sip NEWSLETTER

society for invertebrate pathology

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November 1992

HEIDELBERG HOSTS OVER 400 PARTICIPANTS AT THE 1992 25TH ANNUAL MEETING

The 25th Annual Meeting of the Society of Invertebrate Pathology was held at the University of Heidelberg, Germany (August 16 to 21, 1992) and organized jointly by the Biological Control Institute of the Federal Research Centre for Agriculture and Forestry, Darmstadt (Jürg Huber, Gisbert Zimmermann), by the University of Heidelberg, Institute for Zoology (Wolfgang Schnetter), and by the German Mosquito Control Association, KABS, Ludwigshafen (Norbert Becker).

The scientific sessions were held in the Zoology Building, the Chemistry Building and the Geology Building of the University in the "Neuenheimer Feld", on the northern outskirts of the city. Since the University of Heidelberg, as most other universities, has hardly any on-campus housing for the students, there were no dormitories available for the participants of the meeting. Therefore, the registrants had to be accommodated individually, in local hotels.

The meeting was extremely well attended. About 400 participants from 35 countries registered (not including companions). Approximately 50% of the participants were non-SIP members. The latter came mostly from Europe, in many cases, members of the IOBC/WPRS Working Group on Insect Pathogens and Entomopathogenic Nematodes.

314 scientific papers were accepted, including 12 late posters. In order to cope with the large number of submitted papers, up to six sessions were run in parallel.

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CREDIT CARD PAYMENT OF DUES IS INSTITUTED

Your 1993 dues notice provides you with the option to pay your dues by either MasterCard or Visa credit card. This option will make payment of dues much easier and less expensive for members living outside the USA. Please note, however, that the member will be charged a small fee for this service, and that foreign currency transfer, if applicable, will also be charged to the member. HOWEVER the foreign currency transfer fee should be much less expensive than transfer of a cash payment into U.S. dollars. Because we are aware that not all members have access to MasterCard or Visa, we are retaining the Central Dues Collectors for at least one more year.

SIP DIRECTORY IS PLANNED

We plan to include a Directory of SIP members, with telephone and fax numbers, in the first Newsletter of 1993. This directory should be very useful for all of us, and is the first benefit resulting from the dues increase. IN ORDER TO ASSURE THAT YOU ARE LISTED IN THE DIRECTORY AND RECEIVE THE DIRECTORY YOU MUST PAY YOUR 1993 DUES PROMPTLY. Your 1993 dues notice also provides you with an opportunity to make certain that your address, telephone number, and fax number are current and correct. SO-- RETURN YOUR 1993 DUES PAYMENT WITH YOUR CORRECT INFORMATION PROMPTLY!

In addition, each morning the meeting started with a plenary session, which brought everybody together at least once a day, to give the participants a chance to meet with their colleagues in other fields of research. 28 papers were submitted for the students' competitions.

The scientific program was comprised of 13 symposia, covering many aspects of invertebrate pathology. Most symposia were represented by a specific paper of more general nature in one of the plenary sessions, giving an overview of the symposium's topic.

The Microbial Control and Microsporidia Divisions had workshops on Monday evening. On Tuesday, the Annual Business Luncheon of the SIP Divisions was held.

The social program included a mixer on Sunday evening at the Penta Hotel, a jubilee speech in the Aula of the Old University, in the center of the town on Tuesday evening, and a boat trip on the Neckar on Wednesday. The banquet on Thursday evening took place at the restaurant "Molkenkur", situated high above Heidelberg and reached by cable car directly from the center of the Old Town. The traditional 5K-race was held on Wednesday morning.

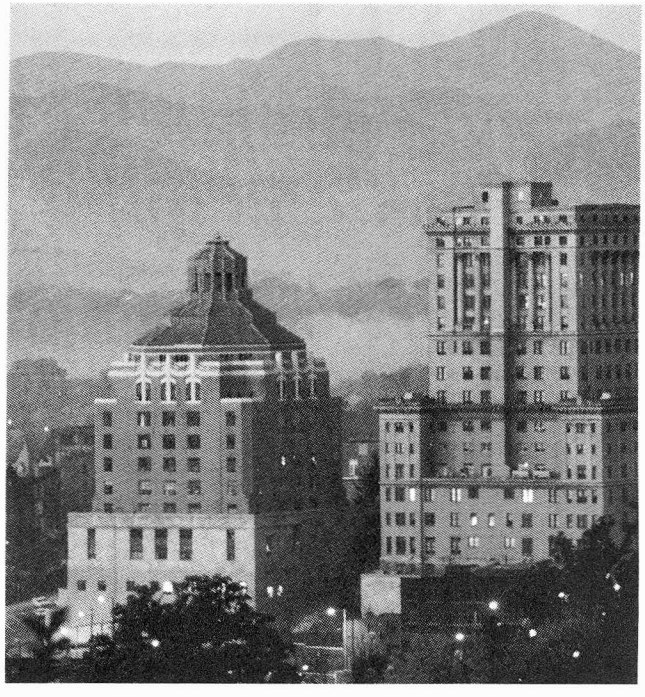
The registration fee was set at US$ 150 for members, US$ 175 for non-members, US$ 95 for students, and US$ 75 for companions. Since we had to commit ourselves for the costs of the mixer and the boat trip, these costs were included in the registration fees.

Donations, totalling approximately US$ 12,000 were received from the following industrial organizations: ABBOTT LABORATORIES, BASF, BAYER, BECKER, BIOSYS, CIBA-GEIGY, CROP GENETICS INTERNATIONAL, ECOGEN, ENTOTECH, MYCOGEN, NOVO, PLANT GENETIC SYSTEMS, and SANDOZ. Briefcases were kindly supplied by HOECHST.

Jürg Huber, Chair, 1992 Organizing Committee

1993 ANNUAL MEETING, GREAT SMOKIES HILTON RESORT AND CONFERENCE CENTER
Asheville, North Carolina, August 1-6, 1993

The Annual Meeting of the Society for Invertebrate Pathology for 1993 will be held at the Great Smokies Hilton Golf Resort and Conference Center in the highland resort city of Asheville, N.C. Lying in the hub of the Great Smoky and Blue Ridge Mountains, Asheville is actually near the center of the Southeastern United States in



Downtown Asheville, North Carolina

western North Carolina, at the intersection of I-40, I-26 and the Blue Ridge Parkway. The city has its own airport serviced by four major carriers (Delta, American, U.S.Air and United). At over two thousand feet above sea level, Asheville has a very inviting climate and a beautiful natural setting. The Hilton Resort and Conference Center is located on 120 attractively landscaped acres nestled in the Appalachians, framed by the Blue Ridge and Great Smoky Mountains. An 18 hole, 5000 yard, par 70 golf course surrounds the hotel along with 4 indoor and 4 outdoor tennis courts, 2 swimming pools and a volleyball court. Holding our meeting at this hotel will enable us to share common meeting and housing facilities similar to the 1985 meeting which was held at the Holiday Inn in Sault Ste. Marie, Ontario. Arrangements have been made for reasonable room rates, details of which will be made available later.

The meeting will be highlighted by two special events. On Wednesday afternoon we will visit Chimney Rock Park, a privately owned scenic attraction offering a 26-story elevator ride through solid granite to the Chimney Rock. Located 26 miles from Asheville, the Rock is a towering monolith with a 75 mile view of Lake Lure and Piedmont region beyond. Three scenic trails lead to Hickory Nut Falls. After "climbing" the Rock (the elevator is for the light-hearted), we will participate in an old fashioned pig pickin' barbecue at a covered picnic pavilion located near the base of the Rock. On Thursday evening,

the Banquet will be held in the Deerpark Restaurant on the Biltmore Estate in Asheville, after which we will enjoy a private candlelight tour of the Biltmore Estate House itself. The House is a spectacular 250 room French chateau built in 1895 by George W. Vanderbilt and is the largest privately owned house in America. The house is filled with priceless art objects and antique furnishings. Lavish gardens and a winery are also present on the Estate. Dessert and coffee will conclude this memorable evening at the Stable Cafe situated in the Biltmore's original stable building.

Specific program details have not been formulated but we welcome suggestions for symposia and/or volunteers willing to organize a session. The meeting will begin with registration and a mixer on Sunday, Aug. 1 and will conclude at noon on Friday, Aug. 6. Because Asheville is at the hub of the Blue Ridge and Great Smoky Mountains, participants are encouraged to bring their families and visit the many attractions this area has to offer either before or after the meeting itself. Some of the nearby attractions include: Carl Sandburg's home, the Cherokee Indian Reservation, Craggy Gardens, Grandfather Mountain, Linville Caverns, Linville Gorge/Falls, Mount Mitchell, the Thomas Wolfe Memorial, the Blue Ridge Parkway, and the Great Smoky Mountains National Park itself. Watch for further details in future issues of the SIP Newsletter.

Wayne M. Brooks, Chair
Local Arrangements Committee
(919) 515-3771
James D. Harper, Chair
Program Committee
(919) 515-2746
Department of Entomology, Box 7613
North Carolina State University
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SIP PRESIDENTIAL ADDRESS, 1992. "FAMILY"

After our very successful conference in Holland in 1986, a colleague and new friend from Israel wrote to me. He ended his letter with the line -- "and thank you for introducing me to the wonderful family of SIP." This conference in the beautiful city of Heidelberg is my 20th consecutive SIP meeting. In thinking back over these 20 years, I have come to realize that for many of us, SIP is indeed family. This led me to consider how a Society functions, how a family functions, and how we must regard our professional interactions in many of the same ways, for better or worse, as we regard our family relationships. And so- What does a family do?

First, a family does not choose its members, they choose us, and it is our duty to make a place for them and to provide for them. The welcoming attitude of SIP toward new members, or guests in our house, is one of our finest characteristics. Let us take care to preserve and nurture this wonderful welcoming attitude. At the same time, I suspect most of us have had the experience of being a new in-law, of being excluded from the family jokes, of being an outsider in someone else's family. While we are enjoying the pleasure of seeing old friends again, let us not neglect to include those new members.

A good family also welcomes those who are a bit different from the rest- the uncle who indulges in one too many beers, the young man with long hair who plays guitar with a rock band, the brainy child with her bug collection. Likewise, it is important that the SIP family recognize, nurture, and joyfully include those who are different from the majority of us -- the invertebrate immunologists, the nematologists, the crab and clam pathologists. The excitement and enthusiasm which currently surrounds some aspects of insect pathology and molecular biology should not cause us to become myopic in our interests. This meeting is organized deliberately to bring us together in plenary sessions each morning to permit us to sample the newest and most exciting from all aspects of invertebrate pathology. Let us continue our dialog with our brothers, sisters and cousins in other fields- we can only gain from it.

