ISPM 15 – History

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Workshop presenting the results from:

Implementation of ISPM 15 (*Regulation of wood packaging material in international trade*):
An empirical analysis of how the regulation affects the economy of a group of countries in Africa

20-21 July, Nairobi, Kenya

Need for a standard

- Wood boring pest interceptions
- Surveillance and monitoring programmes linked interceptions to wood packaging material
- Experts met several times and developed a draft ISPM
- Draft ISPM presented to ICPM-4 (2002)

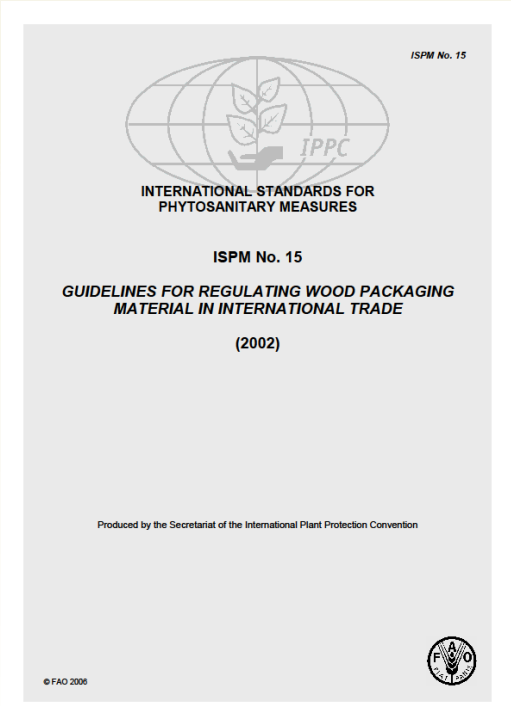
Last minute Negotiations at ICPM-4 (2002)

- Debarking removed- technically justified?
- Concerns on the efficacy of methyl bromide in relation to pinewood nematodes

- Concern about promoting methyl bromide but reference to Montreal Protocol was not removed

• 2002
ISPM 15 first adopted

ICPM-4 adopted: ISPM 15. Guidelines for regulating wood packaging material in international trade


ISPM No. 15

IPPC

INTERNATIONAL STANDARDS FOR PHYTOSANITARY MEASURES

ISPM No. 15

GUIDELINES FOR REGULATING WOOD PACKAGING MATERIAL IN INTERNATIONAL TRADE

(2002)

Produced by the Secretariat of the International Plant Protection Convention

© FAO 2006

2003
Addressing concerns on efficacy

- North American Forestry Commission
- International Forest Quarantine Research Group (IFQRG)
- *ICPM-5 (2003) requested the IFQRG to review data provided by the Republic of Korea and China*
- IFQRG coordinated research on methyl bromide

2003
Implementation issues were raised

- Q & A list serve set up by IFQRG
- Some issues raised, indicated that ISPM 15 should be revised
- CPM-1 (2006) added the revision of ISPM 15 to the IPPC List of topics for standards

2004
Technical Panels

ICPM-6 (2004) established Technical Panels:

- Technical Panel on Forest Quarantine (TPFQ)
  - Work on the development of ISPM 15
  - Practical application of treatments to address implementation concerns

- Technical Panels on Phytosanitary Treatments (TPPT)
  - review treatment efficacy using ISPM 28 (Phytosanitary treatments for regulated pests)

2006
Revised Annex 1 adopted

- CPM-1 (2006) adopted a revised Annex 1: *Approved measures associated with wood packaging material* to address the concerns raised during initial adoption regarding the methyl bromide (MB) fumigation
  - provided more guidance
  - fumigation schedule was changed

2009
Revised ISPM 15

CPM-4 (2009) adopted ISPM 15: *Regulation of wood packaging material in international trade*

