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FINAL REPORT OF AN AUDIT  
CARRIED OUT IN  
SPAIN  
FROM 09 TO 13 SEPTEMBER 2013  
IN ORDER TO EVALUATE THE CONTROL MEASURES APPLIED FOR EPITRIX

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

### ***Executive Summary***

*This report describes the outcome of an audit carried out by the Food and Veterinary Office (FVO) in Spain from 9 to 13 September 2013. The objective of the audit was to evaluate the official control system in place against potato flea beetles *Epitrix* sp. in the Autonomous Community (AC) of Galicia.*

*Overall, the plant health controls carried out against *Epitrix* sp. in the AC of Galicia are not satisfactory. Commission Decision 2012/270/EU is not adequately implemented. The surveillance carried out is not intensive, represents only a small proportion of plots where potatoes are grown and does not provide sufficient information on the actual distribution of the pest.*

**Epitrix* sp. findings are followed by inappropriate and significantly delayed demarcation of infested zones and buffer zones. This often results in uncontrolled movements of untreated potato tubers out of demarcated areas. Treatment of potato lots from demarcated areas is carried out only where symptomatic tubers are found and, even then, only occasionally. When treated, potatoes are not accompanied with plant passports.*

*The inadequate implementation of the Decision, does not provide any level of assurance against the spread of the pest. However, the risk of further *Epitrix* sp. spread is somewhat mitigated by the routine applications of insecticide treatments, which are usually carried out for other, non-regulated pests, and the fact that affected potatoes are mainly marketed locally.*

*Recommendations are made in the report to address the shortcomings identified by the FVO audit.*

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**ABBREVIATIONS AND DEFINITIONS USED IN THIS REPORT**

<b>Abbreviation</b>	<b>Explanation</b>
AC	Autonomous Community
CAP	Common Agricultural Policy
DGHAP	Directorate General of Health of the Agricultural Production ( <i>Dirección General de Sanidad y de la Producción Agraria</i> )
EC	European Community
EPPO	European and Mediterranean Plant Protection Organisation
EU	European Union
FVO	Food and Veterinary Office
ha	hectars
ISPM	International Standard for Phytosanitary Measures
MAGRAMA	Ministry of Agriculture, Food and Environment ( <i>Ministerio de Agricultura, Alimentación y Medio Ambiente</i> )
PFB	Potato Flea Beetle
PGIXP	Protected Geographical Indication and Certification Body of Galicia “ <i>Pataca de Galicia, Indicación Geográfica Protegida</i> ”
PSA	Phytopathology Station of Areiro
RCA	Regional Competent Authority, ( <i>Consellería de Medio Rural e do Mar</i> )
SA	Single Authority, <i>Ministerio de Agricultura, Alimentación y Medio Ambiente</i>
SSPV	Regional Plant Health and Production Service ( <i>Servizo de Sanidade e Producción Vexetal</i> ) of the General Directorate of Agricultural Production ( <i>Dirección General de Producción Agropecuaria</i> )
t	metric tons

## 1 INTRODUCTION

The audit took place in Spain from 9 to 13 September 2013. The Food and Veterinary Office (FVO) team, which comprised two officials from the FVO and one national expert from a Member State, was accompanied throughout the audit by representatives from the Ministry of Agriculture, Food and Environment (MAGRAMA).

An opening meeting was held on 9 September 2013 at the local office of the Plant Health and Production Service (SSPV) of the General Directorate of Agricultural Production in Santiago de Compostela in Galicia. The FVO team confirmed the objectives, scope and itinerary of the audit and requested additional information for the successful completion of the audit.

## 2 OBJECTIVES

The objective of the audit was to evaluate the control measures applied against potato flea beetles (PFB) *Epirrix* sp.

In pursuit of these objectives the following sites were visited:

<b>Competent authorities</b>	
Regional Competent Authority	General Directorate of Agricultural Production (Santiago de Compostela)
<b>Laboratory visits</b>	
Official entomology laboratory	Phytopathology Station of Areeiro (Province of Pontevedra)
<b>Plant health control sites</b>	
Ware potato producing places	7 (Provinces of Pontevedra, Ourense, A Coruña)
Potato packing/despatch station	3 (Provinces of Pontevedra, Ourense, A Coruña)
Potato processing plant	1 (Province of A Coruña)

## 3 LEGAL BASIS

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

### 3.1 RELEVANT LEGISLATION

All EU legislation relevant for this audit is listed in Annex 1. Legal acts quoted refer, where applicable, to the last amended version.