A family is a functioning unit designed to care for the day-to-day needs of its members. Just as members of a family are responsible for the financial health of a family, we must also feel a responsibility for the financial health of this Society. Recently Council has asked for a doubling of our dues. The overwhelmingly positive response to this request reflected the responsibility felt by our members toward the Society. Just as running a family requires money, so does running a Society. And each is, truly, a non-profit organization, or to state the matter more correctly, the profits are not financial. Nonetheless, both families and SIP function more comfortably, with more foresight and boldness, when a comfortable financial cushion is available to fall back upon. In the case of SIP, our annual meetings have traditionally provided the cushion on which our programs can be built. Although you may not realize it, your attendance at our meetings, your payment of registration fees, and your willing participation in planning and running of meetings, have the result of providing for the Society's future.

And, just as a family relies on the willing hands of its

members for cooking, cleaning, mowing the grass and carrying out the trash, so also does SIP rely on the willing hands of its members to carry out the necessary, but sometimes time-consuming and tedious jobs which are essential to keeping our house in order. In the past two years, your Council has consisted of Don Roberts, Chris Payne, Lerry Lacey, Toshi Iizuka, George Soares, Peter Faulkner, Dudley Pinnock and myself. Your new Council will consist of Chris Payne, Bob Granados, Harry Kaya, Richard Daoust, Bob Anderson, Lerry Lacey, Toshi Iizuka and George Soares. In addition, important committees have drawn upon the time of dozens of members of the Society. Your Newsletter is the result of activities of Mark Goettel and myself. Jürg Huber, Norbert Becker, Gisbert Zimmermann, and Wolfgang Schnetter, along with many others, have invested hundreds of hours in the planning and details of the 1992 meeting which we open today. When you meet these people, be sure to thank them for all their efforts on behalf of the Society, and remember, when you are asked to do a task for the Society, please agree. The benefits are far greater than the time invested. And finally, if you are asked to stand for election to a Society office, please accept this honor and responsibility as well. The last election ballot also included members Terry Couch, Mark Goettel, Clay McCoy, Jürg Huber and Tony Sweeney, who felt loyalty to the Society enough to permit their names to be entered as candidates for an office. Let us thank these members as well.

A family shares joys and sorrows. We gather for weddings and christenings, for graduations, ball games and concerts. We also gather for funerals, and we contribute to the support of a member who is out of work, in ill health, or otherwise in need. Similarly, each of us in this Society should share in the real joy of the spotlight of international attention recently focused on cloning of BT toxin genes, their genetic manipulation, and introduction into other microorganisms and plants. We should be delighted with the increased number of biotechnology firms dealing with microbial insecticides from less than five a decade ago to dozens now world-wide. Rapid developments in mariculture have placed cultured shrimp from Thailand on my table in Arizona, attesting as well to the efforts of pathologists in diagnosing and preventing disease in these operations. Each issue of Current Contents contains several papers describing research using the Baculovirus cloning system -- sometimes we forget that this is, after all, an invertebrate pathogen put to use in expression of hundreds of foreign genes. Components of the invertebrate immune system have been identified with important and novel antibacterial properties. Many new microbial products are under rapid development and are being registered by governmental agencies world-wide. At our Colloquium in England just 10 years ago, a symposium on commercialization of microbial insecticides concluded that, aside possibly from BT, these products had a poor future. How our perspective has changed! As a Society we should share in the joy of these successes, we should be willing to say "Good for you!" to our colleagues, whether or not they are in our own area of interest.

At the same time, the world-wide financial recession has led to closure of companies, layoff of faculty, restriction of grant funds, and the freezing of hires on University faculties and governmental agencies. Not only are our young colleagues unable to find entry-level positions, but established scientists find themselves out in the cold. In my opinion, it is our responsibility to do all that we can to assure that a generation of fine scientists is not lost to invertebrate pathology. Each of us has opportunities to speak up for invertebrate pathology- we serve on grant panels, on editorial boards, on search committees, on University and governmental panels. We are all alumni of degree-granting institutions. Let us speak loudly and often to Department chairs and administrators about the importance of our own field. If the decision is made in your department to hire a molecular biologist, why should it not be a molecular insect pathologist? If a Veterinary Medicine or Fisheries department would not be without a pathologist, why should an entomology or zoology department be without a pathologist? In this age of great emphasis on sustainable agriculture and biological control, why should pathogens be ignored? When nearly all zoology departments teach invertebrate zoology, why should a discussion of the microorganisms controlling those invertebrate populations and the potential and practical utility of those microorganisms be ignored? A family looks out for the future of its young people, its next generation. If we don't speak up for our field, if we don't do our part toward the employment of our colleagues- who will?

If your family is like mine, the telephone is an essential part of your daily lives. A family communicates with each other constantly, on matters small and large. The "telephone" of SIP is its Newsletter. Mark Goettel and I are attempting to make the Newsletter a much more vital and interesting part of the life of SIP. We are interested in using the Newsletter to bring us closer together, by including descriptions of laboratories and companies around the world, by stirring up a little controversy in editorial and invited commentaries, and by informing you of the activities of your colleagues. We are dependant on you to send us your news -- when you are promoted or

retire, get a new job or release a new product, receive a award or learn of a member's death, we need to be informed. If your principle field of interest is invertebrate pathology, why should you not send your news to us as well as to the larger organizations to which you belong? After all, nearly all the people who are interested in invertebrate pathology are members of our Society.

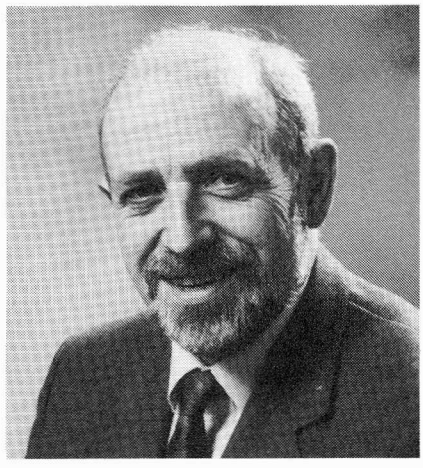
And finally, families have reunions. The SIP annual meeting is, truly, a family reunion. At this reunion we see old friends, share ideas, meet the next generation of bright young people, come up with new ideas and collaborations, and reminisce over the old times. It is always good to remember how we came to be, and who our ancestors were. It is important to remember that the invertebrate pathologists of a generation past were just as intelligent, just as insightful, just as ambitious as those seated here today. For that reason, we have the tradition of the Founder's lecture, honoring one of those past pathologists, and this year we also will hear a special talk on the founding of the Society by one who was there, our old friend Tom Angus. The SIP family includes members from well over 40 countries; where else can you share with such a diverse and interesting group of people? And so we welcome you to the 25th annual meeting of the Society for Invertebrate Pathology, and to the wonderful family of SIP.

Elizabeth W. Davidson, President

SPECIAL FEATURE

YOUR SOCIETY COUNCIL

The Executive Council of the Society for Invertebrate Pathology is responsible for the business activities of the Society, including entering into contracts (such as our recent contract with FASEB), setting sites for future meetings, promoting new activities of the Society, budgeting and dispersal of funds, and making the decisions which hopefully lead to the smooth running of the Society. The officers, their duties, and their terms of office are outlined in the Constitution and By-Laws. The President, Vice-President, Secretary, and Treasurer serve for two years, whereas Trustees serve for four years, with two Trustees being chosen at each election. The Vice-President ordinarily advances to President. The Past-President remains on Council for a further two years. The SIP Council traditionally meets on the Sunday preceding the Annual Meeting, and the results of Council's deliberations are discussed at the Business Meeting during the week as well as being published in the Newsletter. In order to familiarize our members with the operations of the Society, we present a brief introduction to your new Council for 1992-1994.



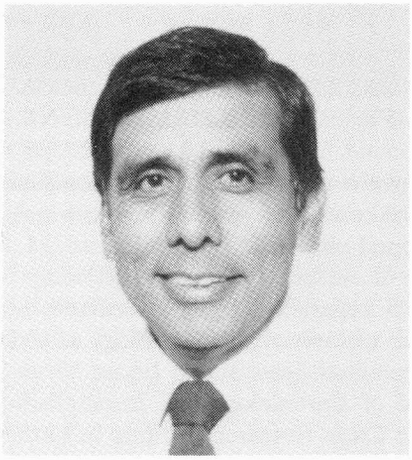
PRESIDENT: CHRIS C. PAYNE.

Chris Payne is an insect virologist interested particularly in biological control of pests in horticultural ecosystems. Chris received the B.A., D. Phil., and M.A. from the University of Oxford, England. Following one year of postdoctoral experience in New Zealand, he joined the NERC Unit of Invertebrate Pathology at Oxford. In 1977 he was appointed head of the Insect Virus Section and later Head of Entomology and Insect Pathology at the Glasshouse Crops Research Institute in Littlehampton. In 1982, Chris was Foundation Fellow at the International Center for Insect Physiology and Ecology in Nairobi, Kenya. He was appointed Head of the Crop Protection Division of the AFRC Institute of Horticultural Research in 1987. Following further changes in the organization of the UK horticultural research he became Chief Executive of Horticulture Research International (HRI) in 1990, and is now based at HRI's headquarters at Wellesbourne, Warwick. He is also Honorary Professor at Warwick University.

Chris has been active in Society affairs since 1977, and was a joint organizer of our IIIrd International Colloquium for Invertebrate Pathology in Brighton in 1982. He also belongs to a number of other professional societies. Chris has served as member of the Editorial Boards for several journals, including Intervirology, Journal of Invertebrate Pathology, Virology, Entomophaga, and Journal of General Virology, and is the founding Editor-in-Chief of Biocontrol Science and Technology.

During his presidency Chris has a number of objectives. These include the need for the Society to retain and

strengthen membership of scientists in special interest groups (e.g., *Bacillus thuringiensis*; molecular invertebrate virology, etc.), as well as those with broader interests in terrestrial and aquatic invertebrate pathology. He is keen to encourage the renewal of close links between the Society and the Journal of Invertebrate Pathology. He aims to continue the improvement in the professionalism of services supplied to members, started by Past-President Betty Davidson. Finally, he sees a need to revise the By-Laws to bring the management of the Society in line with the new contractual arrangements with FASEB.



