

PROGRAM

Sunday Evening, 30 October 2005

2:00-4:00	CPC Meeting	Location: San Diego 1&2
Registration:	5:00 pm to 7:00 pm	Location: South/West Foyer
Set Up Poster:	1:00 pm to 5:00 pm	Location: Ballroom VI-VIII
8:00-10:00	US/Canada Methyl Bromide Working Group	Location: San Diego 1&2

Monday Morning, 31 October 2005

6:30 am	Registration:	Location: South/West Foyer
7:00 am	Set Up Poster Presentations:	Location: Ballroom VI-VIII
7:00 am	Coffee: Sponsor:	Location: Ballroom VI-VIII

8:00 am	PLENARY SESSION: Welcome, ODP, CUE, MBTOC, Fumigation Review	Location: Ballroom I-V
Moderator:	Reggie Brown	
8:00-8:15	Welcome Reggie Brown, MBAO, Chief Executive Officer	
8:15-8:35	<u>Jim Butler-Methyl Bromide in the Atmosphere: A Scientific Overview and Update</u>	
8:35-8:55	<u>Hodayah Finman- CUE Allocation/Supplement</u>	
8:55-9:15	<u>Michelle Marcotte - MBTOC Update</u>	
9:15-9:35	<u>Jim Jones- Cluster Fumigation Review</u>	
9:35-9:40	Gary Obenauf-Housekeeping	

9:40 am – 10:30 am	Sponsor: Metam Sodium Task Force	Break	Location: Ballroom VI-VIII
---------------------------	---	--------------	-----------------------------------

10:30 am – 12:00 noon		Location: Ballroom I-V
PLENARY SESSION – Regulatory, National Strategy		
Moderator:	Reggie Brown	
10:30-10:50	<u>Tobi Jones – CDPR Update</u>	
10:50-11:40	<u>Randy Segawa (1) – Fumigant Regulatory Requirements</u>	
11:40-12:00	<u>Burleson Smith – National Methyl Bromide Management Strategy</u>	

12:00 until 1:00 pm	LUNCH BREAK
----------------------------	--------------------

Monday Afternoon, 31 October 2005

Registration:

Location: South/West Foyer

1:00 pm – 2:30 pm

Location: Ballroom I-V

PLENARY SESSION – QPS, Case Studies

Moderator: Reggie Brown

1:00-1:15 [Larry Zettler \(2\)– QPS Update](#)

1:15-1:30 [Wally Ewert – QPS Survey](#)

1:30-1:45 [Michelle Marcotte \(3\)– Cocoa Case Study](#)

1:45-2:00 [James Green – CSREES Research Grants](#)

2:00-2:30 Discussion

2:30 pm – 3:00 pm

Break

Location: Ballroom VI-VIII

Preplant Session I: Submitted Papers

Loc: Ballroom I-IV

Strawberry Chemical Alternatives

Moderator: Tom Trout

3:00-3:20 [Shem-Tov, S \(4\)- Effect of Alternative Tarp and Fumigants Combinations with Metam Sodium on Strawberry Yield.](#)

3:20-3:40 [Lopez-Aranda, J. M. \(5\)- Demonstrations on Alternatives to MB for Strawberry in Spain. 2004 – 2005 Results.](#)

3:40-4:00 [Goodhue, Rachael E. \(6\)- Strawberry Production Economics: VIF and Drip-Applied 1,3-D and Chloropicrin.](#)

4:00-4:20 [Ajwa, Hussein A. \(7\)- Strawberry Yield and Weed Control with Shank and Drip Applied Midas.](#)

4:20-4:40 [Noling, Joseph W. \(8\)- Commercial Field Evaluations of Methyl Bromide Alternatives In Florida Strawberry.](#)

4:40-5:00 [Lopez-Aranda, J. M. \(9\)- Evaluation of Methyl Bromide Alternatives for Strawberry in Florida and Spain.](#)

