskikovi -(Q)- Adults of this beetle emerged from cones used in a Christmas wreath. The collection was made by R. Weston in Fremont, Alameda County on January 6.

MISCELLANEOUS PEST PROBLEMS

CEREAL THRIPS, Limothrips cerealeum -(C)- Thousands (millions?) of these thrips have been moving out of grain fields and biting people in the West Sacramento area of Yolo County.

SIGNIFICANT FINDS IN OTHER STATES

MEDITERRANEAN FRUIT FLY, Ceratitus capitata -(A)- Has been found in Florida again. The following report taken from "Triology", the Florida Department of Agriculture Newsletter, outlines the find:

"Five freshly caught males were in a Jackson trap hanging in a calamondin tree, Citrofortunella mitis, at a residential area in Haileah, Dade County (3/2/87) (S. Diaz) (det. H.V. Weems and H.A. Denmark). Cooperative USDA and Florida Dept. of Agriculture delimiting surveys and eradication procedures

were immediately set into motion. On March 5 a single Medfly larva was collected from calamondin fruit a short distance away from the original find on the same street in Hialeah (H.A. Denmark, confirmed by D. Habeck & J.B. Heppner). There have been no more finds of Medflies up to press time. Four weekly pesticide treatments were applied followed by a sterile release program over a 49-square mile area of Dade County for 2 months."

AFRICANIZED BEE, Apis mellifera scutellata -(Q)- Has also been found in Florida during this period. The following report by APHIS-PPQ supplies details:

"The identification of a colony of honey bees in Panama City, Florida, was confirmed as Africanized honey bee (AHB) on April 29. This colony originated from a swarm that a hobbyist beekeeper had collected on April 8 on a vessel that had come to Panama City from Central America. This colony of AHB was sampled and destroyed by a State Apiary Inspector on April 22. There were no drone or queen cells in the brood chamber.

All other colonies in the apiary have been sampled and identified as European honey bees. We are currently sampling all bees within a 2-mile radius of this apiary. No additional regulatory activities are anticipated at this time."

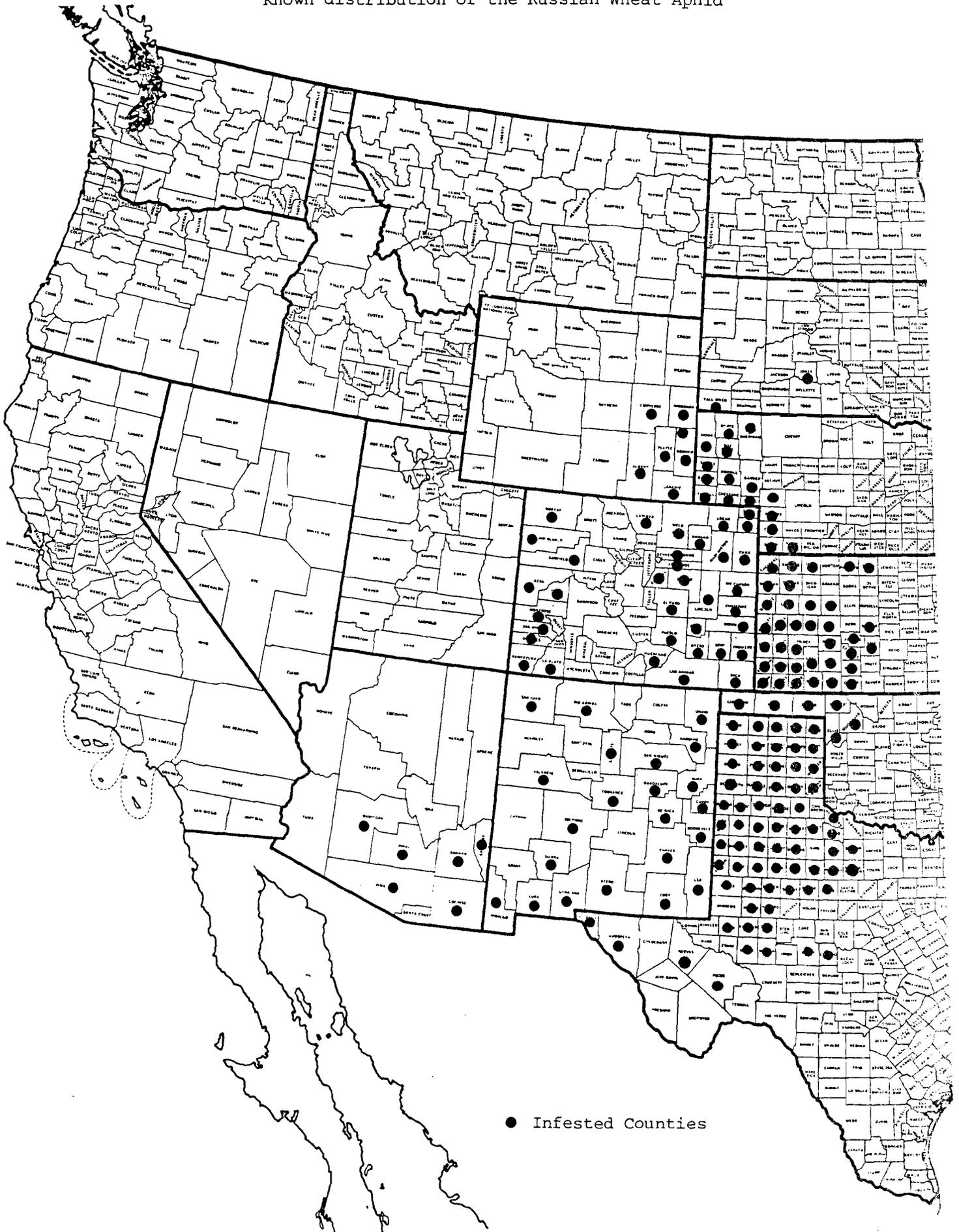
RUSSIAN WHEAT APHID, Diuraphis noxia -(Q)- This serious pest of wheat was first found in Texas last year. For more information see CPPDR January - April 1986, 5(1-2): 206-208 the aphid has now been found in three other states, including neighboring Arizona. The following map (on the next page), adapted from one produced by D.C. Thompson, indicates the present range as of mid-May:

