



View across Lake Torrens towards the Convention Centre and Festival Centre. This is the beautiful setting for the Vth International Colloquium on Invertebrate Pathology and Microbial Control in Adelaide, Australia.

Special Note on the Colloquium

The Organizing Committee for the Vth International Colloquium regret that the provision of the information being transmitted with this newsletter is late in being delivered to Society Members. They do realize that travel plans have to be made far in advance. However, application had been made to the Australian Government for a grant to offset part of the Colloquium Expenses, and it was not possible to determine what the Registration Fees would be until it was known whether the grant was approved. In the event, after much delay, the Committee was notified on

November 27 that the grant application had been refused due to changes in government policy regarding support of scientific conferences.

The Committee would also like to reiterate that the the Registration Fee does include most meals during the Colloquium, and the Proceedings, in which the Abstracts of all presentations will be published.

Some approximate current exchange rates (December 1989) are:

U.S.	\$1.00 = Aus \$1.25
Canada	\$1.00 = Aus \$1.05
UK	£1.00 = Aus \$2.00
France	Ff1.00 = Aus \$0.21
Germany	Dm1.00 = Aus \$0.72

Minutes of the XXII Annual SIP Business Meeting

University of Maryland, College Park, Maryland
August 21, 1989

The XXIInd Annual SIP Business Meeting was called to order by Don Roberts (President) on August 21, 1989 at 6:15 PM. A motion to accept the minutes of the last meeting at the University of California, San Diego (La Jolla) as published in the SIP Newsletter was made, seconded and passed.

All committee reports were approved and will be published in the SIP Newsletter; therefore, the Business Meeting proceedings will be reported here in condensed form. Please see also the following Annual Reports for reports from the Treasurer, Publication Board, etc.

Fred Kern, Treasurer presented a budget and fully-audited financial report for the period. The available computer has received the needed modifications to accommodate the SIP membership and financial record files. The time requirements for this office continue to be demanding; efforts to hire a part-time assistant are now in progress.

SIP Newsletter

The SIP Newsletter is produced four times a year by the Society for Invertebrate Pathology. Annual dues (U.S. funds) for the Society are: regular members, \$15.00; and students, \$6.00. 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, Mr. Fredrick G. Kern, Cooperative Oxford Biological Laboratory, 18 South Morris Street, Oxford, Maryland 21654, U.S.A.

Council Officers of the Society are:

President	Donald W. Roberts, USA
Vice President.	Elizabeth W. Davidson, USA
Past President.	John C. Harshbarger, USA
Secretary	Robert C. Anderson, USA
Treasurer	Fredrick C. Kern, USA
Trustees	Christopher J. Bayne, USA Peter Faulkner, Canada Christopher C. Payne, England Dudley E. Pinnock, Australia

Send News items and other contributions to:

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

DEADLINE NEXT ISSUE: **January 30, 1989.**

Dudley Pinnock, Chairman of the Organizing Committee for the Vth International Colloquium for Invertebrate Pathology, reviewed the progress made to date on next year's meeting in Adelaide, Australia. The scientific meeting, 20-24 August 1989, will be held in the new Adelaide Convention Center and delegates will be housed in nearby hotels. A tentative program including symposia has been organized and invitations have been sent to prospective session convenors. A second announcement will be sent to the membership as soon as exact accommodation costs are known, at that time details on registration fees and the post-conference tour will also be supplied. Air travel will be handled by Quantas, who will be able to at least match the fare of any other carrier. It was recommended that travelers to the meeting fly direct into Adelaide if possible; it would be good to avoid Sydney because construction at the airport may cause delays and confusion. Every aspect of the meeting and subsequent tour of the Outback and the Great Barrier Reef promises to be outstanding.

A preliminary report on this year's meeting at College Park indicated a total attendance of about 230, not counting companions, with representation from about 15 countries other than the USA. Scientists from academia, government and industry were present. Contributions to partially defray meeting expenses were received from 12 corporations, as well as components of the University of Maryland System. A full scientific program was planned around six symposia, two workshops, seven contributed paper sessions and posters. An active social program included a mixer, banquet, tours, road race, bar-b-que, etc.

Brian Federici presented the current schedule for future SIP Meetings: 1990, Adelaide, Australia; 1991, Flagstaff, Arizona; 1992, Germany, exact venue not set; 1993, Ithaca, New York; 1994, France. The final financial report on last year's meeting at La Jolla showed a net income of \$1,029.

A meeting of the Microbial Control Division was held earlier today and the newly elected chairman, Mark Goettel, reported that the Division plans to sponsor a symposium during the meeting at Adelaide. A slide series on bioassay methods is also being organized.

James Becnel, Chairman, presented a report from the Division on Microsporidia describing its last annual business meeting held at La Jolla. Efforts were made to obtain a translation of Dr. Issi's monographs on Microsporidia taxonomy. Another action of the Division was the nomination of Victor Sprague to present the Founders Lecture at the present Annual Meeting. The entire report is reproduced elsewhere in this newsletter.

International Union of Biological Sciences report by J. Briggs was approved.

Archivist: Wayne Brooks. No formal report because of little activity during past year. The archivist stands ready to receive any documents or correspondence of historical or present relevance to the Society, including material from current officers after their terms in office expire.

The report from the Endowment Committee was made by Betty Davidson, who reported that twelve memberships in the Society were offered this year to colleagues residing in countries with difficulties paying dues in U.S. currency. Members were encouraged to contribute to the Endowment Fund when paying their dues and to consider donating unneeded scientific journals for distribution to labs that have need of them.

David Tyrrell presented the report on the Newsletter; this report and accompanying financial details will be published in their entirety. A proposed schedule of deadlines for submission of material for the Newsletter was given: September 15 for 21(3) 1989; November 15 for 21(4) 1989; January 15 for 22(1) 1990; May 15 for 22(2) 1990. Members

were reminded that changes of address should not be addressed to the Newsletter, but should be made known to the Treasurer who maintains the up-dated membership files.

Publication Board report by Jim Harper was approved.

Don Roberts discussed again the size of the workload placed on the Treasurer and the probable near-time need for a permanent address and executive officer/business manager for the Society. A possible candidate for this position is Mr. William Momberger, Executive Director of the Tissue Culture Association, who discussed this possibility at the SIP council Meeting. Any input from the membership on this topic would be welcomed by Don Roberts. It seems clear that such a move will probably necessitate some increase in dues or other financial adjustments. Dr. Roberts announced that Dr. Albert Sparks' nomination for Honorary Membership had received unanimous endorsement by the Council; Dr. Sparks' name will appear on the biennial ballot.

New business items included: the need for a new membership list to be distributed and the question of a contest to choose a SIP logo.

Robert S. Anderson, Secretary

**REPORT OF THE TREASURER, FINANCIAL
STATEMENT OF THE SOCIETY FOR
INVERTEBRATE PATHOLOGY FOR THE PERIOD
AUGUST 31, 1988 – JULY 31, 1989**

BALANCE ON HAND – SEPTEMBER 27, 1988 \$ 30848.61

INCOME

Membership Dues		\$ 7480.00
Regular	\$7176.00	
Student	304.00	
Div. Microsporida		54.00
Div. Microbial Control		198.00
Interest		1364.12
Regular savings	1193.46	
Endowment savings	170.66	
Contributions		550.67
Endowment	352.00	
Society fund	198.67	
San Diego Surplus		1026.33
Steinhaus Book Sales		314.50
J I P Subscriptions		383.00
		11370.62
		<u>\$11370.62</u>
		\$42219.23

DISBURSEMENTS

Academic Press (transfer funds)	\$ 400.00
Treasurer Office Expenses	964.15
Bank fees	\$ 32.85
Postage	501.56
Printing/copying	289.12
Office supplies	90.62
Office Help	50.00

Computer memory upgrade	547.50
Advance for Int. Colloq.	<u>5025.00</u>
	(\$ 6936.65) (<u>\$ 6936.65</u>)
	\$ 35282.58

BALANCE ON HAND AUGUST 14, 1989 \$ 35282.58

Second National Bank	
Endowment Account	\$ 3917.32
Saving Account	30339.84
Checking Account	1000.00
Petty Cash Balance	<u>16.42</u>
	\$35273.58

**SOCIETY FOR INVERTEBRATE PATHOLOGY
BUDGET**

August, 1989

Proposed	Actual
1988-88	1988-89

INCOME

DUES

Regular	\$ 9000.00	\$ 7176.00
Student	400.00	304.00
Sustaining	1000.00	0.00
Microsporida	85.00	54.00
Microbial Control	260.00	198.00
Interest	2000.00	1364.12
Directory	25.00	00.00
Journal	0.00	383.00
Contributions	300.00	550.67
Miscellaneous	100.00	340.83

TOTAL INCOME \$ 13170.00 \$ 11370.62

EXPENDITURES

Newsletter	\$ 8400.00	\$ 8400.00*
Office Expenses		
Ballots/Printing	100.00	289.12
Postage	1000.00	501.56
Office Supplies	175.00	90.62
Bank Fees	75.00	32.85
Student Help	2000.00	50.00
Journal	0.00	400.00
Miscellaneous	100.00	0.00
Int. Colloq. Advance	0.00	5025.00
Founders Lecture Award	1000.00	1000.00*
Computerization SIP	200.00	547.50
Student Paper Award	250.00	250.00*

TOTAL EXPENDITURES \$ 13,200.00 \$ 16,586.65

* Anticipated expenses

Frederick Kern,
Treasurer

**ORGANIZATION OF THE Vth INTERNATIONAL
COLLOQUIUM FOR INVERTEBRATE PATHOLOGY
Adelaide 1990**

A meeting of the Scientific Programme Committee was held during 19th–20th April 1989.