VICE-PRESIDENT: ROBERT R. GRANADOS

Bob is also an insect virologist, with interests in the molecular basis of viral pathogenesis. He is also interested in applications of insect cell culture to invertebrate pathology. Bob received the B.S. degree from the University of California, Davis, and the M.S. and Ph.D. from the University of Wisconsin at Madison. Bob's professional career has been centered at the Boyce Thompson Institute, where he has held posts of Assistant Entomologist, Associate Virologist, Virologist, and Director of Biological Control and Plant Protection Programs at the Institute. He is also Adjunct Professor at Cornell University, where Boyce Thompson Institute is located, and has been Visiting Professor at the University of Wisconsin and the University of California, Riverside.

Bob has been active in the Society since its inception in 1968, as he is a charter member. He has served on the Program Committee during our meeting at Cornell University, Founders Lecture Committee, Publications Committee, as Secretary of the Division of Microbial Control, and has also served as the Society Treasurer. He has also been active in several other professional societies, including being Secretary and Chairman of Section C and Ce (insect pathology) of the Entomological Society of America. He has served on the Editorial Boards of the Journal of Invertebrate Pathology and Biological Control-Theory and Application in Pest Management.

Bob's goals include supporting the continued growth of the Society as a strong international organization. In particular, he would like to see a strategic plan formulated that would focus on the future financial security of the Society. Also, he will continue to seek greater participation by young scientists in Society meetings and committees.

SECRETARY: RICHARD A. DAOUST

Richard currently holds the position of Director, Field Development at Ecogen, Inc., Langhorne, PA, USA, a biotechnology company involved in the commercialization of microbial pesticides, including bioinsecticides, biofungicides, bionematicides, and bioherbicides. Richard's main interest is in research and development aspects of genetically-improved *Bacillus thuringiensis* based products and of biofungicides for control of powdery mildew and post harvest decay of fruit. Richard received B.S., M.S. and Ph.D. degrees from the University of Massachusetts, Amherst. He has worked for more than 20 years with insect pathogens and has travelled extensively and lived overseas under the auspices of the U.S. Peace Corps and the Boyce-Thompson Institute for Plant Research at Cornell University. Richard is a member of the Microbial Control Division and currently serves on the Founders Lecture Committee.

TREASURER: HARRY K. KAYA

Harry Kaya maintains an interest in general insect pathology, but is most active in research on insect parasitic nematodes. Harry received the B.S. and M.S. degrees from the University of Hawaii, and the Ph.D. from the University of California, Berkeley. Following five years service as Assistant and Associate Entomologist at the Connecticut Agricultural Experiment Station, Harry joined the faculty at the University of California, Davis, where he is Professor of Entomology and Nematology. He has served as Local Arrangements Chairman for the Annual Meeting in 1984 in Davis and on the same committee in 1988 for the San Diego meeting. He was Chair of the New Initiatives Committee and member of the Journal Committee. He has served on the Editorial Board of the Journal of Invertebrate Pathology, as Associate Editor of the Journal of Nematology, and is joint founding Editor of Biological Control, Theory and Application in Pest Management. Harry has also served the Entomological Society of America as Section Ce (insect pathology) Chair.

PAST PRESIDENT: ELIZABETH W. DAVIDSON

Betty maintains an interest in pathogenesis and mode of action of insect diseases, particularly *Bacillus sphaericus* as a pathogen of mosquito larvae, and in safety of microbial pathogens. Betty received the B.S. from Mount Union College and the M.S. and Ph.D. from Ohio State University. She was instructor at the University of Rochester, New York, before joining the faculty at Arizona State University, Tempe, Arizona where she is Associate Research Professor. She has served the Society as Secretary, Local Arrangements Chair for our 1973 meeting in Tempe and our 1991 meeting in Flagstaff, on the Nominating Committee and the Publication Board, and as Chair of the Safety Working Group and the Endowment Committee. Currently she is Newsletter Editor. Her major goals during her tenure as President were to place the Society on firm financial footing and to professionalize our Society management. She is deeply committed to encouragement of young scientists, and to maintaining the international and interdisciplinary nature of the Society.

T. Iizuka, E. Davidson, and G. Soares

CONTINUING TRUSTEES:
TOSHIHIKO IIZUKA AND GEORGE G. SOARES, JR.
(Terms 1990-1994)

Toshi Iizuka received the B.S., M.S. and Ph.D. degrees from Hokkaido University in Japan. Toshi is presently Professor in the Faculty of Agriculture at Hokkaido University, Sopporo, Japan. He has also been visiting researcher at the U.S. Department of Agriculture Laboratory in Beltsville, Maryland and at the Great Lakes Forest Research Center in Sault Ste. Marie, Ontario, Canada. Toshi is interested in the crystal toxins of *Bacillus thuringiensis*. Toshi is also a fine photographer, and has produced most of the photographs from our Annual Meetings which have appeared in recent Newsletters.

George Soares is Director of International at Mycogen Corporation in San Diego, California, where he is responsible for the development and marketing of biopesticide products to world agricultural markets outside the U.S. and Canada. George has been with Mycogen for nine years. He established Mycogen's Entomology Department and *Bacillus thuringiensis* survey group and was Director of Entomology for 5 years. Prior to joining Mycogen he worked at the INRA Station de Recherche de Lutte Biologique, La Miniere, France, the USDA European Parasite Laboratories, Sevres, France, and the University of Florida, Lake Alfred. George received the

B.A. and M.S. degrees from Rutgers University and the Ph.D. from the University of California, Berkeley.

Robert Anderson

L. A. Lacey

NEW TRUSTEES:
ROBERT S. ANDERSON AND LAWRENCE A. LACEY
(Terms 1992-1996)

Bob Anderson represents the interests of our members who work with invertebrates other than insects, as his research interests include comparative immunology and immunotoxicology in molluscs and fish as well as insects. His research often bridges the line between invertebrate and vertebrate immunology. Bob received the B.S. from Drexel University, the M.S. from Hahnemann Medical University and the Ph.D. from the University of Delaware. Bob has been employed previously by the Sloan-Kettering Institute for Cancer Research, Cornell University Graduate School of Medical Sciences, and the U.S. Army. Presently he is Professor at the Chesapeake Biological Laboratory of the University of Maryland. Bob has previously served the Society as Chair of the Membership Committee and as Secretary.

Lerry Lacey is active in foreign exploration for parasites and pathogens of introduced insect pests in his capacity as Research Entomologist for the U.S. Department of Agriculture European Biocontrol Laboratory in Montpellier, France. He recently moved from his post at the U.S.D.A. Japanese Beetle program in the Azores, and previously was employed by the U.S.A.I.D. Vector Biology and Control Project and the U.S.D.A. Laboratory in Gainesville, Florida. Lerry has extensive experience working abroad; in addition to his recent positions he has worked in the Onchocerciasis Program in West Africa and at the Amazon Research Institute in Manaus, Brazil. He received the B.S. from California State University in Turlock and the M.S. and Ph.D. from the University of California, Riverside. Lerry has served the Society in many capacities, including Secretary, Membership Committee Chair, Endowment Committee Chair, Safety Committee Chair, and Secretary and Member at Large of the Microbial Control Division.

MINUTES OF THE 25th ANNUAL
SIP BUSINESS MEETING:
University of Heidelberg, Heidelberg, Germany

The 25th Annual SIP Business Meeting was called to order by President Elizabeth Davidson at 10:54 AM on August 20, 1992. She thanked the organizers of the Annual Meeting for their efforts in producing an enjoyable and scientifically successful meeting. On behalf of the Society, President Davidson expressed her gratitude for the financial support of the various commercial contributors to the Heidelberg meeting. Prior to committee and division reports she announced that payment of SIP dues would now be possible with credit cards (Visa and MasterCard).

Reports of the program committees for the Heidelberg and Ashville meetings, and the annual reports of the Meetings Board, Treasurer, Newsletter Editor, SIP Divisions and Committees were presented and will be published in the Newsletter in conjunction with the minutes. The minutes will, therefore, be reported here in condensed format.

Jürg Huber reported that approximately 400 participants attended the meeting with 50 registered companions. There were 340 papers (28 student papers). He thanked the other organizers (Drs. Zimmermann, Becker, and Schnetter) and the numerous volunteers that had helped to make the meeting a success.

James Harper provided extensive background on the 1993 meeting in Asheville, N.C. slated for August 1-6 at the Great Smokies Hilton Resort and Conference Center. Future meeting sites after the 1993 meeting were reported by Brian Federici. The 1994 International Colloquium for Invertebrate Pathology (VIth ICIP) will be held in Montpellier, France and the 1995 annual meeting will be held in Ithaca, New York. The location of the 1996 meeting will be either Banff, Alberta, Canada or Barcelona, Spain.

The acting Treasurer, Don Roberts reported on the financial status of the Society. Full financial details follow in the Treasurer's published report.

The report of the Teller's committee and results of the election were presented by Jim Harper. Chris Payne is the President for the 1992-1994 term; Robert Granados was elected Vice-President; Richard Daoust was elected as Secretary; Harry Kaya was elected Treasurer and Lerry Lacey and Robert Anderson were elected as Trustees. The dues increase and the nominations of Drs. Phyllis Johnson and Keio Aizawa for Honorary Membership were approved by the membership.

The report of the business meeting of the Microbial Control Division was presented by the Division chair, Mickey McGuire. The division has recently produced a color slide atlas of microbial control and a directory of businesses involved in the production of microbial control agents. Jeff Lord was voted on as the new member at large. There was discussion on the development by the division of a document on procedures for the assay of microbial control agents. Wendy Gelernter will chair a committee looking into the subject matter, scope and production of such a document.

The Microsporida Division report was presented by Tony Sweeney. Ann Cali will serve as the new chair for the next year.

Clay McCoy presented the report of the Founder's Lecture Committee. The new chairman for the committee will be Tony Sweeney.

Reports for the Membership Committee, Endowment Committee and Newsletter were presented by Wendy Gelernter, Lerry Lacey and Betty Davidson, respectfully. Betty Davidson reported that the relationship with the FASEB home office of SIP is relatively smooth and that problems are being resolved. Just Vlak reported that funds that are still in the IVth ICIP account will be transferred to SIP in the near future.

President Davidson reported that nominations for honorary membership for Denis Burges and Howard Dulmage were received and approved by the executive council. Their names will appear on the next ballot for approval by the membership.

