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FINAL REPORT OF A MISSION
CARRIED OUT IN ARGENTINA FROM
10 TO 14 SEPTEMBER 2001
IN ORDER TO EVALUATE THE INSPECTION PROCEDURES
FOR CITRUS FRUIT ORIGINATING IN ARGENTINA AND
EXPORTED TO THE EUROPEAN UNION

Please note that factual errors in the draft report have been corrected in bold, italic, type. Clarifications provided by the Argentine Authorities are given as footnotes, in bold, italic, type, to the relevant part of the report



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TABLE OF CONTENTS

1. INTRODUCTION	6
2. OBJECTIVE OF THE MISSION.....	6
3. LEGAL BASIS FOR THE MISSION.....	7
4. BACKGROUND	7
4.1. To present mission	7
4.2. Production and trade	7
4.3. Phytosanitary information.....	8
5. MAIN FINDINGS	8
5.1. Competent Authority	8
5.1.1. Structure and organisation	8
5.1.2. Resources and personnel.....	9
5.1.3. Legal/enforcement powers.....	10
5.1.4. Laboratory.....	10
5.2. Controls and certification in the region of NOA	10
5.2.1. Citrus canker	11
5.2.2. Citrus black spot	14
5.2.3. Fruit flies.....	16
5.3. Controls and certification in the region of the NEA	16
5.3.1. Citrus canker	17
5.3.2. Citrus black spot	20
5.3.3. Fruit flies.....	20
5.4. PROCITRUS Programme.....	21
5.5. Other harmful organisms	22
5.5.1. Insects	22

5.5.2.	Fungus.....	22
5.5.3.	Bacteria	22
5.5.4.	Virus and viroides.....	22
5.6.	Exports Certification.....	22
5.7.	Traceability	23
6.	CONCLUSIONS	24
6.1.	Competent authority.....	24
6.2.	Controls and certification in the region of the NOA.....	24
6.3.	Controls and certification in the region of the NEA	25
6.4.	PROCITRUS Programme.....	26
6.5.	Other harmful organisms	26
6.6.	Exports Certification.....	27
6.7.	Traceability	27
7.	CLOSING MEETING	27
8.	OVERVIEW	27
9.	RECOMMENDATIONS.....	27

ABBREVIATIONS AND SPECIAL TERMS USED IN THE REPORT

AFINOA	Asociación Fitosanitaria del NOA (Phytosanitary association of the NOA)
CITRUS CANKER	Disease caused by the bacterium <i>Xanthomonas campestris</i> (all strains pathogenic to Citrus) (or <i>Xanthomonas axonopodis</i> pv <i>citri</i> (Hasse) Vauterin)
CORENEA	Comité Regional del NEA (Regional Committee of the NEA)
CORENOA	Comité Regional Fitosanitario del NOA (Phytosanitary Regional Committee of the NOA)
COSAVE	Comité Regional de Sanidad Vegetal del Cono Sur (Regional Plant Health Committee of the South Cone)
CPMC	Centro de Propagación de Material Cítrico (Citrus Propagating Material Centre)
CUIS	Centro Unico de Introducción y Saneamiento (Introduction and Cleaning Single Centre)
DCV	Dirección de Cuarentena Vegetal (Directorate of Plant Quarantine)
EC	European Community
EEAOC	Estación Experimental Agroindustrial Obispo Colombres. (Agrarian-industrial Experimental Station Obispo Colombres) Tucumán
ELISA	Enzyme Linked Immuno Sorbent Assay
EPPO	European and Mediterranean Plant Protection Organisation
EU	European Union
FVO	Food and Veterinary Office
IASCAV	Instituto Argentino de Sanidad y Calidad Vegetal (Argentinean Institute of Plant Health and Quality)
IF	Immuno Fluorescence (laboratory technique)
IICA	Instituto Interamericano de Cooperación para la Agricultura (Inter-American Institute for Agriculture Co-operation)
INRA	Institut National pour la Recherche Agraire- France (National Institute of Agrarian Research)
INTA	Instituto Nacional de Tecnología Agraria (National Institute of Agrarian Technology)
MANCHA NEGRA DE LOS CITRICOS	Disease caused by the fungus <i>Guignardia citricarpa</i> Kiely (all strains pathogenic to Citrus)

MERCOSUR	Mercado Común del Cono Sur (Southern Cone Common Market)
MTD	Moscas/Trampa/Día (Flies/Trap/Day)
NEA	Región del Nordeste Argentino (Region of Argentinean North-east)
NOA	Región del Noroeste Argentino (Region of Argentinean North-west)
PCR	Polymerasa Chain Reaction (laboratory bio-molecular technology)
SAGyP	Secretaría de Agricultura, Ganadería y Pesca (Secretariat of Agriculture, Livestock and Fisheries)
SAGPyA	Secretaría de Agricultura, Ganadería, Pesca y Alimentación (Secretariat of Agriculture, Livestock, Fisheries and Food)
SENASA	Servicio Nacional de Sanidad Animal (National Animal Health Service) (up to 24 June 1996)
SENASA	Servicio Nacional de Sanidad y Calidad Agroalimentaria (National Service of Agro-alimentary Health and Quality)(from 24 June 1996)
UNJu	Universidad Nacional de Jujuy (National University of Jujuy)
UP	Unit of Production

1. INTRODUCTION

The mission was carried out in the Argentine Republic from 10 to 14 September 2001. The mission team comprised two inspectors of the Food and Veterinary Office (FVO), a national expert bacteriologist and a national expert in legislation and inspection.

The mission was undertaken as part of the FVO planned mission programme.

The mission team was accompanied during the mission by several representatives of Servicio Nacional de Sanidad y Calidad Agroalimentaria (SENASA). A representative of the Delegation of the European Union in Argentina was present at the opening meeting.

An opening meeting was held on 10 September 2001 in the Head office of SENASA in Buenos Aires. At this meeting the objectives and the itinerary for the mission were confirmed by the inspection team.

2. OBJECTIVE OF THE MISSION

The objective of the mission was the evaluation of the inspections and the treatment of citrus fruits exported to the EU in the light of the requirements of the European Community (EC) legislation, specifically the requirements of point 16 of Annex IV A1 of the Council Directive 2000/29/EC¹, as last amended by Commission Decision 2001/33/EC².

In the course of the mission, information on various phytosanitary aspects of the Argentine citrus production was requested.

In order to cover this objective the following visits were carried out:

COMPETENT AUTHORITIES VISITS			COMMENTS
Competent authority	Central	1	SENASA
	Provincial	3	Directorates of Agriculture of Tucuman, Jujuy and Entre Rios

RESEARCH CENTRES			COMMENTS
Plant		1	Experimental Station INTA - Entre Rios
Provincial		1	Experimental Station Bishop Colombres - Tucuman

¹ OJ N° L 169, 10.7.2000, p. 1-112

² OJ N° L 127, 09.5.2001, p. 42

LABORATORIES		COMMENTS
Central of reference	1	SENASA, Buenos Aires port
Regionals	2	Experimental Station Obispo Colombres - Tucuman and Experimental Station INTA - Entre Rios

PHYTOSANITARY INSPECTIONS		COMMENTS
Export inspection	1	Buenos Aires port
Internal phytosanitary barrier	1	Tucuman province in the entry of NOA
Packinghouses of citrus fruits	3	2 in Tucuman province and 1 in Entre Rios
Production Units - Orchards	3	1 in Tucuman province and 2 in Entre Rios

3. LEGAL BASIS FOR THE MISSION

The mission was carried out under the general framework of Community legislation, in particular Article 21 of Council Directive 2000/29/EC. The mission has been carried out in agreement with the competent authorities of the Republic of Argentina.

