



EUROPEAN COMMISSION
HEALTH AND CONSUMERS DIRECTORATE-GENERAL
Directorate F - Food and Veterinary Office

DG(SANCO) 2011-6035 - MR FINAL

FINAL REPORT OF AN AUDIT

CARRIED OUT IN

MEXICO

FROM 15 TO 23 JUNE 2011

IN ORDER TO EVALUATE CONTROLS OF PESTICIDES IN FOOD OF PLANT ORIGIN
INTENDED FOR EXPORT TO THE EUROPEAN UNION

Executive Summary

This report describes the outcome of a Food and Veterinary Office (FVO) audit in Mexico, carried out between 15 June 2011 and 23 June 2011. The objective of the audit was to assess controls on pesticide residues in food of plant origin intended for export to the European Union, in particular limes.

Although legislation for the authorisation of Plant Protection Products (PPPs) and pesticide controls is in place, the authorisation system is ineffective, as authorisations granted according to superseded legislation do not expire. The system is not sufficiently transparent, because up-to-date information on the authorised use is not publicly available. The quality of PPPs on the market is not controlled. There is a system in place for controls of retailers and users of PPPs, however only a limited number have been inspected and certified. Growers are only inspected on request which contributes to compliance with EU MRL's but does not lead to effective risk-based controls of use of PPPs. There is no national requirement for pack-houses exporting fresh fruits and vegetables to be registered, which is not in line with the requirements of Regulation (EC) No. 852/2004. Official laboratory capacity for pesticide residues is at an early stage of development.

While considerable weaknesses were found in the official control systems, the private controls generally provide sufficient guarantees that limes exported to the EU comply with EU MRL's.

The report makes a number of recommendations to the competent authorities, aimed at rectifying the shortcomings identified and enhancing the implementation of control measures.

Table of Contents

1	<u>INTRODUCTION</u>	1
2	<u>OBJECTIVES AND SCOPE</u>	1
3	<u>LEGAL BASIS AND STANDARDS</u>	2
	3.1 <u>LEGAL BASIS</u>	2
	3.2 <u>STANDARDS</u>	2
4	<u>BACKGROUND</u>	2
5	<u>FINDINGS AND CONCLUSIONS</u>	3
	5.1 <u>RELEVANT NATIONAL LEGISLATION</u>	3
	5.2 <u>COMPETENT AUTHORITIES</u>	4
	5.3 <u>OFFICIAL CONTROLS OF THE MARKETING AND USE OF PLANT PROTECTION PRODUCTS</u>	4
	5.3.1 <u>AUTHORISATION OF PLANT PROTECTION PRODUCTS</u>	5
	5.3.2 <u>CONTROLS OF RETAILERS OF PLANT PROTECTION PRODUCTS</u>	5
	5.3.3 <u>CONTROL OF GROWERS</u>	5
	5.3.4 <u>FORMULATION ANALYSIS</u>	6
	5.4 <u>OFFICIAL CONTROLS OF PESTICIDES RESIDUES IN FOOD OF PLANT ORIGIN</u>	6
	5.4.1 <u>SAMPLING PROGRAMMES FOR PESTICIDE RESIDUES</u>	7
	5.4.2 <u>EXPORT CONTROL PROGRAMMES</u>	7
	5.4.3 <u>CONTROL AT PACK-HOUSES, PROCESSORS, EXPORTERS</u>	7
	5.4.4 <u>LABORATORIES FOR PESTICIDE RESIDUE ANALYSIS</u>	8
	5.4.5 <u>RESPONSE TO RASFF NOTIFICATIONS</u>	9
	5.5 <u>PRIVATE CONTROLS ON LIMES EXPORTED TO THE EU</u>	9
6	<u>OVERALL CONCLUSION</u>	10
7	<u>CLOSING MEETING</u>	10
8	<u>RECOMMENDATIONS</u>	10
	<u>ANNEX 1 - LEGAL REFERENCES</u>	12
	<u>ANNEX 2 – STANDARDS QUOTED IN THE REPORT</u>	13