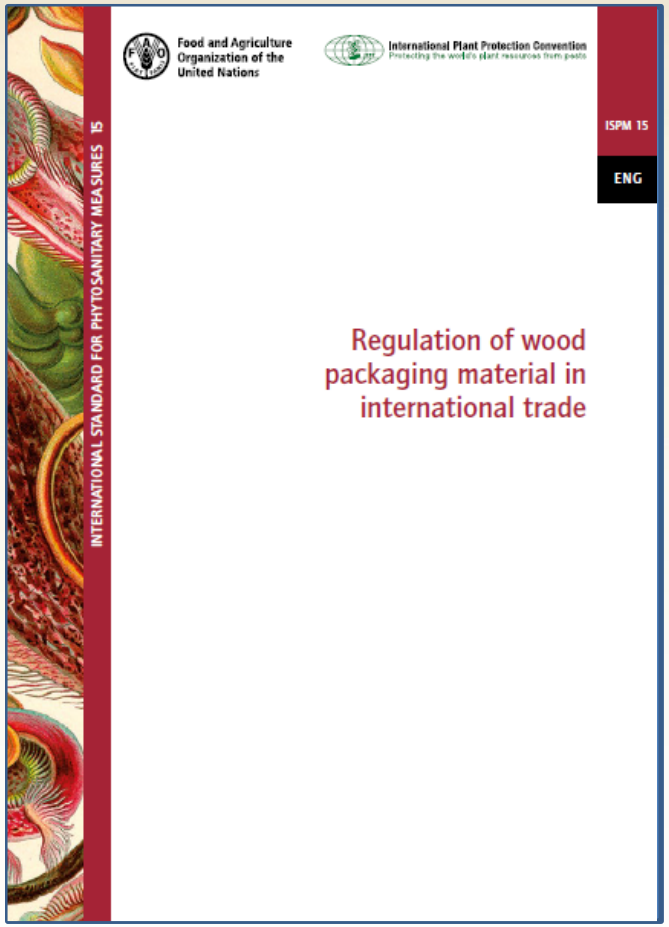
Issues addressed:

- reuse and remanufacture
- bark risks, specifically defining what size of bark was most risky
- removal of bark was added
- more guidance on the application of treatments
- criteria for new treatments removed (under revision)
- increased guidance on the use of the mark

2013
Dielectric heat treatment added

- CPM-8 (2013) adopted a revised Annex 1 to ISPM 15
- Dielectric used instead of microwave
- *a heat treatment using dielectric heating (DH)*
- *CPM-8 requested guidance on the application of this treatment be developed*

Current version, 2013



2015
1st consultation on new treatments

- SC in May 2015 approved for 1st consultation
- Annexes to ISPM 15 2006-010A&B inclusion of the phytosanitary treatment **Sulphuryl fluoride** fumigation and **revision of the dielectric heating** section

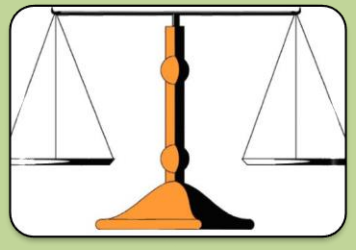
2017
2nd consultation on sulfuryl fluoride treatment

- SC-7 in May 2016 could not agree, technical issues
- SC-7 2017 approved for 2nd consultation
- Annexes to ISPM 15 2006-010A&B inclusion of the phytosanitary treatment **Sulphuryl fluoride** fumigation and **revision of the dielectric heating** section

Future work
New treatment criteria

- Criteria for ISPM 15 treatments was vague
- CPM decided to revise the criteria
- Part of ISPM 15 revision: *Criteria for treatments for wood packaging material in international trade* (2006-010)
- TPFQ are currently developing, pending publication of scientific paper that is basis for this new treatment criteria

Equivalence



First international recognition of equivalence for treatments:

- Fumigation by methyl bromide (MB)
- Treatment by heat (HT) or
- Dieletric heating (DH)

Also recognized the ISPM 15 mark as a way to prove a phytosanitary measure had been applied

