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INTERNATIONAL SOCIETY FOR PLANT PATHOLOGY

ISPP NEWSLETTER

ISSUE 55 (4) APRIL 2025

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INTERNATIONAL SOCIETY FOR PLANT PATHOLOGY (ISPP) www.isppweb.org

ISPP ENDORSES ALLEA STATEMENT ON THREATS TO ACADEMIC FREEDOM AND INTERNATIONAL RESEARCH COLLABORATION IN THE UNITED STATES

FEBRUARY 2025

Recent restrictions on science and scholarship by the new U.S. Administration's executive orders freezing billions in federal research funding and censoring research on topics such as climate change and gender has prompted All European Academies (ALLEA) to respond with this statement calling for our members, partners, and like-minded organisations, and urging national governments and international institutions in the U.S., Europe and beyond to remain vigilant and strengthen ongoing efforts to safeguard academic freedom and the autonomy of scientific institutions. ISPP stands with ALLEA and has endorsed the <u>Academic Freedom Statement</u> (below).

ALLEA ACAEDMIC FREEDOM STATEMENT

The European Federation of Academies of Sciences and Humanities expresses grave concern over the escalating threats to academic freedom, both in the United States and beyond. Recent developments regarding science and scholarship in the U.S., including executive orders freezing billions in federal research funding and censorship around topics such as climate change and gender, are forcing many U.S. science agencies and research organisations to abruptly suspend normal operations. Such censorship and political suppression of language, research topics, and methodologies—whether through funding restrictions, legislative control, or institutional interference—fundamentally compromise the integrity of scientific and scholarly endeavours not just in the U.S. but around the world due to the global nature of the research ecosystem.

Academic freedom is a fundamental pillar of democratic societies and essential for knowledge production and innovation worldwide. The open and collaborative nature of global research strongly depends on the ability of researchers and scientific institutions to operate free from undue political interference. ALLEA is deeply concerned that the actions of the U.S. administration could have far-reaching and devastating consequences for essential (global) research programmes, particularly in fields such as health, climate, gender, and the social sciences. These new restrictions also threaten the careers of the younger generation of scholars, engineers, and health professionals, and may cause lasting harm to the fundamental research that underpins most scientific breakthroughs, as well as efforts to secure a healthy, just, and safe world for all. For instance, restricting transatlantic data sharing jeopardises research on both sides of the Atlantic, putting at risk decades of collaboration that have led to groundbreaking discoveries. The long and fine tradition of data exchange between the U.S. and Europe has been instrumental in advancing scientific progress, and the new executive orders set back not just science but society as a whole.

We therefore encourage our members, partners, and like-minded organisations, and urge national governments and international institutions in the U.S., Europe and beyond to remain vigilant and strengthen ongoing efforts to safeguard academic freedom and the autonomy of scientific institutions, committing to actions and measures adopted through inter-institutional and supranational agreements in Europe and globally.

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VOICES FROM THE FRONTLINES: THE IMPACT OF DISRUPTIONS IN U.S. SCIENCE

30 MARCH 2025

IN FEBRUARY 2025, MANY DEDICATED U.S. SCIENTISTS FACED MAJOR DISRUPTIONS TO THEIR LIVES AND WORK. HERE'S ONE SUCH STORY. IF YOU HAVE A STORY TO SHARE, I WILL PUBLISH IT WITH AUTHOR INFORMATION OBSCURED IN FORTH COMING ISSUES OF THE ISPP NEWSLETTER.

I was terminated from my unexpectedly position as a federal employee, Research Plant Pathologist. I received an email at 10:05 pm CST stating that I was terminated, "effective close of business" that day. Others received emails that day or even the next morning stating the same, that they were terminated as of 13 February. The reason? "The agency finds, based on your performance, that you have not demonstrated that your further employment at the Agency would be in the public interest." My supervisor, and my supervisor's supervisor, or even above them, were not contacted to ask about my performance for this decision. My performance RECORDS say I have been "fully successful" in all areas evaluated. And anyone who knows me knows that I work hard at my job and always give more than required. There are 16 others, just in my center of around 120 people, who were also suddenly terminated, and more are anticipated this weekend. HUNDREDS OF THOUSANDS of federal employees are in the same position of being suddenly terminated for no good reason.

