



**ISPP** INTERNATIONAL SOCIETY  
FOR PLANT PATHOLOGY

PROMOTING WORLD-WIDE PLANT HEALTH AND FOOD SECURITY

INTERNATIONAL SOCIETY FOR PLANT PATHOLOGY

# ISPP NEWSLETTER

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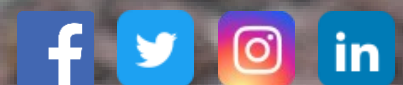
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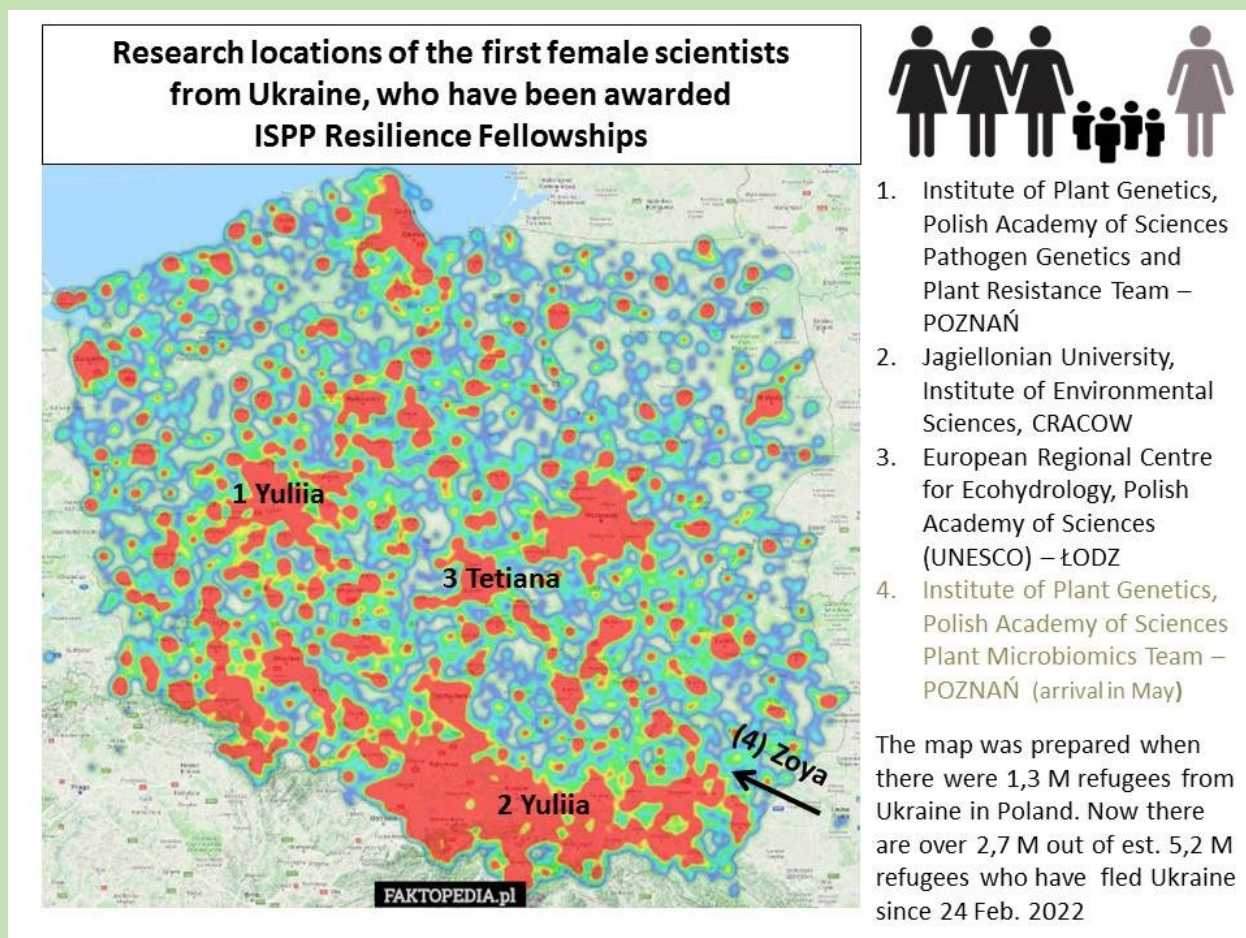
INTERNATIONAL SOCIETY FOR PLANT PATHOLOGY (ISPP)

