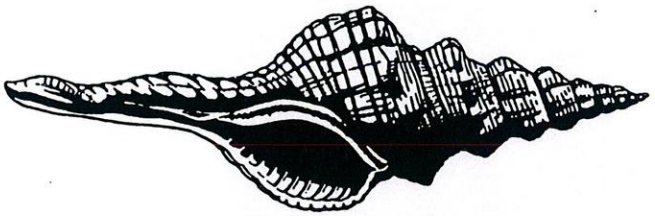
31st ANNUAL

PESTICIDE RESIDUE

WORKSHOP

JULY 17-20, 1994 ST. PETERSBURG, FLORIDA



TradeWinds

ON ST. PETERSBURG BEACH • FLORIDA

State of Florida
Department of Agriculture & Consumer Services

BOB CRAWFORD
Commissioner of Agriculture

WELCOME TO THE 31st ANNUAL PESTICIDE RESIDUE WORKSHOP! We are pleased to see such a large turnout and we appreciate your support.

Residue Chemists face great analytical challenges. During the years we have been enriched by sharing our knowledge of pesticide residue analytical technology. The 31st Annual Meeting contains a program of many great technical presentations and will again provide an excellent opportunity of sharing knowledge, interest and problems.

While you are here, be sure to enjoy the facilities of the TradeWinds Hotel and the beautiful beaches of Florida's west coast. Please let me or the TradeWinds staff know if we can be of any assistance.

Sincerely,

BOB CRAWFORD
COMMISSIONER OF AGRICULTURE

W. George Fong
Environmental Administrator

We appreciate the continuous interest and support by the exhibitors. Please be sure to visit the exhibitors and discuss your interest(s) and needs with them.

EXHIBITORS

Dionex Corporation ..... Bob Moye/Karl Kastner/Bob Joyce

Doe & Ingalla of Florida ..... James R. Fell/John Hodges

Environmental Testing & Analysis ..... Journals on Table

Finnigan Mat ..... Randy Porch/Bob Farr/Terry O'Donovan

Haymes Scientific, Inc. ..... Mark Haymes

Hewlett-Packard Company ..... Tom Stocks

Hitachi Instruments, Inc. ..... L. Oldeen/Charles S. Haws

J. T. Baker ..... Bill West

Microbac Laboratories, Inc. ..... Matt Mendez

Neogen Corporation ..... Don Uglow

Ohmicron ..... David Nardone

OI Analytical ..... Kirk Holladay

Perkin-Elmer Corporation ..... Jim Wagner/Mike Barbera

Sci-Con ..... James B. Westmoreland

SGE, Incorporated ..... Ken Mahler

Shimadzu Scientific ..... Chris Gaylor/Jim Velinsky

Suprex Corporation ..... Scott Elkins

Tekmar Company ..... Pete Vega/Tami Riga

Toxikon Environmental Services ..... Edward W. Koenig

Varian ..... Gary Cook/Phil Tondra
Jose Puras/William Holms/Howard Suddeth

Varian Sample Preparation ..... Andy Sendelback

Whatman, Inc. ..... Elaine Heilweil

Sunday / July 17, 1994 / Afternoon

4:00 - 6:00 **REGISTRATION**
8:00 p.m. **Exhibition Hall Available for Setting-up of Exhibits**

Meetings and Exhibits are to be held in the ISLAND BALLROOMS

Door Prizes will be drawn at the end of each morning and afternoon session. You must be ON TIME at the beginning of each session to receive a ticket and BE PRESENT AT THE DRAWING TO WIN.

Monday / July 18, 1994 / Morning

7:30 - 8:00 **REGISTRATION**

8:00 - 8:30 Welcome
Introduction and Announcements - **George Fong**

1. 8:30 - 9:30 The Evolution of a Pesticide Multiresidue Method
Mr. Milton A. Luke and Dr. Tom Cairns

2. 9:30 - 10:00 Pesticide Data Program - Present & Future
Dr. Robert Epstein

10:00 - 10:30 **BREAK - VISIT EXHIBITS**
Refreshments in Exhibition Area

3. 10:30 - 10:45 EPA's Response to the NAS Report: Pesticides in the Diets of Infants and Children - **Mr. Edward Zager**

4. 10:45 - 11:00 The National Pesticide Residue Database - **Dr. John Jones**

5. 11:00 - 11:20 Some Legal Aspects of Pesticide Regulation
Janis A. Morelli, Esq.