5:00-5:20 Discussion Session

Postharvest Session I: Workshop

Loc: Ballroom V

National Methyl Bromide Management Strategy

Moderator: Bill Chism

3:00-4:20 **Burleson Smith – The Plan to Date**

4:20-5:00 Discussion Session

5:30 pm – 6:30 pm

POSTER SESSION

Moderator: Alan Dowdy

Location: Ballroom VI-VIII

6:30 pm – 8:00 pm

RECEPTION

Location: Ballroom VI-VIII

Tuesday Morning, 1 November 2005, Concurrent Sessions

7:00 am	Registration:	Location: South/West Foyer
7:00 am	Coffee:	Location: Ballroom VI-VIII

<p>Preplant Session II: Workshop Loc: Ballroom I-IV</p> <p>National Methyl Bromide Management Strategy</p> <p>Moderator: Bill Chism</p> <p>8:00-9:40 Burleson Smith – The Plan to Date</p> <p>9:40-10:00 Discussion Session</p>	<p>Postharvest Session II: Submitted Papers Loc: Ballroom V</p> <p>Chemical Alternatives 1: Phosphine Uses</p> <p>Moderator: Larry Zettler</p> <p>8:00-8:20 <u>Ducom, Patrick (60)-The Issue of Phosphine Insecticide Efficacy.</u></p> <p>8:20-8:40 <u>Horn, Franzisfus (61)-Current Practice in Fresh Fruit Fumigation with Phosphine.</u></p> <p>8:40-9:00 <u>Horn, Pedro (62)-Control of False Chilean Mite with Phosphine and Cold Storage.</u></p> <p>9:00-9:20 <u>Glasse, K.L. (63)-Phosphine as an Alternative to Methyl Bromide for the Fumigation of Pine Logs and Sawn Timber.</u></p> <p>9:20-9:40 <u>Klementz, Dagmar (64)-Disinfestation of Table Grapes with Pure Phosphine: Residues and Quality Aspects.</u></p> <p>9:40-10:00 Discussion Session</p>
--	--

10:00 am – 10:30 am	Break	Location: Ballroom VI-VIII
----------------------------	--------------	-----------------------------------

<p>Preplant Session III: Submitted Papers Loc: Ballroom I-IV</p> <p>International Scope/Transition Strategies</p> <p>Moderator: Sally Schneider</p> <p>10:30-10:50 <u>Porter, Ian (10)-Review and Analysis of International Research of Alternatives to Methyl Bromide for Pre-Plant Fumigation.</u></p> <p>10:50-11:10 <u>Welker, Robert (11)-Methyl Bromide Alternatives Training for Extension Agents and Growers.</u></p> <p>11:10-11:30 <u>Trout, Tom (12)-Fumigant Use in California.</u></p> <p>11:30-11:50 <u>Tostovrsnik, Natalie (13)-Facilitating the Adoption of Alternatives to Methyl bromide in Australian Horticulture.</u></p> <p>11:50-12:10 <u>Chilembwe, Eric (125)-Evaluation of Local Substrates as Growth Media for Raising Tobacco Seedlings in Malawi.</u></p> <p>12:10-12:15 Discussion Session</p>	<p>Postharvest Session III: Submitted Papers Loc: Ballroom V</p> <p>Chemical Alternatives 2: Non-Registered/GRAS Alternatives</p> <p>Moderator: Colin Waterford</p> <p>10:30-10:50 <u>Leesch, Jim (65)-The Toxicity of Ozone to Black Widow Spiders.</u></p> <p>10:50-11:10 <u>Armstrong, Jack (66)-Methyl Bromide Alternative for Green Coffee.</u></p> <p>11:10-11:30 <u>Kawakami, Fusao (67)-Methyl Iodide and Mixture of Gas of Methyl Isocyanate/Sulfuryl Fluoride Fumigation as a Quarantine Treatment for Solid Wood Packing.</u></p> <p>11:30-11:50 <u>Ngirazie, Lee (126)-Factors Contributing to the Successful Phase Out of Methyl Bromide in Tobacco Production in Malawi.</u></p> <p>11:50-12:00 Discussion Session</p>
---	--

12:00 noon – 1:00 pm	Lunch
-----------------------------	--------------

Tuesday Afternoon, 1 November 2005, Concurrent Sessions

Registration:

