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Reminder on nominations for the ISPP Executive 2018-2023

The call for nominations of candidates for election to the 2018-2023 ISPP Executive Committee has been posted to all constituent societies of the ISPP. This election occurs once every 5 years, in accordance with the ISPP Rules of Procedure. Nominations are being sought for the positions of ISPP President, Vice-President, Secretary-General and Treasurer.

A Nomination Committee has been formed, consisting of highly respected plant pathologists representing different regions of the world, and chaired by Prof M Lodovica Gullino (ISPP Immediate Past President). The Committee will select two candidates for each position from the nominations received. The selected candidates will go forward to the full election, which will be a ballot of all ISPP Councilors.

Potential nominees must firstly agree to be nominated, and be aware of the time commitments and responsibilities involved with the respective positions. Short-listed nominees will be asked to provide a short written summary of their background and how they might serve in the position for which they have been nominated. Nominees should also be willing and aware of their responsibilities to ISPP and Associated Societies in fulfilling the duties of the positions. These will include participation at the International Congresses of Plant Pathology, in 2018 (Boston, USA) and 2023 (Lyon, France), and being able to commit 70 to 150 h per year for ISPP Executive service. Nominators and potential nominees should view information on the ISPP (http://www.isppweb.org/about_objectives.asp), and consider the duties and responsibilities of the Executive as outlined in the ISPP statutes and rules of procedure: http://www.isppweb.org/about_objectives_statutes.asp.

Nominations should be sent directly to Prof M Lodovica Gullino (marialodovica.gullino@unito.it), or through a representative of an Associated Society (see http://www.isppweb.org/about_associated_eng.asp). Names and full contact details (including e-mail addresses), along with evidence of each nominee's willingness to serve if elected, should be provided. **Nominations should be received by 31 March 2017.**

Ken Pegg - 60 years of plant pathology in Queensland's Fruit Industries



Ken Pegg with family (R to L) wife, Sue Pegg; Ken; son, Dr Geoff Pegg; and daughter in law, Dr Fiona Giblin (both Geoff and Fiona are also plant pathologists).

Ken Pegg commenced as a cadet plant pathologist with the then Queensland Department of Agriculture and Stock in March 1956. Fast forward 61 years, and Dr Ken Pegg AM is still working, an eminent plant pathologist for Agri-Science and Biosecurity Queensland. To celebrate this remarkable milestone, professional and industry colleagues gathered in Brisbane in late February 2017.

While Ken's contributions to horticulture and plant pathology have been many and varied, he has earned global recognition for the development of an integrated disease management system for *Phytophthora* root rot of avocado (including a highly effective trunk injection method for applying phosphonate to rejuvenate affected trees), and his studies on Panama disease in banana (pathogen diversity studies and evaluation of breeding lines for Panama disease resistance).



R to L - Dr Joe Kochman, Dr Melda Moffett and Dr Bob Dodman

After official speeches and congratulations, Dr Melda Moffett, retired plant bacteriologist, and the first female plant pathologist appointed in Queensland, reminisced about when Ken started out, while Dr Suzy Perry, Dr Bob Dodman and John Harden highlighted Ken's lifetime commitment to practical solutions to plant diseases, his collaborative approach to research, his

mentorship of young scientists, his wealth of knowledge, and his kind and humble nature.

Congratulations Ken!

(Lindy Coates, Suzy Perry and Greg Johnson)

Global Good Practice Notes

The [Global Forum for Rural Advisory Services](#) (GFRAS) is about enhancing the performance of advisory services so that they can better serve farm families and rural producers in developing countries, thus contributing to improved livelihoods in rural areas and the sustainable reduction of hunger and poverty. One of its initiatives is the [Global Good Practices](#) which aims to facilitate access to information and know-how on agricultural extension for a wide audience of practitioners. It does so by providing Good Practice Notes, which are peer-reviewed descriptions of key concepts, approaches and methods in an easy to understand format.

Good Practice Notes Note 23 is on [plant health clinics](#) and Note 24 is on [extension campaigns](#) are two notes of interest to the plant pathology community. The extension campaign note covers surveillance and how to get better information from the field so that plant health authorities can respond appropriately.

All 30 notes are available on: <http://www.g-fras.org/en/knowledge/global-good-practice-notes.html>

(Eric Boa, University of Aberdeen)

Pacific Pests and Pathogens app version 5 released

A new version of the app, Pacific Pests and Pathogens, has been released and contains 300 mini fact sheets; one for every full fact sheet. The latest mobile version can be updated and downloaded from [Google](#) or [Apple](#) stores. The mini fact sheets are also available on the [Pestnet website](#).

(Grahame Jackson, [Pestnet](#))

Insights into fungal-bacterial symbioses may lead to novel methods of *Rhizoctonia solani* control

Rhizoctonia species and *R. solani* specifically, are a complex group of soil fungi with broad host range and world-wide distribution. In a research paper titled "[A dimorphic and virulence-enhancing endosymbiont bacterium discovered in *Rhizoctonia solani*](#)" published in *Phytobiomes*, University of Florida researcher Ken Obasa and colleagues identified a novel and important biological aspect of *R. solani* while investigating brown patch infected cool-season turf grasses. The findings of this study suggest that at least some *Rhizoctonia* species in the anastomosis group 2-2IIIIB can harbour intracellular bacteria that affect the biology of their fungal host and, in turn, the way the fungus interacts with plants. This and similar recent discoveries raise important questions about the distribution and significance of fungal microbiomes to our understanding and management of phytopathogenic fungi.