6. 11:20 - 11:35 Opportunities for Pesticide Residue Analytical Method Development - **Dr. Anson Moye**

7. 11:35 - 11:55 Laboratory Quality Control and Assurance
Mr. Michael R. Curry

11:55 - 12:05 **DOOR PRIZE DRAWING (must be present to win)**

12:00 - 1:30 LUNCH (on your own)

Monday / July 18, 1994 / Afternoon

8. 1:30 - 1:45 Survey of Pesticide Residues on Produce: 1991-1994 **Mr. Herb Schattenberg**

9. 1:45 - 2:05 Validation of Computer Systems in Analytical Laboratories **Dr. Michael Thomas**

2:05 - 2:45 **BREAK - VISIT EXHIBITS**
Refreshments in Exhibition Ares

10. 2:45 - 3:05 A Groundwater Lab: The Beginning - **Ms. Cathie Ayers**

11. 3:05 - 3:25 Pesticide Residues in House Dust: An Indicator of Residential Exposure - **Dr. Paul W. Geno**

12. 3:25 - 3:40 Field Testing Disposal Systems Which Uses Sorption and Biological Degradation - **Dr. Roddy Young**

3:45 - 3:55 **Door Prize Drawing (must be present to win)**

5:00 - 6:00 Poster Session

6:00 - 7:00 **Get Acquainted Reception - Courtesy of TradeWinds Hotel**

Poster Session Papers

P1. Miniaturized Method for Determination of Organochlorine and Organophosphorus and Methyl Carbamate Pesticides in Fruits and Vegetables - **Ms. Carolyn M. Makovi** and Mr. Charles H. Parfitt

P2. The Use of Automated SFE/GC for the Quantitative Determination of Pesticides in Soils, Feeds, and Foods - **Dr. J. M. Levy**, Ms. Lori A. Dolata, Ms. Anita Cardamone, Mr. Athos C. Rosselli, and Mr. Scott Elkins

P3. Supercritical Extraction of Soil Herbicides - **Mr. G. Kim Stearman**

P4. Louisiana Pesticide Residue Monitoring in Surface Waters: 1991-1994 **Ms. Nina M. Huffstetler**

P5. Determination of Benzimidazole Fungicides in Crop Samples by HPLC and Various Determination Methods - **Dr. Andre de Kok** and Maurice Hiemstra

P6. Atmospheric Pressure Ionization LC/MS for Pesticide Analysis **Dr. Larry Burchfield**

P7. EBDC Residue Reduction Study on Selected Florida Fresh Vegetables During Commercial Postharvesting Practices - **Mr. W. George Fong and Mr. Charles Matthews**

P8. USEPA Office of Pesticide Program June, 1994 Workshop Summaries

Tuesday / July 19, 1994 / Morning

7:30 - 8:00 REGISTRATION

13. 8:00 - 8:20 Analysis and Confirmation of Bensulfuron Methyl (Londax) in Benlate 50 DF - **Ms. Wendy King**

14. 8:20 - 8:50 A Multiresidue Method for Wheat Using Supercritical Fluid Extraction and Gas Chromatography/Mass Spectrometry **Mr. Tim Norden**

15. 8:50 - 9:20 Supercritical Fluid Extraction of Pesticides in Fruits and Vegetables - **Mr. Steve J. Lehotay**

16. 9:20 - 9:40 Determination and Confirmation of Pesticide Residues Using Benchtop Mass Spectrometry: GC-MSD **Dr. Harry M. Pylypiw, Jr.**

17. 9:40 - 10:00 The Use of Gas Chromatography Tandem Mass Spectrometry for Determination of Pesticides and Food Residue **Dr. William Holmes**

10:00 - 10:30 BREAK - VISIT EXHIBITS
Refreshments in Exhibition Area

18. 10:30 - 10:45 Analytical Method for the Determination of Multiple Pesticide Residues and Several Dealkylated Metabolites in Water by Gas Chromatography/ Mass Selective Detection **Dr. Robert A. Yokley**

19. 10:45 - 11:00 Breathing New Life into an Old Horse, or Getting the Best from Your Old Mass Spec. - **Dr. Charles Schmidt**

20. 11:00 - 11:15 South Carolina State Report - **Ms. Sherry T. Garris**

21. 11:15 - 11:30 Have Flask Will Travel or How to Set Up Two State Laboratories in One Year - **Dr. David Klein**

22. 11:30 - 11:45 Texas Parks and Wildlife Department Report: Statewide Contamination Assessment Program - **Ismael "Smiley" Nava**

