Symbiosis, 10 (1990) 189–195 Balaban, Philadelphia/Rehovot

Forthcoming Events

August 5–9 Kingston, Ontario Canada	2nd International Symposium on Inorganic Carbon Utilization in Photosynthetic Aquatic Organisms Queen's University Contact: Dr. David H. Turpin, Dept. of Biology Queen's University, Kingston, Ontario, Canada K7L 3N6
August 5–10 Umeøa, Sweden	7th Congress of the Federation of European Societies of Plant Physiology , Contact: 7th Congress of FESPP, Prof. Gunnar Öquist, Dept. of Plant Physiology Univ. of Umeøa, S-901 87 Umeøa, Sweden Tel. 4690166963, Fax 4690166676 Telex 54005 UNIV UME
August 1–11 Montreal, Canada	International Union of Forestry Research Organizations, 19th World Congress Montreal. "Science in Forestry" Contact: David K. Lemkay, Sec., 19th IUFRO World Congress 19th IUFRO World Congress, Box 1900 Montreal, Quebec H2Y 3L9
August 12–15 Quebec, Canada	 30th Annual Meeting, Phytochemical Society of North America, Université Laval Contact: Dr. Murray B. Isman, Dept. of Plant Science University of British Columbia, Vancouver, B.C. V6T 2A2 Canada, Tel. (604) 228-4384, Fax (604) 228-6394
August 12–18 Strasbourg, France	Symposium on Genetics of Industrial Microorganisms (6th Annual) Contact: Societé Française de Microbiologie Cedex 15, France, Tel. (1) 45 68 81 79
August 21–24 Bangkok, Thailand	International Conference on Biotechnology and Environmental Science: Molecular Approaches Contact: Dr. Skorn Mongkolsuk, Secretary General Chulabhorn Research Institute, c/o Dept. of Biotechnology, Faculty of Science, Mahidol University Rama VI Rd., Bangkok 10400, Thailand, Fax 66-2-246-3026

August 26–31 Windsor, Ontario Canada	Triennial International Symposium on Biodeterioration and Biodegration (8th) Contact: Mary Hawkins, Secretariat-Biodeterioration 8 10657 Galaxie, Ferndale, MI 48220-2133 Tel. (313) 544-0042, Fax (313) 544-3059
August 26–31 Berlin, FRG	International Congress of Virology (8th) Contact: Dr. K.O. Hebermehl, Chairman, Congress Committee, DER-Congress, Congress Organisation, Augsburger Strasse 27 D-1000 Berlin 30, FRG Tel. (030) 24-6011, Fax (030) 213-6982
Aug. 28-Sept. 3 Regensburg, FRG	The Fourth International Mycological Congress (IMC IV) Contact: Prof. A. Bresinsky, Institut für Botanik Universität Regensburg, Universitätsstrasse 31 Postfach 397, 8400 Regensburg, FRG Tel. (0941) 9431 3108, Telex 65658 unire d
August 27–29 Lublin, Poland	2nd International Symposium: Molecular and Physiological Aspects of Plant Peroxidases University of Lublin, Poland Contact: Dr. Jerzy Lobarzewski, Dept. of Biochemistry The University of Mario Curie-Sklodowska 20-31 Lublin 41, Poland
September Beijing, China	3rd International Exposition and Symposium on Biotechnology and Life Sciences: Biotech Expo 90 Contact: Commedia-CICS Ltd, 22/F, Sing Po Building 101 King's Road, North Point, Hong Kong Tel. 5-716039, Fax 852-8070219
Aug. 27–Sept. 1 Florence, Italy	23rd International Horticultural Congress Contact: Prof. E. Baldini, XXIII IHC Scientifi cCommittee, c/o Società Orticola Italiana Via Donizetti 6, 50144, Firenze, Italy
Aug. 28-Sept. 3 Regensburg, FRG	The Fourth International Mycological Congress (IMC IV) Contact: Prof. A. Bresinsky, Institut für Botanik Universität Regensburg, Universitätsstrasse 31 Postfach 397, 8400 Regensburg, FRG Tel. (0941) 9431 3108, Telex 65658 unire d
September Dublin, Ireland	The Impact of Advances in Recombinant DNA Technology on Industrial Microbiology Contact: Dr. Crawford S. Dow, Meetings Secretary, Dept. of Biological Sciences, Univ. of Warwick Coventry CV4 7AL, UK

FORTHCOMING EVENTS

September 2–7 Florence, Italy

September 3–6 East Anglia

September 3-7 Stockholm, Sweden

September 7-8 Sask, Canada

September 11-13 Univ. of Aberdeen Scotland

September 9–14 Interlaken Switzerland

September 16-21 Glasgow, Scotland

September 16–23 Milano, Italy 3rd European Congress on Cell Biology Contact: Organizing Secretariat OIC Incentive, Viale Majno, 21, 20122 Milano, Italy

