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HEALTH AND CONSUMERS DIRECTORATE-GENERAL

Directorate F - Food and Veterinary Office

DG(SANCO) 2011-8978 - MR FINAL

FINAL REPORT OF AN AUDIT

CARRIED OUT IN

THE NETHERLANDS

FROM 03 TO 07 OCTOBER 2011

IN ORDER TO EVALUATE THE SITUATION AND CONTROL MEASURES AGAINST LONGHORN BEETLES (ANOPLOPHORA CHINENSIS AND ANOPLOPHORA GLABRIPENNIS)

In response to information provided by the Competent Authority, any factual error noted in the draft report has been corrected; any clarification appears in the form of a footnote.

Executive Summary

This report describes the outcome of an audit carried out by the Food and Veterinary Office (FVO) in the Netherlands from 3 to 7 October 2011.

*The objective of the audit was to evaluate the situation of longhorn beetles (*Anoplophora chinensis *and* Anoplophora glabripennis*) and the action taken in response to the recommendations of the previous mission reports DG(SANCO)2009/8189 and DG(SANCO) 2010/8753.*

Annual surveys for A. chinensis *presence are carried out targeting high risk areas like places of production importing specified plants. In case of presence or evidence of presence the Commission and the Member States are notified in due time and a demarcated area is designated. These measures are in line with Decision 2008/840/EC. After the previous FVO mission, corrective measures were taken including additional destructive sampling of plants remaining within the demarcated area in Boskoop. However, in areas where isolated findings of* A. chinensis *occurred, certain provisions of Decision 2008/840/EC concerning the movement of specific plants were not respected.*

Appropriate measures aiming at eradication have been applied following the outbreak of A. glabripennis*. No further evidence of the pest has been found. The intensity and timing of further surveillance activities to verify the eradication have not been decided yet.*

The report makes a number of recommendations addressed to the competent authorities, aimed at rectifying the shortcomings identified and further enhancing the implementing and control measures in place.

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Abbreviations and definitions used in this report

Abbreviation	Explanation
ALB	Asian longhorn beetle – *Anoplophora glabripennis*
ANOPLORISK	Research project focusing on the detection and risk management of EU-listed *Anoplophora* longhorn beetles
CLB	Citrus longhorn beetle – *Anoplophora chinensis*
DA	Demarcated area established in accordance with Article 5 of Decision 2008/840/EC. Consists of an infested zone and a surrounding buffer zone
EC	European Community
EU	European Union
EUROPHYT	European Union Notification System for Plant Health Interceptions
FVO	Food and Veterinary Office
Host plants	All woody deciduous plants, *Cryptomeria* and *Pinus* – applied in the infected zone and surrounding 100m clear cut zone
KCB	Quality Inspection Service
Naktuinbouw	Inspection Service for Horticulture
PCR	Polymerase chain reaction
PPS	Plantenziektenkundige Dienst (Plant Protection Service)
PRA	Pest Risk Analysis
Q-DETECT	Research project focusing on the development of tools for on-site phytosanitary inspection of quarantine harmful organisms
SANCO	Directorate General for Health and Consumers of the European Commission
Specified plants	As defined in Article 1 of Commission Decision 2008/840/EC. Consists of the following 17 species: *Acer* spp., *Aesculus hippocastanum, Alnus* spp., *Betula* spp.,*Carpinus* spp., *Citrus* spp., *Corylus* spp., *Cotoneaster* spp., *Fagus* spp., *Lagerstroemia* spp., *Malus* spp., *Platanus* spp., *Populus* spp., *Prunus* spp., *Pyrus* spp., *Salix* spp., and *Ulmus* spp.
WPM	Wood packaging material

1 Introduction

The audit took place in the Netherlands from 3 to 7 October 2011 as part of the Food and Veterinary Office's (FVO) planned audit programme.

The audit team which consisted of two inspectors from the FVO and one national expert from a Member State, was accompanied throughout the audit by representatives of the Plant Protection Service of the Netherlands (PPS).

A questionnaire was sent to the PPS in advance of the audit, which was completed and returned to the FVO, assisting the planning and conduct of the audit.

An opening meeting was held on 3 October 2011 at the PPS head office in Wageningen during which the objectives and itinerary were confirmed. A closing meeting was held at the same location on 7 October 2011.

2 Objectives

The objectives were to audit:

1. the situation and control measures against *Anoplophora chinensis* and *Anoplophora glabripennis* in the Netherlands;
2. the action taken in the Netherlands in response to related recommendations of the previous FVO reports DG(SANCO)/2009-8189 and DG(SANCO)/2010-8753.

In pursuit of these objectives, the following competent authorities were contacted and the following plant health control sites were visited:

Competent authorities		**Nº**	**Comments**
Single authority	Central	1	PPS Wageningen
Responsible official body		2	PPS and Naktuinbouw
Plant health control sites			
	Places of production of susceptible species / garden centres, e.t.c.	6	2 within the demarcated area in Boskoop, 1 within the demarcated area in Hoofddorp, 1 outside the demarcated area in Delft, 1 importing specified plants (Harmelen), 1 importing natural stone
	Infected zone & surrounding 200m of Buffer Zone	4	Boskoop, Delft, Hoofddorp, Almere
	Laboratories	2	PPS National Reference Lab in Wageningen and Inspection Coordination Centre in Boskoop
	Destruction site	1	Adjacent to intensive survey area in Almere

3 Legal Basis

The audit was carried out under the mandate of Article 21 and Article 27a of Council Directive 2000/29/EC.

3.1 Relevant legislation

All EU legislation relevant for this audit is listed in Annex 1. Legal acts quoted refer, where applicable, to the last amended version. At the time of the audit, Decision 2008/840/EC was under review.

