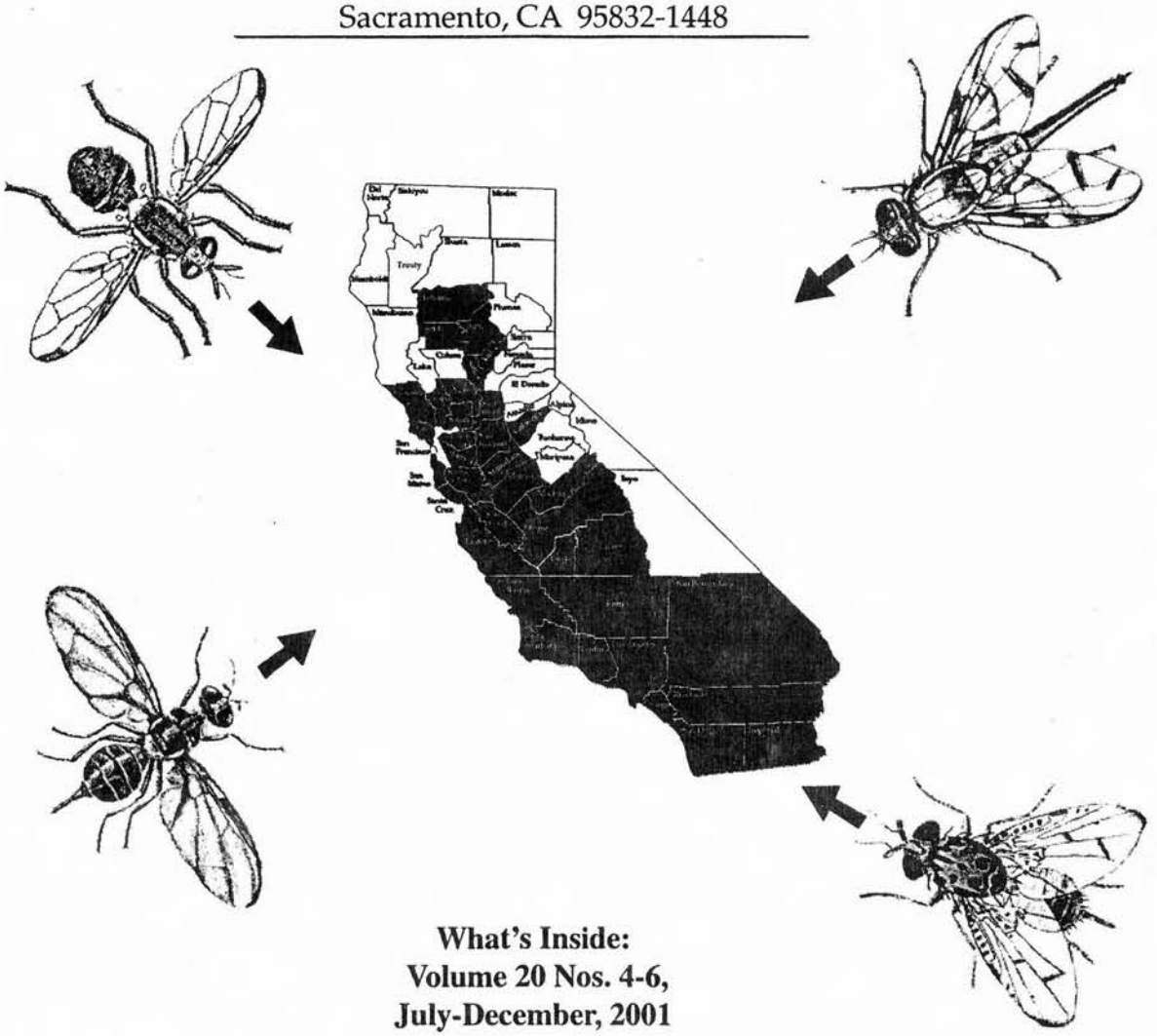
California Plant Pest & Disease Report

California Department of Food and Agriculture
Plant Pest Diagnostics Center
3294 Meadowview Road
Sacramento, CA 95832-1448



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July-December, 2001

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California Plant Pest & Disease Report

Editor: Raymond J. Gill
Production Assistants: Ernest E. Riberal & Alisa L. Hossay

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Correspondence concerning the CPPDR or subscription requests should be addressed to:

Editor, CPPDR
State of California
Department of Food and Agriculture
Plant Pest Diagnostics Center
3294 Meadowview Road
Sacramento, CA 95832-1448

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ENTOMOLOGY HIGHLIGHTS

Scientific names of organisms are changed from time to time, for various reasons. Several economically important or otherwise well known insects have undergone some of these changes. Examples include the San Jose scale, the pear psylla, the cloudywinged whitefly, and the obscure mealybug. For a list of name changes and the reasons for them see the article starting on page 22.

Summary of name changes of some important economic species:
San Jose scale, *Quadraspidiotus perniciosus* (Comstock), is now *Diaspidiotus perniciosus* (Comstock).
Pear psylla, *Psylla pyricola* Förster, is now *Cacopsylla pyricola* (Förster).
Tomato psyllid, formerly *Trioza cockerelli* Sulc and later *Paratrioza cockerelli* (Sulc), is now *Bactericera cockerelli* (Sulc)
Cloudy winged whitefly, *D. citrifolii* (Morgan), is now *Singhiella citrifolii* (Morgan).
Rhododendron whitefly, *D. chittendeni* Laing, is now *Massilieurodes chittendeni* (Laing).

SIGNIFICANT FINDS

There were 14 separate eradication programs in California during 2001 for the following fruit flies: one for Mediterranean fruit fly, one for Mexican fruit fly, six for Oriental fruit fly, six for guava fruit fly, and two for peach fruit fly. Larvae indicating a small infestation were found for Mediterranean and Oriental fruit flies.

MEDITERRANEAN FRUIT FLY, *Ceratitis capitata* -(A)- Three Mediterranean fruit flies were found between the months of June and December, 2001. All of the flies were located in the Los Angeles county. The first find was made on June 21, 2001 at Los Angeles by collector Ken Kietzer. He discovered a female medfly in a McPhail trap that was placed in an apricot tree. The second medfly was found at Los Angeles by collector Marcos Robles on August 29, 2001. He located a female Mediterranean fruit fly in an International Phermone Monitering Trap in a nectarine tree. The last collector, Alicia Ruiz, found 8 larvae alive in a grape fruit. **NOTE: Trap finds do not indicate actual infestations. For more information on actual infestation and eradication programs contact the Pest Detection/Emergency Projects Branch.*

MEXICAN FRUIT FLY, *Anastrepha ludens* -(A)- Four Mexican fruit flies were trapped in California between July and December, 2001. To find out trap information on these pests, please see the chart on page 7. ** NOTE: Trap finds do not necessarily indicate actual infestations. For information on actual infestations and eradication programs contact the Pest Detection/Emergency Projects Branch.*

SIGNIFICANT FINDS, continued

ORIENTAL FRUIT FLY, *Bactrocera dorsalis* -(A)- Many oriental fruit flies were trapped in California between July and December, 2001. To find out trap information on these pests, please see the chart on pages 7-9. Larval finds in Ontario **San Bernardino** county. **NOTE: Trap finds do not indicate actual infestations. For information on actual infestations and eradication programs contact the Pest Detection/Emergency Projects Branch.*

OLIVE FRUIT FLY, *Bactrocera oleae* -(A)- A large amount of olive fruit flies were trapped in California between July and December, 2001. To find out trap information on these pests, please see the chart on page 9-13. **NOTE: Trap finds do not necessarily indicate actual infestations. For information on actual infestations and eradication programs contact the Pest Detection/Emergency Projects Branch.*

PEACH FRUITFLY, *Bactrocera zonatus* -(A)- Five peach fruit flies were trapped in California between July and December, 2001. To find out trap information on these pests, please see the chart on page 14. **NOTE: Trap finds do not necessarily indicate actual infestations. For information on actual infestations and eradication programs contact the Pest Detection/Emergency Projects Branch.*

GUAVA FRUIT FLY, *Bactrocera correcta* -(A)- Many guava fruit flies were trapped in California between July and December, 2001. To find out trap information on these pests, please see the chart on page 7. ** NOTE: Trap finds do not necessarily indicate actual infestations. For information on actual infestations and eradication programs contact the Pest Detection/Emergency Projects Branch.*

JAPANESE BEETLE, *Popillia japonica* -(A)- Several Japanese beetles were trapped in California between July and December, 2001. To find out trap information on these pests, please see the chart on page 14.

AN INDIAN WALKING STICK INSECT, *Carausius morosus* -(Q)- On September 25, 2001 in the county of **Contra Costa**, an Indian walking stick insect was discovered in an ivy by collector James Chan.

SIGNIFICANT FINDS, continued

AFRICANIZED HONEY BEE, ***Apis mellifera. "Africanized"*** **-(B)-** An Africanized honey bee colony was found in **Tulare** County on September 22, 2001 by collector Nielsen.

CITRUS LEAFMINER, ***Phyllocnistis citrella*** **-(A)-** There was a total of fifteen citrus leafminer finds made in the county of Imperial County. They were found in the cities Imperial, Brawley, Niland, Calipatria, West Moreland, Calexico and Sand City. The finds were all made in November and December, 2001. The hosts of the citrus leafminer are as follows: lemon, orange, grapefruit, and citrus.

APPLE MAGGOT, ***Rhagoletis pomonella*** **-(B)-** An apple maggot was found in **Contra Costa** county on August 23, 2001. The find was made by collector Mata, and he found the adult in a McPhail trapped that was placed in an apple tree.

PINK BOLLWORM, ***Pectinophora gossypiella*** **-(A)-** A total of 82 native (non-sterile) moths were collected during summer 2001 in the San Joaquin Valley, down from 154 natives collected last year. The total number of traps deployed during this time was 14,496. The following list indicates trap totals of native (non-sterile) moths by county:

FresnoCounty	Kings County	Merced County	Kern County	Tulare County	Madera County
15	4	4	37	22	0

Traps are deployed in northern California in Colusa, Glenn, Sutter, and Yolo Counties. Kern, Riverside and Imperial Counties are trapped in an effort to track movement of non-sterile moths across the desert toward the San Joaquin Valley and from Mexico.