### 3.2 RELEVANT STANDARDS

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

## 4 BACKGROUND

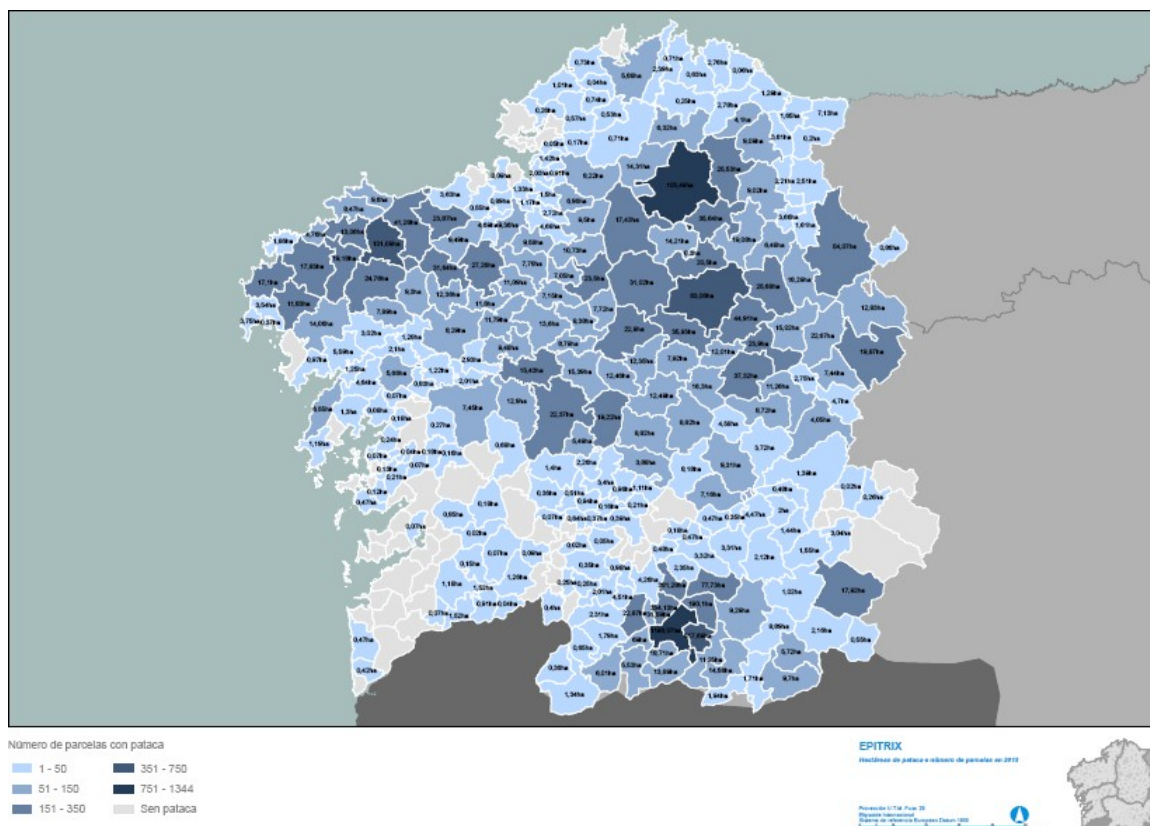
### 4.1 PREVIOUS RELEVANT AUDITS

So far, the FVO has carried out three missions to Spain with relevance to potatoes. These resulted in a number of recommendations for improvements to the Spanish authorities. A more recent audit (DG(SANCO) 2012-6313) in Spain took place on import controls. In addition, two audits (DG(SANCO) 2011-6221 and DG(SANCO) 2012-6308) were carried out in the Autonomous Community (AC) of Galicia for the control of pinewood nematode. The reports are available on [http://ec.europa.eu/food/fvo/ir\\_search\\_en.cfm](http://ec.europa.eu/food/fvo/ir_search_en.cfm) as are the Single Authority's comments on the reports and its response to the recommendations. Unless otherwise stated, statistical data in this and the following chapters were provided by the Spanish authorities.

### 4.2 PRODUCTION AND TRADE OF POTATOES IN THE AUTONOMOUS COMMUNITY OF GALICIA

Potato cultivation is common in the AC Galicia covering a surface area of ca. 4,550 ha, for which 12,513 producers have been registered for the implementation of Common Agricultural Policy (CAP) in 2012. However the actual area where potatoes are grown is estimated to be ca. 10,430 ha if all small areas of cultivation for personal consumption are included (2012 data). In general intensive ware potato production takes place mainly in the provinces of Ourense and Lugo, while in Pontevedra ware potatoes are mainly produced for domestic consumption or sold in the local markets. A large part of the potatoes produced in A Coruña is used for industrial purposes (production of potato crisps) and domestic consumption. Figure 1 below provides an overview breakdown with the number of plots and ha of the potato growing areas.

Figure 1. Breakdown of potato cultivated areas in the provinces of the AC of Galicia (Source: SSPV)



Ware potato production is based on the import of certified seed mainly from the Netherlands, Denmark, Belgium, France and Scotland. Domestically produced (Burgos, Castilla y Leon, etc.) certified seed is also used. A general practice followed by many producers is to multiply certified seed once for farm saved seed. There are only two plots in Galicia intended for production of certified seed potatoes in 2013, with a total area of 4.1 ha and located in Grixoa (Ourense). It is expected that 10.0 t of “Elite” and 3.2 t of “Super Elite” material will be produced. No imports of certified seed potatoes from Canada are taking place. The annual commercial production of ware potatoes in Galicia is approx. 115,000 t with an average yield of 13t/ha in non irrigated and 34t/ha in irrigated land. In 2012, there were 12,513 potato growers with an average production area of 0.36 ha. In general, a crop rotation scheme of one ware potato crop every two or three years (cereals, parsnips, cabbages) is recommended.

Commercial potato production is partially covered by the Protected Geographical Indication and Certification Body of Galicia (PGIXP). Its members are producers and packers of high quality ware potatoes. The main ware potato production areas of PGIXP cover ca. 270 ha, located in Bergantiños (A Coruña), Terra Cha-A Mariña (Lugo), Lemos (Lugo) and A Limia (Ourense). PGIXP implements a system of intensive quality controls during harvest and packaging.

The regulating body of PGIXP and its potato analytic laboratory have both been accredited by the National Accreditation Entity of Spain and the Galician Institute of Quality. Exchange of farm saved seed between growers participating in the certification scheme is prohibited. Potatoes produced in the AC Galicia are mainly traded within Spain and to Portugal (ca. 4,600 t in the 2011/2012 marketing season).

In Galicia, there are two potato processing plants producing potato chips and crisps. Small quantities of potatoes are also preserved for use in ready meals and catering.

