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 in Spain from 15 to 19 May 2017, as part of the published Directorate-General for Health and Food Safety audit programme. The objectives of the audit were to follow-up the situation and evaluate the progress of control measures applied for Epitrix papa since the previous audit in June 2016.

Spain has successfully addressed certain aspects of the shortcomings identified in the previous audit report. These include intensive information campaigns launched for the registration of potato producers and pack houses, the controls carried out for traceability purposes, the appropriate use of potato labelling / plant passports and the implementation of hygiene protocols for the decontamination of vehicles transporting potatoes from demarcated areas.

Comprehensive surveillance efforts include tuber sampling and collection of insect samples from potato crops, alternative hosts and weed stands in their immediate vicinity. The surveillance methodology applied revealed additional outbreaks of Epitrix papa and resulted in the demarcation of the entire autonomous community of Asturias and areas within different provinces of Andalucia. The natural spread of the pest continues with low numbers of adults caught in new areas and minor symptoms in potato tubers sampled for monitoring purposes.

However, the competent authorities at least in the autonomous community of Andalucia have adopted and continue to implement, a minimal approach for land demarcation. The management of both existing and newly established demarcated areas remains only partially compliant with Decision 2012/270/EU, overall increasing the risk of further spread of the pest.

The report makes recommendations addressed to the Spanish competent authorities, aimed at rectifying the shortcomings identified and further enhancing the control measures in place.
# Table of Contents

1. Introduction ..........................................................................................................................1
2. Objectives and scope ..............................................................................................................1
3. Legal Basis ................................................................................................................................2
   3.1 Relevant EU legislation .......................................................................................................2
   3.2 International standards .......................................................................................................2
4. Background ................................................................................................................................2
   4.1 Previous relevant audits .....................................................................................................2
   4.2 Production and trade of potatoes .......................................................................................2
5. Findings and Conclusions .......................................................................................................3
   5.1 Organisational aspects of plant health controls .................................................................3
      5.1.1 Designation of Competent Authorities ........................................................................3
      5.1.2 National legislation, guidelines and training ...............................................................4
      5.1.3 Laboratories ...............................................................................................................5
      5.1.4 Cooperation and communication with stakeholders ...................................................5
      5.1.5 Registration / approval of establishments ...............................................................6
   5.2 Epitrix sp. surveillance strategy and results ............................................................7
      5.2.1 Surveillance strategy ...............................................................................................7
      5.2.2 Inspection / sampling technique and results ..............................................................9
   5.3 Control measures where the presence of *E. papa* is confirmed .....................................10
      5.3.1 Demarcation of Epitrix sp. infestation and measures taken .......................................10
      5.3.2 Movement of potato tubers, decontamination and issuance of plant passports ..........12
   5.4 Follow-up .......................................................................................................................14
6. Overall Conclusions ..............................................................................................................15
7. Closing Meeting ....................................................................................................................16
8. Recommendations ................................................................................................................16
### Abbreviations and Definitions Used in this Report

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>ISPM</td>
<td>International Standard for Phytosanitary Measures</td>
</tr>
<tr>
<td>MAPAMA</td>
<td>Ministry of Agriculture and Fisheries, Food and Environment (<code>Ministerio de Agricultura y Pesca, Alimentacion y Medio Ambiente</code>)</td>
</tr>
<tr>
<td>RCA</td>
<td>Regional Competent Authority</td>
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</table>
1 INTRODUCTION

The audit took place in Spain from 15 to 19 May 2017 and focused on the autonomous community of Andalucía due to the significant shortcomings identified in the implementation of EU legislation on Epitrix papa (E. papa) during the previous audit (ref. 2016-8979).

The audit team consisted of two auditors and one National Expert from a European Union (EU) Member State. A representative of the Ministry of Agriculture and Fisheries, Food and Environment (MAPAMA) accompanied the team during the audit.

An opening meeting was held on 15 May 2017 in Seville with representatives of the Regional Competent Authority (RCA) of Andalucía. The audit team confirmed the objectives, scope and itinerary of the audit and requested additional information.

Unless specified otherwise, the data quoted in this report, was provided by the Single Authority.

2 OBJECTIVES AND SCOPE

The objectives of the audit were to follow-up and evaluate the control measures applied for potato flea beetle E. papa since the previous audit.

In terms of scope, the audit carried out mainly administrative follow up in the autonomous communities of Galicia, Asturias, Castilla y Leon and Cantabria (with the exception of a potato pack house) and on-the-spot visits in Andalucía.

Galicia and Asturias, although affected by E. papa were not included on this occasion. In Galicia, the situation with respect to demarcated areas remains the same (see also section 5.3.1). In Asturias, potatoes are almost exclusively produced by private non-commercial households for private consumption and the entire territory of this autonomous community is demarcated.