Distribution of Olive Fruitfly in California as of December 31, 2001

Mexican Fruit Fly, *Anastrepha ludens*, -(A)- July-December 2001 collections

County	City	Date	#M/F/Stage	Trap	Host	Collector(s)
Los Angeles	Los Angeles	09/10/01	1M/Adult	McPhail	Grapefruit	Carlos Cardenas
Los Angeles	Los Angeles	10/01/01	1F/Adult	McPhail	Sapote	Luis Pocasangre
San Bernardino	Ontario	10/03/01	1F/Adult	McPhail	Apple	Victor Huezo
Los Angeles	Sun Valley	10/29/01	1M/Adult	McPhail	Orange	Ted Gonzales

Guava Fruit Fly, *Bactrocera correcta*, -(A)- July-December, 2001 collections

County	City	Date	#M/F/Stage	Trap	Host	Collector(s)
Los Angeles	Boyle Heights	07/10/01	1M/Adult	Jackson	Apricot	Melvin Pineda
Los Angeles	Long Beach	07/12/01	1M/Adult	Jackson	Peach	Lea Rocha
Los Angeles	Long Beach	07/12/01	1M/Adult	Jackson	Grapefruit	Lea Rocha
Los Angeles	Maywood	07/12/01	1M/Adult	Jackson	Plum	Melvin Pineda
Los Angeles	Boyle Heights	07/13/01	1M/Adult	Jackson	Orange	Cesar Gomez
San Diego	Mira Mesa	08/21/01	2M/Adult	Jackson	Peach	Sulpicio Agnes Jr.
Santa Clara	San Jose	08/27/01	1M/Adult	Jackson	Apple	S. Schmidt
Santa Clara	San Jose	08/29/01	Adult	Jackson	Apple	Khue Lluynh
Riverside	Riverside	09/10/01	1M/Adult	Jackson	Orange	Geovany Ortiz
Santa Clara	San Jose	09/12/01	1M/Adult	Jackson	Lemon	Leland Rand

Oriental Fruit Fly, *Bactrocera dorsalis* complex, -(A)- July-December, 2001 collections

County	City	Date	#M/F/Stage	Trap	Host	Collector(s)
Los Angeles	Los Angeles	07/12/01	1M/Adult	Jackson	Avocado	Ignacia Velazquez
San Diego	San Diego	07/12/01	1M/Adult	Jackson	Peach	Sulpicio Agnesor
Contra Costa	Concord	07/13/01	1M/Adult	Jackson	Peach	Christine O'Boyle
San Bernardino	Chino	07/30/01	4M/Adult	Jackson	Peach	Victor M. Huezo
San Bernardino	Ontario	07/30/01	1M/Adult	Jackson	Peach	Jose Rodriguez
San Bernardino	Chino	08/01/01	1M/Adult	Jackson	Peach	Jay Sarmiento
San Bernardino	Ontario	07/31/01	3M/Adult	Jackson	Plum	Melvin Cruz
Los Angeles	Long Beach	08/06/01	1M/Adult	Jackson	Peach	Mokhiar Ibarhim
Contra Costa	Concord	07/18/01	1M/Adult	Jackson	Apple	Tom Donlon
Contra Costa	Concord	07/20/01	1M/Adult	Jackson	Apple	B. Glenn
Los Angeles	Canoga Park	08/02/01	1M/Adult	Jackson	Asian pear	Rene Dominguez
Los Angeles	Marina del Rey	08/07/01	1M/Adult	Jackson	Apple	Rafael Mejia
San Diego	San Diego	08/10/01	1M/Adult	Jackson	Peach	Roberto Sanchez
San Bernardino	Ontario	08/27/01	2M/Adult	Jackson	Peach	Victor Huezo

Oriental Fruit Fly, *Bactrocera dorsalis* complex, -(A)- July-December 2001 collections

County	City	Date	#M/F/Stage	Trap	Host	Collector(s)
San Diego	San Diego	08/10/01	1M/Adult	Jackson	Peach	Roberto Sanchez
San Diego	San Diego	08/27/01	1M/Adult	Jackson	Apple	Roberto Sanchez
San Diego	Rancho Penasquitas	08/29/01	2M/Adult	Jackson	Peach	Mark Buttner
Orange	Dana Point	08/29/01	1M/Adult	Jackson	Apricot	Karen Gailey
San Diego	Sabre Springs	08/30/01	1M/Adult	Jackson	Fig	Mark Buttner
San Bernardino	Ontario	08/25/01	1M/Adult	Jackson	Peach	Victor Huezo
San Bernardino	Chino	09/08/01	2M/4F/Adult	Jackson	Apple	Mary O'Sullivan
San Bernardino	Ontario	09/07/01	1F/Adult	McPhail	Peach	Mary O'Sullivan
San Bernardino	Ontario	09/07/01	1F/Adult	McPhail	Plum	Mary O'Sullivan
San Bernardino	Ontario	09/06/01	1M/Adult	Jackson	Apple	Mary O'Sullivan
San Bernardino	Ontario	09/06/01	1M/Adult	Jackson	Orange	Mary O'Sullivan
San Bernardino	Ontario	09/06/01	2M/Adult	Jackson	Peach	Mary O'Sullivan
San Bernardino	Ontario	09/07/01	1M/Adult	Jackson	Plum	Mary O'Sullivan
San Bernardino	Ontario	09/08/01	6F/Adult	McPhail	Peach	Mary O'Sullivan
San Bernardino	Ontario	09/08/01	1M/Adult	Jackson	Orange	Mary O'Sullivan
San Bernardino	Chino	09/10/01	2F/1?/Adult	McPhail	Apple	Mary O'Sullivan
San Bernardino	Ontario	09/10/01	1F/Adult	McPhail	Fig	Mary O'Sullivan
San Bernardino	Ontario	09/10/01	1M/Adult	Jackson	Pineapple	Mary O'Sullivan
San Bernardino	Ontario	09/10/01	2 Larvae	-	Grapefruit	Ruiz/Ramirez/Davis
San Bernardino	Chino	09/11/01	1M/Adult	Jackson	Fig	Tom Stevenson
San Bernardino	Ontario	09/11/01	1M/Adult	Jackson	Apple	Raul Burquez
Los Angeles	Los Angeles	09/13/01	1M/Adult	Jackson	Peach	Carrera
San Diego	San Diego	09/13/01	1M/Adult	McPhail	Fig	Ray Dellgadillo
San Bernardino	Ontario	09/13/01	1M/Adult	Jackson	Lemon	Raul Burquez
San Bernardino	Ontario	09/13/01	2F/Adult	McPhail	Lemon	Raul Burquez
San Bernardino	Ontario	09/13/01	1M/Adult	Jackson	Apple	Raul Burquez
San Bernardino	Ontario	09/17/01	1F/Adult	McPhail	Apple	Victor Huezo
San Diego	San Diego	09/20/01	1F/Adult	McPhail	Fig	Ray Delgadillo
San Diego	San Diego	09/17/01	1M/Adult	Jackson	Guava	Ray Delgadillo
Los Angeles	Northridge	09/20/01	1M/Adult	Jackson	Orange	N. Dominguez
San Bernardino	Ontario	09/17/01	1F/Adult	McPhail	Sapote	Victor Huezo
San Bernardino	Ontario	09/17/01	1F/Adult	McPhail	Peach	Victor Huezo
San Bernardino	Ontario	09/20/01	1F/Adult	McPhail	Sapote	Victor Huezo
San Bernardino	Ontario	09/20/01	1F/Adult	McPhail	Lemon	Victor Huezo
San Bernardino	Ontario	09/25/01	1F/Adult	Jackson	Lime	Victor Huezo
San Diego	San Diego	09/25/01	1M/Adult	McPhail	Fig	Ray Delgadillo
San Bernardino	Ontario	09/25/01	1F/Adult	McPhail	Lemon	Victor Huezo
San Bernardino	Ontario	09/14/01	4F/Adult	McPhail	Peach	Raul Burquez
San Bernardino	Ontario	09/14/01	1F/Adult	McPhail	Lemon	Raul Burquez

Oriental Fruit Fly, *Bactrocera dorsalis* complex, -(A)- July-December 2001 collections

County	City	Date	#M/F/Stage	Trap	Host	Collector(s)
San Diego	San Diego	09/14/01	1M/Adult	Jackson	Apple	Ray Delgadillo
San Bernardino	Chino	09/28/01	1M/1F/Adult	McPhail	Apple	Robert Abbet
San Diego	San Diego	09/12/01	1F/Adult	McPhail	Fig	Allan Gonzalez
San Bernardino	Chino	10/11/01	1F/Adult	McPhail	Sapote	Robert Abbet
San Diego	San Diego	09/24/01	2M/Adult	McPhail	Fig	Norma Williams
San Bernardino	Ontario	09/18/01	1F/Adult	McPhail	Peach	Victor Huezo
San Bernardino	Ontario	09/26/01	1M/Adult	Jackson	Ornamental tree	Joseph Stewart
San Diego	El Cajon	09/26/01	1M/Adult	Jackson	Avocado	Alan Sharon
San Bernardino	Chino	09/12/01	1M/Adult	Jackson	Grapefruit	Raul Burquez
San Bernardino	Chino	09/08/01	1M/Adult	Jackson	Lemon	Victor Huezo
San Bernardino	Rancho Cucamonga	09/17/01	1M/Adult	Jackson	Fig	Henry Martin
San Bernardino	Ontario	09/18/01	1F/Adult	McPhail	Sapote	Victor Huezo
San Bernardino	Ontario	10/03/01	1F/Adult	McPhail	Apple	Mary O'Sullivan
San Bernardino	Ontario	10/03/01	1F/Adult	McPhail	Sapote	Victor Huezo
Orange	Aliso Viejo	10/11/01	1M/Adult	Jackson	Ornamental	Susie Federico
San Bernardino	Ontario	10/17/01	1F/Adult	McPhail	Sapote	Victor Huezo
San Diego	El Cajon	10/10/01	1M/Adult	McPhail	Orange	Stephan Davis
San Diego	Spring Valley	10/24/01	1M/1F/Adult	McPhail	Lemon	Jennifer Pelayo
Los Angeles	Los Angeles	11/05/01	1M/Adult	Jackson	Lemon	Rigoberto Gomez
San Diego	Cottonwood	11/02/01	1F/Adult	McPhail	Orange	Mark White
San Diego	La Jolla	11/02/01	1M/Adult	Jackson	Guava	Robert Montavon