11:45 - 12:00 **DOOR PRIZE DRAWING (must be present to win)**

12:00 - 1:30 Lunch on Your Own

Tuesday / July 19, 1994 / Afternoon

23. 1:30 - 1:45 Florida Report: Pesticide Residue Activities
Mr. Mike Page

24. 1:45 - 2:00 Activities of North Carolina Residue Laboratory
"Groundwater" - **Mr. Floyd Quick or Allie Williams**

25. 2:00 - 2:20 Reduction of Endrin and DDT Breakdown Using a PTV Injector - **Ms. Tammy J. Riga**

2:20 - 2:50 **BREAK - VISIT EXHIBITS**
Refreshments in Exhibition Area

26. 2:50 - 3:10 Methylmercury by AED - **Dr. Larry E. Habeger**

27. 3:10 - 3:30 Esters of Phenoxyacetic Acids - **Dr. Alan P. Thio**

28. 3:30 - 3:50 Chemical Derivatization of Sulfentrazone and Its Metabolites for GC Analysis - **Dr. In-Young Kim**

29. 3:50 - 4:05 Fenthion Efficacy and Residues on Kam-Far-Sam Egy. Apparatus Utilized for Control of Fruit Flies Attacking Certain Horticulture Fruits in Egypt
Dr. Samir F. El-Miniawa

4:05 - 4:15 **DOOR PRIZE DRAWING (must be present to win)**

4:30 - 5:00 Southern States Check Sample Program Meeting -
Ms. Gail Parker

*** 5:30 p.m. Volley Ball Games ***

Wednesday / July 20, 1994 / Morning

7:30 - 8:00 **REGISTRATION**

30. 8:00 - 8:15 Rapid Method for the Determination of Methyl Parathion and Methyl Paraoxon in Milk by Flame Photometric Detector-Gas Chromatography with Solid Phase Extraction
Dr. R. E. Baynes and Dr. J. M. Bowen

31. 8:15 - 8:35 Sequential Solid-Phase Extraction for the Determination of Organophosphorus and Organochlorine Pesticide Residues in Vegetable Oils and Butterfat
Dr. Allesia M. Gillespie, Jr.

32. 8:35 - 8:55 Investigation of Solid Phase Extraction (SPE) in Food Sample Preparation For Pesticide Analyses
Ms. Susan M. Price

33. 8:55 - 9:10 SPE Cleanup for Calixin and Propiconazole
Mr. Michael N. Briggs

34. 9:10 - 9:25 Concentration of Glyphosate by Solid Phase Extraction
Dr. Verne A. Simon

35. 9:25 - 9:45 A Method for the Determination of Avemectin in Oranges
Mr. Lawrence H. Lagman

9:45 - 10:30 BREAK - VISIT EXHIBITS
Refreshments in Exhibition Area

36. 10:30 - 10:45 Mississippi Pesticide Residue Program
Dr. Larry G. Lane and Ms. Reba L. Ingram

37. 10:45 - 11:05 Formulation Determination by HPLC - A Turnkey Approach
Mr. Bill Mahn and Mr. Jim Westmoreland

38. 11:05 - 11:20 Advanced Application of the Pulse-Flame Photometric Detector - **Mr. Mario Aparicio**

39. 11:20 - 11:50 Applicability of HPLC with Electron Capture Detector in Pesticide Residue Analysis - **Dr. Andre de Kok**

11:50 - 12:00 Door Prize Drawing (must be present to win)

Main Workshop Adjourns

<u>Wednesday, July 20, 1994 / Afternoon</u>

1:00 - 5:00 Vendors Seminars:

a) Ohmicron and b) Varian

Wednesday / July 20, 1994 / Afternoon

1:00 - 2:30 Chemical Residue Laboratory Staff Meeting

2:30 - 3:00 Break

3:00 - 5:00 Florida PDP Sample Collectors Meeting and Training

Thursday, July 21, 1994 / All Day and Friday, July 22, 1993 / Morning

USDA/PDP Federal-State Meetings

1995 Pesticide Residue Workshops

California March 12-16, 1995

Florida July 16-19, 1995

Program Presenters

Aparicio, Mario; Varian, 505 Julie Rivers Road, Suite 150, Sugar Land, TX 77478 **38**

Ayers, Cathie; Tennessee Dept. of Agriculture, Technical Services, Ellington Agriculture Center, 440 Hogan Road, Nashville, TN 37204 **10**

Baynes, R. E.; College of Veterinary Medicine, North Carolina State University Raleigh, NC 27606 **30**

