Society for Invertebrate Pathology Newsletter for November 2008

- New Committee Members
- Warwick Meeting Reports
- Industry Corner
- Photographic Competition

Newsletter for November 2008

SIP Office Contact Details

Society for Invertebrate Pathology, PO Box 11, Marceline, MO 64658, USA.

Email sip@sip.org

Web http://www.sipweb.org

Telephone / Fax numbers
North America: 888-486-1505 (Toll free)
Outside North America: (660) 376-3586

Newsletter Editors

General Editor: Paresh Shah
pareshashah@mac.com

Technical Editor: Judith Pell
judith.pell@bbsrc.ac.uk

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Cover image © Judith Pell (Rothamsted Research, UK) of a bumblebee, *Bombus terrestris*. The 2008 Annual Meeting highlighted disease problems associated with declines of honey bees and other pollinators. For more information see page 7.

Newsletter Editorial

Welcome to the November 2008 Newsletter. As we sit together on a dull, grey, Sunday afternoon putting together the various articles, it is hard to believe a year has passed since Judith and I agreed to become co-editors for the Newsletter! A lot, of course, has happened over the last 12 months and not just in our highly specialised areas of work. There are also changes within SIP since, following the Annual Meeting in Warwick, we have a new President with Mark Goettel taking over from Wendy Gelernter and make-overs for the various Committees which are detailed in Mark's first letter as President starting on page 4.

One topic that was discussed during the Council meeting at Warwick - highlighted in Mark's first Letter - is the need to increase revenue and cut costs within the Society. So, if you receive this Newsletter by post, please consider whether you might help SIP by downloading the Newsletter from our web pages instead, where you can also print it out in colour!

As part of the development of the SIP web site, we will be posting photos taken during the Annual Meetings in the Member's Area rather than printing them all in the Newsletter. Also, some of you may notice that this issue has fewer pages than previous November issues. This is because the Committee reports and minutes from the SIP Council meetings will be posted on the SIP web pages as a PDF. Please send a letter to the SIP office if you wish to receive a hard copy of these reports and minutes.

There is a new feature starting in this issue with Industry Corner (page 17). Any feedback on this and the Photographic Competition are welcome. Also, we are always on the lookout for articles to publish, so please get in touch if you have ideas for the Newsletter.

The deadline for the February 2009 issue is 23rd January 2009.

Paresh Shah, pareshashah@mac.com
Judith Pell, judith.pell@bbsrc.ac.uk

Guidelines for articles

If you want to submit a news item, announcement or opinion piece, then please follow these simple guidelines:

Font: Verdana size 8 or Arial size 8

Word limits:

Notice/announcement - 150 words

Short article (one column) - 350 words

One page article - 700 words

Two page article - 1,400 words

Email the Editors if you have an article exceeding two pages

Images:

Images and/or logos are required for all articles except notices/announcements where it is optional.

Each image file should be less than 1 MB and JPEG is the preferred file format.

Book reviews/announcements:

- If you want a book review done then send names of two or three potential reviewers and details for a contact at the publishing company who can post a free copy to a reviewer. Non-members of SIP can also do book reviews,
- For announcements of new books, just email the URL or web link, with no other details, to the Editors.

Web (Re)sources

Although the following sites currently have very low content invertebrate pathology, they may be useful outlets for your organisation's press officers to post research findings and highlights.

Science journalism

EurekaAlert http://www.eurekalert.org/; AlphaGalileo http://www.alphagalileo.org/

World Federation of Science Journalists http://www.wfsj.org/

Mapping diseases

Healthmap is largely public health related but with some crop disease links http://www.healthmap.org/en

From the President

Mark Goettel being handed his "powers" by outgoing President Wendy Gelernter

Another successful meeting for SIP, another Council has taken over the reigns of the Society, and I am proud to serve you as your new President.

Council

I would like to thank the outgoing members of Council, Past President Just Vlak, Secretary Jenny Cory, Treasurer Jimmy Becnel, and Trustees, Bryony Bonning and Patricia Stock. The last 2 years were a challenge with the appointment of a new Executive Secretary and diminishing financial resources. Thank you for your perseverance and excellent service to the Society under the able stewardship of President Wendy Gelernter. I would also like to welcome the incoming Council Members, Vice-President Lee Solter, Secretary Johannes Jehle, Treasurer Ann Hajek and Trustees Jeff Lord and Christina Nielsen-LeRoux. These new members join Wendy Gelernter, as Past-President, Jorgen Eilenberg and Zhihong (Rose) Hu as continuing Trustees and I as President. I look forward to working with all of you as the Society faces new opportunities and challenges in the coming years.

Warwick Meeting

We had another very successful annual meeting, this time in Warwick, UK. There were over 400 participants which is another demonstration that the Society remains exciting and vibrant. Many thanks for the excellent organization by Meeting Organizing Committee Chair Dave Chandler, Co-Chair Doreen Winstanley, Program Committee Chair, Bryony Bonning and Local Arrangements and Conference Coordinator, Heike Kuhlmann. Thanks also to all the Divisions for organizing interesting Symposia and to Diana Cox-Foster and Bryony Bonning for organizing the Plenary Symposium on Honey Bee Colony Collapse Disorder. A new and interesting event held during the BBQ was a fund raising auction, with Mike Brownbridge as auctioneer. We had a lot of fun and managed to raise approximately $2,000 for the Society. Many thanks to Fernando Vega for organizing the auction, the many member and commercial donors of items for auction and of course, our auctioneer, Mike Brownbridge, Cashier Linda Becnel and helpers Maddie Vandenberg and Shannon Moar. We hope to make this a yearly event, albeit slightly shortened. Rumor has it that Brian Federici has already obtained some interesting books from Elsevier to auction in Park City!

Plans for our 2009 annual meeting in Park City, Utah, are well on their way. The Organizing Committee, Co-Chaired by Don Roberts and Rosalind James met recently for a program and local arrangements planning meeting on site. Lerry Lacey reports that the venue is splendid. There will be lots of activities available before, during and after the meeting, so I hope to see most of you in Park City next August!

After Park City, the subsequent exciting meetings venue will be Trabzon, Turkey, July 11 – 15, 2010, chaired by Zihni Demirbag. The Meetings Committee already has some possibilities for 2011 & 2012. If you are interested in hosting a future meeting, please contact Lerry Lacey, Chair of the Meetings Committee at Lerry.Lacey@ARS.USDA.GOV.

Committees

One of the first responsibilities of an incoming President is to reassess and rebuild the Society's various committees. This was a bigger chore than I had first expected. Finally after numerous e-mails and some prodding, I am pleased to present to you the SIP Committees as follows:

Nominating Committee

Wendy Gelernter (Chair), Madoka Nakai, Harry Kaya, Just Vlak

Publications Committee

David Shapiro Ilan, (Chair), Hisanori Bando, Brian Federici, Mark Goettel, Ann Hajek, Harry Kaya, Albrecht Koppenhöfer, Cecilia Schmidt, Paresh Shah, Lee Solter, Just Vlak

Founders Lecture Committee

James Becnel (Chair), Neil Crickmore, Zhihong (Rose) Hu, Harry Kaya

History Committee

Elizabeth Davidson (Chair), Jim Harper, Juerg Huber, Harry Kaya, Don Roberts

Membership Committee

Helen Roy (Chair), Robert Anderson, Susan Bornstein-Forst, Nor Chajanovsky, Sunday Ekesi, Ann Hajek, Nina

Jenkins, Liu Jiping, Kerstin Jung, Juan Jurat-Fuentes, Yasuhisa Kunimi, Andreas Linde

Endowment and Financial Support Committee

John Vandenberg (Chair)**,** Michael Brownbridge**,** Mike Dimock**,** Roma Gwynn**,** Jim Harper**,** Ann Hajek (*ex officio*)

Awards & Student Contest Committee

Andreas Linde (Chair), Bryony Bonning, Nguya (Jean) Maniania, Patricia Stock, Stephen Wraight

Meetings Committee

Lerry Lacey (Chair), Dave Chandler, Brian Federici, Kelli Hoover

Meetings Program Committee, Park City, USA

Rosalind James (Co-Chair), Don Roberts (Co-Chair), Byron Adams, Lisa Anderson, Lerry Lacey, Michael McGuire, Division Chairs

Meetings Program Committee, Trabzon, Turkey

Zihni Demirbag (Chair)

Student Affairs Committee

Bacteria: Yi-Chun Tsai (Taiwan); Microsporidia: Taro Saito (Japan); Microbial Control: Jerry Ericsson (Canada); Viruses: Ikbal Agah Ince (Turkey); Nematodes: Hao Yu (China); Fungi: Vitalis W. Wekesa (Kenya)

(Chair yet to be named)

The Lomer Award will now be the responsibility of the Awards and Student Contest Committee. Special thanks are due to Paresh Shah and his committee for having launched the award. A lot of time and effort was spent in the establishment of guidelines and administration of this award. Thanks again, Paresh.

Thank you to all those agreeing to chair, join or remain on these committees and to those who served in the past. These committees play a vital role in the Society.

SIP Divisions

One of the life-lines of our Society is the Divisions. Divisions play a critical role in the Society by providing a "home" for members within different disciplines. Division Chairs are non-voting members of Council and are also members of the Annual Meetings Program Committees. As such, they are responsible for organizing the Symposia and nominating student members on the Student Affairs Committee.

Presently we have Divisions on Bacteria, Fungi, Microbial Control, Microsporidia, Nematodes and Viruses. More information on our Divisions can be found on our website www.sipweb.org.

We are sorely lacking a Division on Pathogens of Beneficial Invertebrates. With the advent of new problems such as honey bee colony collapse disorder, there is renewed interest in this area. If you are interested in forming a new Division on pathogens of beneficial invertebrates, please contact me for details at goettelm@agr.gc.ca.

Website

Our new Executive Secretary, Cecilia Schmidt has started to give our website, www.sipweb.org a new look. Please visit the website and let us know what you think.

It will take some time before we get the whole website re-organized and updated. I have asked the Publications Committee to work with Cecilia to update the site and to provide oversight on an on-going basis to ensure that the information is current and appropriate. Please send your suggestions or comments to David Shapiro-Ilan, Chair of the Publications Committee at David.Shapiro@ars.usda.gov.