Members:

Ray Ackhurst	Robin Bedding (Absent)
Robin Coles	David Cooper
Jane Drummond	John Glazebrook (Absent)
Richard Milner	Leigh Owens
Dudley Pinnock	Kevin Samuels (Absent)
Tony Sweeney	Rob Teakle (Absent)

A tentative conference programme has been drafted and symposium topics identified. Invitations have been sent to selected workers in those fields to convene the symposia and submitted paper sessions.

An offer has been received from a commercial company to assist in the printing costs of the program and proceedings. We have agreed on a camera-ready format.

The local organizing committee is awaiting definitive costs for accommodation and with these will then distribute a 2nd announcement. This will provide detailed costs of accommodation, accompanying persons programme, conference fees, post-conference tour and a registration form.

D.E. Pinnock,
Chairman, Organizing Committee

**DIVISION ON MICROSPORIDIA
SOCIETY FOR INVERTEBRATE PATHOLOGY**

The Division of Microsporidia held its annual business meeting on August 16, 1988 at the XXI Annual meeting of the Society for Invertebrate Pathology in San Diego, California.

Old Business.

A slate of officers were selected from the floor and voted into office. James Becnel was selected as Chairman, Anthony Sweeney was chosen as Vice Chairman and Al Undeen was selected as Secretary.

Methods to obtain a translation of Dr. I.V. Issi's 1986 monograph (in Russian) on the taxonomy of the Microsporidia was discussed. Funds are no longer available through the USDA nor are translation services available. Letters were sent to Dr. J. Lipa and Dr. J. Weiser. Dr. Weiser replied that he could not undertake the task. No reply was received from Dr. Lipa. Dr. Weiser's letter was read to the group by Dr. Wayne Brooks.

The following suggestions were made:

1. That an item be placed in the newsletter as soon as possible offering payment for this job.
2. Ann Cali offered to send the Chairman a translation of the taxonomic chart for distribution to interested members.

An inventory of the available live microsporidian cultures was in the hands of Dr. Steve Jaronski who did not attend the meeting.

A suggestion was made that an update of Microsporidia Division members be obtained by the Microsporidia Division from the Society Treasurer.

New Business.

A decision was made to draft a letter nominating Dr. V. Sprague to present the Founders Lecture at the XXII Annual Meeting in College Park, Maryland. The letter would be written by J. Becnel to Dr. D. Roberts or Dr. B. Granados. This nomination will come from the Microsporidia Division.



Victor Sprague receives the Founder's Lecture Commemorative Scroll from President Don Roberts.

It was suggested that if a symposium is held on the Microsporidia, at the XXII annual meeting, that it be scheduled not to conflict with the symposium on non-insect invertebrates. This symposium can instead be placed against the ones on bacteria and fungi. This request will be directed to the program committee chairman. It was suggested that a symposium on the Microsporidia be held in Australia in 1990 but not at the 1989 meeting in Maryland.

There was a suggestion from Dr. D. Streett that the workshop at the XXII annual meeting in Maryland be on aspects of Dr. Sprague's work on non-insect invertebrates and to let Dr. Sprague conduct it.

Dr. Louise Malone sent a letter to the division Chairman suggesting a visit to her lab in New Zealand in conjunction with the Fifth International Colloquium in Adelaide, Australia in 1990. The Chairman will pursue the matter and report on his findings at the next meeting.



Potpourri of faces and places at the 22nd Annual Meeting at the University of Maryland last August.

The 1988 workshop, held in San Diego, dealt with two separate subjects. One was "New Techniques for the Study of Microsporidia" with presentations given by Dr. D. Streett, Dr. J. Maddox and Dr. A. Undeen. Additionally an "Update on Human Microsporidia" was presented by Dr. A. Cali.

James J. Becnel,
Chairman

1988-89 Annual Report
Commission on Invertebrate Pathology
International Union of Biological Sciences (IUBS).

The constitution of the International Union for International Sciences (IUBS) recognizes the activities of the *Society* for Invertebrate Pathology as those of the *Commission* on Invertebrate Pathology. Biennially the report to the Secretariat of IUBS concerning the activities of the Commission is based upon the collective reports of the Society.

A continuing asset for the activities for the Society serving as the Commission for Invertebrate Pathology is the opportunity to seek short-term financial assistance from IUBS for the organization of international meetings of the Society and hence the Commission. Further, the IUBS maintains operational principles and active Commissions and Sections on matters which can facilitate the activities for the Society of Invertebrate pathology. For example, insistence on the free access of scientists to attend meetings abroad without restrictions; and, the opportunity for the secretariat of the IUBS to intercede and bring to international attention any impediments to the free and open exchange in scientific conferences.

The Society for Invertebrate Pathology has benefited in the past decade on two occasions by the use of funds from the IUBS to plan conferences outside of the United States. Currently, funds are only available on a short-term loan basis rather than grants.

The Commission on Culture Collections is one Commission among others in the IUBS which can facilitate the recognition and preservation of specialized collections which are of interest to the Society of Invertebrate pathology.

John D. Briggs,
Chairman

SIP NEWSLETTER, 1988-1989

Three issues of the Newsletter were prepared and mailed to members during the period August 1988 to July 1989 (Vols. 20(3), 21(1) and 21(2)). Ten extra copies of each issue were mailed to the Archivist and Treasurer, respectively. These three issues comprised 20 pages, a reduction of four pages from the same period last year. In addition, the ballot on dues increase, application forms for the Annual Meeting and the Abstracts booklet for the Annual Meeting were prepared and mailed. Printing and mailing costs are shown in Table 1.

TABLE 1^a

	# Mailed	Printing	Mailing	Total
Newsletter 20(3)	990	\$693.88	\$1822.71	\$2516.59
21(1)	890	485.00	1031.17	1516.17
21(2)	890	370.50	2523.56	2894.06
				\$6926.82
Programme Abstracts		6417.60	19.20 ^b	6436.80
Meeting Insertions		206.84		206.84
Dues Ballot		79.35		535.14
				7178.78
Envelopes for Newsletter				764.54
Envelopes for Ballot				97.41
Miscellaneous				36.75
				898.70
				15004.30

^a All amounts are in Canadian Dollars.

^b This is the cost of mailing the meeting copies to Maryland; the fee for mailing copies to individual members is included in the Newsletter mailing (Vol 21(2)).

TABLE 2

**PROPOSED NEWSLETTER CONTENT AND DEADLINES,
1989-1990**

1989	Vol 21(3)	Sept 15	Presidential Address from Annual Meeting Report on Annual Meeting, including selection of pictures Reports presented to Annual Meeting and Minutes of Annual Meeting. Report from 1990 Australian Meeting organizers.
	Vol 21(4)	Nov 15	
1990	Vol 22(1)	Jan 15	Details of Annual Meeting Call for Abstracts C.V.s of candidates for Society Officers and ?ballot
	Vol 22(2)	May 15	Election results for Society Officers Last minute reports and instructions for Australian Meeting

Comments: Because of time and distance constraints, all items referring to the 1990 Australian Meeting need to be discussed and confirmed with the Organizing Committee.

David Tyrrell,
Editor

REPORT OF THE ENDOWMENT COMMITTEE

E. Davidson (Chair), R. Granados, L.A. Lacey

Twelve memberships were offered to colleagues residing in countries with difficulty paying dues in U.S. currency. These members reside in Czechoslovakia, Peoples Republic of China, Burma, Iraq, Hungary, Nigeria, Uganda, Liberia, Honduras and Malaysia.

This committee has also begun a journal exchange program. Two members have offered unneeded journals, which have been sent to a laboratory which has need of these journals.

We encourage you to contribute to the Endowment in your annual dues, and to consider passing your unneeded journals along to a colleague in a country where such journals are unavailable. These exchanges are a fine way to enhance the scientific level of other countries, and to bring scientists in these countries into the community of invertebrate pathology.

E. Davidson,
Chairman

REPORT OF THE PUBLICATIONS BOARD SOCIETY FOR INVERTEBRATE PATHOLOGY, 1989-1990.