ABBREVIATIONS AND DEFINITIONS USED IN THIS REPORT

Abbreviation	Explanation
CA(s)	Competent Authority(ies)
CAC/GL	Codex Alimentarius Commission/Guideline
CCA(s)	Central Competent Authority(ies)
CODEX	Codex Alimentarius Commission of the Food and Agriculture Organization of the United Nations and World Health Organization
COFEPRIS	Federal Commission for the Protection against Sanitary Risks (<i>Comision Federal para la Proteccion contra Riesgos Sanitarios</i>)
CNRP y C	National Reference Centre for Pesticides and Contaminants (<i>Centro Nacional de Referencia de Plaguicidas y Contaminantes</i>)
DGIAAP	Directorate-General for Agri-Food and Aquaculture Safety (<i>Direction General de Inocuidad Agroalimentaria, Acuicola y Pesquera</i>)
DG(SANCO)	Health and Consumers Directorate-General
EU	European Union
EUROSTAT	Statistical Office of the European Union
FAO	Food and Agriculture Organisation
FVO	Food and Veterinary Office
GAP	Good Agricultural Practice
GC	Gas Chromatograph
GC-MS	Gas Chromatograph coupled to Mass Spectrometer
GC-ECD	Gas Chromatograph coupled to Electron Capture Detector
GC-FPD	Gas Chromatograph coupled to Flame Photometric Detector

GC-FID	Gas Chromatograph coupled to Flame Ionisation Detector
GC-IT-MSD	Gas Chromatograph coupled to Mass Selective Detector
GC- TSD	Gas Chromatograph coupled to Thermionic Sensitive Detector
GMP	Good Manufacturing Practice
HPLC	High Performance Liquid Chromatography
HPLC-FD	High Performance Liquid Chromatograph coupled to Flame Detector
INIFAP	National Institute for Research on Forestry, Agriculture and Livestock (<i>Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias</i>)
ISO	International Organisation for Standardisation
MRL	Maximum Residue Level
MS(s)	Member State(s)
NRL	National Reference Laboratory
PHI	Pre-Harvest Interval
PPP(s)	Plant Protection Product(s)
PT	Proficiency test
RASFF	Rapid Alert System for Food and Feed
SAGARPA	Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food (<i>Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación</i>)
SEMARNAT	Ministry of Environment and Natural Resources (<i>Secretaría de Medio Ambiente y Recursos Naturales</i>)
SENASICA	National Service for Health, Safety and Agri-Food Quality (<i>Servicio Nacional de Sanidad, Inocuidad y Calidad Agroalimentaria</i>)
SOP	Standard Operation Procedure

TC(s)	Third Country(ies)
USFDA	United States Food & Drug Administration
WHO	World Health Organisation

1 INTRODUCTION

The audit took place in Mexico from 15 to 23 June 2011 in order to assess controls on pesticide residues in food of plant origin intended for export to the European Union (EU), in particular limes. The audit team comprised 2 auditors from the Food and Veterinary Office (FVO) and one Member State (MS) expert.

The audit was undertaken as part of the FVO's annual audit programme in the context of a wider series of audits in third countries (TCs) to evaluate control systems and operational standards in this sector.

The FVO team was accompanied during the audit by a representative of the central competent authority (CCA), the National Service for Health, Safety and Agri-Food Quality (SENASICA) under the Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA).

An opening meeting was held on 15 June 2011 with the CCA, SENASICA and the Federal Commission for the Protection against Sanitary Risk (COFEPRIS) under the Ministry of Health. At this meeting, the objectives of and itinerary for the audit were confirmed, and additional information required for the satisfactory completion of the audit was requested.

2 OBJECTIVES AND SCOPE

The **objectives** of the audit were to:

- Verify whether there are control systems in place for the control of pesticide residues in lime intended for export to the EU, and assess whether these systems offer adequate assurance that the produce concerned is within the specified residue limits laid down in EU legislation.

In terms of **scope**, the audit reviewed the controls in place on the production and export, including a review of national legislation, competent authority (CA) organisation, their controls and enforcement capability, facilities (laboratory capability) and measures in place for the determination of pesticide residues. As the residue controls are directly related to the national rules governing the authorisation, placing on the market and use of Plant Protection Products (PPPs), the control systems in this area were also part of the audit. As regards products concerned, the audit covered limes.