9th John Innes Symposium: Molecular & Cellular Basis of Pattern Formation

Contact: Symposium Secretary, John Innes Institute Colney Lane, Norwich, Norfolk, NR4 7UH, UK Tel. (0603) 52571, Fax (0603) 56844

Conference on Aerobiology (4th International). Contact: 4th International Aerobiological Conference Konferensservice AB, Box 4037, S-171 04 Solna, Sweden

Seed Oil Modification — A Plant Biotechnology Saskatoon, Sask Contact: Dr. David Taylor, PBI, NRC, 110 Gymnasium Road Saskatoon, Sask, S7N 0W9

Genetics and Molecular Biology Physiology & Biochemistry: Regulation of Transcription in Prokaryotes Contact: Dr. Crawford S. Dow, Meetings Secretary, Dept. of Biological

> Sciences, Univ. of Warwick Coventry CV4 7AL, UK

5th International Symposium on the Molecular Genetics of Plant-Microbe Interactions
Contact: Dr. Hauke Hennecke, Mikrobiologisches Institut, Eidgenössische Technische Hochschule ETH-Zentrum, CH-8092, Zürich, Switzerland Fax 41-1-252.96.13, Telex 81.73.79 ETHHG CH

International Conference on Acidic Deposition: Its Nature and Impacts Contact: Secretariat, Acidic Deposition '90, CEP Consultants Ltd. 26-28 Albany Street Edinburgh EH1 3QH, Scotland

European Congress on Cell Biology Contact: Prof. Marina Camatini, Dept. of Biology University of Milan, via Celoria 26 20133 Milano, Italy

September 16–22 Osaka, Japan	International Union of Microbiological Societies (IUMS) Congress: Bacteriology and Mycology Contact: Dr. Y. Takeda, Dept. of Microbiology Kyoto University, Konoe-cho Yoshida Sayko-ku, Kyoto 606, Japan Tel. 81-75-753-4441, Fax 81-75-753-446
September 22–27 Ithaca, NY	4th International Workshop on Plant Mitochondria Boyce Thompson Institute for Plant Research Cornell Plant Science Center, Cornell University Contact: David Stern, Maureen Hanson, Elizabeth Earle
September 24–29 Poznon, Poland	XIII Conference on Isoprenoids Contact: XIII Isoprenoid Conference c/o Inst. of Organic Chemistry Polish Academy of Sciences, ul. Kasprzaka 44, 01 224 Warsaw, Poland
September 24–29 Queensland, Australia	9th Australian Biotechnnology Conference Contact: The Secretary, Australian Biotechnology Conference, P.O. Box 78 St. Lucia, Queensland 4067, Australia
September 25–29 Ibadan, Nigeria	African Association for Biological Nitrogen Fixation (4th Conference) Contact: Dr. K. Mulongoy, IITA, Oyo Road, PMB 5320, Ibadan, Nigeria, Tel. 400 300/400 314
October 1–2 Zermatt Switzerland	International Conference on Continuous Bioprocesses for Proteins and Fine Chemicals Contact: Conference Secretariat, A. Gossweiler c/o LONZA AG, 3930 Visp, Switzerland
October 1–4 Barcelona, Spain	 4th International Conference on Environmental Contamination Contact: Secretariat, 4th Int. Conference on Environmental Contamination, CEP Consultants Ltd., 26-28 Albany Street Edinburgh EH1 3QH, UK
October 6–8 Ithaca, NY	6th Crucifer Genetics Workshop Contact: Conferences Services, Cornell University Box 3, Robert Purcell Union, Ithaca, NY 14853 Tel. (607) 255-6290

FORTHCOMING EVENTS

October 7-8 International Congress on Microbially Influenced Corrosion Contact: UT Conferences, P.O. Box 2648, Knoxville, TN 37901 Knoxville, TN Tel. (615) 974-0250, Fax (615) 974-0264 October 16-19 International Symposium on Ecological Indicators Miami Beach, FL Contact: Janet McDonald, Kilkelly Environmental Associates, P.O. Box 31265, Raleigh, NC 27622 Tel. (919) 781-3150 October 21-30 NATO Advanced Study Institute on Individual Cell and Particle Analysis: Multidisciplinary Applications to Naples, Italy Oceanography. Acquafredda di Maratea (near Naples) Contact: Dr. Serge Demers, Maurice Lamontagne Institute Fisheries and Oceans, P.O. Box 1000, Mont-Joli Quebec, Canada G5H 3Z4 Tel. (418) 775-6521, Fax (418) 775-6542 International Symposium on Industrial Biotechnology November Contact: Dr. Padma Sridnar, Convenor Hyderabad, India Department of Microbiology, Osmania University Hyderabad 500 007 (A.P.), India Central American Congress of Microbiology December 3-9 San Pedro Sula, Honduras Honduras Contact: Dr. Edmundo R. Poujol, Apdo Postal 773, Tegucigalpa, Honduras, Central America Anniversary Meeting for Plant Pathology December 12-14 Contact: Dr. Richard Shattock, BSPP Program Secretary Bath, UK University College of North Wales, Bangor, Gwynned, UK Chemotaxis/Phototaxis December 17-19 Contact: Dr. Crawford S. Dow, Meetings University of York, UK Secretary, Dept. of Biological Sciences, Univ. of Warwick Coventry CV4 7AL, UK