The issue of the Society's relationship with the Journal of Invertebrate Pathology has been finalized. As of January 1988, the Journal is no longer being published under the auspices of the Society. While this is unfortunate, several positive things have occurred as a result of defining the actual relationship between the Society and Academic Press. The publications committee initiated discussions with Academic Press with the sole intent to seek improvement in the quality of the Journal. In our meetings with them, we stressed the importance of getting a wider range of reviewers for subject matter submitted than was being used, i.e. much broader than the Journal review board itself. We stressed the importance of improving turnaround time for Journal reviews. Both of these items have been addressed by Academic Press and new policies of manuscript handling and review are in place. Academic Press told us that they did much of the handling of manuscripts internally for many journals that they publish, which takes much of the day to day burden off their editors. They also track the manuscripts and follow up on reviews directly or through their editors and sub-editors. They have initiated these practices for the Journal of Invertebrate Pathology, and turnaround time and quality of reviews appears to have improved significantly. We are pleased to see that these changes have occurred following our expressed concerns. We also asked that the Society have input into decisions on rejected manuscripts if the authors felt they had been unfairly treated in the review process. On this point, Academic Press personnel informed us that their policy was to place total

power in the hands of their editors regarding scientific content of the Journal. This basically meant that although we were endorsing the Journal with our name, we had no ability to participate in editorial disputes for our membership. That was left as the responsibility of one person, the editor. That is how the relationship currently stands. It should be pointed out that our relationship with the Journal was never a legal one, only one of courtesy which had benefits for both AP and our members. We still receive lower individual personal subscription rates as Society members. They receive our help in obtaining personal and institutional subscriptions.

A constitutional amendment was voted on by the membership at the 1988 final business meeting which changed the composition of the Publications Board. Basically it allowed our publication editors to serve on the board on a non-voting basis.

The issue of the Glossary of Terms for Invertebrate pathology has been reconsidered. Dr. Martignoni has been contacted and has indicated that the glossary is in near publication form and that it needs only minor additions and transfer to computer disc to be ready. The board has recommended to President Roberts that we proceed with this project and tentative approval has been given.

James D. Harper,
Chairman

BIOPESTICIDES CONFERENCE

A conference entitled "Biopesticides, Theory and Practice" was held in Ceske Budejovice, Czechoslovakia, September 25-28, 1989, under the sponsorship of the Czechoslovak Academy of Sciences, Faculty of Agriculture, and other Czech organizations. In addition to exchanging scientific information, the conference afforded an opportunity to acknowledge the very significant role of Professor Jaroslav Weiser in the development of invertebrate pathology. Professor Weiser is a past president of SIP, and has published extensively on a wide variety of pathogen and insect groups. Although he will be 70 years of age January 13, 1990, he is still actively engaged in writing and research.

This conference varied somewhat from most insect pathology meetings in that most of the papers were on entomopathogenic nematodes and fungi with a lesser component of presentations on other pathogen groups. There were approximately 65 registered participants representing six western- (Italy, France, Switzerland, Austria, Netherlands, and USA) and six eastern- (Czechoslovakia, Poland, Bulgaria, Hungary, GDR, and USSR) European nations. One-fourth of the participants were from the west, and there was lively discussion both within and across the east-west scientist groups. The official language was English, and the proceedings of the conference currently are being prepared for publication. For more information, contact Dr. Vladimir Matha, Institute of Entomology, Czechoslovak Academy of Sciences, Branisovska 31, 370 05 Ceske Budejovice, Czechoslovakia.

Wednesday August 22, 1990**7.15pm-10.30pm – Scatter Dinners (Aust.\$25)**

Arrangements have been made with recommended central city restaurants for your choice of three courses, coffee or tea at the set price of Aust.\$25 (not including wine, beer or spirits). Indicate your preferred style of food on the registration form and include payment.

Thursday August 23, 1990**10.00am-1.00pm – An Aboriginal Heritage Morning (Aust.\$20 includes morning tea)**

There is a growing interest and appreciation of Aboriginal culture both here and overseas. See the outstanding Ngurunderi Exhibition in the South Australian Museum, with its fascinating blend of 'Dreamtime' legends and artefacts used for day-to-day living. An Aboriginal guide will take visitors around the Botanic Gardens pointing out the plants that were used for food and medicine by his people. Visit Tandanya, Australia's first Aboriginal Heritage Centre which houses an art gallery, a theatre and craft workshops.

Thursday August 23, 1990**7.30pm-1.00am – Colloquium Banquet, Adelaide Festival Centre Banqueting Room (Aust.\$50 includes all food, beverages and entertainment)****Friday August 25, 1990****9.00am-4.00pm – Southern Vales & Fleurieu Peninsula Excursion (Aust.\$60 includes morning & afternoon tea & lunch)**

A scenic drive down the south coast via archaeologically interesting Hallett Cove, then across to Clarendon to sample wine and visit the art & craft centre. Lunch in one of the pretty Southern Vales cottage restaurants before heading off to Victor Harbor. Take the horse-drawn tram across the causeway to Granite Island for spectacular views along the southern coast. Follow the coastline to Goolwa and return home via Strathalbyn, a pretty country town famous for its annual Penny Farthing Bicycle Race.

BOOKINGS FOR THEATRE, RESTAURANTS &/OR SPORTS EVENTS

Elliservice Convention Management will make block bookings at recommended local restaurants on any free evening. Block bookings for current theatre attractions will also be arranged for interested parties. Details of current events will be included in delegates' registration packets.

CHILDCARE PROGRAMME

If you plan to bring a child or children, we would appreciate you completing the appropriate section of the Registration Form. Government-approved, fully qualified caring ladies will set up a creche in the Adelaide Convention Centre. Excursions will be planned to suit the age groups and the charge per child will be Aust.\$25 per day on the basis of working sessions scheduled from 9.00am to 5.00pm. This cost will include a healthy mid-day lunch, morning and afternoon snacks. However, admission fees for excursions and any bus or tram fares will be extra. Depending on the weather and the children's activities happening in Adelaide at the time, we hope to ensure that delegates' children enjoy the Colloquium as much as their parents! Options could include a visit to the Zoo on 'Popeye', a picnic on the banks of the River Torrens followed by feeding the ducks, a tramride to Adelaide's seaside suburb Glenelg or a visit to Children's Theatre.

PAYMENTS (AUSTRALIAN CURRENCY)

All fees are quoted in Australian currency and payments for registration fees, accommodation deposit, optional social programme (including post-Colloquium tours) can be made by personal cheque (within Australia only), by international bank draft drawn on an Australian bank (please note that Euro-cheques are not acceptable).

Payments should be in favour of Vth ICIP and posted to:

Vth ICIP
C/- Elliservice Convention Management
P.O. Box 753
Norwood, S.Australia 5067
Australia.

Alternatively, payments may be made by direct deposit/wire transfer to the Colloquium Bank (all bank charges prepaid). Details are as follows:

Australia & New Zealand Bank (ANZ)
Account No. 015.010.40.180.0017
Account Name: Vth International Colloquium on
Invertebrate Pathology
81 King William Street
Adelaide, S.Australia 5000
Australia

CANCELLATION POLICY

Notification of cancellation of registration must be received in writing (by airmail letter, telegram, telex or fax). A cancellation fee of Aust.\$25 will be charged in all instances where written notification of cancellation is received not later than June 1, 1990. The fee for cancellations received after that date will be not less than Aust.\$85 but may be in excess of that amount if the Colloquium is penalised by its external contractors. Elliservice Convention Management will endeavour to negotiate the best possible refund on behalf of delegates who, due to circumstances beyond their control, find it necessary to cancel at the last minute.

POST-COLLOQUIUM EXCURSIONS

A detailed daily schedule will be posted to registrants.

OUTBACK AUSTRALIA & GREAT BARRIER REEF

Saturday August 25, 1990 to Monday September 3, 1990 (incl.) Tour Code ZAD09 – Aust.\$1,481 per person on a twin-share basis. Children's prices on application. Deposit: Aust.\$500 per person (due by March 30, 1990). Balance due by June 1, 1990. Cancellation fee – 10% of total tour cost within 60 days of departure. 50% of tour cost within 30 days of departure.

Inclusions:

- Airfare Adelaide/Alice Springs/Cairns
- Luxury airconditioned tour coaches
- Full tour commentary
- Top standard accommodation
- All transfers
- Travel bag

Exclusions: Meals (unless specified)

Highlights:**Stage One (4 days – Alice Springs/Uluru National Park/Ayers Rock)**

Alice Springs Flying Doctor Base, The Old Telegraph Station, Panorama Guth, Ayers Rock – the Climb – the Sunset – the Sunrise, The Olgas, Yulara, Virginia Camel Farm, Desert Country

Stage Two (4 days – Great Barrier Reef & Cairns Tropics (individual tours))

a.1) Atherton Tablelands, Rainforests, tropical butterflies, birds, turtles and other wildlife, lakes, waterfalls, rich dairy country, tobacco, maize and peanut-growing areas.