[WWW.ISPPWEB.ORG](http://WWW.ISPPWEB.ORG)

# FIRST UPDATE ON ISPP RESILIENCE BURSARY FOR PLANT PATHOLOGISTS

*This Progress Bulletin for the global plant pathology community provides background on the establishment of the ISPP Resilience Bursary for Plant Pathologists, an update on the partnership between the ISPP and the Polish Phytopathological Society, and the status of support provided to Ukrainian plant pathologists and scientists in aligned disciplines who have arrived or will soon arrive in Poland. The ISPP and the plant pathology communities of Poland and Ukraine are deeply appreciative of the donors and donations received and offered.*

*Future needs and opportunities are also discussed.*



**Figure 1.** The location of the current and planned recipients of ISPP Resilience Bursaries in Poland. The colour shading shows location and of refugees arriving since February 24 2022, with red showing the highest density of arrivals (cities) and blue the lowest density (extending to almost every village). Numbers are lowest near the Eastern border (except border crossings).

## **BACKGROUND**

National and regional conflicts around the world have displaced many plant pathologists in the past and present, creating financial hardships and threatening lives and livelihoods. During March 2022, the International Society for Plant Pathology established a “Resilience Bursary for Plant Pathologists”. The purpose of the fund is to support emergency/refugee situations, specifically providing support for plant pathologists.

The current urgent need is support for the plant pathologists from Ukraine, some of whom are reaching Poland as refugees (Figure 1). ISPP is providing support for fellow plant pathologist refugees and the vital work that they have been doing to reduce plant disease losses and assure food and fiber security in the region.

## **ISPP RESILIENCE FUND**

The idea of ISPP Resilience Bursary emerged during dialog with the Polish Phytopathological Society (PPS) President and ISPP Councillor, who indicated that colleagues were arriving or expected in Poland along with their children with Polish collaborating institutions arranging accommodation and living support per scientist for c. \$1,000 per month. This provided a platform for the ISPP to deliver support and the Resilience Bursary Fund was established to collect and distribute support.

Fund collection, disbursement and acquittal processes are being overseen by the ISPP Treasurer with the ISPP executive approving the initial and any subsequent disbursements.

## **POLISH PHYTOPATHOLOGICAL SOCIETY - ROLE AND REPORTING**

The Polish Phytopathological Society (PPS) / Polskie Towarzystwo Fitopatologiczne was established in 1971. Membership of the PPS is about 300 plant pathologists and specialists on plant protection. It has eight branches distributed across Poland. One of the aims of PPS activity is to keep and upgrade cooperation with national and foreign plant pathologists. Based on this rule, the Presidium and the Board of PPS have created a new Commission for Cooperation, with the PPS President, two deputy presidents, secretary and the treasurer constituting this body to assist in delivery. The PPS amended their regulations and developed mechanisms for allocating and monitoring support. The individual scientist application and reporting procedures are being developed bearing in mind that refugee arrivals have faced trauma and loss already, with uncertainty about their spouses and other family in Ukraine.

According to the regulations of PPS, the Commission chooses successful candidates. Potential recipients apply in writing and indicate their willingness to accept the funding, and either provide proof they are plant pathologists, or indicate they want to increase their knowledge and skills in plant pathology (this also helps PPS find the relevant lab). The application is simple and the PPS asks for available documentation, but this proof is not compulsory. The PPS checks research profiles (Research Gate, LinkedIn etc.). The decisions made by the Commission are in the form of resolutions. Each scientist reports regularly to their supervisor with collaboration tailored to experience, and current research projects at the host institution and or the scientist's home institution. The PPS is providing ISPP with details of the scientists' activities, their Polish supervisors and host institutes and projects.

*Progress:* The initial ISPP funds have been transferred to the PPS who have chosen three candidates (Figure 2.), with a fourth one on her way to Poznan:

1. Yuliia hosted at Institute of Plant Genetics, Polish Academy of Sciences Pathogen Genetics and Plant Resistance Team – POZNAŃ
2. Yuliia hosted at Jagiellonian University, Institute of Environmental Sciences –CRACOW
3. Tetiana hosted at European Regional Centre for Ecohydrology, Polish Academy of Sciences (UNESCO) – ŁODZ
4. Zoya hosted at Institute of Plant Genetics, Polish Academy of Sciences Plant Microbiomics Team – POZNAŃ (arrival after Easter)



**Figure 2.** Ukraine scientists now in Poland. Above - Yuliia in Poznań; Below - Left, Yuliia in Cracow; Right, Tetiana in Lodz.