Bowen, J. M.; College of Veterinarian Medicine, University of Georgia, Athens, GA 30602-7371 **30**

Briggs, Michael N.; C. L. Technology, A Division of Microbac Analytical Services, 280 N. Smith, Corona, CA 91720 **33**

Burchfield, Larry; Finnigan Mat, P.O. Box 6234, Kingwood, TX 77325 **P6**

Cairns, Tom; U.S. Food and Drug Administration, 1521 W. Pico Blvd., Los Angeles, CA 90015 **1**

Curry, Michael R.; Georgia Dept. of Agriculture, P.O. Box 1507, Tifton, GA 31793 **7**

De Kok, Andre; (Government) Food Inspection Service,Burgpoelwaard 6, 1824 DW Alkmaar, The Netherlands **P5, 39**

El- Miniawi, Samir F.; PPRI ARC M.O.A.Dept. Plant Protection Reg. Inst. Agriculture Research Center, Minister of Agriculture, Dokki, Egypt **29**

Epstein, Robert L.; USDA/AMS/Science Division, P.O. Boa 96256, Washington, D.C. 20090 **2**

Fong, W. George; Chemical Residue Laboratory, Florida Dept. of Agriculture, 3125 Conner Bolvd., Tallahassee, FL 32399-1650 **P7**

Garris, Sherry T.; South Carolina Dept. of Agriculture. P.O. Box 11280, 1101 Williams St., Columbia, SC 29211 **20**

Geno, Paul W.; Southeastern Research Int., P.O. Drawer 28510, San Antonio, TX 78228--0510

Gillespie, Allesia M., Jr.; U.S. Food and Drug Administration, 1560 E. Jefferson Avenue, Detroit, MI 48207 **31**

Habeger, Larry E.,; U.S. Food and Drug Administration, 240 Hennipin Avenue, Minneapolis, MN 55401 **26**

Holms, William; Varian, 505 Julie Rivers Road, Suite 150, Sugar Land, TX 77478 **17**

Huffstetler, Nina M.; Feed and Fertilizer Laboratory, L.S.U., Harry D. Wilson Building, Room 118, Baton Rouge, LA 70803 **P4**

Ingram, Reba L.; Mississippi State Chemical Laboratory, P.O. Drawer CR, Mississippi State, MS 39762 **36**

Jones, John W.; U.S. Food and Drug Administration, HFS-11, CEFSAN, 200 C Street SW, Washington, D.C. 20204 **4**

Kim, In-Young; FMC Corporation, P.O. Box 8, Princeton, NJ 08543 **28**

King, Wendy; Pesticide Laboratory, Florida Dept. of Agriculture, 3125 Conner Blvd., Tallahassee, FL 32399-1650 **13**

Klein, David; Texas Park and Wildlife Contaminants Laboratory, P.O. Box 947, San Marcos, TX 78667 **21**

Lagman, Lawrence H.; USDA, AMS, Science Division, Eastern Laboratory, 2311B Aberdeen Blvd., Gastonia, NC 28054 **35**

Lane, Larry G.; Mississippi State Chemical Laboratory, P.O. Drawer CR, Mississippi State, MS 39762 **36**

Lehotay, Steven J.; USDA ARS BLDG. 007, Room 224, BARC-West, Bellsville, MD 20705 **15**

Levy, J. M.; Suprex Corporation, 125 William Pitt Way, Pittsburgh, PA 15238 **2**

Luke, Milton A.; U.S. Food and Drug Administration, Los Angeles District Lab., 1521 W. Pico Blvd., Los Angeles, CA 90015 **1**

Mahn, Bill; Thermo Separation Products, 3661 Interstate Park Road, N., Riviera Beach, FL 33404 **37**

Makovi, Carolyn M.; USFDA/OPDFB/DPIC, 200, C Street, SW, Washington, D.C. 20204 **P1**

Matthews, Charles H. Jr.; Florida Fruit & Vegetable Association, P.O. Box 140155, Orlando, FL 32814-0155 **P7**

Morelli, Janis A.; Office of Environmental Law and Science, P.O. Box 237, Neshanic Station, NJ 08853 **5**

Moye, Anson; Pesticide Research Laboratory, University of Florida, P.O. Box 110720, Gainesville, FL 32611-0720 **6**

Nava, Ismael "Smiley"; Texas Park and Wildlife Dept., Resources Protection Division, 4200 Smith School Road, Austin, TX 78744 **22**

Norden, Tim; USDA-Federal Grain Inspection Service, 10383 N Executive Hill Blvd., Kansas City, MO 64153-1394 **14**