In pursuit of these objectives, the following sites were visited:

Competent Authority/ies			Comments
Competent Authority	Central	2	Directorate-General for Agri-Food and Aquaculture Safety (DGIAAP), Mexico City
	Regional/local	1	Regional Delegation of the Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA) Martinez de la Torre, State of Veracruz
Laboratory/ies			
Public Laboratories		1	Official Laboratory of the National Reference Centre

		for Pesticides and Pollutants (CNRPyC) Tecamac, state of Mexico
Private Approved Laboratories	1	Agrolab, Pachuca, state of Hidalgo
Producers		
Orchards	4	Growers of limes, Martinez de la Torre, state of Veracruz
Exporters/Pack-Houses		
	3	Pack-houses for limes, Martinez de la Torre, state of Veracruz

3 LEGAL BASIS AND STANDARDS

3.1 LEGAL BASIS

The audit was carried out under the general provisions of EU legislation, in particular Article 46 of Regulation (EC) No 882/2004 of the European Parliament and of the Council which stipulates that EU controls in third countries may verify compliance or equivalence of TC legislation and systems with EU feed and food law and EU animal health legislation. These controls shall have particular regard to the assurances which the TC can give regarding compliance with, or equivalence to, EU requirements.

Article 20 of Decision 2/2000 of the EC-Mexico Joint Council (2000/415/EC) states that the Parties shall cooperate in the area of sanitary and phytosanitary measures.

EU legal acts quoted in this report refer, where applicable, to the last amended version. Full references to the EU acts quoted in this report are given in Annex 1.

3.2 STANDARDS

Additionally Guidelines and Codes of Practice of the Codex Alimentarius Commission of the Food and Agriculture Organization of the United Nations and World Health Organisation (CODEX) were taken into account in the frame of the audit.

A full list of applicable standards referred to in this report is provided in Annex 2. Reference to specific provisions of these texts is provided at the beginning of each section.

4 BACKGROUND

The FVO has carried out missions in a number of exporting countries to assess official controls for pesticide residues in food of plant origin originating from these countries. The reports on these missions are available on DG(SANCO)'s internet site at http://ec.europa.eu/food/fvo/ir_search_en.cfm. An overview report summarising findings and conclusions of these missions has also been published at this site:

In 2009 the EU imported 36,100 tons of citrus fruit from Mexico (source: Eurostat). Information of foodstuffs found to have public health implications are disseminated as alert notifications through the EU Rapid Alert System for Food and Feed (RASFF) to all MS and to the exporting country. From 2008 to the time of the audit no notifications relating to pesticide residues in or on fruits and vegetables from Mexico have been notified through the RASFF.

5 FINDINGS AND CONCLUSIONS

5.1 RELEVANT NATIONAL LEGISLATION

Legal requirements

Art. 46 (1) (a) of Reg. (EC) No 882/2004 stipulates that EU controls shall have, inter alia particular regard to the legislation of the TC.

Findings

The Federal Act on Plant Health from the 4th of January 1994, last revision 26th of July 2007, authorises SAGARPA to establish Regulations, Norms, Standards and technical annexes with Guidelines. The official Mexican Standard NOM-033-FITO-1995 establishes the requirements and specifications for the notification of the start of operations with which natural and legal persons involved in marketing agricultural pesticides must comply. NOM-034-FITO-1995 specifies the requirements with which natural and legal persons involved in the production, formulation and import of agricultural pesticides must comply. NOM-032-FITO-1995 specifies the requirements and specifications to carry out biological effectiveness studies on agricultural pesticides and for the relevant technical opinion. NOM-052-FITO-1995 establishes the requirements and phytosanitary specifications for persons or companies involved in the aerial application of PPPs

Guidelines have been developed under the Act on Plant Health regarding registration and import and export authorisation of PPPs, and for the operation and certification of contamination risk reduction systems in the primary production of foodstuffs and regarding Good Agricultural Practices (GAPs).

The Federal Public Administration Organisation Act stipulates that it falls within the responsibility of SAGARPA to establish programmes and actions aimed at promoting the productivity and profitability of rural economic activities, to enforce and implement legislation on animal and plant health, to manage, coordinate, supervise and evaluate health campaigns and to grant those licences which fall within the scope of its mandate.