OR:

a.2) Pathogen Field Survey Workshop Excursion to Millaa Millaa Falls and Cowley Beach. (Thursday August 30, 1990)

b) Quicksilver Outer Barrier Reef Tour (tropical seafood smorgasbord lunch included), coral viewing from Quicksilver submarines, underwater observatory, snorkelling equipment & adviser included, illustrated talk on the reef by marine biologist, morning and afternoon tea also included, video films of the Great Barrier Reef.

c) Travel through dense areas of tropical Daintree Rainforest, view and photograph many unique flora and fauna species, take the boardwalk through the Mangroves, stroll along Cape Tribulation beach.

d) Two Tropical Islands Cruise – Travelling by Supercat. See the mountainous Fitzroy Island with its lush rainforests, beautiful coral gardens then proceed to Green Island, a Coral Sand Cay, to enjoy flare-grilled Beef Steaks or Reef Fish with a choice of tropical salads. Visit the underwater observatory.

OPTIONS on Monday September 3, 1990

- 1) Return home directly from Cairns International Airport.
- 2) Travel on the following Sydney Extension Tour:

SYDNEY CITY/HARBOUR/BLUE MOUNTAINS (EXTENSION TOUR)

Monday September 3, 1990 to Thursday September 6, 1990 (incl.) – 3 nights, 3 days.

Tour Code ZAE03 – Aust.\$538 per person on a twin-share basis. Children's prices on application. Deposit: Aust.\$200 per person (due by March 30, 1990). Balance due by June 1, 1990. Cancellation fee – 10% of total tour cost within 60 days of departure. 50% of tour cost within 30 days of departure.

Inclusions:

- Airfare Cairns/Sydney
- Top standard accommodation, 3 nights
- 1 full day tour to Blue Mountains
- 1 half day tour including lunch while cruising Sydney Harbour

Exclusions: Meals (unless specified)

Highlights:

Blue Mountains, Australian Wildlife, Captain Cook Cruise on Sydney Harbour (Lunch on board), City Sights including Opera House, Botanical Gardens, Art Gallery, Chinatown, Kings Cross, Bondi Beach, Watsons Bay, The Gap, Paddington.



TRAVEL INFORMATION

QANTAS, is the official overseas airline to the Vth International Colloquium on Invertebrate Pathology and Microbial Control. **QANTAS** is Australia's Overseas Airline, operating on a worldwide network offering a superior three class service with regular schedules into and out of Australia. Group travel or excursion fares exist from most parts of the world to Australia and represent a considerable saving on normal fares.

On receipt of your registration form, a **QANTAS** agent will contact you to assist with travel requirements. **QANTAS'** participation in co-ordinating groups to take advantage of these fares will be an important factor in making it financially possible for participants to visit Australia and to participate in the Colloquium. Overseas participants are eligible for special domestic fares within Australia and these can be arranged in conjunction with the purchase of international tickets.

QANTAS has direct flights into and out of Adelaide. Domestic flights from Sydney (2 hours), Melbourne (1 hour) and Perth (2½ hours) connect with flights from all overseas destinations. **It is strongly recommended that delegates arrange to fly directly into Adelaide. However, if it is not possible to obtain a direct Adelaide flight, we recommend that you designate Melbourne as your preferred port of entry because of easier transfer from international to domestic flights.**

Adelaide's domestic and international airports are adjacent to each other and approximately 5kms out of the city.

A Departure Tax of Aust.\$10 is payable on departing Australia. This should be pre-paid when applying for your airline ticket, otherwise it must be paid in Australian currency at the airport check-in counter for your outward bound flight.

BOOK EARLY

We remind you that Australia is a popular destination and it is wise to make your flight bookings for Australia as early as possible in order to avoid disappointment.

QANTAS OVERSEAS TICKET OFFICES

Amsterdam, Nilmiji Building, Rokin 9-15	25 5015
Athens, Cnr Nikis 45 & Filelinon Streets	325 0520
Auckland, 164 Queen Street	3 2298
Bahrain, Al Khalifa & Bab Al Bahrain Rds, Manama	27 1717
Bali (Denpasar), Bali Beach Hotel	8331
Bangkok, 14-18 Patpong Road	233 8701
Beijing, Hotel Beijing-Toronto (Jinglun)	50 2481
Belgrade, Strahinjica Bana 51	63 9166
Bombay, Hotel Oberoi Towers, Nariman Point	202 9288
Christchurch, CML Building, Cathedral Square	79 3100
Copenhagen, Vester Fairmagsgade 1, Room 2348	11 8911
Frankfurt, Muenchener Strasse 7	23 0041
Geneva, 3 Rue de Temple	32 0450
Harare, 51 Union Avenue, Suite 401	79 4676
Hong Kong, Swire House, 11a Chater Road	524 2101
Hong Kong, Sheraton Hong Kong, Kowloon	24 2101
Honolulu, Waikiki Trade Ctre, 2255 Kuhio Ave	800 227 4500
Jakarta, Bank Dagang Negara Bldg, Jalan Thamim No.5	32 7707
Kuala Lumpur, AIA Bldg., Jalan Ampang	8 9133
London, 169 Regent Street	748 5050
London, 393/405 King Street, Hammersmith	
London, 144a Brompton Road, Knightsbridge	
London, Arundel Great Court, Strand	
London, London (Heathrow) Airport Terminal 3	897 0531
Los Angeles, 6151 W. Century Blvd, Suite 500	800 622 0850
Manchester, 16 St Mary's Gate	832 7161
Manila, China Bank Bldg, 8745 Paseo De Roxas St, Makati	815 9491
Milan, Piazza Velasca 4	80 7551
Nadi, Nadi Airport	7 2888
New York, 542 Fifth Avenue	800 227 4500
Noumea, Le Village, Rue de Verdun	28 6546
Papeete, Shop 54, Vaima Ctre, Rue Pomare	43 0665
Paris, 7 Rue Scribe	266 5200
Port Moresby, ANG House, Hunter Street	21 1200
Rome, Via Bissolati 35/37	48 6451
San Francisco, 350 Post Street	761 8000
Singapore, Mandarin Hotel, 333 Orchard Road	737 3744
Stockholm, Maimskillnadsgat 42	23 1635
Tokyo, 2-2-3 Chome, Marunouchi, Chiyoda-Ku	212 1351
Toronto, 80 Bloor St West, Suite 907	800 663 3493
Vancouver, 1055 Dunsmuir St, Suite 17114, 4 Bental Centre	684 8231
Vienna, Opernring 1, Stair R, Floor 7	57 7771
Washington, Suite 1210, 1825K Street, NW	800 227 4500
Wellington, Featherston & Panama Streets	73 8378
Zurich, Lowenstrasse 51, Floor 2, CH-8001	211 4411

AUSTRALIAN AIRLINES are the officially-appointed national airline for travel within Australia. Overseas participants are eligible for special domestic fares within Australia and these can be arranged in conjunction with the purchase of international tickets. **AUSTRALIAN AIRLINES** has put together an exciting post-Colloquium Excursion to Central Australia and Northern Queensland – with a Sydney extension for those participants able to spend an extra couple of days in Australia. The prices quoted for these tours take into account all discounted fare entitlements.

It is important that you support this appointment by asking your travel agent to book air travel within Australia on **AUSTRALIAN AIRLINES** flights wherever possible. Australian delegates may liaise direct with the **AUSTRALIAN AIRLINES** Group & Convention Travel Departments in the capital cities detailed below.

AUSTRALIAN AIRLINES NATIONAL TICKET OFFICES

Adelaide	216 1312	Launceston	32 9911
Alice Springs	50 5233	Melbourne	829 2103
Brisbane	233 2266	Newcastle	26 1544
Cairns	50 3769	Perth	323 8427
Canberra	46 1816	Sydney	669 9555
Darwin	82 3380	Townsville	81 6233
Gold Coast	38 1066	Wollongong	29 9411
Hobart	38 3333		

COACH TRANSFERS

Where possible, delegates' flights will be met on Saturday August 18, 1990 and Sunday August 19, 1990. Courtesy buses will take delegates to the Adelaide Convention Centre and to the central city hotels. To assist us to co-ordinate these arrangements please notify your arrival details as soon as your travel plans have been confirmed.

WEATHER

Adelaide – Weather during the Colloquium is expected to be mild, with daytime temperatures averaging 16°C (61°F) and the mean minimum overnight temperature 8°C (46°F). Occasional rain showers are likely. We recommend delegates bring a woollen jumper, light raincoat, sensible footwear and an umbrella.

Alice Springs/Uluru National Park – Heading north from Adelaide you may expect warmer daytime conditions, but colder nights. Daytime temperatures in August average 20°C (70°F) and the mean minimum overnight temperature is 5°C (41°F). Please bring a sunhat and sunscreen – also sensible footwear – particularly if you plan to climb Ayers Rock! Rain is unlikely – but a possibility! Be prepared!

Cairns – June to August is Australia's winter. However, winter in Northern Queensland is the best time of year. Warm to hot sunny days (average daytime temperature in August is 26°C (78°F)) with mild evenings and a mean minimum overnight temperature of 17°C (63°F).

Sydney – Temperatures and rainfall expectancy in August are similar to Adelaide – average daytime temperature 17°C (63°F), mean minimum overnight temperature 8°C (46°F).