4. BACKGROUND

4.1. To present mission

The present mission was organised taking into account the volume of citrus fruits exported annually by Argentina to the European Union and the potential phytosanitary risks that it entails for the European Citrus production. In the course of the importing season of the year 2000, in the EU, there were 7 interceptions of *Guignardia citricarpa* and 2 of *Tephritidae* in citrus fruits originating in Argentina.

4.2. Production and trade

The average Argentinean citrus production is 2 540 000 t per year. The region of NEA (North-east of Argentina) produces 42% of the total. Oranges, with approximately 564 000 t, and mandarins, of which production exceeds 387 000 t, are the principal citrus fruits of the region. The region of NOA (North-west of Argentina) produces 58% of the total, with a clear predominance of lemon with a production of 1 100 000 t. Between 8% and 10% of the Argentinean production is exported to the EU. Argentinean Citrus fruits are also exported to several countries in South America, mainly Brazil, and to USA and Canada.

The export to the EU in the last 5 years has been as follows:

Tons Year	Oranges	Mandarins	Lemons	Others	Total
1996	73 438	25 946	117 643	30 997	248 024
1997	74 705	23 855	104 634	27 453	230 647
1998	72 957	22 072	91 222	24 863	211 114
1999	53 324	20 569	119 463	19 943	213 299
2000	31 454	14 887	115 520	14 456	176 317

4.3. Phytosanitary information

The Commission Decision 98/83/EC³, as last amended by Commission Decision 2001/440/EC⁴, recognises the provinces of Catamarca, Jujuy, Salta and Tucuman, which are the Citrus producers of the NOA, as free from *Xanthomonas campestris* (all strains pathogenic to Citrus). The rest of the Argentinean territory, and in particular the producing region of NEA, is contaminated by this disease. The same Commission Decision recognises Argentina as free from the fungus *Cercospora angolensis* Carv. and Mendes. With respect to *Guignardia citricarpa* Kiely (all strains pathogenic to Citrus), the Commission Decision 1999/104/EC⁵ does not recognise any part of the Argentinean territory as free from the disease.

The mission team paid particular attention to the control of both above-mentioned diseases present in Argentina and that of the fruit flies.

5. MAIN FINDINGS

5.1. Competent Authority

5.1.1. Structure and organisation

Until the end of 1996, the National Animal Health Service (SENASA) and the Argentinean Institute of Plant Health and Quality (IASCAV) were two independent organisations. At the end of 1996 they were merged into a single organisation while keeping the acronym SENASA (National Service of Health and Agro-alimentary Quality). SENASA is a decentralised service

³ OJ N° L 15, 21.1.1998, p. 41

⁴ OJ N° L 155, 12.6.2001, p 13

⁵ OJ N° L 33, 6.2.1999, p. 27

with economic and technical-administrative autonomy, which has a legal entity and is responsible to the Secretariat of Agriculture, Livestock, Fisheries and Food (SAGPyA) of the Economy Ministry.

A President and a Vice-president govern it. The Government of the Nation, following a proposal of the Secretary of Agriculture, Livestock, Fisheries and Food, appoints them. There is a Board of Governors, mainly of advisory nature, consisting of 10 members, that is going to expand to 17, representatives of related activities. SENASA was divided into 6 areas, which have recently been extended to 8, with a Director heading each one.

In the plants dominion SENASA is responsible for implementing the national policy regarding plant health, including:

- the control and certification of the health (and quality) of plants and plant products;
- the development of preventive actions of monitoring and/or eradication of the harmful organisms to plants;
- the control of federal traffic, imports and exports of plants and plant products.

It is also responsible for:

- the control of products intended for the diagnosis, prevention and control of the harmful organisms to plants;
- the control of chemical and biological products used in plant production.

SENASA has a Regional Director in each of the 5 regions - each region comprising of several provinces. In each province there is a Provincial Co-ordinator and in the cities situated in areas of agricultural or livestock importance there is a Head of Local Office. Inspectors of SENASA are present at all land, marine or air borders that are accredited for the dispatching of animals, plants or their products.

An Internal Audit Unit evaluates the implementation of the policies, plans and internal procedures and confirms the reliability of the data used in the reports.

5.1.2. Resources and personnel

As mentioned before, SENASA has economic independence with a budget for this year of 101.5 million Pesos (1 Peso = 1 US\$). For the realisation of certain programmes additional funds can be obtained, either from the state budget (e.g. campaigns against foot-and-mouth disease required an additional 36 million Pesos), from the province budgets or the private sector. Income from the fees collected for the provision of services is greater than the approved budget.

SENASA employs more than 3 600 permanent staff, 2 800 of these in professional grades. Temporary staff collaborates in various tasks. The staff in charge of plant health, quarantine, survey and monitoring, together with

the diagnostic technicians in the central laboratory of SENASA total 400 technicians. Furthermore, in the implementation of several programmes (e.g. the official control of Citrus production with a view to exportation to the EU) staff from provincial agricultural services or the private sector collaborate with SENASA officials.

5.1.3. *Legal/enforcement powers*

The basic competence of SENASA in the field of plant health is found in the following legislation:

- *Decree Law of 12.8.63 of the President of the Nation. Law of Plant Health.*
- *Decree 660 of 24.6.96 of the Ministry of Economy and Works and Public Services. This decrees the fusion of IASCAV and SENASA (National Animal Health Service) in SENASA (National Service of Health and Agro-alimentary Quality).*
- *Decree 1585 of 19.12.96 of the Ministry of Economy and Works and Public Services. This specifies the competences and organisation of SENASA.*

5.1.4. *Laboratory*

SENASA has established two laboratories to carry out the necessary analysis equipped for certification. One is intended for products of animal origin and the other for those of plant origin. The laboratory intended for products of plant origin is modern and well-equipped (recently new equipment to carry out biomolecular PCR techniques was installed). The following types of analyses are carried out in it:

- quality of agro-chemical used in agriculture: fertilizers, pesticides, regulators of growth, etc;
- residues of pesticides in foodstuffs of plant origin;
- microbiology of foodstuffs of plant origin;
- identification of the harmful organisms to plants.

All samples are registered in a single register on their arrival at the laboratory under a number that the sample keeps throughout the whole determination process. In the laboratory there are 35 permanent staff and 15 temporary. 32 000 analyses on 8 000 samples are carried out annually.

For plant health, this acts as the reference laboratory for quarantine harmful organisms. This department employs 8 permanent technicians and some temporaries. During this year (until September 13) 3 700 samples have been received. This laboratory, however, does not carry out analysis of Canker. Inmuno-fluorescencia (IF) is the most commonly used technology in bacteriology.