30 year pins and 40 year certificates

The History Committee has arranged to provide pins to those who have been members for 30 or more years. In addition, members of 40 years or more are receiving a certificate. Cecilia has been very busy sending these out. By the time that this Newsletter is out, those eligible should have received their pin and/or certificate. If you believe you are eligible and haven't, then please contact Elizabeth Davidson, Chair of the History Committee at e.davidson@asu.edu.

Endowed Memberships

The interest accrued from the Society's Membership Endowment Fund provides endowed memberships to deserving scientists who would not otherwise be able to become SIP members. The Membership Committee is presently seeking nominations for endowed memberships.

Please send your suggestions to Helen Roy, Chair of the Membership Committee, at hele@ceh.ac.uk. Please include a short justification for your choice(s).

Finances and Dues Increase

As a result of some very profitable meetings in the late 1990's as well as numerous and generous sponsor contributions, the Society was left in a very enviable position of having accumulated excess wealth. Council decided to run down this wealth by providing very generous allocations to the Divisions in support of speaker and student travel awards for many years. Unfortunately, the time has now come when the Society is unable to continue this policy.

The target for a scientific society is to retain in their treasury twice the yearly operating expenses, as a cushion for unexpected events. The treasury is now

less than this and we must find ways not only to balance our budget, but also to replenish the treasury.

As a result, Council voted in Warwick to increase dues to US $45 for regular members and US $20 for students and to discontinue providing Divisions with funds for speakers, at least for this year. However, each Division will be provided with US $750 to support student travel.

Unfortunately, the dues increase will not allow a rapid replenishment of our treasury. Council realized that many of our members are from countries where even $45 may be difficult for some and in an effort to retain our full membership, the dues increase is only a modest one.

In addition to renewing your membership, you can help out by 1) choosing to receive your Newsletter only electronically as printing and mailing of the Newsletter is still a significant cost and 2) making a special voluntary contribution, tax deductible for most.

Another difficulty facing our financial situation is that the present low interest environment makes the Lomer and Martignoni Endowment funds unsustainable in the short term, at least at the present level of awards.

The principle of these Endowments is preserved and awards depend on interest and subsidy from the General Fund to make up the difference. In addition to decreased revenue from low interest rates, an increase in dues means further pressure on the endowment of members from the Membership Endowment Fund.

Please consider making special contributions to our Endowment Funds in order to make them more sustainable in the present and for the future.

Suggestions for fundraising or new sponsorships are welcomed. Please send your ideas to John Vandenberg, Chair of the Endowment and Financial Support Committee at John.Vandenberg@ARS.USDA.GOV.

With best wishes,

Mark Goettel

Members of SIP Council at Warwick. Back row (left to right): Johannes Jehle, Patricia Stock, Bryony Bonning, Neil Crickmore, Zhihong (Rose) Hu, Paresh Shah, Regina Kleespies, Christine Nielsen-Le Roux, Jörgen Eilenberg, Helen Roy, David Shapiro Ilan. Front row seated (left to right): Jimmy Becnel, Just Vlak, Wendy Gelernter, Mark Goettel and Jenny Cory

Report on the 41st Annual Meeting

The 41st annual meeting was held at the University of Warwick, Warwickshire, United Kingdom from Sunday 3rd to Thursday 7th August 2008. The 9th International Conference on *Bacillus thuringiensis* incorporating COST862 Action 'Bacterial toxins for insect control', organised by Neil Crickmore, was also incorporated into the Annual Meeting. The last time SIP met in the UK was way back in 1982, when the 15th annual meeting was held at the University of Sussex, Brighton.

The meeting was attended by 410 delegates, of which 85 were students. This year, delegates came from 44 different countries. The meeting organising committee was co-chaired by Dave Chandler and Doreen Winstanley, while the science programme was organised by Bryony Bonning. Able assistance in planning and execution was provided by members of the local organising committee: Judy Pell, Helen Roy, Bob Possee, Neil Crickmore and Gill Prince. Local arrangements and conference coordination were done by Heike Kuhlmann, without whom the meeting would not have succeeded. Invaluable help was also provided during the meeting by the staff of Warwick Conferences and by the following volunteers: Trish Wells, Gary Keane, Sally Hilton, John Danquah, David Carpentier, Zenas George, Vidisha Krishnan, Paul Johnston and Nick Jessop.

The conference was held on the campus of the University of Warwick, on the outskirts of Coventry, Warwickshire, which is located in the centre of England. Most delegates stayed in the University halls of residence. Conference sessions were held in and around the Warwick Arts Centre, one of the finest arts venues in the UK outside of London.

Scientific programme

The conference was formally opened on Monday morning by the Society's President, Wendy Gelernter, and Dave Chandler. Wendy welcomed the delegates, spoke about the traditions and values of the society and paid a warm tribute to 'old hands' still active in the society and to absent friends of SIP. The Founders' Memorial Lecture was given by Johannes Jehle, entitled 'Andre Paillot (1885 – 1944): His work lives on'. The Honoree's grandson, Pierre-Yves Gautier, was able to attend the Memorial Lecture and said a few words about his grandfather's legacy.

The plenary session following the Founders Memorial Lecture was on honey bee colony collapse disorder (CCD), an issue that has been very much in the news and which has received attention around the world. There were four speakers in the session, each a leader in his or her field. Dennis vanEngelsdorp set the scene on CCD in the US, and was followed by Ingemar Fries on microsporidian infections in hymenopteran pollinators. Jay Evans then presented on genomics approaches to honey bee health. Lastly, Diana Cox Foster talked about the role of pathogens in honey bees undergoing CCD.

The plenary attracted significant attention from those outside the traditional SIP family: the BBC recorded interviews with some of the speakers for a radio broadcast on their daily farming programme, while the plenary was featured in a piece on bee health by local BBC TV news a few days before. We also had journalists from the national press, government officials and members of the executive of the British Bee Keepers Association. Honey bee health has attracted considerable attention from politicians in the UK, and the plenary was attended by Baroness Celia Thomas of Winchester who has been campaigning on this issue in the House of Lords.

From Monday afternoon to the end of the conference on Thursday evening, there were 234 oral presentations and 149 poster presentations, 11 symposia and 9 contributed paper sessions. The Society Divisions held 5 workshops. In addition, a student workshop was held on Wednesday, covering the skills necessary for science communication and winning research funding. On top of all this, the meeting also managed to fit in the SIP business meeting, the division meetings plus a packed social programme.

Social programme

One thing you can say about the UK is that the summer weather is unpredictable. Unfortunately, the British 'summer' of 2008 was notable for lower than average temperatures and heavy rains, and so it proved for the week of the SIP. When planning the meeting, we had hoped for blue skies and warm sun, but SIP week brought some cloudy skies and rain most days. SIPers are, however, nothing if not a positive bunch, and they worked and partied hard despite the weather. In fact, delegates from rain starved areas of the US and Australia said they found the weather rather refreshing (much to the amazements of the Brits!).

The meeting started informally on Sunday evening with the traditional mixer, which was held in the Mead Gallery of the Arts Centre, and comprised of a buffet meal and drinks. Entertainment was provided by a string quartet. Delegates quickly settled into campus life and took part fully in the social program. The 5km run was held early morning on Tuesday, with a course

on campus set and organised by Neil Crickmore. Luckily the rain held off for the run, but as often seems to be the case for early morning 5 k's, fewer participants turned up for the race than had entered. This may have had something to do with late nights in the bar the previous evening!

Delegates had a choice of two destinations for the conference excursion on the Tuesday afternoon; a tour around William Shakespeare's Stratford upon Avon, or a visit to Warwick Castle, one of the finest medieval castles in Europe. A total of 220 people went on the excursions; unfortunately the heavens opened in the afternoon but the rain did not spoil the fun, and luckily no one fell off the castle ramparts or picked a fight with one of the knights in armour.

Jörgen Eilenberg, Harry Kaya, Rosalind James and Don Roberts try out their umbrellas

After the excursion, soggy delegates were given a chance to dry out before the barbecue, which we had to move indoors because of the bad weather. As before, this didn't spoil the fun.

Morris dancers in synchrony

We were entertained by a local Morris folk dancing group who, somehow, managed to persuade some plucky volunteers to join in. Despite most of them lacking the traditional Morris dancer's physique (bald head, large bushy beard and even larger belly) the volunteers conducted themselves with aplomb. Awards for the 5 k run were presented during the evening as well as a new SIP phenomenon, the Auction (see page 15).

The meeting closed on Thursday evening with a banquet at the Royal Court Hotel, Coventry. This beautiful Country House Hotel is set in 11 acres of landscaped gardens and parkland. The original Manor House, on which the hotel is based, was built in 1894 by the car manufacturer William Hillman.

Following dinner, a short award ceremony was held with our new President, Mark Goettel, acting as MC. Delegates were then entertained by a traditional ceileidh from a wonderful folk band, Warblefly. The band are well known on the festival circuit in the UK and some of their number play music by night but are gainfully employed as entomologists by day (hence the name Warblefly). The band were excellent, and SIPers took to the floor with gusto. It says much about the evening that most of the coaches waiting to take delegates back to the University did not depart until well after midnight!!!

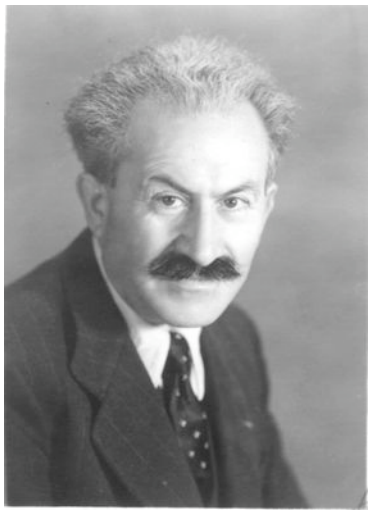
Dave Chandler, Warwick HRI, University of Warwick

A Thank You to our Sponsors!