I was a probationary employee, as are many others. As a scientist with the Agricultural Research Service, we have a 3-year probationary period, regardless of how great you are. At the 3-year mark, and even after and before that, we have built into our system a set of checks and balances of reviews from panels outside our closer group that check whether we are performing to set standards as a scientist, and if not then we can get removed. That system has existed for years. I held this position for 1 year and 2.5 months. I know other scientists who were just a few months from the end of the 3-year probation and were terminated as well. Congratulations, Trump et al.: You got rid of the most passionate, energetic employees who are excited to contribute to American agriculture and science. You also are creating a HUGE brain drain for our federal government, and in general, our society. Others who are left are ALL fearful for their jobs. HINT: Most people do not perform better or remain long-term in their positions when they fear for their jobs, every hour of every day, and fear they will lose them regardless of how well they do (since the current administration and those under them do NOT care about performance or how useful their services are to the everyday American).

What do I do? I research plant diseases and help find solutions to combat them so that farmers can more effectively and efficiently produce the crops needed to feed our society, produce biofuels, and make other plantbased products such as plastics. I am not sure how this isn't "in the public's interest". Including school and postdoctoral time, I trained for 11.5 YEARS post GED to then earn this position. How is this "respectful" and "dignified", like the current administration says they will treat employees, and treat those they terminate when downsizing? I have reached out to HR several times and STILL have NO INFORMATION on how long my benefits go for from here, when to expect my last paycheck, how to get my final paperwork that can help with getting a new job or a future federal position, etc. I have no idea how long my family has health and dental insurance for. I have no idea when I will receive my final payments for work done. I have no idea if I will have issues with obtaining future employment because it was WRONGLY said that my termination was due to performance issues. I wasn't even warned that this would happen; no 2-week or 30-day notice. Not even 1-days' notice. I have a family to feed and keep safe and healthy. I have a mortgage and other bills to pay. I moved my family to the middle of Illinois just for this job; my spouse had to make sacrifices for their own career and pay for me to have this job. All for what? Nothing, now.

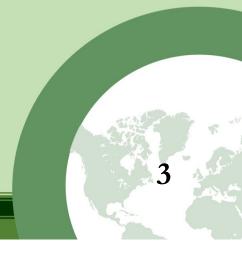
Meanwhile, federal spending keeps increasing. But towards things THEY want, such as a border wall, deportations, etc. The federal workforce only accounts for $\sim 4\%$ of the federal budget. So even if you fired everyone, career employees and all, that is all you are saving. And how many services that benefit the public are then lost? Countless.

Meanwhile, more than just the direct federal government is being impacted. This is trickling quickly down to academics, as Universities face major challenges with federal grants being cut back or deleted altogether. Universities have advised faculty not to spend on EXISTING federal research grants because they believe the federal government will suddenly refuse to pay what they are legally obliged to pay. Which IS actually happening. This impacts ALL LEVELS of research, health, science, technology, development, and more. This will be felt for YEARS on the everyday American, impacting our health and safety, as well as our standing as a STEM leader in the world (though not for long at this rate).

What can you do if you are reading this to help me and the others who are facing this? Reach out to your Congressman or Congresswoman. Reach out to your Senate representatives. Reach out to anyone you can. Tell your friends and family. Spread the word of what is happening. Don't let THEM get away with this. Regardless of what side you are on politically, I hope you can see the disastrous impact of what is happening. This is beyond being a politically-related issue. Our country needs EVERYONE to come together and stand strong; stand against this insanity.

