Vol. 3 October 15, 1980 No. 41

COOPERATIVE PLANT PEST REPORT FOR CALIFORNIA

TO THE READER

In the final issue of the Cooperative Plant Pest Report for California (CPPRC), we made an announcement about its discontinuation, because the USDA's CPPR is ceasing publication. At the same time, we mentioned the possibility that we may continue this service to our readers in a new form. It had been decided we would publish a few issues before contacting other Western States to ask them if they are interested in establishing a "Western CPPR" and, if so, how they would like to see such a publication handled.

To make this medium of communication between a great variety of interested parties more effective, your contribution and support would be greatly appreciated.

The Editor

STATE OF CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE

Address communications to the Editor: *Dr. Charles S. Papp, Systematic Entomologist, Lab. Services — 340, 1220 N. Street, Sacramento, CA 95814 — (916) 445-4521*

MEDITERRANEAN FRUIT FLY - Ceratitis capitata - 135 field collections (traps) and 23 laboratory specimens were submitted for identification since the last report (CPPRC, Vol. 3, No. 40, p. 198). Submitted identification information are included as of October 10, 1980. All determinations made by Karen Corwin. The results are summarized in the following table:

County	Traps				Lab. cult. (larvae)
	Jackson	Steiner	Nadel	Frick	
Alameda	3				3
Marin	1			1	
Los Angeles		2			
San Mateo	1				1
Santa Clara	3*		116**	8***	10
TOTAL	8	2	116	9	23

*Gilroy..... 1
Ignacio.... 1
Mt.View.... 1

**Campbell... 4
Cupertino.. 9
Los Gatos.. 4
Miltipas... 4
San Jose...55
Sta.Clara..24
Saratoga... 8
Sunnyvale.. 8

***Gilroy..... 1
Mt.View.... 3
Sunnyvale.. 4

FIELD NOTES

JAPANESE BAY-BERRY WHITEFLY - Parabemisia myricae - This whitefly was first found in California and the U.S. in October 1978. Even though the whitefly was present in large numbers at that time, it seemed to have died out in 1979. Its potential for causing injury was not then known. However, in 1980 the whitefly again seems to be developing large populations and it appears that it may become a serious pest of commercial lemon trees.

It is becoming a pest because lemons produce fresh flush growth much more frequently than other plants, and this whitelfy does best on this type of growth. According to Mike Rose (UCR), this whitefly has caused severe injury to a lemon orchard on the Irvine Ranch in Orange County in the summer of 1980. Then on October 1, 1980, it was collected during a Project Survey IPM on lemon by S. Rys and R. Williams in Rancho Santa Fe, San Diego County. They found some 10% of the trees affected on a 15 acre area with some 20 to 25 nymphs per leaf (both sides) on the shady side of the trees. Apparently, no whiteflies were found on the sunny sides. On October 7th, C Picket observed this species (2 nymphs and adults per leaf) on Veichi Gardenia in San Diego; 8 out of 8 gardenias were found infested on the upper side of leaves (determinations all made by R. Gill, CDFA).

Here is a list of hosts of this whitefly in California:

Citrus sp.:	Robertson Navel Orange	Betula sp.	Mulberry
	Dancy Tangerine	Dwarf Birch	Hahn's ivy, Hedera sp.
	Bearss Lime	Loquat	Photinia fraseri
	March Grapefruit	Satsuma Plum	Eugenia myrtifolia
	Eureka Lemon	Hibiscus	Arbutus unedo
	Washington Orange	Flowering Pear	Camellia japonica

List of hosts of this whitefly in California continued:

Abelia grandiflora
Pyracantha
Viburnum japonicum
Avocado, Persea sp.
Melaleuca leucodendron
Wilson's Holly, Ilex sp.

GYPSY MOTH - ~~Porthetria~~ Lymantria dispar - A male adult was found in Gypsy Moth Trap in Strawberry, Marin County on September 30th by Mr. Kaufman (det. by T. Eichlin).

HYDRILLA - Hydrilla verticillata - NEW COUNTY RECORD - A small infestation of this A-rated weed found in a lily pond, near the north entrance to the Los Angeles County Museum of Natural History, by A. Posadas, V. Van Way, and R. Wightman on October 6th (det. by T.C. Fuller, CDFA).

TANSY RAGWORT - Senecio jacobaea - NEW COUNTY RECORD - A small infestation of this B-rated weed was found on a USFS property, roadside 11 miles plus 50 yards north of Happy Camp on Indian Creek Road, by D.H. Shaw on October 2nd. Someone called E. Weeth, Assistant Agricultural Commissioner of Del Norte County, and in turn he contacted Siskiyou County. The infestations were eradicated on the same day by the collector (det. by T.C. Fuller).