ISPM 15 mark and symbol

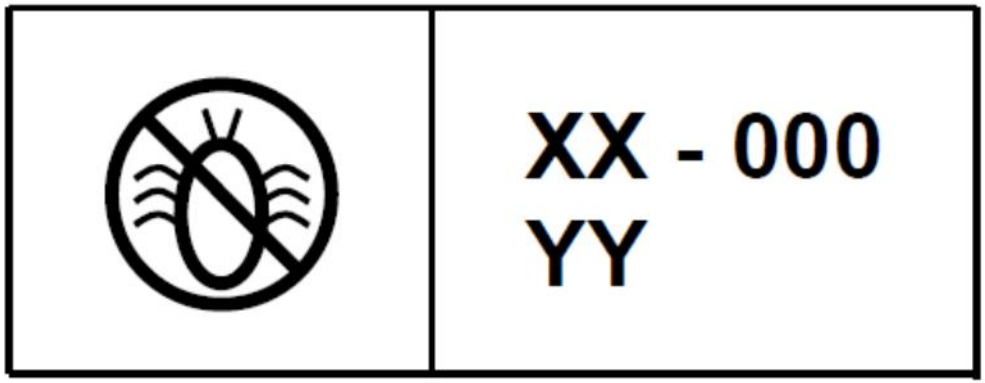
ISPM 15 mark

The mark should at minimum include the:

- symbol
- ISO two letter country code
- unique number assigned by the NPPO to the producer of the wood packaging material, who is responsible for ensuring appropriate wood is used and properly marked
- IPPC abbreviation according to Annex I for the approved measure used.

Addressing concerns on the symbol

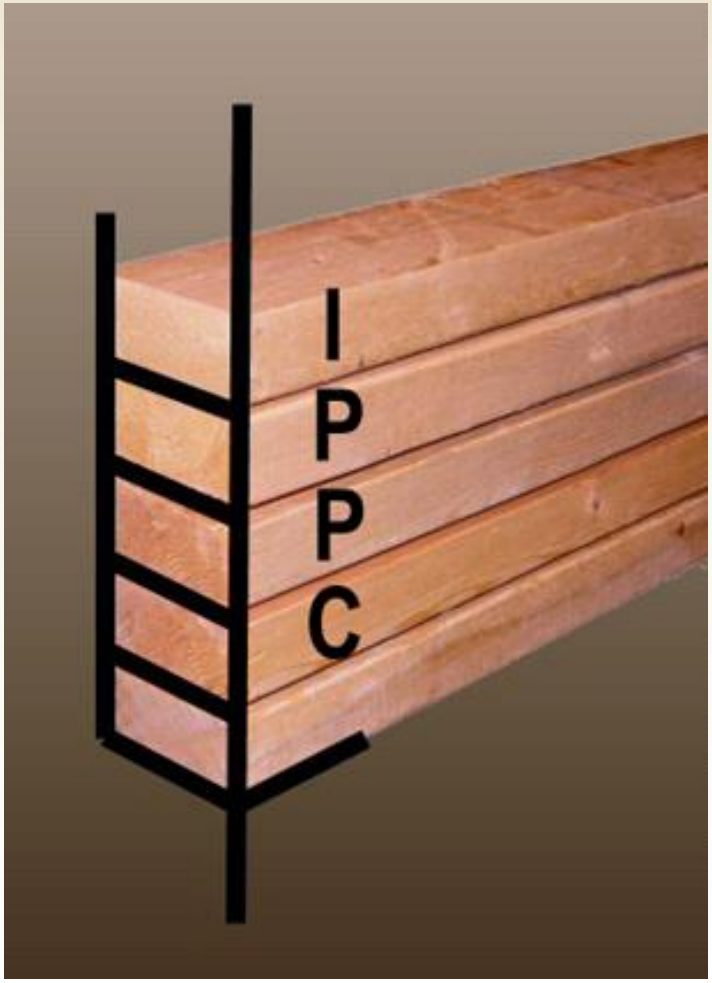
- A company in the USA claimed the symbol was already in use so IPPC Secretariat suggested countries temporarily suspend the implementation of the ISPM 15: 2002



New ISPM 15 symbol

- New symbol design, FAO registered under the Madrid Agreement (MA) and in some countries not party to the MA
- Limited resources: symbol was only registered in 82 countries in 2004.