Olive Fruit Fly , *Bactrocera oleae*,- (A)- July-December 2001 collections

County	City	Date	#M/F/Stage	Trap	Host	Collector(s)
Sacramento	Rio Vista	11/01/01	5 Larvae	-	Olive	R. L. Penrose
Marin	Marin	11/01/01	8M/Adult	Champ	Olive	Anita Sauber
Butte	Oroville	11/02/01	3M/1?/Adult	Champ	Olive	John Scheer
Stanislaus	Oakdale	11/07/01	2 Larvae	-	Olive	R. L. Penrose
Yolo	Woodland	11/19/01	3 Larvae	-	Olive	R. L. Penrose
Solano	Vacaville	11/20/01	3 Larvae	-	Olive	R. L. Penrose
Solano	Dixon	11/20/01	1 Larva	-	Olive	R. L. Penrose
Glenn	Orland	11/21/01	2M/Adult	McPhail	Olive	Lester Messina
Glenn	Orland	11/20/01	3M/Adult	McPhail	Olive	Lester Messina
Sonoma	Santa Rosa	11/16/01	1M/Adult	Champ	Olive	Gary Bjork
Sonoma	Calistoga	11/19/01	2M/Adult	Champ	Olive	Gary Bjork
Solano	Fairfield	11/20/01	6 Larvae	-	Olive	Penrose/Tripp
Sacramento	Walnut Grove	11/17/01	2 Larvae	-	Olive	R. L. Penrose

Olive Fruit Fly , *Bactrocera oleae*,- (A)- July-December 2001 collections

County	City	Date	#M/F/Stage	Trap	Host	Collector(s)
Santa Clara	Saratoga	07/16/01	3M	McPhail	Apple	Leland Rand
Santa Clara	Saratoga	07/16/01	1M	McPhail	Orange	Leland Rand
Santa Clara	Saratoga	07/16/01	1M/1F	McPhail	Apricot	Leland Rand
Santa Clara	San Jose	07/16/01	2M/1F	McPhail	Tangerine	Cynthia Bauer
Santa Clara	San Jose	07/17/01	1F	McPhail	Peach	Linda Cervantes
San Benito	San Juan Bautista	07/19/01	1F	Champ	Olive	Linda Roma
San Benito	San Juan Bautista	07/19/01	1M	Champ	Olive	Linda Roma
Madera	Pinedale	07/18/01	1F	Champ	Olive	K. Olsen
Kern	Bakersfield	07/05/01	1F	Champ	Olive	J. Stewart
Fresno	Fresno	07/17/01	1F	Champ	Olive	R. E. Rice
Tehama	Corning	07/20/01	1F	Champ	Olive	Carolyn Ii
Tulare	Terra Bella	07/19/01	1F	Champ	Olive	J. Stewart
Contra Costa	Brentwood	07/20/01	1M	-	-	Matthew Slattengren
Contra Costa	Oakley	07/20/01	1M	-	-	Matthew Slattengren
Fresno	Fresno	07/26/01	1F	Champ	Olive	R. E. Rice
Tulare	Terra Bella	07/26/01	1F	Champ	Olive	J. Stewart
Santa Clara	San Jose	07/16/01	1M	McPhail	Orange	S. Schmidt
Santa Clara	San Jose	07/16/01	3M/1F	McPhail	Plum	S. Schmidt
Santa Clara	Morgan Hill	07/17/01	48M/11F	McPhail	Apricot	Cassandra Crawford
Santa Clara	San Jose	07/17/01	1M	McPhail	Grapefruit	Linda Cervantes
Santa Clara	San Jose	07/11/01	1M	McPhail	Cherry	Linda Cervantes
Santa Clara	San Jose	07/11/01	1M	McPhail	Shade Tree	Linda Cervantes
Santa Clara	San Jose	07/12/01	15M/3F	McPhail	Orn. Plum	M. Brady
Santa Clara	San Jose	07/12/01	1F	McPhail	Plum	David Pelayo
Santa Clara	San Jose	07/13/01	1F	McPhail	Plum	Cynthia Bauer
Santa Clara	San Jose	07/13/01	1M	McPhail	Plum	Cynthia Bauer
Santa Clara	San Jose	07/16/01	15M/8F	McPhail	Apricot	A. Quintana
Santa Clara	San Jose	07/16/01	1M	McPhail	Orange	Linda Cervantes
Santa Clara	San Jose	07/17/01	1F	McPhail	Orange	Linda Cervantes
Santa Clara	San Jose	07/17/01	1F	McPhail	Orn. Plum	Linda Cervantes
Santa Clara	San Jose	07/17/01	1F	McPhail	Lemon	Linda Cervantes
Santa Clara	San Jose	07/17/01	1M	McPhail	Orange	Linda Cervantes
Tehama	Corning	07/19/01	1M	Champ	Olive	Carolyn Ii
Santa Clara	San Jose	07/09/01	1M/1F	McPhail	Apricot	Ha Quach
Santa Clara	Morgan Hills	07/10/01	5M/6F	McPhail	Apricot	Cassandra Crawford
Santa Clara	San Jose	07/10/01	1F	McPhail	Orn. Plum	Linda Cervantes
Santa Clara	San Jose	07/10/01	1M	McPhail	Orange	Linda Cervantes
Kern	Bakersfield	08/07/01	1F	McPhail	Fig	Mary Moreno
Contra Costa	Concord	08/10/01	1F	McPhail	Peach	R. Crosby

Olive Fruit Fly , *Bactrocera oleae*,- (A)- July-December 2001 collections

County	City	Date	#M/F/Stage	Trap	Host	Collector(s)
Contra Costa	Concord	08/10/01	1F/Adult	McPhail	Plum	R. Crosby
Contra Costa	Martinez	08/31/01	1F /Adult	McPhail	Orange	B. Glenn
Contra Costa	Martinez	08/29/01	1F/Adult	McPhail	Asian Pear	Christine O'Boyle
Contra Costa	Antioch	08/22/01	1F/Adult	McPhail	Pear	M. Brown-Crismon
Tulare	Porterville	08/16/01	1F/Adult	Champ	Olive	Steve Sibbett
Contra Costa	Pittsburg	08/24/01	2F/Adult	McPhail	Apple	R. Crosby
Contra Costa	Bay Point	08/22/01	1F/Adult	McPhail	Peach	R. Crosby
Kern	Bakersfield	08/09/01	1F/Adult	Champ	Olive	J. Stewart
Contra Costa	Danville	08/15/01	1F/Adult	McPhail	Peach	S. Swenson
Napa	Napa	08/30/01	1M/Adult	-	Olive	J Dunster
Santa Clara	San Jose	08/27/01	1F/Adult	Champ	Olive	Bob Clement
San Benito	Hollister	08/30/01	1F/Adult	Champ	Olive	Linda Roma
Tulare	Terra Bella	05/21/01	1F/Adult	Champ	Olive	J. Stewart
Tulare	Terra Bella	08/23/01	1F/Adult	Champ	Olive	J. Stewart
Napa	St. Helena	08/16/01	Adult	Champ	Olive	Jeoff Dunster
Kern	Bakersfield	09/22/01	1M/Adult	McPhail	Grapefruit	Virginia Shinn
Fresno	Fresno	09/29/01	1F/Adult	Champ	Olive	R. E. Rice
Kern	Bakersfield	09/27/01	2F?Adult	Champ	Olive	J. Stewart
Fresno	Fresno	10/04/01	2F/Adult	McPhail	Olive	R. E. Rice
Napa	Napa	09/24/01	1M/Adult	Champ	Olive	Jeoff Dunster
Tehama	Corning	09/24/01	1M/Adult	Champ	Olive	Carolyn Ii
Imperial	Ocotillo	09/06/01	8M/4F/Adult	-	Olive	Arellano/Hernandez
Tulure	Porterville	08/16/01	1F/Adult	Champ	Olive	Steve Sibbett
Tulare	Porterville	08/30/01	1F/Adult	Champ	Olive	Steve Sibbett
Contra Costa	Antioch	09/05/01	3M/Adult	McPhail	Olive	Marilyn Brown
Contra Costa	Antioch	09/05/01	2M/1F/Adult	McPhail	Olive	Marilyn Brown
Contra Costa	Antioch	09/07/01	2M/Adult	McPhail	Citrus	Susan Giannini
Contra Costa	Concord	09/07/01	1M/Adult	McPhail	Fig	Susan Giannini
Santa Clara	Sunnyvale	09/12/01	1F/Adult	McPhail	Carob	Andrew R. By
Santa Clara	San Jose	09/04/01	1M/Adult	Jackson	Fig	N. Ruby
Contra Costa	Antioch	09/18/01	1F/Adult	McPhail	Apple	Marilyn Browm
Contra Costa	Antioch	09/18/01	1F/Adult	Champ	Olive	Matthew Slattengren
Alameda	Union City	09/20/01	1M/1F/Adult	McPhail	Fig	Griffin Wright
Tehama	Corning	09/21/01	1M/Adult	Champ	Olive	Carolyn Ii
San Luis Obispo	Cayucos	09/18/01	1F/Adult	McPhail	Orange	Nancy David
San Mateo	Foster City	09/18/01	1F/Adult	McPhail	Olive	Steve McDonagh
Contra Costa	Concord	08/21/01	1M/Adult	McPhail	Grapefruit	Christine O'Boyle
Calaveras	Valley Springs	09/19/01	1M/Adult	Champ	Olive	Paul J. Eades
Yuba	Linda	11/23/01	1 Larva	-	Olive	R. L. Penrose

