



# NEWSLETTER

INTERNATIONAL SOCIETY OF CHEMICAL ECOLOGY

Vol. 11, No. 2, May, 1994



## ANNOUNCEMENT FROM THE JOURNAL OF CHEMICAL ECOLOGY EDITORS

We take much pleasure in our association with the Journal of Chemical Ecology and the International Society of Chemical Ecology over the past years. We also realize that editors are not forever, and we now announce our retirements as Editors of the Journal. We do so in very good spirits because both the Journal (20 years) and the Society (11 years) have helped define the new field of Chemical Ecology, thus ensuring its great potential.

Even more gratifying is the willingness of two highly qualified individuals to accept the responsibility as Editors: James L. Nation and David A. Jones, both at the University of Florida, Gainesville. We wish them many years of enjoyment.

The new Editors will quickly learn, as we have, that they will be indebted to the Editorial Board; to many additional reviewers; to the contributors who willingly accept the vicissitudes of peer review, patiently revise their manuscripts, and sometimes even thank the reviewers; and to the publisher. We wish to express special thanks to Eleanor Zaccaria, our secretary who held everything together during our stewardship.

To assure uninterrupted publication, manuscripts submitted after June 30, 1994 should be addressed to the new Editors. We shall continue to process manuscripts scheduled for publication in 1994 and to prepare the author and keyword indices for 1994.

R.M. Silverstein      J.B. Simeone

### From the Editor

Please take a minute to vote. Return your ballot for election of the Vice President to me before July, 1, 1994.

Don't forget to mail your 1994 dues to Jim Nation or Martine Rowell-Rahier. (Regular Members (I) \$25 or 37 SF; Student Members \$10 or 15 SF)

If you have published a book or received an honor or would like to have your work profiled in the newsletter, send me the details!

Please share your knowledge of upcoming meetings with me so I can keep these notices current. Thanks for your help.

- John Romeo

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## NEW EDITORS

**James L. Nation.** Jim has a Ph.D. in entomology, with specialization in insect physiology and biochemistry, from Cornell University (1960). He has taught and conducted research at the University of Florida for 33 years, where he currently is a Professor. Most of his recent research has centered on pheromones of tephritid fruit flies and *Dendroctonus terebrans* bark beetles, and studies of cuticular hydrocarbons. A current project funded by the International Atomic Energy Agency is a study of the effects of ionizing radiations upon insects. He has authored or co-authored more than 60 papers and 4 book chapters. Research studies have been supported by NSF; EPA; USDA; US Forest Service; Florida Department of Citrus; and the International Atomic Energy Agency.



**Awards and Honors:** As a graduate student Jim received a Cornell Graduate Fellowship and a Danforth Foundation Fellowship. He has twice received the Teacher of the Year award from the graduate student organization in the Department of Entomology and Nematology at the University of Florida, and in 1985 he was recognized by the Florida Entomological Society for outstanding teaching of insect physiology. He has chaired one NSF postdoctoral Fellowship panel and served on 3 others; served as a member of a USDA competitive grants panel; and is a member of the Editorial Board of the Journal of Chemical Ecology. He served as Associate Editor of the Florida Entomologist from 1967-1969. Jim has been a member of ISCE since its beginning, and has attended every annual meeting. He has served as Treasurer of the ISCE for the past 8 years.

**David A. Jones** was the last undergraduate pupil of R.A. Fisher at the University of Cambridge, graduating with First Class Honours in Genetics in 1957. He obtained his D. Phil. in Oxford, working on plants in a Zoology Department, under the supervision of E.B. Ford. It is while he was a research student that he had the good fortune not only to share a laboratory with Lincoln Brower and Jane vanZandt Brower, and later with Charles Remington and Hugh Paterson, but also to discover selective grazing of acyanogenic bird's-foot-trefoil, *Lotus corniculatus*, by slugs and snails. While in Oxford he found that larvae of several *Zygaena* (moth) species were cyanogenic, a discovery that made Miriam Rothschild very excited. From 1961 David spent 12 years in the Department of Genetics in the University of Birmingham where his research included variation in lectin content of seeds and an association between the lectin and germination, asexual incompatibility in fungi, as well as continuing the work on cyanogenesis. He wrote a book on plant ecological genetics and was part of an unofficial team that supported the then editor of *Heredity*, J. L. Jinks.