The women scientists all arrived with children and the first step was to find nurseries or kindergartens for their care. Some kindergartens were able to offer a Ukrainian teacher, so the children would not have to struggle with a foreign language. The three listed above (1-3) have signed contracts between themselves, the research organisation and the institute. Each candidate has her own dramatic story. With the ISPP Bursary they also feel financially secure and they are thankful to ISPP and PPS for this great joint initiative led by ISPP.

In future updates and social media posts we will discuss the activities of each scientist and their hosts in more detail.

## UKRAINE PLANT PATHOLOGY

In establishing the Resilience Bursary, the ISPP executive has also established contact with the Ukraine plant pathology community through a colleague, Alex, who remains in Kyiv with his family. Alex is providing information on the major plant disease problems in Ukraine and initiating the reestablishment of a Ukrainian Phytopathology Society to connect more than 200 plant pathologists working there.

The ISPP also aims to collate information on current and past collaborative projects with Ukrainian plant pathologists (or graduate students in plant pathology) to identify additional opportunities for support or linkages. This information will be kept confidential for privacy protection. Submit comments to: [resilience@isppweb.org](mailto:resilience@isppweb.org).

As refugees move across Europe and around the world other opportunities and needs to support plant pathologists may arise. The ISPP will consider additional partnerships with more Plant Pathology Societies for other refugee emergencies as needs arise.

## SUPPORT THE BURSARY FUND

The ISPP and the plant pathology communities of Poland and Ukraine are deeply appreciative of the donors and donations received and offered.

This year on 12 May, the global plant health community will celebrate the inaugural International Day of Plant Health (IDPH) as agreed by The United Nations General Assembly as a legacy of the International Year of Plant Health 2020 to continue efforts to increase public awareness of plant health, and foster the implementation of International and Regional Standards for Phytosanitary Measures to protect plant resources and facilitate safe trade. Perhaps as individuals and societies we could combine a celebration of the International Day of Plant Health with fundraising for the ISPP Resilience Bursary.

If you have any suggestions, questions, or information that you would like to share about colleagues that may need help, please email us at: [resilience@isppweb.org](mailto:resilience@isppweb.org).

Credit card payment link for additional donations to the Fundraising Campaign for the ISPP Resilience Bursary is below.



Funds can also be provided as a check or bank wire to ISPP. Please communicate with [resilience@isppweb.org](mailto:resilience@isppweb.org) to get specific information. The donation will be considered a gift to this program and is tax deductible in the U.S.

Please share this update with those you think might be interested in supporting and contributing. ISPP is also seeking support from institutional partners.

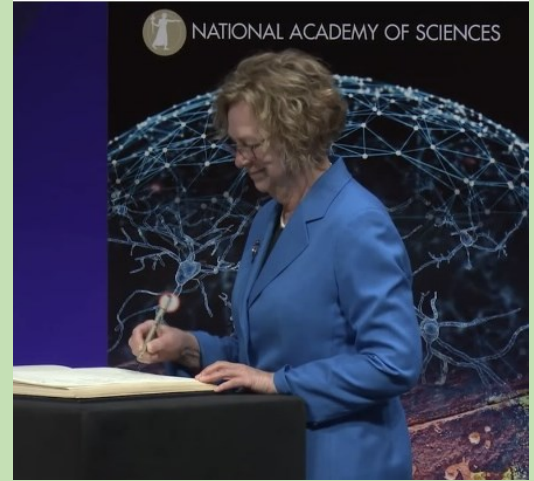
Jan Leach, President, ISPP  
Greg Johnson, Immediate Past President, ISPP  
Mathews Paret, Treasurer, ISPP

Małgorzata Mańka, President, Polish  
Phytopathological Society & ISPP Councillor  
Małgorzata Jędrzycka, ISPP Councillor for  
PPS

## JAN LEACH INDUCTED AS A MEMBER OF THE NATIONAL ACADEMY OF SCIENCES

ISPP President, Professor Jan Leach, was inducted as a member of the National Academy of Sciences on 30 April 2022 for research on plant pathology, specifically the molecular mechanisms of plant disease susceptibility and resistance.