EXCLUSION AND DETECTION

GYPSY MOTH, Lymantria dispar, -(A)- The following chart outlines the quarantine interceptions for the period January 1 through May 31:

County	Origin	Date	State	Collector
SM	MA	1/21	E,L,P	Czarnecki
LA	IL	1/13	E	London
O	CT	1/14	E,L,P	Goodreau
LA	CT	1/16	E	Mork
SM	MA	1/16	E,L	Czarnecki
STCL	NJ	1/16	E	Cover
LA	N	1/16	P	Dingfelder
CC	NY	1/21	E,P	Ziegler

Known distribution of the Russian Wheat Aphid



Source: D.C. Thompson, Colorado State University, Fort Collins, CO.

(Continued from page 12)

SM	MA	1/27	L	Sandoval/Czarnecki
SM	MA	1/29	E	Czarnecki
MAR	?	2/3	E,L,P	de Grassi et. al
SD	NJ	2/6	P	Parades/Rys
O	NJ	2/10	L,P	Parades
CC	CT	2/12	E,P	Ziegler
KE	NY	3/9	E	Lapp
O	CT	3/12	L	Paredes
O	?	3/12	L,P	Goodreau
LA	CT	3/13	E,L,P	Dingfelder
O	MA	4/2	E,L,P	Paredes
SD	NH	4/2	L,P	Rys/Ginsky
SAC	NY	4/7	E,P	Zukin
SAC	NY	4/13	E	Zukin
ALA	NY	4/21	E	Curtner/Pieslak
R	RI	4/27	E	Brown
LA	NY	5/8	E,L,P	Harris
LA	NY	5/7	P	Harris
ALA	PA	5/13	L,P	Jones
STCI	NJ	5/14	L	Price
CC	NJ	5/20	E,L,P	Gilbert
O	MD	5/21	L,P	Paredes
ED	MA	5/27	E,L	Caswell
O	NY	5/28	E,L,P	Goodreau
ED	MA	5/28	E,A	Caswell

ORIENTAL FRUIT FLY, Dacus dorsalis -(A)- Intercepted three times since January 1, 1987. Collections were by Pastalka and Shimada, March 4, in papayas from Hawaii, at Oakland; by L. Fernandez, March 11, in soursop from Hawaii at Westminster; and by G. Nash, March 16, also in soursop from Hawaii at San Bernardino.

WEST INDIAN FRUIT FLY, Anastrepha obliqua -(A)- Collections of what are probably this species have been intercepted four times in mangoes, probably from Haiti. Collections were at Moraga, Contra Costa County, February 9, by R. Locke; South San Francisco, February 10, by Laurenzen et. al; and at Fremont, Alameda County, February 10, by A. Peters.

A FRUIT FLY, Anastrepha fraterculus -(A)- Specimens of what are probably this species were collected by S. Koller in mangoes from Peru on January 15 at Los Angeles.

PAPAYA FRUIT FLY, Toxotrypana curvicauda -(A)- Collected many times this period as indicated by the following chart:

County	Origin	No. of Collections	Collectors
LA	?	1	Cassidy, Azar, King
SD	Mex	22	Reusche

SD	Mex	2	Sudduth
Fresno	?	1	Leary
SD	Mex	3	Krogh

The following insects and molluscs have been intercepted in quarantine so many times during this period that it is not practical to account for all of the collections and collectors:

<u>Species</u>	<u>Common Name</u>	<u>Rating</u>	<u>No. Collections</u>
Malacosoma	tent caterpillar	Q	2
Chrysodeixis chalcites	green garden looper	Q	4
Bradybaena similaris	a snail	B	10
Siphanta acuta	torpedo bug	B	5
Aleurodicus dispersus	spiraling whitefly	Q	5
Lepidosaphes beckii	purple scale	B	3
Aspidiotus excisus	aglaonema scale	Q	2
Coccus viridis	green scale	Q	4
Pulvinaria psidii	green shield scale	A	12
Pinnaspis buxi	boxwood scale	Q	3
Pinnaspis strachani	lesser snow scale	A	9
Howardia biclavis	mining scale	A	10
Ischnaspis longirostris	black thread scale	A	5
Pseudaulacaspis cockerelli	magnolia white scale	A	29
Aspidiotus destructor	coconut scale	A	5
Pheidole megacephala	big-headed ant	Q	5
Pseudococcus lycopidii	club-moss mealybug	Q	4
Dysmicoccus alazon	alazon mealybug	B	4
Pseudococcus elisae	elisae mealybug	B	3