Location: South/West Foyer

<p>Preplant Session IV: Submitted Papers Tomato Alternatives Research Moderator: Hussein Ajwa 1:00-1:20 <u>Candole, Byron (14)-Concentrations and Efficacy of InLine and Vapam in Raised Plastic-Mulched Beds.</u> 1:20-1:40 <u>Welker, Robert (15)-Efficacy of Fall and Spring Applied Methyl Bromide Alternatives in Tomatoes.</u> 1:40-2:00 <u>Siham, Myriam N. (16)-Methyl Bromide Rate Reduction and Mulch Effect on Nutsedge Control.</u> 2:00-2:20 <u>Gilreath, James P. (17)-Effect of VIF on Metam, Chloropicrin and 1,3-Dichloropropene, Alone and in Combination.</u> 2:20-2:40 <u>Sances, Frank (18)-Ten Years of Methyl Bromide Alternatives Research and Development: Lessons Learned.</u> 2:40-3:00 Discussion Session</p>	<p>Loc: Ballroom I-IV</p>	<p>Postharvest Session IV: Submitted Papers Chemical Alternatives 3: Profume[®] Uses Moderator: Mike Hurley 1:00-1:20 <u>Prabhakaran, Suresh (68)-Sulfuryl Fluoride as a Quarantine Treatment for the Pinewood Nematode in Unseasoned Pine.</u> 1:20-1:40 <u>Prabhakaran, Suresh (69)-Global development and Commercialization of Profume[®] Gas Fumigant.</u> 1:40-2:00 <u>Jenkins, Dan (70)-Germination of Seeds with Profume[®] Gas.</u> 2:00-2:20 <u>Hosoda, Ed (71)-The Commercialization of Profume[™] In California.</u> 2:20-2:40 <u>Williams, Robert (72)-Commercial Fumigations with Profume[®] Gas Fumigant in the United States, 2004-2005.</u> 2:40-3:00 <u>Subramanyam, Bhadriraju (95)-ProFume[™] Fumigation of Rice Mills in California: Effectiveness and User Perceptions.</u> 2:40-3:00 Discussion Session</p>	<p>Loc: Ballroom V</p>
---	----------------------------------	--	-------------------------------

3:00 pm – 3:30 pm

Break

Location: Ballroom VI-VIII

Wednesday Morning, 2 November 2005, Concurrent Sessions

7:00 am	Registration:		Location: South/West Foyer
7:00 am	Coffee:		Location: Ballroom VI-VIII
Preplant Session VI: Submitted Papers New Products (Furfural, Essential Oils)		Loc: Ballroom I-IV	Postharvest Session VI: Submitted Papers Postharvest Emissions Reductions
Moderator: Dan Legard			Moderator: Alan Dowdy
8:00-8:20	<u>Rodriguez-Kabana, R. (26)-Herbicidal and Nematicidal Properties of Drench Applications of Furfural (2-Furfuraldehyde).</u>		8:00-8:20 <u>Bair, Jim -Mill Treatments.</u>
8:20-8:40	<u>Burger, G. J. (27)-An Overview of the Development of Furfural (Crop Guard®) as a Nematicide in South Africa: The Chemistry of Furfural within the Soil and Agricultural Environment.</u>		8:20-8:40 Richardson, Bob -Sealing Structures.
8:40-9:00	<u>Rodriguez-Kabana, R. (28)-Fungicidal, Herbicidal and Nematicidal Activities of Essential Oils in Slow Release Formulations.</u>		8:40-9:00 <u>Peckman, Pamela -Alternatives Effectiveness.</u>
9:00-9:20	<u>Burger, G. J. (29)-An Overview of the Development of Furfural (Crop Guard®) as a Nematicide in South Africa: The Biological Efficacy of Furfural within the Agricultural Environment.</u>		9:00-9:20 <u>Beaman, Jeff (76)-New Technologies and Modifications to Existing Methyl Bromide Treatment Schedules.</u>
9:20-9:40	<u>Rodriguez-Kabana, R. (30)-Combinations of Furfural (2-Furfuraldehyde) with Metam Na and Dazomet for Weed Control.</u>		9:20-9:40 <u>Knapp, Gary (77)-Operational Methyl Bromide Recapture Systems.</u>
9:40-10:00	Discussion Session		9:40-10:00 Discussion Session
10:00 am – 10:30 am		Break	Location: Ballroom VI-VIII

