

SIP VIIITH AND IXTH ANNUAL MEETINGS

VIIITH ANNUAL SIP MEETING

CORVALLIS, OREGON; AUGUST 16-22, 1975

The VIII Annual SIP Business Meeting was convened at 11:00 A.M. on August 18, 1975, by President Arthur M. Heimpel. The minutes of the VII Annual Meeting were approved. Dr. C. Vago's cordial wishes for a successful meeting were conveyed by telegram to the membership.

Secretary John C. Harshbarger presented the report of the Treasurer (see p. 3) which was approved pending an audit, and the report of the SIP Newsletter editor (see p. 2).

President Heimpel reported that the Council had voted to submit a proposal to the membership for ratification to increase annual dues for regular members by \$2.00. The increase will provide a reserve fund and permit the Society to award honoraria to plenary speakers, encourage regional meetings, improve and enlarge the Newsletter, and initiate projects in keeping with the original intentions of the Society as set forth in the preamble of the constitution. (A ballot is enclosed in this issue of the Newsletter.)

The difficulties faced by members and potential members from countries with non-convertible currency in paying dues was raised by President Heimpel. Several suggestions were offered and Treasurer Gordon R. Stairs will be asked to investigate possible solutions.

Aaron Rosenfield gave a report on the activities of the Permanent Program Committee (see p. 3).

A progress report for the IX Annual Meeting was given by Vice President Thomas A. Angus. The meeting will be held at Queens College, Kingston, Ontario, Canada, Monday, 29 August - Thursday, 3 September 1976. This will be the First International Colloquium on Invertebrate Pathology and the program will emphasize basic pathology since practical pathology will be emphasized at the International Congress of Entomology in Washington, D.C. the preceding week. Plenary sessions will be held in the morning, submitted papers will be presented in the afternoon, and there will be a social function Wednesday afternoon. Pre-registration will be \$30.00, late registration \$40.00, student registration \$10.00.

A set of guidelines for submitting papers to Annual Meetings has been prepared by Dr. Mauro A. Martignoni and will be published in the Newsletter prior to each Annual Meeting.

A report on the IUBS Commission on Invertebrate Pathology was presented by SIP Representative John D. Briggs (see p. 3). The Publications Committee report was submitted by Dr. Thomas C. Cheng (see p. 2). The meeting was adjourned at 12:00.

John C. Harshbarger, Secretary



(left to right) Rosenfield, Henry, Anthony, Briggs, Ball, Levine, Cali, Sparks. For more pictures of the SIP VIII Annual Meeting see page 4. Caption: 1. Anthony, Davidson, Singer; 2. Cooper, Wittig; 3. Sprague, Paterson, Brooks; 4. Unestam, Evert-Smith; 5. Noble, Ball; 6. Mackin, Sparks, Mix; 7. Brenner, Ferrans; 8. Hildemann, Anderson

INTERNATIONAL COLLOQUIUM ON INVERTEBRATE PATHOLOGY

IXTH ANNUAL SIP MEETING

KINGSTON, ONTARIO, CANADA; AUGUST 29-SEPTEMBER 3, 1976

The Program for the IXth Annual SIP Meeting and the International Colloquium on Invertebrate Pathology will consist of symposia and delivered papers. Convenors are now being approached to bring together symposia on the following topics:

1. viruses of invertebrates,
2. application of tissue culture for study of pathogens of invertebrates,
3. epizootiology of invertebrates,
4. fungal diseases,
5. biological control,
6. Microsporidia,
7. defense mechanisms in invertebrates.