In 1973 he moved to the University of Hull to become the first Professor of Genetics. With Mary Ellis and Rick Keymer he "took apart" a habitat in which there were significant differences in the frequency of cyanogenic *L. corniculatus* over short distances. The analysis led to the conclusion that the polymorphism for cyanogenesis in the United Kingdom was largely maintained by selective grazing by mollusks, with insects having a relatively unimportant role.

He has also conducted research on plant breeding - of maize for a cold climate, and of resistance in barley to *Rhynchosporium secalis* - as well as on the effect on indigenous species of the introduction of large numbers of alien individuals (of the same species) as contaminants or deliberate components of seed mixtures used to revegetate the verges of new roads.

David moved on to the Botany Department of the University of Florida in 1989 to become Professor and Chairman. He has since been studying cyanogenesis in Florida plants as well as genetical variation in endemic Florida plants. Since 1988 he has continued the long-term study (begun by E. B. Ford in 1939) of the scarlet tiger moth, *Panaxia dominula* L. in the colony at Cothill Fen, S. West of Oxford, England.



After five years as chairman, he has recently been asked to serve for another four years. David is a life member and Past President of the ISCE.

## Syracuse - June 4-8, 1994

The 11th Annual Meeting of the ISCE will take place on the campus of the State University of New York College of Environmental Science and Forestry, Syracuse, New York, USA, June 4-8, 1994. Abstracts and registration forms were due May 1, 1994. If you wish to attend this meeting, contact Dr. Francis Webster:

Phone: 315-470-6863  
Fax: 315-470-6856  
Internet: fwebster@suvn.syr.edu

Six symposia are planned entitled: Plant-Herbivore Interactions - Quo Vadimus?; Chemical Prospecting; Chemical Ecology of Forest Insects; Chemical Ecology and Chemical Analysis - Advances in Detection and Identification; Interspecific Chemical Recognition; and Semiochemicals of Beneficial Arthropods. Dormitory housing is available.

The Executive Committee and the Councilors will meet on Saturday, June 4th at 13:00 for their annual meeting.

## Silver Medal Awardees

**Gerald A. Rosenthal** is Professor of Biology at the University of Kentucky, T.H. Morgan School of Biological Sciences and the Graduate Center for Toxicology where he has been since 1974. He was educated at the State University of New York College of Environmental Sciences and Forestry, where he received a B.S. in Forest Botany, and at Duke University, where he earned an M.F. degree in Forest Pathology and a Ph.D. in Plant Physiology and Biochemistry. He did Postdoctoral study at the National Institutes of Health. He has been a Fulbright-Hays Senior Research Scholar at the Université Louis Pasteur, Strasbourg, France and also a Lady Davis Visiting Professor of Insect Biochemistry at Hebrew University of Jerusalem, Rehovot, Israel.

For many years Dr. Rosenthal's research has centered on the role of nonprotein amino acids in chemical ecological phenomena. Since his 1975 paper "Non-protein amino acid-insect interactions. I. Growth effects and symptomology of L-canavanine consumption by the tobacco hornworm, *Manduca sexta*" (Comp. Biochem. Physiol. 51A:33-36 with D.L. Dahlman), he has published over 80 papers mostly dealing with canavanine, its insecticidal properties and its mechanism of action and resistance. The canavanine story is arguably the best understood example of any protective plant allelochemical. His work has had continuous funding from the National Science Foundation since 1973, and he has had further support from the National Institutes of Health (73-88); the USDA; and NATO. He is the author or editor of 4 books on secondary plant metabolites and herbivore interactions, and has lectured and organized symposia on the subject around the world.

Following the charge presented at the January 1983 Gordon Research Conference in Ventura, California, Dr. Rosenthal became a driving force for the establishment of a Society for Chemical Ecologists. Drs. Lincoln Brower, Jean Langenheim, Michael Martin, Robert Silverstein, John Simeone, and Gerald Rosenthal met in Lexington Kentucky in July to formulate policy and draft a preliminary constitution for a new society. The Society was formally incorporated on September 12, 1983 as the International Society of Chemical Ecology, and the constitution was officially approved on June 10, 1984 at the first annual meeting of the ISCE in Austin, Texas. It is fitting that Dr. Rosenthal should receive the Silver Medal Award, the highest award bestowed by the ISCE, from the robust society he helped found, just 10 years after its first meeting.

