FINAL ANNOUNCEMENT

TROPICAL FRUIT PESTS AND DISEASES

25-27 September 2018 Le Méridien, Kota Kinabalu, Sabah, Malaysia www.itfnet.org/troped2018

Theme:

"Sustainable Solutions for Tropical Fruit Pests and Diseases"



Organized by:



In partnership with:

















Although tropical fruit production has been lower in 2017 compared to the last decade, FAO reports that countries have been increasing their areas of production in response to the increasing demand for tropical fruits. It is anticipated that growth would be positive in the coming years with continued and increasing demand for the commodity, which is also beginning to attain a significant share in the global agricultural trade. This has concurrently opened up new market opportunities and transformed the preferences of consumers for healthier, safer and fresher produce.

Like other horticultural crops, the incidences of pests and diseases are among the main factors that can impact sustainable tropical fruit production. Globalization, trade liberalization and expansion of the tourism industry create wide opportunities for networking and market growth. Paradoxically, these also create pathways for broader dispersion of pests and diseases from their geographical origins. Pests and diseases not only destroy total crop areas, but also reduce yields, affect quality and lower the market potential of tropical fruits and its products.

Harmonizing efforts at all levels as well as integrated approaches are necessary to curtail and mitigate the destructive effects of pests and diseases. Strict quarantine and regulatory measures should also be enforced at various entry points of countries to prevent introduction of new pests, diseases and further invasion. At farm level, smallholder farmers and growers should be trained to adopt good agricultural practices (GAP), integrated pests and diseases management, judicious use of chemicals and have a system of monitoring and surveillance. Research and development efforts have to be intensified and prioritized by national research institutes to find effective responses and management approaches. Public awareness and knowledge on the use of biological control methods and biotechnology tools for integrated pest management (IPM) also need to be promoted to assist in decision-making for the adoption of effective methods in the management of pests and diseases.

Cognizant of the above mentioned needs and challenges, the International Tropical Fruits Network (TFNet) through the support from the Malaysian Ministry of Agriculture (MOA) and partners Universiti Malaysia Sabah (UMS), the Centre for Agriculture and Bioscience International (CABI), the Department of Agriculture Sabah, the Malaysian Agricultural Research and Development Institute (MARDI) and Universiti Putra Malaysia (UPM), is organizing the International Conference on Tropical Fruit Pests and Diseases (TROPED 2018) to disseminate the existing expert knowledge on the mitigation and prevention of prevailing pests and diseases afflicting tropical fruits.

We are looking forward to your participation in TROPED 2018!

ORGANIZERS

Main Organizer: International Tropical Fruits Network (TFNet)

Support: Ministry of Agriculture and Agro-based Industry, Malaysia (MOA)
Partners: Biotechnology Research Institute, Universiti Malaysia Sabah (UMS)

Centre for Agriculture and Bioscience International (CABI)

Department of Agriculture (DOA), Sabah, Malaysia

Malaysian Agricultural Research and Development Institute (MARDI)

Universiti Putra Malaysia (UPM)

MAIN STEERING COMMITTEE

Chairman: Dato' Mohd Sallehhuddin bin Hassan (MOA)

Advisor: Mr. Yacob Ahmad (TFNet)

Co-Chairman 1: Ms. Dorothy Chandrabalan (TFNet)

Co-Chairman 2: Dr. Zarina Amin (UMS)

Treasurer: Ms. Hariyatul Asni Abdul Rani (TFNet)
Secretary: Ms. Noor Ba'ah Abdol Said (TFNet)
Members: Dr. A. Sivapragasam (CABI SEA)

Mr. Chong Tan Chun (DOA, Sabah) Dr. Pauziah Muda (MARDI)

Assoc. Prof. Dr. Nur Azura Adam (UPM)

SCIENTIFIC COMMITTEE

Head: Dr. Yew Chee Wei (UMS)

Members: Assoc. Prof. Dr. Azwan Awang (UMS)

Prof. Dr. Clemente Michael Wong Vui Ling (UMS)