The following "A", "B", and "Q" rated pests have been intercepted in quarantine during the period January 1 to May 31

Rating	Species	Common Name	Date	Origin	County	Host	Collector
Q	Xyloborus	a bark beetle	1/29	Europe	Ala	maple wood	Brown
Q	Ligybus villosus	a scarab beetle	1/20	Chile	LA	misc. fruit	Rab/Dee
Q	Carthartus quadricollis	square-necked grain beetle	2/2	Jamaica	Sac	wood statue	Espinoza
Q	Psammococcus disjardinsi	a flat bark beetle	2/10	Puerto Rico	Mad	Dracana	Tashiro Hansen
Q	Orchidophilus attarrinus	orchid weevil	3/19	HI	SJ	orchids	Helmar/Banzhof
Q	Paleocallidium rufipenne	a long horned beetle	3/25	Japan	Ala	dunnage	Brown
Q	Phyllophaga sp.	a June beetle	4/7	TN	R	liquidambar	Chandler
A	Popillia japonica	Japanese beetle	4/13	TN	Sac	car trunk	Basha
Q	Heterobostrychus aequalis	a bostrichid beetle	4/17	Thailand	SD	wood	Boch
Q	Protaetia fusca	mango flower beetle	4/3	HI	LA	auto	Koller
Q	Phyllophaga sp.	a June beetle	4/30	KS	H	Zoysia	Spadoni/Holzberger
Q	Sybra alternans	a long horned beetle	5/27	HI	SJ	Ming	Barnes
Q	Popillia japonica	Japanese beetle	5/28	NY	LA	Patio OHA	Dingfelder
Q	Protaetia fusca	mango flower beetle	5/29	HI	Ala	auto	Brown
Q	Ochetomyrmex europunctata	little fire ant	1/13	Fla	LA	Spathyphyllum	Calicchia
Q	Ochetomyrmex europunctata	little fire ant	1/26	Puerto Rico	SJ	Pothos	Croce/Moretto
Q	Tetramorium sp.	an ant	1/29	Europe	Ala	dunnage	Brown
Q	Anoplolepis longipes	an ant	5/21	HI	SF	Ginger	Rios
Q	Anoplolepis longipes	an ant	3/11	HI	H	Flowers	Spadoni
A	Solenopsis invicta	red imported fire ant	5/20	Fla	Ala	water lily	Stockel
Q	Technomyrmex albipes	an ant	5/9	HI	LA	Philodendron	Olson
Q	Bephatelloides sp.	a seed chalcid	3/4-3/16	HI	SBO	Soursop	Nash
Q	Bephatelloides sp.	a seed chalcid	5/25	HI	O	Soursop	Fernandez
Q	Diastrophus sp.	a gall wasp	3/24	Alaska	H	Rasperry	Spadoni
Q	Diastrophus radicum wasp	rasperry root gall wasp	4/1-4/17	MI	H	Rasperry	Spadoni
Q	Ceroplastes floridensis	Florida wax scale	3/9-5/8	Fla	LA	Ficus	Olson
Q	Ceroplastes floridensis	Florida wax scale	2/18	Fla	SJ	Ficus	Hudson
A	Ceroplastes rubens	red wax scale	3/12	HI	SJ	Birdnest fern	Davelvy
A	Ceroplastes rubens	red wax scale	4/25	Philippines	SF	Hoya	Brown
Q	Pinnaeus uniloba	unilobed scale	4/23	HI	Sol	Maile lei	musso
Q	Diaspis sp.	An armored scale	4/10	Guatemala	R	Avocado	Brown
Q	Geococcus coffeae	A soil mealybug	3/17	HI	LA	Palm	Kelliam
Q	Chaetococcus bambusae	A bamboo mealybug	3/16	China	SD	Bamboo	Brown
B	Aonidiella aurantii	California red scale	3/11	TX	SM	Grapefruit	Buerer
Q	Lepidosaphes esakii	An armored scale	1/27	Philippines	LA	Coconut	Koller
Q	Mesolecanium sp.	A soft scale	1/26	Peru	LA	Mangoes	Koller
Q	Acutaspis sp.	An armored scale	1/15	Peru	LA	Mangoes	Koller
A	Kilifia acuminta	acuminate scale	4/24	Philippines	SF	Hoya	Brown
Q	Philephedra tuberculosa	A soft scale	4/10	Mex	SD	Papaya	Reusche
Q	Orchamoplatus mammaeferus	croton whitefly	5/22	HI	Sac	Maile lei	Jensen
Q	Aleurotrachelus sp.	A whitefly	6/3	Honduras	SD	Palm	Neville/Ginsky
Q	Aleuroglandulus malangae	A whitefly	1/26	Fla	SD	Syngonium	Hudson
Q	Trialeurodes n. sp.	A whitefly	3/9	Mex	SD	Bamboo	Brown
Q	Veronicella sp.	A slug	4/2	HI	SM	Dieffenbachia	Mastrangelo
Q	Veronicella sp.	A slug	3/11	Fla	Sac	Ficus	Bianchi