1991

March 10-14 Raleigh, NC Symposium on Plant Breeding in the 1990s Contact: H.T. Stalker, Chairman, Crop Science Box 7629, North Carolina State, Raleigh, NC Tel. (919) 737-3281, Telex 9100000740(NCP UQ) dialcom 157-AGS1758

April 15–19 Buenos Aires Argentina	Latin-American (11th) and Argentine (6th) Congress on Microbiology, Buenos Aires Contact: Association Latinoamericana de Microbiologia Secretaria, Bulnes 44, PB-B, 1176 Buenos Aires, Argentina, Tel. (54-1) 659-5459
April 16–18 Swansea, Wales	British Society for Plant Pathology Contact: Program Secretary: Dr. R.C. Shattock School of Biological Sciences, University College of North Wales, Bangor, Gwynned LL57 2UW Tel. (0248) 351151, Telex 61100, Fax 0248 361429
June 24–28 Montreal	The 11th Congress of the International Society for Human and Animal Mycology Contact: JPdL Multi Management, 1410 Stanley, Suite 609 Montreal, Quebec, Canada H3A 1P8
June 30-July 5 Queensland	Australian Society of Microbiology, Annual Meeting Gold Coast, Queensland, Australia Contact: Dr. D. Moriarty, Chairman, CSIRO, P.O. Box 120 Cleveland 4163, Australia
August 4–9 Jerusalem, Israel	 15th International Congress of Biochemistry Contact: 15th IUB Congress, P.O. Box 50006 Tel Aviv 61500, Israel Tel. 972-(3)-654571, Telex 341171 KENS IL. Fax 972 3655674, Electronic Mail I.T.T. Diualcom — 05:GLU 150 or BITNET: BNLITAUR at Weizmann
August 5–8 Lappeenranta Finland	Federation of European Microbiological Societies: Contact: Dr. Timo Korhonen, University Helsinki Dept. General Microbiology, Mannerheimintie 172, SF-00280, Henski, Finland
August 18–22 St. Louis, MO	American Phytopathological Society (83rd Annual) Contact: The American Phytopathological Society 3340 Pilot Knob Rd., St. Paul, MN 55121 Tel. (612) 454-7250
October 6–12 Tucson, Arizona	 3rd International Congress of Plant Molecular Biology Contact: ISPMB, Woo Wester, Conf. Consultant 2934-1/2 Beverly Glen Circle, Ste 383, Los Angeles, CA 90077
November 17–22 Jerusalem, Israel	International Symbiosis Congress Contact: Prof. Margalith Galun, Symbiosis Research Laboratory, Dept. of Botany Tel Aviv University, Tel Aviv 69978, Israel Tel. 03-5459163, Fax 972-3-5413752 Telex 342171 VERSY IL, BITNET EEEM@TAUNOS

FORTHCOMING EVENTS

1993

August/September Tokyo, Japan August 23-27 Aug. 28-Sept. 3 International Botanical Congress (15th)

Nomenclature Session Botantical Congress, Tokyo, Dept. of Botany General Session Contact: Secretariat, XV International Faculty of Science The University of Tokyo, 7-3-1 Hongo Bunkyo-ku Tokyo 113, Japan

INSECT ENDOCYTOBIOSIS: MORPHOLOGY, PHYSIOLOGY, GENETICS, EVOLUTION

EDITED BY

WERNER SCHWEMMLER

Professor of Endocytobiology Institute of Plant Physiology Cell Biology and Microbiology Free University of Berlin D-1000 Berlin-33 EBG

GEORGE GASSNER Research Geneticist/Leader Department of Insect Biochemistry Agricultural Research Service, USDA Faroo, North Dakota

Index. c. 256, 7 × 10, ISBN-0-8493-6404-3 Catalog No. 6404X2...Approx., U.S.\$ 129.95/Outside U.S. \$153.00 CRC PRESS, INC., 2000 Corporate Blvd., N.W., Boca Raton, Florida 33431

This book is a collection of contributions from leading scientists in the field of symbiosis research outlining the present status of endocytobiosis studies on the most important group of insects. Emphasis is on the results of experimental symbiosis research on the morphology, physiology, and genetics of selected insect groups. Insights provided by the new interdisciplinary research field of endocytobiology is considered in interpreting experimental results of symbiology. Various insect endocytobionts are discussed with regard to their evolutionary development, reflecting the current status of evolution research. Special attention is given to the phylogenetic and systematic classification of endocytobionts. Also discussed in comparison with the similar system of ticks are all endosymbioses found in roaches, termites, ants, cicadas, coccids, aphids, flies and beetles.