WHAT TO WEAR

Dress for the Colloquium is informal. Lightweight, comfortable clothes are practical – so are comfortable walking shoes.

TRADE EXHIBITION

A Trade Exhibition will be mounted in the Adelaide Convention Centre throughout the Colloquium. Morning and afternoon tea/coffee breaks will be taken in the Trade Exhibition Area which is adjacent to the plenary meeting hall and workshop locations. Potential exhibitors should direct their enquiries to the Colloquium Secretariat, Ellisservice Convention Management.

SPONSORSHIP

Offers of sponsorship will be most welcome. Please direct your enquiries to the Colloquium Secretariat, Ellisservice Convention Management.

COLLOQUIUM SECRETARIAT

Ellisservice Convention Management have been contracted to manage all aspects of registration for the Colloquium, including accommodation arrangements and liaison with Trade Exhibitors and Sponsors. All enquiries relating to any of these matters and all payments (including deposits on post-Colloquium Excursions) should be directed to:

Mrs Muriel Ellis
Ellisservice Convention Management
60 Kensington Road, Rose Park SA 5067 Australia
(Postal Address: PO Box 753, Norwood SA 5067 Australia)
Phone: 08.332.4068 (national)
+618.332.4068 (international)
Fax: 08.364.1968 (national)
+618.364.1968 (international)



Professor Jaroslav Weiser at dinner held September 27, 1989, in Ceske Budejovice, Czechoslovakia honoring his many contributions to invertebrate pathology, and in anticipation of his January 13, 1990, 70th birthday. Ludmila Hermanova of the Institute of Entomology, Czechoslovak Academy of Sciences (Ceske Budejovice) and Dr. Alain Vey of INRA-CNRS

Speaking as a participant, I enjoyed the Conference and found it very informative. I was pleased to meet scientists I previously knew only from the literature. Also, it was a convenient opportunity to be brought up to date on some very interesting microbial control projects in both East and West Europe. The size of the meeting — 65 participants — facilitated interactions. I was favorably impressed with the insect pathology laboratories in Ceske Budejovice, and with the obvious enthusiasm and energy exhibited by the research teams there. The hospitality of the Czech scientists and their staff was outstanding. I recommend that similar meetings be held in the future to extend the exchange of ideas which occurred in September 1989 in Czechoslovakia.

Donald W. Roberts

MICROBIAL CONTROL NEWS

The SIP Microbial Control Division is sponsoring this section which features short news items on microbial control. If you have any information which you would like to contribute under this heading, please submit one or two paragraphs to the Newsletter Editor or to any of the Microbial Control Division executive (Mark Goettel, Ann Hajek, Michael McGuire, Lerry Lacey, Kevin Samuels or Richard Daoust).

First U.S. Field Test of a Genetically-Engineered Baculovirus.

The Boyce Thompson Institute for Plant Research was granted permission to field test a genetically-engineered isolate of the *Autographa californica* nuclear polyhedrosis virus (AcMNPV) by the U.S. Environmental Protection Agency. On August 9, 1989, the first U.S. field release of a genetically-altered virus took place in Geneva, N. Y. The release took place in collaboration with Anthony Shelton, an entomologist at the N.Y.S. Agricultural Experiment Station, and Boyce Thompson researchers Patrick Hughes, Nikolai Van Beek and Martha Hamblin. The engineered AcMNPV had a deletion in the polyhedrin gene, rendering it unable to survive by itself in nature. In order to deliver the engineered virus to the field in an active form, it was co-occluded with polyhedra produced by a wild type isolate of AcMNPV. During the summer three virus applications were made in a quarter acre plot of cabbage plants seeded with *Trichoplusia ni* larvae. Persistence of the engineered virus will be monitored over the next three years.

Alan Wood
Boyce Thompson Institute

Field research test of *Nosema locustae* against African grasshoppers

The first large scale field application of the microsporidian *Nosema locustae* (Protozoa: Microsporidia) has recently been carried out in Mali, West Africa. In August, the pathogen was applied in an experiment to control grasshoppers near Mourdiah and Nara, approximately 300 km north of Bamako. This, and a similar experiment begun in Cape Verde in September, are the first large scale applications of *N. locustae* in Africa, and both are collaborative R and D experiments co-sponsored by the U.S. Agency for International Development.

In Mali, *N. locustae* spores from Evans Biocontrol in Colorado were formulated in locally milled wheat bran at the rate of 2.5×10^9 spores per kilogram of bran and applied to the experimental plots by helicopter. Fifteen 200-ha plots were arranged in sets of three contiguous plots at each of five locations (randomized complete blocks) near the Mali-Mauritanian border. In each block, one plot received no bait treatment, one plot received *Nosema* bait at a rate of 1 kg/ha, and the third plot received 2 kg/ha. The five complete blocks provided a range of conditions, species, and grasshopper ages at application time. The predominant grasshopper species were *Kraussella amabile*, *Cryptocatantops haemorrhoidalis*, *Acorypha glaucopsis*, *Diaboloecatantops axillaris*, *Kraussaria angulifera*, and *Oedaleus senegalensis*.

Sampling was carried out by personnel from Service National de la Protection des Vegetaux (SNPV) and Ciba-Geigy every 10 days up to 60 days after treatment. Grasshopper population densities were estimated in each of 30 subplots, and sweepnets were used to collect 50 grasshoppers per subplot per sampling date, for determination of species composition, age structure and *Nosema* infection. The majority of the field sampling and collections were conducted by SNPV. The proportion of the grasshoppers infected by *N. locustae* will be estimated by microscopic examination of grasshopper tissue in progress).

Project personnel include: Walter Knausenberger, USAID, Washington, D.C., Dan Johnson, Agriculture Canada, Lethbridge, Alberta, Herman Van der Paauw, Ciba-Geigy Ltd., Basel, Switzerland, George Popov, consultant, London, Sounera Soumana, Bernard Maiga, Sekou

Coulibaly and Omar Daffe, Mali Plant Protection Service – SNPV, Bamako,
Hans Dobson, FAO, Rome and Bob Ellis, Evans Biocontrol Inc.

Dan Johnson
Agriculture Canada

Color Slide Atlas of Microbial Control: Bioassay, Production and Application Methods.

CALL FOR CONTRIBUTIONS: The Microbial Control Division is putting together an atlas on microbial control. In order for this venture to be a success, we need contributions of material from society members. Please refer to the last issue of the Newsletter (no. 3) for details or call Mark Goettel, at 403-327-4561. **DON'T WAIT FOR SPRING, DO IT NOW!**

MEMBER IN THE NEWS

Dr. Jerry Stimac's work on biological control of fire ants has been included in a listing of "current research that was thought to have the most potential significance" (Entomological Society of American Newsletter 12(10)2, 1989).

Dr. Stimac has found a unique strain of the fungus *Beauveria bassiana* which regulates fire ants in Brazil, and which in field tests shows great promise for the control of these ants in the U.S. Dr. Stimac, of the University of Florida and the University of Sao Paulo, Brazil, reported on several aspects of this work at the recent SIP meeting in Maryland.

FORTHCOMING WORKSHOP

International Workshop: Pathogens in Scarab Pest Management Christchurch, New Zealand

A workshop is proposed to examine the management of scarab pests using pathogens (including entomophagous nematodes) as either natural components of pest management or by inundative release. The workshop is intended to review some of the major scarab problems and examine the diseases that are found with them. It will also focus on some pathogen-based scarab control programmes and look at the issues that have arisen from them.

Proposed topics include:

- 1) Review of scarab problems in countries of the participants
- 2) Diagnosis of scarab diseases
- 3) Isolation and culture of pathogens
- 4) Use of pathogens
- 5) Epizootiology of scarab diseases
- 6) Development and commercialization

It is proposed that the workshop cover 3 days, 15-17 August, 1990 (the week preceding the SIP Colloquium in Australia). Christchurch is on international routes from North and South America to Australia, and any visit can easily be incorporated as a stopover on the way to the SIP Meeting. The programme will be refined when a list of participants is finalized. We welcome suggestions.

For further information, please contact Dr. Trevor Jackson, MAFTech, P.O. Box 24, Lincoln, Canterbury, New Zealand. Ph (03) 253 011. Fax (03) 252 946.

NEW PUBLICATIONS

Safety of Microbial Insecticides

Edited by: Marshall Laird, Ph.D., D.Sc. Professor, Honorary Research Fellow, University of Auckland, New Zealand;

Lawrence A. Lacey, Ph.D. Vector Biology and Control Project, USAID/MSCI, Arlington, Virginia

Elizabeth W. Davidson, Ph.D. Department of Zoology, Arizona State University, Tempe, Arizona

This state of the art volume provides a previously unavailable single reference source of prime importance to all concerned with economic and medical entomology, biocontrol research and teaching, and pertinent aspects of clearance for field use at national and international levels. The editors, chairpersons of the Society of Invertebrate Pathology's Safety Working Group since 1971, have collaborated with 20 researchers to compile this reference. The book presents, through an internationally diverse group, authoritative analysis of all safety aspects from the standpoints of systematics—viral, bacterial, fungal, protozoan and helminthic. Included here is the currently controversial issue of genetic manipulation. Other topics covered are non-target impact, compatibility with other biocontrols, geographical considerations and registration matters. This book is especially timely because of the recent addition of the first microbial control agent to the mosquito/blackfly control armory. There is also the prospect of additional microbial weapons that are highly selective as well as effective. Safety of Microbial Insecticides is a key source of information for investigators who have previously had to wade through an enormous amount of scattered literature. This volume is invaluable to those in forestry, agricultural entomologists, and all working towards disease vector suppression.