Congratulations to Jan!



## INTEGRATING CEREAL CROP PATHOLOGY, DISEASE QUANTIFICATION TECHNOLOGIES AND EPIDEMIOLOGY

Christian Cruz, Assistant Professor in Botany and Plant Pathology at Purdue's College of Agriculture, presented a webinar on "[Integrating Cereal Crop Pathology, Disease Quantification Technologies and Epidemiology](#)," as part of the Data-Driven Agriculture series.

Dr. Cruz presented advances in 1) developing and testing high-performance methods for foliar disease phenotyping at the host population level, 2) generating basic and applied plant disease epidemiological and management knowledge, and 3) integrating and coordinating activities across scientific and engineering domains.

Learn more about Data-Driven Agriculture series at <https://ag.purdue.edu/digital-ag-resources/spring-2022-digital-ag-seminar-series/>



## DISCOVERY REVEALS HOW FUNGI BYPASSES PLANT DEFENSES, KILLS PLANTS

SCOTT WEYBRIGHT, [WASHINGTON STATE UNIVERSITY INSIDER](#), 25 APRIL 2022

An insight into how the fungi that causes white mold rot avoids plant defenses could lead to a new tool to combat a pathogen that causes billions of dollars of crop loss worldwide. A team led by U.S. Department of Agriculture's Agricultural Research Service and Washington State University researchers found that *Sclerotinia sclerotiorum* uses a protein, called SsPINE1, to bypass natural plant defenses and cause extensive rot in hundreds of broad leaf plant varieties. The findings were just published in [Nature Communications](#).

“Sclerotinia causes stem rot on more than 600 plant species, including peas, lentils, canola, potatoes, soybeans, and many other broad leaf crops,” said Weidong Chen, corresponding author on the paper, adjunct professor at WSU and plant pathologist with the USDA-ARS.

Plants rot when a pathogen degrades cell walls, breaking down the plant by secreting chemicals called polygalacturonases (PG). Plants protect themselves using an inhibitor protein, called PGIP, which was discovered in 1971. Since that discovery, scientists have wondered how certain pathogens, such as *S. sclerotiorum*, gets around the inhibitor protein to cause extensive rot.

Chen and his colleagues discovered a protein secreted by sclerotinia cells, called SsPINE1, that inactivates a plant's defenses. The key to finding the protein was looking outside the fungi cells. “We didn't know what we were looking for,” Chen said. “When we found this protein, SsPINE1, that interacted with PGIP, it made sense. But we weren't really looking for it: we found it by looking outside the cells at the materials excreted by the fungus.”

Sclerotinia does so much damage around the world that USDA and the U.S. Congress have been funding the National Sclerotinia Initiative for more than 20 years.

“I got goosebumps when we found this protein,” said Kiwamu Tanaka, an associate professor in WSU's Department of Plant Pathology and a co-author on the paper in *Nature Communications*. “It answered all these questions scientists had for the last 50 years: Why these fungi always overcome plant defenses? Why do they have such a broad host range, and why are they so successful?”



The fungi that causes white mold rots a sunflower plant (Photo credit: WSU).

To prove that the protein SsPINE1 allowed *Sclerotinia* to bypass plant defenses, the team deleted the protein in fungi in the lab, which dramatically reduced its impact. This discovery could allow breeding of plants with natural resistance to this protein.

“The long-term goal is to reduce the use of chemicals with more useful control management through breeding,” Tanaka said. “The current best way to fight sclerotinia is spraying fungicides, which can unintentionally harm other organisms. Breeding resistance is an environmentally friendly way to manage this pathogen.”

“It’s exciting that we found this new protein,” said Wei Wei, a WSU post-doctoral researcher and first author on the paper. “We hope that this helps increase resistance to fungal infections in plants around the world.”

The research team included scientists from USDA-ARS, WSU, Northwestern A&F University in Shaanxi, China, Wuhan Polytechnic University in Wuhan, China and Huazhong Agricultural University in Wuhan.

## **ACCESS TO DNA SEQUENCE GOING FORWARD**

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**BRENDA WINGFIELD, ISPP SECRETARY**

There is a critical moment for the Convention on Biological Diversity (CBD). Outcomes of the CBD Conference of the Parties coming in 2022 (COP 15). This will shape the use of and access to Digital Sequence Information (DSI) for decades to come. I urge that we all need to be signing the open letter (<https://www.dsiscientificnetwork.org/open-letter/>). I ask that this should be shared with the Plant Pathology community.