Registration details and call for abstracts will appear in the January 1976 issue of the Newsletter. Queries regarding programming should be sent to: *Dr. T. A. Angus, Insect Pathology Research Institute, P.O. Box 490, Sault Ste. Marie, Ontario, Canada, P6A 5M7* and on registration and accommodations to: *Dr. Peter Faulkner, Department of Microbiology, Queen's University, Kingston, Ontario, Canada K7L 3N6.*

SIP COMMITTEE REPORTS

AN ABRIDGED GLOSSARY OF TERMS USED IN INVERTEBRATE
PATHOLOGY, REPORT OF THE EDITOR, 1974-1975

Editorial Committee

Dr. Guido Majno submitted his resignation in April 1975. In his letter to me, Dr. Majno stated that he was "really too swamped to be able to serve on the Editorial Committee." In consultation with Dr. Thomas C. Cheng, Chairman of the Publications Board, it was decided to leave the position unfilled, at least for the present time. Thus, as of April 1975, the Editorial Committee consists of 12 members.

New Entries for the Third Edition

In February 1975 I mailed to each Committee member a list of 163 terms which had been proposed by Committee members and SIP members as additions to the terms presently listed in the second edition of the Glossary. Each Committee member was asked: (1) to delete from the list those terms which he/she considered obsolete or superfluous in a specialized glossary; (2) to suggest additional terms; (3) to indicate what terms he/she would be willing to define or describe; and (4) to suggest revisions of terms listed in the second edition of the Glossary.

As of July 31, 1975, I received replies from five Committee members (a mere 42% of the Committee, unfortunately). The replies were analyzed and tabulated, with the following result:

163 terms proposed to the Committee,
24 additional terms proposed by Committee
members,

56 terms deleted by Committee members;

thus leaving

131 terms accepted by the Committee as new
entries for the third edition.

The Committee will now begin work on the definitions of the newly accepted entries. The definitions will be set on magnetic tape, in Corvallis, and each committee member will receive the full printout from the Glossary editor, for final review.

Translations

The terms listed in the second edition of the Glossary have now been translated in German (Dr. Aloysius Krieg), in Spanish (Dr. Harold Rossmoore), and in Italian (Dr. Mauro E. Martignoni). The following specialists also helped translate terms in various areas of invertebrate pathology:

Dr. Hans P. Wille, *Liebefeld-Bern, Switzerland*
Prof. Maria Adelaide Vecchi, *Bologna, Italy*
Dr. Walter J. Canzonier, *Chioggia, Italy*
Prof. Adolpho Ruperez, *Madrid, Spain*
Dr. A. Saldarriaga, *Bogota, Columbia*
Dr. J. L. Carrillo, *Mexico City, Mexico*

We are expecting the French translation before the end of 1975.

The translated terms will be listed alphabetically, in each of the five languages, along with the corresponding terms in the other four languages. A set of convenient computer routines will be used for the preparation of the five alphabetical lists.

*Dr. Mauro E. Martignoni, Editor
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REPORT OF THE EDITOR-IN-CHIEF
Journal of Invertebrate Pathology

The Journal of Invertebrate Pathology continues to be healthy. During the period extending from July 1, 1974 to August 1, 1975, a total of 195 manuscripts was received for processing. Of these, 101 have been accepted and have either been published or are in the process of being published. Seventeen manuscripts were rejected and the additional 77 are being reviewed, revised, or in the process of being edited for publication.

It is encouraging to be able to once again report that the number of pathobiological manuscripts dealing with invertebrates other than insects is increasing. This is not to say that the papers dealing with insect pathology are not interesting; however, in following the tradition initiated by the late Professor Edward A. Steinhaus, we have encouraged papers dealing with non-insect invertebrates in order to give the Journal a more cosmopolitan nature.

The number of subscriptions is increasing slightly as the Journal is now being subscribed to by more general libraries. However, we must continue to encourage members of the Society to commit themselves to individual subscriptions at the reduced rate.

Your Editor has represented you in keeping the subscription rate constant as well as the extra page charges. These are being accomplished by going to a cheaper style of type-setting, although the reproduction of photo-micrographs and electron micrographs has been maintained at the usual high quality.

Once again, the officers of Academic Press, the owners and publishers of the Journal, have asked me to convey their best wishes to the Society and their continued willingness to cooperate in every way.