B	Subulina sp.	A snail	1/22	Fla	SBO	Palm	Miller
A	Ostrinia nubilalis	European corn borer	1/16	Midwest	Sut	Corn	Stenland/Cameron
Q	Amorbia emigratella	Mexican leaf roller	6/2	HI	Sac	Conifer	Sarracino
A	Thridopteryx ephemeriformis	A bagworm	6/3	VA	SD	Table	Brown
Q	Cydia sp.	A fruit moth	5/6	New Zealand	LA	Apples	Koller
Q	Argyrotaenia velutinana	red banded leaf roller	4/7	Fla	SBO	Fern	Dearmin
Q	Orgyia leucastigma	white-marked tussock moth	2/6	MA	SM	OHA	Czarneec
Q	Bucculatrix sp.	A lyonetid moth	2/5	MA	StB	OHA	Janssen/Davidson
Q	Bucculatrix sp.	A lyonetid moth	2/3	NJ	Sac	OHA	Zunkin
Q	Thrips orientalis	A flower thrips	3/20	HI	SD	Pikake Flower	Kennedy/Walsh
Q	Planococcus pacificus	Pacific mealybug	4/9	Asia	SF	?	Brown
Q	Planococcus pacificus?	Pacific mealybug	5/1	HI	LA	Aglaonema	Cassidy
Q	Palmicultor palmarum	palm mealybug	2/9	Philippines	SF	Coconuts	Brown

The following insects and mollusks are "A" or "Q" rated pests from the period January 1 to May in quarantine which were not immediately identifiable to species because of life stage, condition or lack of comprehensive taxonomic studies of the groups.

Rating	Species	Common Name	Date	Origin	County	Host	Collector
Q	Fulgoroidea	Planthoppers	3/25	HI	LA	Ficus	Murase
Q	Fulgoroidea	Planthoppers	5/26	Fla	F	Palm	Phillips
Q	Fulgoroidea	Planthoppers	5/16	HI	LA	Ti	Papilli
Q	Cicadellidae	A leafhopper	5/22	HI	SM	Ficus lyrata	Mastrangelo
Q	Cicadellidae	A leafhopper	5/29	Costa Rica	SLO	Croton	Schmit
Q	Lepidoptera eggs	Moth eggs	3/28	HI	LA	Palm	Papilli
Q	Aphididae	Aphid nymphs	5/11	HI	V	Ginger	McClure
Q	Cerambycinae	A cerambycid beetle	5/28	Korea	Ala	Wood	Brown
Q	Lamiinae	A cerambycid beetle	5/29	Germany	Ala	Wood	Brown
Q	Xyloborinae	A bark beetle	3/31	Brazil	Ala	Wood	Brown
Q	Limacidae	A slug	2/23	New Zealand	LA	Cabbage	Rabe
Q	Pseudococcidae	Mealybug	1/29	HI	LA	Ginger	Matsumoto
Q	Diaspididae	An armored scale	3/13	TN	YU	Periwinkle	Marion et. al
Q	Diaspididae	An armored scale	3/17	HI	SBO	Heliconia	Cadiente
Q	Pseudococcidae	A mealybug	4/17-5/15	HI	H	Club Moss	Spadoni
Q	Pentatomidae	A stinkbug	4/7	FLA	SBO	Ferns	Dearmin
Q	Mirinae	A mirid bug	4/7	FLA	SBO	Ferns	Dearmin
Q	Arctiidae	A woolly bear	1/15	NY	SD	OHA	Kenyon
A	Noctuidae	A cutworm	1/20	Chile	LA	Fruit	Rabe/Dee
Q	Noctuidae	A cutworm	1/23	MY	S+B	OHA	Janssen
Q	Olethreutinae	A tortricid moth	2/2-3/2	HI	LA	Papaya	Rabe
Q	Lasioleptidae	A tent caterpillar	2/9	PA	CC	OHA	Ziegler
Q	Psychidae	A bag worm	2/9	PA	CC	OHA	Ziegler
Q	Olethreutinae	A tortrid moth	2/5	Fla	Tuo	Ficus	Anzar
Q	Pyraustinae	A pyralid moth	3/4	Ny	Sac	?	Siebert
Q	Arctiidae	A woolly bear	3/25	PA	SM	OHA	Czanecki
Q	Pyralidae	A pyralid moth	3/17	Africa	SF	?	Brown
Q	Limacodidae	Saddle-back caterpillar	4/28	Fla	My	Dracaena	Bohn/Oliver
Q	Psychidae	A bag worm	4/6	Fla	V	Asparagus	Hillis
Q	Lepidoptera	Moth pupae	5/4	HI	LA	Papaya	Rabe
Q	Tortricidae	A tortricid moth	5/4	Fla	SD	Fern	Rhys

BORDER STATIONS

If you think that the border stations might not be a deterrent to the establishment of serious insect pests in California, just look at the interceptions of gypsy moth in California (facts prepared by R. R. Brown, Pest Exclusion):

"Border Stations - A total of 292 interceptions of gypsy moth life stages (mostly egg masses) was made, usually from recreation vehicles (RVs) of various types (campers, house trailers, camping trailers, boat trailers, etc.) during the calendar year of 1986 by border station personnel. This figure compares with 376 interceptions made last year.