The meeting could not have gone ahead without the generous support of the following sponsors:

Andermatt Biocontrol
Bayer CropScience
Bee Disease Insurance
Becker Microbials
BioLogic Company
Certis USA
Dow AgroSciences
Koppert Biological Systems
Mars Incorporated
Monsanto
New England BioLabs
Pioneer
Syngenta
Taylor and Francis Group
Valent BioSciences
Vita

Founder's Lecture



Dr. André Paillot, Founders´ Honoree 2008

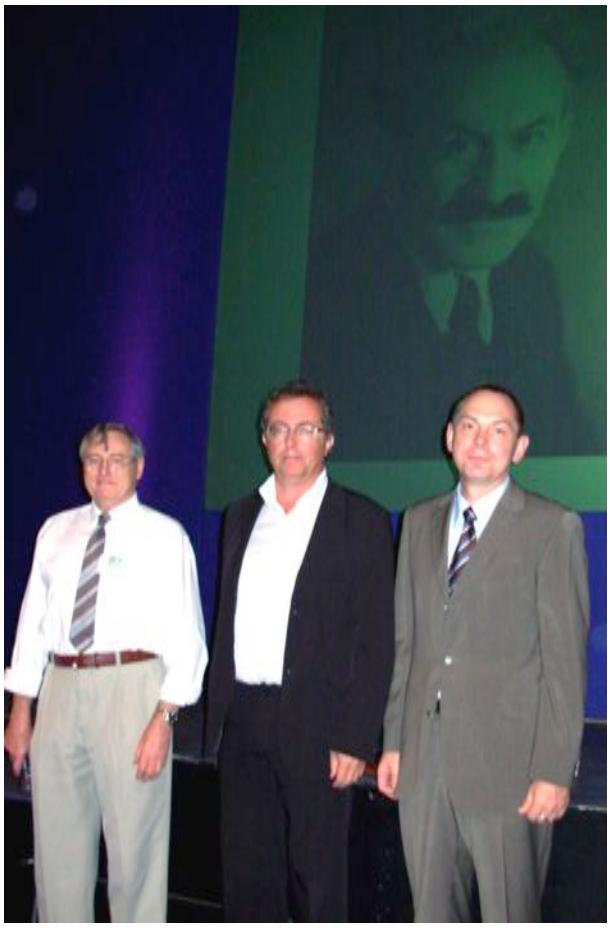
The 2008 Founders´ Honoree was André Paillot, a pioneer of invertebrate pathology. He was born on August 8, 1885 in Bois-de-Gand and started his career first as a teacher in an elementary school in the French Jura. From 1907-1911 he studied natural sciences in Besancon. His interest for entomology was early set, and in 1911 he joined the famous French entomologist Paul Marchal for field studies on grape insect pests. In addition, he received training and education at the Institute Pasteur in Paris. After World War I, when he had been heavily injured, he was appointed as Director of the Station Zoologie agricole du Sud-Est (Southeastern Entomological Station) in St-Genis-Laval, a few kilometers south of Lyon, which he headed until his death on December 22, 1944.

Paillot pioneered insect pathology by a large number of seminal contributions and his outstanding achievements are still influential today. Characteristic for his work was the tight combination of applied experimental work with basic research. He worked on all aspects of insect pathogens, including microsporidia, bacteria, fungi and viruses. He discovered and described a large number of insect pathogens. Most eminent was his discovery of granulovirus infection of the cabbage white butterfly *Pieris brassicae* in 1925. It took more than 20 years until his discovery could be confirmed by E. Steinhaus, who identified the first granulovirus infection in North America.

By a series of meticulous observations he concluded that the humoral immune response is a important component of the insect´s immunity against pathogens. When inoculating *Agrotis segetum* with an attenuated suspension of *Bacillus melolonthae non liquefaciens*, he demonstrated that the insect larvae could be immunized independently from a cellular immune response. Remarkable also was his work and hypotheses on endosymbionts of insects, which he considered as adapted pathogens.

In recognition of his scientific achievements, Paillot received several scientific honors in France, e.g. Chevalier de la Légion d´Honneur and Officer of the French Agricultural Academie.

Though working more or less alone he published more than 160 scientific papers on insect pathology. A further unique achievement was the completion of the text book on insect pathology "L´infection chez les insects" in 1933. This book of 535 pages and 279 mostly hand drawn figures and covered all aspects of insect pathology known in those days. It was the first text book in history that was solely dedicated to insect pathology.



Left to right: Dudley Pinnock, Pierre-Yves Gautier, the Honoree's grandson, and Johannes Jehle

Johannes A. Jehle, Founders´ Lecturer 2008

Dr. Johannes Jehle studied biology at the universities of Munich and Göttingen. Specialized on botany and plant pathology he graduated in 1987. Then he went to Mali/West Africa to perform a field study on medical plants before continuing his studies on plant pathology at the Agricultural Faculty in Göttingen from 1988-1989. From 1990-1994 he performed his PhD studies with Horst Backhaus at the Department of Biochemistry and Plant Virology at the Julius Kuehn Institute in Braunschweig. In his PhD project he worked on the biosafety of genetically engineered baculoviruses and studied the potential of recombination between granuloviruses. During this work he developed his strong interest for molecular biology and virology. After obtaining his PhD he received a Marie-Curie-Fellowship and worked as a postdoc with Just Vlak at Wageningen University, the Netherlands, where he met scientists from all over the world. Many of them are SIP friends to this day.

In 1996 he accepted a position at the State Plant Protection Agency of Rhineland-Palatinate in Mainz, Germany. The year after the laboratory was relocated to Agricultural Service Station Palatinate (DLR Rheinpfalz) in Neustadt a. d. Weinstraße. This institute mainly works on viticulture and horticulture. There, Dr. Jehle set up a research group on biotechnological crop protection. During the last decade his work focused on three themes: (1) molecular biology of baculoviruses and their application in biological control, (2) phylogeny and classification of insect viruses, (3) risk assessment of genetically engineered organisms, e.g. Bt corn. A very important topic of his current research is the resistance of codling moth, *Cydia pomonella*, to CpGV, after failure of CpGV products had been observed in several orchards in Europe.

Since 2006 he has been an external adjunct professor of genetics at the University of Mainz. He is a member of the Editorial Board of the *Journal of General Virology* (since 2004), *Journal of Invertebrate Pathology* (since 2007), *Recent Patents of Gene and DNA Sequences* (since 2007). Dr. Jehle attended his first SIP meeting as a PhD student in 1992 in Heidelberg, and since then he has hardly missed any. He has served in different positions within SIP, including Secretary/Treasurer of the Virus Division (1998-2000), Vice Chair and Chair of the Virus Division (2004-2008). Presently he serves as Secretary of SIP (2008-2010). He has further served as member (2000-2005) and Chair (since 2005) of the Baculovirus Study Group of the *International Committee on Taxonomy of Viruses (ICTV)* and as Taxonomy Advisor for Baculoviruses at GenBank NCBI (USA) since 2005.

Dr. Jehle has authored more than 70 publications in journals, books and conference proceedings, with forty in peer-reviewed journals. He has mentored numerous PhD students, postdoctoral fellows and visiting scientists in his laboratory, which might be one of the only insect pathology laboratories in the world where wine tasting is one of the frequent duties of its members.

Johannes Jehle with Pierre-Yves Gautier

Honoring SIP's 30 and 40 year Members

SIP is honoring its loyal, long-term members with a pin for those who have been members for over 30 years, and with a special certificate for 40 year members.

After significant efforts by James Harper, assisted by Betty Davidson and Harry Kaya, we have come up with a list of these members. Fifty members have loyally paid their dues for 40 years or longer, and another 36 have been members for 30-39 years.

For a Society as small as ours, these numbers make a clear statement about the strong loyalty of our members to the Society over the years.

Among the 40-year members are scientists from 12 countries, reflecting the wonderful international nature of our Society from its beginning. Below is a list of these members: if your name is on the list and you did not attend the meeting in Warwick, UK, you can expect a 30-year pin in the mail, and a certificate if you have been a member for 40 or more years. Six of the 40-year and 9 of our 30-39 year members were in attendance at the 2008 meeting. Congratulations and thank you for your loyalty to SIP!

30 to 39 year members at the Warwick meeting. From left to right: Juerg Huber, Just Vlak, Stefan Jaronski, Dwight Lynn, James Maruniak, Arthur Callaghan and Brian Federici

40 or more year members at the Warwick meeting. From left to right: Betty Davidson, Don Roberts, Dudley Pinnock, James Harper, Max Bergoin and Harry Kaya

SIP members with 30 to 39 years of membership

	YEAR JOINED	CURRENT STATUS
ANDERSON, ROBERT	1972	FULL
ANDREADIS, T. G.	1979	FULL
BILIMORIA, S. L.	1975	FULL
BOUCIAS, DRION	1975	FULL
CALLAGHAN, ARTHUR	1975	FULL
CLINE, GEORGE B	1971	EMERITUS
COUCH, TERRY L	1973	FULL
DOMNAS, ARISTOTLE	1973	EMERITUS
FEDERICI, BRIAN A	1973	FULL
FUXA, JAMES R.	1975	EMERITUS
HOLDOM, D. G.	1979	FULL
HOU, ROGER F	1972	FULL
HUBER, JUERG	1977	FULL
HUMBER, RICHARD A	1972	FULL
JARONSKI, STEPHAN	1975	FULL
KELLER, SIEGFRIED	1975	FULL
KENNETH, ROBERT G	1971	EMERITUS
KURTII, TIM	1975	FULL
LARSSON, J I RONNY	1971	FULL
LEVY, RICHARD	1977	EMERITUS
LYNN, DWIGHT E	1975	EMERITUS
MARUNIAK, JAMES	1977	FULL
MCCOY, CLAYTON W	1970	FULL
MCINTOSH, ARTHUR H	1976	FULL
NUORTEVA, MATTI	1971	EMERITUS
ROHRMANN, G. F.	1976	FULL
SANTIAGO-ALVAREZ, CANDIDO	1977	FULL
SHIMAZU, MITSUAKI	1978	FULL
STOCKDALE, HOWARD	1972	FULL
STREETT, DOUGLAS A	1973	FULL
TRIGGIANI, ORESTE	1977	FULL
VANDENBERG, JOHN	1978	FULL
VLAK, JUST M	1978	FULL
WRAIGHT, STEVE	1979	FULL
YOUSTEN, ALLAN A	1977	EMERITUS
ZIMMERMAN, GISBERT	1977	FULL