## WHEN THE RUST SETTLES: UNCOVERING THE MOVEMENTS OF COFFEE LEAF RUST DISEASE

UNIVERSITY OF TSUKUBA RESEARCH NEWS, 5 APRIL 2022

Coffee is one of the world's most popular drinks, yet there are still many unknowns in the coffee-growing business. Now, researchers from Japan have shed new light on the nature of a disease that seriously affects coffee plants.

In a study published this month in *Frontiers in Plant Science*, researchers from the University of Tsukuba and Ibaraki University have revealed that coffee leaf rust (CLR) disease is widespread in the main coffee-growing regions of Vietnam, the world's second-largest coffee producer.

Rusts are plant diseases named after the powdery rust- or brown-colored fungal spores found on the surfaces of infected plants. CLR fungus, *Hemileia vastatrix*, causes CLR disease in coffee plants—the source of coffee beans. This disease severely affects the plants, resulting in high yield losses and lowering bean quality; developing effective and practical ways of managing the disease is essential for mitigating this problem. The best way to control CLR is by using disease-resistant plant varieties. However, there have been recent reports of CLR outbreaks in coffee-growing regions where rust-resistant varieties are planted.

“To control this disease, we need to understand rust population diversity,” says senior author of the study, Associate Professor Izumi Okane. “We must also identify the genetic variations that underpin it, and anticipate potential future variations.”

To do this, the researchers examined the occurrence of CLR disease in key coffee-producing regions of Vietnam, assessed the current population structure and genetic diversity of the CLR fungus via genetic sequencing, and estimated the geographic region where *H. vastatrix* first established, as well as its direction of migration between Vietnam's main coffee-producing areas.

The results showed a high incidence of CLR disease in most of the regions investigated, and that *H. vastatrix* populations in Vietnam shared a close genetic relationship with several Central and South American populations. The study also uncovered potential starting points and migration routes of *H. vastatrix* in Vietnam's coffee-growing regions. The spread of CLR from northern to southern Vietnam revealed that agents other than wind and monsoon were involved in moving spores from an infected region to other areas.

“Our study highlights the need to consider human-mediated activities, because they may quickly accelerate the genetic diversification of rust fungi populations,” explains Associate Professor Okane.

The results of this study have revealed new information on the genetic diversity of *H. vastatrix* in Vietnam and Central and South America. The researchers' findings will help to predict the spread of this fungus in the future. Furthermore, seedling sources and human activities have been highlighted as factors that should be considered in the coffee-growing industry for the control of CLR disease.

## **SURVEY ON KEY CHALLENGES FOR SUSTAINABLE PEST MANAGEMENT**

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We are a consortium of fourteen international and interdisciplinary researchers lead by Niklas Möhring (CEBC-CNRS, France) and Robert Finger (ETH Zurich, Switzerland). In our research project, we are aiming to identify key challenges and solutions for sustainable pest management in the heterogeneous global agriculture. To get a holistic and balanced overview of challenges and solutions, we are conducting a global survey with experts from different regions, disciplines and professions.

We would thus be very grateful if you would answer the survey and forward the below survey link to experts on sustainable pest management within your organisation. All answers will of course be completely anonymized.

Answering the survey will only take around 5-10 min.

Once the analyses are completed we will be happy to share our results with you.

Survey links:

[English version](#)

[中文版本](#)

[Version française](#)

[Deutsche Version](#)

[Versão em português](#)

[Versión en español](#)

Thank you in advance for supporting our research on this important question,

Niklas Möhring and Robert Finger (on behalf of the team of co-authors)

## IMPROVING INTEGRATED PEST MANAGEMENT IN HORTICULTURE – NEW BOOK

Rosemary Collier, Editor (2022). Improving integrated pest management in horticulture, Burleigh Dodds Science Publishing, UK. 486pp.

Pests and diseases remain a significant threat to crop yields worldwide. With concerns about the environmental impact of synthetic pesticides, there remains a need to develop more environmentally-friendly biological methods of control that can be combined synergistically within integrated pest management (IPM) strategies.

Improving integrated pest management in horticulture provides a comprehensive review of the recent developments in integrated pest management for horticultural crops.