Assoc. Prof. Dr. Vijay Kumar (UMS)

Dr. Zarina Amin (UMS)

Dr. Ruzaidi Azli Mohd Mokhtar (UMS)

Dr. Nur Athirah Yusof (UMS)

Dr. Noor Hydayaty Md. Yusuf (UMS)
Mr. Wilson Yong Thau Lym (UMS)
Prof. Abd. Rahman Milan (UMS)
Prof. Mohammad Mohd Lassim (UMS)
Dr. Mohd Selamat Madom (UMS)
Dr. Mohd Rakib Mohd Rashid (UMS)
Dr. Clament Chin Fui Seng (UMS)
Dr. Chong Khim Phin (UMS)
Mr. Muhammad Faheem (CABI)

Assoc. Prof. Dr. Nur Azura Adam (UPM)

Mr. Yacob Ahmad (TFNet)

SECRETARIAT

Head: Ms. Noor Ba'ah Abdol Said (TFNet)

Co-Head: Dr. Ruzaidi Azli Mohd. Mokhtar (BRI, UMS)
Members: Ms. Hariyatul Asni Abdul Rani (TFNet)

Mr. Arifurrahman Rusman (TFNet) Ms. Dorothy Chandrabalan (TFNet) Mr. Christian Anthony T. Cangao (TFNet) Ms. Halijah Hj Abdul Hamid (BRI, UMS) Ms. Azie Zarifah Abdul Aziz (BRI, UMS)

AIM

The International Conference on Tropical Fruit Pests and Diseases (TROPED 2018) is organized with the aim for expert knowledge sharing and networking on the various topics related to pests and diseases management of tropical fruits. The conference hopes to identify sustainable solutions for practitioners and industry players.



Photo by Nguyen Thanh Hieu, SOFRI

TARGET PARTICIPANTS

Government Agencies Researchers Commercial Growers Input Suppliers Exporters/Importers Students

IMPORTANT DATES

| 14 March | Call for Papers First Announcement Early Bird Registration Begins |
|--------------|---|
| 13 April | Second Announcement |
| 31 July | Early Bird Registration Ends |
| 10 August | Final Announcement |
| 31 August | Deadline of Abstracts |
| 20 September | Deadline of Full Papers |
| 25 September | Start of Conference |

REGISTRATION

| Category | Early Bird (Before 31 July 2018) | Regular (After 31 July 2018) | |
|--|-------------------------------------|---------------------------------|--|
| International Participants (Non-TFNet Members) | USD 450 | USD 500 | |
| International Participants (TFNet Members) | USD 350 | USD 400 | |
| Local Participants (Non-TFNet Members) | MYR 750 | MYR 900 | |
| Local Participants (TFNet Members) | MYR 600 | MYR 750 | |
| International Students | USD 100 | USD 200 | |
| Local Students | MYR 250 | MYR 350 | |
| Field trip | USD 50 (RM 200) | USD 50 (RM 200) | |

To register, visit www.itfnet.org/troped2018/registration.php or email troped@itfnet.org.

For participants intending to submit multiple papers, the following rates would apply:

- 1st paper: Advertised rates
- 2nd paper: 50% of registration fees
- 3rd paper and onwards: USD 50 (RM 200) for each paper

For participants intending to submit multiple posters, the following rates would apply:

- 1st poster: Advertised rates
- 2nd poster and onwards: a flat rate of USD 50 (RM 200)

Students are required to present their Student ID and/or passport during registration.



THEMATIC AREAS



1. New and Emerging Tropical Fruit Pests and Diseases



4. Advances in Biological Control Methods



2. Challenges and Opportunities in Biosecurity and Quarantine



 Advances in Biotechnology Research on Tropical Fruit Pests and Diseases



Plant Health, Soil Nutrition and Disease-free Planting Materials



Developments in Plant Protection: Emerging Trends and Capacity Requirements

GUIDELINES FOR SUBMISSION AND PRESENTATION

Abstracts should not exceed 300 words and it must clearly indicate the problem, objectives, research methods, results, conclusions and five key words describing the paper. Only abstracts submitted in English will be accepted. Once accepted, a full paper is required to be submitted for inclusion in the conference proceedings Deadline for abstract submissions is 31 August 2018. Kindly submit your abstracts to: troped@itfnet.org.