5.2. **Controls and certification in the region of NOA**

In this region there are four provinces producing citrus fruits: Jujuy, Salta, Tucuman and Catamarca. The total planted area is 58 773 ha, of which most is lemon, with 32

988 ha (56%) and being the province of Tucuman, with 33 715 ha (57%) that of bigger production.

In 1991, the producers, together with industry and the exporters of citrus fruits, set up the Phytosanitary Association of the NOA (AFINOA). Its aim is to co-operate with the national and/or provincial phytosanitary authorities in the implementation of measures designed to protect the region against any harmful organism that could have an adverse effect on the free marketing of fruits and vegetables produced in the provinces of NOA. In the phytosanitary programmes that they carry out jointly with official services, AFINOA contributes with financial and staff resources for their realisation. For that associated members make contributions in accordance with the surfaces planted with citrus fruits or with the volumes industrialised or exported.

In 1992, the SAGyP (through the IASCAV), the Provinces government of NOA and AFINOA created the Phytosanitary Regional Committee of NOA (CORENOA). Competences of this committee are:

- to propose to SENASA phytosanitary regional strategies;
- to prepare and approve the regional programmes and their respective budgets;
- to promote and to propose legal regulations for the fulfilment of the objectives proposed at regional level;
- to organise, supervise and coordinate the technical-administrative actions derived from the programmes.

One of the programmes which is carried out within this framework is the "Phytosanitary procedure for exporting Citrus fruits from the NOA to the EU". In the programme, besides the members of CORENOA, the Agrarian-industrial Experimental Station Obispo Colombes (EEAOC) and the National University of Jujuy (UNJu) collaborate in it. This programme sets up the phytosanitary measures that must be carried out by producers, packers and exporters of Citrus fruit to EU, as well as the official measures of vigilance and control of the correct implementation of such measures.

5.2.1. *Citrus canker*

In 1991 Argentina officially declared the region of NOA as an area free of *Xanthomonas axonopodis* pv *citri* and it has been recognised as such by the Regional Plant Health Committee of the South Cone (COSAVE) in 1993. In order to maintain it, Argentinean phytosanitary authorities set up:

- a ban on introducing into the region Citrus plants including fruits;
- a ban on introducing into the region used fruit packing material if it has not been duly disinfected;
- a ban on using in the region used fruit packages for Citrus fruits if they have not been duly disinfected;
- a phytosanitary barrier system for vigilance of products that enter the region;
- a system of survey and monitoring of Citrus trees in commercial orchards, nurseries, isolated trees in private and public gardens in order to detect the possible presence of the bacterium;
- an emergency plan to avoid the export of possibly contaminated fruits and immediately eradicate the disease in the event that it is detected.

I Entry controls to the NOA

In the region of the NOA there are a total of 11 fixed barriers in order to avoid that Citrus plants, including fruits, and used fruit packing material enter the region. The number of barriers by province is as follows:

Jujuy	1
Salta	2
Tucuman	4
Catamarca	4

These barriers are operated by 66 barriermen belonging to plant health Services of the provinces. Provincial police services also assist with these controls. They are operational 24 hours per day and all lorries, buses and private cars are checked. At the barrier a check is carried out that fees due on Citrus fruit exported from the region have been paid. SENASA carries out audits on the performance of these barriers.

One of the established barriers, that of La Florida in National road n° 9 at the border of the province of Tucuman with Santiago del Estero, was visited by the mission team. The barrier includes offices, parking places for vehicles and a place where the confiscated materials are incinerated. When there is a large volume of traffic, buses, cars and small vehicles are inspected at random, but heavy transport is always inspected. A form is filled up daily in relation to the controlled vehicles; from these forms weekly reports are written up and sent to SENASA. There are two types of forms for infringements, one for small vehicles and the other for heavy transport. During the year 2000 in the 4 barriers of the province of Tucuman, 86 332 vehicles were controlled and 36 certificates of infringement were drawn up.

Mobile controls are also carried out by inspectors of SENASA with the cover of the Gendarmeria Nacional (National Police).

II Survey and monitoring

For commercial plantations, on maps on a scale 1/10 000 or 1/20 000, a straight line is outlined with the direction and the length including the greater number of possible sampling stations: it is the principal transept. Afterwards and at 2 000 m distance, two parallel lines are outlined to the principal transept, being the primary transepts I. On the principal transept points 500 m apart are placed; from these points perpendicular lines to transepts are outlined. At the crossing points of these parallel lines with the transepts, the sampling stations are placed the first year. Each sampling station is at the centre of a square of 100 ha.

In the second year between primary transepts I and principal transept, distant 1 000 of each one, primary transepts II are outlined, and the sampling stations are placed in the crossing of these transepts II and the normal parallel straight lines already outlined the previous year. So on for the years 3° and 4° and, after 4 years, there has been a sampling station for each 25 ha.

In each sampling station there are three points of sampling: one at the intersection of the transept with the perpendicular line and the other two

points 100 m on either side of the intersection point along the perpendicular line. Within a radius of 250 m of each point of sampling a central tree is chosen and another four near it. 20 leaves and 4 fruits up to 2 cm diameter from each tree are taken. Each sample is composed then of 100 leaves and 20 fruits, which are placed separately in two labelled bags. If the orchard has been recently planted, 9 plants are chosen instead of 5 and the sample is formed with 100 leaves and 20 fruits (if there were fruits). A band of plastic placed on a clearly visible branch and painting the base of the trunk identifies the point of sampling.

The isolated orchards or individual trees are sampled at a rate of one sample each 15 ha, the same number of leaves and fruits as in the previous case are taken. These places are sampled every year.

In nurseries a sample of each species (or hybrid) will be taken. For the species of which there were more than 5 000 plants, a sample for each 5 000 plants will be taken. 100 leaves at the rate of 2 leaves per plant compose the sample. The nurseries are also sampled annually.

21 inspectors divided into 7 teams of 3 members each comprise inspectors' staff. They are Agronomists or final year students of Agronomy. The sampling is carried out in the period of sprouting and blooming in October, November and December, each team taking 300 samples throughout the period. The samples are labelled with a Roman number, that indicates the inspection team and an Arabian number that is consecutive for each team. This number is written in the working map. The samples taken are transported in refrigerator and are sent to the laboratory where they arrive within the 24 hours. As mentioned, all areas planted with citrus fruit are sampled annually. Given that systematic sampling was begun in 1993, at the end of this year the commercial orchards will have been sampled at the rate of three points of sampling for each 12.5 ha. No positive cases have been found, according to SENASA representatives.

III Laboratories

The laboratories of the EEAOC and UNJu are the only ones accredited for the analysis of above mentioned samples. Each of them analyzes 1 000 samples annually.

The mission team visited the laboratory of the EEAOC where, at peak times, 40 samples daily are processed. Three people deal with these samples in this laboratory from the end of September to mid-December. This staff has received specific training in the laboratory of SENASA in Buenos Aires, which is situated in an area where they can have live bacterium for the validation controls of the analysis systems.

