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Quarterly Comments from the APPS President

The count-down to the Adelaide conference is on with only eight weeks to go! No doubt the organising committee will be looking forward to the conference - and some quieter times afterwards! The conference is a highlight of APPS activities and a wonderful chance to greet old friends and meet new colleagues. If you are able to go I encourage you to make the most of the opportunity!

Planning is also underway for the next two APPS conferences, the details of which are yet to be finalised. The 2009 conference will be in New South Wales and is likely to be a joint conference with the Australian Entomological Society, with involvement of the CRC for National Plant Biosecurity. More details will be provided in Adelaide. APPS has also placed a bid for the 4th Asian Conference on Plant Pathology (ACPP) in September 2011; the suggested venue is Darwin. If this goes ahead, the joint ACPP / 15th APPS Biennial conference will host leading plant pathologists from around Asia – a great chance for Australasian members to interact with these researchers. Prof David Guest will present our bid in Indonesia; further information will be available after the 3rd ACPP, Yogyakarta in August. These developments will provide significant stimulation to our discipline in Australasia!



For those attending the 3rd ACPP, I wish you well and hope you have a great meeting. I will be in Brazil at the Brazilian Phytopathology Society meeting (14-17 August) and am looking forward to meeting pathologists from around South America.

In the next week or two, the APPS Executive will be posting a number of items on the web-site to provide further information leading up to the Adelaide conference. Please keep an eye out for it; I'll send a circular email when the web-site additions have been posted. The Executive would like all members to be aware of developments with the Society so that further comment can be made at our business meeting during the Biennial conference.

Our new Executive team has been identified; the new Management Committee will include people with significant experience and expertise who will place APPS in good stead for the future.

As this is my last newsletter contribution as President, I would like to thank all APPS members for their responses to my circular emails and general support. It has been a privilege to serve the Society in this capacity! My hope is that our term as the Management Committee will have strengthened the position of APPS!

On behalf of the Queensland team, all the very best!

Kind regards

Rob Magarey



New Members

On behalf of the Society, the Management Committee would like to welcome the following new members:

VIC: Mr Glen Waters

WA: Dr Hossein Golzar

TAS: Dr Robert Tegg

SA: Dr Kaye Ferguson
Miss Catherine Hitch
Mr Matthew Ayres
Ms Barbara Morgan

NEW ZEALAND:

Dr Hayley Ridgway
Dr Wellcome Ho
Mrs Sally Harrow
Mr. Nicholas Amponsah
Dr Joe Tang
Ms Chantal Probst



REGIONAL NEWS FROM WESTERN AUSTRALIA

Amazing people doing amazing work

Dieback, “the biological bulldozer”, may be cutting a swathe through Western Australian ecosystems, but a growing number of West Australians are determined to halt its spread. The best and brightest of them gathered in July for the seventh Dieback Information Group Conference. This DIG 07 was bigger and better than ever, with just under 200 filling the conference room of the Fremantle Maritime Museum to capacity.

They were treated to some cutting edge scientific research and management practices that are world-leading. One highlight was the talk on the development of molecular diagnostic tools for detecting *Phytophthora cinnamomi* from soil samples by Nari Williams from Murdoch University’s Centre for Phytophthora Science and Management.

“For somebody trying to manage Phytophthora dieback and getting mapping done I think the molecular technology is a really good advancement – it’s about having that additional certainty when you’re having that testing done,” said Danielle Witham, Natural Diversity Program Manager for the Swan Catchment Council.

Similarly, the presentation by Mike Stukely from the Department of Environment and Conservation on new species of *Phytophthora* highlighted the work that needs to be done to determine the threat they pose and the best response to it.

She was also very impressed by Malcolm Grant and Maria Lee’s presentation on efforts to contain the disease in the Fitzgerald River National Park.

“From a management perspective it’s pretty cutting edge. They’re trying to close off this entire area and looking at how they’re treating it as well – I think that nothing like that is being done in the entire world,” she said.

Ms Witham believes the breadth of DIG 07’s agenda – everything from a unified system of Dieback warning signs to the impact of the disease on small native mammals – reflects the broad holistic approach that is needed to tackle this devastating introduced plant disease.

