

# **International Symposium on Virus Diseases of Important Crop**

## **Date**

2-5 September 2019

## **Venue**

International Conference Hall, 10th Floor, College of Agriculture and Natural Resources

National Chung Hsing University (NCHU), Taichung, Taiwan

## **Convener**

Prof. Shyi-Dong Yeh, Department of Plant Pathology, NCHU

## **Organizer**

Prof. Fuh-Jyh Jan, Dean of College of Agricultural and Natural Resources, NCHU

## **Co-organizers**

Prof. Yuh-Kun Chen, Chairman of Department of Plant Pathology, NCHU

Prof. Jeremy J.W. Chen, Director of Biotechnology Center, NCHU

Prof. Jun-Yi Yang, Director of Graduate Institute of Biochemistry, NCHU

Prof. Tsung-Chi Chen, Professor of Department of Biotechnology, Asia University

## **Sponsors**

College of Agriculture and Natural Resources, NCHU

Department of Plant Pathology, NCHU

Biotechnology Center, NCHU

Graduate Institute of Biochemistry, NCHU

Ministry of Science and Technology Research Promotion Center of Life Sciences

## Objective

In the recent decade, new sequencing technologies promote the exploration of viruses in their natural hosts without the need for virus isolation and gene cloning. The convenient international trade facilitates the global migration of viruses and their vectors via the export/import of viruliferous propagative materials or products of crops. The agricultural industries are facing the challenge of new emerging viruses. Besides, plant viruses cannot be efficiently controlled by chemicals and their affected areas are usually rapidly expanded by vector insects. It is urgent to take measures to reduce the damage caused by plant virus diseases for the purpose of mass production and a stable supply of agricultural products. In this symposium, the latest research achievements on new emerging plant viruses and the control measures for important virus diseases in East Asian countries will be emphasized, aiming at promoting academic exchange and collaboration among related researchers.

## Tentative Program

**Monday, September 2: Arrival at the Splendor Hotel in Taichung**

### Symposium

Tuesday, September 3		
08:30~09:00	Registration	
09:00~09:30	Opening Ceremony & Group Photo	
09:30~10:10	<b>Opening Keynote Speech</b> Prof. Savithramma Dinesh-Kumar (USA) <i>Emerging perspectives on NLR immune receptor-mediated immunity to viruses</i>	Moderator: Prof. Yeh, Shyi-Dong
10:10~10:30	Coffee Break	
<b>Session 1: Emerging Viruses and Epidemiology</b> Moderator: Prof. Wong, Sek-Man		
10:30~11:00	<b>Keynote Speech</b> Prof. Iwai, Hisashi (Japan) <i>Potyvirus causing passionfruit malformation in the Western Pacific region</i>	

11:00~11:20	Prof. Chen, Yuh-Kun (Taiwan) <i>New emerging virus diseases of cucurbits in Taiwan</i>
11:20~11:40	Dr. Okuda, Mitsuru (Japan) <i>Emergence and spread of tospovirus diseases in Japan</i>
11:40~12:00	Dr. Hoang Anh Ta (Vietnam) <i>Present status of rice virus diseases in Vietnam and their control</i>
12:00~13:30	Lunch
<b>Session 2: Virus Characterization and Detection</b> Moderator: Prof. Iwai, Hisashi	
13:30~14:00	<b>Keynote Speech</b> Prof. Wong, Sek-Man (Singapore) <i>Unique genome structure of Hibiscus latent Singapore virus</i>
14:00~14:20	Prof. Chang, Chin-An (Taiwan) <i>Development and application of multiplex detection technology of passionfruit viruses</i>
14:20~14:40	Prof. Jan, Fuh-Jyh (Taiwan) <i>Identification and molecular characterization of a new cucurbit-infecting tobamovirus in Taiwan</i>
14:40~15:00	Dr. Deng, Ting-Chin (Taiwan) <i>Maize lethal necrosis disease (MLND) in Taiwan</i>
15:00~15:20	Prof. Ha Viet Cuong (Vietnam) <i>Detection and Identification of tospoviruses in Vietnam</i>
15:20~15:40	Coffee Break
<b>Section 3: Molecular Virology</b> Moderator: Prof. Suzuki, Nobuhiro	
15:40~16:10	<b>Keynote Speech</b> Prof. Yeh, Shyi-Dong (Taiwan) <i>Current advances on control of plant virus diseases by cross protection</i>
16:10~16:30	Dr. Lin, Na-Sheng (Taiwan) <i>MiR398 plays a regulatory role in Bamboo mosaic virus infection</i>
16:30~16:50	Prof. Tsai, Ching-Hsiu (Taiwan) <i>The recent discoveries of the host factors involved in Bamboo mosaic virus replication</i>
16:50~17:10	Prof. Hsu, Yau-Heiu (Taiwan) <i>Production of epitope vaccines using Bamboo mosaic virus platform</i>

