



## **Import Inspection of WPM**

### **New experiences**

### **More feasible detection methods used for the Control of WPM**

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# Commission Implementing **Decision 2013/92/EU** came into force on 1<sup>st</sup> April 2013 amended per Commission Implementing **Decision 2015/474/EU**

- This Decision lays down plant health checks and measures to be taken on wood packaging material in use in the transport of certain specified stone commodities originating in China **before customs release**.
- The aim is to prevent the introduction and spread of harmful organisms, in particular *Anoplophora glabripennis* (Motschulsky).
- only a very few EU Member-States reported interceptions and non compliances
- Austrian inspectors notified about 10% of the inspected consignments
- **Different ways and precision of inspection ???**

# Import Checks at approved Places of Inspection

- Austria has no EU first entry point -> all inspections have to be carried out at approved places of inspection
- Strong requirements:
  - Walk in space for inspection
  - Adequate light for inspection
  - Availability of a fork-lift truck with an experienced driver
  - Adequate space for storage of unloaded pallets
  - Availability of authorized person for opening the container according custom regulations
  - Adequate Space for fumigation treatment in case of non compliance

# WPM Inspections acc. Impl.Dec 2013/92/EU (Periode April - September 2014 CN 6802) all EU-MS

| EU Member State        | No. of incoming consignments | Inspected Consignments | Harmful Organism + correct ISPM Mark | Missing ISM Mark without harmful organism | Total No. of inspected consignments with non-compliant WPM | Total No. of inspected consignments with compliant WPM | % Inspected (Frequency = 15 % according to 2013/92/EU) |
|------------------------|------------------------------|------------------------|--------------------------------------|---|--|--|--|
| <b>Austria</b>         | <b>758</b>                   | <b>167</b>             | <b>16</b>                            | <b>3</b>                                  | <b>19</b>  | <b>148</b>   | <b>22</b>  |
| Belgium*               | 1865                         | 420                    | 0                                    | 2   | 2  | 418  | 23   |
| Bulgaria               | 242                          | 98                     | 0                                    | 3   | 3  | 95   | 40   |
| Cyprus                 | 84                           | 20                     | 0                                    | 0   | 0  | 20   | 24   |
| <b>Czech Republic</b>  | <b>249</b>                   | <b>61</b>              | <b>1</b>                             | <b>0</b>                                  | <b>1</b>   | <b>60</b>  | <b>24</b>  |
| <b>Germany</b>         | <b>3829</b>                  | <b>1596</b>            | <b>6</b>                             | <b>7</b>                                  | <b>13</b>  | <b>1583</b>  | <b>42</b>  |
| Denmark                | 13                           | 3                      | 0                                    | 1   | 1  | 2  | 23   |
| <b>Estonia</b>         | <b>29</b>                    | <b>29</b>              | <b>1</b>                             | <b>4</b>                                  | <b>5</b>   | <b>24</b>  | <b>100</b>   |
| Spain***               | 1666                         | 250                    | 0                                    | 4   | 4  | 228  | 15   |
| Finland                | 127                          | 35                     | 0                                    | 0   | 0  | 35   | 28   |
| <b>France</b>          | <b>567</b>                   | <b>170</b>             | <b>16</b>                            | <b>2</b>                                  | <b>18</b>  | <b>152</b>   | <b>30</b>  |
| Greece                 | No REPORT                    |                        |                                      |   |  |  |  |
| Croatia                | 58                           | 24                     | 0                                    | 2   | 2  | 22   | 41   |
| Hungary                | 0                            |                        |                                      |   |  |  |  |
| <b>Ireland</b>         | <b>451</b>                   | <b>71</b>              | <b>1</b>                             | <b>0</b>                                  | <b>1</b>   | <b>70</b>  | <b>16</b>  |
| Italy                  | 731                          | 571                    | 0                                    | 4   | 4  | 567  | 78   |
| Lithuania              | 136                          | 136                    | 0                                    | 3   | 3  | 133  | 100  |
| Latvia                 | 23                           | 23                     | 0                                    | 2   | 2  | 21   | 100  |
| Luxembourg             | 6                            | 0                      |                                      |   |  |  | 0  |
| Malta                  | 7                            | 5                      | 0                                    | 0   | 0  | 5  | 71   |
| <b>The Netherlands</b> | <b>1773</b>                  | <b>403</b>             | <b>5</b>                             | <b>4</b>                                  | <b>9</b>   | <b>394</b>   | <b>23</b>  |
| Poland                 | 1173                         | 519                    | 0                                    | 0   | 0  | 519  | 44   |
| Portugal               | 17                           | 4                      | 0                                    | 0   | 0  | 4  | 24   |
| Romania                | 13                           | 13                     | 0                                    | 0   | 0  | 13   | 100  |
| Sweden                 | 99                           | 21                     | 0                                    | 1   | 1  | 20   | 21   |
| Slovenia**             | 532                          | 78                     | 0                                    | 0   | 0  | 78   | 15   |
| Slovakia               | 0                            | 17                     | 0                                    | 0   | 0  | 17   | 100  |
| United Kingdom         | 1333                         | 313                    | 0                                    | 7   | 7  | 306  | 23   |
| <b>TOTAL</b>           | <b>15781</b>                 | <b>5047</b>            | <b>46</b>                            | <b>49</b>                                 | <b>95</b>  | <b>4934</b>  | <b>32</b>  |