SIP members with 40 or more years membership

	YEAR JOINED	CURRENT STATUS
AIZAWA, KEIO	1968	HONORARY
AMONKAR, S. V.	1967	EMERITUS
ANTHONY, DARREL W	1969	EMERITUS
BAILEY, LESLIE	1967	EMERITUS
BERGOIN, MAX	1968	FULL
BROOKS, WAYNE M.	1968	FULL
BURGES, H. DENIS	1967	HONORARY
CALI, ANN	1968	FULL
CARNER, GERALD R	1969	FULL
COOPER, EDWIN L.	1967	FULL
COWDEN, RONALD R.	1969	EMERITUS
DAVIDSON, ELIZABETH W.	1968	FULL
DE BARJAC, H.	1967	HONORARY
DIMMITT, MAJOR W. A.	1968	EMERITUS
GRANADOS, ROBERT R.	1967	HONORARY
HALL, IRVIN M.	1967	EMERITUS
HARPER, JAMES D.	1967	FULL
HARSHBARGER, JOHN C.	1967	FULL
HUKUHARA, T.	1967	EMERITUS
IGNOFFO, CARLO M.	1967	FULL
IIZUKA, TOSHIHIKO	1967	FULL
JAHN, ELSA	1969	EMERITUS
JAQUES, ROBERT P.	1968	EMERITUS
JOHNSON, PHYLLIS T.	1967	HONORARY
KAWARABATA, TAKESHI	1967	FULL
KAYA, HARRY K.	1967	FULL
KRYWIENCZYK, J.	1968	EMERITUS
LEWIS, LESLIE	1969	FULL
LUTHY, PETER	1967	FULL
MARAMOROSCH, KARL	1967	EMERITUS
MILNER, RICHARD J.	1968	EMERITUS
MORRIS, OSWALD N.	1967	EMERITUS
OVERSTREET, ROBIN M	1969	FULL
PINNOCK, DUDLEY E.	1968	FULL
PLUS, NADINE	1968	EMERITUS
PODGWAITE, JOHN D	1969	FULL
ROBERTS, DONALD W.	1967	HONORARY
ROSENFIELD, AARON	1968	EMERITUS
SHAPIRO, MARTIN	1968	FULL
SPARKS, ALBERT K.	1967	HONORARY
STEWART, JAMES E.	1969	EMERITUS
STOLZ, DONALD B.	1967	FULL
TANADA, Y.	1967	HONORARY
TINSLEY, THOMAS W.	1968	EMERITUS
VAGO, CONSTANTINE	1968	HONORARY
VAN DER GEEST, L. P. S.	1968	EMERITUS
WEBSTER, JOHN M.	1967	EMERITUS
WEISER, JAROSLAV	1967	EMERITUS
ZIFFER, J.	1967	EMERITUS
ZIMMACK, HAROLD L.	1968	EMERITUS

SIP Division Photographs

Virus Division (note the ruckus in the back row!)

Microsporidia Division

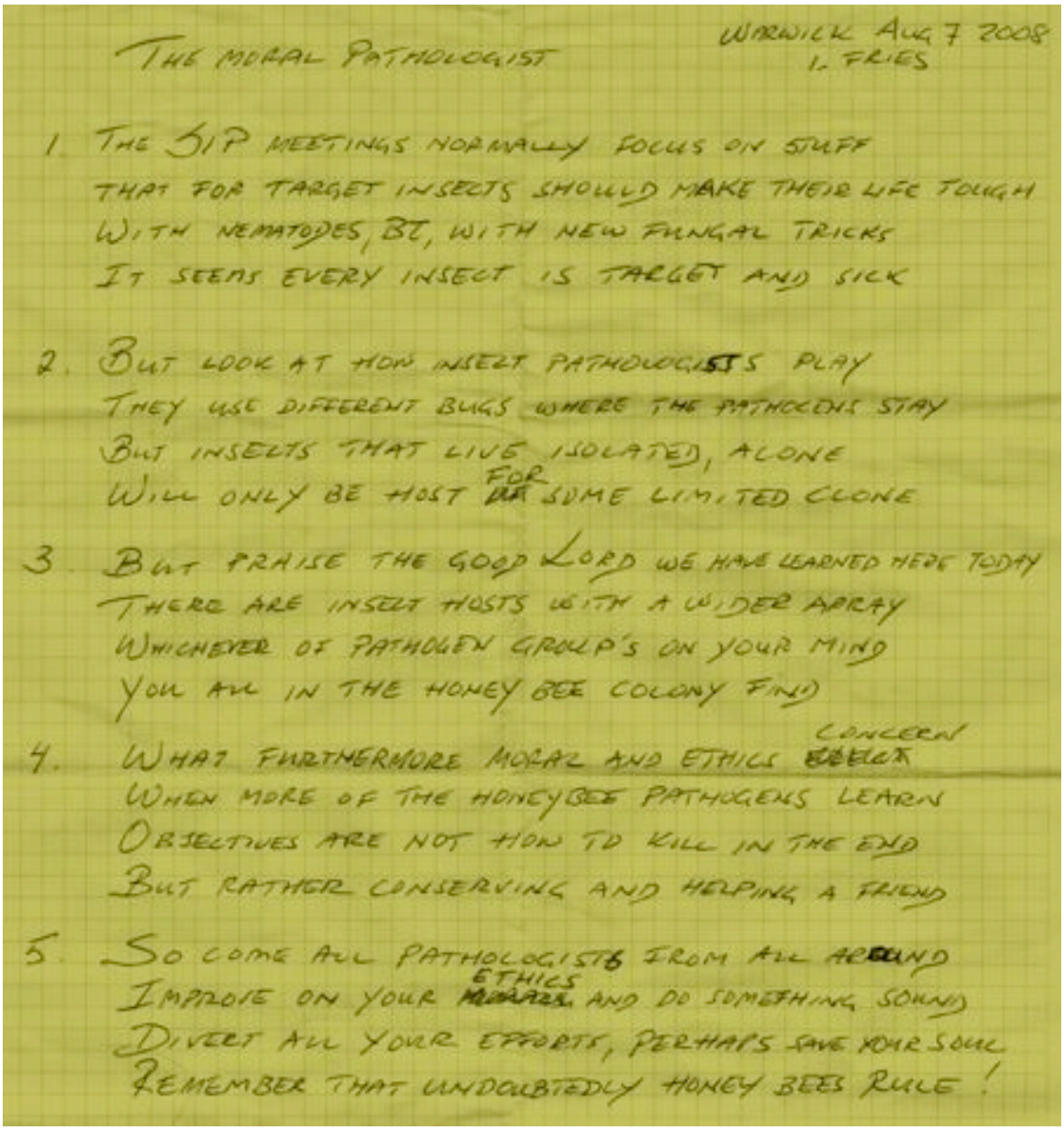
Prof. Chung Hsiung Wang brings half of the Microsporidia Division from the National Taiwan University

Nematode Division

A Plea for Moral Pathologists

During the closing ceremony at the Warwick Meeting, Ingemar Fries sang a deeply moving plea calling for invertebrate pathologists who could selflessly devote their research to improving bee health.

Revealed here for the very first time are the words that Ingemar composed to sing for his supper...



THE MORAL PATHOLOGIST

WARWICK AUG 7 2008
I. FRIES

1. THE SIP MEETINGS NORMALLY FOCUS ON STUFF
THAT FOR TARGET INSECTS SHOULD MAKE THEIR LIFE TOUGH
WITH NEMATODES, BT, WITH NEW FUNGAL TRICKS
IT SEEMS EVERY INSECT IS TARGET AND SICK

2. BUT LOOK AT HOW INSECT PATHOLOGISTS PLAY
THEY USE DIFFERENT BUGS WHERE THE PATHOGENS STAY
BUT INSECTS THAT LIVE ISOLATED, ALONE
WILL ONLY BE HOST FOR SOME LIMITED CLONE

3. BUT PRAISE THE GOOD LORD WE HAVE LEARNED HERE TODAY
THERE ARE INSECT HOSTS WITH A WIDER ARRAY
WHICHEVER OF PATHOGEN GROUP'S ON YOUR MIND
YOU ALL IN THE HONEY BEE COLONY FIND

4. WHAT FURTHERMORE MORAL AND ETHICS CONCERN
WHEN MORE OF THE HONEYBEE PATHOGENS LEARN
OBJECTIVES ARE NOT HOW TO KILL IN THE END
BUT RATHER CONSERVING AND HELPING A FRIEND

5. SO COME ALL PATHOLOGISTS FROM ALL AROUND
IMPROVE ON YOUR ETHICS AND DO SOMETHING SOUND
DIVERT ALL YOUR EFFORTS, PERHAPS SAVE YOUR SOUL
REMEMBER THAT UNDOUBTEDLY HONEY BEES RULE!

SIP Auction

A new event starting at the Warwick meeting was the auction, intended to serve as a fund-raiser for the Society. This event was held during the barbecue and Michael Brownbridge served as a highly entertaining auctioneer. More than 20 items were auctioned, raising more than $2,000 for the Society.

Besides items donated by various publishers, including Taylor and Francis, Springer and CABI, several SIP members also provided articles for auction especially Bryony Bonning, Wendy Gelernter, Meredith Blackwell, Jimmy Becnel, Surendra Dara, Mark Goettel, Sigi Keller and Fernando Vega. A big 'Thank You' to all who contributed to the fun!

Michael - the man knows how to get your money!

5 k Fun Run Results

Final positions at the Warwick Olympics!

Name	Category	Postn.
Filippo Castiglia	Men, 35-44	1
Arne Peters	Men, 35-44	2
Vladan Falta	Men, 35-44	3
Juerg Enkerli	Men, 45 and over	1
Kenneth Narva	Men, 45 and over	2
Steven Valles	Men, 45 and over	3
Onya Opota	Men, under 35	1
Bernhardt Steinwender	Men, under 35	2
Matthew Gardner	Men, under 35	3
Kiri Asano	walker, female	1=
Madoka Nakai	walker, female	1=
Surendra Dara	walker, male	1
Anthony Sweeney	walker, male	2
James Becnel	walker, male	3
Bryony Bonning	Women, 35-44	1=
Michelle Hares	Women, 35-44	1=
Dawn Gouge	Women, 35-44	3
A. Lorena Passarelli	Women, 45 and over	1
Eva Forsgren	Women, 45 and over	2
Judith Smith	Women, 45 and over	3
Céline Blond	Women, under 35	1
Andrea Baker	Women, under 35	2
Michelle Franklin	Women, under 35	3

SIP Annual Meeting: Utah 2009

SIP 2009
Park City, Utah
Exploring the host/pathogen dance!

