

# sip

# newsletter

## society for invertebrate pathology

Volume 18, Number 3  
November 1986

SOCIETY FOR INVERTEBRATE PATHOLOGY

ANNUAL MEETING

University of Florida, Gainesville  
July 20-24, 1987

The 1987 annual meeting will take place at the University of Florida, Gainesville, Florida between July 20-24. Registration will take place on Monday (July 20) and formal meetings will start Tuesday (July 21) and end on Friday (12:00 P.M.) The major reasons for having the meeting at this time rather than in mid-August relates to the availability of dormitory and meeting room space. We are hopeful that this will not be inconvenient for society members interested in attending these meetings. The local program committee comprised of James Maruniak, Clayton McCoy, Al Undeen, John Couch, Patrick Greany and myself have selected 6 symposia topics. These being invertebrate immunity, disease ecology, microbial toxins, general pathology, microbial control (emphasis on glasshouse), and biotechnology. The local program committee will contact various invertebrate pathologists to serve as chairpersons for these symposia. The topics selected are quite broad and will be including speakers having research specialties on various microbial-host systems. The committee decided on this approach for several reasons. Firstly, we decided we did not want overlapping symposia which has in the past caused many members to make a choice between an interesting new subject and one in their own area of research. By choosing "general topics" and by soliciting speakers representative of both "insect" and "non-insect" pathology research we hope to present symposia that are diverse and comparative in nature. As a follow up to these 6 symposia, (which will consist of 3-5 speakers) we have requested that symposia chairpersons contact additional speakers to contribute to submitted paper sessions which will complement these symposia. Scientists who submit contributed papers which fit under these subject areas will be placed in these follow-up sessions. In addition there will be several general submitted paper sessions as well as a series of poster sessions. Details as to chairpersons and scheduling for the individual symposium will be published in the next newsletter. At this time, details of registration and accommodations will be given.

SIP 1987 Organizing Committee (Dr. Drion G. Boucias)

H. DENIS BURGES AND THE  
1984-1986 ADMINISTRATION

We are indebted to our Xth President, a man of scientific stature complimented by good nature and dry wit, for his

selfless dedication to the interests of the Society for Invertebrate Pathology. Notable accomplishments of his administration include:

- A color slide atlas of invertebrate pathology (prepared by the Randy R. Gaugler Committee).
- Distribution of the Proceedings of ICIP-IV/SIP-XIX to all members in good standing, not just attendees as previously done (prepared by Robert A. Samson, Just M. Vlak, and Dick Peters).
- A best student paper award to be initiated at the 1987 annual meeting (recommended by the Harry K. Kaya committee on new initiatives).
- Initiation of an issue oriented forum for member opinion in the SIP Newsletter (recommended by the Harry K. Kaya committee on new initiatives).
- Distribution of the 1986 edition of the "Directory for Invertebrate Pathology" (prepared by John D. Briggs).

On behalf of the Society, I express our deep appreciation and humble gratitude to Dr. Burges, his council, committees, and boards for their effective stewardship.

John C. Harshbarger

### REPORTS OF SIP OFFICERS, BOARDS AND COMMITTEES

#### Introduction

The President has edited out considerable detail from some reports and has inserted items into certain other reports to streamline this account of SIP affairs for 1985-6. Following last year's practice, the main actions of Council are noted as appropriate after each report. Just Vlak presented an excellent current balance sheet on behalf of the Local Arrangements Committee and reported that organisation had proceeded well. Council commended their efforts, especially for raising 18,500 Dutch Florins (= ca. \$8,260) from sponsors and for producing such a comprehensive scientific programme. The Chairperson of the Microbial Control Division, Don Roberts, did not present a report. He decided not to hold a meeting of the Division this year because the intended scientific programme had been used as a special symposium in the Colloquium.

Denis Burges

#### Treasurer

The balance on hand at 2 June 1986 was \$32,318.17. During the period 1 June 1985 to 2 June 1986 the Treasury

increased by \$2,412.52. The increase was aided by the Color Slide Atlas and a major contribution from an individual member (see below). The major income was \$10,355 for membership dues, which includes \$3,000 from sustaining members. Interest income was similar to 1984-85; the Treasury contained more money in 1985-86 than in 1984-85, which offset the declining interest rates. The high-interest savings account rate dropped from 7.5% on 30 May 1985 to 6.0% on 3 June 1986 (NOW checking interest remained at 5.25%). The \$3,424.58 increase in dues over 1984-85 does not truly reflect that great an increase in membership; most of the 1984-85 as well as all of the 1985-86 Sustaining members paid dues during the period covered by the 1985-86 report. The major regular expense was the Newsletter and associated mailings. Newsletter expenses were artificially high in 1985-86 because the membership list was included with one issue and because there was an accidental overpayment for the issue including the membership list due to confusion in establishing a Newsletter account in Canada. This overpayment has been handled through the Canadian account. The Color Slide Atlas provided some financial income to the Treasury; the final Atlas figures for 1984-86 indicate a total profit of \$1,056.30 to SIP (\$6310 profit - \$5253.70 expenses). The Directory for Invertebrate Pathology was the major annual expense for 1985-86. Of the money in the SIP Treasury, the Microsporidia division has assets of \$941.00, and the Microbial Control Division has \$935.00. As far as I can determine, neither division has spent any money since they started collecting dues in 1971 and 1981, respectively.

There were two significant developments in 1985-86. One member, who wished to remain anonymous, donated \$3,500.00 to the Treasury with the stipulations that the money not be spent, but instead that the interest earned be used to pay dues or JIP subscriptions for certain members with currency exchange problems. This arrangement was accepted by mail-vote of the Council and is in effect. The money as of 2 June 1986 totals \$3,602.84 (not in a separate account), and the dues and subscriptions will begin with the 1987 dues year. The other development is that the funds left over from the 1985 SIP meeting in Sault Ste. Marie have been used to open a SIP bank account in Canada

#### SIP Newsletter

The SIP Newsletter is produced four times a year by the Society for Invertebrate Pathology. Annual dues (U.S. funds) in the Society are: regular members, \$11.00; and students, \$4.00. Members receive the SIP Newsletter and a copy of the abstracts of all SIP Annual General meetings free, whether or not they attend. Application forms for membership in the Society may be obtained from the Treasurer, Dr. Robert R. Granados, Boyce Thompson Institute, Cornell University, Tower Road, Ithaca, New York 14853, U.S.A.