*Thomas C. Cheng
Editor-in-Chief*

SIP NEWSLETTER REPORT

Five Newsletters were prepared and distributed during the period July 1974 through August 1975 at a cost of roughly \$1,600. In addition, a "Membership List for 1974-75" and a "Directory of Courses of Instruction in Invertebrate Pathology" were prepared and distributed. The abstracts for the VIIIth Annual SIP Meeting were distributed at the meeting and will be forwarded to members.

Dr. K. Aizawa (Japan), Dr. S. V. Amonkar (India), Dr. L. P. S. van der Geest (Western Europe), and Dr. R. E. Teakle (Australia) are continuing to assist in the rapid delivery of the Newsletter to members outside the U.S. and Canada.

The following members have graciously agreed to serve as regional correspondents for the Newsletter:
Dr. K. Aizawa (Japan), Dr. S. V. Amonkar (India), Dr. H. D. Burges (United Kingdom), Dr. H. Boman (Scandinavia), Dr. P. Ferron (France), Dr. J. Franz (German Federal Republic), Dr. B. Gabriel (The Philippines), Dr. E. Jahn (Austria), Dr. R. Kenneth (Israel), Dr. G. Kuno (Latin America), Dr. J. Pillai (New Zealand), Dr. A. Rosenfield (United States), Dr. J. E. Stewart (Canada), and Dr. C. Yamvriasis (Greece).

Beatrice A. Weaver, Editor

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FROM THE PRESIDENT

It was a good feeling to see so many of you at the Corvallis meeting, although a lot of you were not able to get there. You were missed!

"The time has come," the walrus said, "to speak of many things . . ." The Council Meeting, held on Sunday afternoon, August 17, was very satisfying. A number of decisions were made that affect all of you. The Council decided that we should keep a safety fund of approximately \$1,000 in the "bank" and use some of the funds for the benefit of the Society to provide honoraria for plenary speakers; supply "seed money" to various organizations, including our Society, to initiate meetings and specialized symposia; improve and enlarge the Newsletter; and possibly supply literature to members in countries where it is difficult to obtain books or journals.

It was also decided to support Barbara Pilley's fine efforts to program a computer with the available literature on the Microsporida and sufficient funds have been sent to her. Barbara and Elizabeth Canning will be giving us instructions on method and cost of extraction of information from this valuable collection.

However, this letter may end by sounding like a "Good News--Bad News" joke. The Council agreed that the rising cost of practically every operation and function of the Society and the provision for such philanthropy as I have described may necessitate raising the fees for membership. Accordingly, would you please vote on this issue and return your ballots as soon as possible.

Thank you all for your interest and your help.



SIP Committee Reports Continued from page 2

IUBS COMMISSION ON INVERTEBRATE PATHOLOGY

The Commission on Invertebrate Pathology was established in the Division of Zoology of the IUBS by action of the General Assembly in September 1973. From that date through 1975 the Commission has proceeded to establish contact with the other commissions and sections within all divisions of the Union to identify common interests with respect to invertebrate animals. The Commission asked members of the Society for Invertebrate Pathology to serve as a liaison with the International Association for Microbiological Societies (IAMS) at Tokyo in September 1974 to identify areas of endeavor concerning infectious diseases of invertebrates. The Commission on Invertebrate Pathology has asked to be affiliated with the multidisciplinary Commission on Culture Collections. Our petition for affiliation has been accepted and the Commission will work within the framework of the Culture Collection activities of the Union in the establishment and maintenance of living culture collections of microorganisms associated with invertebrates. Plans for 1975-76 include the identification of individuals and facilities in a number of countries for the establishment of specialized culture collections within the World Federation of Culture Collections. In 1975 the Commission requested and received a subvention of \$2,000 to support the International Colloquium on Invertebrate Pathology in Kingston, Ontario in 1976.