Warning Notices - A total of 26,468 shipments of household goods (HHGs) from areas known to be infested with gypsy moth, were identified at the border stations and permitted to proceed into California under quarantine, with a Gypsy Moth Warning Notice (Form 66-008A) attached to the manifest. The consignee is instructed to contact the agricultural commissioner for inspection after the moving van is unloaded. If the load is going into storage, then the moving company is to make the contact.

Summary - As a result of pest exclusion activities, 384 interceptions of gypsy moth life stages were accomplished. This compares to 470 interceptions last year.

Significance - As a result of the concentrated effort to exclude this pest from the California environment, the number of gypsy moth infestations has decreased. In 1982, 104 adult males were trapped in 14 counties; resulting in the necessity of chemically treating 10 infestation sites (1983) at a cost of about \$1.5 million. In 1984, 25 males were trapped in nine counties; with only two sites which required treatment (1985). In 1985, 29 males were trapped in ten counties; with no indications of an established infestation, and therefore no treatment scheduled (1986). During the 1986 season, 20 males were trapped in nine counties; with only one infestation site which required treatment in the spring of 1987. Our system of preventing the introduction of this pest appears to be quite effective."

Congratulations to the border station crews for a job well done.

BORDER STATION INTERCEPTIONS
(January 1 through May 31, 1987)

APPLE MAGGOT	<i>Rhagoletis pomonella</i>	1	A
GYPSY MOTH	<i>Lymantria dispar</i>	74	A
PECAN WEEVIL	<i>Curculio caryae</i>	34	A
HICKORY SHUCKWORM	<i>Cydia caryana</i>	80	A
IMPORTED FIRE ANT	<i>Solenopsis invicta</i>	11	A
BOLL WEEVIL	<i>Anthononus grandii</i>	1	A
JAPANESE BEETLE	<i>Popillia japonica</i>	2	A
EUROPEAN CORN BORER	<i>Ostrinia nubilalis</i>	2	A
WALNUT HUSK MAGGOT	<i>Rhagoletis suavis</i>	1	A
WHITE MARKED TUSSOCK MOTH	<i>Orgyia leucostigma</i>	7	A
COCONUT SCALE	<i>Aspidiotus destructor</i>	1	A
MEXICAN FRUIT FLY	<i>Anastrepha ludens</i>	2	A
LESSER SNOW SCALE	<i>Pinnaspis strachani</i>	1	A
PINK BOLLWORM	<i>Pectinophora gossypiella</i>	1	A
A SNAIL	<i>Theba pisana</i>	1	A
MAGNOLIA WHITE SCALE	<i>Pseudaulacaspis cockerelli</i>	1	A
EASTERN TENT CATERPILLAR	<i>Malacosoma americanum</i>	12	Q
ORIENTAL SCALE	<i>Aonidiella orientalis</i>	11	Q
BIG HEADED ANT	<i>Pheidole megacephala</i>	1	Q
KIRKALDY WHITEFY	<i>Dialeurodes Kirkaldyi</i>	1	Q
A SLUG	<i>Leidyula moreleti</i>	1	Q
ARROWHEAD SCALE	<i>Unaspis yanonensis</i>	12	Q
CITRUS SNOW SCALE	<i>Unaspis citri</i>	1	Q
MANGO SCALE	<i>Acutaspis tubercularis</i>	1	Q
A SNAIL	<i>Cepaea nemoralis</i>	1	Q
FIRE ANT	<i>Solenopsis germinata</i>	1	Q
SCARAB BEETLE	<i>Anomala flavilla</i>	1	Q
WEEVIL	<i>Curculio sp.</i>	1	A
TENT CATERPILLAR	<i>Malacosoma sp.</i>	29	Q
ANT	<i>Paratrechina sp.</i>	5	Q
SCARAB BEETLE	<i>Phyllophaga sp.</i>	1	Q
LEAF SKELENTONIZER	<i>Bucculatrix sp.</i>	1	Q
WHITEFLY	<i>Tetraleurodes sp.</i>	1	Q
AN APHID	<i>Aphis Sp.</i>	1	Q
ARMYWORM	<i>Spodoptera sp.</i>	1	Q
AN ANT	<i>Phiedole sp.</i>	1	Q
ADELGID APHID	<i>Adelges sp.</i>	1	Q
SOIL MEALYBUG	<i>Rhizoecus sp.</i>	1	Q
SODWORM	<i>Crambus sp.</i>	1	Q
CUTWORM	<i>Euxoa sp.</i>	3	Q
LEAFROLLER	<i>Acleris sp.</i>	3	Q
TUSSOCK MOTH	<i>Orgyia sp.</i>	3	Q
PECAN PHYLLOXERA	<i>Phylloxera sp.</i>	1	Q
MEALYBUG	<i>Pseudococcidae</i>	4	Q
LEAFROLLER	<i>Tortricidae</i>	3	Q
WOOLY BEAR	<i>Arctiidae</i>	17	Q
TENT CATERPILLAR	<i>Tortricidae</i>	7	Q
GELECHIIDE	<i>Gelechiidae</i>	2	Q