Contents

Part I: Registration Requirements and Safety Considerations for Microbial Control Agents

Registration Requirements and Safety Considerations for Microbial Pest Control Agents in North America

Registration Requirements and Safety Considerations for Microbial Pest Control Agents in the USSR and Adjacent Eastern European Countries

Registration Requirements and Safety Considerations for Microbial Pest Control Agents in Japan

Part II: Ecological Overview: Potential Impact of Microbial Insecticides

Potential Impact of Microbial Insecticides on Beneficial Arthropods in the Terrestrial Environment

Potential Impact of Microbial Insecticides on the Freshwater Environment, with Special Reference to the WHO/UNDP/World Bank, Onchocerciasis Control Program

Potential Impact of Microbial Insecticides on the Estuarine and Marine Environments

Part III: Safety of Microbial Insecticides to Vertebrates

Safety of Microbial Insecticides to Vertebrates – Humans

Safety of Microbial Insecticides to Vertebrates – Domestic Animals and Wildlife

Part IV: Safety of Microbial Insecticides to NonTarget Invertebrates

Safety to Nontarget Invertebrates of Baculoviruses

Safety of *Bacillus thuringiensis* sp. israelensis and *Bacillus sphaericus* to Nontarget Organisms in the Aquatic Environment

.Safety Considerations in the Use of *Bacillus popilliae*, the Milky Disease Pathogen of Scarabaeidae

.Environmental Risks of Genetically Engineered Entomopathogens

.Safety to Nontarget Invertebrates of Fungal Biocontrol Agents

.Safety to Nontarget Invertebrates of Nematodes of Economically Important Pests

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Published by CRC PRESS, INC. 2000 Corporate Blvd., N.W., Boca Raton, Florida 33431

c. 288 pp., 7X10, due December 1989, ISBN 0-8493-4793-9 Catalog no. 4793...Approx., U.S. \$139.95/Outside U.S. \$165.00

JOURNAL AVAILABLE

Journal of Virology

Volumes 1 (1967) to volume 61 (1987)

(only volume 14 missing)

Available for the cost of packing and shipment from Corvallis, Oregon, to destination. Contact Dr. Mauro E. Martignoni, P.O. Box 14892, Albuquerque, New Mexico 87191.

FROM THE EDITOR

I hope you like the new format of the Newsletter. The major change is that the camera ready copy is now prepared using a Sun 3/60 work station using the Interleaf Desktop Publishing Programme. In this regard, I gratefully acknowledge the invaluable assistance of Karen Jamieson, our Editor, and Vicky Mervyn, our Graphics Technician at FPPI in preparing the copy.

While this is a big improvement on the previous cut and paste method, it does mean that all the material has to be entered into the computer, and I can no longer use camera ready copy as submitted by the contributor. It would therefore ease my burden considerably if whenever possible material could be submitted to me on disc. We have facilities to handle both 3 1/2 and 5 1/4 discs and most if not all of the popular word processing programmes currently in use.

Read This Message

Once again, I should like to remind all members that this is your Newsletter. Its function is to disseminate news and items of current information among members of the Society. However, it can only do that if the relevant items are passed on to me for inclusion. In past years we had a network of Regional

Representatives whose function was to collect information in their geographical areas and forward it to the Newsletter Editor. With certain notable exceptions, this did not produce a lot of copy! The Microbial Control Division is now producing a regular flow of information under Mark Goettel's energetic leadership: might this spur a sister contribution from the Microsporidian Division? Society members continue to get promoted – let's give them the publicity they deserve. Meeting and conference reports (for example see the one by Don Roberts earlier in this Newsletter), are useful to alert members to current events in the invertebrate pathology world. Graduate students (or anyone for that matter) – do you need help locating a particular insect or pathogen culture, or obscure reference? or help in translating same? The possibilities are endless! The Newsletter is the major expense for the Society. As Newsletter Editor, I spend over 90% of your dues. The best way to obtain value for this money is to get the Newsletter working for you by contributing. Don't worry if you think a particular item may not be suitable – I will be happy to advise.

Change of Address

Please notify the Treasurer of all changes of address. The Treasurer keeps the Society Mailing List from which the address labels (for each Newsletter issue) are produced. In the rush of preparing each issue for mailing I cannot guarantee to catch all address changes, and I certainly assume that the Treasurer will have been properly notified for all subsequent mailing.

David Tyrrell

Season's Greetings



**Vth INTERNATIONAL COLLOQUIUM
ON INVERTEBRATE PATHOLOGY**

**AND
MICROBIAL CONTROL
ADELAIDE, AUSTRALIA**

20-24 AUGUST, 1990

**INVITATION TO REGISTER
incorporating
CALL FOR PAPERS**

The Vth International Colloquium on Invertebrate Pathology and Microbial Control and the 23rd Annual Meeting of the Society for Invertebrate Pathology, will be held in the Adelaide Convention Centre, Adelaide, Australia, from August 20 to 24, 1990.

Opened in 1987, the Adelaide Convention Centre is in the heart of the city — close to nearby shopping and restaurants and adjacent to the Hyatt Regency Adelaide Hotel, Adelaide Casino and Festival Theatre complex.

Adelaide is the capital city of South Australia, and is situated on a coastal plain between the Gulf of St Vincent and the hills of the Mount Lofty Ranges. It has a 'Mediterranean' climate and a relaxed and affordable lifestyle, with many beautiful parks and gardens, art galleries, museums and theatres. Adelaide is the centre of the Australian wine industry, and excellent, locally produced wines can be enjoyed in most of the city's six hundred restaurants and bistros. Adelaide is also the major gateway to the Outback via Alice Springs.

SCIENTIFIC PROGRAMME

The scientific programme will consist of organised symposia of invited papers and sessions of contributed papers and posters. Special symposia are being organised on the following topics:

- Bacterial Toxins and Mode of Action
- Commercialisation of Insect Pathogens
- Computer Simulation and Modelling
- Ecology and Bacteriology of Entomophilic Nematodes
- Epizootiology and Ecology of Invertebrate Pathogens
- Entomophthorales
- Honey Bee Diseases
- Invertebrate Immunity and Defence
- Invertebrate Diseases in Commercial Aquaculture
- Invertebrate Tissue Culture
- Molecular Biology & Genetic Manipulation of Invertebrate Pathogens
- Microbial Control of Pests of Agriculture
- Microbial Control of Pests of Forestry
- Microbial Control of Pests of Horticulture
- Microbial Control of Pests of Livestock
- Microbial Control of Insect Vectors
- Microbial Control of Soil Pests
- Microbial Pathogenicity Factors
- Polydnnaviruses
- Sex Ratio and Incompatibility Organisms

In addition, there will be General Symposia on Baculoviruses, Bacteria, Fungi, Nematodes, Marine Invertebrate Pathology, Microsporidia of Invertebrates, Protozoa and Viruses.

CALL FOR PAPERS AND ABSTRACTS

Invited speakers are being contacted by the Convenors of the various Symposia. Abstracts of submitted papers **MUST** be received by the Organising Committee by **FRIDAY APRIL 13, 1990**. Authors of submitted papers should ensure that their presentations can be made within a time limit of 12 minutes, with a further 3 minutes for discussion. Projection facilities for standard 2" x 2" 35mm slides, plus overhead transparencies will be available. Speakers should notify the Organising Committee of any other special audio-visual equipment requirements when submitting Abstracts.

PREPARATION OF ABSTRACTS

A typing guide is provided for the preparation of Abstracts. The instructions are printed on the reverse of the typing guide. Please follow these instructions carefully since the Volume of Abstracts will be printed directly from the material supplied by each author and will **not** be edited — therefore any errors in the submitted Abstract will appear in the final printed form. **Poorly typed or improperly prepared Abstracts will not be accepted. Because of time constraints, it will not be possible to return Abstracts to authors for retyping.**

STUDENT PRIZE

There will be a prize for the best student paper presented at the Colloquium. Further details are given on the Instructions to Authors sheet.

POSTERS

Boards approximately 1.3m x 1.3m will be provided. Authors of poster presentations must be prepared to attend their posters for a minimum of 2 hours.