Signed,

Your dear friend/family member/scientist/colleague/neighbor/person on the street



EFFECTIVE EVALUATION METHODS FOR BIOCONTROL AGENTS AND BIOSTIMULANTS AGAINST PHYTOPATHOGENIC FUNGI RELEVANT FOR VARIOUS CROPPING SYSTEMS

A review by María Cecilia Pérez-Pizá *et al.* titled "Quick and "Effective evaluation methods for biocontrol agents and biostimulants against phytopathogenic fungi relevant for various cropping systems" was published on 7 February 2025 by *Plant Pathology* (vol. 74, pages 641-668). The abstract is as follows:-

Fungal diseases pose a significant threat to global agriculture, leading to major crop losses and harmful mycotoxin contamination. Effective management of these diseases is crucial for safeguarding crop production and ensuring food safety. With a growing emphasis on sustainability, there is increased interest in using biological control agents (BCAs) and biostimulants with protective effects (BPEs). This paper provides a comprehensive set of methods or protocols for rapidly screening the protective potential of BCAs and BPEs, covering assessments from pathogen-only evaluations to those involving both the pathogen and the host at early stages. By promoting standardised and reproducible methods, this review offers a concise guide for initial evaluations, identify promising helping to microorganisms and substances for further research. These methods allow for comparisons between BCAs/BPEs and conventional chemical treatments, the assessment of potential synergies, the ability to control fungicide-resistant strains and the evaluation of phytotoxicity. The goal is to improve the understanding and integration of BCAs and BPEs

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into agricultural practices, reducing reliance on agrochemicals and promoting sustainable management of fungal diseases. Future research should expand the range of biostimulants under investigation and refine evaluation methods to maximise their effectiveness in real-world applications.

Read paper.

A PANGENOME ANALYSIS REVEALS THE CENTER OF ORIGIN AND EVOLUTIONARY HISTORY OF PHYTOPHTHORA INFESTANS AND I C CLADE SPECIES

A paper by Allison L. Coomber *et al.* titled "A pangenome analysis reveals the center of origin and evolutionary history of *Phytophthora infestans* and 1c clade species" was published on 24 January 2025 by *PLOS One* (vol. 20, e0314509). The abstract is as follows:-

We examined the evolutionary history of *Phytophthora* infestans and its close relatives in the 1c clade. We used whole genome sequence data from 69 isolates of Phytophthora species in the 1c clade and conducted a range of genomic analyses including nucleotide diversity evaluation, maximum likelihood trees, network assessment, time to most recent common ancestor and migration analysis. We consistently identified distinct and later divergence of the two Mexican Phytophthora species, P. mirabilis and P. ipomoeae, from P. infestans and other 1c clade species. Phytophthora infestans exhibited more recent divergence from other 1c clade species of Phytophthora from South America, P. andina and P. betacei. Speciation in the 1c clade and evolution of P. infestans occurred in the Andes. P. andina-P. betacei-P. infestans formed a species complex with indistinct species boundaries, hybridizations between the species, and short times to common ancestry. Furthermore, the distinction between modern Mexican and South American *P. infestans* proved less discrete, suggesting gene flow between populations over time. Admixture analysis indicated a complex relationship among these populations, hinting at potential gene flow across these regions. Historic *P. infestans*, collected from 1845–1889, were the first to diverge from all other *P. infestans* populations. Modern South American populations diverged next

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followed by Mexican populations which showed later ancestry. Both populations were derived from historic *P. infestans*. Based on the time of divergence of P. infestans from its closest relatives, *P. andina* and *P. betacei* in the Andean region, we consider the Andes to be the center of origin of *P. infestans*, with modern globalization contributing to admixture between *P. infestans* populations today from Mexico, the Andes and Europe.

Read paper.

PROTECTING CROPS: RESEARCHERS OPEN UP NEW AVENUE TO COMBAT A WIDESPREAD PLANT VIRUS

MARTIN LUTHER UNIVERSITY HALLE-WITTENBERG NEWS, 19 MARCH 2025

New RNA-based active agents reliably protect plants against the Cucumber mosaic virus (CMV), the most common virus in agriculture and horticulture. They were developed by researchers at the Martin Luther University Halle-Wittenberg (MLU). The active ingredients have a broadspectrum effect; a series of RNA molecules support the plant's immune system in combating the virus. In laboratory experiments, 80 to 100 per cent of the treated plants survived an infection with a high viral load, as the team reports in "Nucleic Acids Research". Their paper, published in <u>Nucleic Acids Research</u>, has been selected as a "breakthrough article" by the journal. The



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researchers are now working on transferring the idea from the laboratory into practice.