The collection builds on the wealth of research on insect and disease control in horticulture using IPM strategies in areas such as biological control and decision support systems to target techniques more effectively. The book also includes valuable case studies based on practical experience of IPM.

Edited by Professor Rosemary Collier, Warwick University, UK, Improving integrated pest management in horticulture will be a standard reference for researchers in IPM in horticultural science departments, entomologists, manufacturers/suppliers of pesticides and crop pest management products, as well as government agencies monitoring and regulating pest management in agriculture.

For more information and to view the full table of contents, visit the Burleigh Dodds Science Publishing [website](#).

### **\*Exclusive Discount for ISPP Members\***

Receive 20% off your order of the book using code **ISPP20** via the [BDS Website](#). Please note that this discount code expires 30<sup>th</sup> June 2022.



## **BIOLOGICAL CONTROL OF PLANT DISEASES – WHAT HAS BEEN ACHIEVED AND WHAT IS THE DIRECTION?**

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A paper by David B. Collinge *et al.* titled “Biological control of plant diseases – What has been achieved and what is the direction?” was published on 12 March 2022 by *Plant Pathology* (vol. 71, pages 1024-1047). The abstract is as follows:-

The global sustainability agenda is increasing the demand for reduction in inputs into agricultural production while maintaining profitable yield of quality products. Plant diseases are a major constraint for both yield and product quality, but often tools for their control are ineffective or lacking. Biological control using antagonistic microorganisms has long been a subject of research resulting in a wide range of products that are now available and marketed in specific territories around the world. These preparations are often niche products with narrow uses. The research effort is intense both to develop new biological control agents (BCAs) and to obtain

knowledge of the mechanisms underlying biological disease control. The prospects for biological control are promising. As a minimum, BCAs supplement other sustainable disease management practices such as disease resistance, and present opportunities for controlling diseases for which other approaches are ineffective or unavailable. We can realistically expect increasing use of BCAs to control crop diseases in ways that will benefit the environment. This review paper arose from a webinar held by the British Society for Plant Pathology as part of the International Year of Plant Health (IYPH2020), at which many of the 300 participants posed or discussed interesting questions. This review is based on that input and the panel members at the webinar are all included as co-authors in this review.

[Read paper.](#)

## **MAY 12TH AS THE INTERNATIONAL DAY OF PLANT HEALTH**

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### **NAPPO SECRETARIAT, 30 MARCH 2022**

The United Nations General Assembly recently adopted the resolution to proclaim 12<sup>th</sup> May as the International Day of Plant Health (IDPH). This important legacy of the International Year of Plant Health 2020 compels the North American Plant Protection Organization (NAPPO) and International Plant Protection Convention (IPPC) communities to continue their efforts towards increasing public awareness of plant health as well as fostering the implementation of International and Regional Standards for Phytosanitary Measures to protect plant resources and facilitate safe trade.

We look forward to celebrating this important day with everyone.

## RESEARCHERS INVESTIGATE GARLIC'S HIDDEN POWERS

THE UNIVERSITY OF QUEENSLAND NEWS, 13 APRIL 2022

Garlic has traditionally been used to ward off evil spirits, but its reputed powers do not stop it from being infected by multiple viruses. University of Queensland plant virologist Associate Professor John Thomas said garlic was unique, as it was difficult to get virus-free garlic anywhere in the world. “There can be up to 10 or 12 viruses in infected plants and most garlic plants would have at least six viruses,” Dr Thomas said. “All Australian commercial garlic varieties have viruses, which doesn’t seem to affect taste or nutrition, but does have an impact on the crop’s yield.”

Understanding that suite of viruses and their impact is the problem Dr Thomas, UQ colleagues Dr Stephen Harper and Associate Professor Andrew Geering, the Department of Agriculture and Fisheries’ Dr Kathy Crew and PhD candidate Sari Nurulita, are investigating. Ms Nurulita’s doctoral study aims to develop reliable virus detection tests and investigate why both superior and inferior garlic plants share the same viral profile.

“Garlic is a vegetatively propagated crop, and once it’s been infected, all the progeny are infected,” Dr Thomas said. “It’s also possible for the crop to collect more viruses in the field, but not lose any plants.”

