

Asian Longhorned Beetle in Austria: Critical Comments on Phytosanitary Measures and Regulations

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Abstract

The ALB is indigenous to East Asia (China, Korea, Taiwan, but not actually present in Japan) It has been introduced twice into North America: New York City, N.Y (1996) and Chicago, Illinois (1998). The first record for Europe was in August 2001 in Braunau, Austria where it was likely introduced through wood packing material (i.g. pallets, crates, dunnage etc.) from Asia.

The first symptoms occurred on maples along a small street in Braunau in November 2000, but the agent of the symptoms was not determined; no adult beetles were found. The first beetles were identified in July, 2001 by experts at the Institute of Forest Protection.

Present Extent of Infestation

- 50 trees infested or with symptoms of maturation feeding and/or oviposition sites (mainly *Acer saccharum* but also *A. platanoides* and *A. pseudoplatanus*).
- 90 beetles caught so far in close proximity to the infested area.

Emergency Measures

All infested trees were felled, chipped and burned by the end of August 2001. Also more than 900 young maple trees without symptoms, occurring in a small forest-like strip in proximity to trees with ALB-feeding symptoms that had been cut, were felled, inspected and chipped between August 2001 and January 2002.

Federal Regulations: (in force since September 1, 2001):

- prohibition of transport of *Anoplophora glabripennis*.
- treatment (chipping and burning) of infested trees and wood.
- stronger import regulations for wood packing material including dunnage of deciduous trees (host trees of ALB) from areas of occurrence: wood must be bark-free and without grubholes > 3 mm and kiln dried below 20% moisture content.
- transport of non infested, susceptible wood including dunnage and plants older than 2 years

out of the safety zone (political district of Braunau) possible only with plant passport and inspection at the district border.

- transport of non infested, susceptible wood within the district of Braunau only under official supervision to wood manufacturers.

Further Federal Regulations: (Decree of Federal Ministry for the Monitoring of ALB):

Infested zone = radius of 1000m around infested areas: visual examination of every susceptible and endangered tree using either a hoisting crane or tree climber, was done in August, September and January; 40 pheromone traps were deployed but no beetles were caught between mid-September and the end of October.

Safety zone = political district of Braunau:

regular random sample examination of susceptible trees and use of pheromone traps

Federal territory = Austria:

intensive monitoring of susceptible trees especially around known importers of wood packed products from Asia.

Main problems on Import Inspections of Wooden Dunnage

- The very high number of consignments makes a complete inspection at points of entry (ports,...) impossible.
- In many cases, no declaration of wood-packing material is added to the imported goods, therefore it is not easy to find wood when consignments are packed in plastic foil or inside containers.
- Many organisms cannot be detected and identified at first sight: highly qualified specialists and labs are necessary to conduct identification. One of the most important recommendations for efficient phytosanitary regulations is the establishment of international standards for wood packing materials including:
 - marking of boxes, crates and pallets.
 - definition of appropriate treatment.
 - declaration of origin (country and producer).
 - scientific name of tree species utilized.
 - date of productions.

Phytosanitary inspections should be allowed everywhere and always. Most efforts should be focused to known importers of “high risk goods” (e.g. stones, cast iron, electronics from Asia). Wood packing material should be destroyed (burned or chipped) under official control soon after usage and not stored or distributed among private users. Regulatory inspections (of trees) in the areas surrounding warehouses and places where crates, pallets or other wood-packing material is stored, are necessary in order to detect infested wood packing material which has not been inspected previously at entry points.

The results of phytosanitary inspections of wooden dunnage in 2001 indicate that there are many living organisms within the investigated wood originating not only from PR. China but also from the U.S. and Canada. Wood Wasps, *Monochamus clamator* from U.S., *Monochamus alternatus* from China, different species of wood feeding weevils from China, *Dryocoetini*- and *Orthotomicus*-bark beetles from both China and the U.S., and *Sinoxylon*-powder post beetles from India are the species most frequently intercepted. No Pine Wood Nematodes (*Bursaphelenchus xylophilus*) have been detected so far but several other *Bursaphelenchus* species such as *B. Mucronatu* have been recovered.

Table 1: Wooden Dunnage Inspection 2001 Austria

	Number of inspected samples	Number of samples with symptoms	Living stages of insects	Living stages of nematodes others than <i>Bursaphelenchus</i>	<i>Bursaphelenchus</i> nematodes not <i>B. xylophilus</i>
PR China	364	120 (33%)			
non coniferous wood		29	2 (6.9%)	2 (6.9%)	0
coniferous wood		96	22 (22.9%)	35 (36.5%)	20 (20.8%)
USA / Canada	219	57 (26%)			
non coniferous wood		19	0	1 (5.3%)	0
coniferous wood		43	5 (11.6%)	8 (18.6%)	3 (6.9%)
Asia without PR China	100	29 (29%)	3 (10%)	2 (7%)	0
n.c. & coniferous wood					
Brasil	8	4 (50%)	0	0	0
n.c. & coniferous wood					