Olive Fruit Fly , *Bactrocera oleae*,- (A)- July-December 2001 collections

County	City	Date	#M/F/Stage	Trap	Host	Collector(s)
Tulare	Ivanhoe	09/13/01	1F/Adult	Champ	Olive	S. Sibbett
Tulare	Porterville	09/13/01	7F/Adult	Champ	Olive	S. Sibbett
Tulare	Tulare	09/13/01	1F/Adult	Champ	Olive	S. Sibbett
Contra Costa	Clayton	09/18/01	1F/Adult	McPhail	Fig	J. Smith
Contra Costa	Bay Point	09/21/01	1F/Adult	McPhail	Apple	Rosann Crosby
Santa Cruz	Aptos	09/28/01	1F/Adult	GWSS trap	Olive	Kira Steinberg
Santa Cruz	San Jose	09/24/01	2M/Adult	GWSS trap	Orange	Bob Clement
Santa Cruz	San Jose	09/24/01	4M/Adult	GWSS trap	Crepe myrtle	Bob Clement
Calaveras	Valley Spring	09/24/01	1M/Adult	Champ	Olive	Darick Westberg
Calaveras	Valley Spring	09/24/01	1M/1F/Adult	Champ	Olive	Darick Westberg
Calaveras	Copperopolis	09/25/01	2M/1F/Adult	Champ	Olive	Darick Westberg
Calaveras	Valley Spring	09/25/01	1F/Adult	Champ	Olive	Darick Westberg
Alameda	Fremont	09/25/01	1F/Adult	McPhail	Apple	Jonathan Gomes
Butte	Oroville	09/24/01	2M/2F/Adult	Champ	Olive	John Scheer
Tehama	Corning	09/24/01	1F/Adult	Champ	Olive	Carolyn Ii
Santa Clara	San Jose	09/24/01	2M/Adult	GWSS trap	Olive	Bob Clement
Santa Clara	San Jose	09/24/01	5M/1F/Adult	GWSS trap	Olive	Bob Clement
Santa Clara	San Jose	09/24/01	1M/Adult	GWSS trap	Brazilian pepper	Bob Clement
Contra Costa	Danville	10/05/01	1M/1F/Adult	McPhail	Fig	Richard L. Mata
Contra Costa	Pittsburg	10/19/01	2F/Adult	McPhail	Apple	M. Brown-Crismon
Tehama	Gerber	10/19/01	1F/Adult	Champ	Olive	Carolyn Ii
Contra Costa	Antioch	10/24/01	1F/Adult	McPhail	Tangerine	M. Brown-Crismon
Contra Costa	Brentwood	10/22/01	2F/Adult	McPhail	Olive	Matthew Slattengren
Tehama	Corning	10/24/01	1M/Adult	Champ	Olive	Carolyn Ii
Contra Costa	Hercules	10/18/01	1M/1F/Adult	McPhail	Olive	B. Glenn
Napa	Napa	10/22/01	2M/Adult	Champ	Olive	Jeoff Dunster
Contra Costa	Antioch	10/08/01	1M/Adult	McPhail	Lemon	M. Brown-Crismon
Napa	Napa	10/08/01	1M/Adult	Champ	Olive	Jeoff Dunster
Contra Costa	Antioch	10/01/01	1M/Adult	McPhail	Fig	M. Brown-Crismon
Contra Costa	Antioch	10/01/01	1F/Adult	McPhail	Orange	M. Brown-Crismon
Tehama	Corning	11/17/01	1M/Adult	McPhail	Olive	Barb Paz
Contra Costa	Pittsburg	10/17/01	1F/Adult	McPhail	Fig	R. Crosby
Contra Costa	Walnut Creek	10/16/01	3F/Adult	McPhail	Crabapple	J. Smith
Calaveras	Valley Spring	10/12/01	4M/1F/Adult	Champ	Olive	Paul J. Eades
Marin	Novato	10/19/01	1M/Adult	Jackson	Apple	F. Groepler
Contra Costa	Pittsburg	10/11/01	1M/Adult	McPhail	Grapefruit	M. Brown-Crismon
Contra Costa	Antioch	10/11/01	1F/Adult	McPhail	Apple	M. Brown-Crismon
Sacramento	Sacramento	12/04/01	2 Larvae	-	Olive	R. L. Penrose
Placer	Lincoln	12/06/01	1 Larva	-	Olive	R. L. Penrose

Olive Fruit Fly , *Bactrocera oleae*,- (A)- July-December 2001 collections

County	City	Date	#M/F/Stage	Trap	Host	Collector(s)
Contra Costa	Antioch	10/15/01	1M/Adult	McPhail	Orange	M. Brown-Crismon
Contra Costa	Antioch	10/15/01	1M/Adult	McPhail	Grapefruit	M. Brown-Crismon
Contra Costa	Antioch	10/15/01	1F/Adult	McPhail	Apple	M. Brown-Crismon
Calaveras	Copperopolis	10/12/01	3M/Adult	Champ	Olive	Darick Westberg
Tehama	Corning	10/15/01	1M/Adult	Champ	Olive	Carolyn Ii
Alameda	Fremont	10/02/01	2M/Adult	Champ	Olive	Nicholas
Santa Clara	San Jose	10/02/01	5 Larvae	-	Olive	Matt Beauregard
Contra Costa	Antioch	10/04/01	1F/ Adult	McPhail	Apple	M. Brown-Crismon
Contra Costa	Pittsburg	10/04/01	1F/Adult	McPhail	Orange	M. Brown-Crismon
San Luis Obispo	Paso Robles	10/04/01	4 Larvae	-	Olive	M. Settevendemie
Tehama	Corning	10/04/01	1F/Adult	Champ	Olive	Carolyn Ii
Alameda	Fremont	10/09/01	4 Larvae	-	Olive	Ken Peek
Fresno	Parlier	10/02/01	1F/Adult	McPhail	Olive	R. E. Rice
Santa Clara	San Jose	10/01/01	2M/Adult	GWSS trap	Citrus	Bob Clement
Tehama	Corning	10/03/01	1M/Adult	Champ	Olive	Carolyn Ii
Tehama	Red Bluff	10/31/01	1M/Adult	Champ	Olive	Carolyn Ii
Tehama	Corning	10/29/01	1F/Adult	Champ	Olive	Carolyn Ii
Tehama	Corning	10/31/01	2M/Adult	McPhail	Olive	Barb Paz
Calaveras	Valley Springs	10/24/01	1M/Adult	Champ	Olive	Paul J. Eades
Fresno	Kingsburg	10/16/01	1F/Adult	McPhail	Olive	R. E. Rice
Fresno	Fresno	10/25/01	2F/Adult	McPhail	Olive	R. E. Rice
Tehama	Corning	10/31/01	5M/Adult	McPhail	Olive	Barb Pez
Tehama	Red Bluff	10/30/01	1M/1F/Adult	Champ	Olive	Carolyn Ii
Napa	Napa	10/31/01	1 Larva	-	Olive	Jeoff Dunster
Alameda	Livermore	10/31/01	1M/Adult	McPhail	Lemon	Cheryl Mailho
Alameda	Pleasanton	10/04/01	1M/Adult	Champ	Olive	-
Tulare	Visalia	10/26/01	1F/Adult	Champ	Olive	John Carter
Santa Clara	San Jose	10/26/01	1M/Adult	McPhail	Fig	Linda Cervantes
Santa Clara	San Jose	10/30/01	1M/1F/Adult	McPhail	Olive	Linda Cervantes
Imperial	El Centro	10/31/01	2 Larvae	-	Olive	Marcos Camarge
Tehama	Corning	11/01/01	1M/Adult	Champ	Olive	Marilyn Alexander
San Luis Obispo	Shandon	11/02/01	2M/Adult	Jackson	Olive	Roxy McIntosh
San Luis Obispo	San Miguel	11/02/01	1M/1F/Adult	Jackson	Olive	Roxy McIntosh
Santa Clara	Saratoga	11/09/01	5M/1F/Adult	McPhail	Olive	Leland Rand
Imperial	Salton City	11/05/01	2M/1F/Adult	McPhail	Grapefruit	Jim Shipman
Sutter	Yuba City	11/16/01	1M/Adult	Champ	Olive	Jill Kammerer
Alameda	Livermore	11/20/01	1M/Adult	Champ	Olive	M. Elhashash
Sonoma	Santa Rosa	11/15/01	1M/2F/Adult	Champ	Olive	Gary Bjork
Sonoma	Santa Rosa	11/13/01	1 Larva	-	Olive	S. Parnay
Alameda	Livermore	11/16/01	1 Larva	-	Olive	R. L. Penrose

Peach Fruit Fly, *Bactrocera zonatus* -(A)- July - December 2001 collections

County	City	Date	#M/F/Stage	Trap	Host	Collector(s)
Santa Clara	Santa Clara	08/29/01	1M/Adult	Jackson	orange	Slonksuis
Santa Clara	San Jose	09/05/01	1M/Adult	Jackson	fig	Slonksuis
Santa Clara	San Jose	09/02/01	1M/Adult	Jackson	persimmon	Gray
Santa Clara	San Jose	08/31/01	1M/Adult	Jackson	citrus	Reimers
Riverside	Indian Wells	10/17/01	1M/Adult	Jackson	tangerine	Gaeba

Japanese Beetle, *Popillia japonica*, -(A)- July-December 2001 collections

County	City	Date	#M/F/Stage	Trap	Host	Collector(s)
San Diego	San Diego	08/07/01	1M/Adult	JB	soil	Armendariz
San Diego	San Diego	07/16/01	1M/Adult	JB	soil	Chavez
San Diego	San Diego	08/21/01	1M/Adult	JB	soil	Culp
Los Angeles	Los Angeles	07/28/01	1F/Adult	JB	-	Akhtar
Los Angeles	City of Industry	07/17/01	3M/Adult	JB	-	Ramirez
San Bernardino	Ontario	07/31/01	1F/Adult	JB	roses	Banta
San Diego	San Diego	08/03/01	1M/Adult	JB	roses/turf	Agnes

Gypsy Moth, *Lymantria dispar*, -(A)- July-Decemeber 2001 collections

County	City	Date	#M/F/Stage	Trap	Host	Collector(s)
San Diego	Fallbrook	07/02/01	1M/adult	delta	oak	White
Madera	Oakhurst	07/05/01	1M/adult	delta	oak	Whatley
San Diego	San Diego	07/10/01	1M/adult	delta	shade	Haase
Alameda	Berkeley	09/12/01	1M/adult	delta	eucalayptus	Newton
Orange	Cypress	07/25/01	1M/adult	delta	shade	Menendez
Shasta	Redding	07/25/01	pupa	-	lawn chairs	Moen
San Joaquin	Manteca	08/03/01	pupa	-	outdoor household	McCoon
Modoc	Tionesta	06/06/01	1M/ adult	delta	-	Haas

NEW COUNTY RECORDS

OLIVE FRUITFLY, ***Bactrocera oleae*** **-(A)-** This serious pest of olives has advanced to another California location. The collection was made near Orland in **Glenn** County. The collection was made on June 25 by trapper Messina.

VINE MEALYBUG, ***Planococcus ficus*** **-(B)-** This serious pest of grapes has been found established in another county. The collection was made from a commercial vineyard near Creston, **San Luis Obispo** County. The collection was made on July 20 by Farm Advisor Mary Bianchi. Infested counties now include Riverside, Kern, Fresno, and Santa Barbara.

TORPEDO BUG, ***Siphanta acuta*** **-(B)-** This planthopper, (Homoptera: Fulgoroidea: Flatidae). has been found recently in several new counties. A nymph of this species was found at San Luis Obispo, **San Luis Obispo** County on June 14 by county trapper Didier. An adult of this planthopper was collected on October 26 from a trap in Capitola, **Santa Cruz** County. The collection was made in a GWSS trap in a lemon tree by county trapper Santiago. This species has been established in southern California and in the Bay area for a number of years, and now seems to be expanding its range along the coast.