He said in previous work led by Dr Harper and funded by the Australian Centre for International Agricultural Research, researchers grew higher performing bulbs among virus-infected garlic crops. “Through breeding selections over generations, Dr Harper was getting three times the yield from the best selections,” Dr Thomas said.

“However, Ms Nurulita’s work shows these elite garlic selections are still infected by the virus complement and we don’t know why that is occurring.” Ms Nurulita also investigated the viruses concentrations using next-generation sequencing, and mapped the full genomes of the viruses. “I did not find any significant differences in the viruses levels and was unable to determine a clear-cut difference between the two different lines of elite and poor performing garlic seed,” Ms Nurulita said.

Dr Thomas said the team had also tried tissue culture propagation to generate virus-free garlic, but without success. “We think maybe gene silencing is happening naturally in the plant,” he said. “It may depend on which virus gets the upper hand in a particular clove, or the order they are infected in. “But we are going to look at absolute levels of virus to see whether we can determine if gene silencing is responsible.”



Sari Nurulita with high and low yielding garlic, which share the same viruses (Photo credit: UQ).

## CURRENT VACANCIES

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### ASSISTANT PROFESSOR IN PLANT-INSECT-MICROBE INTERACTIONS

Applicants are invited for a tenure-track faculty position at the rank of Assistant Professor in the broad area of interactions between and among insects, microbes and/or plants. Candidates are sought whose research will lead to a better understanding of the nature of these interactions and how they impact natural, urban or agricultural ecosystems. The position is 60% research, 30% teaching and 10% service and will be in the merging **Departments of Plant Pathology & Microbiology and Entomology at Iowa State University**. For more information and applications, visit the link [https://isu.wd1.myworkdayjobs.com/IowaStateJobs/job/Ames-IA/Assistant-Professor-in-Insect-Microbe-Plant-Interactions\\_R7638](https://isu.wd1.myworkdayjobs.com/IowaStateJobs/job/Ames-IA/Assistant-Professor-in-Insect-Microbe-Plant-Interactions_R7638). Review of applicants will begin on **4 April 2022**.

**The Department of Plant Pathology at the University of Nebraska-Lincoln** is seeking a Molecular Plant-Microbial Interactions Pathologist at the rank of Assistant or Associate Professor. This 9-month (academic year), tenure-leading appointment will lead an integrated research and teaching program that meets the needs of agricultural producers in Nebraska, the US, and globally, and connects with regional and national crop pathology programs and colleagues with an emphasis on understanding molecular microbial-host plant interactions, where “microbe” indicates bacterial, fungal, or oomycete pathogen(s). The apportionment for this position is 80% research and 20% teaching and is located in Lincoln, Nebraska. To ensure consideration, please submit all application materials before the review date of **15 April 2022**. Further details about the position and how to apply are available in the [PDF](#).

## ACKNOWLEDGEMENTS

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Thanks to Grahame Jackson, Małgorzata Jędrzycka, Greg Johnson, Jan Leach, Małgorzata Mańka, Mathews Paret, and Brenda Wingfield for contributions.

## COMING EVENTS

### 7<sup>th</sup> International Congress of Nematology

1 May - 6 May, 2022

Antibes Juan-les-Pins, France

Website: [www.alphavisa.com/icn/2020/index.php](http://www.alphavisa.com/icn/2020/index.php)

### BSPP Plant Health Club: Biosecurity at RHS Events

10 May 2022, 12:30 pm - 1:30 pm BST

Free, online networking meeting for early career plant pathologists

Website: [www.bspp.org.uk/conferences/bspp-plant-health-club-biosecurity-at-rhs-events/](http://www.bspp.org.uk/conferences/bspp-plant-health-club-biosecurity-at-rhs-events/)

### International Symposium on Cereal Leaf Blights

11 May -13 May, 2022

Gammarth, Tunisia

Website: [www.isclb2022.com/](http://www.isclb2022.com/)

### New CONNECTIONS: plant pathology, entomology and the road ahead

28 June - 30 June, 2022

ONLINE and FREE

Website: [www.connectedvirus.net/new-connections-conference/](http://www.connectedvirus.net/new-connections-conference/)

### Nanotechnology in Agriculture

30 June - 1 July, 2022

University of Tuscia, Viterbo, Italy

Contact: [nanoagrischool22@unitus.it](mailto:nanoagrischool22@unitus.it)