3.2 Relevant standards

International Standards for Phytosanitary Measures (ISPMs) are issued by the International Plant Protection Convention of which the EU Member States are members. Those of relevance for this audit are listed in Annex 2.

4 Background

4.1 Previous relevant audits

The FVO had previously carried out a number of missions to the Netherlands on plant health issues. The most relevant to the current audit was the mission carried out in 20-23 April 2009 (DG(SANCO)2009-8189) and the mission carried out in 9-11 February 2010 (DG(SANCO) 2010-8753) following the notification of an outbreak of *A. chinensis* in the area of Boskoop, which is one of the major tree nursery trade and production areas in the Netherlands. One audit was carried out in 9-13 May 2011 to evaluate the system of import controls for plant health (DG(SANCO)2011-8977).

The reports are available on http://ec.europa.eu/food/fvo/ir_search_en.cfm as are the Single Authority's comments on the reports and its response to the recommendations.

Unless otherwise stated, statistical data in this and the following chapters were provided by the Dutch authorities.

4.2 The pests

A. chinensis, commonly called the Citrus longhorn beetle (CLB) and *A. glabripennis*, commonly called the Asian longhorn beetle (ALB) are both quarantine pests in the European Union (EU) listed in Annex I, Part A, section I of Directive 2000/29/EC. Based on a high number of interceptions and the results of a Pest Risk Analysis (PRA), the Commission introduced emergency measures for the former by Decision 2008/840/EC of 7 November 2008.

CLB and ALB share several characteristics. Both are polyphagus longhorn beetles of insect family Cerambycidae, that attack trees and shrubs belonging to various plant families, but they have a clear affinity to maple trees (*Acer*). Females lay single eggs underneath the bark of the tree. One female can lay more than a hundred eggs. Their life cycle depends on climatic conditions and may range between one year in warmer climates and three years in cooler climates. Generally the life cycle in Europe is considered to be two years. In the Netherlands the life cycle is estimated to be three years. Larvae of CLB are found in the roots and lower parts of the trunk while larvae of ALB occur mostly in the upper part of the trunk and branches of the tree. Further information on these pests is

available on the web-site of the European and Mediterranean Plant Protection Organisation (EPPO) : www.eppo.org.

The presence of these pests within the territory of certain Member States has proved that they can survive winters in Europe.

Table 1 below shows that several interceptions have been made in the last 2 years by the Member States at import. Mainly, the country of origin was China. CLB and non specified species of the genera *Anoplophora* were found mainly on *Acer* plants, while ALB was found only on wood products including wood packaging material (WPM).

Table 1 : Interception at import by the Member States for 2010 and 2011 (source: EUROPHYT)

	Total			Comments
		China	Japan	
A. chinensis	2	2	0	Both on *Acer* sp.
A. glabripennis	8	8	0	All on WPM, wood pallets or wooden crates
Anoplophora sp.	2	1	1	1 on WPM, 1 on *Taxus cuspidata*
Total	12	11	1	

4.3 Situation in the Netherlands

Both pests have been found in the Netherlands in the last 2 years. The single authority and the responsible official bodies differentiate between a 'finding' where there is no evidence that any domestic host plant was infested (i.e. insect and/or symptoms on recently imported or introduced plants only) and an ‘outbreak’ if such evidence is found.

So far there were two CLB outbreaks, one in Westland (January 2008) and a second in Boskoop (December 2009), a major tree nursery production area of the Netherlands, while one outbreak of ALB occurred in Almere. In addition several CLB findings occurred in various locations.

5 Findings And Conclusions

5.1 Overall organisation and human resources

Legal requirements

Article 1(4) of Directive 2000/29/EC provides that Members States shall ensure a close, rapid, immediate and effective cooperation between themselves and the Commission in relation to matters covered by this Directive and that, to this end, each Member State shall establish or designate a single authority, which shall be responsible, at least, for the coordination and contact in relation to such matters.

Article 2(1)(g) of Directive 2000/29/EC requires that the responsible official bodies in a Member State shall either be the official plant protection organisation set up under the IPPC, or any other State authority established at national level or at regional level, under the supervision of the national authorities. Article 2(1)(i) of the same Directive requires Member States to ensure that their public

servants and qualified agents have the qualifications necessary for the proper application of the Directive.

Findings

The structure and responsibilities of the plant health services in the Netherlands are described in detail in the General Audit report DG(SANCO) 2007-8006. More information can be found in the FVO country profile for the Netherlands (http://ec.europa.eu/food/fvo/country_profiles_en.cfm). Since the previous FVO audit describing issues of staffing, training and internal communication, no organisational changes took place in the Plant Protection Service which is the single responsible official body as defined in Article 2(1)(g) of Council Directive 2000/29/EC. The plant health inspections concerning this audit are carried out by Naktuinbouw, the Inspection Service for Horticulture and a separate team of PPS, set up specifically to carry out targeted checks for wood packaging material.

The FVO team throughout the audit noted that:

- There is, in general good cooperation and clear division of responsibilities between PPS and Naktuinbouw concerning the exchange of information on the CLB and ALB situation, surveillance and control;
- Private residential areas and public green are controlled by the PPS. Staff of Naktuinbouw control professional premises for phytosanitary inspections, and are entitled to impose sanctions;
- Relevant training and information have been delivered to plant health inspectors. All PPS inspectors and a tree climber interviewed by the FVO team appeared to be well aware of CLB and ALB signs and symptoms;
- Naktuinbouw inspectors in order to exercise their duties are assisted by digital media providing access to operating procedures and guidelines for inspection. All the Naktuinbouw and PPS staff met were aware of the provisions of Decision 2008/840/EC and Directive 2000/29/EC regarding CLB and ALB.