“We need to take a holistic approach, we need to get people who are doing the cutting edge research developing those relationships and understanding what it’s like for people who are responsible for the management,” she said.

Bookmark the APPSweb site:

www.australasianplantpathologysociety.org.au/

Our new journal, ‘Australasian Plant Disease Notes’ is now available online and can be accessed via a link on the APPS homepage.



PROFILE:

WA State Council Committee Member – Aaron Maxwell

Australian Quarantine & Inspection Service

Perth International Airport, Western Australia

My role is to protect Australia's agriculture and environment from the threat of exotic disease by identifying pathogens on plants and plant products imported into Australia, providing advice in relation to goods that may be infected by pathogens and training AQIS inspectors in the recognition of plant disease risks.

Favourite Disease:

I love so many of them! However my loyalty must lie with *Mycosphaerella* diseases to which I devoted my PhD.

What do you love about Plant Pathology?

I know it is a bit of a cliché but I love unravelling the intrigue and finding out the story behind the cause of a disease. I enjoy trying to figure out 'who' the main culprit is, whether there are accomplices to the 'crime' and how they 'done it'!

Pet hates in Plant Pathology:

I loathe the pitter-patter of little feet in my cultures. There is nothing more depressing than having to spend weeks or months trying to eradicate mites and save a culture collection.



REGIONAL NEWS FROM SOUTH AUSTRALIA

In July, the SA branch had a visit from Timothy Paulitz of the USDA-ARS Root Disease and Biological Control Research Unit in Washington. Timothy has close ties with the Waite campus sharing research interests in both *Rhizoctonia* and *Pythium*. While here, Timothy presented an oral seminar to 15 members of the society on the epidemiology, etiology, molecular detection and disease management of *Rhizoctonia* bare-patch disease complex. His group have discovered a complex of anastomosis groups and species, presenting more general, non-specific root rot symptoms than just bare patch, occurring on both cereals and broadleaf rotation crops. These include *R. solani* AG 2-1 and 10; *R. oryzae* (*Waitea circinata* var. *circinata*), and binucleate *Ceratobasidium* spp. (AG-I). Suppression of bare-patch could be achieved in the greenhouse through monocropping of barley over a number of cycles, and barley rotations could reduce disease in the field, compared to continuous wheat cropping. However, the mechanisms behind suppression are not understood. Timothy also described their research investigating the spatial structure and distribution of *Rhizoctonia* in the US Pacific NorthWest and methods of control, providing an interesting comparison to the extensive work performed here in Australia (and in particular, South Australia) on the same disease.

Amanda Able



REGIONAL NEWS FROM NEW SOUTH WALES

There have been no 'official' APPS seminars in NSW over the last few months, but APPS members have presented their work at the following venues:

On 16 May 2007, Dr Peter McGee from the School of Biology, University of Sydney presented a seminar at Macquarie University entitled "Arbuscular mycorrhizas and carbon sequestration". Arbuscular mycorrhizal (AM) fungi are the most abundant group of microbes in soil. His research is investigating whether AM fungi can be used to increase the quantity of carbon held in the soil. AM fungi are likely to increase carbon because they contribute biomass to the soil, they physically bind soil aggregates creating anaerobic micro-sites where oxidation will be reduced, and because they release nutrients that may influence the activity of microbes maybe leading to transformation of carbon by other microbes. Preliminary outcomes from Peter's work support the view that AM fungi increase sequestration of organic carbon. The mechanisms of how this occurs remain unclear. This work is particularly relevant with the current debate about global warming.

Len Tesoriero from the Plant Health Diagnostic Services, NSW DPI presented work from his PhD research on "*Fusarium oxysporum* and *Pythium* species associated with root rot and wilt diseases of Australian greenhouse cucumbers" at the University of Sydney on 27 July, 2007. His research includes a survey of cucumber crops across Australia, morphological and molecular characterisation of the *Fusarium* and *Pythium* species he isolated, and susceptibility assays. He found both *Fusarium oxysporum* f.sp. *radicis-cucumerinum* and *F. oxysporum* f.sp. *cucumeris* and 10 species of *Pythium* to be present in cucumber growing areas across Australia. Isolates were characterised at the morphological and molecular level using VCG, ERIC and BOX PCR and DNA sequencing. Seedling bioassays using combinations of *Pythium* species and *F. oxysporum* f.sp. *cucumeris* suggested an almost synergistic interaction between *F. oxysporum* f.sp. *cucumeris* and *P. irregulare*. Conversely, no interaction was observed between *F. oxysporum* f.sp. *cucumeris* and *P. spinosa*. This suggests the disease complex may be species or even isolate dependent. The work continues!