GRAIN MOTH	Pyralidae	2	Q
SLUG CATERPILLAR	Limacodidae	1	Q
BAGWORM	Psychidae	13	Q
SCALE COVER	Diaspididae	1	Q
LEAFHOPPER	Cicadellidae	1	Q
PLANTHOPPER	Fulgoridae	1	Q
CUTWORM	Noctuidae	11	Q
INSECT FRAGMENTS/LEAFHOPPER		1	Q
PRIVET THRIP	Dendrothrips ornatus	1	B
CALIFORNIA RED SCALE	Aonidiella aurantii	7	B
PURPLE SCALE	Lepidosaphes beckii	42	B
CHAFF SCALE	Parlatoria pergandii	65	B
GLOVER SCALE	Lepidosaphes gloverii	12	B
CRAZY ANT	Paratrechina longicornis	2	B
CAROB MOTH	Spectrobates ceratoniae	1	B
PYRIFORM SCALE	Protopulvinaria pyriformis	2	B
SNAIL	Bradybaena similaris	4	B
SNAIL	Opeas sp.	2	B

Tomato Powdery Mildew, Oidiopsis taurica Tepper, on Artichoke
in Contra Costa County

Demetrios G. Kontaxis
Pest Management/Public Information Programs Advisor
Contra Costa County

Globe artichoke, Cynara scolymus L., was found to be severely infected with the tomato powdery mildew in Brentwood, Contra Costa County, on June 4, 1987.

The same fungus was noticed on the same artichoke cultivar in a homegarden in Concord on May 29, 1987.

In both cases the fungus had sporulated profusely.

The tomato canopy in the field which was adjacent to the infected artichokes had completely covered the beds on June 4, 1987. As of June 5, 1987, powdery mildew had not been detected in this tomato field.

It is estimated that infection of the artichokes took place at least one month prior to detection.

Identification of the fungus was based on the morphology of its conidia.

This is the first record of Oidiopsis taurica on globe artichoke in Contra Costa County.

IRIS LEAFSPOT

Kathleen Kosta and T. E. Tidwell

A fungal leafspot, sometimes referred to as "fire", is a potentially serious disease of Iris spp. The disease occurs world-wide and is more severe on rhizomatous iris, but may also be found on bulbous iris species. It may result in reduced blooms and bulb/rhizome size and may kill the plant after several years.

Symptoms of the disease become more conspicuous towards the end of the growing season. Oval leaf spots are easily recognized by their dark brown borders, grayish centers and yellow zones surrounding and extending above the spots (Figure 1). Spots may expand to one-half inch long on leaves, stems and flower buds. Where numerous spots develop close to each other, the distal end of the leaf may become necrotic (Figure 2).

Centers of the leaf spots appear grayish due to production of spores of the fungus Heterosporium iridis. Spores are disseminated by splashing rain or irrigation water, or by wind. The germinating spores, which require free moisture for germination, may penetrate the host epidermis directly or through stomata. Perithecia of the sexual stage of this fungus, Didymellina macrospora, may form in dead leaf tissue. The fungus overwinters in dead leaf tissue in the perithecial stage or as mycelium.

The disease is promoted by the moist conditions found in low and poorly drained areas or in overcrowded plantings. Low calcium nutrition also contributes to disease development. Cultural control can be achieved by: 1) spacing of plants to avoid overcrowding, 2) modifying irrigation procedures to prevent splashing spores from one plant to another, and 3) removal and disposal of infected leaf tissue. Fungicide applications have also been successful in controlling the disease.

T.E. Tidwell is an Associate Plant Pathologist for the Analysis and Identification Branch of the California Department of Food and Agriculture.

Kathleen Kosta is an Agricultural Biological Technician for the Analysis and Identification Branch of the California Department of Food and Agriculture.