The following table provides details of the meetings held and sites visited in order to achieve the objective:

<table>
<thead>
<tr>
<th>Competent authority visits</th>
<th>No.</th>
<th>Entity / region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Competent Authorities and MAPAMA</td>
<td>4</td>
<td>Cantabria and Asturias (in Santander), Castilla y León (through video link), Andalucía (in Seville)</td>
</tr>
<tr>
<td>Laboratories</td>
<td>1</td>
<td>Entomology Laboratory, Seville</td>
</tr>
<tr>
<td>Plant health control sites</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fields within demarcated areas</td>
<td>3</td>
<td>1 in Cádiz, 2 in Seville</td>
</tr>
<tr>
<td>Fields outside demarcated areas</td>
<td>3</td>
<td>3 in Cádiz</td>
</tr>
<tr>
<td>Potato pack houses</td>
<td>3</td>
<td>2 in Andalucía, 1 in Cantabria</td>
</tr>
</tbody>
</table>
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 EU LEGISLATION**

Council Directive 2000/29/EC provides for protective measures against the introduction into and spread within the EU of organisms harmful to plants or plant products.

Commission Implementing Decision 2012/270/EU provides for emergency measures to prevent the introduction into and the spread within the Union of PFB. This Decision was amended by Decision 2014/679/EU with regard to movement of potatoes within the Union, cleaning of vehicles, machinery and packaging materials, and requirements concerning packing facilities located outside demarcated areas (DAs).

Following a taxonomic re-assessment of specimens further amendment of the Decision by Decision (EU) 2016/1359 replaced *E. similaris* by *E. papa*. In this light, the last amendment expanded the width of the buffer zone to at least 500m beyond the edge of the infested zone.

Full legal references are provided in Annex 1. Legal acts quoted in this report refer, where applicable, to the latest amended version.

**3.2 INTERNATIONAL STANDARDS**

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

4 **BACKGROUND**

**4.1 PREVIOUS RELEVANT AUDITS**

This was the fourth audit of the control of *Epitrix* carried out by Directorate-General for Health and Food Safety in Spain. The three previous audits were carried out in 2013 (ref 2013-6804), 2015 (ref. 2015-8661) and 2016 (ref. 2016-8979).


**4.2 PRODUCTION AND TRADE OF POTATOES**

No significant changes have been observed since 2016 in the seed and ware potato production. The total surface area of ware potato cultivation in Spain in 2017 is estimated at approximately 46,100 ha (somewhat increased compared to 2016, 44,700 ha) but it is less than in 2015 and 2014 (63,816 ha and 50,564 ha respectively). The most significant areas of production are the autonomous communities Castilla y León (ca. 18,300 ha), Andalucía (ca.
9,600 ha) and Murcia (ca. 5,100 ha). Comunidad Valenciana and the non-demarcated areas of Galicia account for ca. 2,150 ha each for commercial ware potato production.

As already mentioned in the previous audit report, the majority of production from Castilla y León and Galicia is destined for the national market. Since June 2016, some 280,700 t of ware potatoes were moved from Spain to other EU Member States; ca. 96,640 t originated from Castilla y Leon, ca. 64,750 t from Andalucía and ca. 43,000 t from Galicia. Approximately 80% of potato produce from Andalucía, where intensive large-scale professional production of early potatoes takes place, is destined to other EU Member States mainly Germany, Belgium, and the Netherlands; smaller quantities are also "exported" to Portugal, France and the United Kingdom. During the last potato production period, smaller quantities were also exported from Comunidad Valenciana (ca. 24,500 t), Islas Baleares (ca. 15,000 t), Murcia (ca. 13,200 t), Castilla la Mancha (ca. 8,100 t) and Catalonia (ca. 8,000 t).

5 FINDINGS AND CONCLUSIONS

5.1 ORGANISATIONAL ASPECTS OF PLANT HEALTH CONTROLS

Legal requirements

Article 1(4), 2(1)(g), 2(1)(i), 6.5, 6.6, 12(2) and 13c(1)(b) of Council Directive 2000/29/EC.


Findings

5.1.1 Designation of Competent Authorities

1. Since the previous audit no organisational changes have taken place in the Directorate General of Health and Agricultural Production of MAPAMA that remains the single authority on plant health issues. Plant health control activities are supervised by the Sub-directorate General for Plant and Forestry Health and Hygiene. Information on the structure and responsibilities of the plant health services can be found in the country profile for Spain [http://ec.europa.eu/food/audits-analysis/country_profiles/details.cfm?co_id=ES](http://ec.europa.eu/food/audits-analysis/country_profiles/details.cfm?co_id=ES).

2. There has been no change in the organisation with respect to the RCA in Andalucia since the last audit. The RCA remains the Plant Health Service (Servicio de Sanidad Vegetal) within the Ministry of Agriculture, Fisheries and Rural Development (Consejería de Agricultura, Pesca y Desarrollo Rural). At province level, the plant health competences including inspections surveillance and monitoring, are the responsibility of the Agricultural Country Offices (Oficinas Comarcales Agrarias) and the Agricultural Management Agency within the Plant Health Departments (Departamentos de Sanidad Vegetal).

3. The audit team noted, in general, good cooperation between MAPAMA and the RCAs concerning the exchange of information with respect to the situation of PFB.
5.1.2 National legislation, guidelines and training

4. As already stated in the previous audit report, Decision 2012/270/EU is directly applicable in Spain. A national contingency plan updated in April 2017 is the technical reference with respect to guiding the implementation of surveys and control measures against the four regulated *Epitrix* species. The plan forms the basis of tailor made regional action plans, e.g. the manual of procedures for the phytosanitary inspection of potatoes issued by the RCA of Andalucía (last update March 2017).

