

**Pacific Branch
ENTOMOLOGICAL
SOCIETY
OF AMERICA**

**Eighty-Sixth
Annual Meeting**



**Frank G. Zalom
President**

**Harrah's Lake Tahoe
South Lake Tahoe (Stateline), Nevada
June 16-19, 2002**

**PACIFIC BRANCH
ENTOMOLOGICAL SOCIETY OF AMERICA**

President

Frank G. Zalom
Department of Entomology
University of California
Davis, CA 95616

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Syngenta
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Future Meetings

Tucson, AZ – 2003
Bozeman, MT – 2004

**PACIFIC BRANCH
ENTOMOLOGICAL SOCIETY OF AMERICA
COMMITTEES
2001-2002**

Arrangements

Brian Bret, Chair
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Auditing

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Awards Canvassing

Doug Walsh, Chair

Graduate Student

Eileen Cullen, Chair
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Linnaean Games

Sujaya Rao, Chair
Penny Gullan
Richard Zack

Nominations

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Operations

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Registration

Lucia Varela, Chair
Walt Bentley
Bill Chaney
Rich Coviello
Mario Moratorio

Resolutions

Ed Bechinski, Chair

Site Selection

John Brown, Co-Chair (2003 meeting)
David Byrne, Co-Chair (2004 meeting)
Mario Moratorio, Co-Chair (2005 meeting)
Bill Chaney

Eric Mussen

Special Events

Jan Zalom, Chair

Student Paper/ Poster Contest

Sujaya Rao, Chair

Penny Gullan

Richard Zack

Website and Abstracts

Joyce Strand, Chair

Travel Nagler

**PACIFIC BRANCH
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2001-2002**

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PROGRAM

Sunday, June 16

Registration

Tahoe Foyer - 2nd Floor, Harrah's
3:00 p.m. - 9:00 p.m.

Executive Committee Meeting

Tahoe A
6:00 p.m. - 9:00 p.m.

Monday, June 17

Opening Session and Preliminary Business Meeting

Sand Harbor
8:30 a.m. - 10:45 a.m.

- 8:30 Welcome and Opening Remarks**
Frank G. Zalom, President, Pacific Branch,
Entomological Society of America
- 8:40 Report From the National Organization**
Jay McPherson, President, Entomological
Society of America
- 8:55 Report From the Governing Board**
John Starks, Representative, Pacific Branch
- 9:05 Entomological Foundation Presentation**
Robert K. Washino, Foundation Counselor,
UC Davis
- 9:15 2002 Woodworth Award Winner
Presentation**
- Identifying Predator Meals to Tracking
Parasitoid Movement: The Evolution of
Immunoassays for Biological Control Research.
James Hagler, Western Cotton Research
Laboratory, 4135 E. Broadway Road, Phoenix,
AZ
- 9:50 2002 Pacific Branch Comstock Award
Winner Presentation**
- Detection, impact and management of the
western conifer seed bug in lodgepole pine.
Sarah Bates, Simon Fraser University, BC,
Canada
- 10:25 Preliminary Business Meeting**
Frank G. Zalom, President, Pacific Branch,
Entomological Society of America
- 10:45 Adjourn**

**10-Minute Paper Session
Student Competition**

Sand Harbor
11 a.m. – Noon

Moderators:

S. Rao, Department of Entomology, Oregon State
University, Corvallis, OR &
S. Blodgett, Department of Entomology, Montana State
University, Bozeman, MT

Undergraduate

Time **Paper & Author(s)**

- 11:00** Temperature-dependent development in the introduced European crane fly, *Tipula oleracea*. **J. R. Horrell**¹ and S. Rao², (1) Department of Biology, Oregon State University, 2042 Cordley Hall, Corvallis, OR, (2) Department of Entomology, Oregon State University, 2046 Cordley Hall, Corvallis, OR
- 11:12** Rearing triungulins of *Meloe* found in Oregon and their possible association with *Apis mellifera*. **A. Jorgenson**, D. A. Delaney, and L. A. Royce, Department of Entomology, Oregon State Univ., 2046 Cordley Hall, Corvallis, OR

M.S.

- 11:24** Biology of *Trichogramma cacoeciae* Marchal (Hymenoptera: Trichogrammatidae). **K. G. H. Breedveld**¹ and L. K. Tanigoshi², (1) Department of Entomology, Washington State University, Pullman, WA, (2) Vancouver Research and Extension Unit, Vancouver, WA
- 11:36** Thermal ecology and thermoregulatory ability of three *Nicrophorus* species in southeastern Idaho. **M. J. Merrick**, Department of Biological Sciences, Idaho State University, Campus Box 8007, Pocatello, ID
- 11:48** The phylogeny of earwigs (Dermaptera): Molecular and morphological evidence. **K. J. Jarvis**¹, F. Haas², and M. F. Whiting¹, (1) Department of Integrative Biology, Brigham Young University, 401 WIDB, Provo, UT, (2) Universitat Ulm, Sektion Biosystematische Dokumentation, Hemlholtzstrasse 20, D-89081, Ulm, Germany
-

**10-Minute Paper Session
Student Competition - Continued**

Glen Alpine
1:00 p.m. – 5:00 p.m.

Moderators:

S. Rao, Department of Entomology, Oregon State University, Corvallis, OR &
S. Blodgett, Department of Entomology, Montana State University, Bozeman, MT

M.S. - Continued

- | <u>Time</u> | <u>Paper & Author(s)</u> |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1:00 | Breeding honey bees (<i>Apis mellifera</i>) for disease resistance, pest tolerance, and honey production in Washington State. M. A. Gardner and W. S. Sheppard, Washington State University, Department of Entomology, 166 Food Science and Human Nutrition Bldg, Pullman, WA |
| 1:12 | Hot water immersion against <i>Aspidiotus destructor</i> Sign (Homoptera: Diaspididae) in banana. M. Chou , A. H. Hara, and R. F. Mau, Department of Plant and Environmental Protection Sciences, University of Hawaii at Manoa, 3050 Maile Way, Gilmore 310, Honolulu, HI |
| 1:24 | Assessing the impact of multiple stressors on the survival and fecundity of <i>Daphnia pulex</i> . S. Hopkins and J.D. Stark, Washington State University Research and Extension Center, 7612 Pioneer Way East, Puyallup, WA |
| 1:36 | Phylogeny of the leafhopper subgenus <i>Errhomus</i> (<i>Erronus</i>) (Homoptera: Cicadellidae) based on mtDNA sequences. D. G. Johnson , R. S. Zack, and W. S. Sheppard, Department of Entomology, Washington State University, Pullman, WA |
| <u>Ph.D.</u> | |
| 2:00 | Effect of pymetrozine on demographic statistics of <i>Diaeretiella rapae</i> (Hymenoptera: Aphidiidae). S. Bamfo and J. D. Stark, Washington State University, WSU REC, 7612 Pioneer Way East, Puyallup, WA |
| 2:12 | Effect of mycorrhizal colonization on mirid (<i>Tupiocoris notatus</i>) populations in the greenhouse in southern California. S. C. Wooley and T. D. Paine, Department of Entomology, University of California, Riverside, CA |