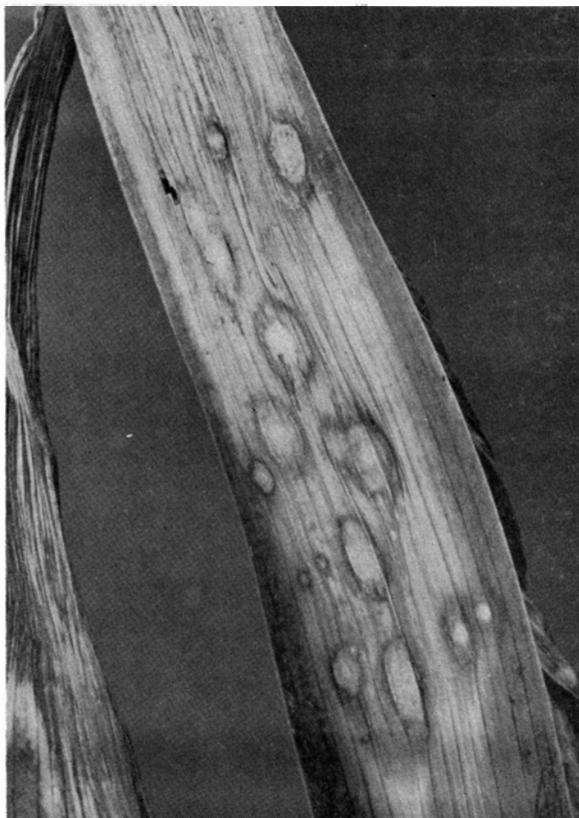


Figure 1



Figure 2

REFERENCES

Gould, C.J. and R.S. Byther 1979. Diseases of Bulbous Iris, Washington State University Cooperative Extension, Extension Bulletin #710, pp. 14-19.

Horst, R.K. 1979. Wescott's Plant Disease Handbook, 4th Edition, Van Nostrand Reinhold Company, New York, 803 pp.

Horst, R.K. and A.W. Dimlock 1977. Diseases of Bearded Iris, Information Bulletin #128, Cooperative Extension of New York State College of Agriculture and Life Sciences, Cornell University, Ithaca, New York, pp. 1-3.

"A" and "Q" Rated Nematode Pest Identifications

1986/87 Fiscal Year

QUARANTINE SHIPMENTS

<u>Pest</u>	<u>Origin</u>	<u>Host Association</u>	<u>Size of Shipment</u>	<u>Destination County</u>	<u>ID Date</u>
Heteroderidae larvae	Florida	<u>Dieffenbachia</u> sp. (<u>Perfecta</u>)	-----	Santa Barbara	1/21/87
<u>Pratylenchus alleni</u>	Arkansas	raspberry (Heritage)	100 plants	Santa Cruz	1/26/87
<u>P. alleni</u>	Arkansas	blackberry (Hall)	-----	Santa Cruz	4/14/87
<u>Pratylenchus</u> sp. (<u>P. flakkensis?</u>)	Mexico	bamboo	15 plants	San Diego	3/17/87
<u>Radopholus similis</u>	Florida	<u>Philodendron</u> spp.	16 plants	Fresno	7/14/86
<u>R. similis</u>	Florida	pothos (Marble Queen)	11 plants	Fresno	7/25/86
<u>R. similis</u>	Hawaii	<u>Philodendron</u> sp. (Red Emerald)	10 plants	Sacramento	8/4/86
<u>R. similis</u>	Hawaii	<u>Anthurium</u> sp.	7 plants	San Francisco	8/25/86
<u>R. similis</u>	Hawaii	palm (Neanthe bella)	5 plants	San Mateo	9/11/86
<u>R. similis</u>	Hawaii	<u>Anthurium</u> sp.	-----	San Francisco	10/3/86
<u>R. similis</u>	Florida	<u>Dieffenbachia</u> sp.	-----	Alameda	10/29/86
<u>R. similis</u>	Hawaii	<u>Phoenix roebelenii</u>	-----	Los Angeles	12/1/86
<u>R. similis</u>	Florida	<u>Epipremnum aureum</u>	304 plants	Los Angeles	1/22/87
<u>R. similis</u>	Canada Surrey, B.C.	<u>Peperomia</u> sp.	800 plants	San Joaquin	2/10/87
<u>R. similis</u>	Costa Rica	pothos (Marble Queen)	20,000 plants	San Diego	3/2/87
<u>R. similis</u>	Hawaii	<u>Anthurium</u> sp.	1 plant	San Diego	3/9/87
<u>R. similis</u>	Illinois/ Hawaii	<u>Anthurium</u> sp.	1 plant	San Diego	4/22/87

QUARANTINE SHIPMENTS (Continued)