Cucumber mosaic virus is a particularly devastating virus for crops. About 90 species of aphids transmit the virus, which affects more than 1,200 plant species. These include numerous agricultural crops such as squash, cucumbers, cereals and medicinal and aromatic plants. Infected plants are easily identified by a characteristic mosaic pattern on their leaves. Once infected, the plants fail to thrive, and their fruits cannot be sold. To date, there exist no approved agents against CMV. However, the new work by researchers at MLU could provide a long-term solution. The basic idea is to fight the virus by directing the plant's natural defences in the right direction.

When a virus infects a plant, it uses the plant's cells as a host. The virus multiplies via its genetic material in the form of ribonucleic acid (RNA) molecules in the plant cells. Once injected, these foreign RNA molecules trigger an initial response from the plant's immune system. Special enzyme scissors recognise and cut the viral RNA molecules. This process produces small interfering RNAs (siRNAs), which spread throughout the plant and trigger a second step of the immune response. The siRNA molecules bind to special protein complexes and guide them to the RNA molecules of the virus. Once there, the proteins begin to break down the harmful RNA molecules of the virus by converting them into harmless, degradable fragments.

"In general, this defence process is not very effective. A viral infection produces many different siRNA molecules, but only a few have a protective effect," says Professor Sven-Erik Behrens from the Institute of Biochemistry and Biotechnology at MLU. His team has developed a method to identify siRNA molecules that are highly efficient in the process. In a further important step, they were now able to combine several of these siRNA molecules into so-called efficient double-stranded RNA molecules (edsRNAs), which are particularly suitable for use in plants. These edsRNAs act as a kind of "package" that is broken down into the siRNAs soon after entering the plant cells. In this way, many highly effective siRNA molecules can exert a protective, antiviral effect on the spot.

The team conducted numerous laboratory experiments on the model plant *Nicotania benthamiana* and was able to show that edsRNA-based active agents reliably protect against the Cucumber mosaic virus. "The plants in our experiments were infected with a very high viral load: all of our untreated plants died," explains Behrens. In contrast, 80 to 100 per cent of the treated plants survived. There's another special advantage of edsRNA agents: when the package is broken down, a bunch of efficient siRNA molecules is produced that exclusively attack the virus at different sites. This significantly increases the protective effect. "RNA viruses such as the Cucumber mosaic virus are dangerous because they can evolve rapidly. In addition, the genetic material of this virus is made up of three separate parts, which can get mixed up, further increasing the chance of new mutations. To achieve maximum protection against the virus, our active ingredients target different parts of the genome," says Behrens. The team has also optimised the process of screening for efficient siRNAs and can adapt the procedure to target new viral mutations within two to four weeks. "Time is an important factor: when a new virus variant emerges, we can very quickly modify the active agent accordingly," Behrens explains. The approach may also be applied to other pathogens and pests.

Until now, the substances have been administered manually in the laboratory, either by injection or by rubbing them into the plant leaves. The team is working with pharmacist and drug delivery specialist Professor Karsten Mäder at MLU to make the RNA-based substances more durable and easier to apply to plants. For example, they could be sprayed on. At the same time, the researchers are planning field trials to test the RNA-based substances under real conditions. And they are talking to companies about future industrial production. In addition, potential new crop protection products still have to go through an approval process, so it will be some time before a product to combat Cucumber mosaic virus enters the market. "However, we are convinced that our approach is feasible. The first crop protection product with an RNA-based active ingredient was recently approved in the USA," says Behrens.