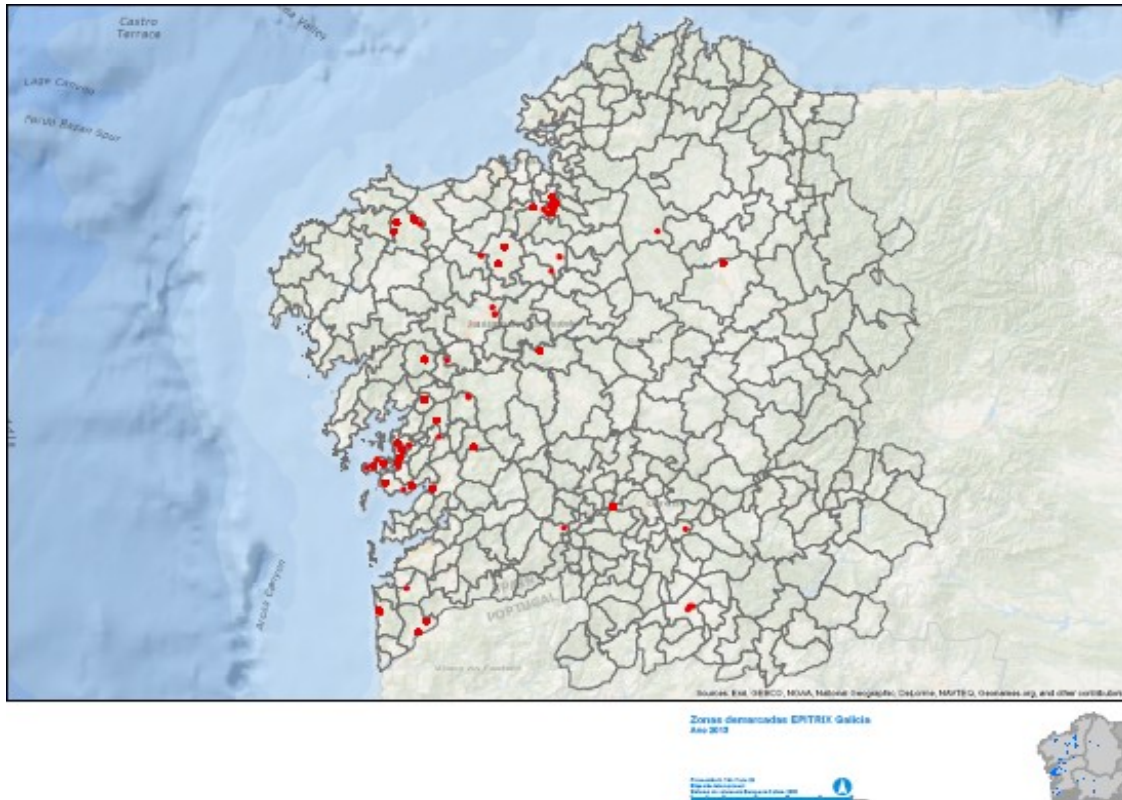
#### 4.3 EPITRIX SP. - SITUATION IN GALICIA

The four PFBs, regulated under Commission Implementing Decision 2012/270/EU, *E. similaris*, *E. tuberosa*, *E. cucumeris* and *E. subcrinita* share several characteristics. They are polyphagous Coleoptera of the family *Chrysomelidae* and appear to feed not only on solanaceous plants (potato, tomato, aubergine, tobacco, *Capsicum* sp.) and weeds (*Datura stramonium*, *Solanum nigrum*) but also on plants and weeds of other families (*Cucurbitaceae*, *Fabaceae*, *Brassicaceae* and *Chenopodiaceae*). Completion of life cycle of various PFB species on potato is well documented but there is little data for other host plant species.

*E. similaris* adult beetles overwinter in the soil and crop debris and can actively fly during spring to find potato fields or other suitable hosts. They feed on the upper and lower leaf surfaces. Eggs are laid in the soil near the base of potato plants. Larvae can only develop in potato tubers where they usually burrow superficial winding tunnels or galleries under the surface of the tubers. The most probable means of international spread are considered to be the pupae or the diapausing adults in the soil adhering on tubers.

*E. similaris* and *E. cucumeris* were identified first in the EU in 2009 in Portugal, where tuber damages were observed in potato fields since 2004. Only *E. similaris* is known to be present in Galicia. It was identified for first time in 2009 in ware potatoes grown in Xinzo de Limia (Province of Ourense). Since then it has been found in the three other provinces of Galicia, A Coruña, Lugo and Pontevedra. No other ACs of Spain have been affected so far by the pest. Figure 2 below indicates the current distribution of PFB in the AC of Galicia. So far, PFB has not caused serious damage in Galicia, but has affected the quality and value of potato tubers intended for marketing.

**Figure 2. Current distribution of PFB outbreaks in the AC of Galicia (Source: SSPV)**



## **5 FINDINGS AND CONCLUSIONS**

### **5.1 OVERALL ORGANISATION AND HUMAN RESOURCES**

#### **Legal requirements**

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

Article 2(1)(g) of the same Directive requires that the responsible official bodies in a Member State shall either be the official plant protection organisation established under the IPPC, or any other State authority established at national level or at regional level, under the supervision of the national authorities.

Article 2(1)(i) of the same Directive requires Member States to ensure that their public servants and qualified agents have the qualifications necessary for the proper application of the Directive.

Article 12(2) of the same Directive establishes that inspectors shall have access to plants, plant products or other objects at all stages in the production and marketing chain and that they shall be entitled to make any investigation necessary for the official checks concerned, including those related to the plant passports and the records.

Article 291.1 of the Treaty on the Functioning of the EU requires that the Member States adopt all measures of national law necessary to implement legally binding Union acts.



Articles 6.5, 6.6 and 13c(1)(b) of Directive 2000/29/EC require that, subject to certain exemptions, producers, collective warehouses, dispatching centres and importers of certain plants and plant products must be included in an official register of a Member State under an official registration number. Directive 92/90/EEC establishes the obligations for producers and importers of certain plants and plant products and the details for their registration.

Article 1 of Directive 93/50/EEC requires that producers or collective warehouses, or dispatching centres in the production zones of tubers of potatoes other than seed potatoes shall be listed in an official local, regional or national register.