([EurekAlert](#), 23 February 2017)

Penn State Creates Center for Microbiome Research

A universitywide effort to promote the study of microbiomes has led to the creation of a center for microbiome research at Penn State. The university's focus on microbiomes dovetails with increased recognition of the importance of this field within the scientific community and by the public.

In May 2016, the White House Office of Science and Technology Policy announced the National Microbiome Initiative, aimed at fostering the integrated study of microbiomes across different ecosystems. That announcement coincided with commitments for federal agency investments of \$1.21 billion in the first two years. Agencies supporting microbiome research include the USDA, Department of Energy, National Aeronautics and Space Administration, National Institutes of Health and National Science Foundation. In addition, \$400 million in financial in-kind support was committed by other organizations, including Penn State.

Carolee Bull, head of the Department of Plant Pathology and Environmental Microbiology, represented Penn State at the kick-off event for the national initiative. Bull, is chairwoman of the planning committee that drafted the proposal for the new center and will lead the center until a director is named.

"Several Penn State colleges and institutes have robust microbiome-related research programs and have made commitments to participate," Bull said. "We expect that a core group of about 30 researchers and their teams will be actively involved in the center's activities." Searches are underway to fill positions in microbial ecology in the Department of Food Science and in root biology and rhizosphere interactions in the Department of Plant Science.

[Read more.](#)

(Penn State News, 2 February 2017)

Acknowledgement of the contributors to the Global Survey on Crop Losses

As of 1 February 1, 2017, the overall results of the Global Survey on Crop Losses, which started on 1 November 2016, have led to the following results:

- 1142 total responses
- 216 respondents (contributors) in 67 countries
- 368 responses on wheat diseases and pests
- 151 responses on maize diseases and pests
- 297 responses on rice diseases and pests
- 180 responses on potato diseases and pests
- 146 responses on soybean diseases and pests

The data set is well-balanced, with very large contributions from North America and South Asia, but also sizeable contributions from South America, East Asia, South-East Asia, and Europe, as well as workable contributions from Sub-Saharan Africa, Central Asia, and Oceania. Interpretations of patterns of responses should be possible, regionally, and world-wide.

This is a tremendous success, since for the first time ever, a collective expert assessment has been generated on the importance of diseases and pests worldwide on world's five most important food crops. The volume of responses should enable worldwide as well as regional estimates of crop losses derived from these assessments.

On behalf of the ISPP subject matter committee on Crop Losses, I wish to thank every one of you for having contributed and volunteered information in this effort. I believe that this is a fine example of the strength of a collective, volunteered action.

In the coming weeks, the data set which has been assembled from these assessments will undergo a first set of processing, to provide (expert-based) crop loss estimates (1) by crops, (2) by disease and pests, and (3) by regions of the world, and worldwide. This will be reported in the bulletin of ISPP News probably in the April or May issue.

A group of colleagues involved in the development of the Survey protocol and procedures [Paul Esker (University of Costa Rica), Asimina Mila (North Carolina State University), Neil McRoberts (UC Davis), Andrew Nelson (University of Twente), Sarah Pethybridge (Cornell University), Serge Savary (INRA, France), and Laetitia Willocquet (INRA, France)], will then proceed with additional, more detailed analyses, aimed at (1) linking levels of crop losses and their frequencies; (2) robustness of the information generated, in comparison with available empirical data; and (3) the implications of these results, including, but not restricted to, policy implications. These analyses will be submitted for publication in a journal (medium) still to be determined.

All the reporting which will be made will include the list of contributors who have volunteered information. The format of this recognition will necessarily depend on the requirements, style, and policies of the publishing medium. For instance, a full table of the contributors will appear in the manuscript which will be submitted to the ISPP in view of an article in ISPP News. The collective work will also be reported at the [Conference on Global Crop Losses](#) to be held in Paris, France, during 16-18 October 2017.

Thanking each of you for your contributions,

S. Savary, INRA, Centre INRA de Toulouse, France; Chair, Crop Loss Subject Matter Committee of the ISPP;
 A. Nelson, ITC, University of Twente, The Netherlands;
 L. Willocquet, INRA, Centre INRA de Toulouse, France;
 Sarah Pethybridge, Cornell University, USA;
 Asimina Mila, North Carolina State University, USA;
 Paul Esker, University of Costa Rica;
 Neil McRoberts, UC Davis, USA.

Asian Conference on Plant Pathology ACPP2017 13-16 September 2017, Jeju, South Korea

The Asian Association of Societies for Plant Pathology will convene their sixth conference in Jeju, South Korea, from 13-16 September 2017 with the theme "Translation from Genomics to Disease Management."