Several issues involving SIP and the Journal of Invertebrate Pathology were discussed. Chris Payne reported feedback from SIP is welcomed by the editor, Carol Reinisch and that new associate editors will be appointed to assist with editorial responsibilities. John Vandenberg suggested that Dr. Reinisch be invited to our meetings.

John Briggs reported on the windfall profits that have been realized at various meetings. He felt that better budgetary planning within the Society was necessary to ensure that income targets were met while avoiding unduly high registration fees for annual meetings.

President Davidson then passed the gavel to the new President of SIP, Chris Payne. President Payne thanked the outgoing President and Council and outlined his personal objectives for his term of office. 1.) He stated that we need to consolidate our past achievements including the new relationship with FASEB; 2.) we also need to retain and cover the broader interest in the field of invertebrate pathology as well as to retain the interest of members in certain groups (i.e. B.t., virology); 3.) encourage the development and recognition of invertebrate pathology in general; 4.) build the membership; and 5.) revise the by-laws of the Society to come into line with current operations. The meeting was adjourned at 12:13 PM by incoming President Payne.

L.A. Lacey, Secretary, SIP.

J.T.M. Flipsen, J.A. Jehle and F. Tillemans

THREE STUDENTS AWARDED PRIZES FOR OUTSTANDING PAPERS AT THE HEIDELBERG MEETING

Twenty-eight papers and posters were entered in the Student Paper competition at the 25th Annual Meeting in Heidelberg. The judging committee, chaired by John Briggs, were kept busy right up to the last moments before the banquet in evaluating their papers. As usual, the students presented the committee with difficult decisions as they delivered papers of high quality. Final winners

were: "Risk assessment on genetic engineering of baculoviruses: *in vivo* acquisition of transposable host DNA into the genome of granulosis viruses", presented by J.A. Jehl of the Institut fur Biochemie und Pflanzenvirologie, Braunschweig, Germany; "Intrinsic variability in the entomogenous, hyphomycete fungus *Metarhizium anisopliae*", presented by F. Tillemans of the Rothamsted Experimental Station, Harpenden, Herts, UK; and the poster "Primary infection in *Spodoptera exigua* larvae using a recombinant *Autographa californica* nuclear polyhedrosis virus" presented by J.T.M. Flipsen of the Department of Virology, Wageningen Agricultural University, Wageningen, The Netherlands. Congratulations to these students and their professors!

NATIONAL BIOLOGICAL CONTROL INSTITUTE

In 1990, the Animal and Plant Health Inspection Service (APHIS) of the U.S. Department of Agriculture (USDA) formed the National Biological Control Institute (NBCI) to promote, facilitate, and provide leadership for biological control. Its staff include Dr. Ernest Delfosse, Director; Dr. Michael Oraze, Technical Coordinator; Dr. Robert Flanders, Technical Consultant; and Drs. Cliff Moran and Dan Girling, Visiting Scientists.

The NBCI has established a 12-member User Advisory Panel composed of representatives from private enterprise, administrators and renown scientists. Two SIP members, Dick Soper and Joe Maddox are included on this Panel. The panel ensures feedback from client groups and maximises representation from Government, University and Industry.

NBCI promotes biological control by bringing biological control to the attention of the media, environmental groups, scientists, administrators, elected representatives, and the general public. It acts as an objective advocate for biological control. NBCI facilitates biological control by providing technical advice and information, developing computerized data bases and communication networks, initiating, coordinating and monitoring projects and supporting the needs of cooperators.

NBCI provides leadership for biological control. Major recent thrusts include developing a Biological Control Philosophy for APHIS (see below), building a national and international biological control network, revising regulatory guidelines in conjunction with biological control scientists, resolving conflicts, and participating in strategic planning at all scientific and administrative levels.

The stategic goals of NBCI are to protect and improve agriculture and the environment through implementation of biological control, often as the key strategy of IPM programs.

For more information on NBCI or about biological control contact:

National Biological Control Institute
USDA, APHIS, Office of the Administrator
Room 538, Federal Building
6505 Belcrest Road
Hyattsville, MD 20782, USA
Tel. 301-436-4329; Fax. 301-436-7823

APHIS ADOPTS A BIOLOGICAL CONTROL PHILOSOPHY

The United Stated Department of Agriculture Animal and Plant Health Inspection Service (APHIS) believes that modern biological control, appropriately applied and monitored, is an environmentally safe and desirable form of long-term management of pest species. It is neither a panacea nor a solution for all past problems. APHIS believes that biological control is preferable when applicable; however, we also recognize that biological control has limited application to emergency eradication programs. Whenever possible, biological control should replace chemical control as the base strategy for integrated pest management.

In support of this philosophy, APHIS will develop regulations that facilitate the release of safe biological control agents, while maintaining adequate protection for American agriculture and the environment. The regulations will give clear and appropriate guidance to permit applicants, including specific types of data needed for review and environmental analysis and specific time limits for Agency review. They will be updated as the science progresses. APHIS believes that public input on procedures to approve the release of biological control agents is a desirable and necessary step, and will strive to gather input from scientists, industry, and the public.

EDITORIAL

Mark Goettel, Assistant Newsletter Editor

WHAT DOES ATTITUDE HAVE TO DO WITH MICROBIAL CONTROL ANYWAY?

SIP members believe in biological control and the role that pathogens can play in this regard. We are usually very

excited in development of a pathogen as a potential microbial control agent. Unfortunately, this enthusiasm often wanes when we are confronted with a deluge of regulatory constraints as we attempt preliminary field trials. We are quickly disillusioned with the number of requirements to satisfy regulators. Many start wondering whose side the regulators are on anyway.

The problem I believe stems from attitude. The pathologist's attitude is usually, "Hey, I've got a very safe pathogen here that I've worked with all my life and I think its got real potential. Give me a break. What's all the fuss about? Why should I have to do all this tedious safety testing myself?" Unfortunately the regulatory attitude was the exact opposite: "I've got to protect the environment and the public. How do I know it won't be detrimental. Prove to me it isn't. No, I'm still not convinced. More testing is required."

The result of these two conflicting attitudes has been very detrimental (and in many cases disastrous) to the development of microbial control of pests. Some countries do not require any regulation of microbial control agents (e.g. Austria and Denmark) while others have yet to approve application of any viable pathogen including Bt (i.e. Germany). The Society has attempted to change this regulatory climate through its Safety Committee and through events such as the Panel Discussion, "Evaluation of risks and regulatory constraints in the commercialization and importation of microbial control agents," with limited success.

What we really need is a change in attitude. We need an agency to actively promote biological control and make people (including regulators) realize the tremendous potential therein. Regulators must realize that risk versus benefit must be weighed when making regulatory decisions and that the benefits of microbial control usually far outweigh risk. Are we dreaming? Not so. In this issue we bring you an article on the National Biological Control Institute (NBCI). This is an organization that is a key proponent of biological control in the USA. This is an organization that has persuaded APHIS to adopt a policy that begins with "APHIS believes that modern biological control, appropriately applied and monitored, is an environmentally safe and desirable form of long-term management of pest species." (see related story, p. 10) This is an organization that is changing attitudes.

Hats off to Dr. Ernest Delfosse, Director of NBCI and his staff for the tremendous amount of work he and his organization have done in the last 2 years. I truly believe that NBCI will not only turn the tide for microbial control in the United States alone, but also in the rest of the world.

FORUM

ANOTHER PERSPECTIVE ON USE OF CLASSICAL BIOLOGICAL CONTROL FOR GRASSHOPPER PESTS

Raymond I. Carruthers, USDA-ARS, Biological Pest Control Research Unit, Subtropical Agricultural Research Laboratory, 2413 E. Hwy. 83 Weslaco, TX 78596

In the last issue of the SIP Newsletter, assertions were made (Lockwood 1992a) of potential negative impacts of classical biological control of grasshoppers based on a new association approach (Pimentel 1963, Hokkanen & Pimentel 1984, 1989). Hypothetical extinctions of non-target grasshoppers and/ or ecological disasters associated with grasshopper population reductions were suggested based on little justification other than speculation, citations of negative impacts linked to introductions of generalist vertebrate predators, or unsubstantiated claims against microparasites.

It is NOT the purpose of this note to respond directly to each of the criticisms listed in that article. First, that has already been accomplished through the Forum of Environmental Entomology (Carruthers and Onsager, 1993), and secondly, because the Editors of the Newsletter asked me to respond in an abbreviated manner. The Environmental Entomology paper, however, addresses many misconceptions presented in the last Newsletter and other similar articles (Lockwood & Larson 1991, Lockwood 1992b). This article by Carruthers & Onsager (1993) also provides data on the use of classical biological control, grasshopper biology, economic impact, management tactics, the grasshopper natural enemies either released or scheduled for release, environmental concerns, and the federal review/permitting of these programs prior to actual implementation.

In some areas, I am in full agreement with positions presented in the preceding Newsletter article; however, in other areas, major differences of opinion exist. For example, there is no scientific basis for establishing the new terminology "Neoclassical Biological Control" as proposed, so traditional terminology of "Classical Biological Control" has been retained. Data on the use of arthropods and pathogens in classical biological control (including specific information on the use of exotic natural

enemies for control of native pests) show that this approach to pest management is far from new (neo) or unusual as suggested by Lockwood (1992a & b). The new association approach to classical biological control has been used well over 100 times since 1880, has successfully controlled many important pest species (Pimentel 1963, Carl 1982, Hokkanen & Pimentel 1984, Hokkanen 1985, Miller et al. 1987, Ehler 1990), has been associated with few if any significant environmental problems, and is a viable technique which has been endorsed by the National Academy of Sciences (1969) and many others. Therefore, the notion that the introduction of exotic natural enemies of grasshoppers is categorically inappropriate and should be halted was not accepted. It should also be noted that while in attendance at several interagency meetings on grasshopper control, Dr. Lockwood never mentioned ANY environmental concerns about the introduction of *Entomophaga praxibuli* during prerelease discussions.

Most importantly, these unsubstantiated criticisms concern me for several reasons including; 1) the lack of any significant data documenting major problems with any invertebrate and/ or microbial biological control agents; 2) the potential impact on slowing specific biological control efforts for grasshoppers and other insect pests; 3) the lack of timeliness (why are the issues raised now rather than before the *Entomophaga* releases were made?); 4) the misinterpretation or inadequate discussion of the program review/ permitting processes; and, last but not least, 5) the consequences of proposed increased regulatory hurdles for future classical biological control programs.