The method of detection recommended by the EPPO is the ELISA and the laboratory adopted it. But immediately after the visit of a scientist of INRA who collaborated with the authorities of IASCAV in the field of Citrus canker, the IF method was adopted, being more appropriate for the activities of exploration.

In most cases when samples consist of non-symptomatic leaves and fruits, the following analysis protocol is applied:

- maceration in a saline buffer : 2 millilitre for 100 leaves and 5 millilitre for 20 fruits;
- macerate is put on a slide for IF test (20 µl for each sample). 4 samples are put on a slide and the slide is repeated; positive control is inactive bacteria;
- if IF is positive, macerate is plated on YPGA medium (Yeast, Peptone, Glucose, Agar);
 - biochemical test (API Galleries 20I – starch, nitrates, Arginine, fermentation, oxydase);
 - gain IF and pathogenicity test (test realized on pomelos leaves inoculated with 10 µl of inoculum through 5 stings each side of nervure and placed on medium during 20 days at 27°C).

In the case of symptomatic material, it is isolated in a selective medium and, if typical colonies develop, the IF and pathogenicity tests are carried out.

PCR techniques cannot be used because chemicals used during farming Citrus trees, copper for example, are inhibitors of this technique.

In several cases it has happened that tests of IF were positive but further tests were negative. In no case is the sample sent to the reference laboratory of Buenos Aires for confirmation. Nor is the sampling at the point of sampling repeated.

IV Emergency Plan

If the presence of the disease in a plot is confirmed, the steps to be followed are:

- the area will be monitored in order to find the infection limits;
- all borders accredited for dispatching citrus fruits will be alerted so as to avoid that fruit with possible infection leaves the country;
- a "red area" comprising of the infected area plus a circular band of land surrounding the infected area of the same length that the radius of the infected area;
- in the "red area" all trees will be burned *in situ* and the stumps will be treated with herbicide;
- around the "red area" a "yellow area" and a "green area" will be established where a high sensitivity monitoring will be carried out (two annual controls: in periods of sprouting - blooming and preharvesting).

If any fruit contaminated at the time of marketing is detected, the "units of production" (UPs) can be located through the established traceability system.

5.2.2. *Citrus black spot*

Producers wishing to export to the EU must enter the UPs of their farms in the provincial register of SENASA, before 31 August of the previous exporting year. The UP is defined as a planted plot of citrus fruits. These plots are clearly identifiable (being separated by paths, non-planted bands,

windbreaks or fences) and its surface is usually 1 to 2 ha. Two letters that are the initials of the province, three digits corresponding to the number of the farm and another two digits that indicate the number of the plot within the farm identify the UP. These three data are separated by hyphens (e.g. TU - 001 - 02). The province of Tucuman with 1 479 UPs registered corresponding to 249 farms is the province with the greatest number of UPs registered, and Jujuy with 82 UPs of 4 farms is the province with fewest UPs registered.

The inspectors of the provinces check the data and then the lists of the registered UPs are sent to the Directorate of Plant Quarantine (DCV) of SENASA to be distributed to the packinghouses and the points where fruit destined for the EU leave the country.

The producers undertake to carry out, at least, two treatments of fungicide (normally oxychloride, sulphate, hydroxide or oxide of copper) - the first before the period of the rains *in October* and the second with the fruit smaller than 2 cm of diameter. By 31 March, producers must send to the provincial plant protection services, a sworn statement on the health of their crops, principally with regard to "black spot" and fruit flies. In the course of the visits on the spot, farmers told the mission team that the number of fungicidal treatments were much more than required.

The UPs are inspected at random by the inspectors of the provincial plant protection services. According to the statement of those responsible, between 40% and 50% of the UPs are visited and in the case of something being wrong from the phytosanitary point of view, the UP is deleted from the register.

Fruit destined for the EU must be handled completely separately to fruit with another destination. The bins or the pallets with the fruit leaving the farms for packinghouses shall have, at least, on two sides a numbered card provided by SENASA, on which the registration number of the UP and the date of harvest are written.

The packinghouses must be registered and accredited by SENASA to deal with fruit destined for the EU. In each packinghouse there is a person, accredited by SENASA, who is responsible for reporting to SENASA. He cannot accept fruit that does not come from a registered UP. The fruit intended for the EU is stored and handled separately to other fruit. In the course of the handling, the fruit is washed first with a solution of sodium hypochlorite and later treated with a fungicide (tiabendazol) and finally it is waxed. All packinghouses are visited daily by provincial inspectors, who remain an average of one hour and a half in each packinghouse; although there are no records kept of such visits. Packinghouses have their own quality control that inspects the fruit during the different phases of handling and the fruit prepared for shipment.

Fruit leaves the packinghouse with a certificate that is stamped by the phytosanitary control authorities when leaving the NOA. Pallets have, at least on two sides, a yellow label in which it is written in Spanish and English: the origin (NOA), that complies with Directive 2000/29/EC and the identification of the UP. In the port of exit, fruit is inspected by the

SENASA inspectors that issue the compulsory Phytosanitary Certificate and keep the original certificate issued.

In case of finding symptoms of black spot in any of the inspections, the UP of origin is automatically disqualified from exporting to the EU.

5.2.3. *Fruit flies*

Fruit flies are not subjected to a special survey by the official services as it is considered that they are not a problem for citrus fruit production of the region, mainly on the basis that the bigger production and export is lemon fruit, which is not considered to be a host to these insects. But fruit flies have been intercepted in the EU in citrus fruits originating in Argentina.

There are no in-depth studies on the flies that are present within the region, either of wild plant hosts, or on the fluctuations of the populations of these flies annually. However the consulted technicians assured the mission team that in this region, fruit flies other than *Ceratitis capitata* and *Anastrepha fraterculus* have not been found. The proportion between both species, in the citrus season, is 95% and 5% respectively, although there are no scientific publications supporting this fact. The behaviour of *A. fraterculus* has been studied under cold treatment and the same results have been found as for *C. capitata*. Throughout the area of MERCOSUR a study on the distribution of the different fruit flies is going to be carried out as well as a study of its wild plant hosts.

Within the visited farms there were Jackson traps with pheromone (trimedlure) for *C. capitata*, and McPhail traps with water and sugar and an insecticide principally for *A. fraterculus*, placed in the periphery of the fields. In the records shown to the mission team, it appeared that, in the weekly inspections of the traps, from April to November, the levels of 1 fly/trap/day (MTD) were rarely reached. When this level is reached (1 MTD), orchards are treated in alternative bands of trees with hydrolysed protein and insecticide. However there are no SENASA regulations for placing traps, revision periods of the traps for determination of the MTD, or level of MTD at which the orchard must be treated and pesticides used.

The presence of fruit flies is inspected in the packinghouses by internal quality control and also at the time of export at the point of exit of fruit by SENASA inspectors.

