

July 2023 Committee Report to the ISPP Executive and Council ISPP Committee on Plant Virus Epidemiology (ICPVE)

Subject Matter Committee, International Committee for Plant Virus Epidemiology (ICPVE)

Established: Committee established, 1978. First Symposium on 28-31 July, 1981, Symposia held every three years.

Web address for SMC. <http://www.isppweb.org/ICPVE/>

ICPVE Website coordinator: Peter Williamson

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Background and Introduction to the ICPVE

The International Committee for Plant Virus Epidemiology (ICPVE) is a subject matter committee of the International Society for Plant Pathology (ISPP) founded in 1978 in the United Kingdom, for worldwide development of plant pathology. ICPVE, was started as an initiative of Prof. Mike Thresh (NRI, University of Greenwich, UK) at the Third ISPP Congress held in Munich, Germany in 1978, when he was one of the UK representatives on the ISPP Council. This led to the first Plant Virus Epidemiology Symposium at Oxford, UK in 1981 with financial support from the Association of Applied Biologists and the Federation of British Plant Pathologists (now the British Society of Plant Pathology). Since formation, the ICPVE has conducted fifteen International Symposia on Plant Virus Epidemiology (ISPVE) in locations throughout the world. The Committee focuses on all aspects related to the epidemiology of plant viruses at the field and molecular level, including virus ecology and evolution, vector ecology, etiology, diagnostics and surveillance, virus-vector interactions, modeling plant virus epidemics, disease control and climate change.

ISPVE Symposia

An International Symposium on Plant Virus Epidemiology (ISPVE) is held every three years, with approximately 150-200 attendees per symposium.

1. UK, Oxford, 28 - 31 July 1981
2. Australia, Corowa, 25 - 27 August 1983

3. USA, Orlando, 6 - 8 August 1986
4. France, Montpellier, 1 - 5 September 1989
5. Italy, Valenzano (Bari), 27-31 July 1992
6. Israel, Jerusalem, 23 - 28 April 1995
7. Spain, Aguadulce (Almeria), 11 - 16 April 1999
8. Germany, Ascherleben, 12 - 17 May 2002
9. Peru, Lima (CIP), 4 - 7 April 2005
10. India, Hyderabad (ICRISAT), 15 - 19 October 2007
11. USA, Ithaca (Cornell University), 20 - 24 June 2010
12. Tanzania, Arusha (IITA), 28 January – 1 February 2013
13. Avignon, France (INRA), 6-10 June, 2016
14. Seoul, Republic of Korea, 13-17 May, 2019
15. Madrid, Spain (CSIC), 6-8 June, 2022

Publications:

Peer-Reviewed Special Issues including selected contributions from research presented at the International Symposia on Plant Virus Epidemiology (ISPVE).

1. Fereres, A. J. M. Thresh, M.E. Irwin (Guest Editors). 2000. Plant virus epidemiology: Challenges for the twenty-first century – Virus Research 71 (1-2): 1-268. Elsevier. ISSN 0168-1702.
2. Thresh, J. M., R.A.C. Jones, T. Kuehne (Guest Editors). 2004. Plant Virus Epidemiology: First steps into the New Millennium. Virus Research 100 (1): 1-152. Elsevier. ISSN 0168-1702.
3. Thresh, J. M., A. Fereres, R.A.C. Jones and P.Lava Kumar (Guest Editors). 2009. Plant Virus Epidemiology: Controlling epidemics of emerging and established plant viruses - the way forward. Virus Research 141 (2): 111-267. Elsevier. ISSN 0168-1702.
4. Thresh, J. M., A. Fereres, N. Bosque-Perez, U. Melcher, J. Valkonen (Guest Editors). 2011. Plant Viruses and Virus Vectors: Exploiting Agricultural and Natural Ecosystems. Virus Research 159 (2): 83-222. Elsevier. ISSN 0168-1702.
5. Bosque-Pérez, N.A., J.M. Thresh, R.A.C. Jones, U. Melcher, A. Fereres, P.L. Kumar, S.M. Gray, H. Lecoq. (Guest Editors). 2014. Plant Virus Epidemiology Symposium Ecology, evolution and control of plant viruses and their vectors. Virus Research 186: 1-162.
6. Michael J Jeger, Nilsa Bosque-Perez, Alberto Fereres, Adrian Fox, Stewart Gray, Michael E. Irwin, Roger Jones, Herve Lecoq, Carolyn Malmstrom, Peter Palukaitis (Guest Editors). 2017. Plant Virus Epidemiology. Virus Research, 241: 1-25
7. M.J. Jeger, A. Fereres, K. Mauck, W.M. Wintermantel (Guest Editors). 2020. Plant Virus Epidemiology. Virus Research <https://www.sciencedirect.com/journal/virus-research/special-issue/10ZPB3WGDPD>.
8. M.J. Jeger, A. Fereres, K. Mauck, C. Malmstrom, W.M. Wintermantel (Guest Editors). 2023. Plant Virus Epidemiology. Phytopathology (in preparation).

Specific Events During the Reporting Period (2018-2023)

14th International Symposium on Plant Virus Epidemiology held in Seoul, Republic of Korea, 13-17 May, 2019

The 14th International Plant Virus Epidemiology Symposium was held in Seoul, Korea, and hosted by Dr. Peter Palukaitis and Ju-Yeon Yoon. The symposium was attended by 123 participants from 33 countries, and included 12 keynote speeches, 53 oral presentations, and 60 poster presentations. The lectures and presentations provided valuable information regarding recent plant virus epidemiology research from throughout the world. In addition to the meeting, the attendees were treated to a field trip to a Korean folk village and to the Suwon Hwaseong Fortress, providing an opportunity to experience the history and culture of Korea. The ICPVE and meeting organizers are grateful for the support of the Korean Rural Development Administration, and the Korean Society of Plant Pathology who generously provided sponsorship.