John D. Briggs, IUBS Representative

REPORT OF THE PERMANENT PROGRAM COMMITTEE

The Permanent Program Committee held a meeting on March 31, 1975, at the United States Department of Agriculture, Agriculture Research Service, Insect Pathology Laboratory, Beltsville, Maryland. In addition to Drs. Aaron Rosenfield, Chairman; W. Brooks, Vice Chairman; and R. Engler, Secretary; others in attendance were SIP President Arthur Heimpel, Past-President John Briggs, Secretary John Harshbarger, and Dr. Phyllis T. Johnson. Several items were discussed at the meeting pertaining to the Committee's function and activities.

The Committee reported that it had received invitations for the Society to hold its meetings in several diverse locations in 1976, including locations outside of North America. The Committee appreciated the invitations extended, however, as earlier discussed by the Council, they recommended that the 1976 meeting be held at Queens College, Kingston, Ontario, August 29 - September 3, 1976. The Committee agreed to look into other possible sites and funding sources for future meetings.

The Committee requested the sum of \$100 to be used as a contingency fund to cover the cost of mailing, telephone service, and other minor expenses which may be encountered in the course of acting on behalf of the Society and its Council.

The Committee, through Past President Briggs, made application to the International Union of Biological Sciences for a subvention in support of the 1976 meetings in Kingston. The request for the subvention included plans to hold the First International Colloquium on Invertebrate Pathology and to publish the Proceedings. The application was received in good order and we have been assured that our request will be considered. {Editor's note: Dr. C. A. Wright, Secretary General of IUBS reported to Dr. Briggs, October 10, 1975, that the request for \$2,000 for the International Colloquium on Invertebrate Pathology was approved.}

The Committee was informed by the American Institute of Biological Sciences of its planned future meeting sites and dates. The Committee was requested by officials of AIBS to support the Institute. It was suggested that the Committee also consider AIBS sites for holding ancillary or subordinate meetings when the major meeting is held in areas too distant for many North American members to attend.

Aaron Rosenfield, Chairman

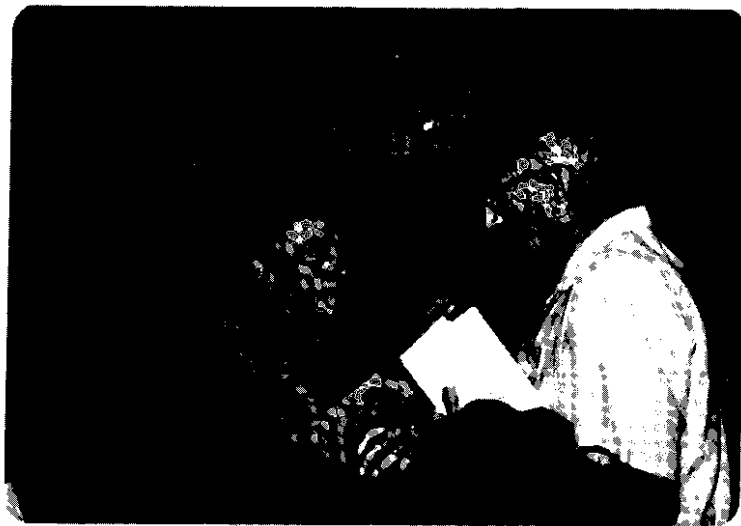
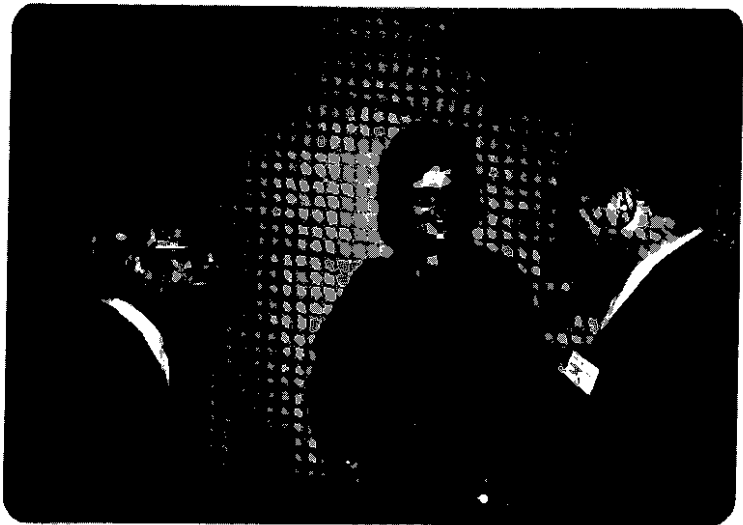
REPORT OF THE TREASURER