5.3. **Controls and certification in the region of the NEA**

Within this region there are also four provinces producing citrus fruits: Misiones, Corrientes, Entre Rios and Buenos Aires. The total planted area with citrus fruits is 88 770 ha. Province Entre Rios has the greater surface with 41 300 ha (47%) and the province of Buenos Aires has the least with 8 760 ha (10%). Orange is the main citric fruit production with 563 503 t (53%), followed by mandarin with 387 418 t (36%).

In 1999, the SGAPyA (through SENASA) together with the governments of the provinces of NEA and different professional associations (Asociación de Fruticultores de Misiones, Sector Productor de la Comisión Mixta Provincial del

Citrus de Corrientes, Federación del Citrus de Entre Ríos, Cámara de Exportadores del NEA y Cámara de Productores y Empacadores de la Zona del Noreste de la provincia de Buenos Aires) created the Comité Regional del NEA (CORENEA). The National Institute of Agrarian Technology (INTA) and the Inter-American Institute for Agriculture Co-operation (IICA) are Advisory Members of this Committee. The competences of this Committee are as follows:

- to propose phytosanitary strategies allowing the lifting of the restrictive measures to export citrus products;
- to prepare and approve the regional programmes and their respective budgets;
- to promote and propose legal regulations for the fulfilment of the objectives proposed at regional level;
- to co-ordinate actions with private or official organisations in order to make more efficient the tasks included in the programmes.

The "Citric Fresh Fruit Certification Programme of the Region of NEA for exporting to the EU" is one of programmes carried out within the described framework and was approved by the SAGPyA on 9 June 2000⁶.

5.3.1. *Citrus canker*

In 1927, in the province of Corrientes, the first outbreak of citrus canker was detected and it was identified as belonging to pathotype B. Between 1960 and 1970 the first outbreaks of the pathotype A were identified (Asian canker) in Corrientes and Entre Rios provinces. As a result of favourable climatic conditions at the beginning of the '70s, the disease was widely spread within the NEA. In the middle of that decade, hard eradication measures were undertaken but, as they were not implemented by the whole sector, they did not have a successful outcome. Currently phytosanitary authorities are implementing measures to co-exist with the disease and risk mitigation measures of its spreading have been adopted. According to SENASA services only pathotype A is currently present in the region.

For exporting fruit produced in a UP, it must be previously certified as appropriate. This certification is obtained through five stages covering the whole growing cycle. They are: Register and inscription, Farming and monitoring, Pre-harvest, Harvest and Post-harvest - Packing.

I Register and inscription

The UPs that each producer wishes to register are detailed in a form sent to the Provincial Office of the Programme. As there is a charge to register the UPs, in order to provide funds to the Programme, producers only register the UPs of their farm that are going to produce fruit to be exported to the EU. For this purpose (registration) maps of the property are presented attached to

⁶ *In their response to the draft report, the Argentine authorities noted that "the 'NEA regional programme for the certification of fresh citrus fruit for export to the EU' was approved by SENASA in its Resolution of 24 January 2001. The provisions of the SAGPyA Resolution dated 9 June 2001 recommend that SENASA develop the programme in accordance with the European regulations..." In addition they noted that "...Independently of the administrative procedures and...resolutions, SENASA had already adopted internal measures to develop and implement the export programme from 1997-98 onwards".*

the appropriate forms, on which access is detailed and the UPs that he wishes to include for the next season are clearly defined. The maximum surface of a UP is 4 ha, although this size is rarely reached. The species and variety of planted Citrus and the estimated production of each UP must also be detailed. The document, which tends to be a sworn statement, must be presented within the ten working days before the date of the first monitoring and that is fixed annually by SENASA (around end of September). The Provincial Office which receives it, and on which SENASA makes audits, supervises the provided information. An extract of the information is sent to SENASA in digitalised form before monitoring starts so that it may audit the controls carried out by Provincial Offices.

All UPs must be surrounded with windbreaks, especially on the sides of the dominant winds that accompany rain. Research carried out by INTA has shown that in flat areas such as the ones of the NEA where strong winds are accompanying rain, the presence of windbreaks mitigates the risk of spreading the disease. The distance between windbreaks must be at most from 6 to 10 times the height of the curtain. Normally the maximum distance is 100 m with windbreaks that reach from 15 to 20 m. The trees used as windbreakers are eucalyptus, cypress, casuarina, pine and also sugar cane. Frequently the trees in the windbreak are in double rows so that one row covers in height and the second row the lower parts. However in the visits carried out to some farms producing fruit for the EU, these protective windbreaks in the lower parts had large areas without covering.

The UPs are registered and identified with a series of groups of digits separated by *blank spaces (non-obligatory)*. The *first group of three digits represents geographical location (The first digit indicates the province; the next two digits indicate the area in the province)*. The next three digits indicate the producer. The two digits after a blank space, indicate the *estate or farm* and after a blank space, the last *three* digits indicate the *batch number* (e.g. **399** 888 01 **007**).

II Farming and monitoring

Each UP must be isolated from the neighbouring UPs by windbreaks as incorrect windbreaks are a possible cause for excluding a UP from the register. The fields must be clear of weeds, branches and fruit that may serve as a breeding ground for the inoculum.

All the new sproutings must be protected with copper products that should be applied, at least, in the following periods:

- full blooming and first sprouting (August-September);
- post-blooming, 30 - 40 days after the previous one;
- with fruits from 2 to 4 cm diameter (November - December);
- with fruits from 4 to 5 cm diameter (December - January).

Two monitorings per year are carried out at the moments of sprouting (spring and autumn) and for late varieties (Valencia oranges, lemons) a third monitoring within the 15 days prior to the harvest is carried out. The dates of beginning and ending of the monitorings are established by SENASA depending on how the weather conditions have evolved in the course of the year. The total inspection staff is 70 with the following provincial

distribution: 23 in Entre Rios, 18 in Misiones, 17 in Corrientes and 12 in Buenos Aires. To carry out this job the inspectors must undergo a short training course⁷ given by SENASA that credits them at the end of it. These inspectors are paid through the budget of the Programme, which make them independent of the companies.

Only the UPs registered for exporting to the EU are controlled. In each UP the control starts by checking one of the three first rows of trees and then by one of the three first trees in the row⁸. Starting from this tree, each third tree in the row until the end of it will be controlled. At the end of a row the inspector passes to the third row that will be controlled in the same way. The size of the sample represents a little more than 11% of the total trees within the UP considered. For each tree controlled, its entire top is observed and the presence of a leaf or a fruit with symptoms presupposes the exclusion of the UP from the register of those UPs for export to the EU. The data of the monitoring (examined trees and results) are stated in a form that is read through optical reading for their computerisation. ***Forms that are delivered to the co-ordination offices of the Programme are forwarded to SENASA, which is then responsible for processing them and gathering, analysing and disseminating data.***

III Pre-harvest

At least 15 days before harvesting, the producers must notify the harvest date to the Provincial Office with details of UPs that are going to be harvested. The inspectors of SENASA audit between 15% and 50% of these UPs. If everything is in order the certification is issued (number of permission).