#### Council Officers of the Society are:

President .....	John C. Harshbarger, USA
Vice President .....	Donald W. Roberts, USA
Past President .....	H. Denis Burges, England
Secretary .....	Ann Cali, USA
Treasurer .....	Robert R. Granados, USA
Trustees .....	Christopher J. Bayne, USA
	John A. Couch, USA
	Brian A. Federici, USA
	Christopher C. Payne,
	England

#### Send news items and other contributions to:

David Tyrrell, Editor  
SIP Newsletter  
Forest Pest Management Institute  
Canadian Forestry Service  
P.O. Box 490  
Sault Ste. Marie, Ontario, Canada P6A 5M7

DEADLINE NEXT ISSUE: January 15, 1987

so that Newsletter expenses can be paid more quickly. This will eliminate certain problems, including service charges to SIP, due to delays in paying bills caused by mailing times and currency exchange. As of 4 March 1986 the Canadian account had Can. \$3,978.75.

The balance sheet included a nominal value of \$2,000 for funds from the Brighton meeting account. This has since been transferred to the main SIP Treasury, due to a favourable exchange rate at the time, and it amounted to much more than \$2,000. Prior to the transfer, pounds sterling 2,000 (ca. \$3,000) had been sent to Holland as a starter fund for the Colloquium.

I wish to thank Don Roberts for his invaluable assistance with the SIP mailing list and E.A. Heinrichs (Head, LSU Entomology) for providing student-worker help to assist with book-keeping and major mailings.

The budget for next year (1986-87) projects a healthy increase of some \$4,000 less the cost of supplying and mailing the Proceedings of the 1986 Colloquium to members in good standing on 17 August 1986, who could not attend the Colloquium.

James R. Fuxa

#### Secretary

The major responsibility of the Secretary this year involved the election of officers. A full report appeared in the last Newsletter. Letters bearing signatures from 16 distinguished colleagues were received putting the name of Professor Constantin Vago into nomination for Honorary Member. In addition, the required curriculum vitae summarising his outstanding contributions to Invertebrate Pathology and to the SIP, together with a list of publications were received. As directed in the By-laws, this nomination was presented to Council.

Elizabeth W. Davidson

#### Action by Council

Council wholeheartedly and unanimously approved nomination of Prof. Vago for honorary membership. The President has informed him of this decision and has heartily congratulated him on behalf of members. His name will appear on the 1988 ballot sheet for election.

Denis Burges

#### Publications Board

The Publications Board has been in contact with the Newsletter editor, the editor of the Journal of Invertebrate Pathology (JIP), and individual members during the past year. Each of the editors mentioned have prepared their separate reports. The Newsletter has been operating smoothly with only slight but unavoidable delays in a few mailing dates. Gary Wilson should be commended for an excellent job over the past two years. He will be giving up the editorship this year.

Tom Cheng indicated that the JIP is in reasonably good health despite the continued problem of low subscribership. Several problems have arisen during the year with respect to manuscripts submitted by individuals. These have been reviewed by members of the Publications Board, and President Burges has communicated with the individuals involved. Tom Cheng will meet with Council, with members of the JIP Editorial Board and the Publications Board during the August meetings in Veldhoven. These and other questions dealing with the Journal and editorial policy will be discussed at that time.

Contact was made with the Library of Congress and the International ISBN Agency relative to obtaining numbers for Society publications, particularly for the Proceedings of annual meetings. Just Vlak had independently made arrangements for ISBN numbers for the Veldhoven ICIP Proceedings, so the Committee took no further action for this year. It is recommended that Council discuss the desirability of obtaining a bank of ISBN numbers for future publications. Library of Congress numbers are apparently restricted to publications from US publishing houses, and therefore might not be available for the majority of the Society's proceedings.

John Briggs reported that the donation made by Council enabled printing and mailing of the Directory of Invertebrate Pathology to be completed. All SIP members received a free Directory, copies totalling \$100 have been sold to non members and about 400 Directories remain for sale. The ISSN number is 0885-1646. The Directory is held on computer software capable of managing a growing SIP Directory and entries can be sorted in a variety of ways.

James D. Harper

#### Action by Council

Council thoroughly reviewed the problems of the JIP with Tom Cheng and views were exchanged. Because ISBN numbers will be used only for the 4-yearly Colloquia, a bank of ISBN numbers was not considered desirable.

The Ohio State University is sincerely complimented for donation of partial employee time and John Briggs for his stirring efforts devoted to the Directory.

Denis Burges

#### Journal of Invertebrate Pathology

The Journal of Invertebrate Pathology (JIP) continues to remain healthy. Not only has it remained the leading journal in insect and molluscan pathobiology, it is attracting manuscripts from all over the world concerned with various aspects of the pathobiology of other categories of invertebrates. The subject matters have included histopathology, cytopathology at the light and electron microscope levels, cellular and humoral immunology, pathophysiology and biochemistry, virology, microbiology, mycology, parasitology, epizootology, and aspects of applied invertebrate (especially insect) pathology as related to field testing.

During this reporting period (June 30, 1985 through May 30, 1986), the Journal received a total of 273 manuscripts for consideration. Of these, 134 were accepted and 43 were rejected. The remaining 96 are still in the process of being reviewed or revised.

It is noted that the Editorial Board and non-board reviewers have exercised their prerogative to be increasingly more discriminating and this has resulted in extreme unhappiness on the part of at least two authors. These episodes, however, are to be expected as the Journal increases in prestige and its standards continue to rise. It is of interest to note that the French Centre National de la Recherche Scientifique (roughly equivalent to the US National Science Foundation), as a result of a recent survey, has ranked JIP among the so-called "middle level" international journals, along with the Journal of Parasitology, Zeitschrift fur Parasitenkunde, Journal of Ultrastructural Research, Journal of Infectious Diseases, Biochemical Journal, Infection and Immunity, among others. Among journals devoted to allied subjects, only Experimental Parasitology, Journal of Experimental Medicine, Journal of Biological Chemistry, and the Journal of Protozoology rank higher. This speaks well for JIP. Of course, the Editorial Board and the Editor-in-Chief will

strive even harder to elevate JIP so that it is included among the "top level" international journals.

Recently received subscription data from Academic Press has revealed the following:

	1984		1985		1986	
	Inst.	Ind.	Inst.	Ind.	Inst.	Ind.
USA	378	61	354	82	339	51
Foreign	275	50	243	32	233	38
Subtotals	<u>653</u>	<u>111</u>	<u>597</u>	<u>114</u>	<u>572</u>	<u>89</u>
Totals	<u>764</u>		<u>711</u>		<u>661</u>	

It is evident from the above that individual subscriptions still remain low. It is suggested that the only way to correct this situation is to tie subscriptions with membership in the Society. This, however, is a decision that only Council can make. In the meantime, JIP is in no danger of being terminated by Academic Press, the owner, although the total number of subscriptions has been drastically reduced. It takes a total of +/- 1000 subscriptions to make the Journal profitable.