- 2:24** Diel periodicity of pheromone response and mating activity in the consperse stink bug, *Euschistus conspersus*. **C. Krupke**, J. Brunner, and V. Jones, Washington State University, Tree Fruit Research and Extension Center, Wenatchee, WA
- 2:36 Break**
- 3:00** Impact of entomopathogenic nematodes on a larval parasitoid of the Colorado potato beetle. **Tae-Hwan Kim**¹, C. Armer¹, R. E. Berry¹, and S. S. Kim², (1) Department of Entomology, Oregon State University, Corvallis, OR, (2) School of Environmental and Agricultural Science, Sunchon National University, 315 Maegok-dong, Suncheon-si, Jeollanam-do, 540-070, Korea
- 3:12** Functional reproductive morphology of the female *Homalodisca coagulata* (Auchenorrhyncha: Cicadellidae). **N. A. Hummel**¹, F. G. Zalom¹, N. C. Toscano², and C. Y. S. Peng¹, (1) Department of Entomology, University of California, One Shields Avenue, Davis, CA, (2) Department of Entomology, University of California, Riverside, CA
- 3:24** Sexually transmitted nematodes in the decorated cricket. **L. T. Luong** and H. K. Kaya, Department of Entomology and Nematology, University of California, Davis, CA

10-Minute Paper Session

Tahoe A & B

1:00 p.m. – 5:00 p.m.

Moderators:

V. Y. Yokoyama, USDA-ARS &

A. Lynch, USDA Forest Service

Time Paper & Author(s)

- 1:00** Secondary transfer of imidacloprid in Isoptera. **P. McNally**, Bayer Corporation, 23296 Buckland Lane, Lake Forest, CA
- 1:12** Resource fidelity in Argentine ant workers. **N. A. Fernandes**, Department of Entomology, University of California, Riverside, CA
- 1:24** Controlling ants on an endangered species breeding site: Two ants - Two strategies. **M. K. Rust** and E. O. Paine, Department of Entomology, University of California, Riverside, CA

- 1:36** Non-target species attracted to baits used for control of yellowjacket wasps (Hymenoptera: Vespidae) in Hawaii. **D. Foote¹**, J. K. McMurry¹, and E. B. Spurr², (1) U.S. Geological Survey, Pacific Island Ecosystems Research Center, P.O. Box 52, Hawaii Volcanoes National Park, HI, (2) Landcare Research, P.O. Box 69, Lincoln 8152, New Zealand
- 1:48** Heat as a quarantine treatment against codling moth in cherry. **J. D. Hansen¹**, E. J. Mitcham², S. R. Drake³, Juming Tang⁴, S. Wang⁴, J. Bower², and W. Biasi², (1) USDA-ARS, Yakima Agricultural Research Laboratory, 5230 Konnowac Pass Road, Wapato, WA, (2) Department of Pomology, University of California, One Shields Avenue, Davis, CA, (3) USDA-ARS, Tree Fruit Research and Extension Center, 1104 N. Western Ave., Wenatchee, WA, (4) Department of Biological Systems Engineering, Washington State University, Pullman, WA
- 2:00** Quarantine treatment for cereal leaf beetle in hay exports. **V. Y. Yokoyama** and G. T. Miller, USDA-ARS, San Joaquin Valley Agricultural Sciences Center, 9611 South Riverbend Avenue, Parlier, CA
- 2:12** Resistance to silverleaf whitefly in the cotton relative, *Gossypium thurberi*. **E. T. Natwick¹** and G. P. Walker², (1) University of California Cooperative Extension, 1050 E Holton Rd, Holtville, CA, (2) University of California, Department of Entomology, Riverside, CA
- 2:24** Evaluation of hairy nightshade as an inoculum source for the aphid-mediated transmission of PLRV. **J. M. Alvarez**, N. Matteson, and M. Wiebe. Department of Plant, Soil and Entomological Sciences, University of Idaho, Aberdeen R & E Center, 1693 S. 2700 W., Aberdeen, ID
- 2:36 Break**
- 3:00** Response of pacific coast wireworm (Coleoptera: Elateridae) to food baits in laboratory and field. **D. R. Horton** and P. J. Landolt, USDA-ARS, 5230 Konnowac Pass Rd., Wapato, WA

- 3:12** Efficiency of *Beauveria bassiana* bals., vuill, against three species of corn stem borers. **J. Y. Kirolos**¹, M. B. Shower², R. El-Suafty², and H. Mansour¹, (1) Plant Protection Research Institute, ARC.Dokki, Egypt, (2) Fac. Agric. Tanta Univ., Egypt
- 3:24** Rice plant tolerance to rice water weevil induced root injury increases with plant age. **L. D. Godfrey** and R. R. Lewis, Department of Entomology, University of California, One Shields Avenue, Davis, CA
- 3:36** Progress of damage impact assessment of cereal leaf beetle in eastern Washington State. **M. C. Gould** and K.S. Pike, Department of Entomology, Washington State University, Pullman, WA
- 3:48** Life history and damage of *Nepytia janetae*, a winter-feeding geometrid on spruce and fir. **A. Lynch**¹ and R. Fitzgibbon², (1) USDA Forest Service, Rocky Mountain Research Station, 2500 South Pine Knoll, Flagstaff, AZ, (2) USDA Forest Service, Forest Health Protection, 2500 South Pine Knoll, Flagstaff, AZ
- 4:00** Development of an interactive CD for teaching insect ecology. **H. Y. Zhao**, Northwest Science and Technology, University of Agriculture and Forestry, Yangling, Shaanxi, People's Republic of China
- 4:12** Extension's role in assuring the sustainable management of fruit flies in Hawaii. **R. F. L. Mau**¹, J. Sugano¹, E. Jang², R. Vargas², and M. Chou¹, (1) Department of Plant and Environmental Protection Sciences, University of Hawaii at Manoa, Honolulu, HI, (2) USDA-ARS, U. S. Pacific Basin Agricultural Research Center, P. O. Box 4459, Hilo, HI