IV Harvest

Fruit destined for the EU must be handled completely separately to fruit with another destination. Fruit leaving the farms shall have, at least, on two sides of bins or pallets loaded on the lorries destined for packinghouses, an orange card provided by SENASA⁹, on which is recorded: the registration number

⁷ *In their response to the draft report, the Argentine authorities noted that “it is important to clarify that the training courses require personal attendance, cover theory and practice, and include a compulsory evaluation which must be favourable in order for applicants to successfully complete the course and consequently qualify as an inspector”.*

⁸ *In their response to the draft report, the Argentine authorities noted that “the monitoring system used follows a defined order of movement. For practical reasons....it has been established that inspectors will start at one corner of the plot and make a note of where they began their inspection; the starting position must vary from one inspection to the next so that the make-up of the sample is not the same”.*

⁹ *In their response to the draft report, the Argentine authorities noted that “only one identification card is required for harvest containers, and its presence is verified on arrival at the packinghouse. A minimum of two cards are required for packed material since, given their volume and the way they may be handled in port, the labels may be in a place inaccessible to the checker”. Additionally, “in the case of harvest containers, each card indicates the type of package on which it is placed but not the total making up the batch. It only indicates the total number....where small harvesting containers are used, in which case one label may serve for a complete pallet, usually comprising 8 or more cases”.*

of the UP, the date of harvest and the quantity and type of packages of the lot.

V Post-harvest - Packing

The packinghouses must be registered and accredited by SENASA to handle fruit destined for the EU. Fruit originating in a UP that is not registered cannot be accepted. Fruit intended for the EU is stored and handled separately to any other fruit. In the course of the handling, the fruit is first washed with a solution of sodium hypochlorite and is later treated with a fungicide (tiabendazol) and finally it is waxed. An inspector of the Programme accredited by SENASA is permanently¹⁰ in each packinghouse. The packages used for fruit transportation and the vehicles involved are disinfected (normally with quaternary ammonium).

Once fruit has been packed, every pallet has, at least, on two sides a numbered **orange** label on which it is written in Spanish and English: the origin (NEA), that the fruit complies with Directive 2000/29/EC, the identity of the UP the date of packing **and the name of the packaging plant**¹¹. In the port of exit the inspectors of SENASA inspect fruit and issue the compulsory Phytosanitary Certificate.

In the case of leaves or fruit with symptoms of canker being found in any of the above mentioned stages, the UP of origin is automatically disqualified from exporting, but the surrounding UPs can continue harvesting fruit for exporting to EU.

5.3.2. *Citrus black spot*

The whole monitoring of possible infections by *Guignardia citricarpa* is carried out simultaneously with the survey of *Xanthomonas campestris* and the controllers of this latter disease monitor the presence of black spot through the system of the UPs, as explained above. The treatments with fungicides described in point 5.2.2. are also compulsorily implemented in NEA, although here producers give more treatments with copper products in order to avoid the spread of canker. The treatments and controls of fruit in the packing process have been described in point 5.3.1.

5.3.3. *Fruit flies*

That which has been said on this subject in point 5.2.3 can be repeated here¹². There is a publication of 1989, which is of particular relevance

¹⁰ *In their response to the draft report, the Argentine authorities noted that “the presence of the qualified inspector is obligatory when the plant is processing fruit destined for the EU. His presence is not required for the rest of the time” and “...these inspectors....receive their qualification following a course....(and) a satisfactory evaluation”.*

¹¹ *In their response to the draft report, the Argentine authorities noted that “during 2000 – 2001, interceptions of fruit affected by health problems led to some of these plants being penalised”.*

¹² *In their response to the draft report, the Argentine authorities noted that (because) “point 5.3.3. refers back to point 5.2.3....we should make it clear that pilot areas for fruit fly control have been operational in the NEA since June 2001. These areas were established on the basis of the ‘Manual Operativo para Mosca de los Frutos en Citrus’...and the ‘Métodos y Procedimientos para la*

"Avances en las investigaciones sobre moscas de las frutas en el litoral del río Uruguay"¹³, made jointly by the SAGyP of Argentina and the Ministerio de Agricultura, Ganadería y Pesca of Uruguay, from which the following data have been extracted:

- The only Fruit flies present in the area are *Ceratitis capitata* and *Anastrepha fraterculus*.
- The proportion between the two species according to data of the citrus area of Salta are 1.43 *Anastrepha* for each 100 *Ceratitis*.
- Between July and September in suburban areas with non-treated citrus trees the MTD is below 2, reaching 2.1 in June and 2.7 in October.
- All the citrus fruits except lemon have been found to be hosts of *Ceratitis* and *Anastrepha*, although the latter is more abundant in grapefruit.

The mission team was informed at the visited farms that the same treatments as described for NOA are applied when 1 MTD was reached.

The occurrence of fruit flies are controlled by internal quality control and Programme inspectors in packinghouses and finally at the point of exit of fruit by inspector of SENASA. That which has been said in point 5.2.3 on the absence of official regulations for fruit flies control can be applied here¹⁴.

5.4. PROCITRUS Programme

In 1998 the resolution n° 149 of the SAGPyA approving the "Regulations for the production, marketing and introduction of nursery Citrus plants and its parts" was published. This regulation establishes that from 2004 only certified plantation material will be allowed.

In order to prepare the launching of the Certification programme, the INTA began in 1995 the PROCITRUS programme for having *certified, disease free* propagating Citrus material. The development of this activity is carried out in the "Centro Único de Introducción y *Saneamiento*" (CUIS) situated in the INTA of Concordia. From an amount of 185 initial varieties, 133 have been sanitized¹⁵ among which there is a collection of mother plants.

Implementación de Sistemas de Vigilancia Fitosanitaria Interna Especifica para Moscas de los Frutos en Citrus' standard, both documents produced under the EU-MERCOSUR project for the internal monitoring group....".

¹³ Technical Bulletin of FAO - Project TCP/RLA/8856

¹⁴ *In their response to the draft report, the Argentine authorities noted that "the operation of the National Fruit Fly Programme is based on Resolution ex Iascav N° 134/96, setting up the PROCEM (and) at the date of publication of the (draft) report: Resolution ex Iascav N° 23/96 (list of hosts, procedures for treatment of host fruit, etc.) repealed and replaced by SENASA Resolutions Nos 515/01 and 601/01)".*

¹⁵ *In their response to the draft report, the Argentine authorities noted that "in the CUIS, any traces of disease are removed from material to be incorporated, and a nursery of mother plants and rootstock is kept".*

In the “Centro de Propagación de Material Cítrico” (CPMC) of Catamarca there are 73 varieties producing scions and another 26 in acclimatisation phase. Currently the facilities of these centres are in a position to provide more than half of the needs of the country.

The plants leaving CUIS of Concordia to CPMC are plants “in vitro” that are tested for the presence of the bacterium of citrus canker. The technology used is ELISA test that makes it possible to test a large number of plants in series. Tests are carried out using as control freeze-dried bacterium, never bacterium culture in order to avoid the risk of its spread in NOA.

5.5. Other harmful organisms

5.5.1. Insects

At the time of its introduction, in the middle of the 90s, Citrus leafminer, *Phyllocnistis citrella*, was a problem, but at present it is kept on levels that can be acceptably dealt with.