## **Findings**

### *5.1.1 Designation of Competent Authorities*

Since the last FVO audit (DG(SANCO) 2012-6313) no organisational changes took place in MAGRAMA which is in charge of the transposition of the EU legislation. According to the provisions of the Spanish Act 43/2002 the Directorate General of Health of the Agricultural Production Health (DGHAP) of MAGRAMA remains the single authority (SA) on plant health issues. Plant health control activities are supervised by the Sub-directorate General for Plant and Forestry Health and Hygiene (SDPFHH) of the DGHAP. Information on the structure and responsibilities of the plant health services in Spain can be found in the FVO country profile for Spain ([http://ec.europa.eu/food/fvo/country\\_profiles\\_en.cfm](http://ec.europa.eu/food/fvo/country_profiles_en.cfm)).

At regional level, the Galician Ministry of the Rural Environment and Sea is the Regional Competent Authority (RCA) of the AC of Galicia. Plant health competences are with the Plant Health and Production Service (SSPV) of the General Directorate of Agricultural Production and the General Secretary for Rural Affairs and Forestry. The RCA is in charge of the implementation of phytosanitary legislation at regional level regarding stakeholder registration, plant health inspections and movement of susceptible material, general and specific surveys and control measures to be implemented against *Epitrix* sp.

The FVO team noted that there is, in general, good cooperation between MAGRAMA and the RCA concerning the exchange of information on the situation of PFB. Relevant information has been delivered to plant health inspectors. All the RCA staff met appeared to be aware of the provisions of Decision 2012/270/EU.

### *5.1.2 National legislation, guidelines and training*

The general plant health national legislation is implemented by Law 43/2002 on plant health and Royal Decree 58/2005 adopting protection measures against the introduction and spread within the national territory and the territory of the European Union of organisms harmful to plants and plant products. Commission Implementing Decision 2012/270/EU is directly applicable in Spain.

An information leaflet and a contingency plan including inspection guidelines and treatments against PFB have been issued. Both contain information on the morphology and biology of the pest. Training was provided to staff involved in the plan for the containment of PFB. The FVO team noted that all of the staff met during the audit was familiar with the harmful organism and they had specific guidelines and procedures to follow.

### 5.1.3 *Communication with stakeholders*

SSPV maintains close contacts with professional organisations of potato growers. Meetings took place between the RCA and representatives of potato traders and other stakeholders aimed at keeping them informed about the latest legal requirements on PFB.

Information manuals and leaflets for the management of PFB have been issued for farmers. The SSPV stated that they had issued a wide range of publicity and technical information to potato producers. Plant health warnings, issued by the RCA, were sent to the producers registered in the electronic system for this purpose. They are also published on the RCA website, see:

[http://www.medioruralemar.xunta.es/fileadmin/arquivos/agricultura/rede\\_avisos/Folla\\_informativa\\_29xull2010.pdf](http://www.medioruralemar.xunta.es/fileadmin/arquivos/agricultura/rede_avisos/Folla_informativa_29xull2010.pdf) and [http://www.efa-dip.org/es/Publicaciones/ftecnicas/Ficha54\\_1.htm](http://www.efa-dip.org/es/Publicaciones/ftecnicas/Ficha54_1.htm)

In addition, SSPV organised an intensive campaign to inform potato producers and prepared television programmes informing farmers on the pest, see:

<http://www.crtvg.es/informativos/consellos-para-loitar-contr-a-pulguina-da-pataca-638798>

The FVO team met several ware potato producers and packers and noted that they were familiar with the measures to be taken for the control of *Epitrix* sp. Sufficient cooperation between the regional services and professional stakeholders is in place. However, due to the large fragmentation of agricultural land, owners of small infested potato plots cannot be easily identified (*see also section 5.2.2.1*).

### 5.1.4 *Registration/approval of establishments*

Producers of seed potatoes and traders, packers, processors and wholesalers of seed and ware potatoes have to be registered. SSPV is responsible for the registration of professional ware potato producers or producers applying for CAP subsidies. The coordinates of the field where potatoes are grown and additional information such as the origin of the seed used, have to be indicated. In the AC of Galicia, some 4,550 ha were cultivated in 2012 by 12,513 registered ware potato producers. Currently 168 potato wholesalers / packing stations operate in Galicia. The total area where potatoes were grown is estimated to be ca. 10,430 ha (see also section 4.2).

### 5.1.5 *Diagnostic and research laboratories*

A cooperation agreement has been signed between Phytopathology Station of Areeiro (PSA) operating under the auspices of the Government of the Province of Pontevedra and the Xunta de Galicia. PFB identification is carried out at species level. Approximately one day per adult specimen is necessary for the analysis of a sample. Identification through polymerase chain reaction could be carried out for both larvae and adults but currently this method is not applied. Samples are examined according to the PFB identification method described in the relevant EPPO diagnostic protocol and the examination of morphological characteristics.

The FVO team visited the laboratory where new plant protection products (nicotinoids) are being tested against PFB. The staff of the entomology laboratory met, appeared to be highly motivated, well trained and competent to perform their duties. In many cases, detection of *E. similaris* has taken place accidentally as potato tubers sent to PSA by farmers were suspected for the presence of other, non-regulated pests or diseases. The FVO team noted that all cases of PFB findings had been notified to the SSPV.

## Conclusions

There is a good general organisation of controls in the potato sector in the AC of Galicia and a clear structure and division of responsibilities in line with EU legislation. There is good cooperation and communication with the key stakeholders. There are laboratory facilities for PFB detection and identification. Registration for plant health purposes is carried out mainly for commercial potato producers and producers implementing the CAP; a considerable area where ware potatoes are grown remains unregistered.