Special Issue of Virus Research, 2020

Following the International Symposium on Plant Virus Epidemiology (ISPVE) in Seoul, held in June 2019, selected speakers from the symposium were invited to submit manuscripts for a special issue of the peer-reviewed journal, *Virus Research*, based on the subject matter and quality of their presentations. The ICPVE has published a special peer-reviewed issue highlighting the research presented at the triennial ISPVE in *Virus Research* for many years. This special issue included 18 manuscripts and a forward by the editorial team.

15th International Symposium on Plant Virus Epidemiology held in Madrid, Spain, 6-8 June, 2022

The 15th International Symposium on Plant Virus Epidemiology was held in Madrid, Spain at the CSIC campus from 5-8 June, 2022, and was hosted by Dr. Alberto Fereres, past chair of International Committee for Plant Virus Epidemiology. The symposium was attended by 152 participants from 24 countries on five continents, and included 7 keynote speeches, 61 oral presentations, and 77 poster presentations. The lectures and presentations provided valuable information regarding recent advances in plant virus epidemiology research from throughout the world and opportunities to establish new and renewed connections. The International Committee on Plant Virus Epidemiology and meeting organizers are grateful to the CSIC in Madrid for hosting the symposium and to the many sponsors of the symposium.

Special Issue of Phytopathology, 2023

Following the International Symposium on Plant Virus Epidemiology (ISPVE) in Madrid, held in June 2022, selected speakers from the symposium were invited to submit manuscripts for a special issue of the peer-reviewed journal, *Phytopathology*, based on the subject matter and quality of their presentations. The ICPVE has published a special peer-reviewed issue highlighting the research presented at the triennial ISPVE in *Virus Research* for many years. This is the first year the special issue will be published in *Phytopathology*. The publication process is lengthy and final acceptance of the last few manuscripts is anticipated in July 2023 with publication of all manuscripts online as well as in a hard copy volume. The special issue included 15 papers including an editorial.

Selection of the site for the 16th ISPVE:

Three sites presented excellent proposals to host the next International Symposium on Plant Virus Epidemiology (ISPVE) during the ICPVE business meeting held online following the ISPVE in Madrid in June 2022. Following the presentations, Sao Paulo Brazil was selected as the site for the next ISPVE, which will be held in 2025. A planning committee has been

established and a scientific committee is in the process of being established. The website for the ISPVE Sao Paulo 2025 is expected to be online by July 2023, prior to the ICPP in Lyon, France.

Changes to ICPVE membership:

The ICPVE modified its representation during 2022 following the ISPVE in Madrid to better reflect geographic differences and new subject matter that now includes vectored bacterial diseases. This change includes significant changes to representation from Asia that allows more complete representation from the different regions of the broad Asian continent. ICPVE now requires three Asian representatives with at least one each from East Asia, South Asia, and West Asia/Middle East due to the diverse geography of size of Asia. Other continents continue to have two representatives each. Current committee membership includes two representatives from North America (both USA), Europe (UK, Spain), Africa (Nigeria, South Africa), Australasia/Oceania (both Australia), South America (Colombia, Peru), two from East Asia (both from Korea), one from South Asia (India), and one from West Asia/Middle East (Israel), along with the current chair from North America (USA).

Current Membership of the ICPVE (full contact information for committee members available at <https://www.isppweb.org/icpve/>)

William M. Wintermantel, *Current Chairman*
Lava Kumar, *Africa Representative*
Augustine Gubba, *Africa Representative*
Ju-Yeon Yoon, *East Asia Representative*
Eui-Joon Kil, *East Asia Representative*
Celia Chalam Vasimalla, *South Asia Representative*
Aviv Dombrovsky, *West Asia and Middle East Representative*
Roger Jones, *Australasia & Oceania Representative (Past Chairman)*.
Piotr Trebicki, *Australasia & Oceania Representative*
Alberto Fereres, *Europe Representative (Past Chairman)*'
Adrian Fox, *Europe Representative*
Kerry Mauck, *North America Representative*
Carolyn M. Malmstrom, *North America Representative*
Jan F. Kreuze, *South and Central America and Caribbean Representative*
Wilmer J. Cuellar, *South and Central America and Caribbean Representative*
Cecilia Tamborindeguy, *At Large Representative (Vectored Bacterial Diseases)*

The ICPVE has organized and is chairing two special sessions at ICPP in Lyon, France.

C4.4 - The ecology of plant viruses and epidemiology of the diseases they cause: How fundamental ecological research in natural systems can inform and advance plant pathology

This session is organized and chaired by Carolyn M. Malmstrom of the ICPVE (Michigan State University, USA, and Mark Paul Rivarez of the Phillipines. The session will be held on Wednesday, 23 August, 2023 from 10:30 am to 12:30 pm and will include presentations by six speakers.

C8.4 - Re-emergence of tobamoviruses threatening global vegetable production. This session is organized and chaired by Kai-Shu Ling, USDA-ARS, Charleston, SC, USA and William M. Wintermantel, USDA-ARS, Salinas, CA, USA, both members of the ICPVE. The session will be held on Thursday, 24 August from 18:00-20:00, and will include six speakers.

Members of the ICPVE in attendance at the ICPP in Lyon will meet during the congress as has been the tradition of the committee at ICPP congresses.

Submitted by William M. Wintermantel, Chairman, ICPVE, 28 June, 2023.