**Insecticide Resistance in Medical & Agricultural
Entomology - Symposium**
Tahoe C & D
1:00 p.m. - 5:00 p.m.

Organizer and Moderator:
A. Cornel, University of California, Davis, CA

Time **Paper & Author(s)**
1:00 Insecticide resistance in *Bemisia tabaci*; a personal perspective. **N. C. Toscano** and N. Prabhaker, University of California, Riverside, CA

- 1:24** Resistance in perspective: How much overlap is there between the perception and reality of resistance? **P. S. J. Castle**, USDA-ARS, Western Cotton Research Laboratory, Phoenix, AZ
- 1:48** Managing insecticide resistance in California red scale. **B. Grafton-Cardwell**, University of California, Kearney Agricultural Research & Extension Center, Parlier, CA
- 2:12** The lion that snored: resistance and intensive use of Bt cotton in Arizona. **T. Dennehy**¹, B. Tabashnik¹, Y. Carriere¹, Larry Antilla² and A. Cornel³, (1) Department of Entomology, University of Arizona, Tucson, AZ, (2) Arizona Cotton Research and Protection Council Phoenix, AZ, (3) University of California at Davis, Mosquito Control Research Laboratory, Kearney Agricultural Field Station, Parlier, CA
- 2:36** **Break**
- 3:00** Maximizing IPM and mitigating fly resistance in confined animal operations. **B. A. Mullens**¹, J. M. Darbro¹ and A. C. Gerry², (1) Department of Entomology, University of California, Riverside, CA, (2) Vector-Borne Disease Section, California Department of Health Services, Visalia, CA
- 3:24** Challenges facing resistance management of California mosquitoes. **A. J. Cornel**, R. D. McAbee and J. Christiansen, University of California at Davis, Mosquito Control Research Laboratory, Kearney Agricultural Research & Extension Center, Parlier, CA
- 3:48** Insecticide resistance in human head lice presents unique management problems. **J. D. Edman**¹ and M. Takano-Lee², (1) Department of Entomology and Center for Vectorborne Diseases, University of California, Davis, CA, (2) Department of Entomology, University of California, Riverside, CA

Pacific Branch Mixer and President's Reception

5:30 p.m. - 7:00 p.m.
Sand Harbor & Logan Creek

Linnaean Games

7:30 p.m. - 10:00 p.m.
Glen Alpine

Tuesday, June 18

Spouse Breakfast

Pre-register at Registration Desk
8:00 a.m.
Forest Buffet

Special Event - Lake Tahoe Cruise

Pre-registration Required - \$25.00
9:30 a.m.

Poster Session

9:00 a.m. - 5:00 p.m.
Marla Bay & Glenbrook

Student Poster Competition:

- D 01 Constructed treatment wetlands vegetation management impacts on mosquito abundance. **M. Sanford**, J. Keiper, J. Jiannino and W. Walton, Department of Entomology, University of California, Riverside, CA
- D 02 Arthropod fauna of abandoned grapevines in eastern Washington. **D. A. Prischmann** and D. G. James, Washington State University, Department of Entomology, FSHN 166, PO Box 646382, Pullman, WA
- D 03 Tales from the Phytotelmata: *Wyeomyia* (*Hystatomyia*) Dyar & Knab (Diptera: Culicidae). **J. Y. Adkins** and D. D. Judd, Department of Entomology, Oregon State University, 2046 Cordley Hall, Corvallis, OR
- D 04 A tale of two setae: Larval and Pupal Chaetotaxy Of *Eucorethra underwoodi* (Diptera: Chaoboridae). **J. R. Ogawa** and D. D. Judd, Department of Entomology, Oregon State University, Corvallis, OR
- D 05 Abundance and seasonality of grape leafhopper egg mortality and natural enemies in Washington. **C. P. Storm**, D. G. James, L. Wright and T. Price, Prosser Irrigated Agriculture Research & Extension Center, 24106 N. Bunn Road, Prosser, WA

General Poster Presentations

- D 06 Classical biocontrol of aphids in the Western Pacific. **R. H. Miller** and O. Idechiil, Agricultural Experiment Station, College of Agriculture and Life Sciences, University of Guam

- D 07 Influence of rapid laboratory assessment on determining benthic macroinvertebrate diversity. **R. P. Stitt** and D. E. Legg, Department of Renewable Resources, P. O. Box 3354, University of Wyoming, Laramie, WY
- D 08 Floating barrier traps for monitoring rice water weevil to determine the need for insecticide applications. **R. R. Lewis** and L. D. Godfrey, Department of Entomology, University of California, Davis, CA
- D 09 The influence of trap placement in monitoring San Jose scale (Hom.: Diaspididae) and its natural enemies. **K. M. Daane** and B. N. Hogg, Division of Insect Biology, University of California, Berkeley, CA
- D 10 Midge-free wheat seeding date recommendations: An exceedence probability approach. **E. J. Bechinski**, Division of Entomology, University of Idaho, 236 Agricultural Sciences Bldg., Moscow, ID
- D 11 Effects of rice bugs feeding (Hemiptera: Alydidae: *Leptocorisa oratorius* (Fabricius)) on rice grain yield, quality, and seed viability. **G. C. Jahn**, I. Domingo, and J. Pacia, Entomology and Plant Pathology Division, International Rice Research Institute (IRRI), DAPO Box 7777, Metro Manila, Philippines
- D 12 Trap suppression using three hand-applied codling moth (Lepidoptera: Tortricidae) pheromone dispensers. **L. G. Varela**, University of California, Cooperative Extension & Statewide IPM Project, 2604 Ventura Avenue, Santa Rosa, CA
- D 13 Proposed changes in the agricultural uses of Lorsban: A Pacific Branch Perspective. **B. Bisabri** and W. H. Hendrix, III, Dow AgroSciences, 109 Canon Drive, Orinda, CA
- D 14 Natural control of the lettuce aphid, *Nasonovia ribisnigri*, by larvae of hoverflies (Diptera: Syrphidae). **W. E. Chaney** and F. K. Dlott, University of California, Cooperative Extension, 1432 Abbott Street, Salinas, CA
- D 15 Effect of reflective mulches and plant covers in controlling insect pests and weeds in goldenrod. **J. P. Newman**¹, C. M. Payne¹, and K. L. Robb², (1) University of California Cooperative Extension, 669 County Square Dr., Ste 100, Ventura, CA, (2) University of California