This is to remind you that the XLII Annual Meeting of the Society for Invertebrate Pathology will be held August 16–20, 2009, in Park City, Utah.

The scientific program will explore the latest in international findings on diseases of invertebrates, including biological control of insect pests, understanding disease in beneficial invertebrates such as bees, and fundamental scientific research in evolution and host-pathogen interactions.

As usual, the meeting will begin with a mixer on Sunday evening and end with the banquet on Thursday evening. Registration will include all meals except Tuesday lunch, which will be included for those who go on the excursion. Cash bars will be available at all social events.

Our primary hotel is the Grand Summit Hotel at The Canyons Resort. Residence in two adjacent hotels, the Sundial and the Silverado, also count towards free conference rooms for the meeting.

The meeting rooms are all located in the Grand Summit Hotel and are in very close proximity to each other, which will facilitate moving from session to session. The hotel is at approximately 7,200 feet (2,400 meters) elevation. Please keep this in mind when preparing for and performing in the 5K fun run.

Park City is approximately a 30 minute ride ($65 to $70 round trip by shuttle) from the Salt Lake City Airport, which is an international and hub airport for Delta Airlines.

The summer climate is moderate and dry -- with brilliant blue skies and breathtaking mountains. August highs average 80°F (27°C) and lows about 50°F (10°C).

Park City originated as a mining town, and is now a world-famous winter and summer tourist destination. It became more famous by hosting the 2002 Winter Olympics, and the site of the excursion will be the Olympic Park, where we will see a spectacular show of high jump skiers performing in the summer training grounds over a swimming pool.

We hope you will join us in Park City next August to scientifically explore the always intriguing invertebrate host/pathogen dance! For further information, please visit our developing website www.UtahSIP.org.

Contacts:

Donald W. Roberts

Insect Pathologist & Research Professor
Department of Biology
Utah State University
Logan, UT 84322-5305
USA
Email: dwroberts@biology.usu.edu

Rosalind R. James

Research Leader
USDA-ARS Pollinating Insect Research Unit
Logan, UT
USA
Email: Rosalind.James@ars.usda.gov

Industry Corner

This is a new feature for the Newsletter where we welcome contributions, articles and opinion pieces from SIP members in industry.

To start this section we have a product announcement from Dow AgroSciences derived from the soil bacterium *Saccharopolyspora spinosa*.

Spinetoram Illustrates Dow AgroSciences Commitment To Principles of Green Chemistry

Earlier this year spinetoram, an innovative new insect control product from Dow AgroSciences, was awarded the United States Environmental Protection Agency (EPA)'s Presidential Green Chemistry Award. The Presidential Green Challenge Award is one of the U.S. government's top honors for new technologies promoting green chemistry. Dow AgroSciences has won multiple Green Chemistry Awards, and spinetoram is the result of the company's long-term commitment to green chemistry principles.

Spinetoram is derived through the fermentation of a natural soil organism followed by chemical modifications and is the latest product from the spinosyn family which features the favorable environmental profile of a biological product with the efficacy of synthetic technologies.

Spinetoram has ingestion and contact activity. The mode of action (as with spinosad) is unique and not shared with any other insecticides. Thus, there is no known possibility for target site-based cross-resistance to any other current class of insecticides.

Spinetoram offers a unique combination of characteristics, including:

- Provides long-lasting control of a broad spectrum of insect pests in a variety of crops
- Can be applied at low rates and has low impact on most beneficial insects
- Favorable toxicological profile as it relates to mammals, birds and aquatic organisms
- Safety to beneficial insects, providing an excellent fit with Integrated Pest Management (IPM) programs
- Unique mode of action makes it an ideal fit for resistance management programs

Spinetoram formulations

For many perennial crops like tree fruits, tree nuts and vines, the compound is sold as Delegate™ WG insecticide.

Delegate WG effectively controls codling moth through a unique mode of action that, unlike many current insecticides for codling moth, does not disrupt populations of most beneficial insects. Delegate WG is labeled for use in a variety of high-value crops, including pome fruit, stone fruit, grapes, citrus, tree nuts and pistachios. It controls a wide variety of insects, including codling moth, Oriental fruit moth, leafrollers, leafminers, thrips, tufted apple budmoth, pear psylla, cherry fruit fly, green fruitworm, peach twig borer, navel orangeworm and more, with suppression of apple maggot and plum curculio.

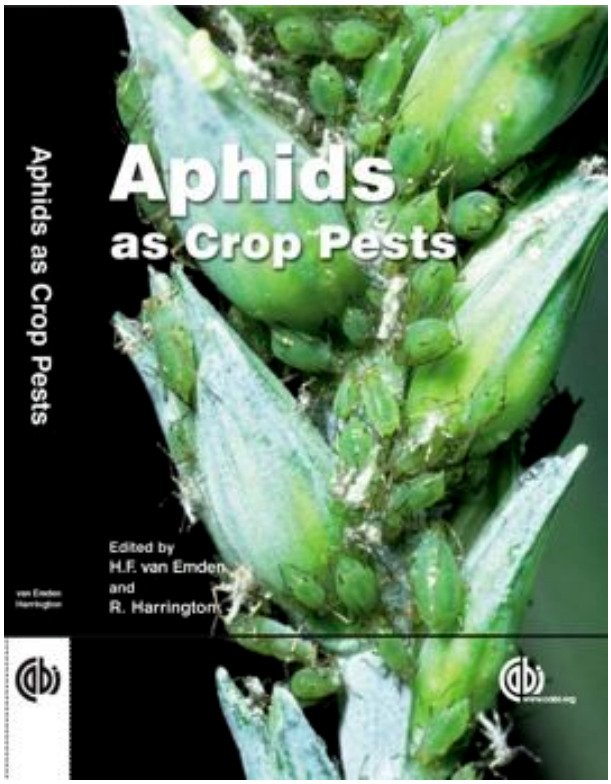
For vegetable crops, it is sold as Radiant™ SC insecticide, a powerful new benchmark for the control of worms, thrips, leafminers and more in vegetable crops. It delivers broad-spectrum insect control in fruiting and leafy vegetables, cole crops and cucurbits. Radiant SC provides fast knockdown and control of a wide variety of damaging vegetable pests, including loopers, armyworms, thrips, leafminers and diamondback moth.

Spinetoram is an example of the power of the Human Element to turn science into solutions, demonstrating how Dow AgroSciences and Dow are sharing technology and expertise to develop better and more environmentally sound products with equivalent or superior performance to many accepted standards.

Book Review: Aphids as Crop Pests

Edited by H.F. van Emden and R. Harrington. CABI, Nosworthy Way, Wallingford, Oxfordshire, OX10 8DE, UK. 2007.

Hardcover, 717 pp., £145.00, $290.00. ISBN 978-0-85199-819-0.



This book of contributed articles by 68 leading aphid researchers is the most complete gathering of current aphid knowledge since the three volume work entitled "Aphids: Their Biology, Natural Enemies and Control" published in 1987 through 1989 (Minks and Harrewijn, 1987).

The current editors, H. F. van Emden and R. Harrington, state that they have concentrated on applied aspects of aphidology and not sought to match the coverage on morphology, physiology, and ecology found in the earlier volumes. However, the new book offers a considerable and contemporary presentation of aphid biology and ecology that is useful to develop integrated pest management (IPM) systems for various crops.

For example, Chapter 1 covers taxonomic issues on aphid species of greatest agricultural importance (pea and bean aphids, cotton/melon aphid, green citrus aphid, wheat aphid, mustard aphid, potato aphid, peach–potato aphid, corn leaf aphid, bird cherry–oat aphid, greenbug, grain aphid, and spotted alfalfa and clover aphids).

Host-plant selection and discrimination as well as penetration feeding are covered in Chapter 4, including a discussion of how plants respond to this feeding.

Knowledge about the movement of aphids (Chapter 7) is central to effective IPM, as well as the interactions of predators, parasitoids, and pathogens with the pest (Chapter 8).

Chapter 11 focuses on aphids' coping mechanisms to stressors such as poor plant quality or extreme temperatures. Feeding injuries inflicted by aphids on plants (e.g., senescence, stunting, chlorosis, deformation, and galling) are covered in Chapter 13. In addition, this chapter discusses the modulating effects on injury from environmental influences such as drought, soil nutrients, temperature, and elevated CO_2, as well as moderating effects from biotic factors such as plant microbial symbionts, and induced and preformed plant resistance.

Control of aphids is emphasized in Chapters 15 on chemical control, 16 on cultural control, 17 on host plant resistance, 18 on biological control, and 19 on monitoring and forecasting of aphid outbreaks. Chapters 21 through 30 detail IPM for specific crops, brassicas, berry crops, cotton, leafy salad crops, grain, seed potato, sorghum, cucurbits, deciduous fruit trees, and tropical and subtropical fruit trees.

Unfortunately, page numbers are not associated with the organisms listed and many of these are not found in the index that follows. For example, if one were interested in the aphid *Uroleucon tanaceti* in the glossary, the reader would need to scan all chapters of the book because this species is not listed in the index. One highlight is the section with 31 color photographs of aphid pests and associated parasitoids and predators.

The chapters are generally well written, informative, and interesting. When I began my review, I thought to skim over the book and read only parts of some chapters. However, I began to read the entire book, chapter by chapter, and write in the margins various ideas for research as stimulated by the knowledge presented and questions posed.

Certainly much has been learned about aphids that is helpful in their control, but with more information and depth of knowledge comes the inevitable exponential increase in questions and hypotheses. These will be explored by the new methods and the developing fields of study which are discussed in the book. I recommend *Aphids as Crop Pests* for both novice and experienced researchers and others interested in aphids and their control.

Reference

Minks, A.K., and P. Harrewijn. 1987. Aphids: Their biology, natural enemies, and control. Elsievier, New York.

John A. Byers
ALARC, USDA-ARS, Maricopa, AZ 85238
Email: john.byers@ars.usda.gov

Abridged from Crop Science (2008) 48:1219-1220 with permission.

