PROGRAM

SEPTEMBER 7, 2015 (MONDAY)

09:00-09:40 Opening Session

Emcee: Mr. Ronald G. Mangubat
Information Officer, FFTC

Welcome Remarks
Dr. Yu-Tsai Huang
Director, Food and Fertilizer Technology Center

Opening Remarks
Dr. Nguyen Van Hoa
Director General, Southern Horticultural Research Institute, Vietnam

Dr. Junne-Jih Chen
Director General, Taiwan Agricultural Research Institute

Introduction of the Speakers
Mr. Ronald G. Mangubat

Group Photo

09:40-10:00 Coffee Break and Networking

Keynote Session

Moderator: Dr. George Kuo, FFTC

10:00-10:45 Thirty One Years of Research and Development in the Vine Cacti Pitaya Cultivation in Israel (Part I)
Dr. Yosef Mizrahi, Department of Life Sciences, Ben-Gurion University of the Negev, Israel

10:45-11:00 Break

11:00-11:45 Thirty One Years of Research and Development in the Vine Cacti Pitaya Cultivation in Israel (Part II)
Dr. Yosef Mizrahi, Department of Life Sciences, Ben-Gurion University of the Negev, Israel

11:45-12:00 Q&A

12:00-13:20 Lunch Break
Session I

Moderator: Dr. Kan-Shu Chen, Fengshan Tropical Horticultural Experiment Branch, TARI

Mr. Shang-Han Tsai, Department of Plant Industry, National Pingtung University of Science and Technology, Taiwan

13:50-14:20 Development of Integrated Crop Management Systems for Pitaya in Taiwan
Dr. Yi-Lu Jiang, Department of Horticulture, National Chiayi University, Taiwan

14:20-14:50 Pitaya Reproductive Phenology in Relation to Production System
Dr. Wendy Wen-Ju Yang, Department of Horticulture and Landscape Architecture, National Taiwan University

14:50-15:10 Off-Season Flowering Treatment by Lighting Red Pulp Dragon Fruit in Gia Lam District, Hanoi, Vietnam
Dr. Nguyen Quoc Hung, Fruit and Vegetable Research Institute, Viet Nam

15:10-15:30 Coffee Break

Session II

Moderator: Dr. Masratul Hawa Mohd

15:30-15:50 Production Potential of Pitaya in the U.S. Virgin Islands
Dr. Thomas W. Zimmerman, University of the Virgin Island Agricultural Experiment Station, Kingshill, VI 00850, U.S.A.

15:50-16:10 Status of Dragon Fruit Cultivation and Marketing in Indonesia
Mr. Irwan Muas, Indonesian Tropical Fruit Research Institute

16:10-16:30 Status of Dragon Fruit Production in Malaysia
Dr. Ahmad Hafiz Bin Baharom, Horticulture Research Centre, Malaysian Agricultural Research and Development Institute

16:30-16:50 Pitaya Production and Marketing Scenario in Myanmar: Current Status and Challenges
Mr. Zaw Htun Myint, Department of Agriculture, Ministry of Agriculture and Irrigation, Myanmar

16:50-17:10 Dragon Fruit Production and Marketing in the Philippines: Its Status, Constraints and Prospects
Dr. Maura Luisa S. Gabriel, College of Agriculture, Food and Sustainable Development, Mariano Marcos State University, Philippines
17:10-1730  Dragon Fruit: The New Money Crop in the Coastal Areas of Northwestern Cagayan  
Ms. Marilou B. Agaid, Department of Agriculture, Regional Field Office 02, Northern Cagayan Experiment Station, Philippines

SEPTEMBER 8, 2015 (TUESDAY)

08:25  Shuttle buses leave separately from Garden Villa, and Rainbow Bazaar (彩虹市集) near Exit 2 of Taiwan High Speed Rail Zuoying Station

Session III
Moderator: Dr. Ya-Chun Chang

09:00-09:30  Fungal Diseases of Pitaya in Malaysia  
Dr. Masratul Hawa Mohd, Department of Plant Pathology, Universiti Sains Malaysia

09:30-10:00  Diseases of Dragon Fruit in Thailand: Incidence and Management Strategies  
Dr. Pornpimon Athipunyakom, Plant Protection Research and Development Office, Department of Agriculture, Thailand

10:00-10:30  Pathogen Identification and Management of Pitaya Canker and Soft Rot in Taiwan  
Ms. Chu-Ping Lin, Taiwan Agricultural Research Institute

10:30-10:50  Coffee Break

Session IV
Moderator: Dr. Pornpimon Athipunyakom

10:50-11:20  Viral Diseases of Pitaya and Other Cactaceae Plants  
Dr. Ya-Chun Chang, Department of Plant Pathology and Microbiology, National Taiwan University

Dr. Nguyen Thanh Hieu, Southern Horticultural Research Institute, Vietnam

11:50-12:20  Study of Insect Pests and Development of Their Control Measures on Dragon Fruit  
Dr. Le Quoc Dien, Southern Horticultural Research Institute, Vietnam