Conclusions

Plant Health Services in the Netherlands have been established in line with EU legislation. There is a clear distribution of responsibilities amongst the competent authorities involved in surveillance and control of CLB and ALB. The inspectors have the necessary rights, information and knowledge to perform the tasks related to this control. Auxiliary staff like tree climbers contributing on plant health inspections appeared to be well trained on carrying out their duties.

5.2 Legislation and Guidelines

Legal requirements

Decision 2008/840/EC provides emergency measures to prevent the introduction into and the spread within the EU of *A. chinensis*. The measures concern the import controls, the movements within the EU, the surveys to be carried out by the Member States and the demarcated areas to be defined.

A. glabripennis is listed in Annex I Part A Section I to Directive 2000/29/EC, its introduction into and spread within the EU is prohibited. Article 16(1) of the same Directive requires the immediate notification of its presence and that all necessary measures to eradicate, or if that is impossible, to inhibit the spread of the pest must be taken.

Findings

In the Netherlands, Commission Decision 2008/840/EC is implemented by two legislative acts. The Regulation against Western corn rootworm, Chinese longhorn beetle and Oriental chestnut gallwasp (*Regeling bestrijding maïswortelkever, boktor en kastanjegalwesp*), requires among others the designation of demarcated areas in case of CLB presence (Art. 11) and contains the conditions for movement of specified plants originating from buffer zones or from third countries where CLB is known to occur (Art. 11a). Article 11c of the same regulation contains certain provisions against *A. glabripennis* and the relevant demarcated zone established in the Municipality of Almere. Article 12i of the Regulation of import, export and movement of plants (*Regeling invoer, uitvoer en verkeer van planten*) lays down specific import requirements for the import of specified plants from third countries. In both regulations direct references are made to the relevant provisions of Decision 2008/840/EC for the establishment of demarcated areas and conditions for import and movement of specified plants. In addition two Ministerial Decisions (*Besluit van de Minister van Landbouw, Natuur en Voedselkwaliteit*) are in place for the specific areas where CLB outbreaks occurred (Municipality of Westland issued on 15.12.2008 and Town of Boskoop issued on 22.01.2010).

The FVO team noted that:

- A national contingency plan for the actions to be taken upon the detection of CLB and ALB presence was elaborated in 2008. The document is also meant to serve as guidelines for the control measures of ALB and currently is under revision;
- Detailed guidelines for import inspections and surveillance have been distributed to PPS and Naktuinbouw inspectors. Specific reference is made to the areas where CLB and ALB occurred.

All documents contain detailed information about the biology of the pests, their host plants, the symptoms and the control measures to be taken in case of occurrence; they are regularly updated.

Conclusions

The Netherlands have the necessary legislative tools and guidelines to control CLB and ALB.

5.3 SITUATION OF ANOPLOPHORA CHINENSIS

5.3.1 Surveys

Legal requirements

Article 4 of Decision 2008/840/EC provides that the Member States shall conduct official annual surveys for the presence of *A. chinensis*, and that the results of those surveys shall be notified to the Commission and the other Member States.

Findings

Official surveys for CLB are carried out according to annual survey plans and guidelines for surveillance addressed to phytosanitary inspectors. PPS prioritises its efforts to areas of increased phytosanitary risk, like nurseries importing host plant species from CLB infested countries where import checks take place according to Decision 2004/103/EC. Systematic surveys are also carried out in places of production of domestically produced host plant species. In most cases the immediate vicinity of areas which are considered to be of high risk for the introduction of CLB is also included in the surveillance scheme.

Garden centres and plant markets are only surveyed for tracing back and/or tracing forward purposes when following up an incident of CLB presence. Surveys in public green areas are based

on random checks of parks and other public green sites including road lanes. Forest areas are surveyed once a year according to information provided by the national forest inventory; no fixed observation points have been established for this purpose.

Following incidents of CLB presence, the PPS has repeatedly raised awareness campaigns addressed not only to the stakeholders involved with trade of host plants but also to the local authorities and the general public. Press releases, radio/television broadcasting and the web are used to inform the public on CLB risks. After the CLB outbreak in Boskoop (December 2009), four CLB findings were reported in Hoofddorp, Krimpen a/d IJssel, Maasland and Delft (see also sections 5.3.2.1 and 5.3.2.2), all associated to imported plant material. All findings except for the finding in Maasland, resulted from observations made by citizens and are considered to be the outcome of the public awareness campaigns launched by PPS.

Based on the survey results the Netherlands considered the status of *A. chinensis* as "Absent, eradicated".

Conclusions

Annual surveys for CLB presence are carried out according to Article 4 of Decision 2008/840/EC and target high risk areas; a rigorous inspection of places of production importing specified plants and their surroundings is included. The results of annual surveys as well as CLB findings are communicated to the Commission and other Member States.

5.3.2 Control measures where presence of Anoplophora chinensis is confirmed

Legal requirements

Anoplophora chinensis is listed in Annex I Part A section I to Directive 2000/29/EC, its introduction into and spread within the EU is prohibited. Article 16(1) of the same Directive requires immediate notification of its presence and that all necessary measures to eradicate, or if it is impossible to inhibit the spread of the pest shall be taken. The Commission and other Member states shall be informed of measures taken.

Article 5 of Decision 2008/840/EC provides that when there is confirmation of the presence, or evidence of the presence of the organism, Member States shall define a demarcated area in accordance with Section I of Annex II to the same Decision and shall take official measures as laid down in section 2 of Annex II. Annex ii (2)(b) of the same Decision provides for the need to carry out intensive monitoring in the infested zone and the buffer zone.