June 10, 1974 - June 30, 1975

Receipts

Bank balance (June 13, 1974)		\$ 4238.16
Cash on hand (used to defray costs of 1974 meeting)		500.00
Sale of banquet tickets (1974 meeting)		756.00
Membership Dues		1846.71
Regular	1765.71	
Student	81.00	
Microsporida Division dues		58.00
AIBS dues		201.00
Sustaining members		800.00
Fairfax Lab	500.00	
Abbott Lab	100.00	
Nutrilite	100.00	
Sandoz-Wander	100.00	
JIP subscriptions		4791.20
Bank interest		261.54
	TOTAL	\$13,452.61

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PUBLICATIONS

Disease in a Minor Chord, by Edward A. Steinhaus (Columbus, Ohio: OSU Press, 1975), 488 pp.

In his prologue, Dr. Mauro Martignoni describes Disease in a Minor Chord as an "interdigitation of history and autobiography." Dr. Steinhaus himself called his account of the development of invertebrate pathology "semi-historical and semi-biographical."

Historically, the book begins with a survey of of advances in invertebrate pathology from Aristotle's "cryptic descriptions of certain diseases of the honey bee" in 300 B.C. to an awareness of the potential of microorganisms as a method of insect control at the end of the 19th century. The second chapter continues through 1940.

"After two attempts to write an objective, impersonal account," Dr. Steinhaus turns to a "semi-biographical form" to describe the period after World War II when invertebrate pathology became "recognized as an honorable and distinct discipline." Chapter 3 outlines the role of California in the history of invertebrate pathology in North America. Dr. Steinhaus details the activity at Berkeley, where the first laboratory of insect pathology in the U.S. was developed. A practical concern with a so-called Bacillus C infection of California citrus red scale a disease of the alfalfa caterpillar, and epizootics of forest insects led to the establishment of a unit "devoted to all aspects of teaching and research in insect pathology." Because there was no textbook for a proposed course in insect pathology, Dr. Steinhaus prepared Principles of Insect Pathology, published in 1949. In an attempt to expand the research base of the laboratory, to include a broad range of insect diseases, Dr. Steinhaus persistently fought for recognition of insect pathology as a basic science, while attempting to demonstrate the applied value of insect diseases as a control technique and interest industry in developing them as "non-chemical insecticides."

In Chapter 4 Dr. Steinhaus traces the expanding relationship between the laboratory of insect pathology at Berkeley with research programs in other countries and in Chapter 5 he reviews significant international meetings, such as the International Corn Borer Conference in 1929, the Tenth International Congress of Entomology in 1956, the First International Conference of Invertebrate Pathology and Biological Control, arranged by Jaroslav Weiser in Prague, in 1958. A history of the Society for Invertebrate Pathology is included in this chapter.

Chapter 6 explores the historical role of journals and books in the development of invertebrate pathology. The manuscript, unfinished at the time of Dr. Steinhaus' death in 1969, was to have been a complete history of the beginnings of insect pathology. Those portions of the manuscript which were finished were prepared for publication by Mabry Steinhaus, with the assistance of Mauro Martignoni and Y. Tanada. Arrangements for publication by the Ohio State University Press were made by John Briggs.

Through the generosity of Mrs. Steinhaus and the cooperation of the OSU Press, copies of Disease in a Minor Chord can be obtained by members of SIP at 40% off the list price of \$20 by completing and returning the enclosed order form to OSU Press. Postage and handling charges will be added to the invoice.