INTRODUCTION, GENERAL ASPECTS: Insect Host Immune System and Endocytobionts: Their Advance Strategies; Vertical and Vector-Borne Transmission of Insect Endocytobionts and the Evolution of Benignity; Insect Endocytobiosis as a Model System for Egg Cell Differentiation

SPECIAL INSECT SYSTEMS: Endosymbiosis of Ants with Intestinal and Salivary Gland Bacteria; Termite Endosymbiosis;

Blattid Endocytobiosis: In Vitro Tissue Culture Model; Endocytobiosis of Leafhoppers with Prokaryotic Microorganisms; Biochemical and Molecular Aspects of the Aphid Endocytobiosis Coccoidea Endocytobiosis; Endocytobiosis in Coleopterea: Biological, Biochemical, and Genetic Aspects; Dipteran Endocytobionts

A COMPARABLE SYSTEM: Interactions between Rickettsial Endocytobionts and their Tick Hosts

SOCIAL INSECTS

An Evolutionary Approach to Castes and Reproduction

EDITED BY

W. ENGELS, University of Tübingen

1990. 41 Figs. 12 Tabs. V, 265 pages. 525 g. Hardcover DM 89.00 Berlin-Heidelberg-New York-London-Paris-Tokyo-Hong Kong: Springer-Verlag 3-540-50812-0

Please order through your bookseller or from: Springer-Verlag, Heidelberger Platz 3, D-1000 Berlin 33

This comprehensive multi-author volume introduces in the modern understanding of the fascinating world of insect sociality. These highly complex non-human societies have evolved impressive solutions for many problems of social life.

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1990 MEETING OF THE AMERICAN SOCIETY OF ZOOLOGISTS with the AMERICAN MICROSCOPICAL SOCIETY, ANIMAL BEHAVIOR SOCIETY THE CRUSTACEAN SOCIETY, INTERNATIONAL ASSOCIATION OF ASTACOLOGY AND THE SOCIETY OF SYSTEMATIC ZOOLOGY

Marriott Rivercenter San Antonio, Texas December 27-30

> Call for Papers: April 1990 Abstract Deadline: August 1, 1990 For Poster or Oral Papers

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Animal Immunity: Biomarkers for Assessment of Risks from Environmental Xenobiotics

Amphibian Metamorphosis

The Compleat Crab: Physiological Ecology of Everyday Life and Special Events

The Evolution of Viviparity in Vertebrates

Life History and Evolution in Uncertain Environments

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Animal Care and Use Committees in Zoological Research Departments (ASZ) History of Carcinology (TCS)

SPECIAL SESSIONS

Biologists and the Media

The Process of Publishing Papers

Improving Visual Communications in Science: Posters, Slide Presentations, and Quantitative Data Displays

SPECIAL EXHIBIT

Nature in the New World: An Exhibition of Paintings and Photographs

Meeting Hosted by Trinity University and Univ. of Texas Health Science Center, Thomas L. Koppenheffer and Mary K. Vaughan, Co-Chairpersons of the Local Committee

For more information, contact:

Mary Adams-Wiley, Executive Officer, American Society of Zoologists, 104 Sirius Circle, Thousand Oaks, California 91360 Phone: (805) 492-3585 • Fax: (805) 492-0370



SAN ANTONIO 1990

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International Symbiosis Congress

Jerusalem, November 17-22, 1991

The program will be arranged to encourage comparative discussions in different symbiotic systems and is therefore planned according to topics rather than types of symbiosis. There will be plenary lectures, parallel symposia, workshops, poster sessions and commercial exhibits. Posters will remain on display throughout the Congress.

Topics

Nutritional interactions, carbon and nitrogen metabolism Transport mechanisms The host-symbiont interface Mutual regulatory and morphogenic effects and structural coadaptation Regulation of symbiont population Recognition and specificity Molecular genetics of symbiotic interactions Symbiosis and genetic exchange Trophic links, recycling and conservation Transmission of symbionts Symbiosis and development of new structures and functions Evolutionary consequences of symbiosis Ecological adaptations Ecology of the rhizosphere Behavioral symbiosis Symbiotic virus-host relationships

Workshops

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Contact: Prof. M. Galun Department of Botany The Dr. George S. Wise Faculty of Life Sciences Tel Aviv University', Ramat Aviv, Tel Aviv 69978 Tel. 972-3-5459163 Fax 972-3-5413752 Bitnet EEEM @ TAUNOS