NESTING WHITEFLY, ***Paraleyrodes minei*** **-(C)-** This whitefly has been established in southern California since 1985 where it has been an occasional pest of dooryard citrus trees. It is native to Mexico and was first found in the state at San Diego. It has now been found established in the Bay Area. The initial collection there was made at San Jose, **Santa Clara** County on August 24. The collection was made from citrus by county trapper Swan. Previous records for this whitefly include San Diego, Orange, Los Angeles, San Bernardino, Ventura and Riverside Counties

SPOTTED GUM LERP PSYLLID, ***Eucalyptolyma maideni*** **-(Q)-** This psyllid has been collected from five new counties. A collection was made at Encinitas, **San Diego** County at a botanical garden on September 13 by County Entomologist David Kellum. A collection was made on September 12 at the U.S. Forest Service property in Riverside, **Riverside** County. And a new record comes from Upland, **San Bernardino** County on January 29, collected by County Ag. Inspector Janet Davey. Another new record includes **Santa Barbara** County, at Santa Barbara on August 2 collected by County Inspector Mary Ann Rajala. And from **Alameda** County, Dick Penrose of CDFA collected this psyllid on November 16 at Union city. These locations increase the range of this psyllid from the previous infested counties, Orange, Los Angeles, and Ventura.

LEMON GUM PSYLLID, ***Cryptoneossa triangula,*** **-(Q)-** This is another Australian psyllid recently introduced into California. Like the species listed above, it feeds primarily on the lemon gum and spotted gum eucalyptus group of trees. Dick Penrose of CDFA collected this psyllid on November 16 at Union City, **Alameda** County, for a new county record. Dick Penrose also collected female specimens at Murrieta Hot Springs Riverside County, on March 21.

EXCLUSION

Occasionally pests are collected in nurseries or similar situations, pests that are rated as "A", "B" or "Q." These organisms are usually not established in the state, and are found on plants that have recently entered the state, but were missed during quarantine inspections, probably because they were small and immature, in very low numbers or hidden on the plants, or they slipped through the quarantine inspection systems via undetected pathways. Some of the following insects are notable examples:

IMPORTED MEALYBUG, *Pseudococcus importatus* -(A)- This mealybug was discovered on orchids in a nursery in Los Osos, **San Luis Obispo** County on May 30. The collection was made by Ag Inspector Francisco Focha.

A PALMFLY, *Elymnias hypermnestra* -(Q)- Specimens of this Nymphalid butterfly were found among other butterfly species at the San Diego Wild Animal Park Butterfly Pavilion near Escondido, **San Diego** County. The collections were made by USDA Inspector Abbott on June 2, 5 and 18 from palm leaves. Permits had not been issued for use of this butterfly species in the pavilion. See Fig. 1-2

A VIOLET TIPPED CROW, *Euploea core* -(Q)- This Danaid butterfly was found in the same butterfly pavilion as the above species. The collection was made on June 2, again by USDA Inspector Abbott. Permits for the use of these species in the pavilion had not been issued. See Fig. 3-4

AZALEA BARK SCALE, *Acanthococcus azaleae* -(B)- This Eriococcin scale was found on *Pieris* plants in a nursery in Santa Rosa, **Sonoma** County. The collection was made on June 4 by County Inspector Gary Bjork. This species has been found in nurseries occasionally over the years, but its present status in California is unknown. It is eradicated whenever found. It is common in the eastern United States on *Azalea, Rhododendron, Vaccinium* and *Pieris*.

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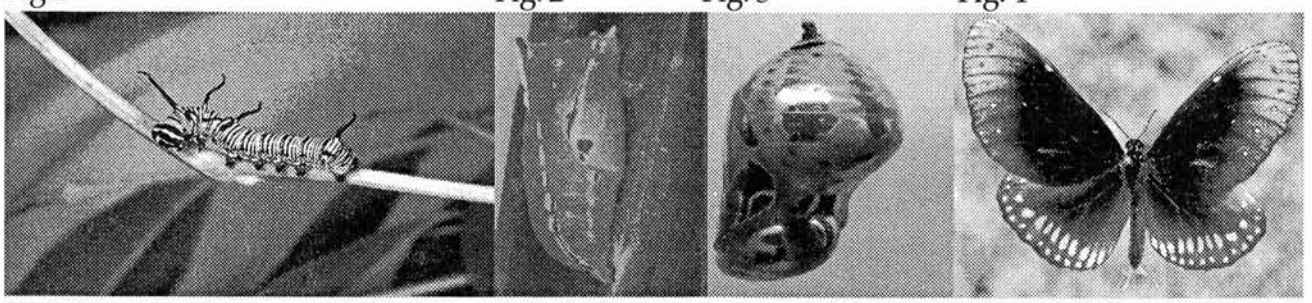
The charts on the following pages include some of the serious or unusual "A", "B" or "Q" pests that were intercepted in quarantine at various checkpoints in the state, and at the Agricultural Inspection Stations. These lists are only a small sampling of the many species that are intercepted, and are included here to keep quarantine personnel abreast of what is being detected in quarantine around the state.

Fig.1 Fig. 2 Fig. 3 Fig. 4



Important "A", "B", and "Q" Rated Arthropods and Mollusks Intercepted in Quarantine July 2001 through December 2001

Rating	Species	Common Name	Date	Origin	County	Host	Collector(s)
A	*Bactrocera cucurbitae*	melon fly	07/16/01	Hawaii	LAX	papaya	Lee
Q	*Aceria* sp.	an eriophyid mite	08/06/01	unknown	YOL	corn	Davis
A	*Coccus viridis*	green scale	08/04/01	Hawaii	SMT	*Alpinia purpurata*	Rodriguez
A	*Pseudococcus cryptus*	a mealybug	08/02/01	Taiwan	LAX	lychee fruit	Jium
Q	*Kallitaxila granulata*	a planthopper	08/09/01	Hawaii	MEN	*Stephanotis*	Linegar
Q	*Pseudococcus odermatti*	a mealybug	08/13/01	Florida	SMT	longan fruit	Loux
Q	*Prosapia* sp.	a spittlebug	08/14/01	Florida	WI	cut flowers	Holby
Q	*Wasmannia auropunctata*	an ant	08/08/01	Florida	LAX	longan fruit	Miller
A	*Rhizotrogus majalis*	European chafer	08/05/01	Indiana	SDG	cargo aircraft	Funk
Q	*Pezothrips kellyanus*	an Australian thrips	07/27/01	Hawaii	LAX	leafy lei	Tsou
Q	*Orientus ishidae*	a leafhopper	08/10/01	Arizonia	SON	olive trees	Inman
Q	*Orientus ishidae*	a leafhopper	08/01/01	Oregon	SON	*Syringa vulgaris*	Inman
Q	*Conopomorpha* sp.	a gracillariid moth	07/31/01	unknown	LAX	litchi	Ortega
Q	*Asterolecanium* sp.	a pit scale	08/13/01	Texas	SAC	palm	Parminder
Q	*Aleurotulus anthuricola*	anthurium whitefly	08/13/01	Texas	SAC	palm	Parminder
B	*Pseudococcus elisae*	elisa mealybug	08/03/01	Puerto Rico	AP	banana	Oubichon
Q	*Dysmicoccus* sp.	a mealybug	08/10/01	British Columbia	HO	longan fruit	Patterson
Q	*Pseudococcus odermatti*	a mealybug	08/16/01	Florida	SMT	longan fruit	Rodriguez
B	*Pseudococcus elisae*	elisa mealybug	08/15/01	Costa Rica	SJQ	*Croton petra*	Viss
B	*Protopulvinaria pyriformis*	pyriform scale	08/16/01	Costa Rica	SJQ	unknown	Ripon
A	*Ostrinia nubilalis*	European corn borer	08/10/01	Massachusetts	SDG	ear corn	Dobbins
Q	*Kallitaxila granulata*	planthopper	08/22/01	Hawaii	LAX	basil	Carrillo
A	*Coccus viridis*	green scale	08/09/01	Florida	ORA		Fullerton
A	*Ceroplastes rusci*	fig wax scale	08/14/01	Hawaii	LAX	cut flowers	Bakri
A	*Ceroplastes rusci*	fig wax scale	08/10/01	Florida	ORA	*Annona* sp.	Nestor
Q	*Aulacaspis yasumatsui*	cycad aulacaspis scale	08/14/01	Florida	RIV	*Cycas revoluta*	Domenigoni
A	*Aonidiella orientalis*	Oriental scale	08/14/01	Peru	LAX	*Musa* sp.	Lugo
A	*Aonidiella orientalis*	Oriental scale	08/24/01	Florida	SMT	mangos	Stevens
Q	*Wasmannia auropunctata*	an ant	08/16/01	Hawaii	LAX	orchids	Sachdev
Q	*Pinnaspis uniloba*	unilobed scale	08/18/01	Hawaii	ALA	meile lei	Willson
B	*Dysmicoccus alazon*	alazon mealybug	08/17/01	Florida	SMT	longans	Joo
A	*Chrysodeixis eriosoma*	green garden looper	08/21/01	Hawaii	LAX	cut flowers	Carrillo
B	*Aonidiella aurantii*	California red scale	08/15/01	Australia/Texas	MNT	naval orange	unknown
Q	*Anoplolepis longipes*	longlegged ant	08/20/01	Hawaii	SMT	pineapples	Stevens
B	*Nezara viridula*	southern green stink bug	08/15/01	Hawaii	SMT	basil	Hanks
Q	*Kallitaxila granulata*	a planthopper	06/27/01	Hawaii	SMT	piper betle	Garibaldi

Important "A", "B", and "Q" Rated Arthropods and Mollusks Intercepted in Quarantine July 2001 through December 2001

