



Food and Agriculture  
Organization of the  
United Nations

# International Symposium and Training Course on Forest Invasive Pests

18 – 22 Oct 2016, Haikou, Hainan, China

## Organized by:

Asia Pacific Forest Invasive Species Network (APFISN)  
International Society of Zoological Sciences (ISZS)  
Environment and Plant Protection Institute, China Academy of Tropical  
Agricultural Sciences  
College of Life Sciences, Hainan University

## Supported by:

FAO Regional Office for Asia and the Pacific  
Institute of Zoology, Chinese Academy of Sciences, China  
USDA, Forest Service,

## Background

Harmful forest pests, especially invasive species, are of a great negative impact on the sustainable production and health of forests that can provide the goods and services on our earth.

For example, palm trees (*Palmae*) are important tree species as in horticulture, agriculture and industrial production throughout the world, especially in the Asia-Pacific Region. Currently, palm oil accounts for over 50% of the total world trade of edible oil and Malaysia produces 45% of the total and its neighboring country, Indonesia, produces another 41%. However, with the growth of world trade and global transportation, invasive pests to palm trees has become a serious problem that requires scientists and managers in the world to work together to tackle with. A small palm tree beetle (*Brontispa longissima*), originally from Indonesia and Papua New Guinea, is currently causing significant damage to palm trees around the world. The red palm weevil (*Rhynchophorus ferrugineus*) also has become a wide spread invasive pest to palm trees in the world. It was originally introduced from South Asia and today it has invaded into the countries in North Asia, South East Asia, countries in southern Pacific, as well as in the Middle East and around the Mediterranean.

Polyphagous Shot Hole Borer, (PSHB) *Euwallacea* sp., and Fusarium Dieback (FD), *Fusarium euwallaceae*, is a new insect-disease complex threatening the world. In 2003, the ambrosia beetle was first detected in the United States. The insect is injuring and killing several native, ornamental, and agriculturally important tree species. Currently, populations of PSHB have been detected in Israel, Vietnam, China and South Africa. Last year, APFISN Beijing Office coordinated a “China-Viet Nam-USA Cross-border Cooperative Study on the Polyphagous Shot Hole Borer and Fusarium Dieback.” It was found that PSHB’s in the United States, Viet Nam and China are the same genetically.

Under such circumstances, the Asia Pacific Forest Invasive Species Network (APFISN) and its partners are organizing an “International Symposium and Training Course on Forest Invasive Pests” 17 – 22 Oct 2016 in Haikou, Hainan province, China with special emphasis on palm pest and the polyphagous shot hole borer. The co-hosts will be the International Society of Zoological Sciences (ISZS) and Environment and Plant Protection Institute, China Academy of Tropical Agricultural Sciences, China. The supporting partners are to be the International Union of Forest Research Organizations (IUFRO), USDA, Forest Service, Institute of Zoology, Chinese Academy of Science and the Asia-Pacific Network for Sustainable Forest Management and Rehabilitation (APFNet).

## Objectives

The main objectives of this symposium are to invite specialists from the world to share information on the current status, monitoring techniques, control strategies, and management of forest invasive pests so as to form basis to develop more efficient and effective techniques to monitor and control forest invasive pests (especially to palm trees) and explore opportunities to international collaboration on monitoring and controlling forest invasive pests to help build up the overall country capacity to identify harmful invasive insects impacting the sustainability of forests in the world, especially in the Asia-Pacific Region.

The major objectives of the training course are to introduce participants to major emerging forest pest identification; understand the ecology, damage and classification of pests; find and diagnose pests in the field; use identification keys, build a reference collection, and interact with the global community of researchers.