BW

Guide Book to Entomophilic Fungi of USSR, by E.Z. Koval, Naukova Dumka Publishing House, Kiev, Ukraine, 1974, 260 pp. (1,200 copies published in the Russian language)

This book is the first determinative manual completely devoted to identification of entomogenic fungi. The methods of fungi examination are described on pages 5-12, including those for dead insect collection, pure culture isolation, microscopic studies and fungi identification. The main portion of the volume (pp. 13-220) is devoted to determinative keys to 482 fungal species of Phycomyces, Trichomyces, Ascomycetes and Deuteromyces classes. Six hundred thirty-three literature references are given, including one hundred sixty-five in Russian. A glossary of nearly one hundred of the most frequently used terms is provided, as well as lists of the Latin names of fungal species and host insects and fungi affecting insect tissue cultures.

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INVERTEBRATE PATHOLOGY IN ISRAEL

Interest in invertebrate pathology in Israel has been stirred only within the last two decades, and with few exceptions is apparently limited to agriculturally important insects and nematodes. In the 1930's one mention was made in the literature (Carmin) of fungal disease as a possible control of the California red scale in citrus groves. Scattered about in the literature since then have been a few references to fungus (and unknown) pathogens of insects, and some material was even sent in the 1940's to Dr. Steinhaus in California for identification. In the 1950's some research on fungal diseases of nematodes was carried out by Dr. Aschner of the Haifa Technion with Mr. S. Kohn. Actual research on insect pathogens was initiated by Dr. I. Harpaz, Faculty of Agriculture, Hebrew University of Jerusalem, Rehovot, Israel, on polyhedral viruses on Spodoptera littoralis and Thaumetopoea wilkinsoni, together with Dr. Y. Ben Shaked, Dr. E. Zlotkin, Dr. B. Raccah and Dr. Naomi Kislev. Dr. I. Moore, Volcani Institute, Bet Dagan, worked for a number of years on bacterial diseases of insects.

Research on fungal diseases of insects was initiated by R. Kenneth in 1966; it has been found that entomopathogenic fungi are far more common in this semi-arid country than had been suspected, with occasional epizootics occurring. Dr. Y. Weis, Ministry of Agriculture, is in charge of bee health. The Hebrew University Centre for Integrated Pest Control, with Dr. I. Harpaz as its chairman, was set up two years ago.

This spring a new graduate lecture and laboratory course was given at the Faculty of Agriculture on "Diseases of Invertebrates:" I. Harpaz, R. Kenneth, E. Cohn, and M. Klein--viral, bacterial, and fungal diseases of insects, mites and nematodes.

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MEETINGS

IV International Conference on Invertebrate Tissue Culture, Mont Gabriel, Quebec, Canada, June 5-8, 1975

The IV International Conference on Invertebrate Tissue Culture was held at Mont Gabriel, Quebec, Canada, June 5-8, 1975. The Conference was sponsored by the University of Montreal with the financial support of the University, the US National Institutes of Health (NIH), the Canadian National Research Council, and the Canadian Medical Research Council. As a result of NIH support, all the US invited speakers and discussion leaders were able to attend the meeting, as well as most of the US graduate students who applied for travel support. The Conference program was arranged by Prof. E. Kurstak (University of Montreal) and Prof. K. Maramorosch (Rutgers University), who acted as Conference Co-chairmen. They were assisted by an International Advisory Committee composed of Prof. C. Barigozzi (Italy), Dr. A. Dubendorfer (Switzerland), Prof. G. Echalié (France), Dr. P. Faulkner (Canada), Prof. T. D. C. Grace (Australia), Prof. E. Hadorn (Switzerland), Dr. J. Mitsuhashi (Japan), Dr. J. Peleg (Israel), Dr. D. Peters (The Netherlands), Dr. J. Rehacek (Czechoslovakia), Dr. K. A. Harrap (UK), and Dr. I. V. Tarasevich (USSR). Papers were contributed by 62 scientists from Belgium, Canada, Czechoslovakia, Federal Republic of Germany, France, India, Japan, The Netherlands, Poland, Switzerland, the United Kingdom, the USA, and the USSR.