5. Both documents provide detailed instructions on the procedures of surveys carried out for the detection of *Epitrix*. Depending on the type of ware potato produced (very early, early or normal) particular emphasis is given in the regional action plan of Andalucía in the timing and locations of sampling together with the technique applied for collection of *Epitrix* adults using sweep nets. Both documents provide instructions for the establishment of infested and buffer zones within larger demarcated areas.

6. Since the previous audit, substantial updates have been introduced in the Spanish action plan for *E. papa* regarding:
   - the obligation of autonomous communities for keeping a registry with potato producers, collective warehouses, pack houses and dispatch centres;
   - the use of plant passports and where necessary replacement plant passports for improving the traceability of potato consignments;
   - the intensive surveillance of potato and other crops of *E. papa* hosts including weeds by monitoring of both demarcated areas and areas which are still free from the pest;
   - the implementation of a hygiene protocol by potato warehouses for the decontamination of packages, machinery and vehicles operating within demarcated areas.

7. However, the audit team noted that there is a discrepancy between the meaning of the term "field" in the English language version of Decision 2012/270/EU and the term "plantación" used in the Spanish language version. Plantación is understood to be a crop and not a field. A similar discrepancy is in place between Annex II of the national contingency plan and the manual of procedures for the phytosanitary inspection of potatoes in Andalucía, regarding the establishment of buffer zones, resulting in implementing minimum designation of infested and buffer zones (see also section 5.3.1).

8. Training and exchange of technical information and practical experience between the autonomous communities with respect to tackling *E. papa* remains a firm priority in Spain. A regional training course was organised by the plant health service of autonomous community of Andalucía in Seville in March 2017. In addition, two coordination meetings with plant health inspectors were organised in September 2016 and February 2017. All plant health staff met during the audit were adequately
trained to a satisfactory technical standard and were aware of the measures implemented for the control of *E. papa*.

### 5.1.3 Laboratories

9. Plant health inspections in the provinces of Seville, Cadiz and Cordoba are supported by the Entomology Laboratory of Production and Plant Health of Seville. The diagnostic needs in other provinces of Andalucía are supported by the laboratories of Almeria, Huelva and Jaen which have been assigned by the RCA to carry out analysis of samples for the detection of *Epitrix*. Comprehensive training, including the use of molecular techniques has been provided to laboratory experts for the identification of *E. papa*; no proficiency or ring tests are organised. If in doubt, samples are forwarded to the University Polytechnic of Madrid which is the national reference laboratory for *E. papa*.

10. The audit team visited the Entomology Laboratory in Seville and noted that:
   - samples of adult beetles usually arrive for identification after being cleaned from plant debris and from insect specimens of other families collected during sampling with sweep nets and very rarely in yellow chromotropic traps;
   - the samples are registered in a database and receive an identification code used as reference number for further analysis. The detection method follows a standard operating procedure based on EPPO 7/109(2) diagnostic protocol;
   - a conclusion about the presence of *E. papa* at species level is issued upon the detection and identification of adult specimens caught on leaves of potatoes or other host plants including weeds, or *E. papa* larvae present in tubers. Visual symptoms on tubers typical of flea beetle presence such as surface galleries are reported as being caused by *Epitrix* at genus level.

11. The RCA of Andalucía stated that the laboratory reports and results are not interpreted and that visual symptoms of *Epitrix* activity on tubers are not considered as sufficient evidence for proving *E. papa* presence in a given area; in such case surveillance efforts will be intensified.

### 5.1.4 Cooperation and communication with stakeholders

12. As already mentioned in the previous audit report an intensive information campaign has been launched in all autonomous communities of Spain to inform stakeholders about the importance of *E. papa*. The RCA of Andalucía has issued a wide range of high quality publicity material providing technical information to potato production and trade operators including wholesalers and processors. This focuses mainly on the identification, biology and control of the pest and includes leaflets, technical bulletins and relevant website references: [http://lajunta.es/12yba](http://lajunta.es/12yba) and [http://lajunta.es/12f4x](http://lajunta.es/12f4x).

13. During the annual survey inspections carried out in places of production of potatoes including fields, collective warehouses and pack houses, plant health inspectors of the RCA of Andalucía, distribute information material and explain the symptomology of
the main harmful organisms of potato listed in the manual of procedures for the phytosanitary inspection. During the 2017 growing period, the RCA of Andalucia organised two meetings and a technical seminar to provide agricultural cooperatives, potato producers and other operators, specific technical information about *E. papa* and the specific requirements for trading potatoes from demarcated areas. More meetings were also organised in all other major potato producing autonomous communities of Spain.

14. The audit team met potato producers and representatives / technical staff of potato pack houses in Andalucia receiving material from demarcated areas and areas which are free from *E. papa*. All appeared to be particularly concerned about the presence of *E. papa* and expressed their commitment for collaborating with the RCA. They stated that in case of suspicion for the presence of *E. papa* during external and internal quality checks they would notify the RCA for further detailed instructions and advice.

5.1.5 Registration / approval of establishments

15. Following up last audit's report the single authority addressed circulars to all autonomous communities for the registration of all large scale commercial potato producers and potato warehouse / pack house operators in line with the relevant legislative requirements. Improvements made in the registration database in Galicia allow for the distinction between potato operators who are actively involved in potato trade and farmers producing potatoes for self-consumption. Currently, in Andalucia such information and information regarding the destination of the produced material is kept within databases of potato operators. The RCA intends to establish a general registry of potato crops and potato growers.