Rosalie Daniel

REGIONAL NEWS FROM THE NORTHERN TERRITORY

Shamsul Bhuiyan's (outgoing APPS NT Regional Councillor) Profile as compiled by Barry Condé.

Shamsul Bhuiyan spent almost three years in Katherine as the Senior Plant Pathologist for the Diagnostic Services Division, Dept. of Primary Industry, Fisheries and Mines (DPIFM). Shamsul was held in high regard by the industry in Katherine and Douglas Daly, staff at Katherine Research Station and his colleagues in plant pathology. Shamsul is currently based in Bundaberg as a Plant Pathologist at the Bureau of Sugar Experiment Stations (BSES) researching sugarcane smut and may visit the NT for surveys of sugarcane diseases.



During his time in Katherine, Shamsul initially worked on *Alternaria* fungus leaf spots on cotton as part of a Cotton-CRC project. He was involved in mango sea freight static experiments – studying post harvest breakdown of mango fruits due to anthracnose, and stem end rot fungi. He was involved in initial GRDC - PCA (Grains Research and Development Corporation) (Peanut Company of Australia) studies on *Cercospora* leaf spots of peanuts - using weather forecasts to apply fungicides. This research has continued. During his time in Katherine, Shamsul investigated many disease problems and took part in many disease surveys in Katherine, including citrus surveys and investigations of powdery mildew of watermelons and other cucurbits.

One of the highlights in Shamsul's time at the NT DPIFM was his involvement in "Mango Pest list disease work" with Indonesian scientists in Indonesia in October-November 2006. This was sponsored by the Australian Academy of Technological Sciences and Engineering (ATSE) Crawford Fund Grant which funds international agriculture research. This work took Shamsul to Jakarta, Jatisari and to the mango growing areas of Cirebon, Majalengka and Indramayu in West Java, Indonesia.

Shamsul successfully applied for a Rural Industries Research and Development Corporation (RIRDC) grant for bio-prospecting work on plants in the NT as possible sources of systemic plant bactericides. This research is presently in progress.

Shamsul Bhuiyan held the position of the APPS NT Regional Councillor from 9 May 2006 till 23 March 2007. Upon Shamsul's resignation, Lucy Tran-Nguyen (DPIFM) was nominated as the new NT Regional Councillor.

Lucy Tran-Nguyen.

NEWS FROM THE CRC FOR NATIONAL PLANT BIOSECURITY

The CRC for National Plant Biosecurity's recent bid for supplementary funding from DEST's CRC Programme was successful, and a new Post-Harvest Integrity Research Program will be added to the Centre from 1 July 2007, led by Dr Pat Collins. The goal of the new program will be to maximise the value, integrity and competitive advantage of Australia's post-harvest supply chain, focussing on the grains industry. The CRC's successful bid included substantial investments from GRDC, CBH Ltd, ABB Grain Ltd and Graincorp Operations Ltd, which will be directed towards new projects across all of the CRC's seven research, education and delivery programs. The CRC is currently seeking ideas for collaborative research projects to enhance biosecurity for the grains industry. If you have an idea for a project in this area, or would like further information about the CRC, please contact Pat Collins (email pat.collins@dpi.qld.gov.au or phone (07) 3896 9433) or visit the Centre's website at www.crcplantbiosecurity.com.au.



Jottings from the APP Editor-in-chief

I think that this will be my last jottings before the conference in Adelaide in September. In this 'jotting' I bring you some good news.

