

CURRENT STATUS OF *ANOPLOPHORA* SPP. IN EUROPE AND AN UPDATE ON SUPPRESSION EFFORTS

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ABSTRACT

The Asian longhorned beetle (ALB) *Anoplophora glabripennis* (Motschulsky), and the citrus longhorned beetle (CLB) *Anoplophora chinensis* (Forster) (Coleoptera, Cerambycidae) have been accidentally introduced into 15 urban sites in Europe where they are considered as serious threats to urban and natural forests and are subject to eradication efforts. In their native area, both pests cause serious damage to many deciduous trees, mainly the genera *Populus*, *Acer* and *Salix*. CLB is also a major pest of citrus in Japan and China. At European ports of entry, only four interceptions of live adults of ALB or CLB were made in 28 years (1980-2008). In Europe, most ALB individuals imported in wood packing material from China, and most CLB individuals imported in bonsais or in plants for planting from China and Japan, remained undetected until the goods reached the final customer's place. In most cases, they were intercepted without establishment of an infestation: ALB was intercepted 48 times between 1994 and 2008, and CLB was intercepted 45 times between 1980 and 2008. On the other hand, some introductions remained undetected until an established infestation was discovered. As of December 2008, breeding populations of ALB had been found in several sites in four European countries: Austria (2001); France (2003, 2004 and 2008); Germany (2004 and 2005); and Italy (2007). As of December 2008, breeding populations of CLB had been found in multiple sites in three European countries: Italy (2000, 2006, 2007 and 2008); France (2003); and The Netherlands (2007). In Europe, the top five host tree genera of ALB are *Acer*, *Betula*, *Salix*, *Aesculus*, *Carpinus*, and those of CLB are *Acer*, *Betula*, *Corylus*, *Carpinus*, *Alnus*.

Eradication is the goal for all infestations. By the end of 2008, the numbers of CLB- or ALB-infested trees detected and destroyed in some European countries were: 192 in Austria, 175 in France, 106 in Germany, and 7 in The Netherlands. By the end of 2007, 3,009 CLB-infested trees had been destroyed in Italy. In that country, four ALB-infested trees were destroyed during 2008. Preventive destruction of high-risk host trees of ALB were occasionally performed around the core of some infestations to stop the pests from spreading: in Austria, 900 maple trees were cut during the winter of 2001-2002, and a small urban forest was destroyed in the spring of 2007; in Italy, 309 trees were destroyed during spring, 2008. Occasionally, when one or a few CLB beetles were intercepted at a tree importer's premises, high numbers of plants or the whole consignment were destructed, as was done in the United Kingdom, The Netherlands, France, Switzerland, Belgium, and Croatia. As of December 2008, ALB and CLB control costs had exceeded €3.3 million in Europe. In France and Germany, ALB populations decreased considerably and eradication still seems possible. In Soyons, France, no CLB symptoms have been detected since 2003 and thus the infestation was declared eradicated there. In Austria, despite eradication efforts, the breeding population is still very active, thus a new reinforced project with €472,500 budget was implemented in July 2008. In Italy, despite some eradication efforts, the CLB situation worsened. New heavy infestations were discovered in the past 3 years. In 2008, the European Commission gave the Lombardy Region a €10 million budget to improve CLB control in north of Italy.