16. In the national registration database of producers of seed and nursery plants there are currently 11,655 entries of registered potato operators. A substantial increase from 280 in 2016 to 398 in 2017 was observed in potato operators registered in Andalucia. Similarly the registered potato operators have been increased in Comunidad Valenciana from 19 in 2016 to 25 in 2017. Additional information provided by the single authority indicated that eight potato operators have been registered in Islas Baleares and one operator in Madrid. During 2016, operators in Extremadura and Castilla la Mancha moved ca. 9,300 t of ware potatoes to other EU Member States. However, at the time of the audit registration of certain potato operators had not been completed. Despite substantial professional potato production and trade taking place from these regions to Spain and to other EU Member States certain potato producers still remain without having been registered. This is not in line with Article 1 of Commission Directive 93/50/EEC.

17. The single authority stated that there is continuous improvement of the database to ensure that all large scale potato operators will be included and that traceability requirements of smaller scale potato farmers is guaranteed through their registration
within collaborating pack houses, collective warehouses and potato dispatching centres.

**Conclusions on organisational aspects of plant health controls**

18. There is a clear division of responsibilities and good communication between the single authority and the regional competent authorities. Due to the non-complete registration of professional potato operators in certain autonomous communities, there is risk of uncontrolled potato movement.

19. The RCA of Andalucía is well structured and supported by competent staff exhibiting a good level of knowledge about the pest and adequate laboratory diagnostic support. However, the discrepancies observed between the EU legislation and the implementing provisions of national legislation in place, result in minimum adoption of measures necessary to prevent further spread of *E. papa*, particularly with regard to area demarcation.

### 5.2 *EPITRIX* SP. SURVEILLANCE STRATEGY AND RESULTS

**Legal requirements**

Article 4 of Decision 2012/270/EU.

**Findings**

#### 5.2.1 Surveillance strategy

20. The surveillance strategy and technical guidance for inspection and sampling is laid down in the national contingency plan and has been explained in detail in the previous audit reports. The plan also provides guidance for the inspection of other hosts, primarily by visual means. In general, a minimum of 3% of the crop surface area (ware potatoes) for sampling intensity (with at least 1 ha per 33.3 ha represented) and an increase to 9% for plots within demarcated areas. For seed potatoes, 100% of production plots are controlled. Table 1 highlights the planned ware potato survey for 2017.

21. Spain notified the results of the annual official survey for Epitrix for 2016 as stipulated under Article 4 (1) of Decision 2012/270/EU for both ware and seed potatoes, with detailed information for individual RCAs. Overall, the national average survey intensity expressed as the percentage of total area of ware potato production under surveillance, was higher than that initially planned (5.49% see previous audit report 2016-8979) whilst in practice it was doubled from ca. 4% during the 2015 growing period to ca. 7.8% during 2016.
Table 1. Current provision for ware potato surveying for 2017.

<table>
<thead>
<tr>
<th>Autonomous Community</th>
<th>Total area (ha) (B)</th>
<th>Total Nº of Plots (C)</th>
<th>Total Nº of plots surveyed (D)</th>
<th>Surveyed area (ha) (E)</th>
<th>Percentage of plots surveyed (%) (D/C)</th>
<th>Sampling density Nº ha per survey (B/D)</th>
<th>Survey intensity (%) (E/B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andalucía</td>
<td>9,620</td>
<td>2,202</td>
<td>199</td>
<td>869.63</td>
<td>9.04</td>
<td>48.34</td>
<td>9.04</td>
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<tr>
<td>Asturias</td>
<td>34</td>
<td>270</td>
<td>27</td>
<td>15.35</td>
<td>4.5</td>
<td>18.06</td>
<td>5.00</td>
</tr>
<tr>
<td>Aragón</td>
<td>307.03</td>
<td>378</td>
<td>17</td>
<td>33.22</td>
<td>3.39</td>
<td>40.83</td>
<td>3.39</td>
</tr>
<tr>
<td>Islas Baleares</td>
<td>980</td>
<td>708</td>
<td>24</td>
<td>10</td>
<td>0.56</td>
<td>17.77</td>
<td>0.56</td>
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<tr>
<td>Canarias</td>
<td>1,777</td>
<td>17,770</td>
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<td>6</td>
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<td>Cataluña</td>
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<td>3,099</td>
<td>186</td>
<td>54.99</td>
<td>3</td>
<td>18.06</td>
<td>6.00</td>
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<tr>
<td>Cantabria</td>
<td>150</td>
<td>933</td>
<td>28</td>
<td>28.20</td>
<td>3</td>
<td>5.36</td>
<td>18.80</td>
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<tr>
<td>Castilla la Mancha</td>
<td>1,924.73</td>
<td>1,167</td>
<td>35</td>
<td>314</td>
<td>3</td>
<td>54.99</td>
<td>16.35</td>
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<tr>
<td>Castilla y Leon</td>
<td>18,296</td>
<td>13,527</td>
<td>454</td>
<td>614</td>
<td>3.36</td>
<td>40.30</td>
<td>3.36</td>
</tr>
<tr>
<td>Extremadura</td>
<td>800</td>
<td>596</td>
<td>40</td>
<td>120</td>
<td>6.71</td>
<td>20</td>
<td>15</td>
</tr>
<tr>
<td>Galicia (Non-</td>
<td>2,149.17</td>
<td>7,145</td>
<td>350</td>
<td>240</td>
<td>4.9</td>
<td>6.14</td>
<td>11.17</td>
</tr>
<tr>
<td>demarcated)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>La Rioja</td>
<td>700</td>
<td>675</td>
<td>23</td>
<td>55</td>
<td>3.41</td>
<td>30.43</td>
<td>7.86</td>
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<tr>
<td>Madrid</td>
<td>51.75</td>
<td>84</td>
<td>4</td>
<td>10.39</td>
<td>4.76</td>
<td>12.94</td>
<td>20.08</td>
</tr>
<tr>
<td>Murcia</td>
<td>5,148</td>
<td>500</td>
<td>60</td>
<td>200</td>
<td>12</td>
<td>85.80</td>
<td>3.89</td>
</tr>
<tr>
<td>Navarra</td>
<td>180</td>
<td>200</td>
<td>20</td>
<td>17</td>
<td>16</td>
<td>18</td>
<td>9.40</td>
</tr>
<tr>
<td>País Vasco</td>
<td>638.54</td>
<td>600</td>
<td>33</td>
<td>54.19</td>
<td>5.5</td>
<td>19.35</td>
<td>8.49</td>
</tr>
<tr>
<td>Valencia</td>
<td>2,195</td>
<td>1,646</td>
<td>120</td>
<td>240</td>
<td>7.36</td>
<td>18.29</td>
<td>10.93</td>
</tr>
<tr>
<td>TOTAL</td>
<td>46,128.22</td>
<td>51,500</td>
<td>1,720</td>
<td>2,897.78</td>
<td>3.34</td>
<td>26.8</td>
<td>6.28</td>
</tr>
</tbody>
</table>