The General Health Law authorises the COFEPRIS to introduce Regulations regarding pesticide residues and gives a legal basis to set Maximum Residue Levels (MRL's). No MRL's have been set until the time of the audit.

Conclusions

Legislation is in place regarding PPP authorisation and controls in producers and traders of PPPs, in

pack-houses for fruit and vegetables and users of PPPs.

5.2 COMPETENT AUTHORITIES

Legal Requirements

Art. 46 (1) (b) and (c) of Reg. (EC) No 882/2004 stipulate that EU controls shall have, inter alia, particular regard to the organisation of the TC's CAs, their powers and independence, the authority they have to enforce the applicable legislation effectively, and the training of staff in the performance of official controls

Findings

SENASICA, under SAGARPA, is responsible for requirements under the Plant Health Act, including the inspection and certification of manufacturers and retailers of PPPs and certification of growers and pack-houses to GMP/GAP standards. Only official staff are authorised to perform inspections, but SENASICA certifies third party specialists to perform verifications and to train and inform operators within the scope of the audit.

The bodies involved in the authorisation of plant protection products are COFEPRIS under the Ministry of Health, SENASICA and the Ministry of Environment and Natural Resources (SEMARNAT). Each issues an opinion in accordance with its competence and COFEPRIS grants the relevant authorisation or registration. The competent authority responsible for the legislation regarding the setting of MRLs in foodstuffs of plant origin is COFEPRIS, while SAGARPA is responsible for supervised pesticide residue trials.

The State Committees on Plant Health in the 32 Mexican States are responsible for the training of growers and the implementation of GAP/GMP and for the sampling within the monitoring programme. The Delegations of SAGARPA in the 32 States are responsible for the inspections of pesticide marketeers and the aerial sprayers of pesticides.

The inspectors from SENASICA verify certified companies randomly and in case of complaints. They can give administrative sanctions in case of non-compliance or bring the case to court. The state delegation has legal staff that can give economic sanctions in case of non-compliance.

Official inspectors are trained 40 hours per year. Third party specialists get a five day course, they are evaluated and certified by SENASICA for one year. SAGARPA delegation staff undergoes continuous training.

The National Institute for Research on Forestry, Agriculture and Livestock (INIFAP) provides research on phytopathology and gives advise to growers on the control of pests.

Conclusions

CAs are clearly designated. SENASICA has sufficient legal powers to enforce the relevant legislation. Staff are regularly trained.

5.3 OFFICIAL CONTROLS OF THE MARKETING AND USE OF PLANT PROTECTION PRODUCTS

Legal requirements

Article 46 (1) (e) and (b) of Regulation (EC) No 882/2004 stipulate that EU controls shall have, inter alia, particular regard to the existence and operation of documented control procedures and control systems based on priorities, and the CA's capability to enforce applicable legislation;

Article 3(1) and 4(1)(a) of Directive 91/414/EEC stipulate that MSs shall prescribe that PPPs may not be placed on the market and used in their territory unless they have authorized the product in accordance with this Directive and its active substances are listed in Annex I to the Directive.

Article 17 of Directive 91/414/EEC requires MSs to make the necessary arrangements for PPPs which have been placed on the market and for their use to be officially checked.

Article 10 of Regulation (EC) No 852/2004, in conjunction with Article 4.1 and Annex I, Part A.III of the same Regulation, requires that FBOs producing or harvesting plant products are, in particular, to keep records on any use of PPPs.

Findings

5.3.1 Authorisation of Plant Protection Products

The competences for authorisation are described in chapter 5.2

In Mexico an estimated number of 2500 PPPs are authorised, containing 500 active ingredients. The majority of these ingredients are not authorised in the EU, including paraquat, azinphos-methyl, monocrotophos, dichlorvos, methamidophos, ethion, amitraz, isofenphos and many others. 80 PPPs have been authorised since the revised authorisation requirements were published on 28th of December 2005. Under the new legislation, PPP authorisations have to be renewed every five years, but the authorisation of PPPs from before 2005 does not expire and can only be withdrawn individually when there is evidence of risks.

A catalogue of authorised PPPs is published on the COFEPRIS website, but it is not updated since 2005. There are also more recent lists published on authorised PPPs, but neither catalogue nor lists mention details of the authorisation, including dosage, crops to be treated or pre-harvest interval (PHI).