As is widely known by now, your Editor-in-Chief is spending a sabbatical year in the Departement de Biologie Animale of the Universite de Perpignan, France. The leave commenced on March 1, 1986. During his absence, Robert S. Anderson has consented to serve as the Acting Editor-in-Chief, although the Editorial Office remains at the Marine Biomedical Research Program of the Medical University of South Carolina, Charleston, South Carolina, USA. Periodic reports from Ms. Patricia DuPree, the Editorial Secretary in Charleston, give the vivid impression that everything is going smoothly. We are most grateful to Robert Anderson and Ms. DuPree.

Thomas C. Cheng

#### Action by Council

Council noted that JIP subscriptions have continued to fall at a rate of 4 to 7% annually since 1983, particularly in the USA. It urgently requests that members should not only subscribe to the JIP themselves and persuade their employers to subscribe to it, but also that they should encourage colleagues to take the same action. Council does not recommend that subscription to the JIP should be tied to membership because it considers that this action would be self defeating. It requested incoming President Harshbarger to appoint a new committee to seek views of membership about whether JIP subscription should be tied to SIP membership. In order to be prepared for possible contingencies, Council suggested that the Publications Board should be instructed to obtain information on the cost of producing a journal such as the JIP.

Denis Burges

#### SIP Newsletter

Four newsletters were prepared and sent Air Mail direct to individual members during the period July 1985 to July 1986 (Vol. 17, No. 3 & 4; Vol. 18, No. 1 & 2). Extra copies were sent to the Archivist and Treasurer. The four issues comprised a total of 41 pages, this represents an increase of 7 pages as compared to the last report of June 1984 to 1985. Registration material for the 1986 SIP meeting and a membership list were mailed with the February issue. The total printing, collating and inserting costs for the four issues of the newsletter was \$ Canadian 2,859.13. Printing of the membership list was \$1,136.39. The total mailing costs were \$3,180.14. Envelope purchases amounted to \$457.24. Thus the total cost incurred by the

Newsletter Editor was \$7,632.90. The actual costs incurred for the production of the newsletters only were \$6,496.51. This represents an increase of \$523.08 over the 1984-85 figure of \$5,973.43. This reflects the greater number of pages and additional postage due to the membership list. As in the past much of the typing was done free at the Forest Pest Management Institute.

The following members have agreed to serve or continued to serve as regional correspondents.

K. Aizawa (Japan), S. Amonkar (India), H. Burges (UK), J. Chadwick (Canada), B. Gabriel (Philippines), R. Kenneth (Israel), A. Kermarrec (Caribbean), W. Oteino (Africa), J. Pillai (New Zealand), G. Riba (France), K. Soderhall (Scandinavia), R. Teakle (Australia), H. Wassink (Latin America) and C. Yamvriasis (Greece).

Note: All values are in Canadian dollars.

Gary G. Wilson

#### Action by Council

The Council wishes to thank Gary Wilson for his efficient, hard work as editor and the Forest Pest Management Institute for help with typing, as well as to wish success to our new editor, David Tyrrell.

Denis Burges

#### Meetings Board

Don Roberts reported orally to Council that the 1987 Annual Scientific meeting will be held at Gainesville, Florida, starting on Tuesday 21 July. Drion Boucias will be Chairperson of the Local Arrangements Committee. Offers from Brian Federici to host the 1988 meeting at the University of California, San Diego (August 14-17) and from Jim Vaughn to host the 1989 meeting in College Park, Maryland were accepted with gratitude by Council. Arrangements for the Colloquium in 1990 are proceeding well - building of the new conference centre at Adelaide has started. Drion Boucias outlined detailed arrangements for 1987 and Council agreed to his arrangement for the University to finance the meeting for agreed fixed charges, the University keeping any profit and bearing any loss.

Denis Burges

#### Membership Committee

As of 2 June 1986 the membership is as follows:

Regular	679	(38 new)
Student	97	(24 new)
Emeritus	14	
Honorary	3	
Sustaining	7	

800

Of the 679 regular members, 561 are in good standing, 77 owe dues for 1986, and 41 owe dues for 1985 and 1986. Of the 97 student members, 77 are in good standing, 9 owe dues for 1986, and 11 owe dues for 1985 and 1986. The membership drive effort has continued with the addition of 5 new recruiters in Japan, People's Republic of China, Iraq, East Africa and Israel. The committee has approved Emeritus status for 7 members.

Lawrence Lacey

#### Action by Council

Membership drives were discussed and it was agreed that these should be biennial, the most effective recruitment being continuous efforts by all individual members. President Burges redrafted a brochure for the SIP, which was modified and approved by Council by correspondence during 1985. A copy will be included with dues forms for 1987 and members will be requested to use it to recruit new members.

Denis Burges

#### Safety Group of the Division of Microbial Control

The main non-meeting activity of the Safety Group has been putting together the annotated bibliography on the "Safety of Entomopathogens". Recently CRC Press has extended an invitation to Marshall Laird to edit a comprehensive book on the subject. Marshall Laird then contacted Elizabeth Davidson and myself regarding the co-editing of the opus. Since the book would contain an extensive bibliography we decided to participate. As soon as approval of the book's outline is received from CRC, we will proceed with contacting prospective authors.

The theme of this year's safety workshop, to be held at the IVth International Colloquium on Invertebrate Pathology, will be the safety of entomopathogens (and related organisms) to vertebrates. Four prospective speakers have been contacted.

Lawrence Lacey

#### Action by Council

Council agreed that a new book will make the annotated bibliography, as originally conceived, redundant. The \$100 earmarked by Council at its last meeting (and the \$100 by the Division of Microbial Control to finance the bibliography) will be held available until the agreement with CRC Press is finalised.

#### Nominating Committee

The chair requested from each member of the Committee a list of four nominees for each of the four open positions in the Council. There were 7 nominees for Vice President, 10 for Secretary, 8 for Treasurer and 24 for Trustees. By means of three Committee ballots these were reduced to the following: President, John C. Harshbarger; Vice President, James D. Harper, Donald W. Roberts; Secretary, Ann Cali, John Cunningham; Treasurer, Susan E. Ford, Robert R. Granados; Trustees (2), Christopher J. Bayne, Rodney P. Dales, Christopher C. Payne. All these nominees agreed to run for office.