MEAN EU 2017 | 30.36 | 5.49

22. Substantial increase in survey intensity has also been observed in the main ware potato producing areas in the autonomous communities of Andalucía (11.8% compared to 9% in 2015), Castilla y Leon (3.2% compared to 0.2% in 2015), Murcia (4.5% compared to 2.9% in 2015), Valencia (12% compared to 4.2% in 2015) and the non-demarcated areas of Galicia (10.8% compared to 3% in 2015).

23. In the autonomous communities with seed potato production (Castilla y Leon, Navarra and Basque Country), surveillance for *E. papa* is generally carried out in all plots of seed potato producing farms. To date, there have been no reports of potato flea beetle presence in potato seed production in Spain. Table 2 highlights the planned seed potato survey for 2017.

Table 2. Current provision for seed potato surveying for 2017.

<table>
<thead>
<tr>
<th>Autonomous Community</th>
<th>Total area (ha) (B)</th>
<th>Total Nº of plots surveyed (C)</th>
<th>Total Nº of farms surveyed (D)</th>
<th>Surveyed area (ha) (E)</th>
<th>Sampling density Nº ha per survey (B/D)</th>
<th>Survey intensity (%) (D/B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Castilla y Leon</td>
<td>1,600</td>
<td>2,000</td>
<td>187</td>
<td>1,600</td>
<td>0.80</td>
<td>100</td>
</tr>
<tr>
<td>Navarra</td>
<td>160</td>
<td>118</td>
<td>16</td>
<td>130</td>
<td>1.35</td>
<td>81.2</td>
</tr>
<tr>
<td>Basque Country</td>
<td>450</td>
<td>345</td>
<td>64</td>
<td>450</td>
<td>1.30</td>
<td>100</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2,210</td>
<td>2,463</td>
<td>267</td>
<td>2,180</td>
<td>0.9</td>
<td>98.6</td>
</tr>
</tbody>
</table>
5.2.2 Inspection / sampling technique and results

24. A new survey approach has been adopted in the national contingency plan since the previous audit. This is based on the visual inspection of the growing crop. Where necessary or in case of suspicion, this is combined with collection of insect samples using sweep nets for laboratory analysis and visual inspection of tubers immediately prior to or after harvest. The same approach is applied during monitoring carried out when potatoes are grown within demarcated areas (see also section 5.3.1). Apart from potato crops, attention is also given to stands with weeds which are hosts of *E. papa* and fields in bare fallow where potatoes were grown.

25. The audit team visited the provinces of Cadiz and Seville and witnessed surveys carried out in plots with potatoes, which at the time of the audit were either at their final stages of plant growth or already defoliated and ready for harvest. In general, the visual inspections for the detection of *E. papa* were in line with the guidelines outlined in the national contingency plan (with primary focus on the surface area of the crop). At the same time, sampling for laboratory analysis was carried out on weeds growing in the immediate vicinity of potato plots and on crops with other host plants of potato flea beetle such as maize.

26. During its visits of surveyed fields, within and outside demarcated areas, the audit team noted that:

- plant health inspectors follow the instructions of the national contingency plan and meticulously inspect potato plants in the border rows of the potato crops for detecting symptoms of flea beetle presence and if necessary take samples;
- in all cases, entomological sweep nets were used for catching flea beetle adults for laboratory analysis. In some cases yellow insect traps had also been deployed;
- where inspections are carried out during harvest, priority is given to tubers collected from different sites in the borders of the potato fields for the detection of typical galleries caused by *E. papa*;
- non-official post-harvest inspections are also carried out during quality checks at potato pack houses handling material originating from demarcated areas.