5.3.2 Controls of retailers of plant protection products

In the State of Veracruz, there are 527 retailers of PPPs. The SAGARPA delegation stated that 86 have been inspected in 2011 in the first semester. In Veracruz 182 companies were certified in 2011 up to the time of the audit. Certification of retailers is required under NOM-033-FITO-1995. There are 22 staff in the delegation of Veracruz, assisted by 7 third party specialists. In each state activities are coordinated by a food safety coordinator. Certificates have to be renewed every 2 years. Nine central SENASICA staff inspect certified retailers, pack-houses and pesticide users randomly within an annual programme according to a documented procedure.(see also 5.3.3 and 5.3.4.)

5.3.3 Control of Growers

In the State of Veracruz there are between 3000 and 5500 growers of lime on an area of 23 000 hectares (ha). It is the largest lime growing state in Mexico. The majority of farms growing limes are smaller than 3 ha but these generally do not produce for the EU, according to SENASICA. The growers are only inspected when they ask for certification to GAP standards by SENASICA or in case of complaints. Until 2010 the growers could be certified according to GAP standards. In 2011 the scope of certification was extended to risk reduction systems with 16 modules in total, covering the growing and packaging stage. The State Committee for Plant Health is providing advice,

training and free sampling and analysis of fruit and water samples. On request of the grower a third party specialist performs a certification audit. The certificates are granted by SENASICA and published on the SENASICA website. Until the time of the audit, one grower of lime has been certified in the State of Veracruz according to these new requirements. The growers visited kept detailed records of PPP use.

5.3.4 Formulation Analysis

COFEPRIS has authorised one laboratory for analysis of physical-chemical properties of PPPs, but no laboratory is authorised for checks on content and identity of active substances. There was no evidence of any formulation analysis carried out on the market or prior to authorisation of PPPs. COFEPRIS stated that during the authorisation procedure, the applicants submit data of formulation analyses.

Conclusions

The authorisation system for PPP is ineffective, as authorisations granted according to superseded legislation do not expire. The system is not sufficiently transparent, as up-to-date information on the authorised use of PPPs is not publicly available. The majority of the active substances, contained in authorised PPPs, can not be legally marketed and used in the EU. If applied on produce for the export market, they can lead to exceedance of EU MRLs.

There is a system in place for controls of retailers and users of PPPs, however at the time of the audit, only a limited number has been inspected and certified. Growers are only inspected on request which does not lead to effective risk-based controls of use of PPPs. Growers keep records of uses of PPPs as required by Regulation (EC) No. 852/2004.

The quality of PPPs is not checked by formulation analyses.

5.4 OFFICIAL CONTROLS OF PESTICIDES RESIDUES IN FOOD OF PLANT ORIGIN

Legal requirements

Article 46 (1)(b), (c), (d), (e) and (h) of Regulation (EC) No 882/2004 stipulate that EU controls shall have, inter alia, particular regard to: the existence and operation of documented control procedures and control systems based on priorities, the CA's capability to enforce applicable legislation, the resources including diagnostic facilities available to competent authorities, the training of staff in the performance of official controls and the assurances which the third country can give regarding compliance with, or equivalence to, EU requirements.

Article 11 of Regulation (EC) No 178/2002 stipulates that food and feed imported into the EU for placing on the market within the EU shall comply with the relevant requirements of food law or conditions recognised by the EU to be at least equivalent thereto.

Article 18 of Regulation (EC) No 396/2005 requires that products covered by Annex I of the same Regulation shall not contain, from the time they are placed on the EU market as food or feed, any pesticide residue exceeding EU MRLs, or 0.01 mg/kg for those products for which no specific MRL is set.

The CODEX has also established MRLs for pesticides, which are considered for the establishment of EU MRLs (CAC/MRL 1-2009).

Commission Directive 2002/63/EC establishing EU methods of sampling for the official control of pesticides residues in and on products of plant and animal origin or equivalent international standards (e.g. CODEX Guidelines CAC/GL 31-1999).

