



Food and Agriculture  
Organization of the  
United Nations



International  
Plant Protection  
Convention

# The International Plant Protection Convention (IPPC) and Biosecurity.

## XV World Forestry Congress

Side event: Forest biosecurity as a shared responsibility – towards a global  
framework – 5 May 2022

Presented by Camilo Beltrán Montoya




## Movement of people and goods

- The increase of **pests and invasive species** is harmful to plants and is caused by the increased **movement of plants, plant products, commodities, and people**. **Climate change** and its effect on the environment provide new habitats for alien species.
- **Regulation of the movement** of plants and plant products can help to reduce these risks.
- Outbreaks of forest insects alone damage some **35 million hectares of forests annually**, primarily in the temperate and boreal zones (FAO, 2010).

Diagram is taken from: <https://www.fao.org/3/ca3279en/CA3279EN.pdf>

### Plant pests cause the loss of:

**40%**   
of all **food crops**  
globally

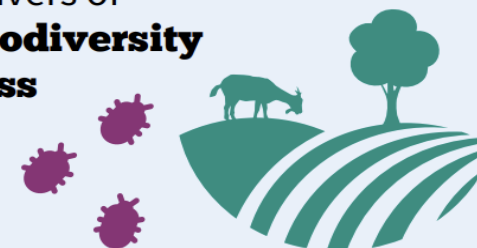
USD  
**220**   
billion of **trade**  
in agricultural  
products annually

### Introduced pests cause:

USD  
**100**   
billion of **annual  
environmental losses**  
*in the United States of America, the United  
Kingdom of Great Britain and Northern Ireland,  
Australia, South Africa, India and Brazil*