Y. Tanada

#### Slide Atlas

The "Color Slide Atlas of Invertebrate Pathology", an initiative started by Past President Wayne Brooks, has been sold out. The last of 150 sets was mailed September 24, so that it required a little more than a year to sell out the Atlas after its first offering at the Ithaca meeting. Orders were received from 22 countries on 6 continents - 23% of all orders were from outside the US and Canada. Purchasers were extremely diverse, ranging from Bob Jones University to Cambridge University. Sales to SIP members were initially slow but a large mailing of flyers targeted at SIP members likely to purchase a set was later very successful. It is difficult to estimate sales to non-insect invertebrate pathologists, but my impression is that

we did not do well here. The Society's funding led to a final income of \$6,320, realising a profit of \$1,066. Based on letters and conversations, I feel the Atlas was well received, filled a need and can be regarded as a success.

For the future, it would be very expensive to reprint the Atlas to supply a possible outstanding demand for 15-20 sets. I feel a new or revised Atlas should not be offered too quickly, a 2-5 year lag between offerings would appear reasonable and prudent.

Randy Gaugler

#### Founders Lecture

The 1986 Lecture is the fifth in the series initiated in 1982. Lecturers and Honorees have been recognized as follows:

1982	Rivers/Smith	UK
1983	Sparks/Makin	USA
1984	Tanada/Steinhaus	USA
1985	Angus/Bergold	Canada
1986	Weiser/Metchnikov	The Netherlands

The present Committee comprises, Granados, Johnson, van der Geest and Briggs. One member is replaced each year. This year Briggs will stand down. Originally suggested as a lecture in memory of the late A.M. Heimpel, the Committee developed a plan to honor two individuals annually. The location of the Society meeting has influenced the Committee leading to the election of local Lecturers and Honorees. Currently the Committee has one commitment to honor, A. Paillot at a future meeting of the Society, and a nominee for an Honoree or Lecturer.

Recommendations have been made by members of the Committee to (a) limit the annual recognition to one individual; and (b) to limit the recognition to a biennial affair. To this date the Committee has not met as a whole but it can meet at the present Colloquium to finalize Committee guidelines for publication in the Newsletter.

John D. Briggs

#### IUBS Commission on Invertebrate Pathology

The Commission has planned a meeting in Egypt this fall but we have no one at present able to attend. John Couch and John Briggs have not yet written their promised article about the SIP for the IUBS news magazine "Biology International" but they still intend to do so. Periodically, grants become available for which the SIP would be eligible and John Briggs will alert the Council about these.

John D. Briggs and John A. Couch

#### Culture Collection Committee

No cultures at risk have come to the attention of Committee members. The Dulmage collection of strains of *Bacillus thuringiensis* will soon be transferred from the USDA site at Brownsville to the site at Peoria, which is regarded by Howard Dulmage as an excellent new home for it.

Denis Burges

#### Glossary Committee

At his retirement in late 1985, Mauro Martignoni resigned as Chairperson and has carefully preserved his material for a revised glossary ready to hand over to a new chairperson. Council all sincerely thanked Mauro for the

effort and enthusiasm he devoted to this subject. After trying other candidates unsuccessfully, President Burges approached Brian Federici to be the new chairperson. Since it is unlikely that the USDA would again publish the glossary, Brian promised to investigate publication by the University of California and to accept the role of chairperson if the investigation proved favorable. Brian reported that a run of 1,500 copies would cost about \$4,000 and he gave estimates of mailing costs.

#### Action by Council

Council discussed at length whether a revised glossary would be a viable publication for SIP to back. They recommended on a majority vote that it should be backed to a ceiling of \$7,500 which would allow for inflation in printing and mailing costs, sending a copy to all SIP members, with an excess of copies for sale to non members. Doubts were expressed at the subsequent SIP Business meeting at Veldhoven as to whether there would be sufficient demand and use for a revised glossary and the meeting instructed that an expression of opinion from members should be obtained before continuing with this venture.

Denis Burges

#### New Initiatives Committee

The 1985 SIP Council adopted, in principle, two proposals out of several that were offered by the New Initiatives Committee. These proposals were the establishment of a "forum section" for the SIP Newsletter and an award for best student paper at the annual SIP meeting.

The Committee agreed that the "forum section" for views in the Newsletter would be successful only if the members contributed towards this section. Currently, there is a mechanism to submit news items to the newsletter. An establishment of a "forum section" with guidelines may stimulate the membership at large to embrace this concept as a means to communicate with others in the Society. A poll was taken among committee members and the SIP Newsletter editor, Gary Wilson, on an appropriate title for this section in the newsletter: the title "forum" was selected and guidelines suggested.

The majority of Committee members are in favor of a best student paper award. The Committee has developed initial guidelines for the presentation of such an award. If the concept of a best student paper award is approved by the Council, the New Initiatives Committee recommends the appointment of a committee to implement the program.

Several new initiatives were suggested by Committee members. One supported by most Committee members is the idea of educational films for teaching. It is suggested that the Society support the filming of pathogens of invertebrates and make them available for SIP members on a loan basis, or otherwise, on film or videotape. The educational film could be on each pathogen group (i.e., viruses, bacteria, protozoa, fungi and nematodes) and could run 15-20 minutes in length. Alternatively, it could be a longer presentation covering all pathogen groups in one film.

Harry K. Kaya

#### Action by Council

Council discussed these proposals at length and recommended that the 'Forum', the 'best student paper award' and a 'collection of existing educational films and videos' should each be established by the formation of

separate committees. Doubt was expressed about whether the cost of making a film could be funded.

Denis Burges

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MINUTES OF THE SIP BUSINESS MEETING  
Thursday, August 21, 1986  
Veldhoven, The Netherlands

The Annual SIP Business Meeting was opened by President Denis Burges. Reports from each committee will be published elsewhere in the Newsletter; highlights of the meeting are presented here.

1. Minutes of the 1985 Business Meeting were approved as published in the Newsletter.
2. Treasurer's Report, Jim Fuxa. The Society gained slightly over \$2000 this year. An anonymous donation of \$3500 has been received by the Society, the interest from which to be used to support Journal subscriptions and memberships for members from developing nations with currency difficulties. Thanks were extended to Don Roberts for maintenance of the membership list and to the Department of Entomology at Louisiana State University for secretarial assistance. The Treasurer's report was approved as presented.
3. Local Arrangements Committee, Just Vlak. 414 delegates and 37 accompanying persons were registered at the International Colloquium. More than 40 countries were represented. The Colloquium will finish with a positive financial balance.
4. Secretary, Betty Davidson. In addition to more routine duties, the Secretary has received adequate signatures and biographical data to support the nomination of Prof. Constantin Vago for Honorary Membership. Council heartily endorsed this nomination, which will be presented to the membership for vote on the 1988 ballot.
5. Publications, Jim Harper. Four issues of the Newsletter were produced at a cost of ca. \$6500. Gary Wilson was thanked for his efforts as editor, and The Forest Pest Management Institute was thanked for secretarial assistance. The Newsletter will continue to be produced at The Institute with David Tyrrell as the new editor. The Directory of Invertebrate Pathology has been distributed, thanks to the efforts of John Briggs. Corrections and additions to the Directory should be sent to Dr. Briggs.
6. Journal of Invertebrate Pathology, Tom Cheng. Please see the detailed report. Tom emphasized that only 89 individuals (39 from the USA) carry subscriptions to the Journal, with merely 661 subscriptions overall, a number which is much too small. Members are urged to take the Journal and to encourage their institutions to do so also.
7. Meetings Board, Don Roberts. Invitations for future meetings have been received and accepted for the following sites:  
  