5.5.2. Fungus

Elsinoë fawcettii has been found almost exclusively in lemon. With the fungicidal treatments that are carried out it is not a particular problem.

5.5.3. Bacteria

In 1994 in the North of the province of Corrientes an outbreak of *Xylella fastidiosa* (Well and Raju) was detected, but, according to the statement of the Argentinean authorities, it was successfully eradicated¹⁶.

5.5.4. Virus and viroides

The following are present in Argentina: Citrus tristeza virus, Caquexia or Xiloporosis, Exocortis and Psoriasis. The scions for certified plants must be free of such viruses and they are tested for their presence.

5.6. Exports Certification

Citrus fruit from the NOA arrives at the ports of exit with a certificate of origin that has been stamped in the barrier of exit of the NOA. Fruit from the NEA has no certificate of origin. The inspector of SENASA in the port checks the data of the certificate of origin in the case of fruit from the NOA and in all cases he checks that the pallets have the identification of the UPs and that they are authorised. The amount of the sample of fruit examined to be exported is 1% of the consignment, which involves taking out 2 boxes of each 3 pallets (each pallet weighs a little more than 1 t and each box contains 18 kg fruit). In total 15 boxes per container, which usually loads 20 t, are inspected. There are inspection tables where the boxes are overturned and all of the fruit of each of them is inspected.

¹⁶ *In their response to the draft report, the Argentine authorities stated that “In 1994 in the north of the province of Corrientes a small outbreak of Xylella fastidiosa was detected and monitored: to date, no confirmable symptoms have been found in the field”*

In the case of symptoms of citrus canker or black spot or presence of fruit flies, the consignment is rejected¹⁷. In addition in the case of the two diseases, the UP of origin is communicated to the central SENASA office so that it is eliminated from the register of authorised UPs.

If no findings occur in the final inspection, the SENASA inspector issues a Phytosanitary Certificate with the additional declaration: Fruit fulfils the Directive 2000/29/EC, item 16.2 Literal b), item 16.3 Literal a), item 16.4 Literal d).

5.7. Traceability

As mentioned before, the UPs are all well identified and registered. The produce that leaves them is loaded into bins or pallets that are identified with the number of the UP of origin. In cases where fruits originate in 2 different UPs, the registration numbers of both UPs are written on the identification card.

All packinghouses that handle fruit destined for the EU are registered and accredited by SENASA. In them, the first check that is carried out on fruit arriving from the fields, is to verify if the UP of origin is authorised. When the fruit of a UP is finished in the selection lines there is a signal indicating that this one has ended, before the fruit of another UP starts. So the pallets are constantly updated with the appropriate identification card of the UP (of yellow colour from the NOA and of *orange* colour from the NEA).

In the course of any inspection carried out throughout the process from the harvest to its exit from the country, the UP of origin of the fruit can be identified. When an anomaly is found, all packinghouses and points of exit of the country are notified in order to delete this UP from the register for the current campaign.

On their arrival in the EU these identification cards must be in all pallets. This allows that the farm and the field where the fruit has been produced can be identified if any problem appears.

The Argentinean authorities have not carried out a follow-up of interceptions of Citrus canker and fruit flies that the EU has sent. The Argentinean authorities state that only if the notification of interception includes the data of the identification card of the UP can follow-up be carried out.

¹⁷ *In their response to the draft report, the Argentine authorities noted that “there are no mistakes in this paragraph....however it might be advisable to make a distinction between the procedures used in the different regions since if an inspector finds....symptoms of canker in a consignment from the NEA he acts in one way, whereas if it is in a consignment from the NOA the procedure is different...”.*

6. CONCLUSIONS

6.1. Competent authority

SENASA is the competent authority to implement the national policy in the field of plant protection.

It has a legal basis concerning its competence and all processes that it imposes on the producer and industrial sector exporting to the EU.

SENASA cover the country well with offices in all provinces of national territory. The material resources and number of staff seem appropriate and the staff is trained for the designated tasks.

The laboratory of plant products of Buenos Aires has adequate equipment and the staff met had appropriate training and knowledge for their task.

6.2. Controls and certification in the region of the NOA

Citrus canker

The region is recognised internationally as free from *Xanthomonas campestris* (all the pathogen races to the Citrus Fruits). The conditions to keep the status of free area are correctly met: ban on entry of products that may propagate the disease, with controls in the roads of access to the region, regular monitoring of the disease both in the commercial field and that of urban or private use and an emergency plan is in place in the case of an outbreak of the disease.

The visited laboratory of the EEAO (the mission was informed that the lab of UNJu, which was not visited, acted in the same way) cannot use live bacterium for positive controls because it is within an area free of the disease. When positive cases by IF technique are found, if further techniques do not confirm the presence of the bacterium, no more researches are carried out (such as sending the doubtful sample to the reference laboratory of Buenos Aires and taking new samples in the site of origin of the sample).

Citrus black spot

With respect to *Guignardia citricarpa* the official programme requires treatments with copper products at least at two stages of the growing cycle. Producers, who normally carry out a greater number of treatments, must introduce a sworn statement that they have carried out such treatments. The inspectors of SENASA carry out inspections at random to check this point.

It is in line with point 16.4.c) and d) of Annex IV AI of Council Directive 2000/29/EC.

Fruit flies

Fruit flies are not considered important in the area especially because lemons are the main citrus fruit exported. Studies on fruit flies in the region are lacking. However, the consulted staff have informed the mission team that only *Ceratitidis capitata* and *Anastrepha fraterculus* (listed in point 25 of Annex I AI of Council Directive

2000/29/EC) are present in the region. Farmers informed the mission team that, in the periphery of the fields, traps are normally set up and are surveyed weekly and the orchards are treated when the level of 1 MTD is reached. However, SENASA does not propose any official measure for fruit flies in the Programme citric fruit certification for the EU.

The only official guaranty that the consignments are free from fruit flies is based on the official inspection carried out at the time of export in the port of exit. However, this is in line with point 16.5.c) of Annex IV AI of Council Directive 2000/29/EC.

6.3. Controls and certification in the region of the NEA

Citrus canker

Currently phytosanitary authorities are implementing measures to co-exist with the disease and risk mitigation measures of its spreading have been adopted. Only pathotype A is present.

All the UPs that are going to produce fruit for the EU must be registered for exporting to the EU. In the farms not all citrus fields are registered because there is a charge to register the UPs in order to provide funds to the Programme. As only registered UPs are monitored, some fields in the immediate vicinity of a registered UP cannot be monitored because they are not registered. A UP must be surrounded by windbreaks for being registered. These curtains did not always have the right structure because of openings in the lower parts¹⁸.

At least two inspections during the growing cycle are carried out in each UP and for late varieties a third monitoring is carried out. In addition the UPs can be controlled before the harvest (between 15% and 50% are inspected) and so the producers must inform the office of the Programme the date of launching of the harvest at least 15 days in advance.

Fruit leaves the farms with the identification of the UP of production joined to the fruit pallets. The packinghouses, which must be registered and accredited by SENASA, handle fruit destined for the EU separately to other fruit. An inspector of the Programme is constantly in the packinghouses.