Article 10 of Regulation (EC) No 852/2004 in connection with Article 6 of the same Regulation requires that every FBO shall notify the appropriate CA of each establishment under its control that carries out any of the stages of production, processing and distribution of food, with a view to the registration of each such establishment.

Point 41 of Guidelines of CODEX CAC/GL 26-1997 on the Design, Operation, Assessment and Accreditation of Food Import and Export Inspection and Certification Systems lays down that inspection services should utilize laboratories that are evaluated and/or accredited under officially recognized programmes to ensure that adequate quality controls are in place to provide for the reliability of test results. In accordance with Guidelines of CODEX CAC/GL 27-1997, point 3, the laboratories should comply with ISO/IEC Guide 17025.

Point 6 of the CODEX Guidelines CAC/GL 25-1997 specifies that upon information about a rejection of a food consignment presented for import, the food control authorities in the exporting country should undertake the necessary investigation to determine the cause of any problem that has led to the rejection of the consignment.

Findings

5.4.1 Sampling Programmes for Pesticide Residues

Since 2011 a national monitoring programme is in place on microbiological contamination and pesticide residues. A total of 250 samples are planned, including 13 samples in the State of Veracruz. At the time of the audit it was not yet determined where these samples should be taken. The monitoring programme is based on the level of production and export volumes, type of crops per State and the laboratory capacity for sample analysis. The sampling procedure for pesticide residues as performed by SAGARPA was explained. They take pre-harvest samples in the fields or orchards according to a documented procedure. The procedure identifies randomised representative sampling points.

5.4.2 Export Control Programmes

The EU does not require export certification for pesticide residues in food of plant origin. Mexico does not have export control programmes or export certification in place for pesticide residues.

5.4.3 Control at Pack-Houses, Processors, Exporters

Pack-houses that pack citrus fruits are registered for phytosanitary reasons, but there is no general obligation of pack-houses producing food of plant origin for export to the EU to be registered. On request they can be certified by SENASICA (see also chapter 5.3.3). There are 50 pack-houses in the northern part of Veracruz State and 30 in the southern part of the State. Three pack-houses were visited by the FVO team, all in the northern part of Veracruz. Each of them exports between 1000 and 2500 tons of limes to the EU per year, approximately 20-30% of their production. Traceability systems were implemented in all the pack-houses visited. One of the pack-houses visited demonstrated a traceability test to the audit team. A batch of limes was traced from the grower to the customer of the pack-house.

5.4.4 *Laboratories for Pesticide Residue Analysis*

Organisation

SENASICA has designated one National Reference Laboratory (NRL), the National Reference Center for Pesticides and Contaminants (CNRPyC), which started its activity in 2009. No further laboratories are authorised by SENASICA, but they plan to evaluate 10 laboratories for possible authorisation. SENASICA is planning to collaborate with a private laboratory for 2011 monitoring sample analysis while the NRL is establishing a quality control system and improving the quality of their analytical capabilities.

In addition COFEPRIS has authorised one laboratory for pesticide residue analysis in foodstuffs.

The FVO team visited the CNRPyC laboratory and a private laboratory.

Resources and training

The NRL has new premises, 14 staff and one vacant post all with bachelor degree and one with master degree. Evidence of an annual training plan with 19 courses programmed for 2011 was presented. The laboratory is equipped with 6 GC-FPD/ECD/TSD, one GC-MS and one HPLC with post column derivatisation.

The private laboratory visited has 18 chemists and 4 administrative staff. The chemists receive three times a year training from a private consultant. The laboratory is equipped with 5 GC-IT-MSD and one HPLC-FD with post column derivatisation.

Analytical spectrum and methods

The NRL plans to analyse 280 samples in 2011, based on the national monitoring programme. They have standards for 450 pesticides although the analytical methods used only detect organochlorine and organophosphorous pesticides. The exact analytical scope is not known as the methods are not fully validated. Three extraction methods are used based on acetone extraction solvent from the US FDA Pesticide Analytical Manual dependent on matrix characteristics (high water, dry and high fat content).

The private laboratory conducted 5000 pesticide analyses in 2010. The accredited scope based on GC-MS analysis is 95 pesticides including organochlorines, organophosphates, pyrethrins and carbamates. The QuEChERS method is used for extraction.