SHEATH NEMATODE - Hemicycliophora arenaria - Was identified from Nussbaum property in 1964. On Oct. 6th, R.A. Flock collected samples in an orange grove in Holtville (also a Nusbaum property). In this sample among Tylenchulus semipenetrans and Paratrichodorus specimens this sheath nematode was present again (det. by R. Fortuner, CDFA).

BARLEY ROOT-KNOT NEMATODE - Meloidogyne naasi - Found in soil sample containing roots of rush (Juncus sp.) collected on September 24th by Greenkank and Krass near Tulelake, Modoc County, in a roadside ditch. This is the FIRST RECORD of this nematode outside of the Reclamation Area in Modoc County. Another collection also from Tulelake on the same day by Schiebel and Krass. Soil samples from foxtail barley and Tule or great bullrush also produced specimens of the Barley Root-Knot Nematode (det. by A. Weiner, CDFA).

Dennis Poore, Staff Biologist, Kern County Agricultural Commission, sent in the following note: Ozone injury to ca. 200 acres of snap beans in the Edison-Lamont area of Kern County. Degree of damage varies with susceptibility of variety (October 9, 1980).

BORDER STATION INTERCEPTIONS

TENT CATERPILLAR - Malacosoma sp. - Larval specimen found in a trailer from New York on September 29th at the Truckee Inspection Station by T. Shellove. Pupa (alive) detected by G. Hart at the Needles Inspection STation on September 25th in a truck from New Jersey (det. by R. Somerby, CDFA).

CODLING MOTH - Laspeyresia pomonella - Eleven interceptions of this C-rated pest is a characteristic example of how injurious species travel with man's help from various states into California. On September 6th, L. Huffaker at the Meyers Inspection Station discovered several live larvae in apples carried in an automobile from Minnesota. On September 29th, at the Redwood Inspection Station, M. Versteeg located live larvae in pears in an automobile from Oregon. Between September 23rd and October 1st, several interceptions at the Yermo Inspection Station, namely two from New Jersey (by J.E. Lowe and M. Tracy), one from Nebraska (by E. Morris), one from Ohio (by M. Tracy) and two from Illinois (by D. Hoffmann

and R. Shibley), all but one (from N.J. in peach) found in apples. Several larval specimens detected in apples from New York (by C. Lee), from Iowa (by C. Lee) and from Missouri (by R. Sigler) at the Truckee Inspection Station (all det. by T. Eichlin, CDFA).

APPLE MAGGOT - Rhagoletis pomonella - Sixteen interceptions of this A-rated species, all in apples. In automobiles from New Hampshire (by S. Beach) and from Minnesota (by L. Huffaker) at the Meyers Inspection Station. From Ontario, Canada (by D. Sage) and from Wisconsin (by A. Bennett, with a note "3 animals in backyard apples from Wisconsin") (all det. by M. Wasbauer, CDFA). At the Smith River Inspection Station, two collections were made (by S. Kelly and A. Valenzuela) in cars from Oregon; they also found larval specimens in apples from Wisconsin; D. Hattem intercepted apples with larvae from Indiana (det. by K. Corwin, CDFA). The Truckee Inspection Station submitted seven collections; all larvae found in apples. Three occasions from Wisconsin (by R. Sigler, T. Shellove, L. Baker); three collections from Michigan (by C. Halvorson, L. Baker, S. Wilt); one collection in an automobile from New Mexico, by F. Quilici (det. by M. Wasbauer, CDFA).

DIFFUSE KNAPWEED - Centaurea diffusa - Two interceptions of this A-rated weed at Mt. Shasta Inspection Station on October 4th. D. Bienenfeld located these specimens while inspecting a California automobile returning from Oregon and found this weed in a box containing pears. On the same day, S. Sterling found specimens in a floral arrangement in an automobile returning from Washington (det. by T. Fuller, CDFA).

SCOTCH THISTLE - Onopordum acanthium - Intercepted in a floral arrangement by J. Imhof at the Mt. Shasta Inspection Station on October 5th in a New York automobile coming through Washington-Oregon (det. by T. Fuller, CDFA).

HALOGETON - Halogeton glomeratus - Intercepted by M. Pastell in an automobile on October 4th from Nevada at the Truckee Inspection Station (det. by T. Fuller, CDFA).