Findings

Three recommendations of report DG(SANCO)2009-8189 concerned this subject:

Recommendation 3 *"Ensure that the approach in case of findings identified since November 2008 is in line with the requirements of Commission Decision 2008/840/EC",*

Recommendation 4 *"Consider increasing the general knowledge of the stakeholders involved in import and production of A. chinensis host plants as regards the risk involved, precautionary measures and requirements of the new emergency decision".*

Recommendation 5 *"Consider the removal of all host plants in the infested zone or in a wider radius as recommended by international scientists as necessary for successful eradication",* and

In addition two recommendations of report DG(SANCO)2010-8753 concerned this subject:

Recommendation 1 *"Ensure that the Commission and the other Member States are immediately notified in writing of the presence of A. chinensis, and that all necessary measures are taken to eradicate or if that is impossible, to inhibit the spread of the organism, as required by Article 16(1) of Council Directive 2000/29/EC"* and,

Recommendation 2 *"Ensure that, whenever the presence of A. chinensis is confirmed, or there is evidence of the presence of that organism by other means, that a demarcated area is defined, in accordance with Article 5 of Commission Decision 2008/840/EC".*

5.3.2.1 Presence of A. chinensis

As already described in report DG(SANCO)2009-8189, PPS follows a different approach between a "finding" where CLB presence is directly related to the import of already infested plant material at the country of export and an "outbreak" where CLB presence or evidence of presence is related to the infestation and completion of full life cycle of CLB in domestic plants.

Since the last CLB outbreak detected in Boskoop in December 2009, there were five additional notifications of findings concerning four different locations: in Hoofddorp, (female and male adult emerged from 2 exit holes, confirmed in July and August 2010 respectively), in Krimpen a/d IJssel and Maasland (exit holes and exuviae both findings confirmed in August 2010) and in Delft (exit holes and exuviae, confirmed in September 2011). All findings were associated to *Acer palmatum* plants potted or planted in private gardens and belonged to the infested consignment which was imported from China in April 2007 and traced forward following a notification by Germany.

There was no case where further infestation was noted on domestic plants growing in these sites therefore, PPS considered all occurrences as findings. According to the PPS, the evidence suggests that either *A. chinensis* has completed a 3-4 year life cycle in the Netherlands or a new CLB generation occurred, re-infesting plants that once belonged to the same consignment imported from China in 2007. The PPS stated that further evidence is required to conclude on this hypothesis as a four year life cycle for *A. chinensis* has not been proved to occur. Following the confirmation of CLB occurrence, notifications were sent in writing to the Commission and the other Member States within one to three days.

5.3.2.2 Control measures

<u>Control measures in the demarcated area of Boskoop</u>

In December 2009 a CLB outbreak occurred in Boskoop within the premises of a nursery importing plants from China. The initial handling of the outbreak has been described in detail in the mission report DG(SANCO)2010-8753. This included the designation of a 2km radius demarcated area established on 25 January 2010, consisting of a 15m radius infected zone, a clear-cut zone (100m radius from infestation), an intensive inspection zone (100-200m radius from the infected zone) and the remainder of a buffer zone up to 2km from the focal point. In addition it included restrictions on the movement of specified plants within and from the demarcated area. A survey of all places of production trading host plants including targeted destructive sampling of 1% of host plants, subject to a maximum of 40 plants per field and 100 plants per company was carried out. In total, more than 15,000 plants were cut and inspected in the demarcated area by the end of February 2010. The trade ban imposed in January was then lifted and host plants remaining in the places of production were allowed for trade.

Following the above mentioned mission the following control measures took place during 2010:

- Removal and destructive sampling of the few remaining host plants within the 100m radius clear-cut zone; by mid February 2010 all of the approximately 2,800 plants were removed.

- Supplementary inspection of the host plants that remained in the places of production. The inspection included additional targeted destructive sampling in order to reach 1% per plant species; completed by the end of March 2010.

- Monitoring of all host plants in public and private green sites including approximately 6,700 private gardens and the immediate vicinity of places of production within a 2km radius from the focal point; completed by the end of March 2010.

- Additional monitoring of all host plants in public and private green sites in the intensive inspection zone; completed in November 2010.

- Survey of all host plants in public green sites within 2km radius from the focal point; completed by December 2010.

The FVO team visited different sites in the clear-cut and the intensive inspection zones and two companies operating within the demarcated area, where it also examined relevant documentation of the actions taken in 2010, and noted that:

- The survey carried out in public and private green also included sites neighbouring canals and railway tracks; special preparatory actions had to be considered for this purpose.
- Two more inspections for CLB were carried out in places of production: the first between May-July and the second in November 2010. During these inspections premises of the same company located in different sites either within or outside the demarcated area were also inspected by Naktuinbouw.
- The numbers of plants destroyed for CLB identification purposes were recorded. During the second inspection a second monitoring of host plants in the immediate vicinity of the places of production was included.
- No further evidence of CLB presence was detected.

The PPS stated that after the outbreak, companies operating in Boskoop refrained from importing susceptible host plants due to the high risk of re-introducing CLB in the area. Between late spring and autumn of 2011 Naktuinbouw carried out two CLB targeting inspections in places of production within the demarcated zone. The same companies have been additionally inspected two times for general plant health purposes during which attention is also paid to CLB. A provision for targeted destructive sampling was in place where suspicious signs or symptoms like wilting or retarded growth of host plants were observed; no further evidence of CLB presence were found.

- However the FVO team also noted that in 2011 by the time of the audit no monitoring for CLB presence had been carried out in high risk areas like the immediate vicinity of places of production and the public green between 100-200m from the focal point; monitoring of private gardens had not been decided.

The PPS stated that additional monitoring of these sites and of public green within the demarcated area was planned to take place in November 2011 as in winter many shrubs have lost their leaves and this season is considered by the PPS to be most appropriate for monitoring woody plants. Indeed a small infestation and one or few exit holes or other symptoms like frass or maturation feeding might be hidden by dense growing ground vegetation and their detection might be more difficult during the summer. However according to the existing scientific literature, late autumn or winter is generally not considered to be the most appropriate time for carrying out intensive monitoring aiming to the earliest possible detection of *A. chinensis;* during this period only exit

holes of adults that emerged in late summer can be detected and new infestations might already be in advanced stages for building up a viable CLB population.