TECHNICAL PROGRAMME

If you have any queries regarding the Technical Programme, these should be directed to:

Professor Dudley E. Pinnock
Chairman, Organising Committee
Department of Entomology
University of Adelaide
Waite Agricultural Research Institute
Waite Road
Glen Osmond, S. Australia 5064
Australia

Telephone:	08.372.2444	National
	+618.372.2444	International
Fax:	08.338.1757	National
	+618.338.1757	International
Telex:	UNIVAD	AA 89141

LETTERS OF INVITATION

The Convenors of Vth International Colloquium on Invertebrate Pathology and Microbial Control are willing to send, upon request, a personal invitation to attend the Colloquium. It should however be understood that such an invitation is only to help raise travel funds or to obtain a visa, and is not a commitment on the part of the Organising Committee to provide any financial support. If you require such an invitation, please indicate this fact on the registration form.

REGISTRATION

Delegates are requested to register as soon as possible, particularly since accommodation will be assigned on a "first come first served" basis, and later registrants may have to be placed in less conveniently located accommodation. All registrations will be acknowledged in writing.

FEES

The registration fee includes most meals — the Welcome Reception on Sunday August 19, Lunches, Morning and Afternoon Tea or Coffee on Monday, Tuesday, Thursday and Friday, Dinner Monday and Tuesday and the Colloquium Banquet on Thursday August 23, 1990.

SIP Members (if received on or before 1 June, 1990)	Aust.\$395
SIP Members (if received after 1 June, 1990)	Aust.\$425
Non-Members (on or before 1 June, 1990)	Aust.\$425
Non-Members (after 1 June, 1990)	Aust.\$450
Students (on or before 1 June, 1990)	Aust.\$250
Students (after 1 June, 1990)	Aust.\$275

Note: proof of student status must be provided.

ACCOMPANYING PERSONS' PROGRAMME

There is **no registration fee for persons accompanying registered delegates**. The accompanying person should choose those elements of the optional social programme that are required and pay accordingly. Similarly, accompanying persons are welcome to attend the social functions offered at no charge to registrants to the Colloquium by paying the appropriate ticket price.

ACCOMMODATION

Accommodation has been reserved in a range of nearby hotels, the majority of which are within easy walking distance of the Adelaide Convention Centre. The group discount rates set out below are quoted in Australian currency projected for August 1990 and are on a "room only" basis. Whilst we think it most unlikely, each accommodation house reserves the right to apply the rate applicable at the time of booking which may be higher than the rates now quoted; however, delegates may confidently expect that any increase would not be in excess of 10% of the rates now advised. Children's rates will be advised upon application. Delegates are responsible for payment of their accommodation accounts direct with the establishment when checking out.

SHARED ACCOMMODATION

The cost of accommodation can be reduced significantly by sharing. If you wish to share accommodation with another specified delegate, please indicate this on the registration form. ALL persons involved must indicate this on their individual registration forms. To avoid confusion, it is recommended that all such registration forms be enclosed in the same envelope. Elliservice Convention Management is unable to arrange shared accommodation with unspecified participants.

ACCOMMODATION DEPOSITS

All requests for accommodation must be accompanied by pre-payment of two nights' accommodation at the accommodation grade of your choice. Elliservice Convention Management will not guarantee to hold accommodation unless this payment is made. Delegates will forfeit their accommodation deposit in all instances where rooms have been reserved but are not used unless formal notification of later arrival has been received by Elliservice Convention Management at least seven days prior to the booking commencement date. Accommodation will be allocated strictly in order of receipt of registration forms.

HOTELS

Hyatt Regency Adelaide (adjacent to the Adelaide Convention Centre), North Terrace, Adelaide (Telephone 08.231.1234 National, 618.231.1234 International)

- **Single, Double or Twin Room – Aust.\$165 (all same price)**

The Terrace Adelaide Hotel (opposite the Adelaide Convention Centre), 150 North Terrace, Adelaide (Telephone 08.217.7552 National, 618.217.7552 International)

- **Single, Double or Twin Room – Aust.\$150 (all same price)**

The Grosvenor Hotel (opposite Adelaide Convention Centre), 125 North Terrace, Adelaide (Telephone 08.51.2961 National, 618.51.2961 International)

Budget Class –

- **Single Room Aust.\$54, Double or Twin Room Aust.\$68**

Business Class –

- **Single Room Aust.\$99, Double or Twin Room Aust.\$113**

Barron Townhouse Hotel, (10 minutes' walk from Adelaide Convention Centre), 164 Hindley Street, Adelaide (Telephone 08.211.8255 National, 618.211.8255 International)

- **Single, Double or Twin Room – Aust.\$107 (all same price)**

Hotel Adelaide (15 minutes walk from Adelaide Convention Centre), 62 Brougham Place, North Adelaide (Telephone 08.267.3444 National, 618.267.3444 International)

- **Single, Double or Twin Room – Aust.\$93 (all same price)**

Ambassadors Hotel (15 minutes' walk from Adelaide Convention Centre), 107 King William Street, Adelaide (Telephone 08.231.4331 National, 618.4331 International)

- **Single Room Aust.\$47, Double Room Aust.\$59**

The Directors Hotel (20 minutes' walk from Adelaide Convention Centre), 247 Gouger Street, Adelaide (Telephone 08.231.3572 National, 618.231.3572 International)

- **Single Room Aust.\$60, Double or Twin Room Aust.\$75**

SERVICED APARTMENTS

First preference will be given to families with children.

Greenways Apartments (15 minutes' walk from Adelaide Convention Centre), 45 King William Road, North Adelaide (Telephone 08.267.5903 National, 618.267.5903 International) – Price quoted is per Apartment.

- **3 only – 1 Bedroom/Lounge/Kitchen – Aust.\$58**
- **2 only – 2 Bedrooms/Lounge/Kitchen – Aust.\$80**
- **1 only – 3 Bedrooms/Lounge/Kitchen – Aust.\$105**

The Mansions Apartments (20 minutes' walk from Adelaide Convention Centre), 21 Pulteney Street, Adelaide (Telephone 08.232.0033 National, 618.232.0033 International)

- **20 only – 1 Bedroom/Lounge/Kitchen – Aust.\$87**
(A third person could sleep in the lounge room – a settee converts into a bed – extra cost Aust.\$10 per night).

COLLOQUIUM SOCIAL PROGRAMME

The cost of the following functions is included in the registration fee for full-time participants – accompanying person or guest ticket prices are as indicated:

- **Welcome Reception (Adelaide Convention Centre)**
Sunday evening, August 19, 1990 from 6.00pm to 8.00pm
(accompanying person or guest tickets Aust.\$25 each).
- **Colloquium Banquet (Adelaide Festival Centre)**
Thursday evening, August 23, 1990 from 7.30pm to 1.00am
(accompanying person or guest tickets Aust.\$50 each).

COLLOQUIUM BAROSSA VALLEY EXCURSION (Optional)

The following recommended Colloquium Excursion is not included in the registration fee for full-time participants:

- **Excursion to Barossa Valley (lunch included)**
Wednesday August 22, 1990 from 10.30am to 6.00pm
(ticket price Aust.\$50 each).

OPTIONAL SOCIAL PROGRAMME FOR DELEGATES AND ACCOMPANYING PERSONS

Sunday August 19, 1990

1.00pm-4.30pm – Cleland Wildlife Reserve/Mt Lofty
(Aust.\$35, includes admission and afternoon tea)

View Adelaide and its environs from the high vantage point of Mt Lofty. Walk amongst a wide variety of Australian animals and birds in their natural surroundings at Cleland Wildlife Reserve. Hand feed a kangaroo, cuddle a koala and chat with a cockatoo! Visit Aldgate Crafts on the way back to town.

Monday August 20, 1990

9.00am-1.00pm – North Terrace Walk & Fashion
(Aust.\$45, includes morning tea)

Stroll along North Terrace – past Government House, Parliament, the South Australian Museum, Art Gallery and State Library – the recently restored Mounted Police Barracks and Migrant Museum Quadrangle. Travel by bus to a private home in North Adelaide to enjoy a Fashion Parade of garments designed locally.

Monday August 20, 1989

1.00pm-5.00pm – Opals and Aboriginal Artefacts
(Aust.\$25, includes lunch)

Visit recommended retailer to view a large range of opal jewellery and genuine aboriginal artefacts. Specially discounted prices for delegates.

Tuesday August 21, 1990

5.00am-8.30am – Warrawong Sanctuary at Dawn
(Aust.\$40 includes admission and breakfast)

Coach picks you up from your hotel promptly at 5.00am. A 20 minutes' drive and you will enjoy a guided walk by streams, black water lakes, reed-beds and through a 14-hectare shrubby full of native Australian plants, birds and butterflies. See and photograph kangaroos, wallabies, pademelons, bettongs, potoroos, bandicoots, possums, quolls and platypus in their natural environment. At dawn creatures of the night and the day intermingle as the sun rises through the mist of the Adelaide Hills. A light breakfast is provided before returning to the Adelaide Convention Centre by 8.30am. Wear sensible clothing and footwear.