27. Inspectors stated that during sampling with sweep nets they try to focus on plants showing suspicious signs of flea beetle presence (holes in their foliage) or jumping adults. In line with the instructions of the national contingency plan, systematic and comprehensive attention is given to sites where no pesticide application is taking place, such as hedgerows or other areas in the immediate vicinity or adjoining potato fields under survey, populated by other host plants including weeds.

28. The RCA of Andalucía provided the results of laboratory tests carried out during the last two potato growing periods. Of the 722 samples analysed during 2016, 22 were found positive whilst the actual presence of *E. papa* adults (11) or larvae (2) was confirmed in 13 samples; 18 tubers were found with signs of *Epitrix* sp. Similarly, by the time of the audit in 2017, the analysis of 205 samples revealed the presence of *E.*
*papa* in three cases (2 adults and 1 larvae) whilst symptoms were also detected in one sample of tubers. There were no cases of *E. papa* adults caught on yellow chromotropic traps.

29. At national level, 2,255 fields with ware potatoes were visually inspected during 2016; of the 1,311 samples taken for laboratory analysis, 127 were positive to *E. papa*. Of the 1,690 lots of potato tubers inspected nine were found positive. Overall, 126 fields were declared infested and 37 new demarcated areas have been established: nine in Andalucía (in the provinces of Cadiz, Huelva, Granada, Cordoba and Seville) and further 28 in Asturias leading to demarcation of the entire autonomous community. No new demarcated areas have been established in Galicia as all positives were found within already demarcated areas.

30. Subsequent to this audit, and as a further reflection of increased survey intensity, three more outbreaks of *E. papa* were notified in Andalucía: two with larvae found in tubers in the province of Seville and one with adults on black night shade (*Solanum nigrum*) in the province of Malaga (first notification).

31. The results indicate a wider geographic presence of the pest than that previously observed in Andalucía where a minimum number of surveying actions is implemented for every 50 ha of potato cropping. During 2017, the number of planned survey actions is 199. This includes visual observation of plants during growth, insect capture and sampling and examination of tubers planned to take place in very early (26 from 15/1-15/4), early (87 from 15/4-15/6), medium (62 from 15/6-30/9) and late (24 from 30/9-15/1) potatoes.

### Conclusions on Epitrix sp. surveillance strategy and results

32. The guidelines for surveillance have been updated with respect to increased sampling intensity whilst the surveillance methodology applied provides sufficient information about the current distribution of potato flea beetles, particularly in the main ware potato producing regions of Spain.

5.3 CONTROL MEASURES WHERE THE PRESENCE OF *E. PAPA* IS CONFIRMED

5.3.1 Demarcation of Epitrix sp. infestation and measures taken

**Legal requirements**

Article 5 of Decision 2012/270/EU.

Annex II Sections 1 and 2 of Decision 2012/270/EU.

**Findings**

33. As explicitly stated in the previous audit report, all *Epitrix* presence since its first outbreak in Galicia is *E. papa*. Since the previous audit, there was no change to the large demarcated area in Galicia, which still comprises the entire provinces of La
Coruña and Pontevedra; nine more demarcated areas have been established in the provinces of Orense and Lugo. Following the surveys carried out in Spain during 2016 and 2017, the 28 new demarcated areas established in Asturias ultimately resulted in the demarcation of the entire autonomous community.

34. Ten more demarcated areas have been established in Andalucía; where new *E. papa* outbreaks occurred the single authority notified the outbreaks to the Commission and other Member States. All areas demarcated in Andalucía are indicated in the link: http://www.juntadeandalucia.es/organismos/agriculturapescaydesarrollorural/areas/agricultura/sanidad-vegetal/paginas/epitrix-zonas.html

35. In Andalucía, demarcation of infested fields takes place only when individual specimens of *E. papa* adults or tubers with *E. papa* larvae are detected and identified following laboratory analysis. The RCA of Andalucía stated that in case of tubers with signs of flea beetle infestation, inspectors intensify further their monitoring efforts for the actual detection of the presence of *E. papa* adults or larvae. The same applies in case where tubers with galleries are found during monitoring carried out by inspecting and sampling potato crops grown within areas which have already been demarcated.

36. Inspectors of the RCA of Andalucía carry out visual inspections within 100 m around pack houses receiving potatoes from the demarcated areas in line with Article 3(a) of Decision 2012/270/EU. If necessary, these include insect sampling with sweep nets around host plants and weeds. Such inspections are not carried out around pack houses which have not been authorised to receive potatoes from demarcated areas.

37. The audit team received documentation of monitoring carried out in line with Annex II section 2(2) of the Decision within demarcated areas and the results of the laboratory analysis of samples taken in Seville and other provinces of Andalucía. Tubers with typical signs of flea beetle infestation such as surface galleries are notified by the entomology laboratories in Andalucía as *Epitrix* sp. and are not considered by the RCA of Andalucía sufficient evidence for the actual presence of *E. papa* and subsequent area demarcation.