Control measures in places where CLB findings occurred

After the outbreak in Boskoop, the Netherlands communicated to the Commission and the Member States four cases of CLB presence in Hoofddorp, Krimpen a/d IJssel, Maasland and Delft. Following their confirmation the PPS determined that all cases suggested evidence of a CLB "finding" as they were associated to the consignment of infested plants imported from China in 2007 (see also section 5.3.1). Assessment based on the age of the exit holes and estimation of the possible timing of adult emergence confirmed this conclusion.

The PPS decided to take an approach similar to that agreed for the demarcated area in Boskoop. In all cases a demarcated area was established consisting of a 100m radius intensive monitoring zone and a buffer zone up to 2km from the focal point. No clear cut measures were taken in the zones around the focal points, as evidence suggested the case of CLB "findings"; only the plants that belonged to the infested consignment and found to be infested had been removed and destroyed. Awareness campaigns were launched in cooperation with the local municipalities by sending letters to the residents of properties located within the limits of the intensive monitoring zone. The public was also informed on the follow up delimiting survey. In addition, the movement of specified plants from nurseries and garden centres operating within the demarcated areas in Hoofddorp (3 places of production), Krimpen a/d IJssel (1 place of production) and Maasland (1 place of production) was banned.

The FVO team visited the focal point in Hoofddorp where a finding was detected in a private garden in July 2010 and a registered place of production/garden centre located within the demarcated area where specified plants originating from Boskoop and other Member States are traded. The FVO team noted that:

- The management of the garden centre appeared to be quite aware of the plant passport requirements and the potential implications of a CLB finding in the premises of his company. All specified plants in the premises of the garden centre were accompanied by plant passports wrapped around the stem;

After the finding the management of the garden centre received an official note prohibiting the trade of specified plants.

- However the FVO team noted that the ban was lifted as soon as an official inspection carried out by Naktuinbouw during which 1% of susceptible plants per plant species were sampled by targeted destructive sampling and the absence of CLB was confirmed; no further CLB presence or evidence of presence was detected.

The FVO team visited the demarcated area designated following a recent CLB finding in the municipality of Delft. PPS confirmed that the infested tree was part of a consignment of *Acer palmatum* (maples) imported from China in 2007. Following a notification by Germany the consignment was reported to be infested in December 2009. The owner of the private garden where the finding was detected stated that the plant had been purchased from a garden centre in June 2010; she reported the suspicious symptom (exit hole on a maple tree) to PPS although she was advised not to, by the management of the garden centre.

The FVO team during this visit noted that:

- A delimiting intensive survey had been carried out in all private gardens and public green sites located within the 100m radius from the focal point;

- Residents appeared to be quite aware of the situation regarding CLB; they confirmed that monitoring was carried out in their properties and produced the relevant communication letters as well as additional information delivered by PPS.

In one case a living *Heteroptera* specimen *(Leptoglossus occidentalis)* had been captured in order to be reported to PPS for identification. During this survey, plants were examined for the presence of exit holes and the adult specimen that emerged from the infested *Acer palmatum.*

- However the FVO team also noted that the decision for continuing the delimiting monitoring survey in public green sites located in the immediate vicinity beyond the 100m radius of the intensive survey zone had been postponed until the elaboration of a new legislative act for the control of *A. chinensis*.

The PPS considers that in the case of a single finding the risk of CLB spread is minimal and intensive monitoring activities are not given immediate priority for areas like public green sites and private gardens located within the buffer zone at a larger distance from the finding.

The FVO team visited the mentioned garden centre in Delft, which had supplied the infested plant. The centre is located outside the demarcated area. The management of the garden centre confirmed that among other *Acer* sp. plants traded in its premises, 16 originated from the above mentioned consignment; the plants had been delivered in three lots of six, five and five plants to the garden centre in the period between April 2008 and April 2009 from the same wholesale company that imported the consignment with infested plants from China. In general only few plants from the infested consignment were present at the same time in the garden centre.

After the notification of the infested consignment in December 2009, tracing forward documentary and plant health checks in the garden centre were not carried out until August 2010. During the inspection, susceptible plants were inspected and no CLB findings were detected. As many of them were sold, there was no further information on the plants originating from the same consignment and no possibility to find the places where they were planted. The manager received advice for being more vigilant. He stated that suspicion of CLB presence will in any case be immediately reported to PPS.

However the FVO team noted that:

- In the immediate vicinity of the garden centre there were 20-30 mature *Populus* sp. (poplars) trees surrounding the premises. The lower parts of their trunk were covered to a large extent by creeping and climbing *Hedera* sp.; this could mask any possible signs or symptoms of CLB presence like oviposition sites or exit holes. During the official plant health inspection these plants had not been inspected;
- Although maples originating from an infested consignment had been present for a prolonged period of time at the garden centre, a monitoring exercise of the surroundings had not been carried out or not planned to be carried out.

The PPS considers that the risk of CLB establishment is low due to the small quantity of maples traded through the garden centre and because deliveries of the 16 high risk *A. palmatum* to the garden centre took place in small lots during a period of one year.

Conclusions

A demarcated area is designated in all cases where CLB presence or evidence of presence is confirmed. The Commission and the other Member States were notified on time and in writing. Measures are taken to eradicate or to inhibit the spread of CLB. Recommendations 1 and 2 of DG(SANCO)2010-8753 mission report have been addressed. Operators involved in the production

of host plants were aware of the consequences that *A. chinensis* presence could have for the continuity of their activities and the associated plant health risk; recommendations 4 and 5 of DG(SANCO)2009-8189 mission report have been addressed.