Obituary: Dr. Sérgio Batista Alves

Dr. Sérgio Batista Alves died of cancer on 23rd October 2008 in Piracicaba, São Paulo, Brazil, at the age of 64 years. He was one of the founding fathers of insect pathology in Brazil and dedicated his life to teaching and research on microbial control.

After graduating in agricultural engineering from the Federal Rural University of Rio de Janeiro – UFRRJ in 1969, he worked as a Professor at the Faculdade de Agronomia e Zootecnia Manoel Carlos Gonçalves in Espírito Santo do Pinhal-SP from 1970 until 1977.

Sérgio received a MSc and PhD in Entomology from the University of São Paulo (ESALQ-USP) where he started to work in 1977. His initial studies focused on the use of *Metarhizium anisopliae* against spittlebugs in pasture and sugarcane, and this project turned out to be very successful; in 2008, *M. anisopliae* was applied to about 1 million hectares of sugarcane and pasture land in Brazil. Sérgio founded the first laboratory of Insect Pathology and Microbial Control in Brazil.

From 1987 to 1989 he frequently visited the University of Florida where he had a collaborative project with Dr. Jerry Stimac on biological control of fire ants and other urban pests. Sérgio's many international collaborators included Don Roberts, Richard Humber, Drion Boucias, Roberto Pereira and Clay McCoy.

His research had a major impact on the use of microbial control, especially with fungal pathogens, but also with viruses, bacteria and microsporidia. He developed commercial microbial products such as *Biomax*, *Boveril* WP, *Metarril* WP and *Trichodermil* SC.

Sérgio helped to set up laboratories for the production of fungal pathogens in Brazil (Labormax, Itaforte BioProdutos, ESALQ), Peru (Servicio Nacional de Sanidad Agrária del Ministério de Agricultura) and Florida, USA (University of Florida, Gainesville).

Sérgio's long and distinguished career with the USP included over 180 publications, four books, 40 book chapters, co-authorship of an international patent on control of termites and the discovery of numerous insect pathogens. One of Sérgio's major contributions was the publication of the book *Microbial Control of Insects* in 1986 as this was the very first textbook about microbial control in Brazil. In 2008 he edited, with Dr. Rogério Biaggioni Lopes, a book entitled *Microbial Control of Pests in Latin America: Advances and Challenges*.

Sérgio supervised 24 MSc and 19 PhD students from various countries including Argentina, Uruguay, Costa Rica, Peru, and Colombia. He received 12 awards including the Edilson B. Oliveira Award, the highest honor from the Brazil Entomological Society.

Sérgio was a wonderful person and his enthusiasm and curiosity inspired many of his students and collaborators, who are now Professors and researchers in many institutions. His contributions will outlive us all through the work of the many researchers he trained and worked with.

Sérgio was an avid tennis player and fierce competitor, always happy to beat his brother-in-law Bepe on the court. He was deeply religious and humble despite his enormous scientific contributions. Sérgio also deserves to be remembered for his work as President of the philanthropic organization PUSA – Pia União de Santo Antônio to alleviate poverty and hunger.

His sense of humor and vision were an inspiration and comfort for all those who met him, from the newest student in his lab to the highest authorities in the land. Sérgio never forgot the lessons from his very humble upbringing on a small farm in Monte Mor, SP, and dedicated his life and profession to providing simple and inexpensive solutions to insect problems.

Sérgio was a committed family man who had to struggle as a single parent after the loss of his first wife to cancer at a very young age. He is survived by his wife Sílvia, his son Sérgio Jr. and daughters Vanessa and Marina.

Italo Delalibera Jr. & Roberto Pereira

Obituary: Dr. Keith H. Steinkraus

March 17, 1918 – October 23, 2007

Dr. Keith H. Steinkraus, 89, died October 23, 2007 at his home in Ithaca, New York. Keith was born to Henry and Alice Steinkraus in Bertha, Minnesota. He married Maxine Curtiss, the love of his life, on August 26, 1941 and they celebrated their 65th wedding anniversary in 2006. Maxine died of cancer on December 8, 2006. Keith was a Professor of food science and microbiology at Cornell University for 36 years.

He received his B.A. from the University of Minnesota and his Ph.D. in bacteriology in 1951 from Iowa State University. He was a world expert on food fermentations, such as tempeh, idli, soy sauces, wines, beers, kombucha, and soy milks. However, he also worked for 50 years on the bacteria causing milky disease in scarabs and American foulbrood in honey bees.

The focus of Keith's research on milky spore was the factors that affect sporulation of milky spore bacteria *in vitro*. This is a fundamental problem with milky spore bacteria for biological control. Unlike Bt, milky spore bacteria sporulate poorly on artificial media. Production of viable, infective spores for biological control has had to be done using expensive *in vivo* methods.

In 1955 Dr. Steinkraus published a paper with Cornell's turf entomologist, Dr. Haruo Tashiro, in Science on production of *Paenibacillus popilliae* and *P. lentimorbus* on artificial media. This led to many papers in the Journal of Bacteriology on variability of milky spore strains, saprophytic growth, and factors affecting germination of spores. He often worked with Dr. Tashiro on virulence of milky spore bacteria in different scarab hosts, such as *Amphimallon majalis*, and *Ataenius spretulus*.

They investigated milky spore disease histopathology and cations in hemolymph and gut tissues of healthy and infected grubs. These resulted in publications in the Journal of Invertebrate Pathology and Applied Microbiology. Dr. Steinkraus had a patent on enhancement of milky disease bacteria using fatty acids (U.S. Patent 4,626,508).

He gave lectures on milky disease bacteria in Dr. John Kramer's insect pathology course at Cornell, each time it was taught. These lectures were a highlight of the course. Keith had an excellent sense of humor and told the class "*When I was a Ph.D. student at Iowa State, my major professor, Dr. John Ayres, taught me that a scientist needed patience. Now, after working 35 years on in vitro sporulation of milky spore bacteria, and still not solving the problem, I understand the meaning of patience.*"

Dr. Steinkraus never lost his interest in milky spore bacteria and in his late 80's was working on a book on the history of bacteriological work on this group. As late as 1990, when Keith had been retired two years, he was an author on a JIP paper (56: 286-288) on plasmids in *P. popilliae*. Two weeks before his death, when he was very weak, he gave a guest lecture to a food science class at Cornell, his last lecture.

He also worked closely with Dr. Roger Morse, the apiculturalist at Cornell. They worked for a decade on honey wine fermentations, the chemical composition of honeys, and also on research on the American foulbrood bacterium, *Paenibacillus larvae*, in honey.

They examined honey samples from around America and Canada using the Hansen method and found that foulbrood spores were present in 8.5% of the samples (published in Apidologie). Further studies compared various media for the detection of foulbrood spores in honey (published in Acta Biotechnologica). Finally, they studied growth of foulbrood bacteria in lepidopteran cell cultures (Acta Biotechnologica).

Keith was an excellent photographer, jazz pianist, and mentor to many students from around the world.

Survivors of Dr. Steinkraus include his five children: Bonnie (a librarian in Syracuse, NY), Nancy (a teacher in Carbondale, IL), Donald (Professor of Entomology and Apiculture at University of Arkansas, Fayetteville), Anna (an orchard farmer in Newfield, NY), and Karen (a home maker in St. Paul, MN), eleven grandchildren, and one great grandchild.

Don Steinkraus

Announcements

Temporary Suspension of USDA-ARS Collection of Entomopathogenic Fungal Cultures (ARSEF)

Temporary halt to receipt and distribution of cultures while moving to new cryogenic facilities

The moving process will start on 3 November and continue for 4-6 weeks. Many tens of thousands of cryovials will be moved from several overcrowded nitrogen Dewars to a different space with a much larger, more cryogenically efficient Dewar while simultaneously updating our database to reflect the new locations of all cryovials.

Please be patient if we are slow or unable to respond to your messages during this period. Your patronage of the ARSEF collection is vitally important to us, and we hope to be able to provide a new level of service once this transition is complete.

ARSEF will resume shipping and receiving fungi as soon as possible but this suspension of routine collection activities may extend into our usual year-end 'break': As a matter of policy, we rarely ship isolates during late December, a widely observed holiday period, when the weather, postal/shipping conditions, and a requesting laboratory's ability to receive or to process isolates remain unpredictable. Full normal operations of the ARSEF collection may not resume until Monday, 5 January 2009.

Please check the ARSEF website, http://arsef.fpsnl.cornell.edu from mid-November for updates about our progress and anticipated resumption of services. ARSEF will also notify recent customers about when we will resume normal operations both by email and notices on the websites of the Society for Invertebrate Pathology and Mycological Society of America.

Richard A. Humber

Insect Mycologist and Curator, ARSEF

Email: Richard.Humber@ars.usda.gov

Web: http://arsef.fpsnl.cornell.edu

Request for Used Equipment for ICIPE

The International Centre of Insect Physiology and Ecology (*icipe*), based in Nairobi, Kenya, was established in 1970 as a centre of excellence in insect science research. Its mission is to help alleviate poverty, ensure food security and improve the overall health status of peoples of the tropics by developing and extending management tools and strategies for harmful and useful insects, while preserving the natural resource base through research and capacity building.

Among the domains of the various research departments of the *icipe*, is the Arthropod Pathology Unit (APU). As a research unit, APU aims at developing technologies that promote utilization of arthropod pathogens, especially fungi and bacteria, and products of biotechnology to achieve sustainable agricultural production, improvement in livestock and human health, conservation of natural resources and preservation of the environment.

Due to financial constraints, the unit has not been able to renew its equipment for the last few years. We are therefore requesting all SIP colleagues who may have reasonably used and functional equipment at their disposal to kindly donate such equipment to us. This may include, but is not limited to, equipment such as shaker incubators, dissecting and compound microscopes, 5 litre fermentors, environment-controlled growth chambers, incubators, level II laminar flow cabinets, etc.

Thanks in advance!

Nguya K. Maniania, nmaniania@icipe.org

Sunday Ekesi, sekesi@icipe.org

icipe - African Insect Science for Food and Health

P.O. Box 30772-00100 GPO

Nairobi

Kenya

Tel. Office: 254-20-8632000; Fax: 254-20-8632001/2

Web: http://www.icipe.org/

New Magazine For Those Wild About Mushrooms

Each issue of *FUNGI* explores the world of mycology with regular features on toxicology; medicinal mushrooms; how to photograph, cook, and cultivate mushrooms; and peer-reviewed technical papers ranging from original research findings to reviews of taxonomic groups to new records of North American species.