Rating	Species	Common Name	Date	Origin	County	Host	Collector(s)
Q	*Kallitaxila granulata*	a planthopper	06/27/01	Hawaii	SMT	betel leaf	Garibaldi
Q	*Coccus capparidis*	capparis soft scale	08/24/01	Florida	SDG	pittosporum	Dobbins
Q	*Pseudococcus odermatti*	a mealybug	09/04/01	Florida	SMT	*Eugenia* sp.	Eide
A	*Thrips palmi*	a thrips	08/24/01	Hawaii	LAX	orchid flowers	Core
Q	*Pinnaspis uniloba*	unilobed scale	08/30/01	unknown	LAX	flower lei	Burton
B	*Nezara viridula*	southern green stinkbug	09/09/01	Hawaii	SMT	piper	Rodriguez
A	*Diatraea saccharalis*	sugarcane borer	09/10/01	Florida	SMT	sugarcane stalks	Hanks
A	*Spodoptera mauritia*	lawn armyworm	09/06/01	Hawaii	LAX	basil	Carrillo
A	*Anastrepha* sp.	an exotic fruit fly	09/05/01	Puerto Rico	SMT	*Spondias* sp.	Stevens
A	*Thrips palmi*	a thrips	09/05/01	Hawaii	LAX	flowers	Burton
Q	*Pseudococcus lycopodii*	club moss mealybug	09/06/01	Hawaii	LAX	ti leaf	Regis
Q	*Pseudococcus jackbeardsleyi*	a mealybug	09/17/01	Hawaii	SMT	basil	Garibaldi
Q	*Minutaleyrodes* sp.	a whitefly	08/17/01	Hawaii	SON	unknown leaves	Turano
Q	*Spodoptera* sp.	an armyworm	09/20/01	Florida	SMT	wingbeans	Melo
B	*Lamellaxis* sp.	a snail	09/19/01	Florida	SDG	*Aglaonema* sp.	Terhall
Q	*Kallitaxila granulata*	a planthopper	08/07/01	Hawaii	SMT	Herb	Hanks
B	*Dysmicocccus alazon*	alazon mealybug	09/24/01	Florida	SMT	*Ficus benjamina*	Edie
A	*Coccus viridis*	green scale	09/23/01	Hawaii	SMT	pink ginger	Eide
Q	*Coccus acutissimus*	slender soft scale	09/20/01	Hawaii	LAX	*Dracaena*	Herrera
A	*Ceroplastes rubens*	red wax scale	09/11/01	Florida	ORA	*Schefflera*	Wynn
Q	*Aulacaspis yasumatsui*	cycad aulacaspis scale	08/27/01	unknown	LAX	*Sago palm*	Tsai
Q	*Ceroplastes* sp.	a wax scale	09/26/01	Florida	SMT	*Ficus banjamina*	Bide
A	*Parlatoria blanchardi*	parlatoria date scale	09/21/01	Israel	CCA	palm leaves	Fonseca
Q	*Empoasca* sp.	a leafhopper	09/24/01	Hawaii	SDG	cut foliage	Worester
Q	*Thripidae*	a thrips	09/24/01	Hawaii	SDG	cut foliage	Worester
Q	*Aleurotulus* sp.	anthurium whitefly	09/28/01	Florida	LAX	palm frond	Burton
A	*Leptinotarsa decemlineata*	Colorado potato beetle	10/12/01	unknown	SCL	processed food	Khokher
Q	*Euphyes arpa*	arpa skipper	10/08/01	Florida	SAC	palm fronds	McCarty
Q	*Colobopsis* sp.	an ant	10/08/01	Florida	SAC	palm fronds	McCarty
Q	*Pseudococcus jackbeardsleyi*	a mealybug	10/09/01	Florida	SMT	*Eugenia* sp.	Eide
B	*Unaspis euonymi*	euonymous scale	10/18/01	N. Carolina	ORA	*Celastrus* sp.	Rivas
Q	*Pseudaulacaspis duplex*	camphor scale	10/18/01	Florida	SON	rose	Inman
A	*Ischnaspis longirostris*	black thread scale	10/19/01	Florida	SBD	palm leaves	Davey
A	*Hemiberlesia palmae*	tropical palm scale	10/23/01	Florida	SMT	*Neoregalia* sp.	Russo
A	*Coccus viridis*	green scale	11/01/01	Hawaii	ORA	*Alpinia purpurata*	Gibbs
A	*Ceratitis capitata*	Mediterranean fruit fly	12/06/01	unknown	SDG	*Citrus* sp	Dearie
A	*Ceratitis capitata*	Mediterranean fruit fly	12/07/01	Spain	SBD	*Citrus* sp	Chacon
A	*Ceratitis capitata*	Mediterranean fruit fly	12/07/01	Spain	RIV	*Citrus* sp.	Aguilar

Important "A", "B", and "Q" Rated Arthropods and Mollusks Intercepted in Quarantine July 2001 through December 2001

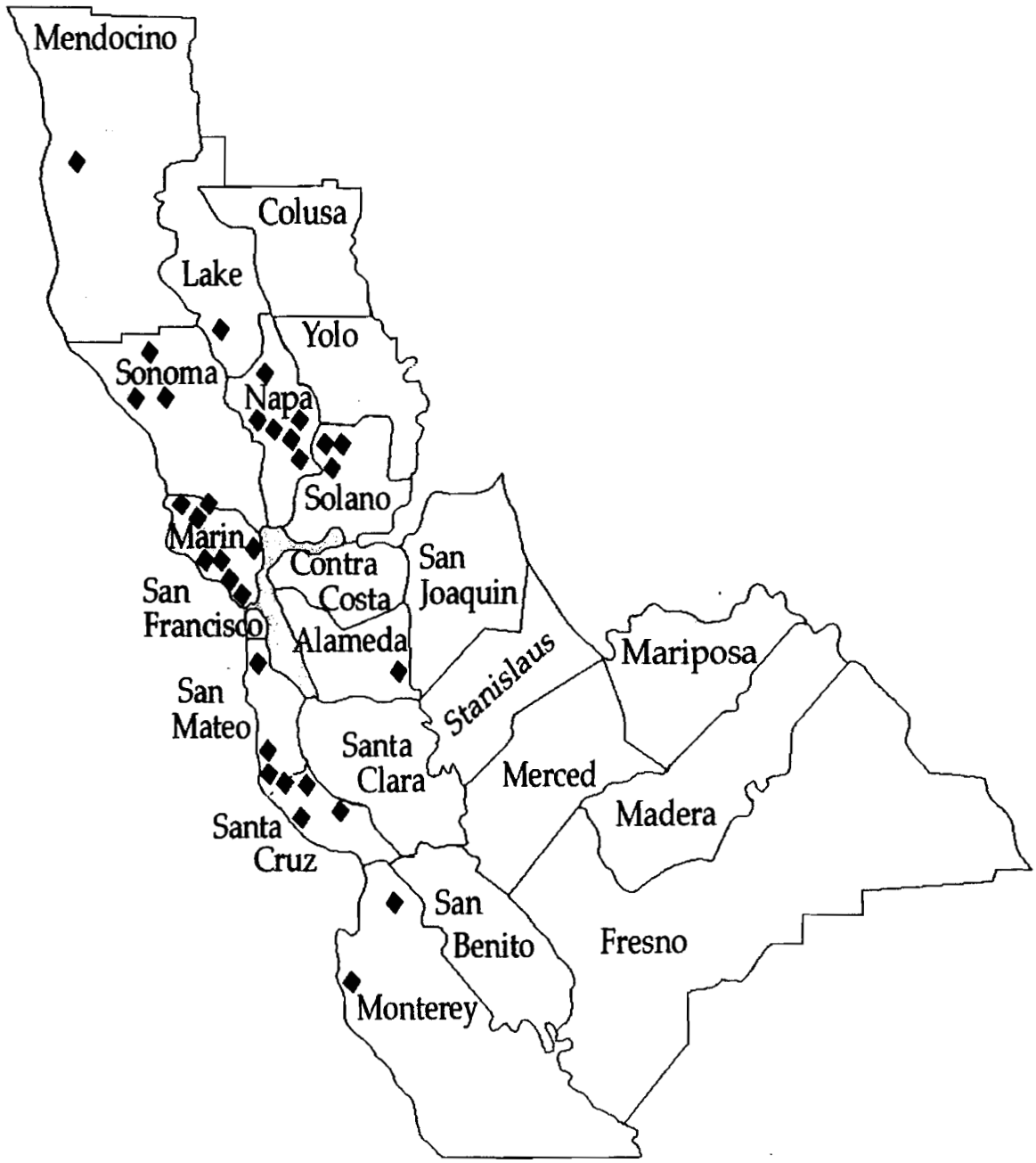
Rating	Species	Common Name	Date	Origin	County	Host	Collector(s)
A	*Aonidiella orientalis*	Oriental scale	10/09/01	Ecuadoz	LAX	Bandus	Hugo
Q	*Aleurotrachelus* sp.	a whitefly	11/08/01	Hawaii	LAX	lalot	Carrillo
A	*Ceratitis* sp.		11/29/01	Spain	TUL	clementine orange	Bicham
B	*Pseudococcus elisae*	elisa mealybug	11/16/01	Costa Rica	SJQ	*Schefflera*	McCoon
Q	*Nipaecoccus* sp.	a mealybug	11/02/01	unknown	ORA	king palm	Phoutrides
Q	*Melormenis antillarum*	West Indian flatid	11/0701	Hawaii	ORA	*Ficus lyrata*	Wynn
Q	*Kallitaxila granulata*	a planthopper	10/25/01	Hawaii	CCA	ginger cut flower	Deviney
A	*Aonidiella orienralis*	Oriental scale	10/31/01	Florida	SMT	*Beaucarnea recurvata*	Bide
A	*Diastrophus radicum*	raspberry root gall wasp	12/06/01	Florida	ORA	*Schefflera arboricola*	Wynn
A	*Diastrophus radicum*	raspberry root gall wasp	12/04/0	Arizona	SMT	blackberry	Eide
A	*Ceroplastes rubens*	red wax scale	12/10/01	Hawaii	LAX	*Monstera*	Miller
Q	*Stenotrupis* sp.	a cossonine weevil	-	Hawaii	SHA	coconut husk	Moen
Q	*Sibine* sp.		12/05/01	Florida	SDG	*Thrinax radiata*	Stalnaker
Q	*Empoasca* sp.	a leafhopper	11/02/01	Hawaii	SMT	Hawaiian herbs	Stevens
A	*Cydia caryana*	hickory shuckworm	12/03/01	California	YOL	pecans in shell	Lya
A	*Curculio caryae*	pecan weevil	12/07/01	Oklahoma	TUL	pecan	Sihota
Q	*Atrichonotus taeniatulus*	a weevil	11/29/01	unknown	HUM	concrete foundation	Spadoni
Q	*Atrichonotus taeniatulus*	a weevil	11/09/01	unknown	HUM	unknown	Dolf
Q	*Ancylis* sp.	olethreutine tortricid moth	12/13/01	Arizona	SMT	lawton blackberry	Eide

Important "A", "B" and "Q" Rate Arthopods and Mollusks Intercepted at Border Stations July 2001 through December 2001