Quality assurance systems

The NRL is not accredited to ISO 17025 but is currently establishing a quality system which is at an

early stage of development. Analytical standards are stored from 0 to 9 C, which can cause degradation of some of the standards. The concentrations of the stock solutions are from 1 to 2 mg/kg in acetone solvent, being too low. Some are stored in volumetric flasks which can cause contamination when the flasks are reused. The stock solutions are renewed only once every six months. A chlorpyrifos standard is used to test for sensitivity of the GC equipment on every analysis. Confirmation is done by retention time and by injection in columns of different polarity. Only in case of coelution, MSD confirmation is carried out. No measurement uncertainty is calculated. The NRL does not participate in proficiency tests.

The private laboratory is accredited under ISO 17025:2006 since 2006. Analytical standards are stored at -20°C. Stock solutions of 1000 mg/kg are renewed every year (although solutions of carbamates are renewed every 3 months). A five point calibration curve is established every second day of analysis. Determination is done using retention time and three selected ions. Recovery checks for all the pesticides targeted are done in every batch of analysis. Measurement uncertainty is calculated based on the Horwitz equation. The laboratory does not take part in proficiency tests.

5.4.5 Response to RASFF Notifications

There has not been a RASFF notification within the scope of the audit since 2008, but a documented procedure to respond to RASFF notifications is in place at the Mexican CA. This procedure identifies tasks and contact points within DGIAAP, responsible for the implementation.

Conclusions

There is no general requirement for pack-houses exporting fresh fruits and vegetables to be registered, as required by Article 10 in connection with Article 6 of Regulation (EC) No 852/2004. Traceability systems are implemented in the pack-houses visited. An official monitoring programme for pesticide residues in food of plant origin has been started this year with a small number of samples. Although the sampling procedure provides for random and representative samples, it does not follow the Codex Guidelines CAC/GL 33-1999, and as the samples are taken before the harvest, any MRL exceedances can not lead to infringement procedures.

The NRL has good staff and facilities. The analytical methods and quality system are being developed, but do not yet provide reliable results. The private laboratory visited performs adequate analyses and quality controls but the lack of LC-MS equipment means that some pesticides used by growers can not be detected.

5.5 PRIVATE CONTROLS ON LIMES EXPORTED TO THE EU

Findings

All growers visited were certified to private GAP standards. The growers take one private pesticide residue sample per year and send it to a private accredited laboratory for analysis with a limited scope. The results confirmed that no MRL exceedances were found. The growers were informed about EU MRL's by the EU website and their clients in Europe. They followed principles of integrated pest management, such as observing economical threshold for pesticide applications. They use sulphur and citric oils to control several mites and *Diaphorina* which are frequently occurring pests in Veracruz. For these pesticides no EU MLR's exist due to the low toxicity. The

CA stated that in cases where this is not sufficient, cypermethrin and lambda-cyhalothrin can be used. One grower visited stated that dimethoate (EU MRL for lime: 0.02 ppm) can be used to control *Diaphorina* in exceptional cases. In the results of the EU national monitoring programme 2009 in one out of the 15 samples of limes from Mexico the EU MRL for dimethoate was exceeded. Benomyl and thiabendazole are used as fungicides in an early stage of the season when the weather is cold and wet.

Conclusions

The private control systems evaluated at the visited growers in general provide sufficient guarantees to compliance of the exported produce.

6 OVERALL CONCLUSION

Although legislation for the authorisation of PPPs and pesticide controls is in place, the authorisation system is ineffective, as authorisations granted according to superseded legislation do not expire. The system is not sufficiently transparent, because up-to-date information on the authorised use is not publicly available. The quality of PPPs on the market is not controlled. There is a system in place for controls of retailers and users of PPPs, however only a limited number has been inspected and certified. Growers are only inspected on request which contributes to compliance with EU MRL's but does not lead to effective risk-based controls of use of PPPs. There is no national requirement for pack-houses exporting fresh fruits and vegetables to be registered, which is not in line with the requirements of Regulation (EC) No. 852/2004. Official laboratory capacities for pesticide residues are in an early stage of development.

While weaknesses were found in the official control systems, the private controls generally provide sufficient guarantees that limes exported to the EU comply with EU MRL's.