The movement restrictions implemented in case of CLB findings in areas other than Boskoop are in compliance with what was agreed between the Netherlands and the Commission for the demarcated area in Boskoop, but not in line with Annex I(II)(1)(ii) of Decision 2008/840/EC. Recommendation 3 of DG(SANCO)2009-8189 mission report has not been adequately addressed.

In case of CLB findings, intensive monitoring for the presence of CLB is accomplished only in the infested zone of the area that has been demarcated; monitoring in the rest of the buffer zone is significantly delayed. This is not in line with Annex II(2)(b) of Decision 2008/840/EC. In one case the PPS delayed significantly the surveillance of a production site linked to a CLB infested consignment and did not include specified plants growing in the immediate vicinity of the place of production as the associated phytosanitary risk was assessed as low.

5.3.3 Import of host plants

Legal requirements

Article 3 of Decision 2008/840/EC provides that specified plants originating in the demarcated areas within the EU or imported from third countries where *A. chinensis* is known to be present may be moved within the Community only if they are accompanied by a plant passport and have been grown under certain conditions.

Article 2 of Decision 2008/840/EC provides that specified plants may only be introduced from third countries, where *A. chinensis* is known to occur, into the territory of EU if they comply with certain specific import requirements and are, on entry, inspected by the responsible official body. Annex I specifies these import requirements.

Commission Directive 94/3/EC, establishing a procedure for notification of interception of harmful organisms or consignments presenting an imminent phytosanitary danger, provides in Article 2(1) that such notifications are sent within two working days to the Commission and the other Member States.

Findings

Controls taking place during import of host plants have been described in detail in report DG(SANCO)2009-8189; two recommendations concerned this subject:

Recommendation 1 "Ensure that the host plants of Anoplophora chinensis *imported from third countries where the harmful organism is known to be present are accompanied by the plant passport when moved within or from The Netherlands as required by article 3 on the Commission Decision 2008/840/EC"*

Recommendation 2 "Ensure that the Commission and the other Member States are notified and the notification is sent within less that 2 days in accordance with Article 2(1) of Directive 94/3/EC".

From 1 April 2009 until the date of the prohibition of *Acer* spp. imports from China, three interceptions, all related to the presence of *Anoplophora,* were carried out in two different places of production. In the earlier case the contaminated consignment was destroyed while the Commission and the other Member States were notified through EUROPHYT with a delay of 38 days possibly because evidence of *Anoplophora* presence were detected during post import inspections. In the other two cases the entry to the intercepted part of the consignment was refused and notifications were sent without significant delay.

Table 2a shows a breakdown analysis of numbers of consignments containing susceptible plants and *Cornus* spp., *Crataegus* spp., and *Rosa* spp. imported from third countries.

Table 2a Total number of consignments containing susceptible plants and *Cornus* spp., *Crataegus* spp., and *Rosa* spp. imported from third countries
Source: PPS

Year	2010	2010	2010	2010	2011	2011	2011
Months	1-3	4-6	7-9	10-12	1-3	4-6	07/08/12
Nº of consignments with specified plants	75	31	35	14	90	29	30
Nº of consignments with specified plants imported from infested countries*	40	2	0	3	41	3	0
*Philippines, Hawai (USA), Indonesia, Japan, Malaysia, Myanmar, North Korea, Taiwan, Vietnam and South Korea							

Table 2b shows the numbers of post import inspections carried out on *Acer* spp. from China and aberrant places of origin.

Table 2b Total number of post import checks on *Acer* spp. imported from third countries
Source: PPS

Year	2010	2010	2010	2010	2011	2011
Months	1-3	4-6	7-9	10-12	1-3	4-6
Nº of post import checks in places of production	17	2	0	1	3	1

The FVO team visited a company importing artificially dwarfed plants (bonsais) in Harmelen. Naktuinbouw carries out import inspections consisting of documentary, identity and plant health checks. The number of plants sampled for visual inspection varies depending on the size of lot and it is indicated in the table below:

Table 3 Size of sample examined during the visual inspections carried out on import
Source: Naktuinbouw

Number of plants in the lot	Level of visual checks
Up to 300	15 plants
Between 300-1000	15 plants plus 2 plants per hundred
More than 1000	30 plants plus 5 plants per thousand

Targeted destructive sampling is also applied when specified plants are imported from infested countries or from a doubtful place of origin according to the levels required by Decision 2008/840/EC. All specified plants in the premises of the bonsai importing company had plant passports in the form of a label wrapped around the stem or affixed on the container.

Conclusions

The system of import controls is in line with the import requirements of Decision 2008/840/EC and actions are always taken following an interception. Plants imported from countries where CLB is

present had plant passports attached. The time taken for the notification of an interception has been significantly decreased. Recommendations 1 and 2 of DG(SANCO)2009-8189 mission report have been addressed.

5.4 SITUATION OF ANOPLOPHORA GLABRIPENNIS

Legal requirements

Anoplophora glabripennis is listed in Annex I Part A section I to Directive 2000/29/EC, its introduction into and spread within the EU is prohibited. Article 16(1) of the same Directive requires immediate notification of its presence and that all necessary measures to eradicate, or if it is impossible to inhibit the spread of the pest shall be taken. The Commission and other Member states shall be informed of measures taken.

5.4.1 Presence of Anoplophora glabripennis

Findings

The PPS carries out an annual survey for ALB following a risk based approach. The survey includes inspection of the premises of 47 companies importing or storing natural stones and wood packaging material. The inspection does not exclusively target ALB; additional information is provided to stakeholders regarding high risk WPM material. Inspection of surroundings include ALB host plants within 50m and *Acer* spp. trees within a 100m radius.