Preplant Session VII: Submitted Papers		Loc: Ballroom I-IV	Postharvest Session VII: Submitted Papers		Loc: Ballroom V
Regulatory Issues/National Initiatives			Non-Chemical 1: Heat/Vacuum		
Moderator	Jim Gilreath		Moderator:	Bill Chism	
10:20-10:40	<u>Sullivan, David A. (31)-Recent Developments of the FEMS Model to Promote Realistic Buffer Zones for Fumigants.</u>		10:30-10:50	<u>Wang, Shaojin (78)-Large-Scale Radio Frequency Treatments for Insect Control in Walnuts.</u>	
10:40-11:00	<u>Chart, Ian (32)-Metam Sodium and Metam Potassium Regulatory Update.</u>		10:50-11:10	<u>Abaraw, Mimoun (79)-An Introduction to Thermal Remediation from TEMP-AIR: A Patented Process to Eliminate Pests with Dry, Clean Heat – An Effective, Safe, and Economical Alternative to Methyl Bromide.</u>	
11:00-11:20	<u>Norton, Jack A. (33)-A Review of Methyl Bromide Alternatives Evaluated by IR-4.</u>		11:10-11:30	<u>Lindsay, Bruce (80)-Update on Heat Treating Wood Packaging Materials to Comply with ISPM 15.</u>	
11:20-11:40	<u>Mann, R. C. (34)-Evaluating Novel Soil Fumigants for Australian Horticulture.</u>		11:30-11:50	<u>Johnson, Judy (81)-Vacuum Treatments for Tree Nuts.</u>	
11:40-12:00	Ndalut, Paul (124)-Protection of Maize Grains from Weevils in Farmers Granaries in Rural Areas of Kenya by Improved Traditional Practices.		11:30-12:00	Discussion Session	
12:00-12:10	Discussion Session				

Wednesday Afternoon, 2 November 2005, Concurrent Sessions

Registration:

Location: South/West Foyer

<p>Preplant Session VIII: Submitted Papers Emissions Reduction/Efficacy Enhancement Moderator: Joe Noling 1:00-1:20 <u>Trout, Tom (35)-Irrigation Practices that Improve Drip Fumigation.</u> 1:20-1:40 <u>Sullivan, David A. (36)-Results of the USDA Study: Commercialization of Enhanced Water Sealing Methods.</u> 1:40-2:00 <u>McKenry, Michael (37)-Strategies and Tactics for Fumigating Clay Loam Soils.</u> 2:00-2:20 <u>Lagunas-Solar, Manuel C. (38)-Thermal Disinfection of Soils with Radiofrequency Power.</u> 2:20-2:40 <u>Joyce, Peter (39)-Methyl Bromide Scrubber for Elimination of Soil Emissions.</u> 2:40-3:00 <u>Gilreath, James P. (40)-Equipment Modifications for Successful Applications of Low Fumigant Rates.</u> 3:00-3:15 Discussion Session</p>	<p>Loc: Ballroom I-IV</p>	<p>Postharvest Session VIII: Submitted Papers Chemical Alternatives 5: Unregistered Fumigants Moderator: Dagmar Klementz 1:00-1:20 <u>Waterford, Colin (82)-The Status of Ethanedinitrile and Carbonyl Sulfide Registration in Australia.</u> 1:20-1:40 <u>van S. Graver, Jan (83)- Fumigation of Bulk Stored Wheat with Carbonyl Sulfide.</u> 1:40-2:00 <u>Ren, YongLin (84)-Development of New Ethyl Formate Formulation for Grain Storage.</u> 2:00-2:20 <u>Ren, YongLin (85)-Using Liquid Ethyl Formate for Disinfestation of Insect Pests in Farm Bins.</u> 2:20-2:40 <u>Ren, YongLin (86)-Toxicity of Ethanedinitrile (C₂N₂) to Timber Related Insect.</u> 2:40-3:00 Discussion Session</p>	<p>Loc: Ballroom V</p>
--	----------------------------------	---	-------------------------------