1987 - July 21 (note this is a Tuesday, Gainesville, Florida).  
1988 - August 14, La Jolla (San Diego), California, hosted by our members at Riverside.  
1989 - College Park, Maryland  
1990 - International Colloquium at Adelaide, Australia.
8. Division of Microsporidia, Ted Andreadis. Please see report of the meeting. Jimmy Becnel solicited ideas for the Gainesville meeting.
9. Division of Microbial Control, Denis Burges. This year the meeting was transformed into a symposium and no formal meeting was held.
10. Safety Working Group, Larry Lacey. Money approved by Council and the Division of Microbial Control to support production of an Annotated Bibliography on Safety will probably not be spent, as a proposed volume on safety to be edited by M. Laird, L. Lacey and E. Davidson will include this information.
11. Membership Committee, Larry Lacey. There are currently 880 members of SIP, including 679 Regular (38 new), 97 Student (24 new), 14 Emeritus, 3 Honorary and 7 Sustaining. However only 561 regular and 77 student members are in good standing (paid up). Members of the committee were complimented on their assistance. Note that all members in good standing not attending the International Colloquium will receive a copy of the Proceedings free of charge.
12. Color Slide Atlas, Denis Burges. The Atlas is sold out and was profitable. Council has decided to update the Atlas in 3-4 years, with a new committee being appointed. Comments on the existing set are solicited. Randy Gaugler and his committee are to be complimented on this effort.
13. Founder's Lecture, John Briggs. John is retiring as chairman, and the new committee will consist of L. Van Der Geest (Chair), R. Granados, P. Johnson and D. Pinnock. Elie Metchnikoff was honored this year by a lecture given by Jaroslav Weiser. The recent death of former honoree, John Mackin, was announced.
14. IUBS Representative, John Briggs. Please see report.
15. Financial Assistance, John Briggs. \$2000 received from National Institutes of Health was used to support travel of 6 persons from North America to the Colloquium.
16. Culture Collections, Denis Burges. No collections were found at risk this year. The Howard Dulmage collection of Bacillus thuringiensis strains will be transferred to the USDA laboratory at Peoria, Illinois.
17. Glossary, Denis Burges. Following the retirement of Mauro Martignoni, the Glossary has been taken over by Brian Federici. A maximum of \$7500 was authorized by Council to support this effort. John Harshbarger moved (second by F. Obenchain) that the Glossary project be referred to the Publications Committee for study and analysis of need. After discussion from the floor, the motion carried unanimously.
18. Archivist, Wayne Brooks. Members are reminded that materials can be deposited and obtained for study.
19. New Initiatives, Harry Kaya. Please see report. Council chose 3 ideas last year for further development. As a result, committees will be formed to establish (1) an opinions forum column for the Newsletter, (2) to develop an award for the best student paper at the annual meeting, and (3) to develop a list of films and videotapes on invertebrate pathology.
20. 1987 Meeting, Drion Boucias. The meeting will be early next year, Monday July 20 (Council meeting) - Friday July 24, due to change of University start date. Ideas for symposia should be directed to the Local Arrangements Committee.

21. Nominating Committee, Joe Tanada. Results of the election appeared in the last Newsletter.

Respectfully submitted,  
Elizabeth W. Davidson

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#### ANNOUNCEMENTS FROM YOUR SECRETARY

##### ARE YOU PLANNING TO RETIRE SOON?

According to the Bylaws, you may eligible for Emeritus status if you have been a dues-paying member. Contact the Membership Chairman, Dr. Robert Anderson, University of Maryland Chesapeake Biological Laboratory, Solomons, MD (301-326-4281).

##### COULD YOU USE A COPY OF THE BYLAWS?

All committee chairs and officers, as well as members at large may need a copy of the Bylaws; if you can't find yours or never had one, contact the Secretary.

##### THE SIP ENDOWMENT

As noted in the Minutes and Treasurer's report, SIP has received an endowment, the proceeds of which will be used to finance memberships and journal subscriptions in "soft currency" countries. Scientists in these countries find great difficulty in paying dues and subscriptions in dollars, and when checks are received in foreign currency they cost the Society for currency exchange. You can assist your colleagues in these countries to be a part of the Society by contributing to this endowment. Contributions should be sent to the Treasurer marked for the Endowment. American members note - this may be the last year you can deduct such contributions! If you know a colleague who may be in need of assistance in paying his/her dues, please inform the Treasurer or Elizabeth W. Davidson.

##### DO YOU HAVE FILMS ON INVERTEBRATE PATHOLOGY?

The Society is developing a list of available films on any aspect of invertebrate pathology, or including portions involving invertebrate pathology or microbial control. If you have or know of such films, please contact the Secretary.

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##### COLOR SLIDE ATLAS COMMITTEE - FINAL REPORT

The Color Slide Atlas of Invertebrate Pathology has been sold out. The last of 150 sets (200 slides each) was mailed in September 1985, so that it required a little more than a year to sell out the Atlas after its first offering at the Davis meeting. Orders were received from 22 countries on six continents - 23% of all orders were from outside North America. Demand continues high, with more than forty additional orders (nearly all from overseas) remaining unfilled. It is expected that a revised Atlas will be offered in the future. Because orders exceed stock, those holding sets may return them for a refund. Total income received from Atlas sales came to \$6,320.00 (\$40/set), while expenses totaled \$5,253.70, so the Society realized a profit of \$1,066.30.