Pest	Station	Date	Origin	Collector	Host
Planococcus minor - Pacific mealybug	AP	07/31/01	New York	Castillo	longan
Ostrinia nubilalis - European corn borer	AP	08/03/01	Missouri	Cochrane	zea mays
Ostrinia nubilalis - European corn borer	TR	07/23/01	Nebraska	Calick	ear corn
Orgyia sp.- a tussock moth	TR	07/18/01	Pennsylvania	Rudolph	rv frame
Conopomorpha sp. - a gracillariid moth	HO	08/01/01	Washington	Craig	litchi
Apterona helix - garden bagworm	SM	07/25/01	Washington	Brodie	under motorhome
Planococcus minor - Pacific mealybug	HO	07/28/01	British Colombia	Bear	sugar apple
Ostrinia nubilalis - European corn borer	AP	08/16/01	Iowa	Brannigan	corn
Pseudococcus odermatti - a mealybug	AP	08/23/01	Florida	Sohal	longan
Prosapia sp. - a spittlebug	YE	08/23/01	Florida	Dubose	cut flower/fern
Dyscinetus morator - a scarab beetle	VI	08/18/01	Mississippi	Guilin	empty trailer
Conotrachelus sp. - a weevil	BL	08/28/01	Florida	Saldivat	guava
Coccus acutissimus - slender soft scale	AP	08/28/01	Florida	Sohal	longan
Coleophora sp. - a casebearing moth	RH	09/07/01	Massachusetts	Richins	trailer rv
Conopomorpha litchella - a gracillariid moth	HO	07/24/01	Washington	Craig	longans
Conopomorpha litchella - a gracillariid moth	HO	07/23/01	Washington	Sauners	litchi
Orgyia sp. - a tussock moth	NE	09/06/01	Michigan	Villarreal	under a trailer
Conotrachelus juglandis - butternut curculio	NE	09/14/01	Tennessee	Kimbell	grapevine wreaths
Ostrinia nubilalis - european corn borer	LV	09/20/01	Nebraska	Sheppard	corn
Coccotorus scutellaris - plum gouger	YE	08/10/01	Nebraska	Morris	homegrown plum
Pachypsylla sp. - a psyllid	VI	08/30/01	Texas	Robert	juice
Aleurocerus sp. - a palm whitefly	YE	09/03/01	Florida	Blakely	tee pee fronds
Lymantria dispar - gypsy moth	NE	08/12/01	New York	Derichsweiler	ladder
Lymantria dispar - gypsy moth	LV	08/08/01	Virginia	Wildschut	rv
Lymantria dispar - gypsy moth	LV	08/02/01	New York	Hamblet	fence material
Lymantria dispar - gypsy moth	TR	08/02/01	Michigan	Dickerson	rv
Lymantria dispar - gypsy moth	ME	08/31/01	Michigan	Speck	camp trailer
Phyllocnistis citrella - citrus leafminer	BL	09/12/01	Florida	Villa	orange tree leaf
Euxesta sp. - a picture-winged fly	BL	09/21/01	Mexico	Slye	corn
Euxesta sp. - a picture-winged fly	BL	09/26/01	Mexico	Slye	corn
Rhagoletis suavis - walnut husk maggot	NE	10/21/01	Arizona	Derichsweiler	black walnut husk
Rhagoletis suavis - walnut husk maggot	LV	10/29/01	Missouri	Wildschut	*Juglans* sp.
Rhagoletis ponomella - apple maggot	TR	10/04/01	Illinois	Calick	apple
Megaselia seticauda - a scuttle fly	BL	11/03/01	Mexico	Robertson	corn
Euxesta stigmatias - corn silk fly	BL	11/03/01	Mexico	Robertson	corn
Dreissena polymorpha - zebra mussel	TR	10/05/01	Michigan	Behjdou	boat
Apterona helix - garden bagworm	LO	10/20/01	Kansas	Goodman	birdbath

PLANT PATHOLOGY HIGHLIGHTS

Current distribution of confirmed SOD
As of December 31, 2001



The last issue of CPPDR had an incorrect SOD location at the southern end of Santa Cruz County. That error is corrected in this map.

IMPORTANT NAME CHANGES IN THE "HOMOPTERA"

Like time, science marches on! And as science marches on, things are bound to change. With these facts in mind, it is time now to take a look at just how things have changed in the area of names for insect species. The binomial naming tradition that scientists use for classifying organisms was developed by Linnaeus, and published in his "Systema Naturae" in 1758. That system uses the concept of a genus and species name for each "living" organism, and each name combination cannot be applied to any other living organism unless that other organism is considered to be the same species (and, as we will see later, this may be the root of some of the problems requiring name changes). However, the genus name alone to which an organism is thought to belong can be and frequently is changed, as science makes steps forward in learning about **relationships** between related (or non-related) species.

Other names pertaining to an organism, at a higher phylogenetic level, usually in the following scheme of Phylum, Order, Family, and Tribe, are usually very stable and only rarely will be changed, but change is still not beyond the realm of possibility. Any name below the species level, such as subspecies, race, biotype or other, has no valid nomenclatural standing, and is considered only a name of convenience. These names may indicate that species limits are not defined well enough to predict if one or more species may be present in the group of individuals under study. More on that later. Common names have absolutely no nomenclatural standing and are only used for convenience, and any given species may have multiple common names in use around the world. The Entomological Society of America periodically publishes a list of a committee approved common names of insects in an effort to standardize the use of those common names within the United States.

The species binomial name of an organism actually has three words normally attached, the genus name, the specific name, and the name of the author(s) who described the species originally. The author name is used constantly by the taxonomist since specific names can occur in other genera, so it is imperative to know who described the species in question. For instance, there is an armored scale (Family Diaspididae) that is described as *Parlatoria* ***citri*** McKenzie. In this case the name *Parlatoria* is the genus name, ***citri*** is the species name and McKenzie is the author of the species. However, the common name of citrus mealybug (Family Pseudococcidae) applies to the name *Planococcus* ***citri*** (Risso) and the name citrus whitefly applies to the name *Dialeurodes* ***citri*** (Ashmead). The name ***citri*** occurs for three different species, although in different families and genera, and so this is perfectly legal nomenclature.

If someone else had inadvertently described another, different Parlatoria species at a later date as *Parlatoria citri*, that name would be considered a homonym, and must be changed to some other specific name. If an author described a species with a certain name, but it was discovered later that the same species had been described much earlier under a different name, the new name is considered a synonym and it is therefore of no legal nomenclatural standing, since the first name given a species has priority, as long as the name is valid in other ways. Most taxonomic papers usually include a list of synonyms and their authors for the species covered in the publication.

The next aspect of this nomenclatural procedure is related to generic changes which can occur very frequently as scientists learn more about certain species and their relationships to other species, similar and dissimilar. In the example above, *Parlatoria citri* was described by McKenzie, and the species is still included in the genus in which it was originally described. On the other hand, the two species, *Planococcus citri* (Risso) and *Dialeurodes citri* (Ashmead), were described by the authors in genera in which they are no longer included. The parentheses around the author's names therefore indicate to the taxonomist that these species were described in genera other than where they are now placed. This change of genus has occurred again with relatives of *Dialeurodes citri*, as will be explained later.

A species name is seldom changed, usually only under three main circumstances. Two circumstances are if the name is a homonym or synonym, as explained above. The other has to do with grammar. Generic and specific names traditionally are made up of words based on ancient Latin and Greek languages, and so the specific names may or may not have to match the gender of the particular generic name. An example would be the Kuno scale insect, *Eulecanium kunoense*, that was originally described as *Lecanium kunoensis*, but the specific name *kunoensis* had to be changed to *kunoense* when the generic placement was changed from *Lecanium* to *Eulecanium*, because of gender requirements. Similarly the specific names in *Calophya rubra* and *Texananus spatulatus* indicate endings of the specific name which reflect the gender of the generic name.

Not only have there been a lot of generic changes over the last ten years or so, but also a lot of synonyms have been discovered as well, particularly for species that occur in California or that are encountered here in quarantine, and also for some very common and well known species. A lot of the proposed name changes will have a profound effect on the past literature covering these species, which can be particularly troublesome for the economic entomologists.

The first major name change discussed here has to be very important in the future, because it involves the insect order HOMOPTERA. Simply put, the word Homoptera must be phased out of usage. This will take time, but it must be done, because the name has proven to be basically invalid in light of recent scientific discoveries.

Homoptera have been recognized historically, in the United States anyway, as having piercing, sucking mouthparts arising at or near the back of the head near the thorax. This is opposed to the Hemiptera, which have piercing, sucking mouthparts originating at the front of the head away from the thorax. The whole issue is not as simple as that but it will suffice for this discussion. The order Homoptera has been divided into two suborders, the Sternorrhyncha (the aphids, psyllids, whiteflies, and scale insects, including mealybugs), and the Auchenorrhyncha (the cicadas, leafhoppers, spittlebugs and plant hoppers). The Hemiptera included the true bugs (stinkbugs, milkweed bugs, ambush bugs etc.) and usually the moss bugs (Peloridiidae). This arrangement must now be changed, due to the following series of events.

In 1986, the sweetpotato whitefly, *Bemisia tabaci*, appeared to be causing very unusual, uncharacteristic and economically devastating crop losses in Florida. By 1990 this entity had arrived in California, and by the end of 1991 had caused multimillion dollar agricultural losses in the desert valleys of southeastern California and adjacent areas of Arizona. The research that has gone into all issues of that insect attack are well documented. But during the early stages of the research aimed at the control of this insect there was also research into just what this insect was and where it had come from. In an attempt to determine whether the new problem insect was or was not the same insect that had been in the United States since the late 1800s, or if it was an entity totally different and a closely related new species, a number of steps were taken, particularly a very careful morphological and taxonomic study of all of the related and similarly appearing whitefly species. But more importantly, a new and very informative diagnostic tool had then recently been developed. That is gene sequencing.

At a whitefly meeting in Houston, Texas in 1991, it was decided between the whitefly taxonomists present, and Dr. Bruce Campbell, a Molecular Scientist and Entomologist stationed at the USDA ARS facility in Albany, California, that the whitefly should be sequenced to see what information could be obtained to solve the problem. Dr. Campbell sequenced the 18s rDNA gene system, and he sequenced the entire 2000+ base pair molecular make up of this gene. This particular gene involves the very basics of cell function, and as such is very prone to resist change over time. Therefore, this gene allows a comparison of the same gene in closely related entities, or totally unrelated entities, in such a way that predictions can be made as to what changes have been made in the gene over very long periods of time. This allows tracking of lineages back through millions of years. Whitefly species were found to differ by as few as two to eight base pair differences out of the entire 2000+ base pairs; currently accepted genera can differ by as few as 10 to 20 base pair differences. Through computer programming and data analysis, base pair differences can then allow determinations of relatedness for a given group of species.

As the sequencing took place for various available whitefly species and genera, it became apparent that the sequencing should also include other Homoptera, in order to strengthen the data sets and to verify various procedures and techniques. To accomplish this one or more individual species from each of the Homoptera families were sequenced as well as some Hemiptera. This also compared with similar work being done at that time by Drs. Ward Wheeler and Toby Schuh at the American Museum of Natural History in New York, although their work focused mainly on the Hemiptera, and later by Nancy Moran and Carol Van Dolen.