DUTCH ELM DISEASE IDENTIFICATION

Positive for DED fungus, Ceratocystis ulmi. Wood samples and specimens of the smaller European bark beetle, Scolytus multistriatus, from the following locations (identified by T.E. Tidwell, CDFA):

MARIN COUNTY: European elm - Positive years include rings of 1973 and 1970, in San Rafael. Beetle specimens from Traps No. 21-19A, -22 and -24. (Also from Adherton, Burlingame, and Woodside).

SAN MATEO COUNTY: European elm - Positive years 1980 and 1979, in Menlo Park; streaking present, from Redwood City. Chinese elm from Redwood City. Beetle specimens from Trap No. 41-13, -13C, -14B, -29, -33, -33A, -39, -55, -64 and -108 from County Traps. Siberian elm sample from San Mateo.

SONOMA COUNTY: American elm from Penngrove; European elm, 3 samples positive; two additional samples 1980 rings only, from Sonoma. Beetles from Trap No. 49-68.

NEWS BRIEFS OF INTEREST

The Integrated Pest Management Unit has sponsored and published a color key to the lepidopterous insects attacking field and vegetable crops. The text was prepared by Dr. Kirby Brown (Entomologist in San Joaquin Valley) and Ray Bingham (Entomologist at Plant Industry, CDFA). This publication will be available November 15th from the Integrated Pest Management Unit.

... has recently issued its first Newsletter entitled Pest Post. The purpose of this newsletter is to provide the County Agricultural Commissioner information about pest management practices, activities of the Integrated Pest Management Unit as well as the Bio-Control Unit and the Environmental Hazards Assessment Unit and the recent publications in IPM. The first issue was released in September and there will be a monthly newsletter thereafter.

... has issued the following directories to pesticides registered on walnuts, pears, almonds and apples. These directories are to be updated every six months. The walnut directory also includes information on considerations for the use of most pesticides. Contact the Integrated Pest Management Unit for copies. The phone number is (916) 322-2395.

UNIT ACTIVITIES

CONTROL AND ERADICATION:

SCOTCH THISTLE TREATED - Monterey and San Benito Counties - The entire 43-mile (26 miles of Lewis Creek and 17 miles of San Lorenzo Creek) infestation was surveyed. Thirty-three plants, eight bolted bearing seed and twenty-five rosettes, were found scattered over 6,300 square feet at a new location along Lewis Creek. Fifty-four rosettes were found, dug up and destroyed in a home yard vegetable garden near Priest Valley School. A total of 98 plants were found and, except for the home yard, were treated with Tordon beads. All seed heads were collected and destroyed by the County.

DALMATIAN TOADFLAX - San Bernardino County - Within the 120 sites observed, only 70 plants were found. On two sites, plants were removed by digging; the remainder were treated with dicamba, 5 oz. total material used. Those plants which contained mature seed pods were topped; the flower heads were removed and placed in bags for incineration by county facilities. This final survey of the year marks a seasonal end to an extensive and most successful campaign.

HYDRILLA - Imperial County - Biologists Melnicoe and Van Way located possible sites within the hydrilla infested portions of the All American Canal system for test plots of Diquat^{R}, Cutrine^{R} and a chelated iron compound combined with Komeen. The biologists and project personnel continued with scheduled water and crop sampling at numerous stations along the system before, during and after the third application of Komeen. Treatment of all main canals and laterals was completed Tuesday, leaving only ponds and infested delivery gates to be treated.

EXCLUSION AND DETECTION:

QUAKER PARROT taken at Mt. Shasta Agricultural Inspection Station - A Quaker parrot, also known as a Monk parakeet, was intercepted from a Washington auto on September 20th. This was the second interception in the last two months of this increasingly popular parrot. One Portland outlet advertises the bird for sale at $29.95.

GERBILS-FERRETS - Yermo's truck office still smells like a zoo. It seems one batch of animals was disposed of and a few more are coming down the road. Yermo inspectors have rejected two gerbils, one ferret, and are holding them for owners' decisions as to disposition.

FERRETS AT TRUCKEE - Two more ferrets from Boise, Idaho and one from McLeasn, Virginia were rejected at the Truckee Inspection Station by Inspectors McKenzie and Wilt.

NURSERY AND SEED SERVICES:

BUDWOOD RE-INOCULATION FOR-THE AVOCADO SUNBLOTCH DISEASE - Avocado budwoods from the Fallbrook and Valley Center area in San Diego County that were previously submitted for indexing the viroid disease have yeilded negative budtake. For this reason, the plant pathology technician at the University of California at Riverside, with the assistance of Nursery and Seed personnel, have to recut another batch of budwood for the re-inoculation test. The observation and final reading will require a six month period to determine the presence or absence of the disease from the candidate trees. A new procedure which is currently tested at the University with the use of chemical test (gel electrophoresis technique) will hopefully replace the conventional grafting technique. With this quick method, it will facilitate a massive indexing of avocado for the presence of the viroid. (B.A.A.)