Cooperative Extension, 5555 Overland Dr.,
Bldg 4, San Diego, CA

- D 16 Leaf feeding by early instar codling moth (Lepidoptera: Tortricidae). **L. P. S. Kuenen**, P. V. Vail, H.C. Rowe, USDA-ARS, SJVASC, 9611 S. Riverbend Ave., Parlier, CA
- D 17 Life-history and ecology of vine mealybug (Hemiptera: Pseudococcidae) in central California. **R. Malakar-Kuenen**¹, K. M. Daane¹, G. Yokota¹, M. Guillen², W. J. Bentley³, and L. M. Martin³, (1) Division of Insect Biology, University of California, Berkeley, CA, (2) Department of Entomology, University of California, Riverside, CA, (3) University of California Statewide IPM Program, Parlier, CA
- D 18 Effect of reflective mulches and plant covers in controlling insect pests and weeds in chrysanthemum. **K. L. Robb**¹, S. Parker¹, D. Yamashita¹, D. DeJong¹ and J. Newman², (1) University of California Cooperative Extension, 5555 Overland Dr. Bldg 4, San Diego, CA, (2) University of California Cooperative Extension, 669 County Square Dr., Ste 100, Ventura, CA
- D 19 Efficiencies and natural spread of citrus tristeza virus isolates in central California. **R. K. Yokomi**, USDA-ARS, San Joaquin Valley Agricultural Sciences Center, 9611 S. Riverbend Ave., Parlier, CA
- D 20 Potato aphid, *Macrosiphum euphorbiae* (Thomas), distribution and sampling on processing tomatoes. **N. A. Hummel**, F. G. Zalom, G. M. Miyao, N. C. Underwood, and A. Villalobos, Department of Entomology, University of California, One Shields Avenue, Davis, CA
- D 21 An alternative management strategy for codling moth: Autocidal biological control. **L. G. Neven**¹ and Holly J. Ferguson², (1) USDA-ARS, Yakima Agricultural Research Laboratory, 5230 Konnowac Pass Road, Wapato, WA, (2) Heritage College, 3240 Fort Road, Toppenish, WA
- D 22 Infectivity of a cyovirus to navel orangeworm and homologous cell lines. **P. V. Vail**, D. F. Hoffmann, and F. A. Cardenas, USDA-ARS, San Joaquin Valley Agricultural Sciences Center, 9611 S. Riverbend Ave., Parlier, CA

- D 23 Cherry bark tortrix in the Pacific Northwest – biology and applied biological control. **L. K. Tanigoshi**¹, K. G. H. Breedveld¹ and B. B. Bai², (1) Department of Entomology, Washington State University, Vancouver Research & Extension Unit, Vancouver, WA, (2) Oregon Department of Agriculture, Salem, OR
- D 24 Entomology research in PNW grass seed. D. E. Bragg, Washington State University, Extension Entomology. P O Box 190, Pomeroy, WA

10-Minute Paper Session

Glen Alpine

8:00 a.m. – 10:30 a.m.

Moderators:

L. P. S. Kuenen, USDA-ARS &
D. Walsh, Washington State University-Prosser

- | <u>Time</u> | <u>Paper & Author(s)</u> |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8:00 | Investigating the relationship between San Jose scale life stages and wood infestation in almonds. W. Bentley ¹ , B. Ribeiro ¹ , F. Zalom ² and M. Viveros ³ , (1) University of California Statewide IPM Program, Kearney Agricultural Center, 9240 S. Riverbend Avenue, Parlier, CA, (2) Department of Entomology, University of California, One Shields Avenue, Davis, CA, (3) University of California, Cooperative Extension, Kern County, 1031 S. Mt. Vernon Avenue, Bakersfield, CA |
| 8:12 | Winter sanitation practices for navel orangeworm in California pistachio may not be complete. K. M. Daane ¹ , G. Y. Yokota ¹ , R. Krugner ¹ , and R. Beede ² , (1) Division of Insect Biology, University of California, Berkeley, CA, (2) University of California Cooperative Extension, Kings County, Hanford, CA |
| 8:24 | Development of the pear ester kairomone as a mass-trapping strategy to control codling moth in walnuts. D. M. Light ¹ , A. L. Knight ² , and B. Lingren ³ , (1) Western Regional Research Center, USDA-ARS, 800 Buchanan Street, Albany, CA, (2) Yakima Agricultural Research Laboratory, USDA-ARS, 5230 Konnowac Pass Road, Wapato, WA, (3) Trécé, Inc., 1031-C Industrial Street, Salinas, CA |
| 8:36 | Population dynamics of <i>Lygus hesperus</i> in pear: The role of orchard groundcover vegetation and management. R. J. Hilton , Southern Oregon Research & Extension Center, Oregon State University, 569 Hanley Road, Central Point, OR |

- 8:48** Assail's (acetamirid) fit into Washington's Tree Fruit IPM Program. **J. F. Brunner**, E. H. Beers, and M. D. Doerr, Washington State University, Tree Fruit Research and Extension Center, Wenatchee, WA
- 9:00** Differential insecticide efficacy for control of root weevils on *Euonymus*. **R. Rosetta**, S. Svenson, T. Collins, and J. Paxson, Department of Horticulture, Oregon State University-NWREC, 15210 NE Miley Road, Aurora, OR
- 9:12** Milbemectin: A naturally derived miticide/insecticide for selective arthropod management. **R. L. Kepner**¹, J. Brazzle², and O. Bain³, (1) Gowan Company, 409 Mainberry Dr., Madera, CA, (2) Gowan Company, 8071 Langdale Ct., Sacramento, CA, (3) Gowan Company, P.O. Box 5569, Yuma, AZ
- 9:24** Bionomics of the vine mealybug, *Planococcus ficus* Signoret (Homoptera: Pseudococcidae), in the Coachella Valley (CA). **M. Guillén**¹, R. Malakar-Kuenen², K. M. Daane², and G. Y. Yokota², (1) Department of Entomology, University of California, Riverside, CA, (2) University of California, Berkeley, Division of Insect Biology, Kearny Agricultural Center, 9240 S. Riverbend Ave., Parlier, CA
- 9:36** Biology and management of mealybugs in Washington vineyards. **D. Walsh**, K. Eastwell, and D. James, Washington State University, 24106 N. Bunn Rd., Prosser, WA
- 9:48** **Break**
- 10:00** Natural enemies of grape leafhoppers in conventional, low and no input sites. **C. P. Storm** and D. G. James, Prosser Irrigated Agriculture Research & Extension Center, 24106 N Bunn Rd., Prosser, WA
- 10:12** Ecological pest management in grapes: A peer-reviewed, internet-based course for California pest control advisors. **C. Geiger**¹ and D. Chaney², (1) California Department of Pesticide Regulation, P.O. Box 4015, Sacramento, CA, (2) University of California, Sustainable Agriculture Research and Education Program, One Shields Avenue, Davis, CA