38. The audit team visited one field found infested during 2016 within a recently demarcated area in the province of Cadiz and two fields within the buffer zones of areas already demarcated since 2015 in the province of Seville prior to the latest amendment of Decision 2012/270/EU and noted that:

- the demarcation of the infested zone was limited only to the surface where there is a crop (or "plantación") of potatoes or other *E. papa* hosts. This could be considered to be in line with the Spanish language version of Decision 2012/270/EU, where the term "plantación" is used, but is not in line with the English\(^1\) version, which uses the term "field", i.e. a plot of land with defined boundaries according to ISPM No.5;

\(^1\)This text was initially drafted in English and then later translated into other languages.
the same also applies for fields within the outer border of the 500 m width buffer zone. Demarcation is not carried out in line with Annex II section 1(1b) of the same Decision because only the part of the fields within the 500 radius is included and not the entire fields. The RCA stated that, in the notification letters sent to producers, they require that any potatoes grown in parcels located the outer limits of the buffer zones to be considered, treated and handled as produce grown within the demarcated area.

39. The audit team also noted that a 500 m width buffer zone beyond the edge of the infested fields is only applied to new outbreak sites; areas which have already been demarcated prior to the adoption of the provisions of Decision EU 2016/1359 remain with a buffer zone of 100 m beyond the infested area; infested zones are not reviewed and buffer zones are not expanded.

40. As already stated in the previous audit report, merging of four geographically close demarcated areas in a larger demarcated area in the province of Seville did not take place. Instead, an "intensive surveillance zone" composed of the demarcated areas and the areas between them had been established. The RCA stated that possible expansion and further merge of the demarcated areas in line with Article 6 of Decision 2012/270/EC, is not considered to be necessary as monitoring carried out within the demarcated areas had not revealed the actual presence of *E. papa* but only cases of tubers with signs of *Epitrix* sp. infestation.

41. No potatoes or other *E. papa* host crops were grown in the area demarcated in 2016 and in one of the buffer zones demarcated in 2015 in Andalucía. The audit team noted that tubers with laboratory confirmed signs of *Epitrix* sp. infestation had been detected during two successive growing periods in a plot within the buffer zone where organic potatoes were grown in one of the areas demarcated in 2015. The RCA stated that prohibition of potato cropping within demarcated areas was not deemed necessary as the monitoring carried out had not provided further evidence confirming the actual presence of *E. papa*. This is not in line with Annex II section 2(1) of Decision 2012/270/EU. The producer was applying pesticides approved for organic potato production and at the time of the audit, demarcation of this area was to be ceased.

5.3.2 Movement of potato tubers, decontamination and issuance of plant passports

**Legal requirements**

Articles 3, 3a and 3b of Decision 2012/270/EU.

**Findings**

42. In Andalucia, the strategy in place regarding the movement and traceability of potatoes originating from the demarcated areas includes a legal obligation for potato producers to process material originating from demarcated areas through authorised pack houses equipped with potato brushing or washing facilities in line with Article
3b(a) of Decision 2012/270/EU. The same applies for potato tubers originating from areas which have not been demarcated showing laboratory confirmed signs of *Epitrix* sp. infestation (see also section 5.3.1).

43. The single authority has addressed an official letter to all RCAs requesting the use of plant passports and replacement plant passports in case of handling potatoes originating from areas demarcated due to the presence of *E. papa*. A series of legal actions have been taken against producers not respecting relevant plant health requirements. Fines have been imposed in case of infringement and dispatch of untreated potatoes outside demarcated areas.

44. The audit team visited two pack houses in Andalucía, one of which had been authorised to treat potatoes from the demarcated areas, and a pack house in Cantabria and noted that:

- systematic decontamination of packaging facilities, potato harvest machinery and transport vehicles operating within the demarcated area, together with safe disposal of waste soil, is in place in line with Article 3a of the Decision. The implementation of these measures is regularly checked and verified by the regional competent authorities;
- all pack houses implement a good traceability system by registering collaborating producers and the potato lots processed and packed in their premises. In all cases, adequate documentation could be retrieved and provided to the audit team in line with Article 3b(b) of the Decision;
- pack houses handling potatoes in Andalucía implement internal control systems involving checks of the general quality of the produce at the time of arrival of potato tubers from the field and compulsory notification of the RCA in case of suspicion of *E. papa* infestation;
- full traceability requirements are also implemented by one pack house located in Cantabria equipped with washing facilities and handling potatoes from Andalucía. The owner was not aware of the specific conditions and plant passport requirements regarding potato flea beetle presence. The RCA of Cantabria stated that the pack house was not authorised to process and pack potatoes from any of the areas demarcated in Andalucía.

### Conclusions on control measures for *E. papa*

45. The entire autonomous community of Asturias has now been demarcated whilst in Andalucía the infested area continues to increase. Andalucía has implemented precautionary measures to prevent the further spread of the pest. However, area demarcation is not carried out in line with the provisions of Decision 2012/270/EU, which may reduce the effectiveness of the control measures in place.
### 5.4 Follow-up

The table below summarises the follow-up to the relevant recommendations made in report 2016-8979-MR.