**Daniel H. Janzen** is Professor of Biology at the University of Pennsylvania and a leading ecologist and advocate for the conservation of tropical biodiversity. He has a Ph.D. in Entomology from the University of California, Berkeley. Through his creative research and the implementation of his ideas, Janzen has contributed to preservation of the environment through non-destructive sustainable use by society. He had the profound insight to realize early that since land will be exploited, the best way to preserve it is to insure that its exploitation is non-destructive. At a time when world governments and private citizens alike acknowledge the need for immediate attention and innovative planning, his advocacy and the proposals derived from his research have had inestimable influence.

While advising conservationists worldwide, most of Dr. Janzen's efforts are focused on the Guanacaste Conservation Area in Costa Rica where for the past several years he has conducted research on the interactions between animals and plants in tropical dry forests. This region, which contains 4 percent of the world's biodiversity, is serving as a pilot conservation project for the remainder of the undeveloped tropics, providing on-sight apprenticeships for ecologists from other areas of the world.

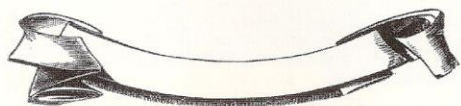
Dr. Janzen has won numerous prizes and awards for his efforts in research and conservation including: the Crafoord Prize of the Swedish Academy of Science (the equivalent of the Nobel Prize in ecology) in 1984; the "genius award" of the John D. and Catherine MacArthur Foundation in 1989; and the Founder's Council Award of the Field Museum of Natural History of Chicago in 1991. In 1992 he was elected to membership in the US National Academy of Sciences. He was honored with the Award for the Improvement of Costa Rican Quality of Life from the Universidad de Costa Rica in 1993, and was recently appointed official advisor to the government of Costa Rica in matters of environmental management. He is a life member of the ISCE.

## BOWERS HONORED

William S. Bowers is a 1994 recipient of the Purdue University Distinguished Agricultural Alumni Award. The Award honors alumni whose contributions to their professions and communities have had a lasting impact. Dr. Bowers received both his M.S. and Ph.D. in Entomology from Purdue. Currently he is Professor of Entomology and Chemical Ecology at the University of Arizona. He has pioneered significant research in chemical ecology and the biological control of insect pests. His research on the chemistry of insect/plant interactions and the natural defensive strategies of plants and beneficial organisms has had far-reaching applications to the welfare of humankind through improved methods of insect control. His accomplishments have resulted in 18 patents and more than 130 published scientific works. Several products derived from these discoveries have been developed commercially and are in common use.

Dr. Bowers has received a number of honors throughout his career. In 1969 and 1970 he was named "Outstanding Young Scientist" by the Agricultural Research Service of the USDA. The USDA again honored him with the "Superior Service Award for Scientific Research" in 1991. In 1980, he received the J. Everett Bussart Memorial Award from the Entomological Society of America in recognition of his outstanding work in economic entomology. He was a Fulbright Scholar in 1987, and was the 1992 recipient of the Senior Fulbright Scholar Award for his research on the desert locust. In 1989, he received the Alexander von Humboldt Foundation Award, which recognizes scholarly research applied to agriculture.





## ANNOUNCEMENTS

**Lost Contact.** We have lost contact with 2 life members of ISCE. Last address for **Dr. Robert Stipanovic** was: USDA, ARS, NCPRL, College Station, Texas 77840. Last address for **Dr. W.B. Quay** was: Healthdyne, Inc., Bio-Research Laboratory, 2003 Ida Street, Napa, California 94558. If anyone has information about these two members, please **contact Jim Nation**. Box 110620, Dept. of Entomology & Nematology, Univ. of Florida, Gainesville, FL 32611-0620 or e-mail: JLN@GNV.IFAS.UFL.EDU

**Delegation to China.** The Citizen Ambassador Program Chemical Ecology Delegation to the People's Republic of China will take place June 15-30, 1994. Anyone still wishing to join this delegation should **contact John Romeo** immediately. Phone: 813-974-3250 or e-mail: Romeo@chuma.cas.usf.edu

