## CHIPS, DUST, HOGWOOD, SCRAP

## WHAT DO THEY MEAN? WHAT ARE THE RISKS?

Event: EPPO Council Colloquium Date: 17 September 2015 Andrei ORLINSKI, EPPO – ado@eppo.int



## **EPPO Study on Wood Commodities**

#### Background:

- Little information on wood chips and wood waste commodities was available
- International trade of these commodities is increasing: results in additional pest risk
- EPPO Panel on Phytosanitary Measures initiated the EPPO Study initially "on non-manufactured wood commodities"
- First objective was to classify wood commodities other than round wood, sawn wood and firewood

## **EPPO Study on Wood Commodities**

Other objectives - to classify and describe:

- Intended use of wood commodities
- current practices of their production (including industry practices, types of wood used, etc.)
- current practices in trade (including mode of transport, storage and packaging)
- pest groups likely to be associated with these commodities and impact of processes on their survival
- measures currently applied (both for commercial and phytosanitary purposes) for these commodities
- possible measures that could be applied
- gaps in knowledge for developing measures

## **EPPO Study on Wood Commodities**

- Preliminary document developed by sub-contracted expert
- Advice received from IFQRG experts after Rome meeting (2014-09-8/12)
- Advice received from EFSA meeting (Brussels, 2014-09-19)
- Advice received from 'ISO/TC 218 Timber' meeting (Paris, 2014-09-29/10-03)
- The document discussed and finalized by an EPPO Ad Hoc Expert Working Group (Paris, 2014-10-7/10)

## **Decisions of the EPPO EWG**

- To change the name to "Study on wood commodities other than round wood, sawn wood and manufactured items"
- To subdivide all wood commodities into:
  - Harvesting residues (initially left after harvesting round wood)
  - Round wood (taken from the forest)
  - Processing wood residues (from processing round wood)
  - Bark (from debarking round wood)
  - Sawn wood (from processing round wood)
  - Wood chips (from chipping different wood products)
  - Hogwood (from crushing different wood products)
  - Processed wood material (with glue/heat)
  - Manufactured wood items (items made of wood)
  - Post-consumer scrap wood (after use of items)

To avoid where possible the term 'waste' - all wood has uses

### **Recommendation on Firewood**

- All types of wood may be burned
- This end use does not reduce risks which arise during transport and storage
- Unlike most plant products, wood may be transported and stored uncovered for extended periods
- Most wood traded as firewood meets the definition of round wood and can therefore be regulated as such





### **Commodity definitions of the IPPC Glossary of phytosanitary terms**

- 'Round wood' 'Wood not sawn longitudinally, carrying its natural rounded surface, with or without bark'
- 'Bark (as a commodity)' 'Bark separated from wood'
- 'Sawn wood' 'Wood sawn longitudinally, with or without its natural rounded surface with or without bark'
- Processed wood material' 'Products that are a composite of wood constructed using glue, heat and pressure, or any combination thereof'
- 'Wood (as a commodity class)' 'Commodities such as round wood, sawn wood, wood chips and wood waste, with or without bark, excluding wood packaging material and processed wood material'

### Proposed terms and definitions (1) (in addition to the Glossary)

#### 'Harvesting residues'

- Definition: 'Wood material consisting of any parts of trees initially left on the site after round wood harvesting'
- Includes: tree tops, branches, stumps and roots, parts of trunks
- Intended use: for fuel, chips & hogwood production
- Transported: loaded in open transport or in closed containers
- Possible measures: pest free area, chipping to specified size, HT, DH, fumigation, irradiation
- Gaps in knowledge: lack of information on trade volumes and distances

#### 'Harvesting (= Logging) residues'



## **Proposed terms and definitions (2)**

#### 'Processing wood residues'

- Definition: 'Parts of wood and bark that are left after the process of transforming round wood into sawn wood and further transformation of sawn wood
- Includes: sawdust, shavings, and off-cuts
- Intended use: for fuel, chips, hogwood & processed wood material production, animal litter, packing material
- Transported: in closed containers of different types and sizes depending on the intended use
- Possible measures: pest free area, chipping to specified size, HT, DH, fumigation, irradiation

#### 'Processing wood residues'



## **Proposed terms and definitions (3)**

#### 'Bark'

- Glossary definition ('bark (as a commodity)'): 'Bark separated from wood'
- Intended use: for fuel, chips, hogwood & processed wood material production, animal litter, packing material
- Transported: in closed containers of different types and sizes depending on the intended use
- Possible measures: pest free area, HT, DH, fumigation, irradiation
- Gaps in knowledge: e.g. non-vector transmission of nematodes and pathogens

'Bark' used as mulch



## **Proposed terms and definitions (4)**

#### 'Wood chips'

- Definition: 'Wood with or without bark in the form of pieces with a definable particle size produced by mechanical treatment with sharp tools'
- Note: divided into different classes according to particle size, pest risk depends on size and MC
- Intended use: for fuel, production of mulch, pulp and processed wood material, for animal bedding, road covering, packing material, biofiltration
- Transported: in bulk or in closed containers of different types and sizes depending on intended use
- Possible measures: pest free area, limit of particle size, HT, DH, fumigation, irradiation, production from bark-free wood

#### 'Wood chips'



## **Proposed terms and definitions (5)**

#### 'Hogwood'

- Definition: 'Wood with or without bark in the form of pieces of varying particle size and shape, produced by crushing with blunt tools such as rollers, hammers, or flails'
- Includes: sawdust, particle bark and/or wood with different size of pieces
- Intended use: 'for fuel, production of mulch and processed wood material, for animal bedding, road covering, packing material'
- Transported: in bulk or in closed containers of different types and sizes depending on intended use
- Possible measures: pest free area, HT, DH, fumigation, irradiation