### 5.2 EPITRIX SP. SURVEILLANCE STRATEGY AND RESULTS / SAMPLING AND TESTING

#### Legal requirements

Article 4 of Decision 2012/270/EU provides that the Member States shall conduct official annual surveys for the presence of *Epitrix* sp. on potato tubers and where appropriate other host plants, including fields where potato tubers are growing; any presence or suspected occurrence of *Epitrix* sp. shall immediately be notified to the responsible official bodies.

#### Findings

DGHAP is the general coordinator of potato surveillance projects. In July 2013, DGHAP elaborated a surveillance protocol for the detection and identification of PFBs. The text provides information on the biology of the pests and the methods of inspection in potato crops and stored tubers. Information is also provided on the morphological characteristics of PFBs and differences with other non-regulated species like *Chaetocnema* sp. and *Phyllotreta* sp. At regional level, the organisation and execution of PFB surveillance remains a task of the plant health services of the ACs. Spain provided the results of the PFB surveys carried out in potato crops in 2012. Table 1 indicates the results of PFB surveys which were carried out in Spain during 2012. Figures in brackets indicate the situation in the AC of Galicia.

Category	Cropping area (ha)	Sampled area (ha)	Visual inspection of tubers			Visual inspections of the growing crop			Total infested area (ha)
			N° of samples inspected	Size of sample	N° of positive samples	N° of visual inspections	N° of plants inspected	N° of positive samples	
Seed potatoes	5,838.2 (-)	1,536.2 (-)	459 (-)	200	0	269 (-)	235 (-)	0 (-)	0
Farm-saved seed	-	-	-	-	-	2	50	0	0
Ware/other potatoes	53,273.5 (10,430)	840 (40.9)	9,540 (20)	200 (20)	0 (0)	488 (137)	6,400	47 (47)	11.4 (11.4)
Tomatoes	94.4	18.3				27	1,560	0	0
Other hosts/weeds	-	-				-	-	-	-

In Spain, systematic surveys for the detection of PFB are carried out in all seed potato producing areas. Ware potato fields are selected at random; in most cases there is no upper or lower threshold on the size of the fields to be sampled. Seed potatoes are inspected during growth and prior to or after harvest. Ware potatoes are inspected mainly after harvest.

In the AC of Galicia, official surveys for the detection of PFB have been carried out since 2011. For

the organisation of these surveys the database of ware potato producers applying for CAP subsidies is used. However, the list of potato producing farms is only available to SSPV by the beginning of June when potatoes have already been planted. The selection of the fields to be inspected is random. They generally represent 20% of the number of plots selected for the official surveys carried out in order to determine the potato cyst nematode distribution in ware potato producing fields as required by Council Directive 2007/33/EC.

Additional samples may be taken in case of suspicion by SSPV inspectors and staff of the PSA. In all cases, producers have to be notified prior to SSPV visits. Data in table 1 indicate that the percentage of the total surveyed area (approx. 0.4% of the estimated areas where potatoes are grown) in the AC of Galicia is significantly lower when compared to the average of ware potato producing areas sampled in other ACs of Spain (approx. 1.9%), which have not been affected by PFB. Table 2 below indicates surveillance data in the AC of Galicia during the 2011/2013 growing periods.

Year	N° of inspected plots	N° of positive plots	Total areas inspected (ha)	Total positive areas (ha)
2011 <sup>(1)</sup>	324	40	262.6	7.02
2012	137	47	40.9	11.4
2013 <sup>(2)</sup>	174	2	36.2	0.05

<sup>(1)</sup> samples were also provided by PGIXP, <sup>(2)</sup> data from inspections conducted until 6/8/2013

Data in table 2 indicate that PFB surveillance efforts in Galicia have been reduced significantly between 2011 and 2012. The 137 fields inspected during the 2012 campaign represent only a very small part of the 12,513 registered potato producers and area totalling ca. 4,550 ha. The number of inspected fields is even smaller if the non-registered producers and the total area where ware potatoes are grown (ca. 10,430 ha) is considered. During the 2011 campaign, SSPV was assisted by the PGIXP, which provided a substantial amount of samples for laboratory analysis. This action took place prior to the adoption of the Decision 2012/270/EU. The results were not considered official, but areas where positive findings occurred are still monitored by SSPV.

The FVO team, during its visits in ware potato producing fields, met plant health inspectors of the AC of Galicia and discussed details of PFB surveillance. They organise their work according to surveillance guidelines which provide *inter alia*, for visual inspections for the detection of PFB suspicious symptoms on leaves, capturing of as many adults as possible and dispatch to PSA for laboratory identification; no yellow sticky traps are used. After each visit an inspection document is issued and signed by the plant health inspector and the farmer.

Inspectors stated that guidelines for surveillance provide only for the inspection of the potato crop and the tubers directly after harvest or during storage. Randomly selected fields are sampled only where potato plants are found during the surveillance period. Weeds, other PFB hosts or plant debris are not examined or sampled. Most inspectors stated that in many cases they find PFB symptoms in ware potato plots of small farms when undertaking other tasks not falling within the official survey plan or during off duty activities. However, SSPV stated that inspectors are not expected to report the suspected or actual PFB presence to the SSPV, or to take samples for laboratory analysis, unless there is a severe PFB outbreak in a potato plot. Notification to SSPV may take place only when high numbers of PFB adults are present or if the suspected plot is neighbouring a larger commercial potato area.

The presence of *E. similaris* has been confirmed in many ware potato producing areas throughout

Galicia. SSPV provided the detailed 2012 survey results where inspections were carried out in 40 plots within the areas that had been demarcated during 2011 (15 plots in A Coruña, 2 plots in Lugo, 3 plots in Ourense and 20 plots in Pontevedra) totalling ca. 7 ha. They also provided the results of the surveys carried out in 103 new plots within the same provinces totalling 33.9 ha. Overall, 26 out of 40 plots demarcated in 2011 were again found to be infested in 2012 (ca. 3.9 ha). The new areas investigated during 2012, revealed 21 new positive plots (7.5 ha) indicating that at least 20% of the plots examined are infested.