Many of the Contributing Editors of *FUNGI* have won national awards for photography, writing, or pedagogical efforts. Most are leaders in regional North American mycological societies who believe that North American mycologists should have a magazine of their own that is the equal of what the Europeans are publishing. Several recent events, including the termination last year of the British journal *The Mycologist,* led them to the conclusion that the time is right for something new.

FUNGI is published five times per year (four seasonal issues plus a special issue) by FUNGI, P. O. Box 8, 1925 Hwy. 175, Richfield, Wisconsin 53076-0008 USA. Subscriptions are $35 for five issues, for U.S.A. residents; $38 for residents of Canada and Mexico; $40 for all others. More information including author instructions, credit card orders, and archives can be found at the Web site: www.fungimag.com.

For more information about *FUNGI* contact Britt A. Bunyard:

Email: bbunyard@wi.rr.com

Web: http://www.fungimag.com

Meeting on Integrated Protection of Olive Crops

The fourth European Meeting of the IOBC/WPRS Working Group *Integrated Protection of Olive Crops* will be held in Córdoba, Spain, from June 1 to 4, 2009.

The aim of the meeting is to provide a forum for discussing current knowledge on pests, diseases and weeds affecting olive growers worldwide. During the last few years, there has been an increasing concern to develop control strategies which are compatible with new forms of agricultural production, including sustainable and organic methods, as well as the potential impacts of global climate change on olive integrated management strategies.

The main topics of the meeting include:

- Biology, ecology and behavior of arthropods associated with olive groves
- Population detection and assessment of pests and their natural enemies
- Olive diseases caused by bacteria, phytoplasma, fungi and straminopiles, nematodes, and viruses: etilogy and epidemiology
- Spatio-temporal analyses of olive pests and diseases
- Genetic diversity of olive pest and disease agents
- Chemical control: efficacy, selectivity, resistance and side effects
- Biological and biotechnological methods for the control of pests and diseases
- Integrated pest and disease control strategies
- New problems in the integrated management of olive pests, diseases and weeds
- Pest and disease control in ecological olive growing
- New methods for the diagnosis and identification of olive pest and disease agents, and certification of olive planting stocks
- Effect of climatic change on olive pest and disease incidence

Authors wishing to participate at the Congress are requested to submit the preliminary registration form indicating their field of research and a tentative title using the Congress website.

Proceedings of the meeting will be published in the IOBC/WPRS Bulletin.

For more information visit the conference web site at www.protecolicordoba2009.com.

News from SIP Members

Entomological Society of America Names New Fellows for 2008

The Entomological Society of America (ESA) recently announced ten new Fellows in acknowledgement of their outstanding contributions in research, teaching, extension or administration. One of the newly appointed Fellows is long-standing SIP member Dr Lawrence (Lerry) Lacey. The following tribute appeared on the ESA web site.

Dr. Lawrence A. Lacey is internationally recognized for his work in insect pathology and microbial control. He has published more than 200 refereed journal articles, reviews, and book chapters in medical and agricultural entomology and insect pathology, and has edited or co-edited four books, including the Manual of Techniques in Insect Pathology and the Field Manual of Techniques in Invertebrate Pathology.

Lacey received his master's degree (1975) and Ph.D. (1978) in entomology at the University of California, Riverside. His first work was with the National Institute of Amazon Research in Manaus, Brazil. Subsequently, he has worked for the USDA Agricultural Research Service, the World Health Organization, and the Vector Biology and Control Project (USAID) in the U.S., Latin America, West Africa, Europe, and several other regions of the world.

His research has included studies on the biology and microbial control of black flies, mosquitoes, Japanese beetle, whiteflies, and several insect pests of tree fruit and potato. He led the Japanese beetle control project on Terceira Island (Azores, Portugal), and he conducted foreign exploration for natural enemies of *Bemisia tabaci* while based in Montpellier, France. In 1996, he was assigned to the USDA-ARS laboratory in Wapato, WA, where he has implemented a research program in insect pathology.

Lacey has served as an officer in the ESA and in the Society for Invertebrate Pathology, and as subject editor, co-editor and editorial board member for ESA journals and for the Journal of Invertebrate Pathology.

His honors include an International Honor Award from the USDA Foreign Agriculture Service and a Public Service Award from the University of California, Riverside Alumni Association.

Email from Dr. Toshihiko Iizuka

Dear Mark,

I received your letter and the Certification of 40 years loyalty to the SIP. Thank you very much and congratulations for your Presidency of SIP.

I am still fine and have now retired from all my jobs since this April. So I am enjoying my gardening in the country house which you visited in 1998 after the Sapporo ICIP meeting.

I sometimes get foreign visitors in that house. This past year, five Professors from Wuhan University, China, and Professor Binh from Viet Nam and his undergraduate student visited me. I am always very happy to receive these friends in my country house.

Best wishes,

Dr. Toshihiko Iizuka

Emeritus Professor of Hokkaido University

Email: tiizuka@abs.agr.hokudai.ac.jp.

Email from Dr. Houping Liu

I recently started a new position as a Forest Entomologist at the Pennsylvania Department of Conservation & Natural Resources in Harrisburg, PA., where I will be responsible for monitoring forest health and the management of forest pests for the state.

Previously I was a senior research associate in the Department of Entomology at Michigan State University in East Lansing, MI. Our forestry group welcome collaborative studies with scientists from all fields.

Liu, Houping P.

Email: hliu@state.pa.us

News from Patricia Stock's Lab, Tucson, USA

We had a pretty busy summer hosting two high school interns from Tucson, one biology high school teacher from a Navajo reservation in Arizona and a senior student from New College, Florida who all did summer internships in the lab.

Programs that sponsored these internships were the Research Experience for Undergraduates (REU) program of the National Science Foundation and Undergraduate Biology Research Program (UBRP) and the Bio5 Keys Program from the University of Arizona.

Two new graduate students have joined the Stock lab this fall: Patricia Navarro, from Chile who is pursuing a PhD degree and Victoria Miranda from Connecticut, who is a Masters candidate.

We also welcomed Hyunbae Cho from Korea and Brody Holohan from Arizona, who are both in their senior year and are doing research for their Honors Theses.

Two new lab assistants, Sarah Pearce (senior) and Karri Hobaica (junior) also joined the lab and are helping everybody with their hard and skillful work!

Back row (left to right): Hyunbae Cho, Victoria Miranda, Patricia Stock. Front row (left to right): Karri Hobaica, Brody Holohan, Yolanda Flores-Lara, Rousel Orozco, Ming-Min Lee, Sarah Pearce and Patricia Navarro

Brazil - China biocontrol links

Dr. Zengzhi Li of Anhui Agricultural University (AHAU), China, visited Brazil from 29 June to 15 August, 2008. He was hosted by Dr. Drauzio E. N. Rangel currently of the Universidade do Vale do Paraíba (UNIVAP), São José dos Campos, Sao Paulo.

The purpose of the visit was to exchange academic and technological information in the field of biological control of insects between Brazil and China, two important countries in fungal pesticide production.

Dr. Li´s visit was sponsored by the National Council for Scientific and Technological Development (CNPq) of Brazil. During his stay in Brazil, Dr. Li and Dr. Rangel travelled more than 6,000 km to visit three universities, four research institutes and five companies that produce fungal insecticides for biological control of insects.

For more information see www1.univap.br/drauzio/index_arquivos/A_ZLI.htm.

Editor's Note: Drauzio Rangel was the first ever winner of the Chris Lomer Memorial Award in 2006 while studying for a PhD at Don Robert's lab in Utah.

Are you eligible for Emeritus Membership?

Every year the Membership Committee receives a number of requests for emeritus membership. However, there are likely to be members that are eligible who have not contacted the membership committee. To qualify as an emeritus member you must fulfill the following criteria:

- Full Member in good standing for at least 20 consecutive years OR Charter Member or Founding Member in good standing without regard to length of membership

- Retired from regular and remunerative professional work

Emeritus Members are exempt from the payment of membership dues but retain all the rights of Full Members.

If you are eligible for Emeritus Membership please contact the Chair of the Membership Committee, Helen Roy by email to hele@ceh.ac.uk.

Positions Available

MSc in fungal control of forest caterpillars

We are looking for a MSc candidate to conduct applied research on the development of the entomopathogenic fungus *Beauveria bassiana* as a biological control agent of forest caterpillars.

The suitable candidate will have a BSc (Honours) in biology with course work in mycology and entomology, or equivalent research experience. The successful candidate must be able to split his/her time between research labs in Nova Scotia and Newfoundland.

The project will be co-supervised by Dr Barry Hicks (College of the North Atlantic, Carbonear, Newfoundland) and Dr Doug Strongman (SMU), with a significant portion of his/her research done in Dr Hicks' lab in Newfoundland.

The proposed start date is Jan.1, 2009 to May 1, 2009. Interested candidates should send a current transcript and a letter describing their research interests to:

Contact information:
Dr. Barry Hicks
College of the North Atlantic, 4 Pike's Lane, Carbonear, NL, Canada, A1Y 1A7.

Telephone: 709-596-8956, Fax: 709-596-2688
Email: barry.hicks@cna.nl.ca

Dr. Doug Strongman
Biology Department, Saint Mary's University, 923 Robie Street, Halifax, NS, Canada, B3H 3C3.

Telephone: 902- 420-5754 Email:
doug.strongman@smu.ca

Field R&D Scientist at Valent BioSciences

This position supports the global product development efforts of Valent BioSciences Corporation.

Responsible for Field R&D activities primarily in the Midwest US, with an emphasis on row crops; other areas of field research likely will include fruit & vegetable crops. Field research will focus on Valent's experimental materials for the improvement of crop productivity in the Midwest US.

Skills: Excellent writing and presentation skills. Statistics & experimental design. Computer literacy. Skilled in the use of pesticide application techniques and equipment commonly used in field trials. Can be depended upon to develop new skills and procedures as needed for novel field assignments. Manages technical support personnel (interns, technicians, temporary help) when required. Expected to function with only periodic supervision; works independently for the majority of responsibilities.