BUILDING FOR BERRIES - In the Watsonville area several caneberry foundation blocks are currently entered in the certification program. The participants have been experiencing some delays in finishing their greenhouse facilities. The interim arrangements have been adequate but not intended to be permanent, and are not likely to bear up well over the winter. Both participants are, however, now undertaking final construction along the lines required by the regulations for final approval by Nursery and Seed Services. (E.C.F.)

A REQUEST

Mr. Rominger, our Director, received a letter of request from a person in England, who had been advised by the U.S. Embassy in London to contact our Department. This gentleman, a Fellow of the Royal Geographical Society, is working on a series of educational film strips and an informative text book for schools, and he is in need of photographs (color slides) depicting agricultural themes such as irrigation, field workers, air pollution (and damage), and general agriculture. He, with a group of people, previously visited California, and as he stated in his letter "...one of the groups involved had cameras and films stolen in New York after a successful trip to California".

I was asked to give help to this gentleman, which I am unable to do since my photographic activities (which are private) are directed to insect close-ups, flowers, mountains and the deserts. Therefore, I believe many of our readers probably have photographs that Mr. Saunders might be able to use. If you do, please contact me, or get in touch directly with

Mr. Anthony M. Saunders, B. Sc.,
F.R.G.S.
2 Elmcroft Close
Wanstead, London E11 2BW
ENGLAND

Thanking you in advance for your help.

C.S.P.

CALIFORNIA BLACK LIGHT TRAP REPORT

For the week ending October 3, 1980

DATE	9-28-80	9-28-80	9-28-80		
LOCATION	Bellota	Manteca	Robert's Island		
TEMPERATURE		87° - 56°			
ALFALFA LOOPER *Autographa californica*		1			
ARMYWORM *Pseudaletia unipuncta*	1	1	4		
BEET ARMYWORM *Spodoptera exigua*	189	377	685		
BLACK CUTWORM *Argrotis ipsilon*			1		
CABBAGE LOOPER *Trichoplusia ni*		1			
CLOVER CUTWORM *Scotogramma trifolii*	4	1	1		
CODLING MOTH *Laspeyresia pomonella*					
CORN EARWORM, (ETC.) *Heliothis zea*	4	3	3		
FALSE CELERY LEAFTIER *Udea profundalis*	3	3	11		
GRANULATE CUTWORM *Feltia subterranea*	4	12	2		
SALTMARSH CATERPILLAR *Estigmene acrea*					
SPOTTED CUTWORM *Amathes c-nigrum*	6		3		
SUGARBEET WEBWORM *Loxostege sticticalis*					
TOBACCO BUDWORM *Heliothis virescens*					
W. YELLOWSTRIPED ARMYWORM *Spodoptera praefica*					
NAVEL ORANGEWORM Amyelois transitella	1	16			
GRAPE LEAF FOLDER Desmia funeralis		2			
VAREIGATED CUTWORM Peridroma saucia		1			
PEACH TWIG BORER Anarsia lineatella		3			
ROUGHSKINNED CUTWORM Proxenus mindara		2	5		

61-033 (Est. 5-77)

CALIFORNIA BLACK LIGHT TRAP REPORT

For the week ending October 10, 1980

DATE	10-5-80	10-5-80	10-6-80		
LOCATION	Manteca	Roberts Island	Bellota		
TEMPERATURE	96° - 59°		95° - 58°		
ALFALFA LOOPER *Autographa californica*		2			
ARMYWORM *Pseudaletia unipuncta*		1			
BEET ARMYWORM *Spodoptera exigua*	607	192	269		
BLACK CUTWORM *Argrotis ipsilon*			3		
CABBAGE LOOPER *Trichoplusia ni*		2	1		
CLOVER CUTWORM *Scotogramma trifolii*	3		6		
CODLING MOTH *Laspeyresia pomonella*					
CORN EARWORM, (ETC.) *Heliothis zea*	5	3	4		
FALSE CELERY LEAFTIER *Udea profundalis*	24	22	39		
GRANULATE CUTWORM *Feltia subterranea*	13	1	2		
SALTMARSH CATERPILLAR *Estigmene acrea*					
SPOTTED CUTWORM *Amathes c-nigrum*	4		1		
SUGARBEET WEBWORM *Loxostege sticticalis*					
TOBACCO BUDWORM *Heliothis virescens*					
W. YELLOWSTRIPED ARMYWORM *Spodoptera praefica*					
ROUGHSKINNED CUTWORM Proxenus mindara		1	2		
NAVEL ORANGEWORM Amyelois transitella	3	1	2		
OMNIVOROUS LEAF ROLLER Platynota stultana		105	2		
GRAPE LEAF FOLDER Desmia funeralis	2				
PEACH TWIG BORER Anarsia lineatella	17				