## 'Hogwood'



## **Proposed terms and definitions (6)**

#### 'Processed wood material'

- Glossary definition 'Products that are a composite of wood constructed using glue, heat and pressure, or any combination thereof'
- Includes: agglomerated sawdust, pellets, brickets, plywood, particle board, oriented strand board, veneer, etc.
- Intended use: for fuel, production of manufactured wood items, packaging and packing
- Transported: in bulk or in closed containers of different types and sizes depending on intended use
- Possible measures: not needed

#### 'Processed wood material'



## **Proposed terms and definitions (7)**

#### 'Post-consumer scrap wood'

- Definition: Wide variety of wood material from excommercial, industrial and domestic use made available for recycling
- Intended use: for fuel, production of chips hogwood, and processed wood material
- Transported: in open or closed containers of different types and sizes depending on intended use
- Possible measures: not needed

#### 'Post-consumer scrap wood'



## Potential pest risk

Depends firstly on phytosanitary status at area of origin and destination, and then mainly on:

- freshness of wood (expressed by moisture content)
- bark presence
- size of particles (e.g. for chips)

## Preliminary assessment of pest risk associated with wood commodities depending on initial materials

| Commodities                         | Initial material                          | Likelihood of<br>presence of large<br>insect pests (e.g.<br>longhorn beetles<br>& buprestids) | Likelihood of<br>presence of<br>small insect<br>pests (e.g. bark<br>and ambrosia<br>beetles) which<br>may develop in<br>wood | Likelihood of<br>presence of<br>small insect<br>pests (e.g. bark<br>and ambrosia<br>beetles) which<br>can develop only<br>under the bark | Likelihood of<br>presence of non-<br>arthropod pests<br>(nematodes<br>fungi, bacteria,<br>etc.) |
|-------------------------------------|---|---|--|--|---|
| Harvesting residues                 | Standing trees                            | +++   | +++  | +++  | +++   |
| Off-cuts                            | Fresh* wood with<br>bark                  | +++   | +++  | +++  | +++   |
| Wood chips<br>larger than 2.5<br>cm | Fresh* and<br>untreated wood<br>with bark | +++   | +++  | +++  | +++   |
| Hogwood                             | Harvesting<br>residues, wood<br>with bark | +++   | +++  | +++  | +++   |

#### +++ means high pest risk

\* Fresh meaning that intracellular moisture content is suitable for pest development NB Overall risk depends also on phytosanitary status of the area of origin and destination

# Preliminary assessment of pest risk associated with wood commodities depending on initial materials (2)

| Commodities  | Initial material  | Likelihood of<br>presence of<br>large insect<br>pests (e.g.<br>longhorn beetles<br>& buprestids) | Likelihood of<br>presence of<br>small insect<br>pests (e.g. bark<br>and ambrosia<br>beetles) which<br>may develop in<br>wood | Likelihood of<br>presence of<br>small insect<br>pests (e.g. bark<br>and ambrosia<br>beetles) which<br>can develop only<br>under the bark | Likelihood of<br>presence of non-<br>arthropod pests<br>(nematodes<br>fungi, bacteria,<br>etc.) |
|--|---|--|--|--|---|
| Off-cuts   | Wood without bark   | ++   | ++   | +  | ++  |
| Wood chips<br>larger than 2.5<br>cm<br>Wood chips not<br>larger than 2.5 | Fresh* and<br>untreated wood<br>without bark<br>Fresh and<br>untreated wood | ++<br>+/++   | ++<br>++   | +<br>++  | ++<br>++  |
| cm in any<br>dimension   | with bark   |  |  |  |   |
| Bark   |   | +  | ++   | ++   | ++  |
| Wood chips not<br>larger than 2.5<br>cm in any<br>dimension              | Fresh* and<br>untreated wood<br>without bark                                | +  | +/++   | +  | +/++  |
| Hogwood  | Wood without bark   | +  | +/++   | +  | +/++  |
| Off-cuts   | Wood without bark   | ++   | ++   | +  | ++  |

+ means low pest risk, ++ medium pest risk

\* Fresh meaning that intracellular moisture content is suitable for pest development NB Overall risk depends also on phytosanitary status of the area of origin and destination

## Preliminary assessment of pest risk associated with wood commodities depending on initial materials (3)

| Commodities                 | Initial material  | Likelihood of<br>presence of large<br>insect pests (e.g.<br>longhorn beetles<br>& buprestids) | Likelihood of<br>presence of<br>small insect<br>pests (e.g. bark<br>and ambrosia<br>beetles) which<br>may develop in<br>wood | Likelihood of<br>presence of<br>small insect<br>pests (e.g. bark<br>and ambrosia<br>beetles) which<br>can develop only<br>under the bark | Likelihood of<br>presence of non-<br>arthropod pests<br>(nematodes<br>fungi, bacteria,<br>etc.) |
|-----------------------------|---|---|--|--|---|
| Sawdust and shavings        | Wood  | +   | +  | +  | +   |
| Post-consumer<br>scrap wood | Manufactured wood<br>commodities,<br>Wood packaging<br>material | +   | +  | +  | +   |
| Wood chips                  | Post-consumer<br>scrap wood or<br>treated wood                  | +   | +  | +  | +   |
| Hogwood                     | Post-consumer<br>scrap wood                                     | +   | +  | +  | +   |
| Processed wood material     | Wood  | -   | -  | -  | -   |

+ means low pest risk, - no risk

NB Overall risk depends also on phytosanitary status of the area of origin and destination

# Thank you for your attention