Page, Michael; Pesticide Laboratory, Florida Dept. of Agriculture, 3125 Conner Blvd., Tallahassee, FL 32399-1650 **23**

Parker, Gail; Chemical Residue Laboratory, Florida Dept. of Agriculture, 3125 Conner Blvd., Tallahassee, FL 32399-1650 **Check Sample Program**

Price, Susan M.; 3M Company, 3M Center building, 209-1C-30, St. Paul, MN 55144-1000 **32**

Pylypiw, Harry M.; The Connecticut Agricultural Experiment Station, 123 Huntington Street, New Haven, CT 06504

Quick, Floyd; North Carolina Dept. of Agriculture, 4000 Reedy Creek Road, Raleigh, NC 27607 **24**

Riga, Tammy J.; Tekmar Company, 7143 E. Kemper Road, Cincinnati, OH 45249 **25**

Schattenberg, Herb; Southwest Research Institute, 6220 Culebra Road, San Antonio, TX 78228-0510 **8**

Schmidt, Charlie; Dept. of Environmental Engineering Science, University of Florida, 418 A. P. Black Hall, Gainesville, FL 32611 **19**

Simon, Verne A.; HRS Office of Laboratory Services, 1217, Pearl Street, Jacksonville, FL 32202 **34**

Stearman, G. Kim; Tennessee Technological University, Water Center, Box 5033, Cookeville, TN 38505 **P3**

Thio, Alan P.; University of Kentucky, Division of Regulatory Services, Regulatory Services Building, Lexington, KY 40546-0275 **27**

Thomas, Michael; Hewlett-Packard, 2850 Centerville Road, Wilmington, DE 19808 **9**

Westmoreland, Jim; Sci-Con, 2022 Forest Circle, Orlando, FL 32789 **37**

Williams, Allie; North Carolina Dept. of Agriculture, 4000 Reedy Creek Road, Raleigh, NC 27607 **24**

Yokley, Robert A.; Biochemistry Resources Dept., Ciba Plant Protection, Ciba-Geigy Corporation, P.O. Box 18300, Greensboro, NC 27419 **18**

Young, Roddy; Virginia Tech, Pesticide Residue Research Laboratory, 352 Litton Reavse Hall, Blacksburg, VA 24061-0309 **12**

Zager, Edward; USEPA, 1921 Jefferson Davis Highway, Arlington, VA 22202 **3**

THANK YOU!!

FOR ATTENDING THE

31st ANNUAL PESTICIDE RESIDUE WORKSHOP

HOPE TO SEE YOU AGAIN NEXT YEAR!

31st Annual Pesticide Residue Workshop
July 17-20, 1994

Program Changes

Monday, July 18, 1994

Poster #8 Cancelled

Additional Posters:

Poster #9 "Use of Benchtop BC/MS for the Analysis of Pesticides in Fruits and Vegetable." - Dr. Ping Liu* and Gail Parker, Florida Department of Agriculture and Consumer Services, Tallahassee, FL 32399-1650
* Currently with Texas Natural Resources Conservation Commission, Austin, Texas

Poster #10 "State of the Art of N-Metylcarbamate Analysis of Crop Samples." - Dr. Andre de Kok and Maurice Hiemstra (addresses in the program)

Poster #11 "A Miniature Multiresidue Method for the Determination of Pesticides in Crop Samples Based on the Luke Extraction and Using Multiple Chromatography Detection Systems." - Dr. Andre de Kok and Maurice Hiemstra (addresses in the program)

Poster #12 "Application of HPLC with Electron-Capture Detection in Pesticide Residue Analysis." - Dr. Andre de Kok and Maurice Hiemstra (addresses in the program)

Tuesday, July 19, 1994

Paper #13 - Cancelled — Morning meeting will begin at 8:20 a.m. on Tuesday, July 19, 1994

Paper #22 - Cancelled — Dr. Yokley (Paper #18) will have 5 extra minutes for his presentation.

Paper #26 - Cancelled — We will have longer break period.

Wednesday, July 20, 1994

Paper #37 - Speaker substitution
"Automated Analysis of Formaldehyde in Drinking Water." will be presented by Tina M. Mannschreck, Thermo Separation Products, 3661 Interstate Park Road, N., Riviera Beach, FL 33404

Program Presenters - Corrections

Dr. Epstein - P.O. Box 96256
Dr. Geno - Paper #11
Dr. Levy - Poster #2

James B. Westmoreland's address
Sci-Con, 831 Executive Drive, Winter Park, FL 32789