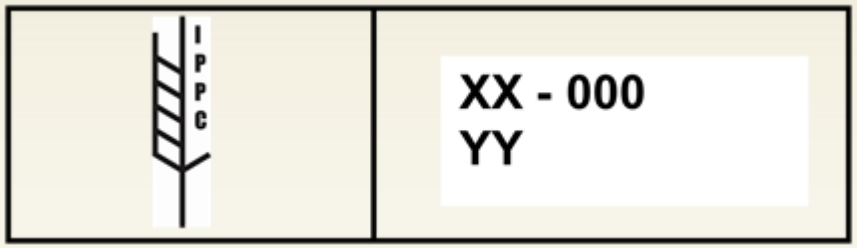
New ISPM 15 symbol

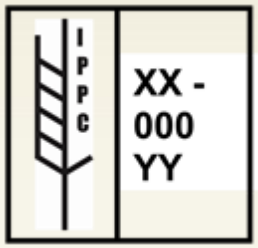


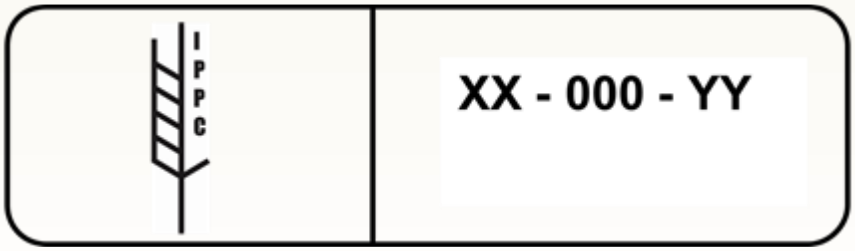
More specific guidance on the use of the ISPM 15 mark

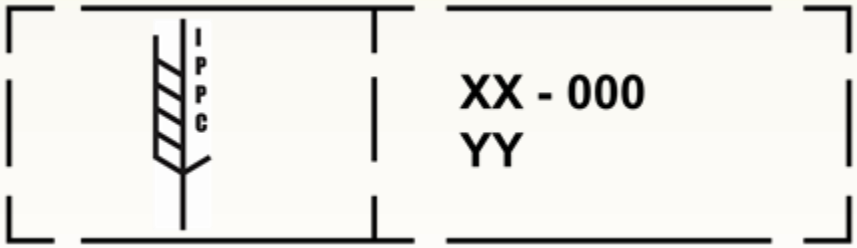
- legible to inspectors without the use of a visual aid
- durable and not transferable
- rectangular or square
- no other information within a border line
- not hand written
- some flexibility allowed

Examples of the ISPM 15 mark









Protection of the symbol

- FAO has now registered the symbol in most countries
- Each year, with limited resources, FAO continues the registration process, as well as the renewal process

Protection of the symbol

- **BOTSWANA, KENYA and MOZAMBIQUE**: symbol is registered under the Madrid Convention and expires on 26 September 2023
- **CAMEROON**: symbol is registered under OAPI (Organisation Africaine de la Propriété Intellectuelle) and expires 3 October 2018 for classes 19 and 20, and 24 December 2018 for class 37

Usage Rules

- FAO as owner of the symbol has established usage rules
- FAO has authorized NPPO to use of the symbol in the ISPM 15 mark when implementing ISPM 15

Compliance

- FAO has delegated the NPPO as the authority to authorize and monitor the national use of the symbol in the ISPM 15 mark
- If misuse is discovered, NPPOs may request FAO to send a "Cease And Desist" letter to the offending party

Prosecution

- If the "Cease And Desist" letter does not bring about compliance NPPOs may request advice from FAO legal services
- The NPPO (or Contracting Party) may request authority to prosecute on behalf of FAO, this needs to be done in consultation with FAO Legal Services and at the costs are covered by the NPPO

CPM Recommendation

- Use of methyl bromide for quarantine purposes is allowed under the Montreal Protocol
- IPPC criticized by the world for promoting methyl bromide use but in reality there was always an alternative treatment
- CPM-3 (2008) adopted a CPM Recommendation, R-03: *Replacement or reduction of the use of methyl bromide as a phytosanitary measure*

Efforts to help with Implementation

IPPC workshop on the practical application of ISPM 15

28 February-4 March 2005,
Vancouver, Canada

- Over 170 delegates participated :
  - reviewed ISPM 15 requirements
  - toured approved facilities
  - each delegate developed an implementation plan.
- Delegates from:
  - Mozambique: Khalid Cassam
  - Kenya: Abed Kagundu & Rachel Ntoyai