Randy Gaugler, Chair

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The Meetings Board gathers invitations from groups interested in hosting Society for Invertebrate Pathology meetings, and transmits these invitations to the SIP Council for consideration. Action was taken by Council in their meetings in 1985 and 1986 for the next three annual meetings. In 1987 we will meet in Gainesville, Florida on the University of Florida campus July 21-25. Please note that the commencement date is Tuesday, rather than the normal Monday. Housing will not be available on campus on Sunday evening. For further details on the program for this meeting, please see the announcement elsewhere in this newsletter. The 1988 meeting will be held at San Diego (La Jolla), California the week of August 15-18. Dr. Brian Federici of the University of California at Riverside (Division of Biological Control, Department of Entomology, University of California, Riverside, CA 92521) will serve as meeting chairman. The meeting for 1989 will be in College Park, Maryland (Washington, D.C. area) on the University of Maryland campus in August. The Local Arrangements Committee includes Dr. James Vaughn (Insect Pathology Lab., Biosci Bldg, Rm 214, Bldg. 011A, BARC-WEST, Beltsville, MD 20705) and Dr. Charles Reichelderfer (Department of Entomology, University of Maryland, College Park, MD 20742). In 1990 the Fifth International Colloquium on Insect Pathology will be held under the auspices of SIP in Adelaide, South Australia, Australia. The Chairman of the Organizing Committee is Dr. Dudley Pinnock (Department of Entomology, Waite Institute, University of Adelaide, Glen Osmond, South Australia 5064). The date selected for this meeting is the week of August 20, 1990. The SIP Meetings Board and the Organizing Committee of the Colloquium will appreciate comments from SIP members on the suitability of this date. We are particularly interested in conflicts with other major meetings. The date and site for the 1991 meeting have not been selected as yet, but some European members have requested that the meeting be held in Europe that year. The Meetings Board welcomes invitations for this year. In summary, the Society, through the generosity of some of its members, has selected some exceptionally interesting meeting sites over the next several years.

Donald W. Roberts  
Chairman, Meetings Board

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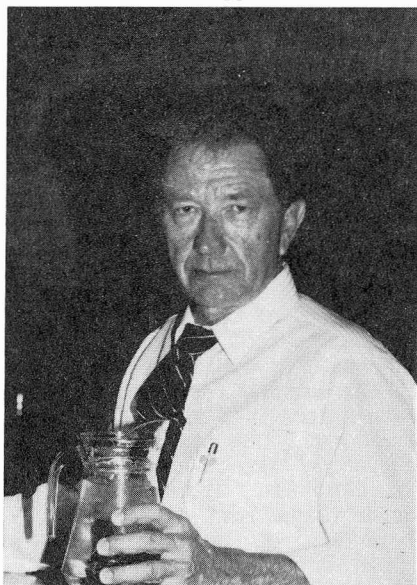
#### MICROBIAL CONTROL DIVISION REPORT

The Microbial Control Division at its 1985 meeting in Sault Ste. Marie gave permission to Dr. Wellington Odieno to organize a symposium on "Microbial Control in Developing Nations" at the International Colloquium on Invertebrate Pathology in the Netherlands in 1986. This was done although not specifically identified by the Colloquium as a Microbial Control Division activity. The business meeting for 1986 was not held at the request of several prominent members of the Division, because of excessive scheduling conflicts for the time assigned to this meeting. The only matter of business pending is the election of a Trustee, which will be done by mail ballot. The most pressing issue at present is a decision on a Division-sponsored event for the upcoming July 21-25, 1987 SIP meeting in Gainesville, Florida. Suggestions from Division members are requested. Also, proposals for longer-term activities for the Division are welcome. For example, the Division agreed last year to assist in the publication of a handbook on safety of invertebrate pathogens. The Division at this time is healthy in membership and finances, and therefore, is capable of launching activities with long-term value to its members.

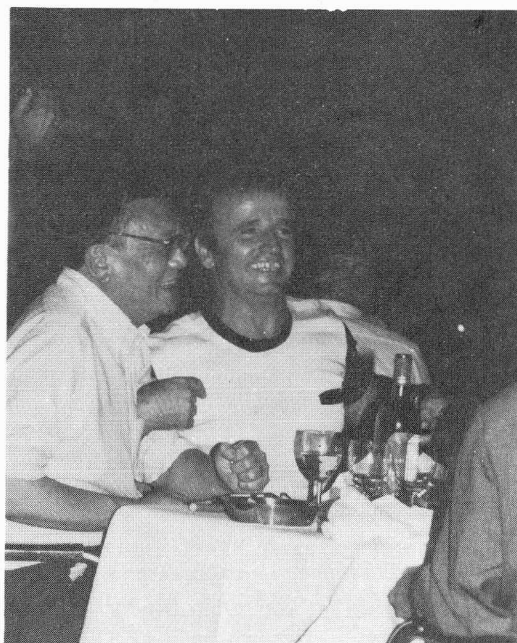
Donald W. Roberts  
Chairman



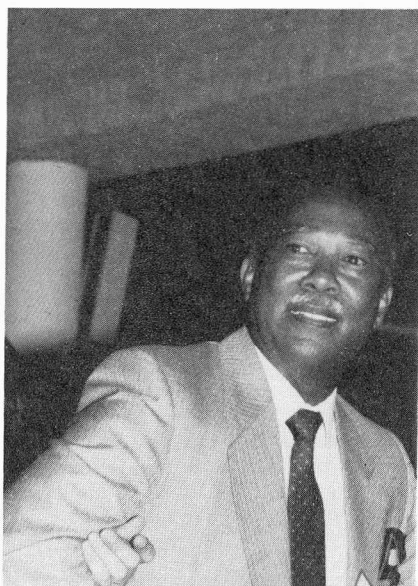
John Briggs



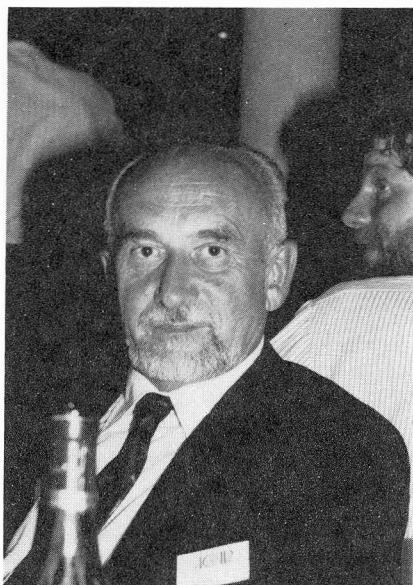
Thomas Cheng and Kurtesh Purrini



Oswald Morris



Jerzy Lipa



David Alderman



The microsporidia gang: Maddox, Henry, Becnel, Sweeny, Andreadis and Brooks





Denis Burges and Phyllis Johnson



OTHER ICIP 86 ACTIVITIES

Denis Burges handing over the gavel to the new SIP President, John Harshbarger



Ester Peters and John Harshbarger



John Briggs presents plaque to Jaroslav Weiser, who gave the Founder's Lecture honoring E. Metchnikoff. Denis Burges and Just Vlak look on



Austin Farley and Iuke Sunila



ANNUAL 5K SIP RUN  
Go that way



BIOTECHNOLOGY AND FOREST INSECT PEST CONTROL IN  
THE CANADIAN FORESTRY SERVICE

In its broader sense, biotechnology can be defined as the use of microorganisms, animal and plant cells for the production of goods and services. It is old in the sense that microbes and cells in culture have long been used to produce a variety of food, agricultural and pharmaceutical products. Penicillin is a product of biotechnology, as are the spirituous fluids that are produced with a thousand-year-old brewing technology. It is new and exciting in the sense that recent advances in technology and molecular biology provide the means not only for improving known processes but for developing entirely new ones with novel biological and genetic characteristics. One area that is of great interest in the development of insect pest control methods is the application of microbial genetics and molecular biology to improve virulence, modify host specificity and develop new methods for production of microbial control agents.