# WPM Inspections acc. Impl.Dec 2013/92/EU (Periode April - September 2014 CN 6801) all EU-MS

| EU Member State        | No. of incoming consignments | Inspected Consignments | Harmful Organism + correct ISPM Mark | Missing ISM Mark without harmful organism | Total No. of inspected consignments with non-compliant WPM | Total No. of inspected consignments with compliant WPM | % Inspected (Frequency = 15 % according to 2013/92/EU) |
|------------------------|------------------------------|------------------------|--------------------------------------|---|--|--|--|
| <b>Austria</b>         | <b>135</b>                   | <b>31</b>              | <b>1</b>                             | <b>0</b>                                  | <b>1</b>   | <b>30</b>  | <b>23</b>  |
| Belgium                | 649                          | 135                    | 0                                    | 1   | 1  | 134  | 21   |
| Bulgaria               | 0                            |                        |                                      |   |  |  |  |
| Cyprus                 | 0                            |                        |                                      |   |  |  |  |
| <b>Czech Republic</b>  | <b>22</b>                    | <b>14</b>              | <b>1</b>                             | <b>0</b>                                  | <b>1</b>   | <b>13</b>  | <b>64</b>  |
| <b>Germany</b>         | <b>2313</b>                  | <b>928</b>             | <b>9</b>                             | <b>5</b>                                  | <b>14</b>  | <b>914</b>   | <b>40</b>  |
| Denmark                | 31                           | 4                      | 0                                    | 0   | 0  | 4  | 13   |
| Estonia                | 39                           | 39                     | 0                                    | 1   | 1  | 38   | 100  |
| Spain*                 | 153                          | 23                     | 0                                    | 0   | 0  | 23   | 15   |
| <b>Finland</b>         | <b>141</b>                   | <b>48</b>              | <b>2</b>                             | <b>0</b>                                  | <b>2</b>   | <b>46</b>  | <b>34</b>  |
| <b>France</b>          | <b>398</b>                   | <b>103</b>             | <b>6</b>                             | <b>1</b>                                  | <b>7</b>   | <b>96</b>  | <b>26</b>  |
| Greece                 | no REPORT                    |                        |                                      |   |  |  |  |
| Croatia                | 0                            |                        |                                      |   |  |  |  |
| Hungary                | 0                            |                        |                                      |   |  |  |  |
| Ireland                | 84                           | 17                     | 0                                    | 0   | 0  | 17   | 20   |
| Italy                  | 116                          | 65                     | 0                                    | 3   | 3  | 62   | 56   |
| Lithuania              | 8                            | 8                      | 0                                    | 0   | 0  | 8  | 100  |
| Latvia                 | 0                            |                        |                                      |   |  |  |  |
| Luxembourg             | 0                            |                        |                                      |   |  |  |  |
| Malta                  | 0                            |                        |                                      |   |  |  |  |
| <b>The Netherlands</b> | <b>1233</b>                  | <b>304</b>             | <b>10</b>                            | <b>8</b>                                  | <b>18</b>  | <b>286</b>   | <b>25</b>  |
| Poland                 | 43                           | 12                     | 0                                    | 0   | 0  | 12   | 28   |
| Portugal               | 1                            | 1                      | 0                                    | 1   | 1  | 0  | 100  |
| Romania                | 0                            |                        |                                      |   |  |  |  |
| <b>Sweden</b>          | <b>253</b>                   | <b>43</b>              | <b>1</b>                             | <b>0</b>                                  | <b>1</b>   | <b>42</b>  | <b>17</b>  |
| Slovenia               | 33                           | 7                      | 0                                    | 0   | 0  | 7  | 21   |
| Slovakia               | 0                            |                        |                                      |   |  |  |  |
| United Kingdom         | 623                          | 241                    | 0                                    | 1   | 1  | 240  | 39   |
| <b>TOTAL</b>           | <b>6275</b>                  | <b>2023</b>            | <b>30</b>                            | <b>21</b>                                 | <b>51</b>  | <b>1972</b>  | <b>32</b>  |