3:00 pm – 3:30 pm

Break

Location: Ballroom VI-VIII

<p>Preplant Session IX: Submitted Papers Nursery & Perennial Crops Moderator: Steve Fennimore 3:30-3:50 <u>Schneider, S. (41)-Methyl Bromide Alternatives for Perennial Crop Field Nurseries.</u> 3:50-4:10 <u>Wang, Dong (42)-Emission and Soil Distribution of Fumigants In Forest Tree Nurseries.</u> 4:10-4:30 <u>Muckenfuss, Adam (43)-Basamid ® G for Weed Control in Forest Tree Nurseries.</u> 4:30-4:50 <u>Lampinen, B. (44)-Alternative Pre-Plant Soil Fumigation Treatments for Deciduous Tree Crops.</u> 4:50-5:10 <u>Schneider, S. (45)-Field Evaluations of Methyl Bromide Alternatives for Vineyard Replant.</u> 5:10-5:30 <u>Shrestha, Anil (46)-Weed Populations in Nurseries as Affected by Methyl Bromide and Alternative Fumigants.</u> 5:30-5:40 Discussion Session</p>	<p>Loc: Ballroom I-IV</p>	<p>Postharvest Session IX: Submitted Papers Non-Chemical Alternatives 2: Radiation/MSDD/CA Moderator: Patrick Ducom 3:30-3:50 <u>Marcotte, Michelle (87)-Hawaii Sweetpotato treatment Led to Regulatory Change.</u> 3:50-4:10 <u>Lagunas-Solar, Manuel (88)-Update on Metabolic Stress Disinfestation and Disinfection.</u> 4:10-4:30 <u>Mack, Ron (89)-Evaluation of Non-Thermal Metabolic Stress Disinfestation and Disinfection (MSDD) on Selected Pests of Perishables.</u> 4:30-4:50 <u>Liu, Young-Biao (90)-Ultra-low Oxygen Treatment for Postharvest Insect Control on Lettuce and Broccoli.</u> 4:50-5:00 Discussion Session</p>	<p>Loc: Ballroom V</p>
---	----------------------------------	--	-------------------------------

5:30 pm – 7:00 pm

RECEPTION

Location: Ballroom VI-VIII

Thursday Morning, 3 November 2005, Concurrent Sessions

7:00 am	Registration:	Location: South/West Foyer
7:00 am	Coffee:	Location: Ballroom VI-VIII

<p>Preplant Session X: Submitted Papers Loc: Ballroom I-IV IPM Components and Considerations</p> <p>Moderator: Nancy Kokalis-Burelle</p> <p>8:00-8:20 <u>Besri, Mohamed (47)-Current Situation of Tomato Grafting as Alternative to Methyl Bromide for Tomato Production in the Mediterranean Region.</u></p> <p>8:20-8:40 <u>Chellemi, Dan O. (48)-Impact of Land Management Practices on Soilborne Pests and Productivity of Tomatoes.</u></p> <p>8:40-9:00 <u>Kreger, Robert (49)-Performance of Midas ® 50:50 in the Southeastern US.</u></p> <p>9:00-9:20 <u>Shem-Tov, S. (55)-Effect of Band or Bed Top Applied Basamid on Strawberry Weed Control and Yield.</u></p> <p>9:20-9:40 <u>Noling, Joseph W. (51)-Associations of Soil Factors, Fumigant Efficacy, and Field Distribution of Nematodes.</u></p> <p>9:40-10:00 Discussion Session</p>	<p>Postharvest Session X: Submitted Papers Loc: Ballroom V Fumigant Efficacy and Detection/Insect Behavior</p> <p>Moderator: Jim Leesch</p> <p>8:00-8:20 <u>Hurley, Mike (91)-Confirmation of Phosphine Schedules and Survival of Three Moth Species on Almonds.</u></p> <p>8:20-8:40 <u>Arnold, Frank (92)-Measuring New Fumigants with Dräger-Tubes®.</u></p> <p>8:40-9:00 <u>Griffith, Tom (93)-Propylene Oxide, A Versatile Fumigant, A Safe Insecticide.</u></p> <p>9:00-9:20 <u>Silhacek, Don (94)-The Selection of Germ in Whole Wheat by Neonatal Plodia Larvae for Growth.</u></p> <p>9:20-10:00 Discussion Session</p>
--	--