In earlier editions of the Newsletter I stated that the Impact Factor of *Australasian Plant Pathology* in 2005 was 0.587. Previous IF's had been 0.536 in 2002, 0.517 in 2003 and 0.503 in 2004. In late June I was informed by Andrew Stammer, who is the journals manager at CSIRO Publications, that the IF for 2006 was an all time record of **0.766**. This is an excellent result as I was aiming for a value of 0.65 which also would have been a 'high'. To get 0.766 is wonderful and it reflects the quality of the papers that were produced in the recent past and also measures the outstanding service given to the Society by all of the Senior Editors and for those of us in the Society, and others, who have generously assisted in the peer review process. Of course, it also gives notice that the work of the many plant pathologists who have contributed is of an increasing standard.

I was also informed in April that web site usage of APP had improved. The total number of institutional downloads in 2005 was 22,498 which increased markedly in 2006 to 44,466. In the first three months of 2007 there were 9295 downloads. It is predicted that there will be in excess of 40,000 downloads in 2007.

There were some who criticized my move of removing the 'New Records', 'Disease Notes' and other short papers from APP. I mentioned in an earlier Newsletter that I had a firm belief that they were hindering the growth of the APP Impact Factor since they were rarely, if at all, cited. I hope that those critics are now silenced and this is hopefully so due to the next item of good news.

In August 2006 the first group of short papers, mainly of the types mentioned above, was published in the new electronic journal *Australasian Plant Disease Notes*. In 2006 APDN published 19 of this type of paper. Up to the end of June 2007 a further 43 were published and I am grateful to the two Senior Editors who have been key participants in the peer review process for this journal which is not yet one year old. APDN will not get its first Impact Factor until it is two years old but I am confident that we will be pleasantly surprised.

In contrast to APP, the papers in APDN can be downloaded in full by anyone – not just APPS members and other subscribers. I am informed by Andrew Stammer that the monthly totals of downloads from APDN is:

2006	August	100	
	September	188	
	October	410	
	November	554	
	December	512	(probably the fall coincides with vacations)
2007	January	612	
	February	881	
	March	1032	
	April	1566	
	May	1681	
	June	2165	



This, apparently, is one of the fastest take-offs for a new journal ever recorded and should result in a high level of citations for APDN – thus creating a very healthy Impact Factor. I expect that some of you rarely look at the APDN website. Have a look today and you will be surprised by the quality of presentation of the papers and I acknowledge here the efforts of Lauren Webb who is the person that I deal with on a day-to-day basis at CSIRO Publications. She does an excellent job.

I would like to thank Robin and James for their outstanding help with APDN and those of you who reviewed papers. They are short papers and do not take long to review – this is worth remembering.

I shall be at the conference in Adelaide and I would be happy to chat to any of you about how the two journals are going. I am also happy to negotiate contributions of the '**Invited Review**' type. At the Mycological Congress in Cairns last August I sat down with quite a few people and discussed potential contributions and how I could help facilitate their presentation in APP. At this years APPS conference I certainly want to hear all of the keynote speakers since I will already have started processing their manuscripts and I will try to attend as many sessions as possible but I am easily approachable and we could discuss potential publications over a coffee or even a glass of wine – I believe they make some quite good wines in SA!

I expect that I will also have to address the old question at the conference which goes something like 'will I get a subscription reduction if I only take the electronic version of APP'. This is a matter for the Executive but my advice will be that such a reduction would be minimal since only a small part of the cost of production is the actual printing and distribution of the hard copy. The cost of producing the electronic copy is about \$270 per page and this is also the cost for the electronic publication of APDN. When I retire I will have more than a 30 year set of APP which will attract a good price on Ebay or from an institution. I think the hard copy is a valuable asset.

There have been no recent changes to the Editorial Boards but I have some people I wish to speak to in September about their potential as a future Senior Editor. I look forward to catching up with you in Adelaide.

Best Wishes

Keith Harrower

NOTES FROM THE NEWSLETTER EDITOR

As you may have noticed, a new format has been trialled for this newsletter. Comments are gratefully received. I would also appreciate photos of diseases and pathogens I can use in the banner at the side of each page – preferably not too large in size! Please send them to me at hall.barbara@saugov.sa.gov.au. Hope to see you in September.