List of living stages of wood boring insects detected in WPM from China, in the period 1. 4. 2013 till 31.03.2015 by inspectors of the Austrian Plant Protection Service

| Pest   | Number    |
|--|-----------|
| <i>Anoplophora glabripennis</i> (ALB)                                    | 10        |
| <i>Trichoferus</i> sp.   | 16        |
| <i>Apriona germari</i>   | 2         |
| <i>Callidiini</i>  | 2         |
| <i>Clytini</i>   | 1         |
| <i>Aromia</i> sp.  | 1         |
| <i>Phoracantha</i> sp.   | 1         |
| <i>Batocera lineolata</i>  | 1         |
| Unknown species of Cerambycidae  | 8         |
| <b>Total Cerambycidae</b>  | <b>42</b> |
| <i>Scolytinae</i> / <i>Scolytus</i> sp. (bark beetles, ambrosia beetles) | 12        |
| <i>Lyctidae</i>  | 9         |
| <i>Anobidae</i>  | 1         |
| <i>Bostrichidae</i>  | 2         |
| <i>Platipodidae</i>  | 2         |
| <b>Total wood boring small beetles</b>                                   | <b>26</b> |
| <i>Buprestidae</i>   | 1         |
| <i>Cossidae</i>  | 3         |
| <i>Siricidae</i> (wood wasp)   | 1         |



# Findings in WPM from China

## *Apriona germari*

### Mulberry Longhorn Beetle

Origin: China, India, South-East-Asia

Introduction:

2008, 2009 Netherland with WPM????

2012-2014 Austria: several times in WPM

Host spectrum:

very polyphagous (70 species), mostly trees, but  
also herbaceous plants

Morus (Mulberry), Populus, Salix, Malus, Ficus,  
Ulmus, Betula



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# *Apriona germari*

## Mulberry Longhorn Beetle



**Larva:** up to 5-6 cm long, without legs, radial black grain on prothorax, produces bigger saw dust and galleries than ALB

**Beetle:** 3-4 cm, ochre-greenish coloured with black spots (granulates) on the wing basis, striped antennae



***Batocera lineolata***



***Batocera lineolata***





# *Trichoferus campestris*



# *Trichoferus* *campestris*

- Origin: China, Korea, Russia
- Introductions:
  - 2002, 2006 Kanada: Quebec
  - 2008 Kanada: Montreal
  - 2009 USA: Illinois
  - 2013 Austria: several times in Chin. WPM
- Host spectrum:
  - prefers fruit trees, but also wide range of ornamental and forest trees,
  - able to develop in very dry wood
  - Pest of building timber
- Larva: 3 pairs of short stub legs, whitish torus on the prothorax
- Beetle: 1,3-1,5 cm, brown





# Findings in WPM from China



*cf. Apriona  
germari*



# Findings in WPM from China

## *Apriona germari* Mulberry Longhorn Beetle

Further species:

*A. japonica*

*A. cinerea*

Origin: China, India, South-East-Asia

Introduction:

2008, 2009 Netherland with WPM

????

2012, 2013 Austria: several times in WPM

Host spectrum:

- very polyphagous (70 species), mostly trees, but also herbaceous plants
- Morus (Mulberry), Populus, Salix, Malus, Ficus, Ulmus, Betula

Larva: up to 5-6 cm long, without legs, radial black grain on prothorax, produces bigger saw dust and galleries than ALB

Beetle: 3-4 cm, ochre-greenish coloured with black spots (granulates) on the wing basis, striped antennae



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# Findings in WPM from China



larva and pupa of ALB





# Findings in WPM from China

Cerambycidae: *Trichoferus campestris*



Typical symptoms:

- gallery close to the surface, the residual wood layer is thin like a skin
- gallery densely filled with fine saw dust

# Findings in WPM from China

Mostly the middle pole is of less quality and often shows symptoms.