In the AC of Galicia, some visual inspections are also carried out randomly in potato warehouses for the detection of suspicious symptoms on tubers. In most cases, these are carried out after potato sorting selection and packing and are combined with sampling carried out for the detection of quarantine potato bacteria. Discarded tubers are not sampled. Quality control staff of warehouses and potato processing industries have been instructed to notify plant health inspectors in case they see severe PFB symptoms during the sorting, selection and packing of potato tubers. However, this does not ensure that PFB is reported when occurring at small farms who do not market their potatoes through warehouses but at local markets. So far PFB has never been found during the official surveys carried out on tubers for the detection of ring rot and brown rot.

## **Conclusions**

A detailed surveillance protocol and good inspection guidelines have been elaborated in Spain for the detection and identification of PFBs. However, the percentage of the ware potato producing areas inspected and sampled in the AC of Galicia, is significantly lower when compared to areas surveyed in other ACs, which have not been affected by PFB. Surveillance on growing crops starts too late in the season and the incidental presence or the suspected occurrence of PFBs does not appear to trigger any further surveying action if PFB presence is suspected or identified outside the official survey framework. In addition, the percentage of fields found to be infested indicates that PFB might be quite widespread in Galicia. The surveillance methodology implemented does not provide sufficient information about the current distribution or actual presence of PFB. This is not in line with article 4 of Commission Decision 2012/270/EU.

## **5.3 CONTROL MEASURES WHERE THE PRESENCE OF *EPITRIX SP.* IS CONFIRMED**

### *5.3.1 Demarcation of *Epitrix sp.* infestations*

#### **Legal requirements**

ISPM No. 5 defines as a “field” a plot of land with defined boundaries within a place of production on which a commodity is grown. Unless specifically indicated in the text, when the word field is used, this definition is intended.

Article 5 of Decision 2012/270/EU provides that when there is confirmation or other evidence of the presence of *Epitrix sp.*, Member States shall, without delay, establish a demarcated area consisting of an infested zone and a buffer zone as set out in in Section 1 of Annex II to the same Decision.

#### **Findings**

The designation of the demarcated areas is organised at regional level. RCA is responsible for the notification of the PFB affected plots to their owners. Upon the confirmation of a positive finding, PSA sends a notification to SSPV, which establishes the demarcated area and designates the infested and the buffer zone. Details of the demarcated area are communicated to the plant health inspectors of the provinces who are responsible to deliver the official notes of demarcation to the owners of the affected plots and to follow up for the appropriate implementation of the measures to be taken.

The FVO team visited three ware potato producing fields in Pontevedra, two in Ourense and two in A Coruña, which had been reported recently or during 2012, as positive to PFB and examined relevant documentation together with maps of demarcation. SSPV stated that they set priorities when notifying the demarcation of the infested plots to their owners depending on the size and the purpose (domestic consumption or production for commercial purposes) of the growing potato crop and the associated plant health risk. However, the FVO team noted that in most of the cases examined, such notifications had been significantly delayed. Potato plots where PFB was found during official surveys, were usually notified first by phone but very often after harvesting, movement or marketing of untreated potato tubers outside the limits of the area to be demarcated.

A similar approach is followed for the demarcation of neighbouring fields located in the buffer zone within the 100m distance from the infested plots. Demarcation largely depends on the presence or not of potato crops at the time of notification. In particular, if there is no potato crop in the field, it will not be included in the buffer zone. The SA stated that this is due to a discrepancy between the term “field” used in the text of the Decision in English and the term “plantación” (crop) used in the translated text in Spanish. In many cases, owners of plots in the buffer zone cannot be easily found due to the fragmentation of agricultural land. Where the size of the field is small (<100m<sup>2</sup>), official notifications of plots demarcated within the buffer zone are issued with even bigger delays or are not issued at all. In at least two cases examined in detail (in the provinces of Pontevedra and Ourense), such notes were issued immediately prior or even during the next year's ware potato growing season. Potatoes originating from the buffer zone had already been moved or marketed outside the demarcated area without been treated.

For one of the above mentioned cases the plant health inspector stated that a small neighbouring plot growing potatoes for domestic consumption had not been demarcated as potatoes had already been harvested there when the infested plot was demarcated. The harvested potatoes, or at least part of them, had also been moved outside the demarcated area. In follow up inspections carried out during the following growing period, the neighbouring plot was found to be infested.

When delimiting the size of the buffer zone, the minimum required by the Decision (100m from the infested plot) is always applied. The SSPV does not take into consideration other elements, such as, the presence of other cultivated or wild PFB hosts in the area and the capacity of the pest to spread naturally, the distribution of other potato crops or other host plants between two or more demarcated areas that have not been selected for sampling during the official surveillance, or fields farmed within the same place of production. Neighbouring demarcated areas are in most cases not merged.

## **Conclusions**

The establishment of demarcated areas is not in compliance with the requirements of Article 5 of Decision 2012/270/EU. Demarcation for both infested zone and buffer zone takes place with substantial delays or in some cases not at all. Due to a discrepancy between the original and the translated text of the Decision concerning the definition of a “field”, demarcation of neighbouring plots and the establishment of buffer zones also depends on the presence of potato crops in these plots. Furthermore, geographically close demarcated areas are not merged, which is not in line with Decision 2012/270/EU, Annex II, Section 1, point 2. Finally the establishment of infested zones and buffer zones is not carried out taking into consideration the sound scientific principles required by Decision 2012/270/EU, Annex II, Section 1, point 3.

### *5.3.2 Measures taken in demarcated areas*

## **Legal requirements**

Article 5 of Decision 2012/270/EU provides that when there is confirmation or other evidence of

the presence of *Epitrix* sp., Member States shall take official measures as laid down in Section 2 of Annex II. When such measures are taken the Member State shall immediately notify the list of demarcated areas to the Commission and the other Member States.