### Invasive alien species

are one of the main  
drivers of  
**biodiversity  
loss**



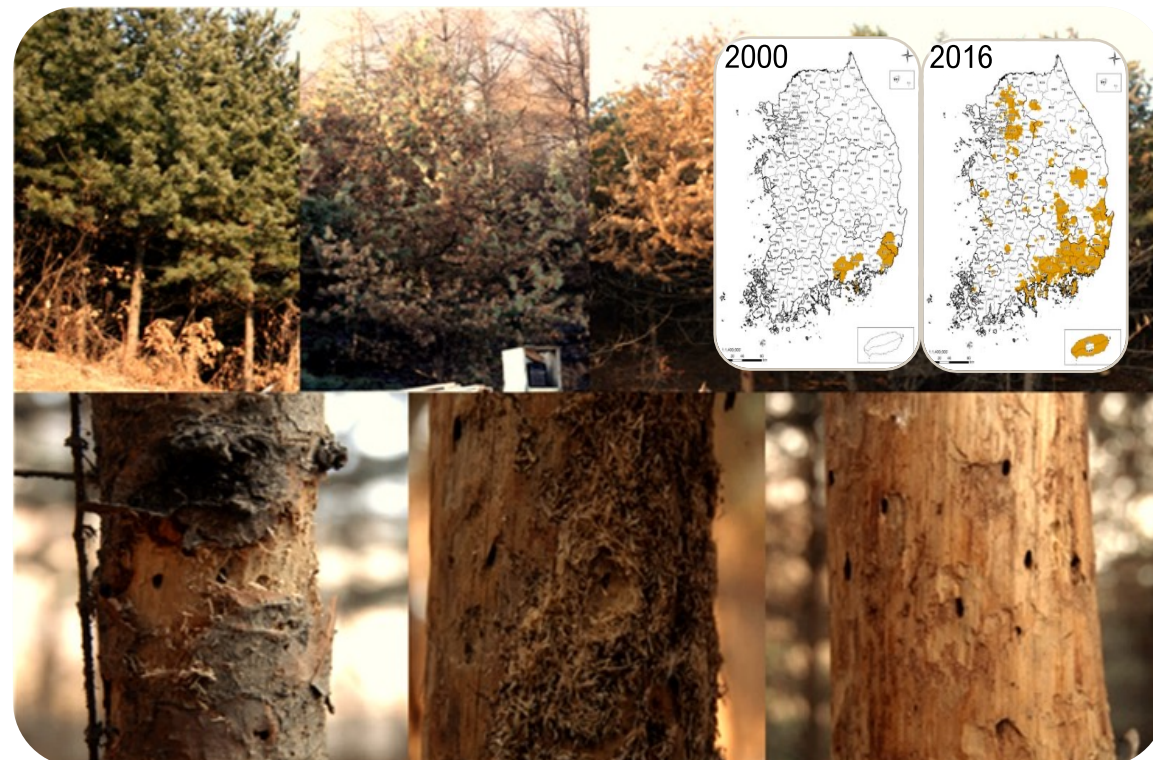


## Impact of pests: the pinewood nematode (*Bursaphelenchus xylophilus*) in South Korea.

### ISPM 15 on the Regulation of wood packaging material in international trade

In the Republic of Korea, more than 10 million trees were lost to infection from the pinewood nematode (*Bursaphelenchus xylophilus*) that was most probably introduced into the area through wood packaging material (WPM). An IPPC standard on the Regulation of WPM in international trade (ISPM 15) was thus developed to manage this risk.

Taken from: <https://www.fao.org/3/ca3279en/CA3279EN.pdf>

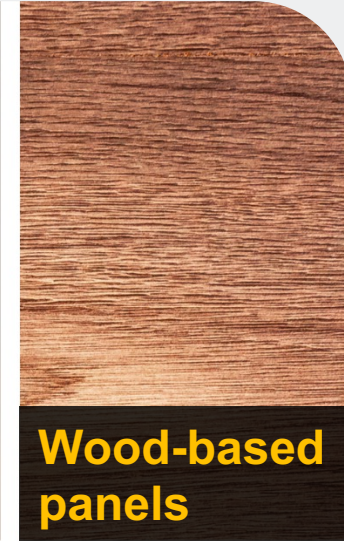


Images from K-O Yim, MAFRA South Korea





## Main wood and forest products traded





# International Plant Protection Convention (IPPC)

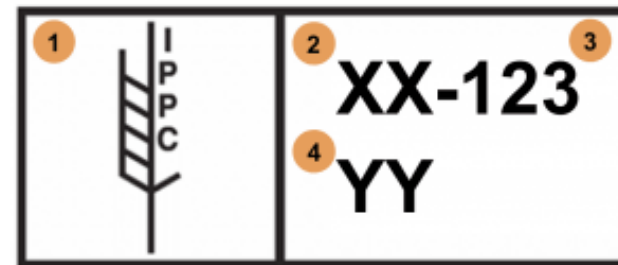
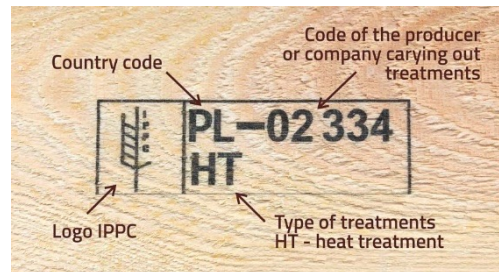
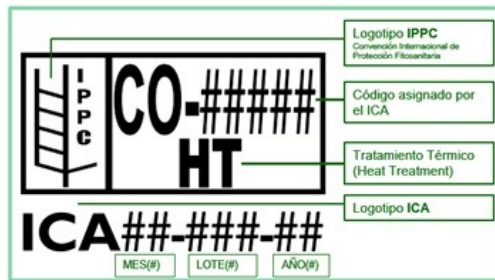


**International treaty** to secure **cooperation among nations** in **protecting global plant resources** from the **spread and introduction of pests** of plants, in order to preserve food security, and biodiversity and to facilitate safe trade.