INTERNATIONAL SUMMER SCHOOL ON "PLANT PATHOGENOMICS FOR SUSTAINABLE FUTURE FOOD," 23-27 JUNE 2025

ALESSANDRA VILLANI

We are pleased to inform you that we are organising an international summer school entitled: "Plant Pathogenomics for Sustainable Future Food", which will take place in Bologna, Italy, from 23-27 June 2025. The school is aimed at early-career researchers, PhD students, and postdocs and will cover both theoretical and practical aspects of genomics applied to plant pathology, including bioinformatic approaches and hands-on sessions over five days.

Participants will explore genomic approaches to studying plant-interacting microorganisms, both pathogenic and beneficial, and their role in plant health and agricultural sustainability. Each morning will feature two plenary lectures by leading international scientists, covering breakthroughs in fungal and microbial genomics. The afternoons will be dedicated to practical bioinformatics training, equipping participants with essential genomic data analysis skills.

The school is jointly organised by Riccardo Baroncelli (University of Bologna), Luigi Faino (University of Rome "La Sapienza"), and Alessandra Villani (Research National Council of Italy, CNR-ISPA, Bari), with the support of the Società Italiana di Patologia Vegetale (SIPaV).

You can find more information including costs, application and improtatn deadlines on the official website: <u>www.2p4s2f.com</u>.



FROM LABORATORY TO LAPTOP: HOW SCIENCE COMMUNICATION CAN BRIDGE THE GAP BETWEEN PLANT PATHOLOGY AND THE PUBLIC

A paper by Blake Oakley *et al.* titled. titled "From laboratory to laptop: How science communication can bridge the gap between plant pathology and the public" was published on May 2023 by *Physiological and Molecular Plant Pathology* (vol. 125, 102032). The abstract is as follows:-

Highlights:

- Social media is a useful tool in scholarly communication and research productivity.
- Marginalized communities experience challenges in accessing scientific information.
- Integration of 'sci comm' practices into education can fuel engagement in science.

- Diversity and equitability can breed innovation and improve research culture.
- Shaping science communication to the target audience can be highly effective.

Abstract:

This paper briefly summarizes my favorite highlights of the plant pathology research presented at the 12th Japan-US Seminar in Plant Pathology and hones in on the associated panel discussion in which career professionals in the field of plant science were probed for their observations on a series of topics that are popular amongst scientists from all disciplines around the world. Panelists highlighted the pros and cons of social media, publications, academic networking platforms, literature corrections, and scientific communication in a variety of contexts as well as the challenges marginalized groups experience in science. Here, I synthesize the recent research progress of American and Japanese plant pathologists, as well as panelists' observations and audience members' comments with peerreviewed literature and provide extra resources and recommendations that I hope will help readers to achieve success in, and out, of academia and science.

Read paper.

GETGENOME NEWSLETTER

GetGenome is a non-profit organisation that empowers early career scientists by providing equitable access to genomics technology and related education. GetGenome promotes open science principles to ensure scientific research benefits everyone.

GetGenome believes that genomics technology and genomics-related education should be available to all and has developed a bottom-up concept to empower individuals.

GetGenome prodoces a quarterly Newsletter, which can be accessed here.



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BLUEBERRIES BEWARE: POWDERY MILDEW SPREADING ACROSS THE

GLOBE

MICK KULIKOWSKI, CALS NEWS, 8 JANUARY 2025



A new North Carolina State University study pinpoints the worldwide spread of a fungus that taints blueberry plants with powdery mildew, a disease that reduces blueberry yield and encourages the use of fungicides to combat disease spread. The findings could help blueberry growers predict, monitor and control the spread of powdery mildew.

The study shows that the fungus, *Erysiphe vaccinii*, has in the last 12 years or so spread from its point of origin in the eastern United States to multiple continents.

"We're watching this global spread happen right now, in real time," said Michael Bradshaw, assistant professor of plant pathology at NC State and the corresponding author of <u>a paper describing the research</u>.

As its name suggests, powdery mildew disease causes a white, powdery substance to cover host plants, stealing nutrients and retarding photosynthesis while keeping the host alive. Different species of this fungus affect different plants; wheat, hops, grapes and strawberries, among other plants, have been detrimentally affected by powdery mildew.