Because of its background as the centre for microbial control research in the CFS and its resident expertise, FPMI is taking a lead role in identifying areas of potential for biotechnological applications and addressing these areas as resources permit. Two examples can be given.

Paul Fast, Project Leader of the Bacterial Pathogen Project has initiated a research network in close collaboration with Dr. Lou Visentin, Coordinator for Biotechnology at the National Research Council. The purpose of the network, called Biocide, is to foster the biotechnological development of *B.t.* into a major insecticide, targeted to either specific crops or pests. The objective was to recruit a group of competent scientists to study the molecular genetics and structure of the *B.t.* delta-endotoxin, the activation, the nature of the receptor and the molecular mode of action of the active principle.

The team includes Dr. R. Brousseau, Montreal Biotechnology Research Institute (molecular genetics) Dr. P. Lau, (gene sequencing) and Dr. P. Carey (protein structure and spectroscopy), both of National Research Council, Dr. H. Kaplan, Ottawa University (protein chemistry), Dr. H. Falter, Laurentian University (activation chemistry), Dr. R.G.H. Downer, Waterloo University (receptor studies) and Dr. P. Fast, FPMI (coordinator, responsible for bioassays and for supplying crystal toxin and bacterial strains). Dr. R. Williams of NRC is contributing circular dichroism studies and Dr. W. Crosby of the Saskatoon Biotechnology Research Institute will be attempting to express the cloned toxin gene in plants. Additional FPMI involvement includes Dr. A. Pang, Immunochemist, Dr. L. Gringorten, a PDF carrying out bioassays, and R. Milne providing biochemical technical support. Funding is provided by NRC, CFS Headquarters and FPMI. During its 2 year history, significant progress has been made organizationally and scientifically, and the network is being used as a model for organization in other areas.

In the Virology area, Dr. Basil Arif spent a year and half Career Development Leave at the Institute for Genetics in Cologne, learning genetic sequencing and manipulation techniques. These are now being applied to the characterization and physical mapping of several viral genomes with a view to future manipulation to improve virulence and host specificity. Dr. Sadar Sohi, Project Leader in Tissue Culture, and closely allied to the Virology program, has returned from Career Development leave at the Institute of Biological Control, Kyushu University, Fukuoka Japan, where he learned up-to-date techniques in hybridoma technology, monoclonal antibodies and production of insect pathogenic viruses *in vitro*. FPMI will now be more fully equipped for the application of biotechnology to virus replication and production in cultured cells. Dr. Pang, our Immunochemist, is also strongly involved here, as are two other project staff, Peter Jamieson, Biochemist, and Keith Brown, Biochemistry Technician. Preliminary contacts have been made

with other researchers at NRC and University of Guelph to develop the network of research expertise necessary for the application of biotechnology to improve viral pathogens.

Other areas of potential yet to be developed are in fungal pathogens and in insect and pathogen production. Because of limited resources and the need for several areas of expertise, biotechnology research is best done on a collaborative, network basis. This approach has been successful to date, and FPMI will continue to take the cooperative approach to ensure that the benefit of long years of research are optimized in both the scientific and insect pest management fields. The CFS has provided leadership in the field of microbial control and can continue to do so by developing interest in the research community in the biotechnology approach, and by coordinating and actively participating in research networks. The payoff potential is extremely high.

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GYPSY MOTH VIRUS PRODUCED AT  
FOREST PEST MANAGEMENT INSTITUTE

Permission has been granted by Agriculture Canada for gypsy moth larvae to be reared at FPMI for the production of nuclear polyhedrosis virus. This virus was registered under the name of Gypchek by the Environmental Protection Agency in the U.S.A. in 1978, and this is the first production operation in Canada. Eggs in diapause will be stored during the summer months when escaping larvae pose a potential threat. This winter, eggs are being supplied by Mr. John Tanner at the Otis Methods Development Centre on Cape Cod and Dail Grisdale is using some of this stock to establish our own colony. John McPhee, supervisor of the pathogen production facility is presently infecting and harvesting about 15,000 fifth-instar larvae per week and finds gypsy moth a satisfying host for virus production because of its large size and high yield of virus per larva. Infected larvae are lyophilized and ground to a fine powder to prepare a product for field application. It is hoped that aerial spray trials will be conducted in Ontario this spring. These trials will build on the technology already established by our American colleagues. Any operation will be in collaboration with OMNR and GLFC staff. We plan to produce sufficient virus material to treat about 200 ha.

The above two articles and others can be read in FPMI's Newsletter, with copies available from:

Information Services  
Forest Pest Management Institute  
Canadian Forestry Service  
P.O. Box 490  
Sault Ste. Marie, Ontario  
Canada P6A 5M7

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THE AUSTRALASIAN INVERTEBRATE PATHOLOGY WORKING GROUP

The Australasian Invertebrate Pathology Working Group has been operating now for seven years. It constitutes an informal network of workers, and functions primarily to encourage communication between members. A newsletter is produced annually where members share their current activities, interests, successes and problems.

It reaches approximately 80 persons from Australia (49), New Zealand (10), Asia (12), Europe (8), N. America (2) and S. America (1).

The Vth International Colloquium on Invertebrate Pathology is scheduled for Adelaide, South Australia, in 1990. We expect this to afford the opportunity for similar workers outside this region to meet the members. We urge you all to start planning now for Adelaide in 1990.

R.E. Teakle  
Regional Correspondent

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THIRD INTERNATIONAL CONFERENCE ON  
MALARIA AND BABESIOSIS  
ANNECY, FRANCE  
SEPTEMBER 7-11, 1987

First Announcement

The organizing committee takes pleasure to invite you to participate in the 3rd International Conference on Malaria and Babesiosis, which will be held in Anancy, France on September 7-11, 1987. The theme of the Conference is: New Technologies and Field Applications. Major topics include epidemiology, chemotherapy, vaccine development, teaching and training. The Congress language will be English and French.