The results of the sequencing were profound. It was discovered that the planthoppers, 16+ families of insects in the group called the Fulgoroidea, were not related to the cicadas, leafhoppers and other members of the Auchenorrhynca, but instead were ancient ancestors to the Hemiptera. In Systematics parlance, this means that the whole Homoptera grouping is paraphyletic, meaning that they did not share a common ancestor, but that the ancestor is probably related to all the Homoptera and Hemiptera together. Because of all this, there are a number of different suggestions as to how this matter should be resolved, and what the final name(s) for the entire Homoptera-Hemiptera issue will end up being. But it will have to be changed eventually.

Workers in Europe and other places have used Hemiptera instead of Homoptera in publications for many years, and that tendency is increasing now. The name Heteroptera has been also used to indicate a strong relationship between the Hemiptera and Homoptera. The name Heteroptera has been also used to indicate a strong relationship between the Hemiptera and Homoptera, and this name probably is best to supplant the current usage of the other two.

Dr. John Sorensen (Sorensen et al. Pan Pacific Entomologist 71(1):31-60, 1995) of this lab has proposed the four following names as possible alternatives within the Homoptera/ Hemiptera/ Heteroptera naming question, as it regards the suborder names within the order "Heteroptera." These include the Sternorrhyncha, the old, standard subfamily name for the psyllids, scale insects, aphids, and whiteflies; the Clypeorrhyncha, a new proposed name for the old Auchenorrhynca minus the Fulgoroidea (families Cicadellidae, Cercopidae and Membracidae); the Archaeorrhyncha including the approximately 16 families of Fulgoroid plant hoppers, and the moss bugs, family Peloridiidae; and finally the Neohemiptera, including the families of the "true bugs," or the old interpretation of the order Hemiptera.

Generic Name Changes

The following name changes deal primarily with new generic placements, by family groupings. However, name changes due to synonymy are also included where appropriate. Those changes listed deal most importantly with those species which currently occur in California, however, other non-California species may be included if they are of special quarantine significance.

Diaspididae - armored scales

Based on opinions published by Evelyna Danzig in Russia, the generic placement of all species in two genera of armored scales occurring in California has been changed. All species of armored scales formerly in the genus *Quadraspidiotus* have been moved to the genus *Diaspidiotus*. The name *Quadraspidiotus* will be dropped. The reasons for this change in generic status is because, considering all the known species in *Diaspidiotus* and *Quadraspidiotus*, it was found that morphological characters intergrade in such a way as to prevent separation of the species into one genus or another. The name *Diaspidiotus* has priority so that name is retained. The work appeared in Danzig, E.M., 1993:"Fauna of Russia and neighboring countries," Russian Academy of Sciences, St. Petersburg, New Series #144. 1-452 (in Russian).

The most notable example is the very common San Jose scale, *Quadraspidiotus perniciosus* (Comstock), which now becomes *Diaspidiotus perniciosus* (Comstock).

The other species to be moved are now: *D. forbesi* (Johnson), *D. juglans-regiae* (Comstock), *D. gigas* (Thiem & Gerneck, and *D. ostreaeformis* (Curtis). The latter two species do not occur in California but are of quarantine significance.

The introduced species Hall scale, formerly *Nilotaspis halli* (Green), is now placed as *Mercetaspis halli* (Green) and is included with five other related species known from Eurasia. The revision of this species status was also published by Evelyna Danzig

Psyllidae - psyllids

Psylla - Cacopsylla changes: Most of the psyllids formerly in the genus *Psylla* are now placed in the genus *Cacopsylla*.

The most notable example, the pear psylla, formerly *Psylla pyricola* Förster, is now *Cacopsylla pyricola* (Förster).

The only California psyllids formerly in the genus *Psylla* that are still left in the genus are: *P. alni* (Linnaeus), *P. floccosa* Patch and *P. maculata* Crawford.

All of the California species now in *Cacopsylla* are too numerous to mention here, but several species common in the nursery trade are *C. buxi* and *C. fatsiae*

Several California psyllids formerly in the genera *Trioza*, *Paratrioza* and *Kuwayama* are now placed in the genus *Bactericera*.

The most notable example, the tomato psyllid, formerly *Trioza cockerelli* Sulc and later *Paratrioza cockerelli* (Sulc), is now *Bactericera cockerelli* (Sulc).

The California species of *Trioza* now placed in *Bactericera* are: *californica* (Crawford), *incerta* Tuthill, *lobata* (Crawford), *minuta* (Crawford), *salicivora* Reuter, and *varians* (Crawford).

The California species of *Paratrioza* besides *cockerelli* now placed in *Bactericera* include: *dubia* (Tuthill), and *maculipennis* (Crawford).

The species formerly in *Kuwayama* now in *Bactericera* is *lavaterae* (Van Duzee).

Placement of the above species within these three genera into *Bactericera* is based on work by Daniel Burckhardt in Switzerland and Pavel Lauterer in the Czech Republic (J. Nat. Hist., 31:99-153, 1997). The work is based primarily on material examined and therefore does not include a number of California species that still remain in the genus Trioza for now.

This includes *Kuwayama medicaginus*, and the following species in *Trioza*: *albifrons* Crawford, *astraea* Bliven, *bakeri* Crawford, *beameri* Tuthill, *breviantennata* Crawford, *eugeniae* Froggatt, *frontalis* Crawford, *loletae* Bliven, *longicornis* Crawford, *mira* Tuthill, *occidentalis* Tuthill, *phoradendri* Tuthill, *quadripunctata* Crawford, *stygma* Tuthill, *sulcata* Crawford, and *viridis* Crawford.

Three California species formerly in *Trioza* are now placed in *Calinda*. These three species belong to a strictly new world group, mostly South American, that are associated with the plant genus *Baccharis*. The three California species are *Calinda collaris* (Crawford), *C. longistylus* (Crawford) and *C. fumipennis* Olivares & Burckhardt. The work was done by S. Oliveras and D. Burckhardt in Rev. Suisse de Zoologie 104:231-344, 1997.

Aleyrodidae - whiteflies

Based on a cladistic analysis if the whitefly genus *Dialeurodes*, Dr. Andy Jensen has re-assigned a number of United States species of this genus to two other genera, *Singhiella* and *Massilieurodes*, and has described several new North American species in this generic grouping. Keys to the North American genera and species are included in the paper. The work was published by A.S. Jensen in Systematic Entomology 26: 279-310, 2001.

The citrus whitefly, *Dialeurodes citri* (Ashmead), and the *Kirkaldy whitefly, D. kirkaldyi* (Kotinsky), remain in the genus *Dialeurodes*.

The cloudy winged whitefly, *D. citrifolii* (Morgan), is now *Singhiella citrifolii* (Morgan).

The rhododendron whitefly, *D. chittendeni* Laing, is now *Massilieurodes chittendeni* (Laing).

Four new species of North American *Massilieurodes* have been described in this paper, *M. alabamensis* Jensen, *M. americanus* Jensen, *M. curiosa* Jensen and *M. myricae* Jensen. No common names have been suggested for these species

Pseudococcidae - mealybugs

The following mealybug species have undergone synonymy changes or generic re-assignments:

The common cactus mealybug, formerly *Spilococcus cactearum* MacKenzie, is now *Spilococcus mamillariae* (Bouché)

Several native California species of *Spilococcus*, *S. juniperi* (Ehrhorn) and *S. reducta* (Ferris) are now placed in the genus *Paracoccus* by Williams and Granara de Willink in "Mealybugs of Central and South America," CAB International, London, 1-635, 1992.

Several California mealybugs are now placed in the genus *Vryburgia*. The common lily bulb mealybug, formerly *Chorizococcus lounsburyi* (Brain) is now *Vryburgia amaryllidis* Bouché and the shortlegged mealybug, formerly *Chorizococcus brevicruris*, (McKenzie) is now *Vryburgia brevicruris* (McKenzie).

The common obscure mealybug, formerly *Pseudococcus obscurus* Essig, and *Pseudococcus affinis* (Maskell), is now *Pseudococcus viburni* Signoret.

Asterolecaniidae - pit scales

The genus Asterolecaniidae is a small family, containing only a few genera. Although the largest genus within the family has been *Asterolecanium*, based particularly on the work of Louise Russell (U.S.D.A. Misc. Publ. 424:1-322, 1941), more recent workers are beginning to split this genus apart. There is some controversy over the changes, but the current thinking suggests that those species of Asterolecanium that occur on bamboo should be placed in the genus *Bambusaspis*, and those that occur on palms should be in the genus *Palmaspis*. The following species have undergone synonymy changes or generic re-assignments:

Two species of Asterolecanium occurring in California, *A. arabidis* and *A. stentae*, are now placed in the genus *Planchonia*.

Several bamboo infesting species have been found to be variants of a single species, the variability in morphology resulting in separate species names has been shown to be a function of the individual's position on the host plant. As a result of this study, the pit scale species *Bambusaspis robusta* (Green) and *B. pseudomiliaris* (Green) were found to be synonyms of *Bambusaspis miliaris* (Boisduval). This work was published by Drs. Christof Stumpf and Paris Lambdin in Insecta Mundi 13(3-4):205-211, 1999.

Cicadellidae

Several leafhoppers in the sharpshooter subfamily Cicadellinae have been placed for years in the genus *Carneocephala*. However, work by Dr. Andy Hamilton has suggested that the original type species of *Carneocephala* actually belonged in the genus *Draeculacephala*, but that most of the remaining species in *Carneocephala* do not, and therefore should be transferred to a new genus, *Xyphon*. This work was published in Entomologische Abhandlungen 49(5)83-103, 1985.

Two common California species, formerly *Carneocephala fulgida* Nottingham, and *C. triguttata* Nottingham are now *Xyphon fulgida* (Nottingham) and *X. triguttata* (Nottingham). Both of these species are implicated as vectors of Pierce's disease.

Also moved to *Xyphon* are other North American species including *balli* (Knull), *diducta* (Fowler), *dyeri* (Gibson), *flaviceps* (Riley), *gilletti* (Ball), *nuda* (Nottingham), and *reticulata* (Signoret).

The rest of the species of *Carneocephala* and *Draeculacephala* have been divided into two subgenera, the subgenus *Carneocephala* now includes the species complexes of *D. angulifera*, *D. crassicornis*, *D. noveboracensis* and the species *D. floridana* Ball. All the rest of the species are included in the subgenus *Draeculacephala*.

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