CALIFORNIA BLACK LIGHT TRAP REPORT

For the week ending 10/19/80

DATE	10/13/80	10/13/80	10/13/80		
LOCATION	Manteca	Bellota	Roberts Island		
TEMPERATURE	67 - 46°				
ALFALFA LOOPER *Autographa californica*			1		
ARMYWORM *Pseudaletia unipuncta*	7	3	35		
BEET ARMYWORM *Spodoptera exigua*	64	30	182		
BLACK CUTWORM *Argrotis ipsilon*	1	2			
CABBAGE LOOPER *Trichoplusia ni*	2	1			
CLOVER CUTWORM *Scotogramma trifolii*	2	2	1		
CODLING MOTH *Laspeyresia pomonella*					
CORN EARWORM, (ETC.) *Heliothis zea*	4	1	7		
FALSE CELERY LEAFTIER *Udea profundalis*	7		170		
GRANULATE CUTWORM *Feltia subterranea*	9	1	13		
SALTMARSH CATERPILLAR *Estigmene acrea*					
SPOTTED CUTWORM *Amathes c-nigrum*		3	2		
SUGARBEET WEBWORM *Loxostege sticticalis*					
TOBACCO BUDWORM *Heliothis virescens*					
W. YELLOWSTRIPED ARMYWORM *Spodoptera praefica*					
PEACH TWIG BORER Anarsia lineatella	2	2			
VARIEGATED CUTWORM Peridroma saucia		1			
ROUGHSKINNED CUTWORM Proxenus mindara			3		
OMNIVOROUS LEAFROLLER Platynota stultana			42		

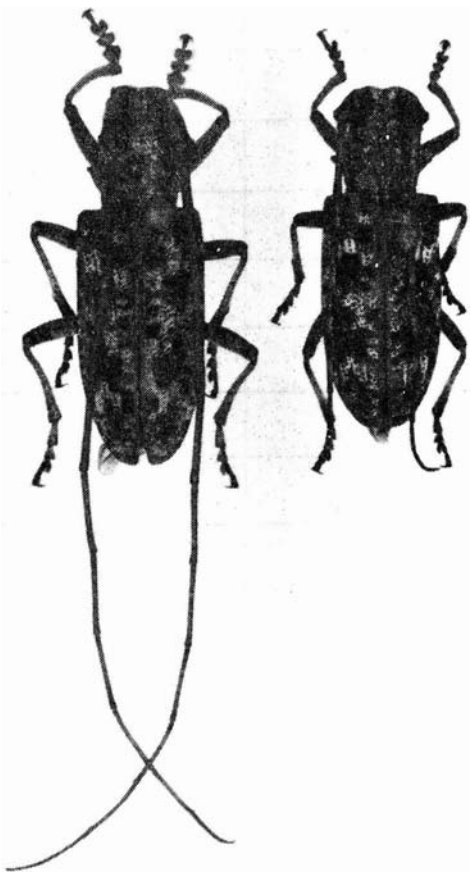
61-033 (Est. 5-77)

PINEWOOD NEMATODE

Larvae of Bursaphelenchus lignicolus Mamiya & Kiyohara, 1972 (the pinewood nematode), have been recovered from Monochamus obtusus Casey (the obtuse sawyer) captured in Siskiyou County (California).

A single beetle was picked up in a pine plantation located one mile west of McCloud, September 25th. The beetle was submitted to Laboratory Services, CDFA, by Doug Horn (county) and Conrad Krass (state).

The cerambycid beetle was identified by Fred G. Andrews. Nematode larvae recovered from the dissected beetle were reared on the fungus, Botrytis cinerea, and adults were identified by A.C. Weiner and R.W. Hackney.



The Obtuse Sawyer, Monochamus obtusus adults male with long, female with short antennae.

Previous recoveries of the pinewood nematode in Siskiyou County have been limited to dead pine trees in Yreka. Pine species involved were Pinus ponderosa, P. contorta var. murrayana, and P. radiata. Also, the pinewood nematode has been collected in Pacific Grove (Monterey County).

Q. Holdeman