12:20-13:30  Lunch Break
Session V

Moderator: Dr. Maura Luisa S. Gabriel

13:30-13:50  Sustaining and Improving Pitaya Production in Abiotic Stress Environments: A Case Study in Penghu, Taiwan
Dr. Yu-Chun Chu, Kaohsiung District Agricultural Research and Extension Station, Taiwan

Dr. Nguyen Van Hoa, Southern Horticultural Research Institute, Vietnam

14:25-15:00  Value Chain Initiatives for Dragon Fruit (Pitaya) Market Development
Dr. John M. Campbell, New Zealand Institute of Plant and Food Research Limited

15:00-15:20  Coffee Break

15:20-16:20  Wrap-up Discussion
(Q&A, and recommendations on research focus and potential collaboration)

Dr. Yosef Mizrahi
Dr. John Campbell
Dr. Nguyen Van Hoa
Dr. Yi-Lu Jiang
Dr. Maura Luisa S. Gabriel

16:20-16:30  Closing Remarks

Dr. Yu-Tsai Huang
FIELD TRIP PROGRAM

09:00 (Departure)
Depart from Garden Villa for Pingtung County, which is the focus of the day.

Pingtung County is located in the very southern tip of Taiwan. It is renowned for its marvelous scenery, majestic mountains and beautiful beaches. With a land area of over 2,775 km² (1,072 mi²) and a population of about 900,000, its economy is being dominated by agriculture and fishery industries, as well as tourism related to the largest national park in the country, Kenting National Park. The Maanshan Nuclear Power Plant located nearby South Bay in the county is Taiwan's third nuclear power plant and second largest in terms of generation capacity. About tropical and subtropical fruits; wax apple, pineapple, jujube, mango, lemon, star fruit, banana, and litchi are produced in the county. And pitaya is an emerging fruit that attracts young farmers, most of them with a virtual connection.

09:30-10:30 (Visit)
Ru-Yuan Fresh Fruit Orchard
1. Location: Wandan Township (22°37'14.5"N, 120°27'40.7"E)
2. Owner: Mr. Chao-Ju Hong, the first prize winner of the 2015 National Pitaya Contest for the red flesh category.
3. Main features: The very orchard produces red-flesh pitatya (Hylocereus costaricensis) for online ordering and home delivery. Thus, quality rather than quantity is all that matters. Two distant fields of the same orchard employ sod mulch (Portulaca quadrifida) for weed control, and wide spacing at 3 m between rows and 0.6 m between plants for easy field management. Both A-shaped and U-shaped steel frames are used to support plants. Much of the plants in the first field are derived from disease-free seedling stocks. And long scions (30-40 cm) are grafted on long stocks (100-120 cm) in the second field to induce early fruiting.

10:30-12:00 (Travel)
View FFTC, SOFRI and TARI video stories on board, and enjoy scenic views en route to Hengchun Township

12:00-13:30 (Lunch)
Nanbei Diving Restaurant at Hengchun Township

13:30-14:00 (Travel)
Enjoy scenic views en route to Checheng Township

14:00-15:30 (Visits)
Nan-Dao Pitaya Farm
1. Location: Checheng Township (22°03'23.9"N, 120°43'50.0"E)
2. Owner: Mr. Chun-Chin Fu
3. Main features: The farm grows red-flesh pitatya, mainly for export market. The farm employs temporary farm labors for pruning, bagging, harvesting and packing. When there is overproduction and the price of the produce is low, the harvested fruit is sliced, dehydrated and packed for valued-added products. The first field of the farm is established one year ago, and spaced at 120 cm x 270 cm. But the field is suffering from stem canker, likely because the source of planting materials was already afflicted with the disease. The second field is located near where mountain breezes are common, and
its spacing is smaller. Black mesh bags are used to wrap around growing fruits to prevent fruit flies, and Tyvek (DuPont protective material) sheet inserted inside to block sunlight. However, Tyvek sheet also has the drawback of preventing washout of nectar at the base of scale, thus offering environments favorable for the occurrence of sooty mold. Pitaya plants in the second field are also often damaged by gusting winds from the mountain during the northeast monsoon in the winter season.

**Lai’s Farm**
1. Location: Checheng Township (22°03'23.9"N, 120°43'50.0"E)
2. Owner: Mr. Ming-Te Lai, a septuagenarian leader for the area with a total of 25 hectares of pitaya
3. Main features: The farm is distinct for its close spacing, intensive management and high unit land yield for white flesh pitaya (*Hylocereus undatus*). Artificial lighting fixtures are installed for forcing culture, and natural windbreaks planted to prevent gusting winds from the mountain during the northeast monsoon.

**15:30-16:30 (Travel)**
Enjoy scenic views en route to Eluanbi Lighthouse

**16:30-17:00 (Visit)**
Eluanbi Lighthouse is located on the southernmost point of Taiwan. It is built between the Pacific Ocean and the Taiwan (Formosa) Strait, facing toward the Luzon Strait. Thus, the lighthouse has a splendid panorama.

**17:00-19:30 (Travel)**
Enjoy scenic views, sandwich box and snooze en route to Garden Villa