## Current topics for symposium:

- Current research on harmful forest insect pests
- Harmful forest insect pests identification
- Response to new incursions in forests
- Prevention from new incursions in forests
- Interceptions at the border from imported forest products
- Establishment of exotic and unwanted organisms
- Interact with the global community of researchers
- Distribution and damage of palm pests and the polyphagous shot hole borer (PSHB)
- Multi-country PSHB project
- Management options
- Others

## Currently topics for training course:

- Pest surveillance and monitoring
- Identification keys
- Sampling methods
- Pest diagnosis
- Building a reference collection
- Taxonomy
- Others

## Targeted participants

- Field oriented entomologists and pathologists
- Sampling specialists and experts
- Diagnosticians
- Ecologists

## Targeted partners

- International Union of Forest Research Organizations (IUFRO)
- USDA, Forest Service
- Institute of Zoology, Chinese Academy of Science
- Chinese Academy of Forestry
- Other research institutions in the region or world

## Program Overview

Date	Time	Activity
Mon 17 Oct 2016	900-2200	Registration
Tue 18 Oct 2016	900-930	Opening Ceremony
	930-1700	Plenary Lectures and Symposium
Wed 19 Oct 2016	900-1200	Symposium
	1400-1600	Training Course
Thu 20 Oct 2016	900-1700	Training Course
Fri 21 Oct 2016	900-1200	Training Course
	1200-1700	<ul style="list-style-type: none"><li>● Training Course</li><li>● APFISN Members Meeting</li></ul>
Sat 22 Oct 2016		Departure

## Venue

Environment and Plant Protection Institute, China Academy of Tropical Agricultural Sciences, Haikou, Hainan province, China

## Working Language

The working language for the symposium and training course is English.

## Call for Symposia Speakers and Posters

If you are interested in delivering a presentation or poster at the symposium, please contact Dr Chunxu Han ([iszs2@ioz.ac.cn](mailto:iszs2@ioz.ac.cn)) before 1 September 2016. Organizers of sessions with current or new topics are especially welcome.

## Nominations for Training Course Participants

The Training Course on Forest Invasive Species will provide participants with an introduction to ground survey techniques, insect trapping, and taxonomy using bark beetles as the focused class of insects. Although introductory, participants should have an understanding of entomology so they are at least familiar with general terms and biology of insects. Participant's work should also be directly related to forest insects, especially related to ground survey and trapping or taxonomy. Participants must submit a nomination form to be considered for this training.

Meeting organizers will cover selected participant air travel (direct round-trip economic class), registration fee, hotel accommodation and meals, during the meeting in Haikou, China from 18–22 October, 2016.

Completed the nomination forms are **DUE** to the APFSIN Beijing Secretariat before **AUGUST 15, 2016**. Completed forms and inquiries should be sent to Mr Chunxu Han, the

APFSIN Secretariat –Beijing: [iszs2@ioz.ac.cn](mailto:iszs2@ioz.ac.cn).

## **Hosts, Organizers, and supporters**

### **Asia Pacific Forest Invasive Species Network (APFISN)**

The Asia-Pacific Forest Invasive Species Network (APFISN) has been established as a response to the immense costs and dangers posed by invasive species to the sustainable management of forests in the Asia-Pacific region. APFISN is a cooperative alliance of the 33 member countries in the Asia-Pacific Forestry Commission (APFC) – a statutory body of the Food and Agriculture Organization of the United Nations (FAO). The network focuses on inter-country cooperation that helps to detect, prevent, monitor, eradicate and/or control forest invasive species in the Asia-Pacific region. Specific objectives of the network are: 1) raise awareness of invasive species throughout the Asia-Pacific region; 2) define and develop organizational structures; 3) build capacity within member countries; and 4) develop and share databases and information.

### **FAO Regional Office for Asia and the Pacific**

In order to fulfill the vision and mission, a highly participatory process at the FAO Regional Office for Asia and the Pacific was used to translate FAO's corporate strategic objectives into five Regional Strategic Priority Areas: strengthening food and nutritional security, fostering agricultural production and rural development, enhancing equitable, productive and sustainable natural resource management and utilization, improving capacity to respond to food and agricultural threats and emergencies, and coping with the impact of climate change on agriculture and food and nutritional security. Within the above regional priorities, the core functions of the FAO Regional Office for Asia and the Pacific are: providing perspectives, trend monitoring and assessments, capacity building and technical support, policy assistance and advice to subregions, building partnerships and alliances, strengthening information, knowledge and statistics, and developing international instruments. For further information on the Office, please visit the website at: <http://www.fao.org/asiapacific/about/en/>.