### **Findings**

The SSPV stated that due to the fragmentation of agricultural land, the large number of other cultivated or wild hosts and the capacity of the pest to spread naturally, PFB eradication is not feasible. The main strategy against PFB is to contain the pest and prevent its spread. Where the presence of PFB is notified to farmers, SSPV recommends growing non-host crops for the following two consecutive years. Where this measure is not implemented, farmers have to notify the parcel where potatoes are grown, carry out regular controls of the growing crop every 15-20 days for the detection of PFB, apply pesticide treatments and implement additional measures like destruction of crop debris and weeds and decontamination of agricultural machinery. Prohibiting the planting PFB host plants including potatoes has not been considered by SSPV.

For the infested plots visited, the FVO team noted that no activity had been undertaken to verify the implementation of control measures. Intensive pesticide treatments and decontamination measures are mainly applied by big commercial potato producers. At the time of the audit, the only plant protection products authorised specifically for PFBs were those containing acetamiprid (SP 20% w/w). Smaller producers follow the routine crop protection scheme for other non-regulated potato pests like potato tuber moth and Colorado beetle. Depending on the degree of PFB infestation, they apply one or two treatments per year. Follow-up monitoring of the buffer zone might be carried out through the inspection of plots which have been planted with potatoes during the next growing period.

In addition, the FVO team also noted that where potatoes are produced in plots located within the demarcated areas and destined for domestic consumption or trade in local markets, the use of plant protection products is not verified, it is usually limited or it does not take place; surveillance of the movement of potato tubers out of the demarcated areas is not carried out. PFB infested potato plots may remain untreated and without a prohibition on growing potatoes and other PFB host plants during the next growing period. Such plots would remain reservoirs of infestation, which could cause further spread of the organism. Plots where other PFB hosts are cultivated are generally not monitored for the presence of PFBs. This is also the case for plots in fallow even if in such plots wild *Solanaceous* hosts like *Datura stramonium* or *Solanum nigrum* are common.

### **Conclusions**

No official measures are imposed for PFB containment and no specific official action is taken to suppress the PFB population. Measures implemented in plots where potatoes are grown within the demarcated area are usually similar to those followed against non-regulated potato pests and largely fall within the discretion of the farmers. Follow-up monitoring of the demarcated areas to verify the implementation of the recommended measures is not sufficient, often delayed, or not done. This is not in line with Article 5 of Decision 2012/270/EU and the requirements for official measures to be taken within demarcated areas laid down in Section 2 of Annex II to the same Decision.

#### *5.3.3 De-scheduling of PFB infested plots*

### **Legal requirements**

Annex II Section 1 of Decision 2012/270/EU provides that an area may cease to be demarcated where *Epitrix* has not been detected for a period of two years during official surveys carried out according to Article 4(1) of the same Decision.

## Findings

Of the 40 infested plots demarcated in 2011, only 14 were found to be free from PFB in 2012; the status of demarcated areas has been retained.

## Conclusions

At the time of the audit no areas or plots had ceased to be demarcated.

### *5.3.4 Movements of potato tubers, decontamination and issuance of plant passports*

## Legal requirements

Article 3 of Decision 2012/270/EU first paragraph, provides that potato tubers originating in demarcated areas within the Union may be moved into non-demarcated areas within the Union only if they are accompanied by a plant passport prepared and issued in accordance with Commission Directive 92/105/EEC and have been washed and brushed so that there is no more than 0,1% of remaining soil and packed in clean packing material.

## Findings

Currently in Galicia there are 168 registered potato warehouses and two potato processing plants. In many cases, warehouses also trade potato seed imported from other regions of Spain or other Member States including small quantities from Portugal. SSPV could not provide precise information of the quantities traded. Where the presence of PFB is notified to the farmers, potatoes from the infested plot cannot be marketed out of the demarcated zone unless they are brushed or washed. However, in the notification served to farmers of potato plots found to be infested and therefore demarcated, no reference is made to a general prohibition on potatoes moving out of the demarcated area when they are not destined for marketing. The same applies for potatoes produced in plots located in the buffer zone. Plant passports for treated ware potatoes are generally not issued.

SSPV deems that brushing or washing potatoes is not relevant for their AC as the sandy structure of the Galician soil generally prevents its adherence to tubers; furthermore, infested potatoes will be discarded in the warehouse during grading. SSPV suggested that a derogation from the legislation might be necessary for areas with sandy soils. Plant health inspections are conducted in warehouses from the end of the main potato harvest period in September until March.

The FVO team visited one potato processing plant and three registered potato warehouses. In one warehouse potatoes were traded only occasionally. The other two were packing and trading potatoes from Galicia and other regions of Spain. The FVO team noted that SSPV occasionally carries out inspections during the delivery of ware potato tubers to the warehouses after harvest and, in case of suspicion, they take some samples of tubers for laboratory analysis. However the FVO team also noted that:

- SSPV had allowed the movement of potato lots from plots within the demarcated area to warehouses located several kilometres outside the demarcated area. No additional safeguards were in place, i.e. lists of producers with demarcated plots for which a treatment was necessary;
- Contaminated potatoes are only brushed or washed upon requests of the buyer or if severely damaged or infested tubers are present in the potato lot delivered to the warehouse. Quality control staff have been instructed to notify SSPV inspectors for this purpose. Healthy looking potato lots from demarcated areas are not treated;
- In at least one case examined, no plant passport had been issued for potatoes originating from a lot where PFB symptoms had been detected and a treatment had been applied.



Potatoes had been moved out of the demarcated area.

- No specific instructions had been provided to the owners of potato warehouses and processing plants about the safe disposal of soil and other waste from potato tuber processing. Such material is usually collected by private individuals and returned to agricultural land or forwarded to landfills without prior treatment.