17:10~17:30	Prof. Chiang, Chu-Hui (Taiwan) <i>Plant viral vector expressed edible vaccine of American cockroach hypoallergen prevents roach-allergic asthma</i>
18:30~21:00	Welcome Dinner
<b>Wednesday, September 4</b>	
08:30~09:00	Registration
<b>Section 4A: Virus Resistance and Control Measures</b> Moderator: Prof. Savithamma Dinesh-Kumar	
09:00~09:30	<b>Keynote Speech</b> Prof. Suzuki, Nobuhiro (Japan) <i>Dicer functions transcriptionally and post-transcriptionally in a multilayer antiviral defense</i>
09:30~09:50	Dr. Yeh, Hsin-Hung (Taiwan) <i>Plant A20/AN1 proteins play important roles in salicylic acid-mediated antiviral immunity</i>
09:50~10:10	Prof. Tsai, Wen-Shi (Taiwan) <i>Identification of squash resistance against leaf curl begomovirus in Taiwan</i>
10:10~10:30	Coffee Break
<b>Section 4B: Virus Resistance and Control Measures</b> Moderator: Prof. Wei, Taiyun	
10:30~10:50	Dr. Tomitaka, Yasuhiro (Japan) <i>Virus control using attenuated virus strains</i>
10:50~11:10	Prof. Chen, Tsung-Chi (Taiwan) <i>Development of recombinant vaccines against potyviruses and orthospoviruses</i>
11:10~11:30	Prof. Lin, Shih-Shun (Taiwan) <i>The function of P1/HC-Pro in gene silencing suppression</i>
11:30~11:50	Dr. Thi Bich Ngoc Nguyen (Vietnam) <i>Virus diseases on passion fruit in Vietnam</i>
11:50~12:10	Prof. Wei, Jing (China) <i>Synergism between Rice stripe mosaic virus and Rice gall dwarf virus enhances their insect vector transmission</i>
12:10~13:30	Lunch
13:30~17:00	Field Trip: Cultivation and Virus Diseases of Orchid

<b>Thursday, September 5</b>	
08:30~09:00	Registration
<b>Section 5: Virus Detection and Epidemiology</b> Moderator: Prof. Chen, Yuh-Kun	
09:00~09:30	<b>Keynote Speech</b> Prof. Tsuda, Shinya (Japan) <i>Emergence and management of viruses and viroids in 21st century, Japan</i>
09:30~09:50	Dr. Cheng, Ying-Huey (Taiwan) <i>Occurrence of tomato leaf curl disease-associated recombinant begomoviruses in Taiwan</i>
09:50~10:10	Dr. Chen, Chin-Chih (Taiwan) <i>Development and application of Plantago asiatica mosaic virus (PIAMV) detection reagents on quarantine and inspection for imported lily bulbs in Taiwan</i>
10:10~10:30	Coffee Break
<b>Section 6: Virus-Insect Vector Interactions</b> Moderator: Prof. Tsuda, Shinya	
10:30~11:00	<b>Keynote Speech</b> Prof. Wei, Taiyun (China) <i>Molecular mechanisms enabling the transmission of rice reoviruses by insect vectors</i>
11:00~11:20	Dr. Huang, Li-Hsin (Taiwan) <i>Occurrence and retention of Tomato chlorosis virus by Bemisia tabaci on tomato in Taiwan</i>
11:20~11:40	Prof. Tsai, Chi-Wei (Taiwan) <i>The competition of two tomato begomoviruses in Taiwan from the aspect of vector transmission</i>
11:40~12:00	Prof. Zhang, Xiaofeng (China) <i>The replication and transmission of a rice rhabdovirus in its insect vector, leafhopper</i>
12:00~12:10	Closing Remarks
12:10~13:30	Lunch
13:30~17:00	Field Trip: Cultivation and Virus Diseases of Papaya & Passionfruit
18:30~21:00	Farewell Dinner