Full paper submissions must be 5–8 pages in length, A4 size. Font should be Arial size 12 and must include the paper title, author(s), affiliation(s), addresses, email addresses, abstract, keywords, relevant figures or pictures, and references. Deadline for full paper submissions is 20 September 2018. Kindly submit your full papers to: troped@itfnet.org.

The **poster** should include the research title, abstract, introduction (background study and objectives), methodology, results, discussion and conclusion. The poster should be no larger than A1 size (A1 size is 59.4cm x 84.1cm), and its orientation must be in portrait style. The text, illustrations, etc. should be large or bold enough to be read from a distance of two meters.

Oral presenters to arrive at the designated hall 15 minutes before your session begins, and report to the session chair(s). Each oral presentation will be allocated 15 minutes. Please ensure to complete your presentation within the allocated time. Deadline for submission of Powerpoint presentations is 20 September 2018. Kindly submit your full papers to: troped@itfnet.org.

PUBLICATION

All accepted oral papers will be published in the conference proceedings indexed in **CAB Abstracts**, a leading English language bibliographic information system.

Keynote Presenters



Prof. Randy Ploetz Professor of Plant Pathology Tropical Research & Education Center, University of Florida **Keynote Paper:**

Progress and the Future Outlook for

Tropical Fruits Diseases Management



Dr. Mohamad Roff Mohd. Noor Director-General Malaysian Agricultural Research and Development Institute (MARDI) **Keynote Paper:** Tropical Fruit Pests and Their

Management Options in Malaysia



Team Leader/Plant Pathologist Centre for Agriculture and Bioscience International (CABI) **Keynote Paper:** The Role of Plant Health in Food

Security

Lead Paper Presenters



Prof. Randy Ploetz Professor of Plant Pathology Tropical Research & Education Center, University of Florida Session 1: New and Emerging Tropical Fruit Pests and Diseases Lead Paper:

New and Emerging Diseases and Pests of Tropical Fruit Crops



Mr. Ahmad Kamil Mohd. Yunus Director Plant Biosecurity Division, Department of Agriculture Malaysia Session 2: Challenges and Opportunities in Biosecurity and Quarantine

Lead Paper: Strengthening Sanitary and Phytosanitary (SPS) Capacities for Improving Trade of Tropical Fruits



Prof. Latiffah Zakaria Professor of Plant Pathology Universiti Sains Malaysia Session 3: Advances in Biotechnology Research on Tropical Fruit Pests and Diseases Lead Paper: To be confirmed



Prof. Ravindra C. Joshi Professor University of the South Pacific, Fiji Session 4: Plant Health, Soil Nutrition, and Disease-free Planting Materials Lead Paper:

The Impact of Elevated Levels of Carbon Dioxide on Host Plants, Insect Pests, and Their Natural Enemies: Implications for Tropical Agriculture



Prof. David Guest Professor of Plant Pathology University of Sydney Session 5: Advances in Biological **Control Methods** Lead Paper:

Bio-based Control Methods for Disease Management in Tropical Fruits



Dr. Sivapragasam Annamalai Regional Director Centre for Agriculture and Bioscience International (CABI)- South East Asia Session 6: Developments in Plant Protection: Emerging Trends and Capacity Requirements Lead Paper:

Emerging Trends in Plant Protection

Tentative Program

| Time | Details | | | | |
|----------------------|---|---|--|--|--|
| - | 2.7 | | | | |
| 25 SEPTEMBER - DAY 1 | | | | | |
| 08:00 am | | | | | |
| 22.22 | Arrival of guests and participants | | | | |
| 09:00 am | Opening Ceremony Welcome Address: Dato' Mohd. Sallehhuddin Hassan | | | | |
| | Welcome Address. | Chairman, International Tropical Fruits Network (TFNet) | | | |
| | Opening Remarks: Prof. Datuk Dr. D. Kamaruddin D. Mudin | | | | |
| | | Vice Chancellor, Universiti Malaysia Sabah | | | |
| | | Datuk Idrus Shafie | | | |
| | Official Opening Address: | Director, Department of Agriculture, Sabah CM of Sabah/Sabah Agriculture Minister | | | |
| Keynote Sessi | <u> </u> | CIVIOI GUBUII/ GUBUII / GITGUILUI O WIII IIGUI | | | |
| | | ary General of African-Asian Rural Development Organization | | | |
| (AARDO)/TFNet | | , , | | | |
| 10:00 am | Keynote Paper 1: Progres | ss and the Future Outlook for Tropical Fruits Diseases | | | |
| | Management | | | | |
| | Prof. Randy C. Ploetz | | | | |
| 10:30 am | University of Florida, USA Crown Photo Society and Speek Break | | | | |
| | Group Photo Session and Snack Break | | | | |
| 11.00 am | 1:00 am Keynote Paper 2: Tropical Fruit Pests and its Management Options in Malaysia Datuk Dr. Mohamad Roff Mohd. Noor | | | | |
| | | rch and Development Institute (MARDI), Malaysia | | | |
| SESSION 1: Ne | w and Emerging Tropical | Fruit Pests and Diseases | | | |
| | | ademy of Agricultural Sciences (GDAAS), China; Vice-chairman of | | | |
| | pical Fruits Network (TFNet) | | | | |
| 11:30 am | I - | merging Diseases and Pests of Tropical Fruit Crops | | | |
| | Prof. Randy C. Ploetz University of Florida, USA | | | | |
| 12:00 am | Technical Papers | | | | |
| 12:45 pm | Q&A and End of Session 1 | | | | |
| 01:00 pm | Lunch Break | | | | |
| | SESSION 2: Challenges and Opportunities in Biosecurity and Quarantine | | | | |
| | | al, Fruit and Vegetable Research Institute, Vietnam/TFNet Board | | | |
| Member | | | | | |
| 02:00 pm | | ning Sanitary and Phytosanitary (SPS) Capacities for | | | |
| | Improving Trade of Tropical Fruits | | | | |
| | Mr. Ahmad Kamil Mohd. Yunus Department of Agriculture, Malaysia | | | | |
| 02:30 pm | Technical Papers | alaysia | | | |
| | Q&A and End of Session 2 | | | | |
| 03:00 pm | | | | | |
| 03:15 pm | Snack Break and Poster Pr | esentation | | | |