7 CLOSING MEETING

A closing meeting was held on 23 June 2011 with representatives of SENASICA and COFEPRIS. At this meeting, the audit team presented the main findings and preliminary conclusions of the audit. The authorities offered initial comments and clarifications.

8 RECOMMENDATIONS

The competent authorities are invited to provide details of the actions taken and planned, including for deadlines for their completion ("action plan"), aimed at addressing the recommendations set out below, within 25 working days of receipt of this report.

The CA should:

N°.	Recommendation
1.	Re-evaluate authorisations for PPPs granted under superseded legislation. The full details of the authorised uses should be made available to the public to increase transparency.
2.	Introduce formulation analyses of PPPs to control the quality of products on the market.
3.	Strengthen controls for the marketing and use of plant protection products and their residues. Any export controls should take into account the CODEX Guidelines CAC/GL 26-1997 on the Design, Operation, Assessment and Accreditation of Food Import and Export Inspection and Certification Systems.
4.	Ensure registration of all pack-houses operating for export to the EU, in line with Article 10 in connection with Article 6 of Regulation (EC) No 852/2004.
5.	Follow the Codex Guidelines CAC/GL 33-1999 on recommended methods of sampling for the determination of pesticide residues for compliance with MRLs.
6.	Broaden the scope of analytes sought in the laboratory used for export control, and officially evaluate and/or accredit the laboratory to ISO 17025, in line with Points 41 of Guidelines of CODEX CAC/GL 26-1997 on the Design, Operation, Assessment and Accreditation of Food Import and Export Inspection and Certification Systems.

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

http://ec.europa.eu/food/fvo/ap/ap_mx_2011-6035.pdf

ANNEX 1 - LEGAL REFERENCES

Legal Reference	Official Journal	Title
Reg. 178/2002	OJ L 31, 1.2.2002, p. 1-24	Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety
Reg. 882/2004	OJ L 165, 30.4.2004, p. 1, Corrected and re-published in OJ L 191, 28.5.2004, p. 1	Regulation (EC) No 882/2004 of the European Parliament and of the Council of 29 April 2004 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules
Reg. 852/2004	OJ L 139, 30.4.2004, p. 1, Corrected and re-published in OJ L 226, 25.6.2004, p. 3	Regulation (EC) No 852/2004 of the European Parliament and of the Council of 29 April 2004 on the hygiene of foodstuffs
Reg. 396/2005	OJ L 70, 16.3.2005, p. 1-16	Regulation (EC) No 396/2005 of the European Parliament and of the Council of 23 February 2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin and amending Council Directive 91/414/EEC
Dir. 2002/63/EC	OJ L 187, 16.7.2002, p. 30-43	Commission Directive 2002/63/EC of 11 July 2002 establishing Community methods of sampling for the official control of pesticide residues in and on products of plant and animal origin and repealing Directive 79/700/EEC
Dec. 2/2000	OJ L 157, 30.6.2000, p. 10-29	Decision No 2/2000 of the EC-Mexico Joint Council of 23 March 2000 - Joint Declarations

ANNEX 2 – STANDARDS QUOTED IN THE REPORT

Reference number	Full title	Publication details
CODEX Guidelines CAC/GL 25-1997	Guidelines for the exchange of information between countries on rejections of imported food (CAC/GL 25-1997).	http://www.codexalimentarius.net/web/standard_list.jsp
CODEX Guidelines CAC/GL 26-1997	Guidelines on the design, operation, assessment and accreditation of food import and export inspection and certification systems (CAC/GL 26-1997).	http://www.codexalimentarius.net/web/standard_list.jsp
CODEX Guidelines CAC/GL 27-1997	Guidelines for the Assessment of the competence of testing laboratories involved in the import and export control of food (CAC/GL 27-1997).	http://www.codexalimentarius.net/web/standard_list.jsp
CODEX Guidelines CAC/GL 33-1999	Recommended methods of sampling for the determination of pesticide residues for compliance with MRLs (CAC/GL 33-1999).	http://www.codexalimentarius.net/web/standard_list.jsp
CAC/MRL 1-2009	Maximum Residue Limits (MRLs) for Pesticides	http://www.codexalimentarius.net/mrls/pestdes/jsp/pest_q-e.jsp