When in the course of the inspections a contaminated UP is identified, it is eliminated from the register for the present season, while at the same time alerting all packinghouses and land, marine and air borders which dispatch citrus fruits to the EU. All the remaining UPs of the farm, including those in its immediate vicinity can continue collecting fruits destined for the EU¹⁹. With respect to UPs in the

¹⁸ *In their response to the draft report, the Argentine authorities noted “....that the curtain affects the aerodynamics of wind movement, and that the key to protection lies more in the height of the plants than in the space between the trunks”.*

¹⁹ *In their response to the draft report, the Argentine authorities stated that “we should like to clarify that only registered UPs, which meet all the requirements, are certified, and for which certification has not been discontinued under the programme are authorised to collect fruits destined for the EU”.*

immediate vicinity²⁰ of an infested UP, this is not in line with point 16.2.c) of Annex IV AI of Council Directive 2000/29/EC.

Citrus black spot

The system is as in the NOA with the difference that during the two inspections carried out for canker citrus the presence of black spot is also monitored. Therefore it is in line with EU regulations.

Fruit flies

There are studies on fruit flies in the region confirming that only *Ceratitis capitata* and *Anastrepha fraterculus* are present in the region. For both species all citrus fruits, excluding lemon, have been found to be hosts. That *A. fraterculus* has grapefruit as principal plant host is also endorsed in these studies.

As in the NOA, the visited farms had traps placed in their citrus orchards. The data on levels of MTD and treatments were similar to those of NOA region. There are not official measures either for the treatment of fruit flies. Presence of fruit flies is checked, on a representative sample of the consignments, in the port of exit by SENASA inspectors.

6.4. PROCITRUS Programme

From 2004 only certified plants of Citrus marketing will be permitted. The PROCITRUS Programme has as an aim to have identified and sanitized propagating Citrus material for nurseries. There is a collection of 133 sanitized mother plants planted in greenhouses protected against insects especially aphids. All cuttings are tested for the presence of citrus canker, citrus tristeza virus, caquexia or xiloporosis, exocortis and psoriasis.

Cuttings are tested for the presence of citrus canker by ELISA technique that is recommended by COSAVE. However, the mission team considers that it has the difficulty of low sensitivity for the plants that are used. Indeed, in very young plants if the bacterium is present it will be on very low levels that can not be easily detected with this technique.

6.5. Other harmful organisms

Of other organisms harmful to Citrus and present in Argentina, *Elsinoë fawcettii* can be a danger but seems controlled in the production phase. *Xylella fastidiosa* was detected in the North of Corrientes province in 1994, but Argentinean authorities stated that it was successfully eradicated. Thus there is a reasonable level of security that these pests are not present in the exported fruit to the EU.

²⁰ According to the “GLOSSARY OF PHYTOSANITARY TERMS” of FAO (*Publication N° 5 of June 1996*) the term “Immediate vicinity” is defined as “**Fields** adjacent to a **field**, or **places of production** adjacent to a **place of production**” and is equivalent in Spanish to the term “Colindancia”. The term “Immediate vicinity” is used in points 16.2., 16.3. and 16.4. of Council Directive 2000/29/EC, English version.

6.6. Exports Certification

All pallets with citrus fruit either from NOA or from NEA arrive at the ports of exit of the country with cards affixed where the UPs of origin are identified. In the port of exit all consignments are inspected by means of a sample of 1% of the total weight. The size of the sample is adequate to the volume of the consignment. The Phytosanitary Certificate is issued if in the inspection process none of the harmful organisms to the citrus fruits mentioned in the Council Directive 2000/29/EC is found.

6.7. Traceability

The UPs are perfectly identified and registered. Fruit leaves the fields with the identification joined to the packages. Fruit for the EU is processed separately to any other fruit. In the classification chains each UP is considered separately. Fruit leaves packinghouses with the identification of the UP joined to two laterals of each pallet and, with it, arrives to the EU where, if any problem appears, the farm and the field where the fruit has been produced can be identified.

7. CLOSING MEETING

A final meeting took place in the SENASA headquarters on 14 September 2001. In the course of the meeting the principal observations and conclusions were presented by the mission team. The representatives of SENASA accepted the conclusions and hoped to answer the observations after careful study.

8. OVERVIEW

The conditions of production, vigilance and certification seemed satisfactory to the mission team with the observations and exceptions that have been mentioned in the conclusions. The recommendations referring to laboratory techniques are suggestions that do not disqualify at all the work carried out in such laboratories.

9. RECOMMENDATIONS

It is recommended to the Argentinean phytosanitary authorities:

- (1) In the NEA, in the farms in addition to the UPs that are going to produce fruit for the EU, the UPs registered in its immediate vicinity should be registered to be in line with point 16.2.c) of Annex IV A I of Council Directive 2000/29/EC. The registration numbers could incorporate a distinction, for example a letter, to distinguish the types of UPs.
- (2) In the NEA, when a UP is found the presence of citrus canker it is excluded for producing fruit for EU. But in addition also the UPs that are in its immediate vicinity should be excluded for producing fruit for EU, in order to comply with point 16.2.c) of Annex IV A I of Council Directive 2000/29/EC.

The following points are suggested:

- (3) When laboratories of the NOA that carry out analysis of citrus canker on asymptomatic material find an IF positive, they should:
 - send the sample to the reference laboratory of Buenos Aires for confirmation since there live bacterium can be used;
 - carry out a new analysis of another sample taken at the point of sampling where the sample originates.
- (4) In the PROCITRUS Programme, if the ELISA technique is used for testing vitroplants for citrus canker, as positive control should be used ten-fold dilution of live bacterium suspension to get an assessment of method sensibility. IF is considered a better and more sensitive method in this case. If ELISA is maintained for detection, plating on medium at the same time should supplement it.

The Argentinean phytosanitary authorities are requested to report to the European Commission within two months after receipt of the final report all action taken in response to the recommendations (1) and (2).

It is recommended to the Commission services:

To communicate to the Member States that when an interception of citrus fruit from Argentina is carried out, the notification must include the UP identification, which is in each pallet of fruit, in order that the Argentinean authorities can make a follow-up of this interception.

ADDENDUM

In their response to the recommendations in the draft report and the comments of the mission team at the closing meeting, the Argentine authorities noted that they have “made a series of changes to the operating procedure which have been incorporated for the 2001 season”. They comment that these “bring the programme perfectly into line with the requirements of Directive 2000/29/EC”. The full text is included in the attached comments.

The Argentine authorities noted, in response to recommendation (1), that “the state of neighbouring UPs is already included as a condition for the certification of a plot for the 2001/2002 growing season”. They also stated in response to recommendation (2), that “any plot applying for certification and which meets the requirements will not be authorised to export fruit to the EU if symptoms of one or more of the diseases included in the programme are detected on one or more of the plots adjoining it”.

The Argentine authorities agreed with the recommendations made in advisory point (3) and “they will be implemented for future monitoring exercises”.

SENASA will inform the INTA de Concordia about the recommendations in advisory point (4) “so that it can take them into consideration”.