- Mission: **Protect global plant resources and facilitate safe trade.**
- Vision: The **spread of plant pests is minimized** and their impacts within countries are effectively managed.
- Recognized as a standard-setting organization for plant health by the **WTO SPS Agreement** along with **Codex Alimentarius** and OIE (“SPS sisters”).
- **184 Member Countries**
- IPPC Secretariat collaborating **with 10 Regional Plant Protection Organizations** and over **40 international organizations** – IPPC Secretariat is a member of the **Biodiversity Liaison Group (BLG)**.

# International Standards on Phytosanitary Measures (ISPMs)

ISPMs are adopted by the **Commission on Phytosanitary Measures (CPM)** and reinforce the joint efforts of contracting parties to protect global plant resources from pests.



- **ISPM No. 15** has a significant global impact in preventing the spread of forest quarantine pests through the pallets and wood packing materials
- **ISPM 28: PT 22:** Sulphuryl fluoride fumigation treatment for insects in debarked wood
- **ISPM 28: PT 23:** Sulphuryl fluoride fumigation treatment for nematodes and insects in debarked wood
- **ISPM 39:** International movement of wood.



# ISPMs adopted (1993-2022)

47



ISPMs

44

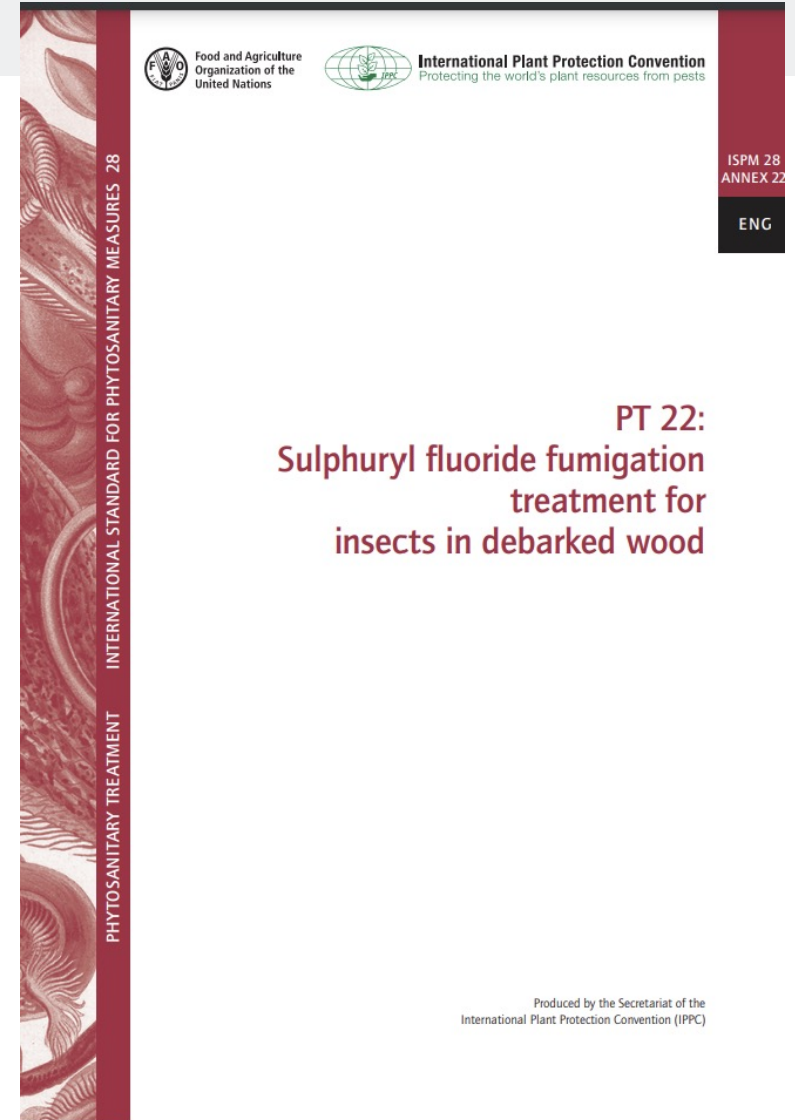


Phytosanitary Treatments

31



Diagnostic Protocols



## Implementation and Capacity Development

### Guides (examples):

- Market Access
- Import Verification
- Export Certification
- Establishing a NPPO
- Surveillance
- Pest Status
- National Reporting Obligations
- Pest Risk Communication
- Pest Free Areas