The middle pole can be removed easily for further investigation. The unit will not become unstable.





# Findings in WPM from China

also *Bostrichidae* possible

- *Sinoxylon* sp.  
Powder post beetles



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# Findings in WPM from China

also *Bostrichidae* possible

- *Sinoxylon* sp.



# Findings in WPM from China

also *Bostrichidae* possible

- *Lyctus africanus*



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# Findings in WPM from China

also *Bostrichidae* possible

*Lyctus africanus*





# Findings in WPM from China

also *Bostrichidae* possible

*Lyctus africanus*



# OTHER THREATS AND RISKS

- WPM made of coniferous species from North America and Eastern Asia -> Pine Wood Nematode (*Bursaphelenchus xylophilus*)
- Problem: no visual symptoms except blue stain fungus if no galleries of *Monochamus* (vector) present
- blank samples for PWN extraction necessary



# Symptoms



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# Symptoms



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# Symptoms

Frass or mould ?



*Lyctus sp.*

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# Symptoms



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# Symptoms



Lepidoptera: Larvae  
of a species feeding  
in decaying wood



# Symptoms



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Lepidoptera: Larvae of a species feeding in decaying wood



# Symptoms



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*Trichoferus campestris*



# Symptoms



Frass and Pellets of  
*Apriona germari*



# Symptoms



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Frass of *Apriona germari*

# Symptoms



Galleries and pupal chamber of *Apriona germari*



# Symptoms



Frass of bark beetles  
(scolytidae)



# Principles

- The cheaper the consignment the worse the quality of the wood of the pallet
  - Increasing price competition
  - insufficient or missing treatment of wood
  - High risk of introduction of harmful organism

# Principles

- Missing knowledge of WPM Producer in China
  - Despite of repeated notifications of non compliances no reaction (improvement)
  - In 90% of cases WPM was marked
  - suspicion: forged IPPC-marking

# Principles

- Origin of risk consignments
  - In the first year 2013 mainly from North China (Qingdao, Yantai, Tianjinxingang, Shandong)
  - since 2014 also 30% from South China (Xiamen, Wuhan)



# How to detect risk consignments

- Bill of Lading
- Packing list
- Fumigation certificate

# How to detect risk consignments

- Packing List
  - Wall Panel (Material Code): G359, G654, G603, G350
  - Floor tiles (Material): Bluestone
  - Building stones (MC): G350, G359
  - Border stones (MC): G341, G359, G375
  - Palisade square (MC): G341

# How to detect risk consignments

- IPPC-Marking

- Strong requirements in ISPM 15 standard
- Old marking
- Chinese provinces (33, 35 a.o. South China; 12, 37, 41 a.o. North China)
- New Chinese Marking: CN-37096-HT
  - Hyphen between ISO two letter code and registration number of treating company





# More feasible detection methods



## Import Inspection

- Special requirements for inspection places
- Use of special trained detection dogs

# Inspection procedure

- Before opening the container residual gas-measurement (Inspector or representatives of inspection place) e.g. with Dräger Accuro Pump has to be done
- If gas (Methyl bromide) is detected → container will not be inspected -> warning sticker is placed on the container door



# Danger because of gas inside the container





# Inspection procedure

- Every pallet, every WPM unit has to be unloaded and inspected. When the number of cases of non compliance has reached the critical limit, unloading is stopped and an appropriate treatment has to be done.
- If inspection is done with detection dogs at least one third of the WPM units has to be unloaded, because dogs are sniffing inside the container



# Import- Inspection of WPM



After residual gas-measurement without positive result the customs seal is broken and the container opened



# Import- Inspection of WPM



- Unit by unit is unloaded with fork-lift trucks and presented to the inspector, often 2 fork-lift trucks are working alternating



# Inspection of WPM



The inspector looks carefully at every side and also at the top and to the bottom. The driver of the fork-lift truck lifts the unit to the appropriate height.

# Inspection of WPM



checking of WPM already in the container with detection dogs, if possible (if no residual Methyl Bromide fumigant is present!)



# *Anoplophora* sniffing dogs monitoring Wood Packaging Material from Asia





Training of the dogs: two weeks in special training courses;  
then regularly self training