Mandatory Environmental Assessments (EAs) and/or full Environmental Impact Statements (EISs) have been proposed for all types of biological control introductions (Lockwood & Larson 1991). Mandatory EAs or EISs go well beyond guidelines developed at a recent Interagency Biological Control Quarantine Workshop (Coulson et al. 1991), and, if adopted, would severely limit the implementation of biological control programs in all areas of pest management. Pedigo & Higley (1992) point out that any IPM tactic, including biological control, has associated environmental risks. They support the assessment of monetary values for environmental costs associated with environmental risks. They concede the difficulties of doing so, including the fact that the dissident point of view may have tyrannical power to suppress new technology, because the assigned costs of possible risks can constantly be adjusted to exceed all rational benefits. Likewise, a single antagonist with a fertile imagination can generate possible costs infinitely faster than their realities can be investigated.

As pointed out by Lockwood (1992a & b), uncertainty of success is clearly an issue in all attempts to introduce exotic biological control agents, and, I believe, with many other methods of pest management, including the augmentation of natural enemies, use of economic thresholds based on imperfect sample data, application of chemical insecticides, and so on. Fortunately, however, the proposed biological control programs criticized by Lockwood (1992a & b) do not differ in principle from many similar programs conducted over the past hundred years and should not be discounted based only on unsubstantiated speculation. The use of invertebrates and microbials as biological control agents has had an excellent track record in solving difficult pest problems, at comparatively little expense, and with few side effects (DeBach 1974, Marsden et al. 1980, Tisdell 1990). Chant (1966) cites a 30:1 dollar return for every dollar invested in biological control in the United States. Therefore, benefits of such programs make classical biological control well worth conducting and defending from environmental extremists and pesticide advocates, alike.

Finally, I agree that we should use other tactics to control grasshoppers including all feasible means of biological control and the careful use of chemical pesticides. I highly disagree, however, that "several realistic scenarios with neoclassical control are significantly more damaging" than use of insecticides (Lockwood, 1992b). In particular, I disagree because during the ten year period from 1977 to 1986, over 36 million acres of rangeland were treated with broad spectrum chemical insecticides (USDA-APHIS 1987), and many of the most significant environmental risks are indisputably associated with pesticide use (Pedigo and Higley 1992). In 1985 alone, approximately 13 million acres were treated with insecticide (typically carbaryl) at a substantial cost to the public and with unknown costs to the range ecosystem (USDA-APHIS 1987). Considering the vast acreage involved and the indiscriminate mode of action associated with broad spectrum insecticides (which directly affect many more groups of organisms than the Acrididae), there is little likelihood of a highly density dependent natural enemy ever having so great a disruptive impact on the rangeland ecosystem.

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COMMITTEE REPORTS

TREASURER'S REPORT
September 1992

The role of SIP Treasurer changed markedly in the past year. Labor-intensive tasks, such as sending dues notices and logging dues received were contracted to FASEB, an organization with extensive knowledge on managing of scientific society fiscal affairs. FASEB is also involved in other aspects of SIP operations; e.g., printing and distributing our Newsletter, as well as our annual meeting programs and abstracts. A precise direct comparison is difficult since the books are kept slightly differently now as far as categories, but it is my estimate that FASEB services cost SIP approximately $7,000 more for this year than was spent for the same services (with considerable volunteer help) in the previous year.

The 1992 Annual Meeting was very well attended and, accordingly, the program and abstracts volume was much larger than in previous years. As a result, the production and mailing costs were unusually high. This publication has always been the Society's largest annual cost. Procedures are to be implemented by FASEB and meeting organizers to significantly reduce this cost in future years.

The organizers of the 1991 meeting, Drs. Betty Davidson and Martha Gilliam, are to be complimented and thanked for an outstanding meeting as far as science, location, and -- from the Treasurer's viewpoint -- finances. The Society advanced them $4,200 in 1990, and they returned almost $27,000 in 1992. A key factor in this unexpectedly high return was a very large number of late registrants. As you will recall from the SIP Business Meeting in Heidelberg, the 1986 Colloquium will also turn over to SIP several thousands of dollars in the very near future. We express our appreciation for their excellently executed meeting and for their sound fiscal management. These meeting inputs, in addition to 1993 dues increases, provide a reserve fund appropriate to the size of our Society and annual income which will almost match annual operative expenses. The financial health of the Society, due to the enthusiastic support of its members, is good.

Donald W. Roberts
Acting Treasurer

Society for Invertebrate Pathology
Balance Sheet
Sept. 12, 1991- July 31, 1992

	Society Operations	Microsporida Division	Microbial Control Division	Endowment Fund	Total
ASSETS					
Cash (Checking Accounts)	$56,394	$248	$1,838	$5,019	$63,499
Advance to Treasurer	2,552	-	-	-	2,552
Total Assets	$58,946	$ 248	$ 1,838	$ 5,019	$66,051
LIABILITIES AND FUND BALANCE					
Liabilities:					
Account Payable (FASEB)	$15,770	$ -	$ -	$ -	$15,770
Future Year Dues	30	-	-	-	30
Total Liabilities	$ 15,800	-	-	-	15,800
Fund Balance:					
Fund Balance (Beginning of Year)	32,896	199	1,758	4,902	39,755
Current Year Net Income (EXHIBIT B)	10,250	49	80	117	10,496
Fund Balance (End of Year)	43,146	248	1,838	5,019	50,251
Total Liabilities and Fund Balance	$58,946	$ 248	$ 1,838	$ 5,019	$66,051

Society for Invertebrate Pathology
Statement of Revenue and Expense
Sept. 12, 1991 - July 31, 1992

	Society Operations	Microsporida Division	Microbial Control Division	Endowment Fund	Total
REVENUE (EXHIBIT B)					
Annual Meeting Income	$26,958	$ -	$ -	$ -	$26,958
Membership Dues	11,255	89	596	-	11,940
Membership Contributions	286	-	-	138	424
Special Publication Sales	100	10	65	-	175
Dues Handling Fees	123	-	-	-	123
Interest	2,036	-	-	144	2,180
Miscellaneous Income	663	-	-	-	663
Total Revenue	41,421	99	661	282	42,463
EXPENSE					
Addressing, Mailing and Shipping:					
Abstracts	6,588	-	-	-	6,588
Newsletter	1,585	-	-	-	1,585
Other	2,390	50	450	-	2,890
Composition and Printing:					
Abstracts	6,381	-	-	-	6,381
Newsletter	4,335	-	-	-	4,335
Sponsored Foreign Memberships	-	-	-	165	165
Office Supplies	863	-	131	-	994
Slides*	2,910	-	-	-	2,910
Accounting Services	2,700	-	-	-	2,700
Annual Meeting Heidelberg**	1,000	-	-	-	1,000
Dues Processing Fees	2,092	-	-	-	2,092
Telephone	56	-	-	-	56
Duplicating	93	-	-	-	93
Travel:					
President	54	-	-	-	54
Treasurer	21	-	-	-	21
Bank Charges	12	-	-	-	12
Miscellaneous	91	-	-	-	91
Total Expenses	31,171	50	581	165	31,967
NET REVENUE	$10,250	$ 49	$ 80	$ 117	$10,496

* Advance to MC Division
** Advance to organizers

REPORT OF THE SIP MEETINGS BOARD

The report of the Society for Invertebrate Pathology Meetings Board for 1992 is essentially the same as the report submitted last year.

Year	Site	Host/ Organizer
1993	U. of North Carolina Asheville, North Carolina	J. Harper, W. Brooks
1994	*University of Montpellier Montpellier, France	M. Bergoin
1995	Cornell University Ithaca, New York	R.Granados, D. Roberts
1996	Yet To Be Determined	

*VI International Colloquium of Invertebrate Pathology
Brian A. Federici, Chair
Robert Granados
Just M. Vlak

REPORT OF THE TELLER COMMITTEE

Ballots sent out in the November 1991 Newsletter were returned to James D. Harper as Chair of the Nominations Committee for 1990-1992. These were held until late May of 1992 and were turned over to the Teller Committee appointed by President Davidson. Ballots were opened and counted on May 26, 1992. A total of 351 ballots were counted. Additionally, 63 ballots were judged invalid because of lack of identification on the outside envelope as required by the Bylaws or ballots were improperly marked.

The newly elected officers are as follows:

President - Chris Payne
Vice President - Robert Granados
Secretary - Richard Daoust
Treasurer - Harry Kaya
Trustee - Lawrence A. Lacey
Trustee - Robert S. Anderson

Both Phyllis T. Johnson and Keio Aizawa were elected as Honorary Members.

The vote for a dues increase was approved with a vote of 297 for and 103 against.

Aris Domnas; Clinton Kawanishi, Teller's Committee

FOUNDER'S LECTURE COMMITTEE REPORT

The 1992 Founders lecture was presented by Dr. Alain J. Vey and honored Erwin Müller-Kögler. Müller-Kögler is famous for his original textbook on "Fungal Diseases of Insects" and 40 years of contributions to the study of insect mycosis and their potential as microbial control agents. During 25 years at the "Institut fur Biologisches Schadlingsbekampfung der Biologischen Bundesanstalt fur Land und

Forstwirtschaft in Darmstadt, Germany, Müller-Kögler pioneered research with fungi infections to soil insects, a challenge that was cooperatively shared with many insect pathologists throughout Europe such as Vey and Ferron. Müller-Kögler is still very busy pursuing his artistic interests in active retirement at the proud age of 83. The complete text of Dr. Vey's talk with inputs from Dr. Pierre Ferron has been submitted for publication in the Journal of Invertebrate Pathology.

The Founders Lecture Committee (Richard Daoust, Carlo M. Ignoffo, Anthony Sweeney and Clay McCoy, Chair) always welcome suggestions of honorees or speakers. The committee would like to recognize Dr. John Briggs who has contributed greatly to the committee for the past 11 years by kindly handling the engraving and framing of the handsome hand-lettered certificate commemorating the occasion.