IPPC workshop on the practical application of ISPM 15

- *Workshop proceeding are available on the IPP:* https://www.ippc.int/core-activities/capacity-development/ippc-workshop-practical-application-ispm-no-15vancouver-canada-28-february-4-march-2005

Explanatory document

- First ISPM 15 explanatory document was produced by Shane Sela
- Revised in 2014 (TPFQ & **Shane Sela**, Thomas Schroeder, Matsui Mamoru and Michael Ormsby
- The ISPM 15 explanatory document is published on the IPP in English and French: https://www.ippc.int/static/media/files/publication/en/2017/02/ISPM_15_ED_En_2017-02-10.pdf

Guidance Documents

- IPPC Secretariat has developed specific guidance on the use of dielectric heating, information can be found on the IPP http://www.phytosanitary.info/
- *Dielectric Heating- a quick guide to Dielectric Heating as treatment for wood packaging material, posted* on the IPP: http://www.phytosanitary.info/information/dielectric-heating-quick-guide-dielectric-heating-treatment-wood-packaging-material

Dielectric Heating- a quick guide to Dielectric Heating as treatment for wood packaging material

International Plant Protection Convention
Protecting the world's plant resources from pests

www.ippc.int

Dielectric heating as a treatment for wood packaging material

Dielectric heating is a newly approved treatment for wood packaging material that uses heat from electromagnetic energy to disinfect the wood. The International Plant Protection Convention's Commission on Phytosanitary Measures (CPM) approved dielectric heating as a phytosanitary treatment for wood packaging material as part of the International Standards for Phytosanitary Measures (ISPM) No. 15, *Regulation of wood packaging material in international trade.*

This quick guide provides additional information on dielectric heating as a phytosanitary treatment for wood packaging material. It is for information only.

What is dielectric heating?

Dielectric heating uses electromagnetic waves – such as microwaves (MW) or radio-frequency (RF) waves – to create heat. Some of the electromagnetic energy converts into heat when it interacts with moisture, just like in the ordinary kitchen microwave oven.

How does dielectric heat treat wood packaging material?

When wood is heated to the temperature, and within the time period, specified in ISPM 15 Annex 1, the heat kills the pests in the wood that need to be eliminated.

Because wood contains moisture throughout its structure, dielectric heating simultaneously heats wood across the whole profile of the wood. As a result, dielectric heating differs from conventional heat treatment methods like air or kiln heating because those methods raise surface temperatures more quickly than the core. It takes time for heat to be conducted from the surface of the wood to the core and so with conventional heat treatment it is necessary to monitor the temperature of the core of the wood to ensure that sufficient heating has occurred to eliminate the pests.

In contrast, when using dielectric heating, the temperature of the wood can be measured at its surface or by monitoring infrared images that show heat levels of the wood's surface. With dielectric heating, the surface of the wood is often cooler than the core because the outer surface cools first as heat radiates into the surrounding environment. Because of this, if you record the target temperature of 60°C at the wood's surface you can be assured that the temperature is equal or higher inside.

Dielectric heating

Dielectric heating

Conventional heating

Dielectric heating works across the entire profile of the wood, while conventional heat has to be conducted into the wood from the surface.

Conclusions

- The first and possibly the last case where the Appropriate Level of Protection is globally harmonized
- Huge impact on protecting trees and forests
- Equivalence
- Raised the profile of the IPPC
- Well worth the effort
- Need to focus on proper implementation

Responses to study

- Study indicates need for improved oversight.
- EWG *Authorization of entities to perform phytosanitary actions* (2014-002) met in June 2017
- Draft will be presented to SC May 2018 and possible consultation in July 2018
- Outlines:
  - Criteria
  - Roles & responsibilities
  - Audits and non conformities

Responses to study (cont)

- Study also indicated low number of audits.
- Topic: *Audit in the phytosanitary context* (2015-003), priority 2
- Draft specification is now out for consultation between 2017-07-01 to 2017-08-31.

Contact details

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