Tuesday August 21, 1990

1.00pm-5.30pm – Rooftop Designers' Workshop
(Aust.\$40 includes lunch)

Scenic drive through the Adelaide Hills to Mt Barker to visit Rooftop Designers' Workshop – see centuries-old printing techniques resulting in beautiful silk and cotton garments – for men and women. Discounted prices to delegates.

RECOMMENDED COLLOQUIUM ACTIVITIES

Wednesday August 22, 1990

8.30am-9.30am – SIP 'FUN RUN' – 5km Race – Lake Torrens (Aust.\$10 includes souvenir T-shirt)

Intending participants in the 'Fun Run' should complete the appropriate section of the Registration Form provided with this brochure and include payment of the fee. Shower facilities.

Wednesday August 22, 1990

11.00am-6.00pm – Barossa Valley Excursion
(Aust.\$50 includes lunch)

South Australia grows more than 60% of Australia's premium quality wines, and the Barossa Valley is one of three major wine-making areas of the State. Many of its early settlers were from Germany and the area has many German traditions. On arrival enjoy wine tasting, a tour of the winery, and a typically Australian gourmet barbecue accompanied by high quality varietal wines. Entertainment will include an 'Oompah Band', boomerang throwing demonstrations and aboriginal dancers.



**5th INTERNATIONAL COLLOQUIUM
ON INVERTEBRATE PATHOLOGY
AND
MICROBIAL CONTROL
ADELAIDE, AUSTRALIA
20-24 AUGUST, 1990**

REGISTRATION FORM

Register BEFORE 1 JUNE, 1990 AND SAVE Aust.\$30

**VENUE: ADELAIDE CONVENTION CENTRE
North Terrace, Adelaide
South Australia
Australia**



**Vth INTERNATIONAL COLLOQUIUM
ON INVERTEBRATE PATHOLOGY
AND
MICROBIAL CONTROL
ADELAIDE, AUSTRALIA
20-24 AUGUST, 1990
REGISTRATION FORM**

(Please use BLOCK LETTERS)

REGISTRANT

Surname Initials
 Prof/Dr/Mr/Ms/Other
 Preferred Name for Name Badge
 Organisation
 Postal Address

 Post Code/Zip Code
 Country Member SIP []
 I am a full-time student at
 Student I/D No:

ACCOMPANYING PERSON

Surname Initials
 Prof/Dr/Mr/Ms/Other
 Preferred Name for Name Badge
 I/We shall be accompanied by child(ren) whose name(s)
 and age(s) is/are as follows:

Childcare will be required for child(ren).

ARRIVAL/DEPARTURE DETAILS (if known)

Arrival date Time Flight
 Depart date Time Flight
 Other form of transport

LETTER OF INVITATION

I would appreciate a letter of invitation to attend the Colloquium. I understand that this is not a commitment on the part of the Organising Committee to provide any financial support.

ACCOMMODATION

A deposit of two night's accommodation is required and must accompany registration form. NO ACCOMMODATION RESERVATION WILL BE ACCEPTED UNLESS ACCOMPANIED BY THE MANDATORY DEPOSIT.

I shall be making my own arrangements []
 Please arrange accommodation for adult(s) and
 child(ren). Date In Date Out by 11am.

All rates are PER DAY on a PER ROOM or PER APARTMENT basis. No meals are included. Please indicate 1st choice 1, 2nd choice 2, 3rd choice 3, 4th choice 4.

	Single	Double	Twin	Choice
Hyatt Regency Adelaide	<input type="checkbox"/> \$165	<input type="checkbox"/> \$165	<input type="checkbox"/> \$165	.....
The Terrace Adelaide	<input type="checkbox"/> \$150	<input type="checkbox"/> \$150	<input type="checkbox"/> \$150	.....
The Grosvenor, Budget	<input type="checkbox"/> \$ 54	<input type="checkbox"/> \$ 68	<input type="checkbox"/> \$ 68	.....
The Grosvenor, Business	<input type="checkbox"/> \$ 99	<input type="checkbox"/> \$113	<input type="checkbox"/> \$113	.....
Barron Townhouse	<input type="checkbox"/> \$107	<input type="checkbox"/> \$107	<input type="checkbox"/> \$107	.....
Hotel Adelaide, N.Adel.	<input type="checkbox"/> \$ 93	<input type="checkbox"/> \$ 93	<input type="checkbox"/> \$ 93	.....
The Ambassadors	<input type="checkbox"/> \$ 47	<input type="checkbox"/> \$ 59	<input type="checkbox"/> \$ 59	.....
The Directors	<input type="checkbox"/> \$ 60	<input type="checkbox"/> \$ 75	<input type="checkbox"/> \$ 75	.....
Serviced Apartments	1 B/rm	2 B/rms	3 B/rms	Choice
The Mansions	<input type="checkbox"/> \$ 87	-	-	.....
Greenways, N.Adelaide	<input type="checkbox"/> \$ 58	<input type="checkbox"/> \$ 80	<input type="checkbox"/> \$105	.....

Note: Preference given to families for Apartments.

I would like to share accommodation with the following person(s) whose form(s) are enclosed with this form:

(1) Male Female
 (2) Male Female

SIP 'FUN RUN' 5KM RACE

I intend to participate in the race. I affirm that I am in proper physical condition to participate in this race and in consideration of the acceptance of this entry hereby release sponsor officials and organisers of this race from all claims of injury or damage to person or property, including death, resulting from my running in this event. I note that my entry fee of Aust.\$10 includes the price of a souvenir T-shirt.

Signature

I would like a souvenir T-shirt, but do not wish to enter the race. I enclose my payment of Aust.\$10.

Signature

My organisation may be interested in becoming a Trade Exhibitor [] and/or a Sponsor []
 Please send me information.

FEES PAYABLE (all quoted in Australian currency) Aust.\$

REGISTRATION FEE:	
SIP Member on or before 1 June 1990	(Aust.\$395)
SIP Member after 1 June 1990	(Aust.\$425)
Non-Member on or before 1 June 1990	(Aust.\$425)
Non-Member after 1 June 1990	(Aust.\$450)
Student on or before 1 June 1990	(Aust.\$250)
Student after 1 June 1990	(Aust.\$275)
SIP 'Fun Run' 5 km Race Entrant	(Aust.\$ 10)
" T-shirt only	(Aust.\$ 10)

Balance carried forward: Aust.\$

Aust.\$

Balance brought forward: Aust.\$

ACCOMMODATION DEPOSIT

2 nights @ \$Aust.

COLLOQUIUM FUNCTIONS (free to registrants)

Please indicate if you will attend.

WR Welcome Reception Sunday [] no charge
 WRG A.Person/Guest Tickets @ Aust.\$25
 CB Colloquium Banquet Thursday [] no charge
 CBG A.Person/Guest Tickets @ Aust.\$50

COLLOQUIUM FUNCTION (optional)

BV Barossa Valley Excursion & Lunch
 Tickets @ Aust.\$50

OPTIONAL SOCIAL PROGRAMME FOR DELEGATES & ACCOMPANYING PERSONS

CW Cleland Wildlife/Mt Lofty, Sunday afternoon
 Tickets @ Aust.\$35 incl.A/Tea
 NT North Terrace Walk & Fashion, Monday morning
 Tickets @ Aust.\$45 incl.M/Tea
 OA Opals & Aboriginal Artefacts, Monday afternoon
 Tickets @ Aust.25 incl.Lunch
 WS Warrawong Sanctuary at Sunrise, Tuesday morning
 Tickets @ Aust.40 incl.breakfast
 RD Rooftop Designers' Workshop, Tuesday afternoon
 Tickets @ Aust.40 incl.Lunch
 SD Scatter Dinner (Selected Restaurants), Wednesday
 Tickets @ Aust.25
 Indicate preferred cuisine 1st choice 1, 2nd choice 2
 IItalian [] FFrench []
 CHinese [] JJapanese []
 SEafood [] AUssie Pub []
 AM Aboriginal Heritage Morning, Thursday
 Tickets @ Aust.20 incl.M/Tea
 SV Southern Vales/Fleurieu All-Day Excursion, Friday
 Tickets @ Aust.\$60 incl.M/A Tea/Lunch

POST-COLLOQUIUM EXCURSIONS

ZAD09 Outback Australia/Gt Barrier Reef
 Sat.Aug.25-Mon.Sept.3 (incl.)
 Aust.\$1481 per person at Dec.1 1989
 Deposit for . . . adult(s) @ Aust.\$500
 No. of children (price to be advised)
 PF Pathogen Field Survey Excursion
 (replacing Atherton Tablelands sector of Tour)
 Thursday August 30, 1990
 No. of: Adult(s) Children
 ZAE03 Sydney City & Harbour/Blue Mountains
 Mon.Sept.3-Thur.Sept.6 (incl.)
 Aust.\$538 per person at Dec.1 1989
 Deposit for . . . adult(s) @ Aust.\$200
 No. of children (price to be advised)

TOTAL OF FEES (including Tours & Accom.) Aust.\$

Please make payment in favour of Vth ICIP and post to:
 Elliservice Convention Management, PO Box 753
 Norwood, S.Australia 5067, Australia.