The Conference covered invertebrate organ, tissue, and cell culture and the limitations and pitfalls, as well as potential applications, of morphogenesis, differentiation, virology, parasitology, neurophysiology, and agriculture. New applications of invertebrate tissue culture in medicine and in biology, the latest developments in molluscan tissue culture and cell cloning, and applications to the study of the Microsporidia were among the highlights of the Conference. The meeting brought together the most active workers in invertebrate tissue culture and provided for their direct contact with younger workers and graduate students.

Prof. Barigozzi recommended depositing established invertebrate cell lines in a number of tissue culture depositories in order to assure their identification and accessibility to the scientific community. At the end of the Conference a permanent committee was established to assure the proper planning of future invertebrate tissue culture conferences, with Drs. Kurstak and Maramorosch and the International Advisory Committee in charge of the arrangements. The V International Conference will be held in 1979 in Switzerland. Announcements and a tentative program will be prepared approximately two years in advance to permit proper funding, as well as transportation for interested participants.

The papers presented at the IV International Conference will be published by Academic Press as a hard-cover volume entitled, Invertebrate Tissue Culture: Applications in Medicine, Biology, and Agriculture. The book, edited by Drs. Kurstak and Maramorosch, is scheduled for completion in December 1975.

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EPRS/IOBC--WPRS/IOBC, August 25, 1975, Moscow, USSR

East Palearctic Regional Section, International Organization of Biological Control (EPRS/IOBC)

On August 25, 1975, at the VIII International Congress of Plant Protection in Moscow, a meeting was held to finalize preparation for the foundation of EPRS/IOBC. Under the chairmanship of Dr. J. N. Fedayev (Moscow), delegations from Bulgaria, the German Democratic Republic, Hungary, Poland, Rumania, and Czechoslovakia expressed their interest in membership in the organization. Simultaneous translation by Congress interpreters was provided for the meeting, which was conducted in the Russian language. Drafts of statutes for EPRS/IOBC had been distributed the day before the meeting and will need official approval. The Secretariat of EPRS will be in Moscow. Microbial control activities will be organized under a "Commission for Microbial and Genetical Methods." Cooperation with non-member institutes was emphasized.

West Palearctic Regional Section, International Organization of Biological Control (WPRS/IOBC)

The Working Group on Microbial Control of the Gypsy Moth, established in 1969 by the WPRS/IOBC, conducted a symposium at the International Congress of Plant Protection in Moscow. The Working Group has been primarily active in the production and use of viruses against *Porthetria dispar* in central and western Europe (cf. report in "Plant Protection (Beograd)", 124-125, XXIV, 1973). Dr. L. Vasilievic (Beograd), moderator, and Dr. P. Grison (Paris) reported the Working Group's intention to broaden its activities to (1) describing and analyzing gypsy moth outbreaks and virus epizootics among ecosystems which differ greatly (e.g., North Africa, Spain, Corsica, Sardinia, and Yugoslavia) and (2) stimulating cooperation in an enlarged joint (West-East) Working Group relevant particularly for countries such as Rumania, Bulgaria, and the Soviet Union. A meeting of this Working Group was proposed for the Autumn of 1976 in Rumania, where a common plan will be worked out to increase successful virus application, as well as other types of biological control techniques and silvicultural procedures, based on a better insight into the environmental conditions in the whole area of distribution of the pest, including non-outbreak zones.

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XV International Congress of Entomology,
Washington, D.C., USA, August 19-27, 1976

The XV International Congress of Entomology will be held in Washington, D.C., USA, August 19-27, 1976, under the sponsorship of the National Academy of Sciences and the Entomological Society of America. The Congress will be held at the Washington Hilton Hotel, Washington, D.C. The scientific program will consist of plenary symposia, invitational speakers, specialized symposia/work groups/

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