Barbara Hall

News from the Business Manager

Its that time of the year when most of the subscriptions for 2007 have now been renewed. The total number of members for each year can be seen in the figure below. There has been a worrying decline over the past few years. The peak of 2005 is interesting. Geelong is obviously very attractive for a conference. We should give a special thanks to the excellent organising committee. Without the 2005 peak there would have been a gradual decline in numbers since 1999. Please encourage any non-member plant pathologists in your area to join the society.

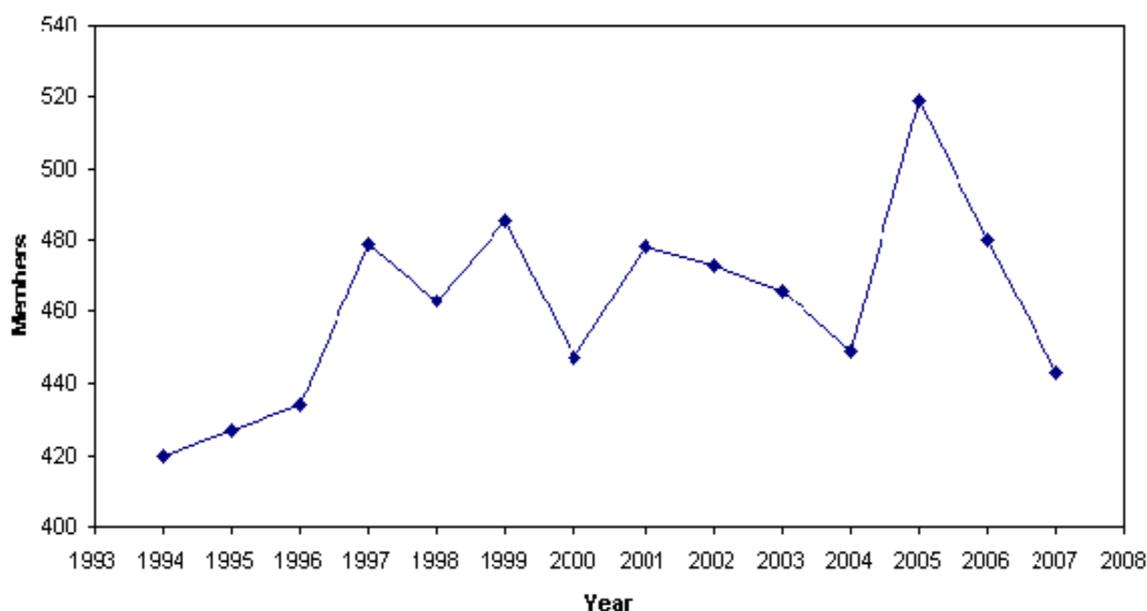
The world directory was recently updated and the current information from our database is now online. The next update will be around May next year.

I have recently taken on the role of business manager for the International Society for Plant Pathology. In this role I will be coordinating the world directory and encouraging all societies to keep their information current. Members of APPS are associate members of the International Society and through this association each member of APPS is also an associate member of the International Union of Biological Sciences (IUBS), the International Union of Microbiological Societies (IUMS), in liaison with the UN Food and Agriculture Organization (FAO), and the International Council for Science.

Another point I need to mention is that I no longer work for Queensland DPI&F. I can therefore only be contacted at my APPS email addresses, which are always available from the web site.

peter.williamson@australasianplantpathologysociety.org.au
businessmanager@australasianplantpathologysociety.org.au

Peter Williamson



APPS Honorary Members & Fellows

Over the last few editions of the newsletter, profiles of the Fellows and Honorary Members of APPS have been included in the newsletter and are placed on the web. Written by colleagues, these profiles are intended to introduce to you the luminaries of our society. The definitions of both are outlined in the constitution, and can be viewed on the web page. Fellows are people who have "rendered distinguished service to the science of plant pathology", and Honorary Members are those who have "made an outstanding contribution to the Society".

This profile on John Brown was written by Joe Kochman.