Awards Luncheon

Noon - 1:15 p.m.

Sand Harbor & Logan Creek

**Soil Arthropods: Detection, Diversity and Dynamics -
Symposium**
Tahoe A & B
8:00 a.m. - Noon

Organizers and Moderators:

S. Rao, Department of Entomology, Oregon State
University, Corvallis, OR &

S. Blodgett, Department of Entomology, Montana State
University, Bozeman, MT

- | <u>Time</u> | <u>Paper & Author(s)</u> |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8:00 | Trials and tribulations of soil arthropod studies: grass seed systems. S. Rao , Department of Entomology, Oregon State University, Corvallis, OR |
| 8:12 | Microarthropods in soil: Are they indicators of anything useful? A. Moldenke , Department of Entomology, Oregon State University, Corvallis, OR |
| 8:36 | The nematode spin on soil food webs. M. Tenuta and Howard Ferris, Department of Nematology, University of California, Davis, CA |
| 9:00 | Effect of prescribed fire and stand structural manipulation on forest oribatid mite assemblages in the southern Cascade Range, California. N. Rappaport ¹ , M. Camman ² , and K. Lamoncha ² , (1) USDA Forest Service, Pacific Southwest Research Station, Berkeley, CA, (2) Humboldt State University, Arcata, CA |
| 9:24 | Ecology and management of garden symphylans (<i>Scutigera immaculata</i> Newport) in western Oregon. J. R. Umble ¹ and J. R. Fisher ² , (1) Department of Entomology, Oregon State University, Corvallis, OR, (2) USDA - ARS, Horticultural Research Lab., Corvallis, OR |
| 9:48 | Break |
| 10:00 | Land use patterns and the abundance of <i>Stictococcus vayssierei</i> on cassava in central Africa. R. Hanna , M. Tindo, and G. Goergen, International Institute of Tropical Agriculture, Benin |
| 10:24 | Listening for insects: acoustics, non-destructive detection of soil insects. J. R. Fisher ¹ and R. W. Mankin ² , (1) USDA-ARS, Horticultural Research Lab., Corvallis, OR, (2) USDA-ARS, CMAVE, Gainesville, FL |

- 10:48** Crop type and cultural practices influence the abundance and diversity of soil-surface Coleoptera in the Palouse. **T. Hatten**, G. Chang, N. Bosque-Pérez, and S. D. Eigenbrode, Department of Plant, Soil and Entomological Sciences, University of Idaho, Moscow, ID
- 11:12** Positive and negative impacts of carabid beetles on biocontrol. **W. Snyder**, Washington State University, Pullman, WA
- 11:36** Carabid diversity in northern great plains cropping systems. **S. Blodgett**, P. M. Denke, and S. Wallace, Department of Entomology, Montana State University, Bozeman, MT

Awards Luncheon

Noon - 1:15 p.m.

Sand Harbor & Logan Creek

Current Topics in Urban Entomology - Symposium

Emerald Bay & Tahoe D

8:00 a.m. - Noon

Organizers and Moderators:

L. Hansen, Biology Department MS 3180, Spokane Falls Community College, 3410 W. Fort Wright Drive, Spokane, WA &

R. Sbragia, Dow AgroSciences LLC, U.S. Professional Pest Management, Placerville, CA

Time **Paper & Author(s)**

8:00 Mill fumigation with Profume - “best practices” preparation and “precision” application and aeration. **R. E. Williams**, Dow AgroSciences LLC, U.S. Professional Pest Management, Moorpark, CA

8:24 Laboratory evaluation of localized treatments for control of the western drywood termite, *Incisitermes minor* (Hagen) in California. **V. R. Lewis**^{1,3}, R. Williams², S. Rubio-Garcia¹, G. M. Getty¹, M. I. Haverty⁴, (1) Structural Pest Research and Extension Center, Forest Products Laboratory, University of California, 1301 So. 46th Street, Richmond, CA, (2) Dow AgroSciences, 9330 Zionsville Road, Indianapolis, IN 46268, (3) Insect Biology, Department of Environmental Science, Policy and Management, 201 Wellman Hall, University of California, Berkeley, CA, (4) Pacific Southwest Research Station, Forest Service, USDA, P.O. Box 245, Berkeley, CA

- 8:36** Field evaluation of localized treatments for control of western drywood termite, *Incisitermes minor* (Hagen) in California. **G. M. Getty**¹, R. E. Williams², M. I. Haverty^{1,4}, and V. R. Lewis^{1,3}, (1) Structural Pest Research and Extension Center, Forest Products Laboratory, University of California, 1301 So. 46th Street, Richmond, CA, (2) Dow AgroSciences, 9330 Zionsville Road, Indianapolis, IN, (3) Insect Biology, Department of Environmental Science, Policy and Management, University of California, Berkeley, CA, (4) Pacific Southwest Research Station, Forest Service, USDA, P.O. Box 245, Berkeley, CA
- 8:48** Laboratory evaluation of noviflumuron: impact on survival and feeding response of the desert subterranean termite. **P. A. Neese**, Dow AgroSciences LLC, Tucson, AZ.
- 9:00** The use of the Sentricon[®] termite colony elimination system for termite control in northern California – The need for continuous monitoring. **D. H. Kistner**¹ and R. J. Sbragia². (1) Dept of Biological Sciences, California State University, Chico, CA, (2) Dow AgroSciences, Placerville, CA
- 9:12** Movement of imidacloprid in colonies of the western subterranean termite. **K. Haagsma** and M. K. Rust. Department of Entomology, University of California, Riverside, CA
- 9:24** *Reticulitermes* species in California. **M. I. Haverty**¹, Lori J. Nelson¹, Laurence G. Cool² and Christopher Solek², (1) Chemical Ecology of Forest Insects, Pacific Southwest Research Station, U.S. Forest Service, U.S. Department of Agriculture, Berkeley, CA, (2) Structural Pest Research and Extension Center, Forest Products Laboratory, University of California, Richmond, CA
- 9:48** **Break**
- 10:12** The development of baits for Argentine ant control. **M. K. Rust**, Donald A. Reiersen, and John H. Klotz. Department of Entomology, University of California, Riverside, CA
- 10:36** Use of integrated pest management in a medical environment. **R. J. Woodrow**, Department of Preventive Medicine, Tripler Army Medical Center, Honolulu, HI