Website: [www.unitus.it/it/dipartimento/dafne/summer-school-/articolo/nanotechnology-in-agriculture](http://www.unitus.it/it/dipartimento/dafne/summer-school-/articolo/nanotechnology-in-agriculture)

### 4<sup>th</sup> International *Erwinia* Workshop

2 July - 3 July, 2022

Assisi, Italy

Website: [www.icppb2020.com](http://www.icppb2020.com)

### 14<sup>th</sup> International Conference on Plant Pathogenic Bacteria

3 July - 8 July, 2022

Assisi, Italy

Website: [www.icppb2020.com](http://www.icppb2020.com)

### 12<sup>th</sup> International Workshop on Grapevine Trunk Diseases (ICGTD12)

11 July - 15 July, 2022

Mikulov, Czech Republic

Website: [ucanr.edu/sites/ICGTD/Workshops\\_559/](http://ucanr.edu/sites/ICGTD/Workshops_559/)

### 11<sup>th</sup> Australasian Soilborne Diseases Symposium

2 August - 5 August, 2022

Cairns, Queensland, Australia

Website: [asds2022.w.yrd.currinda.com](http://asds2022.w.yrd.currinda.com)

### APS Plant Health 2022

6 August - 10 August, 2022

Pittsburgh, Pennsylvania, USA

Website: [www.apsnet.org/meetings/annual/PH2022](http://www.apsnet.org/meetings/annual/PH2022)

### Annual Oomycete Molecular Genetics Meeting

22 August - 25 August, 2022

Mendel University, Brno, Czech Republic

Website: [omgn.org/](http://omgn.org/)

### 16<sup>th</sup> International Cereal Rusts and Powdery Mildews Conference

31 August - 2 September, 2022

University of Cambridge, UK

Website: [www.niab.com/international-cereal-rusts-and-powdery-mildews-conference-2022](http://www.niab.com/international-cereal-rusts-and-powdery-mildews-conference-2022)

### BSPP2022 – Microbial lifestyles: from symbionts to pathogens

5 September - 7 September, 2022

Newcastle University, UK

Website: [www.bspp.org.uk/conferences/bspp2022/](http://www.bspp.org.uk/conferences/bspp2022/)

### International Phytobiomes Conference 2022

13 September - 15 September, 2022

Denver, Colorado, USA

Website: [phytobiomesconference.org](http://phytobiomesconference.org)

**1<sup>st</sup> International Plant Health Conference**

21 September - 23 September, 2022

London, UK

Website: [www.ippc.int/en/news/press-release-the-first-international-plant-health-conference/](http://www.ippc.int/en/news/press-release-the-first-international-plant-health-conference/)

**8<sup>th</sup> International Cereal Nematodes Symposium**

26 September - 29 September, 2022

Abant, Turkey

Website: [www.cimmyt.org/events/8th-international-cereal-nematodes-symposium-icns/](http://www.cimmyt.org/events/8th-international-cereal-nematodes-symposium-icns/)

**13<sup>th</sup> Arab Congress of Plant Protection**

16 October - 21 October, 2022

Le Royal Hotel, Hammamat, Tunisia

Contact: Dr. Asma Jajar, Chairperson of Organising Committee [info@acpp-aspp.com](mailto:info@acpp-aspp.com)

Website: [acpp-aspp.com](http://acpp-aspp.com) **13<sup>th</sup> International Congress on Plant Biotechnology and Agriculture**

12 June - 16 June, 2023

Cayo Guillermo, Cuba

Website: [bioveg.bioplantass.cu](http://bioveg.bioplantass.cu)

**12<sup>th</sup> International Congress of Plant Pathology (ICPP2023)**

20 August - 25 August, 2023

Lyon, France

Website: [www.icpp2023.org](http://www.icpp2023.org)

**XX International Plant Protection Congress**

1 July - 5 July, 2024

Athens, Greece

Website: [www.ippcathens2024.gr](http://www.ippcathens2024.gr)

**9<sup>th</sup> ISHS International Postharvest Symposium**

11 November – 15 November, 2024

Rotorua, New Zealand

Website: [scienceevents.co.nz/postharvest2024](http://scienceevents.co.nz/postharvest2024)







# ICPP 2023

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**20-25 August, France**



[www.icpp2023.org](http://www.icpp2023.org)



## INTERNATIONAL SOCIETY FOR PLANT PATHOLOGY (ISPP)

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