Key topics for the conference include: Subtropical and Tropical Plant Diseases, Plant Diagnosis and Quarantine, Grain Crop Diseases, Horticultural Crop Diseases, Molecular Plant Pathology, Biological Control, Genomics and Phytobiome, and Chemical Control. The conference will conclude with a field trip on the 16 September 2017.

Abstract submission will be available from 1 May 2017 to 30 June 2017 through the ACPP 2017 website (<http://acpp2017.org>). (ACPP2017

Organising Committee, February 2017)

Overconsumption leads to loss of one fifth of world's food

The world's population is consuming around 10 per cent more food than it needs, while almost nine per cent is thrown away or left to spoil, a new study has found. Scientists at Edinburgh examined ten key stages in the global food system, including food consumption and the growing and harvesting of crops, to quantify the extent of losses. Using data collected primarily by the UN's Food and Agriculture Organisation, the team found that more food was lost from the system than was previously thought.

"Reducing losses from the global food system would improve food security and help prevent environmental harm. Until now, it was not known how over-eating impacts on the system," Dr Peter Alexander, from the university's School of GeoSciences and Scotland's Rural College, said.

Livestock production is the least efficient process, with losses of 78 per cent, or 840 million tonnes, the University of Edinburgh

team found. Increased demand for some foods, particularly meat and dairy products, would decrease the efficiency of the food system and could make it difficult to feed the world's expanding population in sustainable ways, researchers said. Encouraging people to eat fewer animal products, reduce waste and not exceed their nutritional needs could help to reverse these trends, the team said.

([ABC News](#), 22 February 2017)

How trees talk to each other

"A forest is much more than what you see," says ecologist Suzanne Simard. Her 30 years of research in Canadian forests have led to an astounding discovery - trees talk, often and over vast distances. Learn more about the harmonious yet complicated social lives of trees and prepare to see the natural world with new eyes.

<https://youtu.be/Un2yBqIAxYs>

The secret life of trees: [read more](#).

(CNN, 7 February 2017)

Prospects for biological soilborne disease control: Application of indigenous versus synthetic microbiomes

A paper by Mark Mazzola and Shiri Freilich titled "Prospects for biological soilborne disease control: Application of indigenous versus synthetic microbiomes" was published in March 2017 by *Phytopathology* (vol. 107 pp. 256-263). The abstract is as follows:-

Biological disease control of soilborne plant diseases has traditionally employed the biopesticide approach whereby single strains or strain mixtures are introduced into production systems through inundative/inoculative release. The approach has significant barriers that have long been recognized, including a generally limited spectrum of target pathogens for any given biocontrol agent and inadequate colonization of the host rhizosphere, which can plague progress in the utilization of this resource in commercial field-based crop production systems. Thus, although potential exists, this model has continued to lag in its application. New omics' tools have enabled more rapid screening of microbial populations allowing for the identification of strains with multiple functional attributes that may contribute to pathogen suppression. Similarly, these technologies also enable the characterization of consortia in natural systems which provide the framework for construction of synthetic microbiomes for disease control. Harnessing the potential of the microbiome indigenous to agricultural soils for disease suppression through application of specific management strategies has long been a goal of plant pathologists. Although this tactic also possesses limitation, our enhanced understanding of functional attributes of suppressive soil systems through application of community and metagenomic analysis methods provide opportunity to devise effective resource management schemes. As these microbial communities in large part are fostered by the resources endemic to soil and the rhizosphere, substrate mediated recruitment of disease-suppressive microbiomes constitutes a practical means to foster their establishment in crop production systems.

[Read paper](#).

Zebra chip disease: Portable diagnostic tool breakthrough aims for fast, accurate results

A new portable diagnostic tool for identifying the devastating zebra chip disease may bring faster and more accurate results to stem its spread, according to New Zealand scientists. Zebra chip is a bacteria which alters a plant's metabolism and burns striped patches in potatoes, making both the potato and its seed inedible and unmarketable. It is mainly spread by infected [tomato potato psyllids, a pest which was detected in Perth last week](#).

Dr Grant Smith is a plant pathologist with the Plant and Food Research institute in New Zealand and has been working on the development of the tool. He said current tests were not accurate enough. According to Dr Smith, the new technology would also be portable and cut waiting times from two-three days to roughly 30 minutes. Dr Smith said this reduced time-frame and portability would be particularly important for delimitation surveys when trying to define infected areas and distance of spread.

[Read more](#).

(Michelle Stanley and Tyne Logan, ABC Rural, 21 February 2017)

Discovery of new rust in sugarcane

In January 2017, the Australasian Plant Pathology journal published the description of [Macruropyxis fulva](#), a new fungus that causes rust in sugarcane. The samples originated from the south of the African continent and consisted of leaves presenting symptoms of rust on both faces, with different characteristics of other rusts. Comparative molecular analyses with other species of fungi confirmed that this was a new species. In addition to sugarcane, *Macruropyxis fulva* has also been reported in *Miscanthus ecklonii*. As far as is known, it is restricted to Swaziland and South Africa, at least for now.

([Coopercitrus News](#), 8 February 2017)

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