### **The International Society of Zoological Sciences (ISZS)**

The ISZS was established in Beijing in 2004 as an international zoological body charged with organizing the ICZ and providing a global voice for zoologists. It is also a nonpartisan, nonprofit membership-based organization of professionals that aims to: promote zoology by improving communication between zoologists and zoological organizations; increase the availability of resources needed to conduct zoological research; and promote co-ordination, collaboration and co-operation between different fields of zoology. Currently, it remains the only international organization that covers all branches of zoological sciences in the world.

The core business of ISZS includes organizing the International Congress of Zoology (ICZ, started in 1889 and held every four years), publishing *Integrative Zoology* (INZ), a multidisciplinary scientific journal which is SCI and Medline Indexed, organizing the International Symposia of Integrative Zoology (ISIZ) in non-Congress years, and facilitating international research programs, such as Biological Consequences of Biological Sciences (BCGC). Currently, there are over 100 institutional members, including scientific academies, universities, NGOs, nature reserves, zoos and other professional societies from every continent, as well as more than 1000 individual members, with the ISZS. Currently, ISZS works as the manager of the APFISN Office in Beijing. For further information about the ISZS and its membership, please visit the official website at: <http://www.globalzoology.org>.

### **Environment and Plant Protection Institute, China Academy of Tropical Agricultural Sciences**

To be available

### **Institute of Zoology, Chinese Academy of Sciences, China**

Institute of Zoology (IOZ), Chinese Academy of Sciences (CAS), is a government-funded

research institution in zoological sciences. It has a long history of over 80 years. Several sub-disciplines in zoological sciences in China were derived from IOZ, such as entomology, animal ecology, and experimental embryology. IOZ also has a long history of service to the country with many significant contributions, such as successful control of China's chronic agricultural pest-locust, control and management of other pest insects and rodents, establishment of nature reserves in China, conservation of giant panda, crested ibis and other endangered wildlife, reproduction and contraception, and fish nuclear transfer. For further information on IOZ, please visit the website at: <http://english.ioz.cas.cn/>.

### **USDA Forest Service**

The USDA Forest Service is a federal agency within the United States who is charged with the stewardship and management of America's National Forests. The Forest Service manages over 58 million hectares of forests and provides assistance to state and private landowners as well as other federal agencies. The forested area in the United States is 310 million hectares or 33% of the total land, the 5<sup>th</sup> largest in the world. In order to assure that these forests are healthy and vibrant, the USDA Forest Service has a keen interest in having a global perspective in addressing issues such as a changing climate, forest products trade, and invasive species. The Forest Health and Protection Program within the USDA Forest Service is particularly charged with protecting America's forests from the negative impacts from insects and diseases and invasive plants. Effective management of these pests includes a strong working relationship with colleagues from other countries. More information about the USDA Forest Service and Forest Health Protection Program can be found at: [http:// www.fs.fed.us](http://www.fs.fed.us).

### **Contact**

Person to contact: Mr Chunxu Han ([iszs2@ioz.ac.cn](mailto:iszs2@ioz.ac.cn)), APFISN Beijing Office or ISZS Secretariat. Address: Room C-506, Institute of Zoology, Chinese Academy of Sciences, 1 Beichen West Road, Chaoyang District, Beijing 100101, China; Tel: +86-010-6480-7295; Fax: +86-010-6480-7295; Email: [iszs2@ioz.ac.cn](mailto:iszs2@ioz.ac.cn); Website: [www.globalzoology.org](http://www.globalzoology.org).



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