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"There are other closely related powdery mildews that affect plants like wild berries or eucalyptus, but these are genetically different from the ones spreading across the world on blueberries," Bradshaw said.

In the study, Bradshaw and his colleagues examined historic and modern plant leaves plagued by powdery mildew. The collection includes 173 samples from North America, Europe, Africa and Asia; one sample analysed from a North American herbarium was collected over 150 years ago, while the foreign samples were all collected within the past five years. In this study, powdery mildew was first spotted outside North America on a farm in Portugal in 2012, as noted by a co-author of Bradshaw's who was employed by a major berry company.

The researchers performed genetic testing on the fungal samples to trace the history and spread of powdery mildew disease. Interestingly, none of the old specimens have the same genetic makeup, or genotype, as the specimens currently spreading throughout the world.

The study showed that the disease originated in the eastern United States and was set loose globally in two different introductions. One strain of E. vaccinii found its way to China, Mexico and California, while a different strain wound up in Morocco, Peru and Portugal. Bradshaw thinks humans are responsible for the spread as nursery plants traveled to foreign shores.

"This is a hard organism to control," Bradshaw said. "If you're sending plant material across the world, you're likely spreading this fungus with it."

Interestingly, the study also showed that the E. vaccinii fungus found in blueberries in other countries appears to solely reproduce asexually; both sexual versions of the fungus are not required in reproduction, whereas the fungus reproduces sexually and asexually in the United States.

The study also worked with a large company and farmers to provide an estimate of the global cost of powdery mildew to blueberries, reflecting the cost of spraying fungicide to prevent or reduce powdery mildew. The study estimates a cost range of between \$47 million and \$530 million annually to the global blueberry industry.

Finally, the study provides some early warning signals to important blueberry producing areas, like the U.S. Pacific Northwest. Conditions there are ripe for powdery mildew to take hold and spread, but the disease has not found its way there yet.

"Disease spread could also be impacted by agricultural conditions," Bradshaw said. "Some areas that grow blueberries in tunnels, or enclosed areas, seem to have worse disease outcomes than areas that grow blueberries outdoors without any covering, like in North Carolina."

Bradshaw added that the researchers utilised a useful tool that can help identify *E. vaccinii* strains to aid farmers and other researchers.

"It's difficult to identify the fungus that causes powdery mildew in blueberries, so we input our data in a public database developed at NC State by a co-author, Ignazio Carbone. This platform allows growers to enter their data and learn which specific strain is in their fields," Bradshaw said. "That's important because understanding the genetics can warn farmers about which strain they have, whether it is resistant to fungicides, and how the disease is spreading, as well as the virulence of particular strains."

RESEARCHERS EXPLORE BREAKTHROUGH APPROACH TO COMBAT DEVASTATING CITRUS GREENING DISEASE

BRAD BUCK, UNIVERSITY OF FLORIDA NEWS, 8 JANUARY 2025

Scientists at the University of Florida are testing a new type of citrus tree that can fight off the tiny insects responsible for citrus greening. While the genetically modified tree has only been tested so far in the lab and the greenhouse, it is one of the most promising discoveries to date in a challenge that has plagued growers, researchers and consumers as Florida's citrus industry has plummeted over the past two decades.

The approach involves inserting a gene into a citrus tree that produces a protein that can kill baby Asian citrus psyllids, the bugs that transmit the greening disease. That gene normally occurs in a soilborne bacterium called *Bacillus thuringiensis* (Bt). This gene provides instructions for the new citrus tree on how to make this protein. Thus, when you put the gene into the tree, the plant produces the protein that kills psyllids.

While this approach can kill baby psyllids, UF/IFAS scientists are close to finding a solution to control the adult pests. "We are trying to deploy a biotechnological solution that is sustainable, easy for growers to deploy and replaces the need for spraying insecticides," said Lukasz Stelinski, an entomology professor at the UF/IFAS Citrus Research and Education Center. "That can't be done completely with the current Bt trees and thus it might require some additional, albeit reduced, insecticide spraying for adults, for example."