John Frederick Brown, Fellow 1999



John was educated at Hurlstone Agricultural High School and the University of Sydney, graduating BScAgr (Hons) in 1961 and PhD in 1965. In 1964 he was appointed Lecturer in Botany at the University of New England (UNE) at Armidale. Initially he taught mycology and soil microbiology but soon introduced plant pathology into the curriculum. This was the beginning of more than 35 years of teaching and research into many aspects of plant pathology. His courses, teaching ability and rapport with students quickly attracted quality honours and postgraduate students and a significant research group was formed at UNE. He interacted with many agricultural and horticultural industry groups to identify



disease problems that he and his students could research and hopefully solve. He had a great ability to attract research funds to support postgraduate research. John was promoted to Associate Professor in 1973, a position he held until he retired in 1996. He continued as a Research Fellow at UNE supervising PhD students until 2000 when he moved from Armidale. John supervised and co-supervised about 26 PhD and MSc students as well as numerous honours students, many of whom served on the executive of the Society. His past students work, or have worked, in universities, Government departments (both State and Federal), in private enterprise as well as holding overseas posts.

His research interests have been broad and encompassed most major areas of plant pathology (etiology, pathogenesis, epidemiology, disease assessment and management strategies). His research activities can be broadly divided into five categories; diseases of temperate field crops (particularly small grain cereals and sunflower), diseases of tropical cash and subsistence crops in Pacific Island nations, microbiology of leaf surfaces, mycorrhizal symbioses and biological control of weeds using plant pathogens. However, it is in the area of epidemiology and crop loss assessment that John developed special expertise and is recognised both nationally and internationally for his contributions to this field. John has authored or co-authored about 190 publications including 10 books or book chapters, 177 scientific publications and several reports to international agencies. A highlight of his career was the publication of the 556 page textbook *Plant Pathogens and Plant Diseases* which was launched at the 1997 APPS conference in Perth. This text was specifically written to emphasise examples of diseases in the Australasian region.

John's interest in tropical agriculture commenced in 1969 when he was asked by the then Department of Foreign Affairs, to visit the Solomon Islands as an advisory plant pathologist. He spent 10 months in the Solomons between 1970 and 1974. Later, from 1977 to 1981, he was involved in running a 'short course in plant protection' and initiating and monitoring follow-up research in selected universities in Indonesia. In 1986 and 1987 he was seconded from UNE for 17 months to the Bogor Agricultural Institute (IPB) in Indonesia to head a project designed to improve the university's (IPB) ability to train their own undergraduate and postgraduate students in agriculture and science. His most recent involvement in tropical plant pathology (1987-94) was in the South Pacific states of Tonga, Fiji, Samoa and Vanuatu where a dieback disease of kava was investigated and its cause established.

In addition to his research contributions to Australasian Plant Pathology, John has contributed to the Society in many ways, particularly during the first 20 years of its existence when he acted as Chairman and Convenor of the Epidemiology and Crop Loss Assessment section for several biennial conferences, as well as for the Fourth International Plant Pathology Congress held in Melbourne in 1983. He also served as President of the Society from 1995 to 1997.

In his retirement John and his wife Leonie moved to the family property on the shores of Lake Conjola on the south coast of NSW. He still maintains an interest in mycology and plant pathology and enjoys catching up with past students and colleagues.

Joe Kochman
July 2007



ADELAIDE 2007

Adelaide Convention Centre
South Australia

24-27 September 2007

16th Biennial APPS Conference Back to Basics: Managing Plant Disease

Online registration is now open

<http://www.plevin.com.au/apps2007/>

or follow the link from your APPS website

A three-day scientific program is planned along with a trade exhibition, workshops, field trips and the opportunity for all delegates to enjoy pre and post Conference tours to some of South Australia's agricultural and scenic regions.

Photos in banner - top to bottom: *Fusarium oxysporum* fsp. *ubensis*, Peacock spot on olives (*Spilotea oleaginea*), *Fusarium* in banana, Smut on wheat (*Ustilago tritici*), *Spilotea oleaginea* spores, Asci of *Phomopsis* taxon 1 (*Diaporthe perijuncta*), EM of grapevine powdery mildew (*Erysiphe necator*).

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Editor-in-Chief APP: Dr Keith Harrower, School of Biological & Environmental Sciences, Central Queensland University, Rockhampton, Qld 4701. Ph 07 4930 6354, Fax 07 4930 9209, E-mail k.harrower@cqu.edu.au

Web Site: <http://www.australasianplantpathologysociety.org.au/>