- 10:48** Carpenter ants and efficacy of baiting in control. **L. D. Hansen**, Biology Department MS 3180, Spokane Falls Community College, 3410 W. Fort Wright Drive, Spokane, WA
- 11:00** Field evaluations of selected baits against foraging yellowjackets, *Vespula pensylvanica*, located in central California. **W. A. Donahue**. Sierra Research Laboratories, Modesto, CA
- 11:24** The healthy schools act: encouraging school districts in California to adopt integrated pest management. **N. A. Davidson**. California Department of Pesticide Regulation (DPR), Sacramento, CA

Awards Luncheon

Noon - 1:15 p.m.

Sand Harbor & Logan Creek

**Insect Zoos and Butterfly Houses in California -
Symposium**

Tahoe A & B

1:30 p.m. – 5:00 p.m.

Organizer and Moderator:

R. Dowell, Calif. Department of Food & Agriculture,
Sacramento, CA

Time **Paper & Author(s)**

- 1:30** Overview of butterfly houses and insect zoos in United States. **L. Saul**, Center for Ecosystem Survival, 699 Mississippi Street Suite 106, San Francisco, CA
- 2:00** On 1,400 wings: Turtle Bay's butterflies! **L. H. Simons**, Turtle Bay Exploration Park, P.O. Box 992360, Redding, CA
- 2:30** Microzookeeping: confessions of a frass scooper. **P. Schlemmer**, San Francisco Insect Zoo, 1 Zoo Rd., San Francisco, CA
- 3:00** **Break**
- 3:15** Insect zoos and butterfly houses as educational tools. **B. Karner**, Natural History Museum of Los Angeles Insect Zoo, 900 Exposition Blvd., Los Angeles, CA
- 3:45** National insect zoo and butterfly house permit process. **B. Hass**, Special Assistant for Permits and Regulations, California Department of Food and Agriculture, 1220 N Street, Sacramento, CA

4:15 Physical requirements for the containment of insects in zoos and butterfly houses. **D. Hamon**, United States Department of Agriculture, Animal and Plant Health Inspection Service, 9550 Micron Ave, Suite G, Sacramento, CA

Forest Ecology - Symposium

Emerald Bay & Tahoe D

1:30 - 5:00 p.m.

Organizers and Moderators:

J. C. Miller, Department of Entomology, Oregon State University, Corvallis, OR &

D. L. Dahlsten, Department of ESPM, Division of Insect Biology, University of California, Berkeley, CA

- | <i>Time</i> | <i>Paper & Author(s)</i> |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1:30 | Forest biodiversity and the future? D. L. Dahlsten , Department of ESPM, Division of Insect Biology, University of California, Berkeley, CA |
| 1:42 | Statistical methods for analyzing insect communities. G. J. Brenner , Pacific Analytics, L.L.C., P.O. Box 219, Albany, OR |
| 2:18 | Comparing richness & diversity with discriminate function analysis of herbivore communities on a pollution gradient. M. Eatough Jones and T. D. Paine, Department of Entomology, University of California, Riverside, CA |
| 2:42 | Polynesian voyagers: spider biodiversity across the Hawaiian archipelago. J. E. Garb and R. G. Gillespie, Department of ESPM, Division of Insect Biology, University of California, Berkeley, CA |
| 3:06 | Break |
| 3:18 | Distribution and diversity in North American carabid beetles (Coleoptera: Carabidae). K. W. Will , Department of ESPM, Division of Insect Biology, University of California, Berkeley, CA |
| 3:42 | Ground dwelling beetles and vegetation succession over a 17-year period. W. H. Heyborne , Department of Entomology, Oregon State University, Corvallis, OR |
| 4:06 | Macromoth biodiversity across forested landscapes of western Oregon. J. C. Miller , |

**Biology, Ecology and Current Status of Leafrollers in
Western Agriculture - Symposium**

Glen Alpine

1:30 p.m. - 5:00 p.m.

Organizer and Moderator:

H. Riedl, Oregon State University, Hood River, OR

<u>Time</u>	<u>Paper & Author(s)</u>
1:30	Leafrollers in California and the Pacific Northwest: importance, distribution and hosts. H. Riedl , Oregon State University, Hood River, OR
1:42	Leafrollers in major cropping systems: pome fruit. J. F. Brunner , Washington State University, Tree Fruit Research and Extension Center, Wenatchee, WA
2:06	Leafrollers in major cropping systems: stone fruit and nut crops. C. Pickle , University of California, Statewide IPM Program, 142-A Garden Hwy, Yuba City, CA
2:18	Leafrollers in major cropping systems: sweet cherry. M. Omeg , Wy'East Resources Conservation and Development, 2325 River Rd., The Dalles, OR
2:30	Leafrollers in major cropping systems: grapes and kiwis. W. Bentley , University of California Statewide IPM Program, Kearney Agricultural Center, 9240 S. Riverbend Avenue, Parlier, CA
2:54	Break
3:06	Leafrollers in major cropping systems: cane berries. T. Peerbolt , Peerbolt Crop Management, Portland, OR
3:30	Biological control leafrollers. T. Unruh , USDA-ARS, Yakima Agricultural Research Laboratory, 5230 Konnowac Pass Road, Wapato, WA
3:54	Mating disruption as a control tactic for leafrollers. A. Knight , USDA-ARS, Yakima Agricultural Research Laboratory, 5230 Konnowac Pass Road, Wapato, WA
4:18	New insecticides and resistance in leafrollers. J. F. Brunner , Washington State University,

Tree Fruit Research and Extension Center,
Wenatchee, WA

Pacific Branch Student Mixer

5:30 p.m. - 6:30 p.m.
Room will be announced

Wednesday, June 19

Insects and People - Symposium

Tahoe A & B
8:00 a.m - 11:30 a.m.