So far, scientists have developed the modified tree in the lab and the greenhouse. Now, they must prove this method works in the field – and they're still a few years away from perhaps reaching that conclusion, Stelinski said. They hope to begin testing the trees in about a year.

Since it was reported in Florida in 2005, greening, also known as Huanglongbing, or HLB, has damaged most of the citrus trees and the fruit they bear, around the state, leaving growers and scientists seeking answers to the disease.

UF receives funding from the U.S. Department of Agriculture for citrus greening research, which plays a key role in advancing and accelerating breakthroughs. Through the new research, scientists have found that the tree is protected because all juvenile psyllids that feed on the tree are killed, Stelinski said.

"A citrus tree that produces its own potent defense against the Asian citrus psyllid by preventing this insect from reproducing would reduce or possibly eliminate vector populations," he said. "In terms of stopping HLB, this approach could curtail the ability of an otherwise very effective vector from spreading the pathogen."

Before UF/IFAS scientists started this research a few years ago, they knew that certain Bt proteins could kill other sap-sucking insects, but none were known to kill Asian citrus psyllids.

This protein kills psyllids. It binds to specific receptors on the gut wall, causing pores to form. This disrupts the insect cells on the gut wall, ultimately killing the insect.

In their experiments, scientists at CREC inserted a gene from Bt into citrus trees. The gene yields a protein in the phloem -- the vascular part of a leaf where the psyllid feeds. Ultimately, that protein protects the tree from the psyllid and therefore, from citrus greening.

Bryony Bonning, an eminent scholar and entomology professor on the main UF campus in Gainesville, led the research to identify the bacterial proteins that kill psyllids.

In the most recently published study, UF/IFAS researchers found that the protein derived from Bt can kill the vast majority of the psyllids in their earliest stages. Additionally, no new adults can emerge on the tree, so adults laying eggs on these plants will not perpetuate the population.

Adult psyllids remain an issue that scientists hope to solve in future research. For now, they're working on controlling the baby psyllids on citrus trees.

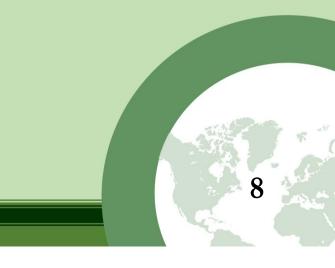
"Given the widespread use of Bt proteins for protection of other crops against insect pests, we think we're on the right track for control of the Asian citrus psyllid," he said. "The next step is to prove this method works in the field, so that citrus growers everywhere will no longer have to contend with the insect that transmits this deadly disease. The next stage is to grow these trees in the ground into a more mature stage under natural field conditions."

CURRENT VACANCIES

No current vacancies.

ACKNOWLEDGEMENTS

Thanks to Grahame Jackson, Greg Johnson, Alessandra Villani for contributions.



COMING EVENTS

International Symposium on Plant Pathogenic Sclerotiniaceae - BotryScleroMoni 2025. Joint meetings of XIX International *Botrytis* Symposium, XVII International *Sclerotinia* Workshop, and II International *Monilinia* Workshop 25 May – 30 May, 2025 Thessaloniki, Greece Website: <u>botryscleromoni.com</u>

Australasian Plant Pathology Society Conference 26 May – 28 May, 2025 International Convention Centre at Darling Harbour, Sydney, Australia Website: <u>www.apps2025.org</u>

14th Conference of the European Foundation for Plant Pathology (EFPP) 2 June – 5 June, 2025 Uppsala, Sweden

Website: <u>www.efpp2025.com</u>

XVII Working Group "Biological and integrated control of plant pathogens." From single microbes to microbiome targeting One Health. 11 June – 14 June, 2025

University of Torino, Torino, Italy Contacts: Davide Spadaro and Monica Mezzalama Email: <u>iobc2025@symposium.it</u> Website: <u>www.iobctorino2025.org</u>