The FVO team visited a company importing natural stones from China which had been inspected by the PPS in 2010 and where it was noted that:

- Some of the WPM associated with Chinese stones were not meeting ISPM 15 requirements and had suspicious marks. The assistant operator met was not fully aware of ALB and WPM specific requirements; he declared that he relies on his Chinese exporter for the quality of WPM.

The PPS stated that a national network of professionals working in public and private green sites will be established, aiming at the development of an early warning system for signs and symptoms of pests including ALB. The network will include seven different professional associations involving approximately 3,000 professionals throughout the Netherlands and it is expected to be operational by 2012.

In October 2010 climbers of a pruning company in charge of the maintenance of trees in a public area of the Municipality of Almere noticed exit holes on six adjacent *Acer pseudoplatanus* trees. The trees were part of a lane along a public road bordering companies importing goods from Asia. Tree samples were sent to the National Reference Laboratory; the presence of *A. glabripennis* was confirmed on 16 November 2011. Laboratory work is still on-going; the results on the dynamics of the ALB population in the Netherlands will also be analysed in the context of ANOPLORISK research project (see also section 5.5 *Research*).

Conclusions

An annual national risk based survey is carried out. Operators were not fully aware of the phytosanitary risk linked to the import of WPM. However new initiatives involving the establishment of a network of professionals are being taken in order to increase chances of early detection of ALB.

5.4.2 Control measures where presence of Anoplophora glabripennis is confirmed

The ALB outbreak site is located within an industrial zone in the Municipality of Almere. Several companies importing goods from Asia are situated in the vicinity. There are only few private and public green sites, the most important of which is destined for nature conservation. No places of production or garden centres with *Anoplophora* host plants operate in the area. The PPS demarcated an area around the first six infested *Acer pseudoplatanus* trees consisting of a clear cut area, a buffer zone and an intensive survey area.

In collaboration with the Municipality of Almere, the PPS launched a public awareness campaign providing information on the eradication measures and the obligations of residents/stakeholders. Leaflets and letters were sent to residents and companies located within the 1 km radius of the infested area. The information provided varied depending on the distance from the focal point and the recipient's target group. Accomplishment of eradication tasks and results of intensive monitoring exercise were announced through a second communication. There were regional and national press releases and an information helpdesk service was available to reply to phone enquiries.

Eradication measures in the clear-cut area

Following confirmation of ALB presence eradication measures were implemented; these involved concerted efforts by 58 people trained by the PD. Teams of 6-7 tree climbers supervised by PPS inspectors carried out the inspection and felling activities. Inspection and felling of infested trees and precautionary felling of all deciduous trees started within one week after confirmation of the outbreak. The latter revealed infestations in three more *Acer* trees and one shrub (*Salix aurita*). All 10 infestations were identified within a lane of 70 m; this led to the expansion of the clear cut area within 100 m radius from the outer limits of the outbreak totalling a 270m length by 200m wide elliptic surface.

All the trees felled in the clear-cut area were registered and numbered, cut into numbered pieces and then safely transferred for analysis to the laboratory facilities of a nearby inspection coordination centre especially set up for this purpose. In total, more than 60 exit holes, 11 adult beetles (two alive and nine dead), seven larvae and numerous scar tissue spots that may be related to oviposition were identified. No young larvae or eggs were detected. Estimation of the age of the exit holes revealed that the oldest was formed in 2005 and the most recent in 2010; the first infestation and oviposition occurred possibly during 2002-2003. Further analysis showed that half of the exit holes were formed in 2007; In total, 100 deciduous trees and 7 groups of shrubs were felled and analysed. After analysis, non infested material was transported to a recycling company located within 1 km from the focal point for chipping and incineration. Eradication was completed by mid February 2011.

Restrictions of movement in the buffer zone

A 500 m radius buffer zone was established around the first six infested trees. Plant material of more than 2.5cm diameter originating from this zone, could only be moved outside this zone under the condition that it would be sent for destruction in a recycling company designated for this purpose. The measure was communicated by letters to the general public on 17 November 2010. Residents were also informed about the recycling company designated to receive, chip and incinerate material originating from pruning on private properties. A contract was signed for this purpose between the municipality and the recycling company.

The PPS informed the FVO team that safe disposal of pruned material is carried out for free; records are kept of the amount of disposed pruning material but there is no control to ensure that the movement restrictions are implemented. The period of implementing the above mentioned movement restrictions was initially for four years but it might be shortened if the PPS concludes that the associated plant health risk has been adequately addressed.

Intensive survey area

A 1km radius intensive survey area was established around the first six infested trees. Approximately 5,500 deciduous trees grown in public and private areas within this zone were inspected by tree climbers assisted by bucket trucks. In case of suspicion, trees were registered and GPS mapped for identification purposes. Wood samples were taken and dispatched for further analysis; 41 suspicious trees examined during monitoring proved negative to ALB infestation. Wood packaging material (WPM) of the 184 companies operating in the area was also inspected for ALB signs.

These inspections were carried out by PPS assisted by inspectors from the Quality Inspection Service (KCB). The monitoring within the area of 1 km radius from the focal point was completed by mid February 2011. No further signs of ALB presence were observed. The PPS stated that the limited number of exit holes suggests that ALB population at the time of detection was in a stage of natural decline. Based on the results of the monitoring, the PPS considered the status of *A. glabripennis* as "Absent, eradicated" and the country being free from *A. glabripennis.*

- However the FVO team noted that no monitoring had been carried out during the first vegetation period following the detection of the outbreak; at the time of the mission, the intensity and timing of the next monitoring exercises had not been decided.

The PPS stated that a monitoring plan based on the assessment of the phytosanitary risk would be drafted soon.