Clayton W. McCoy, Chair

MEMBERSHIP COMMITTEE REPORT

Composition of SIP Membership: Membership of the Society for Invertebrate Pathology now stands at **898**. Of this, 777 are regular members, 88 are student members, 26 are Emeritus and 7 are Honorary members. Our Society has grown increasingly international with members from **50** different counties, from Algeria to Yugoslavia. A break down of our membership by region appears below:

Africa	1.2%
Asia	11.9%
Australia/New Zealand	4.8%
Europe	22.4%
Middle East	1.9%
North America	54.4%
South America	3.3%

Activities during 1991-1992: The increase in the number of non-North American SIP members is largely due to the efforts of the following volunteers who circulated information and membership forms in their respective regions of the world: Norbert Becker, GiES, Germany; James Becnel, USDA, U.S.; Cumhur Cokmus, Ankara University, Turkey; Cornelia Ceinau, Cantacuzino Institute, Romania; Lerry Lacey, European Biological Control Laboratory, France; Vladmir Matha, Charles University, Czechoslovakia; Chris Payne, Institute of Horticulture Research, England; Isabelle Thiery, Institut Pasteur, France. Thank You!

Payment of membership dues has sometimes been hampered by difficulties in exchanging currency to U.S. dollars. However , in 1993 the Society will begin accepting dues payments via credit card (Mastercard or Visa). This move should help increase the number of new members, especially outside the U.S.

A new membership form was designed and distributed by FASEB to all members. To help understand our members better, information on each member's specific research area(s) was requested, and FASEB has begun to collate this data. During 1992/93, the form will be further modified based on input from SIP members.

Despite the increase in non-North American members, the actual number of paying members of the SIP decreased during 1992. This is primarily due to the fact that 108 former members have not yet paid their 1992 dues. During the next year, we will target this group, as well as members of industry involved in invertebrate pathology, with mailings urging them to join or rejoin the Society.

The Membership Committee: The Membership Committee for 1992-1993 consists of Lerry Lacey, James Becnel and Wendy Gelernter. We are actively seeking an additional member who is involved in invertebrate (other than insect) pathology. Please contact Wendy Gelernter (Mycogen Corporation, 5451 Oberlin Drive, San Diego, CA 92121, (619) 453-8030) if you are interested.

Wendy Gelernter, Chair

REPORT OF THE ENDOWMENT COMMITTEE 1991-1992

The committee nominated for endowed membership 11 invertebrate pathologists in 10 countries (Czechoslovakia, Yugoslavia, Peoples Republic of China, Brazil, Romania, Algeria, Russia, Poland, Moldava and India). Nine new members were nominated and two continued as endowed members from last year. As in previous years, some recipients have indicated that the memberships are very much appreciated. Each year the interest from the endowment fund normally enables gratis membership for several colleagues from soft currency countries. This year the unusually low interest rates provided only enough funds for eleven individuals. The memberships allow these colleagues to participate in the Society and, through the Newsletter, to be kept informed about the Society and invertebrate pathology in general. Your contributions to the Endowment Fund are encouraged in order to continue and expand this activity. If you know of an active pathologist in a soft currency country who would benefit from membership in SIP, please inform one of the Endowment Committee members.

E. Davidson
R. Granados
T. Poprawski
L. Lacey, Chair

NEWSLETTER REPORT

Three issues of the SIP Newsletter were distributed, including issues on November, 1991, January, 1992 and July, 1992. The Newsletters consisted of 12, 16 and 18 pages respectively. The Program and Abstracts of the 1992 meeting were included in the July issue. Several new features are being tried in the Newsletter; these include laboratory profiles, industrial profiles, a list of new members, stories highlighting certain activities of the meeting in the issue following the meeting, and a discussion forum on a controversial issue. Many photographs have been added to the text.

A professional computer newsletter design specialist has been employed to set the copy which is sent camera-ready to FASEB, where it is printed and distributed. Cooperation from FASEB has been excellent during this year.

The Editor is very grateful for the enthusiasm and efforts of the Assistant Editor, Mark Goettel; to Jennifer Ashley, the computer design specialist; and to various members and industrial companies for the materials submitted for the Newsletter.

Please note that the costs of printing and distributing the Newsletter are detailed in the Treasurer's report, and do not appear in this report.

NEWSLETTER EXPENSES, 1991-1992

EXPENSES	
Computer Design Specialist	525.00
WordPerfect Program	142.43
Copies, Telephone, FEDEX	142.63
Service Charges on Account	41.26
Total Expenses	$851.32

INCOME	
Checks from Treasury	2000.00
Interest on Account	10.29
Total Income	$2010.29
CASH ON HAND (7/6/92)	$1158.97

Elizabeth W. Davidson, Editor

MICROSPORIDIA DIVISION ANNUAL REPORT 1991

The Microsporidia Division and Annual General Meeting were held at the 1991 SIP Annual Meeting in Flagstaff, Arizona on 5 August 1991.

The workshop was convened by Ann Cali. The topic was the sporophorous vesicle of the Pleistophera - like complex. Speakers were Ann Cali, Ted Andreadis, and Wayne Brooks.

The AGM was opened by the Chairman, Tony Sweeney, at 2110, with 18 members in attendance. The minutes of the 1990 meeting were read by Secretary Al Undeen and approved by the members present.

Tony Sweeney moved that a certificate of appreciation be presented to Dr. Lipa for his excellent efforts in translating Issi's monograph. This was seconded by Ted Andreadis and passed unanimously.

A letterhead figure drawn by Peg Johnson was displayed by Jimmy Becnel and suggested as a logo for the Division. The motion was seconded by Ann Cali and passed unanimously.

Ann Cali was complimented by the Chairman for the conduct of the workshop and she was assigned to convene the workshop at the 1992 meeting at Heidelberg. Wayne Brooks suggested that any ideas on a symposium topic be conveyed to the Chairman by letter.

A suggestion was made that the Division dues be increased to $2.00 and Wayne Brooks undertook to investigate the formal initiation of this proposal in line with the rules of the Division.

The Chairman appointed a nominating committee to select nominees from which officers would be elected at the 1992 meeting. Nominating Committee members are: Jimmy Becnel, Joe Maddox, and Ted Andreadis.

Subsequent to the meeting, Secretary Al Undeen sent 110 ballots to all members of the Division to vote on the proposal to increase annual dues from $1.00 to $2.00 After 40 days and 40 nights had elapsed the 43 returned ballots were opened. All were seen to be marked yes, indicating unanimous approval for a dues increase to $2.00.

MICROSPORIDIA DIVISION BUSINESS MEETING 1992 ANNUAL MEETING

The meeting was called to order by chairman Sweeney on Tuesday August 18, 1992.

The minutes of the 1991 meeting were read by acting secretary Becnel. David Onstad moved that the minutes be accepted, the motion was seconded by Andy Linde. The minutes were approved as read by unanimous decision.

Old Business: Chairman Sweeney announced the outcome of a ballot to increase the annual dues for the Division from $1.00 to $2.00. Ballots were sent to all active division members with a final count of 43 for and 0 against. The dues will be increased effective 1993.

The nominating committee, made up of James Becnel, Joe Maddox and Ted Andreadis, presented its recommendations for the new vice-chairman and secretary. The committee nominated Timothy J. Kurtti for vice-chairman and Leah S. Bauer for secretary. Tony Sweeney moved that the nominations be accepted, the motion was seconded by David Onstad and passed unanimously.

New Business: The workshop for the 26th annual meeting to be held in Asheville, NC was discussed. Doug Streett suggested the possible topic of the different spore types found in Nosema. It was also suggested that Dr. Ishihara from Japan be invited to discuss this topic. Tony Sweeney suggested that David Onstad present an update on his new microsporidian database at next years meeting.

Jimmy Becnel suggested that the division provide a report for each edition of the newsletter. This would include information about division activities and activities at meetings other than the SIP. He volunteered to perform this duty for the upcoming year.

Dr. Larsson's excellent talk on "Chytridopsis and its Relatives" presented at the Microsporidian Workshop held on Monday evening was acknowledged.

The meeting was adjourned by Chairman Sweeney.

DIVISION ON MICROBIAL CONTROL

1991 Annual Meeting and Other Business: The Annual Meeting of the Division on Microbial Control was called to order by Mark Goettel at 7:30 PM August 5, 1991. Minutes of the meeting were published in the Newsletter Vol 24 No 1. It was approved by members in attendance to raise the dues from one to two dollars to provide enough income to provide services such as the Directory to Division members. The new executive committee was elected and the addition of a third member at large was approved. It was pointed out at the Society business meeting that the Division by-laws should be consulted to determine if correct procedures were followed to change the dues and the make-up of the committee. Because the Division was relatively inactive prior to 1989, the previous executive committee worked without the by-laws. Following the meetings, the by-laws were found in the archives and forwarded to McGuire by Jim Harper. The by-laws indicated that the dues increase was handled satisfactorily but the change in the committee was not. Therefore, a ballot was sent to all Division members suggesting that the by-laws be amended to increase from two to three the number of members at large. This amendment was approved by a mail ballot of 77-1. The new member at large will be elected at the 1992 meeting.

Committee Activities: The Division sponsored a symposium entitled "Microbial Control of Grasshoppers and Locusts" and a workshop entitled "Evaluation of Risks and Regulatory Constraints in the Importation and Commercialization of Microbial Control Agents" at the 1991 meeting in Flagstaff. Both sessions were well attended. A synopsis of the workshop was published in the SIP Newsletter Vol 23 No 3, and in Biocontrol News 5:5-9.

The Division will sponsor a symposium entitled "Assay and Standardization of Microbial Insecticides" and a workshop entitled "The Effect of Artificial and Natural Light of Entomopathogens" at the 1992 meetings in Heidelberg.

The "Directory of Industries Involved in the Development of Microbial Control Projects" was completed and sent to division members in good standing as of December 1991. The directory is also available to anyone else by contacting Dr. Michael McGuire. The cost to non-division members is $5.00, payable to the Society for Invertebrate Pathology. Dr. Mark Goettel compiled the directory and will update it when necessary. Companies are urged to continue sending new information to Dr. Goettel as this directory will be published periodically.

A slide atlas on various aspects of microbial control, bioassay, production, formulation, and application is nearing completion. This atlas will consist of 200 slides with accompanying legends and should be available for purchase at the Annual Meeting in Heidelberg. The Society authorized a line of credit of $7000 to the Division to cover reproduction costs. Profits from the sale of the atlas will remain with the Division.

Several articles concerning events pertinent to the Division were published in a section of the SIP Newsletter entitled Microbial Control News. The Division continues to solicit articles. If any members have information that would be appropriate, please submit one or two paragraphs to the Division chairperson or to one of the Newsletter Editors.

Memberships and Finances: There are 263 members in the Division paying dues this year. We urge all SIP members with an interest in microbial control to join the Division. The Division has become more active in the past three years and has started to provide services to its members. Continued support and growth is necessary to maintain this level of activity.