**21 Guides**

### Training materials (examples):

- e-learning course “Introduction to the International Plant Protection Convention”
- e-learning course “Pest Risk Analysis”
- e-learning course “National Reporting Obligations”
- Training kit: Pest Risk Analysis

**5 Training materials**



## How does IPPC contribute to biosecurity?

“*The primary contribution of the IPPC for biosecurity is to reduce the introduction and spread of quarantine pests. The principles underlying the IPPC include those principles of FAO’s biosecurity approach” (IRSS)*

### Safeguarding biodiversity and fragile ecological systems



Biodiversity is crucial for a healthy environment, and vice versa. The IPPC has many common objectives with the Convention on Biological Diversity (CBD) – the foremost global biodiversity treaty. In particular, the IPPC provides guidance on preserving biodiversity by protecting the environment from plant pests and invasive alien species – one of the main drivers of biodiversity loss. The IPPC directly addresses the CBD’s Aichi Target nine of “identifying and prioritizing invasive alien species and pathways, controlling or eradicating priority species, and putting in place measures species to manage pathways to prevent their introduction and establishment”. In 2017, the IPPC and CBD Secretariats established a Joint Work Programme.

## Specific IPPC contributions to biosecurity

All ISPMs

Guides and training  
materials

- ISPM 11 (**Pest risk analysis for quarantine pests**), includes analysis of environmental risks and living modified organisms
- ISPM 36 (**Integrated measures for plants for planting**), recognizes the higher risk of international trade of plants destined for planting in the importing country
- The Aquatic plants: their uses and risks – a review of the global status of aquatic plants study under the IRSS
- **NPPOs** are the primary actor to avoid the spread of quarantine pests
- **The Biosecurity Approach**. A review and evaluation of its application by FAO, internationally and in various countries (**IRSS**)



## Plant Health and One Health

- One Health approach recognizes the relationship between humans, animals, and environmental health, and thus requires a multi-sectoral collaboration.
- IPPC participates in the FAO One Health discussions
- Use of Antimicrobials and Antimicrobial Resistance in respect of plant health are a special discussion topic

### Protecting trees and human health



In recent years, invasive pest outbreaks have caused great destruction to forests and trees with serious repercussions on human health. In the USA, between 2002 and 2007, millions of trees were lost due to the emerald ash borer (*Agrilus planipennis*) — an invasive insect originally from Asia. This rapid tree loss was associated with 15,080 additional deaths from cardiovascular disease and 6,113 additional deaths from lower-respiratory disease in 15 US states.<sup>1</sup> Applying IPPC standards and recommendations helps save trees and forests from being destroyed by invasive pests.

Taken from: <https://www.fao.org/3/ca3279en/CA3279EN.pdf>

## Prevention, preparedness, and response to emerging pests

1

Commission on Phytosanitary Measures (CPM)  
Focus Group (FG) on Pest Outbreak Alert and  
Response Systems

2

Implementation and Capacity  
Development Committee (IC) Team on  
*Fusarium oxysporum* f. sp. *cubense* Tropical Race 4  
(TR4)

3

FAO/IPPC Technical Working Group on Quarantine  
and Phytosanitary Measures for Global action on  
FAW control





## Closing reminder

- All IPPC Community materials can be found at <https://www.ippc.int/en/> and on our social media channels



- Sign up to receive news items to stay up-to-date with the latest information
- All guides and training materials are saved in one place <https://www.ippc.int/en/core-activities/capacity-development/guides-and-training-materials/>



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# Thank you

**IPPC Secretariat**

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