Congress Secretariat  
Fondation Internationale Laveran  
"Les Pensières"  
55, route d'Anancy  
Chavoires  
74290 VEYRIER-DU-LAC  
France

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BIOTECH TO HOLD MICROBIAL CONTROL TRAINING

About 20 researchers in microbial control of insect pests and plant diseases, particularly those from Southeast Asia will converge at the National Institutes of Biotechnology and Applied Microbiology (BIOTECH), University of the Philippines at Los Baños, Laguna, Philippines from October 19-26, 1986 to be trained in recent developments in their field.

The training, according to Dr. Leodegario E. Padua, Organizing Committee Chairman of the Southeast Asian Regional Training Course on Microbial Control of Insect Pests and Plant Diseases in the Tropics, is based on the significance of microbial control as an alternative component in the Integrated Pest Management (IPM) program. Growing interest has been generated in the use of microbial control due to reduced pest control costs and its contribution towards maintaining an ecologically sound environment.

Specific topics will cover microbial control of insects of medical importance, agricultural and forest pests and plant diseases. Trainees will be trained on both theoretical and practical aspects by local and foreign specialists. Aside from lectures, laboratory exercises, and field trips participants will have a round table discussion on their respective country's current research work and future plans on microbial control.

The training is organized by BIOTECH in cooperation with the United Nations Educational Scientific and Cultural Organization (UNESCO) and the Food and Agriculture Organization (FAO).

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INVERTEBRATE PATHOLOGY AT INRA, GUADELOUPE

INRA is the Research Institute of the French Ministry of Agriculture and one of the 20 research centers is located in Guadeloupe (FWI). Some 250 people work in this center and almost 1/10 of them belong to the Zoology and Biological Control Research Department. This department carries out studies in entomology (weevils, leaf cutting ants, moths, entomophagous insects) and nematology (plant and insect parasites). The two laboratories that would be of most interest to SIP members are the weevil and lepidoptera laboratories.

The weevil laboratory of this department is involved in the following invertebrate pathology studies:

1. Entomopathogenic fungi for the control of Diaprepes spp in citrus orchards (Martinique and Guadeloupe). These studies are conducted in collaboration with INRA France (Dr. Ferron's staff of La Miniere-Guyancourt).
2. Entomophagous nematodes of neoaplectanid type for the same purpose, also in collaboration with INRA France (Dr. Dalmaso's staff at Antibes). All international contacts are welcome in the theme of the biological control of Diaprepes spp, presently one of the most dramatic problems here.

The lepidoptera laboratory is concerned with Baculovirus (nuclear polyhedrosis and granulosis) of Spodoptera, Mocis and Heliothis. Studies are also conducted on the combined field use of pyrethroids and viral particles.

A. Kermarrec  
Regional Correspondent  
Caribbean Area

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POSTDOCTORAL POSITIONS

Two Postdoctoral Associate positions available immediately: One to study pathogenesis/epizootiology of legume-insect-pest diseases, with emphasis on fungal diseases of homopterous and/or coleopterous pests. Research will be conducted in USA using pests relevant to cowpea production in Brazil. The second position is to study toxins produced by entomopathogenic fungi. Principal activities will be isolation and bioassay of active compounds. Both positions are funded for at least 2.5 years with salary of at least US \$16,000. Send resume and 3 reference to Donald W. Roberts, Insect Pathology Resource Center, Boyce Thompson Institute, Tower Road, Cornell University, Ithaca, New York 14853 USA. Telephone: (607) 257 2030.

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FOUND

Who lost his/her money at ICIP86 in Veldhoven?  
An amount in French currency was found the last day  
of the ICIP86 meeting in Veldhoven. The person who  
lost this money should write the undersigned describing  
the type of 'purse' and the amount of money probably lost.

Dr. D. Peters  
Treasurer ICIP86  
P.O. Box 8045  
6700 EM Wageningen  
The Netherlands

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EDITOR'S NOTE

The Editor apologizes for the delay in producing  
this issue of the Newsletter. This was due to the  
late receipt of materials for submission. This issue  
will constitute numbers 3 and 4 (September and November,  
1986).

Gary Wilson

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FAREWELL

This issue of the SIP Newsletter will end my term as  
editor. It has been a great learning experience,  
rewarding, but sometimes frustrating trying to meet  
deadlines. I would like to thank the Regional Corres-  
pondents, and others who contributed items to the News-  
letter. Also, I wish to thank Miss E. Young, my tech-  
nical assistant for her help in the production of the  
Newsletter and Mrs. N. Lemieux for her fine job typing  
some of the material.

Dr. David Tyrrell of our Institute has agreed to  
assume the Newsletter Editorship starting with the next  
issue. Dr. Tyrrell is a mycologist with the Institute  
and I'm sure known by many of you. You can now send  
your contributions and news items to David, whose  
address is the same as mine.

Gary Wilson

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TEN YEARS AGO

This notice appeared in the November, 1976 issue of the  
SIP Newsletter and is still relevant today.

Dear SIP Members,

Bringing in the news! bringing in the news! instead of  
the sheaves. This is an all year round task and I want  
everybody to get in the act. If you went to West  
Yahoopistan University and gave a talk on "Biological  
control of the abominable snowperson" we want to know of  
it. As for foreign correspondents, don't worry about  
the English - I'll take care of French, Italian, Greek  
and German. The Russian I'll hand over to a colleague  
in the slavic language department, and we'll try to work  
on Japanese as well. Also let me know about books in  
your language as well as any up-coming meetings.

This article was signed by A. Domas. I would suggest  
that you check with the new SIP Newsletter Editor before  
sending in an article in Japanese. Also FPMI does not  
have a slavic language department.

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MEETINGS

Entomological Society of America, Annual Meeting on 8-12  
December 1986 in Reno, Nevada. Contact: William A. Allen,  
Department of Entomology, Virginia Polytechnic Institute and  
State University, Blacksburg, VA 24061 (703) 961-6772.

American Society of Zoologists, Annual Meeting on 27-30  
December 1986, Nashville, Tennessee. Contact: Mary Wiley-  
Adams, Box 2379, California Lutheran College, Thousand Oaks,  
CA 91360.

International Congress of Limnology on 8-14 February 1987 at  
Hamilton, New Zealand. Contact: Convention Management  
Services, P.O.Box 3839, Auckland, New Zealand.

XVIII International Congress of Entomology, at the Univers-  
ity of British Columbia, Vancouver, B.C., on 3-9 July 1988.  
Contact: Dr. G.G.E. Scudder, Secretary General, XVIII  
International Congress of Entomology, University of British  
Columbia, Vancouver, B.C. V6T 2A9, (604) 228-3168.

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*Happy Holidays  
and all the best  
in  
1987*