## **Conclusions**

Due to the inadequate demarcation of plots, potatoes for domestic consumption or sale in the local market do not fulfil the conditions for movement. In addition, potato tubers originating from infested plots and other plots in the demarcated areas, can be moved to a warehouse located outside the demarcated area, and be packed and marketed without treatment. This is not in line with Article 3 of Decision 2012/270/EU. In Galicia, treatment of potato tubers is not deemed necessary due to the special structure / type of soil. However, removal of all forms of PFBs from tubers can only be achieved by brushing or washing. Currently, this is carried out only occasionally and in case of severe infestation or evident PFB symptoms on tubers coming from a demarcated area or otherwise. This is not in line with Annex I, Section 2, point 2 (b) of Decision 2012/270/EU. SSPV is informed only in case of severe PFB infestations. However, even in such cases plant passports are not issued. This is not in line with Annex I, Section 2, point 1 of the same Decision.

## **6 OVERALL CONCLUSIONS**

Overall, the plant health controls carried out against *Epitrix* sp. in the AC of Galicia are not satisfactory. Decision 2012/270/EU is not adequately implemented. The surveillance carried out is not intensive, represents only a small proportion of plots where potatoes are grown and does not provide sufficient information on the actual distribution of the pest.

*Epitrix* sp. findings are followed by inappropriate and significantly delayed demarcation of infested zones and buffer zones. This often results in uncontrolled movements of untreated potato tubers out of demarcated areas. Treatment of potato lots from demarcated areas is carried out only where symptomatic tubers are found and, even then, only occasionally. When treated, potatoes are not accompanied with plant passports.

The inadequate implementation of the Decision, does not provide any level of assurance against the spread of the pest. However, the risk of further *Epitrix* sp. spread is somewhat mitigated by the routine applications of insecticide treatments, which are usually carried out for other, non-regulated pests, and the fact that affected potatoes are mainly marketed locally.

## **7 CLOSING MEETING**

A closing meeting was held on 13 September 2013 with the representatives of the Competent Authorities. At this meeting, the FVO team presented the main findings and preliminary conclusions of the audit.

## **8 RECOMMENDATIONS**

The Single Authority in Spain is recommended:

Nº.	Recommendation
1.	To ensure that the survey for <i>Epitrix</i> sp. is adequate to fully determine the presence in Galicia, in line with the requirements of Article 4(1) of Decision 2012/270/EU. In particular, the survey should be representative of the ware potato production and the total number of field inspections and samples taken should be increased.
2.	To ensure that any presence or suspected occurrence of <i>Epitrix</i> sp. outside the official survey framework, shall immediately be notified to the responsible official bodies, in line with the requirements of Article 4(2) of Decision 2012/270/EU.
3.	To ensure that where the presence of <i>Epitrix</i> sp. is confirmed, a demarcated area is established without delay in line with Article 5(1) of Decision 2012/270/EU and the requirements laid down in points (1), (2) and (3) of Annex II, Section 1 of the same Decision.
4.	To ensure that measures taken in a demarcated area are in line with Article 5(1) of Decision 2012/270/EU and compliant with the requirements laid down in points (1), (2) and (3) of Annex II, Section 2 of the same Decision.
5.	To ensure that potato tubers moved from demarcated areas comply with Article 3 of Decision 2012/270/EU and with the requirements laid down in points (1) and (2) of Annex I, Section 2 of the same Decision. In particular, potato tubers from demarcated areas will be treated and accompanied by a plant passport prepared and issued in line with Commission Directive 92/105/EEC.

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

[http://ec.europa.eu/food/fvo/rep\\_details\\_en.cfm?rep\\_inspection\\_ref=2013-6804](http://ec.europa.eu/food/fvo/rep_details_en.cfm?rep_inspection_ref=2013-6804)

The Single Authority in Spain is requested to provide an action plan addressing all of the above recommendations. It should give details of the action taken and planned, including deadlines for their completion and it should be provided within 25 working days of receipt of this report.

## ANNEX 1 - LEGAL REFERENCES

Legal Reference	Official Journal	Title
Dir. 2000/29/EC	OJ L 169, 10.7.2000, p. 1-112	Council Directive 2000/29/EC of 8 May 2000 on protective measures against the introduction into the Community of organisms harmful to plants or plant products and against their spread within the Community
Dir. 92/105/EEC	OJ L 4, 8.1.1993, p. 22-25	Commission Directive 92/105/EEC of 3 December 1992 establishing a degree of standardization for plant passports to be used for the movement of certain plants, plant products or other objects within the Community, and establishing the detailed procedures related to the issuing of such plant passports and the conditions and detailed procedures for their replacement
Dir. 92/90/EEC	OJ L 344, 26.11.1992, p. 38-39	Commission Directive 92/90/EEC of 3 November 1992 establishing obligations to which producers and importers of plants, plant products or other objects are subject and establishing details for their registration
Dec. 2012/270/EU	OJ L 132, 23.5.2012, p. 18-21	2012/270/EU: Commission Implementing Decision of 16 May 2012 as regards emergency measures to prevent the introduction into and the spread within the Union of <i>Epitrix cucumeris</i> (Harris), <i>Epitrix similaris</i> (Gentner), <i>Epitrix subcrinita</i> (Lec.) and <i>Epitrix tuberis</i> (Gentner)
Dir. 93/50/EEC	OJ L 205, 17.8.1993, p. 22-23	Commission Directive 93/50/EEC of 24 June 1993 specifying certain plants not listed in Annex V, part A to Council Directive 77/93/EEC, the producers of which, or the warehouses, dispatching centres in the production zones of such plants, shall be listed in an official register

**ANNEX 2 - STANDARDS QUOTED IN THE REPORT**

International Standard	Title
ISPM No. 5	International Standard on Phytosanitary Measures Publication No 5, Glosary of Phytosanitary Terms, Food and Agriculture Organisation, Rome, 2010