Organizers and Moderators:

R. S. Zack, Department of Entomology, Washington
State University, Pullman, WA &

L. Royce, Department of Entomology, Oregon State
University, Corvallis, OR

- | <u>Time</u> | <u>Paper & Author(s)</u> |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8:00 | Insects and People: An introduction. R. S. Zack , Department of Entomology, Washington State University, Pullman, WA |
| 8:12 | Seeing is believing: entomological attention grabbers for the public. S. Rao , Department of Entomology, Oregon State University, Corvallis, OR |
| 8:36 | Art of the arthropod. E. Eaton , 5201 E. 2 nd Street, Tucson, AZ |
| 9:00 | Mysterious skin sensations. L. Royce , Department of Entomology, Oregon State University, Corvallis, OR |
| 9:24 | Using spiders as a teaching tool in the classroom. M. Gaver , Spokane Falls Community College, Spokane, WA |
| 9:36 | Arthropods go to war. R. S. Zack , Department of Entomology, Washington State University, Pullman, WA |
| 9:48 | Break |
| 10:00 | Our homespun relationship with <i>Aedes aegypti</i> and dengue fever. J. D. Edman , Department of Entomology and Center for Vectorborne Diseases, University of California, Davis, CA |
| 10:36 | Shifting admissibility of scientific evidence: Impacts on forensic entomology. R. Kimsey , Department of Entomology, University of California, Davis, CA |

- 11:00** Focusing on observation: Insects as teaching instruments of science skills. **D. R. Brentt**, Department of Entomology, University of Arizona, Forbes 410, Tucson, AZ
- 11:12** Insects as Food. **M. Rader**, Department of Entomology, University of Montana, Bozeman, MT

Student Systematic - Symposium

Elk Point & Fallen Leaf & Marla Bay
8:00 a.m. - 11:00 a.m.

Organizer and Moderator:

P. S. Cranston, University of California, Davis, CA

- Time*** ***Paper & Author(s)***
- 8:00** Utility of the nuclear gene elongation factor 1- α for assessing relationships among Hawaiian crab spiders. **J. E. Garb** and R. G. Gillespie, Division of Insect Biology, Department of Environmental Science, Policy and Management, University of California, Berkeley, CA
- 8:24** Losing key components of Hawaii's forest ecosystems: The status of a diverse group of Hawaiian moths. **M. L. Heddle** and R. G. Gillespie, Division of Insect Biology Department of Environmental Science, Policy and Management, University of California, Berkeley, CA
- 8:48** Tales of the South Pacific: Unraveling evolutionary patterns in polynesian weevils. **E. Claridge** and George K. Roderick, Division of Insect Biology, Department of Environmental Science, Policy and Management, University of California, Berkeley, CA
- 9:02** The evolution of long-tongued fly pollination (Diptera: Tabanidae) in South Africa. **S. Morita**, Department of Entomology, University of California, Davis, CA

**Note: A complete agenda for this symposium/
informal conference will be provided at the
registration desk**

Final Business Meeting

Tahoe A & B
11:30 a.m. - Noon

MEETING NOTES

REGISTRATION:

Sunday, June 16, 3:00 p.m. - 9:00 p.m.

Monday, June 17, 8:00 a.m. - 4:00 p.m.

Tuesday, June 18, 8:00 a.m. - noon

Everyone attending the Pacific Branch meeting or participating in the Special Events Program must register. The registration desk will be located in the Tahoe Foyer, 2nd Floor, Harrah's. Those who are pre-registered may pick up registration materials there. On-site registration for members, students, spouses and non-members can be made at the registration desk. Credit card payments can not be accepted.

BRANCH MIXER & PRESIDENT'S RECEPTION:

The mixer and reception is scheduled for Monday evening, June 17, from 5:30 to 7:00 p.m. in Sand Harbor & Logan Creek. Drinks and appetizers will be served. Tickets for guests are \$15 each at the registration desk.

AWARDS LUNCHEON: Our awards luncheon will be held starting at noon Tuesday, June 18, in Sand Harbor & Logan Creek and is included in the registration fee.

SPECIAL EVENTS: A Spouse Breakfast is being planned for Tuesday morning, June 18. Registered spouses are invited to attend, but must indicate their interest in attending before 3:00 p.m. on Monday by signing up at the Registration Desk. A Lake Tahoe Cruise on Bill Harrah's Private Yacht is planned for Tuesday morning, June 18, at 9:30 a.m. An extra charge of \$25.00 per person includes transportation to the dock, snacks and beverages. Space is limited, so sign up early. Must be over 18 years of age. Those participating in the cruise will return to the hotel before the Awards Luncheon.

POSTER DISPLAY PRESENTATIONS: Poster displays will be presented in Marla Bay & Glenbrook on Tuesday, June 18, from 9:00 a.m. to 5:00 p.m. Marla Bay & Glenbrook will be open for authors to set up their displays in advance on Tuesday, June 18, from 8:00 to 9:00 a.m. Displays should be taken down by 6:00 p.m. Tuesday, June 18. Poster boards are 3' (H) x 4' (L) and push-pin friendly. Authors, please bring your own push-pins and post your displays to indicate when you will be present to discuss your presentation.

INFORMATION: Notices, meeting schedule changes and general information will be posted throughout the meeting and will be available at the Registration Desk. Information on points of interest, dining, and entertainment will also be available from the hotel.

EXECUTIVE COMMITTEE: The Pacific Branch Executive Committee will meet Sunday evening, June 16, from 6:00 - 9:00 p.m. in Tahoe A.

MEETING SCHEDULE: Session moderators are responsible for keeping speakers on schedule. If a presentation is completed early, or cancelled, the moderator must insure that the next presentation begins at the scheduled time. Sessions must not get ahead or fall behind schedule.

LINNAEAN GAMES: The Games will be held on Monday, June 17, from 7:30-10:00 p.m. in Glen Alpine. Contact Dr. Sujaya Rao Oregon State University for more information.