<u>R. similis</u>	Hawaii	<u>Anthurium</u> sp. (Flamingo Flower)	2 plants	Humboldt	4/22/87
<u>R. similis</u>	Hawaii	<u>Anthurium</u> sp.	2 plants	Butte	4/24/87
<u>R. similis</u>	Hawaii	<u>Anthurium</u> sp.	2 plants	San Bernardino	4/24/87
<u>R. similis</u>	Hawaii	<u>Anthurium andreanum</u>		Kern	6/5/87
<u>R. similis</u>	Hawaii	<u>Anthurium</u> sp.	1 plant	San Bernardino	6/8/87
<u>R. similis</u>	Hawaii	<u>Anthurium</u> sp.	1 plant	Solano	6/8/87
<u>R. similis</u>	Hawaii	<u>Anthurium</u> sp.	3 plants	Los Angeles	6/15/87
<u>R. similis</u>	Hawaii	<u>Chamaedorea elegans</u>	15 cans	San Diego	6/15/87
<u>R. similis</u>	Hawaii	<u>Anthurium</u> sp.	2 plants	Monterey	6/15/87
<u>R. similis</u>	Hawaii	<u>Anthurium</u> sp.	1 plant	San Bernardino	6/17/87
<u>Pratylenchus</u> sp. ? (<u>Radopholus</u> sp. ?)	Costa Rica/ Honduras	pothos (Marble Queen)	11 boxes (cuttings)	San Joaquin	2/24/87
<u>Rotylenchulus</u> sp.	Columbia	<u>Ficus</u> sp.	300 plants	San Luis Obispo	8/21/86
<u>Rotylenchulus</u> sp.	Mexico	<u>Schefflera</u> sp.	-----	San Luis Obispo	10/6/86
<u>Rotylenchulus</u> sp.	Mexico	<u>Schefflera</u> sp.	-----	San Luis Obispo	10/6/86
<u>Rotylenchulus</u> sp.	Mexico	<u>Schefflera</u> sp.	-----	San Luis Obispo	10/6/86
<u>Rotylenchulus</u> sp.	Mexico	<u>Schefflera</u> sp.	2 boxes	San Joaquin	2/10/87
<u>Rotylenchulus</u> sp. <u>reniformis</u>	Florida	<u>Dracaena</u> sp. (Janet Craig)	50 plants	Los Angeles	8/4/86
<u>R. reniformis</u>	Florida	<u>Dracaena reflexa</u>	19 plants	Orange	10/1/86
<u>R. reniformis</u>	Mexico	coconut (fiber)	-----	San Luis Obispo	10/15/86
<u>R. reniformis</u>	Mexico	coconut (fiber)	-----	San Luis Obispo	10/15/86
<u>R. reniformis</u>	Florida	Areca palm	180 plants	San Diego	11/21/86
<u>R. reniformis</u>	Texas	<u>Phoenix roebelenii</u>	162 tubs	San Diego	12/30/86
<u>R. reniformis</u>	Texas	<u>Chamaerops</u> sp.	38 tubs	San Diego	12/30/86
<u>Xiphinema</u> sp.	Mexico	soil	-----	San Luis Obispo	10/14/87

BORDER STATION/PORT INTERCEPTIONS

<u>Pest</u>	<u>Origin</u>	<u>Host Association</u>	<u>Border Station or Port</u>	<u>ID Date</u>
<u>Dolichodorus heterocephalus</u>	Florida	plant/soil	Needles	3/5/87
Heteroderidae larvae	Pennsylvania	soil from hickory seedling	Smith River	6/8/87
<u>Radopholus</u> sp.	Florida	house plants	Blythe	10/31/86
<u>Radopholus similis</u>	Florida	house plants	Blythe	3/17/87
<u>R. similis</u>	Florida	pothos	Blythe	10/31/86
<u>Rotylenchulus leptus</u>	South Africa	soil (in granite blocks)	San Pedro	12/22/86
<u>Rotylenchulus reniformis</u>	Florida	<u>Dracaena fragrans</u>	Blythe	7/14/86
<u>R. reniformis</u>	Florida	plants	Blythe	8/15/86
<u>R. reniformis</u>	Florida	house plants	Blythe	9/2/86
<u>R. reniformis</u>	Florida	a weed	Blythe	3/16/87
<u>Xiphinema</u> sp.	Florida	house plants	Winterhaven	6/8/87
<u>Xiphinema</u> sp.	Florida	house plants	Winterhaven	11/10/86

NURSERY INFESTATIONS

<u>Pest</u>	<u>Host Association</u>	<u>County</u>	<u>ID Date</u>
<u>Cactodera</u> sp.	Cotoneaster	San Francisco	1/12/87
<u>Radopholus</u> <u>similis</u>	<u>Anthurium</u> sp.	San Diego	8/26/86
<u>R. similis</u>	<u>Diffenbachia</u> sp. (Camille)	San Diego	10/2/86
<u>R. similis</u>	<u>Maranta</u> sp.	San Diego	10/15/86
<u>R. similis</u>	<u>Maranta</u> sp.	San Diego	10/15/86
<u>R. similis</u>	pothos (Marble Queen)	Alameda	1/30/87
<u>R. similis</u>	pothos (Golden)	Alameda	1/30/87
<u>R. similis</u>	pothos (Golden)	Alameda	2/3/87
<u>R. similis</u>	<u>Calathea argentea</u>	San Diego	2/18/87
<u>R. similis</u>	<u>C. zebrina</u>	San Diego	2/18/87
<u>R. similis</u>	<u>Philodendron</u> sp. (Black Cardinal)	San Diego	2/17/87
<u>R. similis</u>	<u>Calathea zebrina</u>	San Diego	2/26/87
<u>R. similis</u>	<u>Maranta massangeana</u>	Los Angeles	3/25/87
<u>R. similis</u>	<u>Maranta sanderiana</u>	San Diego	4/1/87
<u>R. similis</u>	<u>Dieffenbachia</u> sp.	Santa Barbara	4/3/87
<u>R. similis</u>	palm (Neanthe bella)	Santa Clara	5/1/87
<u>R. similis</u>	pothos	Santa Barbara	5/12/87
<u>R. similis</u>	<u>Philodendron</u> sp.	Monterey	5/26/87
<u>Radopholus</u> sp.	pothos	Santa Barbara	4/10/87
<u>Radopholus</u> sp.	palm (Parlor)	Santa Barbara	5/1/87