| Time | Details | | |
|---|--|--|--|
| | Ivances in Biotechnology Research on Tropical Fruit Pests and Diseases | | |
| Chair: Dr. Zarina Amin, Director, Biotechnology Research Institute, Universiti Malaysia Sabah, Malaysia | | | |
| 03:30 pm | Lead Paper 3: To be confirmed Prof. Latiffah Zakaria Universiti Sains Malaysia | | |
| 04:00 pm | Technical Papers | | |
| 04:30 pm | Q&A and End of Session 3 | | |
| 05:00 pm | End of Day 1 | | |
| 26 SEPTEN | MBER - DAY 2 | | |
| Keynote Sessi Chair: Prof. Rand | on 3 ly C. Ploetz, University of Florida, USA | | |
| 08:30 am | Keynote Paper 3: The Role of Plant Health in Food Security Dr. Jayne Crozier Centre for Agriculture and Bioscience International (CABI), United Kingdom | | |
| | ant Health, Soil Nutrition, and Disease-free Planting Materials Ahmad, TFNet Advisor/Expert Board Member | | |
| 09:00 am | Lead Paper 4: The Impact of Elevated Levels of Carbon Dioxide on Host Plants, Insect Pests, and Their Natural Enemies: Implications for Tropical Agriculture Prof. Ravindra C. Joshi University of the South Pacific, Fiji | | |
| 09:30 am | Technical Papers | | |
| 10:00 am | Q&A and End of Session 4 | | |
| 10:15 am | Snack Break | | |
| | lvances in Biological Control Methods Mohamad Roff Mohd. Noor, Director General, Malaysian Agricultural Research and Development), Malaysia | | |
| 10:30 am | Lead Paper 5: Bio-based Control Methods for Disease Management in Tropical Fruits Prof. David Guest <i>University of Sydney, Australia</i> | | |
| 11:00 am | Technical Papers | | |
| 11:45 am | Q&A and End of Session 5 | | |
| | evelopments in Plant Protection: Emerging Trends and Capacity Requirements and Capacity Requirem | | |
| 12:00 pm | Lead Paper 6: Emerging Trends in Plant Protection Dr. Sivapragasam Annamalai Centre for Agriculture and Bioscience International–Southeast Asia (CABI–SEA), Malaysia | | |
| 12:30 pm | Technical Papers | | |
| 01:00 pm | Lunch Break and Poster Exhibition | | |
| 02:00 pm | An Introduction to CABI's Plantwise Programme and Plant Clinics Mr. Muhammad Faheem Centre for Agriculture and Bioscience International–Southeast Asia (CABI–SEA), Malaysia | | |
| 02:30 pm | Q&A and End of Session 6 | | |
| 03:00 pm | Panel Discussion: Recommendations for Sustainable Solutions in the Management of Tropical Fruit Pests and Diseases Moderator: Mr. Yacob Ahmad (TFNet Advisor/Expert Board Member) | | |
| 04:30 pm | Closing Ceremony - Presentation of Best Poster Award & Closing Message | | |
| 05:00 pm | End of Conference | | |

FIELD TRIP - 27 SEPTEMBER 2018

| Time | Details | | | |
|----------|---|--|--|--|
| 07:00 am | Assemble at the hotel | | | |
| 07:30 am | Depart to fruit farms (Tuaran Pineapple Farm) | | | |
| 08:30 am | Arrival and briefing by DoA Sabah's Officer-In-Charge | | | |
| 08:45 am | Plant Clinic demonstration by CABI | | | |
| 09:30 am | Depart for Kundasang | | | |
| 10:45 am | Arrival at Kundasang/Site tours | | | |
| 12:00 pm | Lunch | | | |
| 01:00 pm | Site tours and stopover at Nabalu | | | |
| 04:00 pm | Depart to hotel | | | |
| 06:15 pm | Arrival at hotel | | | |



Pineapple industry in Sabah

Participants will visit pineapple farms in Tuaran. The tour will be led by Department of Agriculture, Sabah.

Photo from quintinlake.com.



Plant Clinic Demonstration

After visiting the farm, CABI will demonstrate its plant clinic program. Experts will identify pest and diseases affecting crops and will recommend affordable solutions.



Kundasang, Sabah

Participants will be able to enjoy scenic views at the foot of Mount Kinabalu. These include beautiful hills, dairy farms, vegetable gardens, botanical gardens, and many more.

Photo by Nadhirah Hasnan, Traveloka.

OTHER PLACES OF INTEREST IN KOTA KINABALU



Mari Mari Cultural Village

The Mari Mari Cultural Village features five different ethnic tribes and operates as an interactive museum to preserve Borneo ethnic cultures.

Photo and info from Madeleine Tham, shopback.my.



Tunku Abdul Rahman Park

The Tunku Abdul Rahman (TAR) Marine Park is a composite of five smaller islands: Gaya, Manukan, Sapi, Sulug, and Mamutik. Photo and info from Madeleine Tham, shopback.my.



Sepilok Orangutan Rehab Centre

Sepilok is a rehabilitation site to care for orphaned and confiscated orangutans, as well as pockets or other animals such as gibbons and elephants.

Photo and info from Madeleine Tham, shopback.my.

Venue and Accommodation





TROPED 2018 will be held at the Le Méridien Kota Kinabalu, Sabah Malaysia.