## UPCOMING MEETINGS

**Plant Growth Regulator Society.** Portland, Oregon, USA. 3-6 August, 1994. Will feature symposia and research reports on a variety of topics related to plant growth regulation. Contact: Dr. Tom Tworowski, Program Chair, USDA, ARS, Appalachian Fruit Research Station, Kearneysville, WV 25430. Phone: 304-725-3451

**Phytochemical Society of Europe and American Society of Pharmacognosy.** Halifax, Nova Scotia, Canada. 31 July - 4 August, 1994. "Natural Products Research". Contact: Dr. R.F. Chandler, Director College of Pharmacy, Dalhousie University, Halifax, NS, Canada. Phone: 902-494-2097 Fax: 902-494-1396

**Phytochemical Society of North America.** Mexico City, Mexico. 14-19 August, 1994. "Phytochemistry of Medicinal Plants". Contact: Dr. John Arason, Department of Biology, University of Ottawa, Ottawa, Ontario, Canada K1N 6N5. Phone: 613-564-3458 Fax: 613-564-9295.

**Indian Society of Allelopathy.** 2nd National Symposium. Jodhpur, India. 6-8 September, 1994. "Allelopathy in Sustainable Agriculture, Forestry and Environment". Contact: Dr. S.S. Narwal, Department of Agronomy, Haryana Agricultural University, Hisar, 125 004, India. Phone: 91-1662-73721 Fax: 91-1662-73552

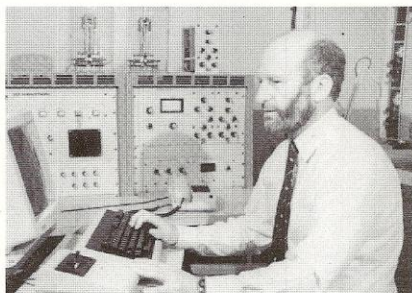
**VIII International Symposium on Toxic Microorganisms.** Peoria, Illinois, USA. 15-17 November, 1994. "Molecular Approaches to Food Safety Issues Involving Toxic Microorganisms". Contact: Dr. Mary Ann Dombink-Kurtzman, National Center for Agricultural Utilization Research, 1815 N. University St., Peoria, IL 61604. Phone: 309-681-6254 Fax: 309-681-6686

**Congreso Latinoamericano de Botanica.** Mar del Plata, Argentina. 2-8 October, 1994. Contact: Renee Fortunato, Secretaria Ejecutiva, Instituto de Recursos Biologicos, INTA Castelar 1712, Prov. de Buenos Aires, Argentina.

## CANDIDATE FOR ISCE VICE PRESIDENT/PRESIDENT ELECT

**Profile:** John A. Pickett is Head of the Biological and Ecological Chemistry Department, Institute of Arable Crops Research, Rothamsted Experimental Station in Harpenden, Hertfordshire, England, where he has been since 1976. He attended King Edward VII Grammar School in Coalville; received a B.Sc. Honors chemistry degree from the University of Surrey; and a Ph.D in organic chemistry from the University of Surrey where he studied under Professor J.A. Elvidge. He did postdoctoral work at the University of Manchester with Professor R.N. Haszeldine. His research interests are in insect/insect/plant interactions, including the identification of semiochemical components and studies of secondary plant metabolism leading to molecular genetic targets and a practical contribution in chemical identification. The long term objective is to develop pheromones and other semiochemicals for new methods of pest control.

Among his many honors, Dr. Pickett is a Fellow of the Royal Society of Chemistry and a Fellow of the Royal Entomological Society. In 1991 he gave the Distinguished Lecture in Life Sciences at the Boyce Thompson Institute for Plant Research at Cornell University, and he served as the Alfred M. Boyce Lecturer at the University of California, Riverside in 1993. He is a member of the American Chemical Society; Chairman of the Advisory Committee for the School of Applied Chemistry at the University of North London; and on the Editorial Board of the Journal of Chemical Ecology. He received a D.Sc. from the University of Nottingham in 1993.



Dr. Pickett is a past Councillor of the ISCE. He is British, married, and has two children. His presence at ISCE annual meetings is characterized usually by being the center of lively discussions early in the mornings and playing the trumpet late in the evenings.

### 1994 ISCE BALLOT

ISCE Vice President/President-Elect

John A. Pickett

Other \_\_\_\_\_