17th International Cereal Rusts and Powdery Mildews Conference

15 June – 20 June, 2025 Vancouver, Canada Website: <u>icrpmc2025.ca</u>

International summer school: "Plant Pathogenomics for Sustainable Future Food" 23 June – 27 June, 2025 Bologna, Italy Website: www.2p4s2f.com

17th Congress of the Mediterranean Phytopathological Union - New phytopathology frontiers of research and education for plant health and food safety 7 July – 10 July, 2025 Ciheam-Bari, Italy Contact and Email: Anna Maria D'Onghia <u>mpu2025@iamb.it</u> Website: <u>www.mpunion.org</u>

13th International Workshop on Grapevine Trunk Diseases 21 July – 25 July, 2025

Ensenada, Baja California, México Contact and Email: Rufina Hernández <u>13iwgtd@cicese.mx</u> Website: <u>13iwgtd.cicese.mx</u>

Plant Health 2025

2 August – 5 August, 2025 Honolulu, Hawaii Website: www.apsnet.org/meetings/annual/PH2025/Pages/defa ult.aspx

Plant Pathology 2025

9 September – 11 September, 2025 Nottingham, UK Contact and email: Richard Oliver <u>meetings@bspp.org.uk</u> Website: <u>www.bspp.org.uk/conference-info-plant-</u> <u>pathology-2025-ppath2025-and-early-careers-plant-</u> pathology-2025-ecpp2025/

Conference of the IOBC/WPRS Working Group "Integrated Protection in Viticulture"

13 October – 15 October, 2025 Mikulov, Czech Republic Website: <u>event.fourwaves.com/ipvc/pages</u>

14th Arab Congress of Plant Protection Sciences

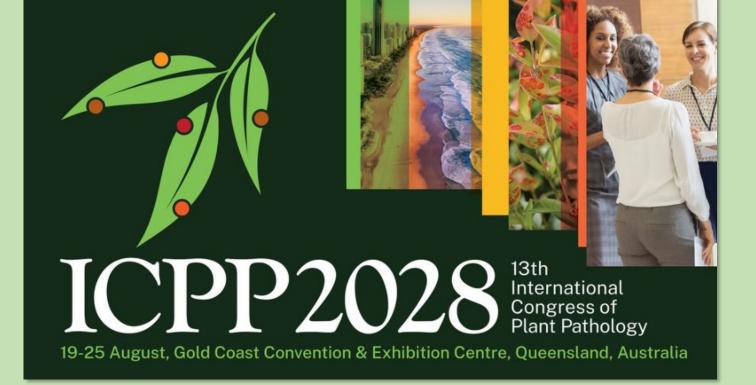
3 November – 7 November, 2025 Algeria city, Algeria Contact and Email: <u>info@acpp-aspp.com</u> Website: <u>acpp-aspp.com</u>

International Society for Plant Pathology

8th International Bacterial Wilt Symposium (IBWS) 22 March – 26 March, 2026 Wageningen, the Netherlands Website: <u>event.wur.nl/ibws2026</u>

13th International Congress of Plant Pathology 2028

19 August – 25 August, 2028 Gold Coast, Queensland, Australia Website: <u>www.icpp2028.org</u>



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INTERNATIONAL SOCIETY FOR PLANT PATHOLOGY (ISPP)

WWW.ISPPWEB.ORG

The ISPP List is an e-mail list server which broadcasts messages and announcements to its subscribers. Its goal is to facilitate communication among members of the International Society for Plant Pathology and its Associated Societies. Advertised vacancies in plant pathology and ISPP Newsletter alerts are also sent to members of the ISPP List.

In accordance with the guidelines and recommendations established by the new EU General Data Protection Regulation 679/2016 (GDPR), the International Society for Plant Pathology has created a <u>Privacy Information</u> <u>Notice</u> containing all the information you need to know about how we collect, use and protect your personal data. This policy explains when and why we collect personal information about our users, how we use it, the conditions under which we may disclose it to third parties, how we keep it safe and secure and your rights and choices in relation to your personal information.

Should you need further information please contact business.manager@issppweb.org







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