Budget (Provided by FASEB):

Funds On Hand (July 31, 1991)	$1758.24
Revenue	
Dues	526.00
Directory	65.00
Total	$591.00
Expenses	
FASEB Costs for Mailing Labels	38.00
Supplies for Directory Reproduction	131.74
Postage for Directory and Ballots	411.73
Total	$581.47
Balance	$1767.77*

*Does not include line of credit or expenses for slide atlas reproduction.

REPORT OF THE DIVISION ON MICROBIAL CONTROL 1992 ANNUAL BUSINESS MEETING, Heidelberg

The meeting was called to order on Tuesday 18 August, 1992 at approximately 1300 with 30 members present. The 1992 annual report was summarized, including mention of the symposium and workshop sponsored by the Division for this year's meeting, and approved by the members present.

Richard Daoust's position as Member-at-Large terminated. Jeff Lord was elected unanimously for the 2 year term.

Wendy Gelernter initiated discussion concerning formation of a subcommittee to explore the possibilities of the Division sponsoring publication of a document on standardization and bioassay of microbial control agents. Following a lengthy discussion, the members approved the formation of this subcommittee and elected Dr. Gelernter as chair. She will select the subcommittee members but anyone who has interest in this area is encouraged to contact Dr. Gelernter directly.

Upon request of the Founders committee the Division discussed possible honorees and lecturers the Division might support. A list of suggestions was forwarded to the committee.

The Division then turned to discussion concerning sponsorship of workshops and symposia for next year's meeting. George Soares suggested the topic of using microbial control agents in IPM systems rather than as calender style applications. Microbial synergism was also discussed as a possible topic. Since time was limited and not all ideas may have been brought forth, members are encouraged to send their suggestions to the executive committee for consideration. Please prepare a one page draft of the suggestion and list some possible speakers.

Election of New Officers: New officers of the Executive Committee will be elected at the next annual meeting. Michael Klein will assume the chair and Michael McGuire will become an ex-officio member as past chair. Jeff Lord, elected to Member-at Large will retain his seat for the next two years. Two members-at-Large, currently Jane Drummond and Ramon Georgis, a Secretary Treasurer, currently Ann Hajek, and a Chair-elect will need to be elected. If you would like to serve the Division or would like to nominate someone for one of these positions, please contact Michael Klein at USDA-ARS, Ohio Agricultural Lab, Hort Insects Lab, Wooster, OH 44691 (216 263-3868).

Respectfully submitted,
Michael R. McGuire, Chair, Division on Microbial Control

MICROBIAL CONTROL NEWS

DIRECTORY OF INDUSTRIES INVOLVED IN THE DEVELOPMENT OF MICROBIAL CONTROL PRODUCTS

In December, 1991, the Division on Microbial Control published the Directory of Industries Involved in the Development of Microbial Control Products. The Directory contains 35 pages of information with indexes of pathogens, target hosts, crops and habitats, companies and addresses, and trade names. Over 40 companies and 60 products are listed. Copies are available from Dr. Michael McGuire, USDA-ARS, 1815 North University, Peoria, Il, 61604, USA at a cost of US $5.00 (includes postage)(Fax 309-360-4222; bitnet mmcguire@asrr.arsusda.gov)

Since its publication in December, several additions and changes have been received. The Division therefore plans to publish yearly supplements every December until such time when a new Directory is warranted. Therefore, if you have any changes or additions to make, or know of a company that should be included, please write or fax Mark Goettel, Agriculture Canada Research Station, PO Box 3000, Lethbridge, AB Canada, T1J 4B1 (Fax.403-382-3156; internet goettel@abrsle.agr.ca). It is our intention to

include the supplement with the mailing of the next Newsletter, so please don't delay.

COLOR SLIDE ATLAS OF MICROBIAL CONTROL

The slide atlas is now completed and is being distributed. It consists of 200 slides on various aspects of microbial control projects, application techniques, bioassay, production and formulation. The 200 slides come in a box and each slide is cross referenced to a 28-page legends. It should be of value to many members, especially those involved in the education of students or the general public.

There were only 250 sets printed and approximately 100 are already sold. We are restricting advertising of the atlas to the SIP Newsletter for the time being to allow SIP members time to purchase the slide atlas. If you intend to purchase a copy, please do so soon in order to avoid disappointment. If we are not able to sell all copies to our members within a year, we will advertise outside of the Society in order to move our inventory.

The slide atlas can be ordered by sending a cheque, money order or international bank draft (drawable on an American bank) in the amount of US $50.00 (add $5.00 for overseas orders) to Dr. Ann Hajek, Boyce Thompson Institute, Tower Road, Ithaca, NY 14853-1801, USA (fax 607-254-1242; internet Ann_Hajek@qmrelay.mail.cornell.edu)

MICROBIAL CONTROL OF GRASSHOPPERS AND LOCUSTS PUBLICATION

At the symposium entitled "Microbial control of grasshoppers and locusts" during the XXIV Annual Meeting of the Society for Invertebrate Pathology, Flagstaff, AZ, we discussed our intention to compile a comprehensive collection of reviews and original research articles on microbial control of grasshoppers and locusts. The consensus was that there was a need for such a publication, but that it would be most beneficial if such a publication was peer reviewed as well as available at reasonable cost. We looked into this and came to the conclusion that this would be best accomplished if the publication were to be published in the Memoir series of the Entomological Society of Canada.

Our plan is to publish a comprehensive review on a subject matter followed by a series of submitted original research articles. Since this is a refereed publication, authors should receive full credit for original research papers. The benefit would be that these papers are all in one publication, rather than being scattered throughout several journals.

We are soliciting authors and titles of review articles with the view of finalizing the list by February of 1993. Deadline for submission of the review articles would be set for summer, 1993 with a targeted publication time of late 1993. Research articles can be submitted at any time. Since it takes about a year to publish a manuscript in a refereed journal anyway, we request that you please consider publishing any research manuscripts you may have between now and the fall of 1993 in this special Memoir.

Page charge for Memoirs is $Cdn25.00 per published page. We will attempt to obtain external funding for this, however, if we are not successful, page charges will remain the responsibility of the authors.

If you are interested in writing a review or research article for this Memoir, please contact us.

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BACULOVIRUS PATENTED, LOW-COST PRODUCT UNDER DEVELOPMENT

The celery looper strain of baculovirus has been patented by the US Department of Agriculture, and becomes the basis for an agreement between Biosys Corporation of Palo Alto, California and Sandoz Agro Corporation of Des Plaines, Illinois. The goal of this cooperative agreement is production of a baculovirus insecticide product through the development of a low-cost manufacturing process. For further information, contact Dr. V.S. Sohoni, 1057 East Meadow Circle, Palo Alto, CA 94303.

MEMBERS IN THE NEWS

DAN JOHNSON AWARDED C. GORDON HEWITT AWARD

The 1992 recipient of the Entomological Society of Canada's C. Gordon Hewitt Award for outstanding achievement in entomology by an individual under 40 is Dr. Daniel Lloyd Johnson of the Agriculture Canada Research Station, Lethbridge, Alberta.

Dr. Johnson was born in Yankton, South Dakota and received his B.Sc. from the University of Saskatchewan in 1978. He was awarded his M.Sc. by the university of British Columbia in 1980 for research on the ecology of soil arthropods and his Ph.D. from the same institution in 1983 for research on "Dispersal, predation and weather in an orchard mite system."

Since 1983, Dr. Johnson has been an entomologist with Agriculture Canada at Lethbridge where he has developed an internationally recognized program on the ecology and control of grasshoppers. His research includes the improvement of methods for field testing and assessment of efficacy, analysis of pest populations and development of microbial control.

Dan is best known to SIP through his research on *Nosema locustae* and *Beauveria bassiana* and other pathogens of grasshoppers. Dan has recently conducted field experiments totalling several thousand hectares to test the efficacy of these pathogens for control of grasshoppers in Alberta and west Africa and he will continue research in this area in a joint Burkina Faso/Lethbridge project funded by the UNDP.

Congratulations Dan.

NEWS ITEM

MEETING AND WORKSHOPS ON ENTOMOPATHOGENIC NEMATODES HELD IN 1992

The 4th Annual Meeting of the project group "Entomopathogenic Nematodes" and two workshops were held at the Institute for Phytopathology, Kiel-Raisdorf, Germany on May 19-24, 1992 with 57 colleagues from 15 European countries participating. Talks on the taxonomy, biology and ecology of entomopathogenic nematodes, their *in vitro* production and application in biological control of insects were presented. Abstracts can be requested from R.-U. Ehlers, Institute for Phytopathology, Dept. of Biotechnology and Biological Control, Klausdorfer Str. 28-36. 2313 Raisdorf, Germany.

A workshop of the European Community Cooperation in Science and Technology (COST), action 812 "Cold active lines of insect parasitic nematodes", concentrated on the comparison of results from different bioassay systems used at different laboratories to assess nematode activity at low temperatures. Participants agreed to publish their results in a joint paper. It was agreed to widen the objectives of the action in order to incorporate other groups in Europe working with entomopathogenic nematodes. The next workshop will be held in Zürich, Switzerland, September 10, 1993 after the IOBC working group "Microbial Control and Insect Parasitic Nematodes". The joint research for the next year will concentrate on any kind of selection for beneficial traits of entomopathogenic nematodes and their symbiotic bacteria. The management committee elected Ralf-Udo Ehlers to succeed Paula Westerman as a chairman.

The objective of the second workshop was to introduce classical and molecular methods to the identification of nematode species of the genera *Steinernema* and *Heterorhabditis*. W. Sudhaus (University of Berlin) gave an introduction into the taxonomy of rhabditid nematodes with special emphasis on diplogasterid and rhabditid nematodes associated with insects. D. Sturhan (BBA, Münster, Germany) taught the use of the morphological characteristics of dauer juveniles, and A. Peters, B. Talosi and R.-U. Ehlers (Raisdorf) introduced the morphology of male adults to distinguish between species. At least 5 steinernematid strains could not be assigned to described species. A. Reid (Imperial College, Ascot, UK) trained the participants in RFLP technology for taxonomic purposes. The difficulties in identifying heterorhabditid species was discussed and results from cross-breeding experiments (A. Burnell, Ireland) successfully summarized the current status of the taxonomy of entomopathogenic nematodes and showed that we are just about to better understand these nematodes, but know very little about their host specificity, pathogenicity mechanisms, ecology and genetics. As entomopathogenic nematodes are already used in biocontrol it is obvious that applied research on this field is ahead of our fundamental understanding.