Conclusions

The presence of ALB in Almere and the related phytosanitary measures taken were immediately notified to the European Commission and other Member States. A range of measures aiming at eradicating the pest was quickly implemented after the presence of ALB was confirmed. An information campaign targeting residents and companies was conducted. All operations were completed by mid February, prior to the next ALB flying season. The measures taken by the PPS are considered to be appropriate for eradicating ALB as required by EU legislation.

However since signs and symptoms may easily be overlooked during inspections carried out exclusively in winter and ALB in the Netherlands has a life cycle of several years, it cannot be concluded yet that the pest has been eradicated. The fact that the the number of recent exit holes is limited, suggests that either ALB population at the time of detection was in a stage of natural decline or that the beetles had left the site for searching more suitable trees for breeding. An organism cannot be declared as eradicated prior to a period of safety which should be at least one life cycle and one additional year without new findings during which intensive monitoring is carried out. At the time of the audit no decision had been taken concerning the intensity and timing of the next monitoring exercises.

5.4.3 Import of susceptible material

Legal references

Annex IV Part A Section I, point 2 of Directive 2000/29/EC includes wood packaging material and other objects originating in certain countries.
The list of non regulated plants that may be subject to supervision in accordance with Article 13(3) of Directive 2000/29/EC, includes wood in the form of dunnage, spacers, pallets or packaging material, which are actually in use in the transport of objects of all kind.

Findings

Import checks of WPM from China are carried out by PPS inspectors at the seaport prior to customs clearance. On average 1,500 inspections of WPM are carried out approximately each year (see also report DG(SANCO)2011-8977). PPS considers the possibility of increasing the level of checks of imported consignments. Only significant cases of non-compliant WPM are notified in EUROPHYT. Where minor cases are found i.e. single pieces of non-compliant WPM, they are not notified. This is expected to change in 2012.

Conclusions

There is a WPM control programme in place for import as described in report DG(SANCO)2011-8977, with no major changes since then.

5.5 Research

In the Netherlands research on *Anoplophora* is mostly focused on the development of early detection and identification techniques. The FVO team visited the entomology department of the National Reference Laboratory in Wageningen. It was explained that identification of *Anoplophora* at species level is possible by using PCR performed on larval stages or exuviae remnants in the galleries. Conclusions following the determination of the age of exit holes allow for the appropriate level and intensity of the measures to be taken. PPS in the framework of two European research programmes QDETECT and ANOPLORISK also participates in research projects investigating the effectiveness of various non-destructive techniques for the early detection of quarantine pests including the use of x-rays.

6 Overall Conclusions

Annual surveys for *A. chinensis* presence are carried out targeting high risk areas like places of production importing specified plants. In case of presence or evidence of presence the Commission and the Member States are notified in due time and a demarcated area is designated. These measures are in line with Decision 2008/840/EC. After the previous FVO mission, corrective measures were taken including additional destructive sampling of plants remaining within the demarcated area in Boskoop. However, in areas where isolated findings of *A. chinensis* occurred, certain provisions of Decision 2008/840/EC concerning the movement of specific plants were not respected.

Appropriate measures aiming at eradication have been applied following the outbreak of *A. glabripennis*. No further evidence of the pest has been found. The intensity and timing of further surveillance activities to verify the eradication have not been decided yet.

7 Closing Meeting

A closing meeting was held on 7 October 2011 in Wageningen, with representatives of the Single Authority (PD) and NAK. At this meeting, the FVO team presented the main findings and preliminary conclusions of the audit.

8 RECOMMENDATIONS

The Single Authority in the Netherlands is recommended to:

N°.	Recommendation
1.	Ensure that all necessary measures to eradicate or, if that is impossible, inhibit the spread of the pest are taken, in line with Article 16(1) of Directive 2000/29/EC; in particular monitoring carried out in places of production following up an A. chinensis finding, will not be delayed and will also include specified plants grown in their immediate vicinity following a risk based approach.
2.	Ensure that the approach followed in case of A. chinensis findings, is in line with the requirements of the Commission Decision 2008/840/EC.
3.	Ensure that the intensive monitoring for the presence of A. chinensis will include inspections of host plants in all areas of the buffer zone according to Annex II (2)(b) of Commission Decision 2008/840/EC.
4.	Ensure that all necessary measures to eradicate or, if that is impossible, inhibit the spread of the pest are taken, in line with Article 16(1) of Directive 2000/29/EC; in particular an appropriate monitoring is carried out during a period covering at least two life cycles since the last A. glabripennis finding.
5.	Follow the suggestions of international scientific literature for the timing of the annual intensive monitoring to ensure that it is carried out at the most appropriate period for the detection of A. chinensis as required in Annex II, point 2(b) of Decision 2008/840/EC.
6.	Increase the general knowledge of the stakeholders on the requirements of point 2 of Annex IV(A) (I) of Directive 2000/29/EC regarding the import of high risk wood packaging material.

The competent authority's response to the recommendations can be found at:

http://ec.europa.eu/food/fvo/rep_details_en.cfm?rep_inspection_ref=2011-8978

Annex 1 - Legal References

Legal Reference	Official Journal	Title
Dir. 2000/29/EC	OJ L 169, 10.7.2000, p. 1-112	Council Directive 2000/29/EC of 8 May 2000 on protective measures against the introduction into the Community of organisms harmful to plants or plant products and against their spread within the Community
Dec. 2008/840/EC	OJ L 300, 11.11.2008, p. 36-41	2008/840/EC: Commission Decision of 7 November 2008 on emergency measures to prevent the introduction into and the spread within the Community of Anoplophora chinensis (Forster)

Annex 2 – Standards Quoted in the report

International Standard	Title
ISPM No. 15	International Standard on Phytosanitary Measures Publication No 15, Regulation of wood packaging material in international trade, Food and Agriculture Organisation, Rome, April 2009