Experience: Five to ten years experience in field research related to the evaluation of agricultural products in agronomic crops; experience from the Midwest US preferred.

Education: Advanced degree in an agricultural or related science required; PhD preferred.

Contact information:
Nicole Kellerman
870 Technology Way, Libertyville, IL. 60048, USA.

Email: careers@valent.com
Web: www.valentbiosciences.com

Valent BioSciences Corporation is an equal opportunity employer.

Postdoctoral Position at Iowa State University

A Postdoctoral Position is available immediately in the lab of Dr. Bryony Bonning at Iowa State University to conduct cutting edge research toward development of aphid resistant transgenic plants. Responsibilities include (1) modification and *in vitro* production of engineered toxins, (2) assessment of toxin stability and binding to aphid gut epithelia, (3) aphid bioassays.

A PhD in an appropriate discipline and a strong background in Microbiology, Entomology, and/or Molecular Biology are required. Experience with insect toxin research advantageous. Interested individuals are requested to submit a letter of application including a statement of research interests, CV and contact information for three referees to Dr. Bryony C. Bonning, bbonning@iastate.edu, Iowa State University, by e-mail. Review of applications will commence from September 22, 2008.

This project is funded in part by the Plant Sciences Institute of Iowa State University which provides state-of-the-art facilities and expertise in all areas of fundamental plant biology. Ames, Iowa, combines the friendliness and convenience of small town life with the cultural and academic amenities expected of a major US university.

Iowa State University is an Affirmative Action/Equal Opportunity Employer

Associate/Full Professor at Gainesville

Associate or Full Professor in Genetics/Genomics of Insect Vectors of Disease. A background in genetics and/or comparative or functional genomics is required and a PhD. Initially the incumbent will study the genetics/genomics of the Asian citrus psyllid, vector of the citrus greening pathogen.

To ensure full consideration, applications must be submitted by December 15, 2008. Formal review begins then and will continue until a suitable candidate is identified.

Go to https://jobs.ufl.edu, Requisition 0800874 to apply. Attach: 1) letter of application describing professional interests and graduate level courses you may teach, 2) curriculum vitae, 3) PDF files of 2-3 publications.

Send 3 letters from referees to: Dr. Marjorie A. Hoy, Dept. Entomology & Nematology, POB 110620, Univ. Florida, Gainesville 32611-0620.

Additional information: Email mahoy@ifas.ufl.edu or telephone 352-392-1901 extension 153.

Dow AgroSciences recruiting widely in 2009

Dow AgroSciences created 350 new positions globally in 2008 as a business advancing new technology in the growing global agricultural marketplace.

These jobs are being added around the world to forward the company's research and development work as well as to produce and commercialize its new products. More than half of the jobs were added at the global headquarters in Indianapolis.

In addition, the company is expanding its workforce through employees added via acquisition, with seven seed companies being acquired in the last year.

"Global demand for food, feed, fiber and fuel reinforces the need for agricultural productivity, and Dow AgroSciences is well positioned as a technology leader to provide solutions" says Jerome Peribere, President and CEO. "We will continue to add to our workforce to ensure we have outstanding talent to help our company deliver on its ambitious growth plans based on significantly advancing superior solutions for our customers."

The company expects to continue hiring in 2009. Key areas of recruiting are focused on science and technology positions.

People interested in the latest job postings and career opportunities with Dow AgroSciences should visit: http://www.dowagro.com/careers/.

Dow AgroSciences provides innovative technologies for crop protection, pest and vegetation management, seeds, traits, and agricultural biotechnology to serve the world's growing population.

Global sales for Dow AgroSciences, a wholly owned subsidiary of The Dow Chemical Company, were $3.8 billion in 2007. More information at www.dowagro.com.

Positions Wanted

Research Entomologist

I am a skilled research entomologist with experience in industry, government and academia developed while working on insects of agricultural, medical and veterinary importance.

My expertise is in microbial control of insect pests and examining influences of biotic and abiotic stressors on insect fitness, disease susceptibility and behavior. I am accomplished in experimental design, statistical analysis, insect rearing and grantsmanship. I am looking for a position in industry or academia developing practical approaches to pest management.

Contact: **Dr. Scott Costa**
206 Hills Bldg, Department of Plant and Soil Sciences, University of Vermont, Burlington, VT, USA.

Email: scosta@uvm.edu
Tel: 802.656.2824

Post-doctoral position

I am interested in applying for a postdoctoral position in research towards the development of aphid resistant transgenic plants.

I have a strong background in Microbiology, Entomology, and Molecular Biology. I am confident that my experience with insect toxin research and experimental skills, combined with my dedication to scientific discovery and strong work ethic, will help me to make a positive impact as a member of your laboratory and be an asset to your lab in a very short time as well. I can provide a CV with contact information for three referees on request.

Currently, I am working as the lab director in the crop protection lab in Sichuan Provincial Center for Agri-Biotech, China. Our lab is focused on genes and partly on functions of *Bacillus* spp and *Pseudomonas* spp. Some important genes have been cloned and analysed. I have worked on some Bt genes (Cry 1Ab, Cry1Ac,Cry1c), which were cloned through chromosome walking, and important bacterial plasmids. Some have been introduced into rice and cotton plants for further insecticidal effect evaluation.

I have extensive experience in microbiology and moleuclar biology as well as biotechnology since I began my PhD program 6 years ago. My PhD thesis was focused on screening and application of molecular factors against pests and pathogens from microorganism. My PhD program has resulted in several papers published in Chinese and international peer-reviewed journals.

Contact: **Dr Aiping Zheng**
E-mail: zapbsh2008@yahoo.com.cn

Post doctoral position in USA or Europe

I am interested in entomopathogenic fungi and their interactions with insect hosts especially understanding modes of action using molecular approaches for enhanced biocontrol.

I have a Ph.D. (Microbiology) from Mumbai University, India. During my Ph.D. studies I worked on thermophilic bacteria for degradation of toxic compounds.

My post graduate M.Sc. study was in Agricultural Entomology. After this I worked as a Research Associate in the Agriculture University on mass production of different insect biocontrol agents.

I also worked on development of insect cell lines from indigenous insect pests. Presently I am working as a Scientific officer in Bhabha Atomic Research Centre, Mumbai, India.

I have published 10 research articles in National and International journals. Also, I have published 7 GenBank submissions, 9 abstracts, 50 popular articles and 1 book.

Contact: **Mehetre Sayaji**, Scientific Officer

Nuclear Agriculture and Biotechnology Division, Bhabha Atomic Research Centre, Mumbai - 400085, India.

Email: smehetre@gmail.com/ smehetre@barc.gov.in

SIP Photographic competition, 2008/09

A chance to win prizes for your invertebrate pathology photos! Here's what you need to know in order to enter...

Prizes

The overall winner selected from the category winners will receive a book prize. Category winners will receive prizes to be announced later. All entries will be posted on the SIP web site in 2009.

Categories

A) Pathogen Biology

Pictures at any scale from microscopic images to populations that demonstrate the 'essence' of a pathogen and/ or its relationship with its host.

B) Invertebrate Pathology in Action

Pictures ranging from practical uses of beneficial pathogens to educating the public – as dynamic as you like!

C) Invertebrate Pathology in the 21st Century

Pictures that bring to life technological advances as applied to invertebrate pathology, for example gene sequences to mass production factories.

D) Best Collection

Consisting of a set of three pictures which are linked in some way. Each picture must be a potential prize-winner in its own right.

E) Student Category

This category is open only to SIP student members. Pictures can be on any invertebrate pathology topic or theme.

Competition rules

1. The competition is open to current SIP members only.
2. Only images and photographs taken since January 2006 are eligible.
3. All entries must be accompanied by an entry form which must include, for each entry, the names of the species shown, and, if appropriate, a description explaining the image.
4. Pictures with close-ups of one or more persons can only be submitted with the permission of those photographed. Crowd shots taken at a meeting or similar do not require permissions.
5. Applicants can submit a maximum of three pictures per category.
6. Entries must be digital images, not prints. Digital images must be submitted on CD, DVD or zipped e-mail file compatible with Apple Macintosh. Images must be saved in TIFF, JPEG or GIF formats at a maximum of 300 dpi and/ or less than 5 Mb file size.
7. If digital enhancement techniques have been used, they must be declared. Only limited digital enhancements that do not change the essence of the picture will be accepted (i.e. cleaning, minor colour and saturation work). The original and the edited image need to be submitted.
8. All entries must be clearly labelled with the entrant's details and category on the electronic file (e.g. PELL_cat2.jpeg)
9. The same photograph cannot be entered for two different categories.
10. Although copyright remains with the photographer, by entering the competition applicants agree to give the SIP the right to freely use their image(s) e.g. for Newsletters and on the SIP web site.
11. Winners will be chosen by judges appointed by SIP. Judges decisions are final and no feedback will be available to applicants.
12. Winning entries will be announced at the SIP Annual General Meeting in 2009 and award winners will be notified by e-mail.
13. The SIP does not accept responsibility for loss, damage or delay to entries, however caused. Proof of posting will not be accepted as proof of delivery.
14. The closing date for entries is 26th June 2009.

How to Enter

Via e-mail to pareshashah@mac.com with the subject headline: 'SIP Photographic Competition 2009'. One image and entry form should be attached to one email.

OR

Via post by filling out the entry form and send it along with your digital image to:

Dr. Judith K. Pell, Plant and Invertebrate Ecology Department, Rothamsted Research, Harpenden, Hertfordshire, AL5 2JQ, United Kingdom.

Entry forms and rules will be posted on the SIP web site during December 2008.

Photos from the 2008 Warwick Meeting

Michael Brownbridge with Maddie Vandenberg (left) and Shannon Moar (right)

Richard Meadow and Jorgen Eilenberg

Max Bergoin and Basil Arif

Nigel Halsall

Jason Baverstock, Helen Roy, Helen Hesketh, Trish Wells and Judith Pell

James Harper signs up new members for SIP

It won't rain (much!)

Just Vlak and Brian Federici

Bryony Bonning goes for a twirl

Don't forget, we will be posting photos from the Warwick Meeting on the SIP web site. Please send the editors any photos you would like included.

Marcos Faria, Evérton Fernandes and Gilberto Braga