Ralf-Udo Ehlers

ANNOUNCEMENTS

POSTDOCTORAL RESEARCH ASSOCIATE: Immunochemistry/Biochemistry.

Applications are invited for a 2-year research position available 1 April, 1993 at the Forest Pest Management Institute in Sault Ste. Marie, Ontario. Research involves the use of immunochemical techniques to study functional domains of *Bacillus thuringiensis* endotoxins, toxin mode of action, and toxin-receptor interactions in forest insects. Ph.D in biochemistry with strong background in immunochemistry desirable. Applicant must be able to work cooperatively in a multidisciplinary team that is investigation the mode of action of B.t toxins at molecular, physiological, and ecological level. Salary $35,000 annually, relocation expenses negotiable. Send CV and references to Dr. Kees van Frankenhuyzen, Forest Pest Management Institute, P.O. Box 490, Sault Ste. Marie, Ontario, Canada, P6A 5M7 (phone: 705-949-9461; FAX: 705-759-5700).

ANNUAL BELTSVILLE SYMPOSIUM TO DISCUSS PROGRESS IN BIOCONTROL

The XVIII Beltsville Symposium to be held May 2-6, 1993 at the Beltsville Agricultural Research Center will be on "Pest Management: Biologically Based Technologies." Topics that deal with populations of insects, weeds, nematodes and fungi that are problems in modern agriculture will be addressed. The Symposium will begin with a plenary session reviewing the status of several aspects of biological control. Research approaches and applications will be discussed in five subsequent sessions and the final session will address the challenges of implementing biologically based technologies in pest management. There also will be a session of invited and submitted posters and a demonstration of computer systems for use in pest management.

Social events planned will include an informal reception during the poster session and a buffet dinner at the National Aquarium in Baltimore. During the dinner, the Symposium attendees will have exclusive use of the Aquarium, which is considered one to the finest on the East Coast of the United States. Make plans now to be in Beltsville next spring for a stimulating and enjoyable week. For additional information and registration materials contact:

Virginia Hupfer
FAR-Beltsville
Rm. 128, Bldg. 001,
Beltsville Agricultural Research Center - W
Beltsville, MD 20705-2350
Telephone: (301) 504-6108FAX: (301) 504-6357

7th INTERNATIONAL CONFERENCE ON *BACILLUS*

The 7th International Conference on *Bacillus* will be held at the Institut Pasteur, Paris, France, July 18-23, 1993.

There will be five days of sessions, including poster sessions. A one-day session will be devoted to molecular biology of *Bacillus thuringiensis* and related entomopathogens and another one-day session on genome sequencing projects.

Main topics:
-Regulation of genetic expression.
-Developmental gene expression, competence, sporulation, germination.
-Biotechnological aspects.
-Molecular biology of entomopathogens.
-Genome sequencing.

International Organizing Committee:
K. Devine, E. Ferrari, J. A. Hoch, G. Rapoport.

Local Organizing Committee and Secretariat:
Unité de Biochimie Microbienne, Institut Pasteur
25, rue du Docteur Roux-75724 Paris Cedex 15 (France)
Tel: 33 1 45 68 88 10; FAX: 33 1 45 68 89 38

Deadline for submission of Abstracts is April 1, 1993.

NEW TEXTBOOK ON INSECT PATHOLOGY

The book by Y. Tanada and H. K. Kaya entitled Insect Pathology, is available from Academic Press, San Diego. The cost is about $130. More specifics: 666 pages; 16 chapters including: Association between insects and Nonpathogenic Microorganisms, Amicrobial and Microbial Agents, Bacterial Infections, Viral Infections, Fungal Infections, Protozoan Infections, Nematode Infections, Host Resistance, Microbial Control, and Epizootiology.

MEMBERS ON THE MOVE

Dr. Stefan T. Jaronski recently joined Mycotech Corp., Butte MT, as Senior Scientist. He had been at Abbott Laboratories for the last nine years. In his new capacity Jaronski will be primarily concerned with the development

of fungi as biopesticides, with his first task being the registration of Mycotech's first mycoinsecticide, Mycocide GH, for grasshoppers, crickets and locusts. The company received a U.S. Experimental Use Permit for this product this past summer.

In addition, Jaronski will be involved with Mycotech's efforts in developing fungi as bioremediation agents for oil-hydrocarbons and PCBs.

Development efforts at Mycotech since 1982 have resulted in a proprietary Solid Culture System process with which commercial quantities of fungi can be produced at relatively low cost. Research on mycoinsecticides began in 1987. Since then Mycotech has produced field-trial quantities of fungal products for a number of clients as well as for its own programs. Beginning in 1992 Mycotech will be supplying Groundwater Technologies Inc. fungal product for in situ bioremediation efforts.

Dr. Stefan Jaronski
Mycotech Corporation
630 Utah Avenue
P.O. Box 4113
Butte, MT 59701 USA.

NEW ADDRESS

C. Joel Funk
Dept. of Agricultural Chemistry
ALS 1007
Oregon State University
Corvallis, OR 97331-7301

RETIREMENTS

Dr. Rodney Dales retired at the end of the spring academic session, 1992, from his position in the Department of Biology, Royal Holloway and Bedford New College, University of London, England. He has a set of SIP Newsletters from 1974 and the 1986 Directory of Invertebrate Pathology which he offers to any member who wishes to contact him. His address is:

Dr. Rodney Dales
University of London
Royal Holloway and Bedford New College
Department of Biology
Egham Hill
Egham, Surrey TW20 0EX United Kingdom

Dr. John D. Briggs retired March 1, 1992 following thirty years as Professor of Entomology at the Ohio State University in Columbus. John Received the Ph.D. degree from the University of California at Berkeley, where he studied under the late Edward Steinhaus. He began his career at the Illinois Natural History Survey, Section for Economic Entomology. John also worked for the Bioferm Corporation (later International Minerals and Chemicals) during the initial production of the *Bacillus thuringiensis* product, Thuricide. He joined the faculty at Ohio State in 1962. During his tenure at OSU, he enjoyed collaboration with pathologists Fred Hink and Gordon Stairs. Several invertebrate pathologists have received their graduate training with Dr. Briggs, including John Kramer (Illinois), Fred Hink, Goro Kuno, Ann Cali, Harriet Gray, Eldon Reeves, Carol Reeves, Douglas Streett, Albert Pye and Betty Davidson. John has been active in international collaborations, including programs in Mexico, Colombia and Nigeria. Currently he is involved in a project in Indonesia.

John was President of SIP (1972-1974), and has always been active in the Society, fulfilling offices and tasks as he has been called upon. Most recently, he presented the Annual Meeting in Heidelberg with a display of photographs of prominent invertebrate pathologists and organized the judging of the student papers; he is also our representative to the International Union of Biological Sciences. For several weeks in October and November, 1992, John and Jaroslav Weiser from Czechoslovakia will be in residence at the Rockefeller Foundation Bellagio Center in Italy, where they will prepare a book which has developed from their thirty-five year international association.

SIP COMMITTEE CHAIRS (1992-1994)

1993 Annual Meeting Organizers: Dr. Wayne M. Brooks, Dr. James Harper, Dept. of Entomology, North Carolina State University, Raleigh, NC 27695-7613 USA

Division of Microbial Control: Dr. Mickey McGuire, National Center Agri. Util. Res., USDA/ARS, 1815 N. University, Peoria, IL 61604, USA

Division of Microsporidia: Dr. Ann Cali, Dept. of Biological Sciences, Rutgers University, 101 Warren St. Smith Hall, Newark, NJ 07102, USA

Founders' Lecture: Dr. A.W. Sweeney, Army Malaria Research Unit, Ingleburn, NSW 2174 Australia

Membership: Dr. Wendy Gelernter, Mycogen Corporation, 5451 Oberlin Dr., San Diego, CA 92121 USA

Endowment Committee: Dr. George Soares, Mycogen Corporation, 5451 Oberlin Dr., San Diego, CA 92121 USA

By-Laws Revision: Dr. Chris Payne, Horticultural Research International, Wellesbourne, Warwick CV35 9EF U.K.

Meetings Board: Dr. Brian Federici, Dept. of Entomology, University of California, Riverside, CA 92521 USA

International Union of Biological Sciences: Dr. John D. Briggs, Dept. of Entomology, Ohio State University, Columbus, OH 43210 USA

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Assistant Newsletter Editor: Dr. Mark Goettel, Agriculture Canada Research Station, Box 3000, Main, Lethbridge, Alberta T1J 4B1 Canada.

THE SIP ENDOWMENT

As you prepare to send in your membership dues for next year, I would like to ask that you consider donating a little something extra to help support your Society's endowment program. I know that in light of the increase in membership dues that it may be difficult to think of making that check out for even more. However, the endowment is an extremely worthwhile program that allows the Society to give free memberships to those of our colleagues who cannot afford to pay dues. The memberships that we provide in this way are so important to those receiving them. Through the Newsletter these colleagues who live under situations of economic hardship can stay in touch with developments in invertebrate pathology and their friends and associates abroad.

Please help us in providing these memberships. If each member of SIP will donate just $2 to the endowment, we can provide memberships to a great many deserving colleagues who otherwise would have to go without the stimulation, the ideas and the news provided by the Newsletter. As we are in the holiday season in many countries, I ask that you all consider this special gift to our less fortunate friends around the world. Thank you for your help.

George G. Soares, Chairman, Endowment Committee

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Deadline for the next Newsletter: January 15, 1993

Memories of the Heidelberg meeting: 1. J. Vlak and N. Crook at the Sunday mixer, Penta Hotel. 2. H. de Barjac and M. Lecadet at the Opening Session. 3. B. Lay and C. Goto. 4. Start of the 5K race. 5. Members and their families boarding boats for the Nekar boat trip. 6. N. Becker presenting award for the 5K race to P. Jarrett.

7. E. Canning and D. Burges. 8. J. Becnel. 9. M. Goettel and T. Butt. 10. Dr. and Mrs. J. Weiser. 11. A lively German chorus at the Banquet. 12. At the Banquet, L. to R.: C. Goto, B. Arif, H. Kikuta, H. Bando and T. Iizuka. 13. The 25th Anniversary Jubilee Speech at the Alte Aula, University of Heidelberg. L. to R.: E. Davidson, T. Angus, W. Schnetter, N. Becker.