HOUSING AND TRANSPORTATION: Headquarters for the meeting will be at the Harrah's Lake Tahoe Hotel, 15 Hwy 50, Stateline, Nevada (1-800-427-7247). The hotel can be reached from the Sacramento area by taking Highway 50 east through Placerville, over Echo Summit to South Lake Tahoe with approximate driving time of 2 1/4 hrs. The hotel can be reached from the Reno/Tahoe airport by taking Hwy 395 south through Carson City, and then taking Hwy 50 west to South Lake Tahoe with approximate driving time of 1 1/4 hrs.

WEATHER: The weather in Lake Tahoe during June is excellent! Daytime temperatures average around 70°F with night time lows in the 40s. The weather can be variable, so be prepared for warm days and cool nights with an occasional summer shower.

NOMINATIONS FOR PRESIDENT-ELECT: The nominations Committee, Tom Henneberry (chair), Keith Pike, and John Trumble recommend Dr. Diane Alston for President-elect of the Pacific Branch. Dr. Diane



Alston is Associate Professor of Entomology and Extension IPM Coordinator in the Department of Biology at Utah State University. Her research and extension entomology efforts focus primarily on horticultural fruit and vegetable crops. She is interested in arthropod ecology, arthropod-plant interactions, plant culture manipulations to enhance pest management, and demonstration of new IPM technologies for adoption by Utah growers. Dr. Alston received her BS degree from University of California, Riverside and her MS and PhD degrees from North Carolina State University.

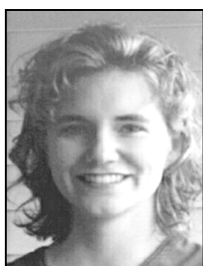
Her honors and professional activities include Utah State University New Extension Specialist Award in 1991, serving as a member of the National Extension Service Ad Hoc IPM Task Force (ECOP) from 1991 to 1995, and

serving as Chair and Co-Chair of the Western Region IPM Coordinating Committee (WCC-69) in 1995 and 1996, respectively.

Dr. Alston has served the Pacific Branch on its Executive and Awards committees, as student paper competition judge in 1993, and as judge and student paper coordinator in 1994.

AWARDS: The C. W. Woodworth and Comstock Awards will be presented during the opening session on Monday, June 17. All other awards will be presented during the awards luncheon on Tuesday, June 18.

JOHN HENRY COMSTOCK GRADUATE STUDENT AWARD



This year's winner of the Comstock Award for the Pacific Branch of the ESA is Sarah Bates. Ms. Bates is completing a Ph.D. at Simon Fraser University, where she is studying the biology and management of the western conifer seed bug, *Leptoglossus occidentalis*, a potentially serious pest of conifer seed orchards. She received an M.S. in pest management from SFU (1999), and a B.S. in biological sciences from the University of Guelph (1997). She has been awarded a post-doctoral fellowship from the Natural Sciences and Engineering Research Council of Canada to study resistance management in transgenic crops.

WOODWORTH AWARD

The C. W. Woodworth Award annually recognizes a person in the Pacific Branch of the ESA who has made



outstanding contributions to entomology during the past decade. The 2002 Award goes to Dr. James Hagler of the USDA-ARS, Western Cotton Research Laboratory.

Dr. Hagler received a B.S. degree (1983) in pest management and an interdisciplinary M.S. degree in entomology, range science, and statistics (1985) from New Mexico State University. He continued his graduate studies at the University of Arizona, obtaining a Ph.D. in entomology in 1988. He was a post-doctoral research entomologist at the USDA-ARS, Biological Control Laboratory (Tucson, AZ) and at the Western Cotton Research Laboratory (Phoenix, AZ) from 1988 to 1996. In 1996, he was hired as a permanent research entomologist at the Western Cotton Research Laboratory. His early work is most noted for the development of pest-specific monoclonal

antibodies (MAbs) for detecting prey remains in predator guts. Dr. Hagler was the first scientist to apply pest-specific MAbs for predator field evaluations. His innovative techniques have been used to characterize and measure the effect of arthropod predation on pink bollworm, silverleaf whitefly, and western tarnished plant bug under natural field conditions. More recently, his work has focused on the development and application of an insect “immunomarking” technique for mark-release-recapture studies. He was the first researcher to mark insects with a vertebrate protein. In turn, individuals that were marked and released could be recaptured and analyzed for the presence of the specific protein by enzyme-linked immunosorbent assay. The application of his techniques to microscopic parasitoids has resulted in a paradigm shift for insect migration and dispersal studies as well as evaluation of augmentative biological control agents.

Author Index

<u>Name</u>	<u>Type</u>	<u>Time</u>
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Bamfo, S.	St Comp	Mon 2:00 pm
Bates, S.	Award	Mon 9:50 am
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Bentley, W.	Symp	Tue 2:30 pm
Bentley, W.	Paper	Tue 8:00 am
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Brunner, J. F.	Symp	Tue 4:18 pm
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Edman, J. D.	Symp	Wed 10:00 am
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Hatten, T.	Symp	Tue 10:48 am
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Natwick, E. T.	Paper	Mon 2:12 pm
Neese, P. A.	Symp	Tue 8:48 am

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Rao, S.	Symp	Wed 8:12 am
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Rust, M. K.	Symp	Tue 10:12 am
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Storm, C. P.	Paper	Tue 10:00 am
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Tenuta, M.	Symp	Tue 8:36 am
Toscano, N. C.	Symp	Mon 1:00 pm
Umble, J. R.	Symp	Tue 9:24 am
Unruh, T.	Symp	Tue 3:30 pm
Vail, P. V.	Poster	Tue 8:00 -5:00
Varela, L. G.	Poster	Tue 8:00 -5:00
Walsh, D.	Paper	Tue 9:36 am
Will, K. W.	Symp	Tue 2:42 pm
Williams, R. E.	Symp	Tue 8:00 am
Woodrow, R. J.	Symp	Tue 10:36 am
Wooley, S. C.	St Comp	Mon 2:12 pm
Yokomi, R. K.	Poster	Tue 8:00 -5:00
Yokoyama, V. Y.	Paper	Mon 2:00 pm
Zack, R. S.	Symp	Wed 8:00 am
Zack, R. S.	Symp	Wed 9:36 am
Zhao, H. Y.	Paper	Mon 4:00 pm