10:00 am – 10:20 am	Break	Location: Ballroom VI-VIII
----------------------------	--------------	-----------------------------------

<p>Preplant Session XI: Submitted Papers Loc: Ballroom I-IV Strawberry Chemical Alternatives</p> <p>Moderator: Daniel A. Botts</p> <p>10:20-10:40 <u>Walgenbach, Paul (52)-Muscodor: A New Biofumigant as an Alternative to Methyl Bromide.</u></p> <p>10:40-11:00 <u>Ajwa, Hussein A. (53)-Strawberry Yield with Various Rates of Chloropicrin and InLine Applied Under VIF.</u></p> <p>11:00-11:20 <u>Fennimore, Steve (54)-Chloropicrin and InLine Lethal Dose on Nutsedge and Knotweed Under Impermeable Film.</u></p> <p>11:20-11:40 <u>Browne, G (50)-Effects of VIF and Chloropicrin and InLine Rates on Survival of Nematodes and Pathogens in Soils.</u></p> <p>11:40-12:00 <u>Damodaran, Nimmi (56)-Research Trends on Alternatives to Methyl Bromide for Strawberries and Tomatoes.</u></p> <p>12:00-12:20 <u>Lopez-Aranda, J. M. (57)-Alternatives to MB for Strawberry Nurseries in Spain. 2004 Results.</u></p> <p>12:20-12:30 Discussion Session</p>	
---	--

The End – Hope to see you next year in Orlando, Florida!

POSTER PRESENTATIONS

Moderator: Alan Dowdy

PREPLANT:

- Ajwa, Husein** (100)- Behavior of MITC in Soil After Application of Metam-Na and Metam-K.
Driver, Jim (101)- On-Farm Fumigation Trials for Strawberries in the Southeast.
Warren, Morris (102)- Versatile Propylene Oxide.
Wigley, Simon (103)- VIF-An Update.
Gerik, James (105)- Drip Applied Alternatives for Floriculture Production.
Roskopf, Erin (106)- Evaluation of AJMC-330 for Production of Ornamental Cockscomb(*Celosia argentea*).
Westerdahl, Becky B. (107)- Management of Root-Knot Nematode on Carrots.
Nyczepir, Andrew P. (108)- Evaluation of Guardian™ Peach Rootstock to the Peach and Pecan Root-Knot Nematodes.
Gao, Suduan (109)- Potential of Using Surface Water Applications to Reduce Fumigation Emissions.
Kokalis-Burelle (110)- Review of the Non-Fumigant Nematicides Oxamyl and Fosthiazate.
Mazzola, Mark (111)- Suppression of Rhizoctonia Root Rot by *Streptomyces* in *Brassica* Seed Meal-Amended Soil.
Walgenbach, Paul (112)- Muscodor: A New Biofumigant as an Alternative to Methyl Bromide.
Loper, Joyce (113)- Genomic Sequence of the Biological Control Agent *Pseudomonas Fluorescens* PF-5.
Pinkerton, Jack (114)- Soil Solarization: A Component in Managing Raspberry Root Rot.
Trout, Tom (127)- Impact of Township Caps on Telone Use in California.

POSTHARVEST:

- Ren, YoungLin** (115)- International Collaboration on the Use of Alternative Fumigant to Treat Timber for Replacement of Methyl Bromide in Malaysia – Result from EDN (C2N2) Trial.
Ren, YoungLin (116)- Fate of 35S-Labelled COS on Grain and Grain Fraction.
Tubajika, Kayimbi M. (118)- Efficacy of Radio Frequency Against Sapstain and Wood Decay Fungi.
Kobara, Yuso (119)- Estimation of Atmospheric Concentrations of Methyl Bromide Alternatives After a Ban on Methyl Bromide.
Ryan, Robert F. (120)- Vapormate™ Disinfestation of Philippine Export Bananas.
Krishna, Hari (123)- Quarantine and Preshipment Applications Search for MB Alternatives in Fresh Produce.

Structural:

- Ryan, Robert F.** (121)- Disinfestation of Food Processing Equipment.
Arthur, Frank (122)- Susceptibility of Different Life Stages of *Tribolium* spp. to Pyrethrin Aerosol.