Hotel address: LE MÉRIDIEN KOTA KINABALU

Jalan Tun Fuad Stephen, Sinsuran Kompleks, 88000 Kota Kinabalu, Sabah

Participants of the conference are welcome to book their accommodation at the Le Méridien Kota Kinabalu through their website: www.lemeridienkotakinabalu.com. Participants are also welcome to book through 3rd party services (Agoda, Traveloka, etc.) at their own discretion.

Urban Room: USD 127 (RM 491) Vista Room USD 138 (RM 566)

Other Hotel Options: The Klagan Hotel (USD 52/RM 200)

KK Waterfront Hotel (USD 54/RM 208) Promenade Hotel (USD 62/RM 240)

Dreamtel (USD 47/RM 180)

Hyatt Regency (USD 135/RM 520)

Backpacker Hotels: Seaview Capsule Hotel (USD 13/RM 50)

Seri Borneo Hotel (USD 27/RM 103)

Yomi Hotel (USD 23/RM 88)

Space Cap Hotel (USD 10/RM 37) Hotel Traveller (USD 21/RM 78)

For even more options, visit: www.itfnet.org/troped2018/venue.php

Transportation

The Le Méridien Kota Kinabalu is 8.0 km away from the Kota Kinabalu International Airport.

Taxis from the airport to the venue costs around RM 20-25 (USD 5-6).

Visa

Nationals from countries listed below who are traveling to Malaysia for business and tourism purposes are allowed to enter Malaysia without visas for a stay not exceeding ninety (90) days:

| All European Union Citizens | Albania | Algeria | Argentina | Australia | Bahrain |
|--------------------------------|-------------|--------------|--------------|--------------|-------------------------|
| Bosnia and Herzegovina | Brazil | Canada | Cuba | Egypt | Iceland |
| Japan | Jordan | Kuwait | Kyrgyzstan | Lebanon | Liechtenstein |
| Maldives | Morocco | New Zealand | Norway | Oman | Peru |
| Qatar | San Marino | Saudi Arabia | South Africa | South Korea | Sudan |
| Syria | Switzerland | Tunisia | Turkey | Turkmenistan | United Arab Emirates |
| United States | Uruguay | Yemen | | • | * |

Nationals from countries listed below who are traveling to Malaysia for business and tourism purposes are allowed to enter Malaysia without visas for a stay not exceeding thirty (30) days:

| Andorra | Antigua and Barbuda | Armenia | Azerbaijan | Bahamas | Barbados |
|-----------------------|------------------------|------------------|--|------------------------|--------------------------|
| Belarus | Belize | Benin | Bolivia | Botswana | Brunei |
| Cambodia | Cape Verde | Chad | Chile | Comoros | Costa Rica |
| Dominican Republic | Ecuador | El Salvador | Fiji | Gabon | Gambia |
| Georgia | Grenada | Guatemala | Guinea | Guyana | Haiti |
| Honduras | Hong Kong | Indonesia | Iraq | Jamaica | Kazakhstan |
| Kenya | Kiribati | Laos | Lesotho | Масаи | Macedonia |
| Madagascar | Malawi | Marshall Islands | Mauritania | Mauritius | Mexico |
| Moldova | Monaco | Mongolia | Namibia | Nauru | Nicaragua |
| Palau | Palestine | Panama | Papua New Guinea | Paraguay | Philippines |
| Russia | Saint Kitts and Nevis | Saint Lucia | Saint Vincent and the Grenadines | Samoa | São Tomé and Príncipe |
| Senegal | Seychelles | Sierra Leone | Singapore | Solomon Islands | Somalia |
| South Sudan | Suriname | Swaziland | Taiwan | Tajikistan | Tanzania |
| Thailand | Timor-Leste | Togo | Tonga | Trinidad and Tobago | Tuvalu |
| Uganda | Ukraine | Uzbekistan | Vanuatu | Vatican City | Venezuela |
| Vietnam | Zambia | Zimbabwe | | • | • |

Foreign Exchange

The Malaysian Ringgit (RM/MYR) is the official currency. USD $1.00 \sim RM \ 4.00$