<table>
<thead>
<tr>
<th>No</th>
<th>Previous recommendation</th>
<th>Assessment</th>
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<tbody>
<tr>
<td>1</td>
<td>To ensure that a full, comprehensive and up-to-date register of producers, collective warehouses and operating dispatching centers of potatoes has been established in all autonomous communities of Spain in line with Commission Directive 93/50/EEC.</td>
<td>Partially addressed. During the previous audit the auditors noted that the registration of operators was particularly incomplete in two autonomous communities with considerable ware potato production. Despite an order issued by the single authority for the compulsory registration of the potato operators and the substantial improvement observed, particularly for autonomous communities where <em>E. papa</em> is present, the implementation of follow-up actions taken for other autonomous communities has not been verified. See findings 6 and 16. See recommendation 1 of the current audit report</td>
</tr>
<tr>
<td>2</td>
<td>To ensure that in case or re-packing of ware potatoes, plant passports issued for potato tubers originating in demarcated areas would only be replaced by “replacement passports” in line with Article 3(d) of Commission Directive 92/105/EEC.</td>
<td>Addressed. The single authority issued specific instructions as proposed by Spain in the relevant action plan which are now deemed satisfactory. See findings 6 and 43</td>
</tr>
<tr>
<td>3</td>
<td>To ensure that the survey, as well as survey technique, for <em>Epitrix</em> sp. is adequate to fully determine the presence and spread in Spain, in line with the requirements of Article 4(1) of Decision 2012/270/EU, in particular, with respect to enhanced scrutiny of other hosts plants, including weeds, that border on, or are in the immediate vicinity of, potato fields.</td>
<td>Addressed. Surveillance intensity and methodology applied in the potato producing areas of Spain are adequate for the determination of <em>E. papa</em> presence in a given area for both potato crops and stands of weeds which are also hosts of <em>E. papa</em>. See findings 21, 22, 25, 26 and 27</td>
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</table>
### 6 OVERALL CONCLUSIONS

Spain has successfully addressed certain aspects of the shortcomings identified in the previous audit report. These include intensive information campaigns launched for the registration of potato producers and pack houses, the controls carried out for traceability purposes, the appropriate use of potato labelling / plant passports and the implementation of hygiene protocols for the decontamination of vehicles transporting potatoes from demarcated areas.
Comprehensive surveillance efforts include tuber sampling and collection of insect samples from potato crops, alternative hosts and weed standing in their immediate vicinity. The surveillance methodology applied revealed additional outbreaks of *E. papa* and resulted in the demarcation of the entire autonomous community of Asturias and areas within different provinces of Andalucía. The natural spread of the pest continues with low numbers of adults caught in new areas and minor symptoms in potato tubers sampled for monitoring purposes.

However, the competent authorities at least in the autonomous community of Andalucia have adopted and continue to implement, a minimal approach for land demarcation. The management of both existing and newly established demarcated areas remains only partially compliant with Decision 2012/270/EU, overall increasing the risk of further spread of the pest.

### 7 CLOSING MEETING

A closing meeting, where the team presented the main findings and preliminary conclusions of the audit, was held on 19 May 2017 in Seville.

### 8 RECOMMENDATIONS

The Spanish CA is invited to provide details of actions, both planned and already taken, including deadlines for their completion, in the form of an 'action plan', aimed at addressing the recommendations as set out below, within twenty five working days of receipt of this audit report.

<table>
<thead>
<tr>
<th>No.</th>
<th>Recommendation</th>
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<tbody>
<tr>
<td>1.</td>
<td>To ensure that all commercial producers, collective warehouses and potato dispatching centres are registered in a comprehensive and up-to-date register in all autonomous communities of Spain in line with Commission Directive 93/50/EEC.  &lt;br&gt; <em>Recommendation based on conclusion 18</em>  &lt;br&gt; <em>Associated finding 16</em></td>
</tr>
<tr>
<td>2.</td>
<td>To ensure that where the presence of <em>E. papa</em> is confirmed, a demarcated area is clearly established in line with Article 5(1) and Annex II, Section 1, 1(a) and (b) of Decision 2012/270/EU and that the measures adopted for protection of spread of <em>E. papa</em> will be amended in a manner complying with Article 6 of the same Decision. In particular,  &lt;br&gt; • a. the demarcated area will comprise an infested and a buffer zone as referred to point 1 of the said section and be composed of fields with defined boundaries in the meaning of the relevant phytosanitary terms given in ISPM 5;  &lt;br&gt; • b. geographically close buffer zones are merged and sound scientific</td>
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<td>No.</td>
<td>Recommendation</td>
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<td>principles are taken into account when establishing demarcated areas as referred to in points 2 and 3 of the said section;</td>
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<td></td>
<td>• c. further expansion of already established demarcated areas will be carried out in line point 1 of the said section.</td>
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<tr>
<td></td>
<td><strong>Recommendation based on conclusion 45</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Associated findings 38, 39 and 40</strong></td>
</tr>
<tr>
<td>3.</td>
<td>To ensure that measures taken in a demarcated area are in line with Article 5(1) and Annex II, Section 2 of Decision 2012/270/EU. In particular, that prohibition of planting of host plants is carried out as referred to in point 1 of the said section.</td>
</tr>
<tr>
<td></td>
<td><strong>Recommendation based on conclusion 45</strong></td>
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<td></td>
<td><strong>Associated finding 41.</strong></td>
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</tbody>
</table>

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

## ANNEX 1 – LEGAL REFERENCES

<table>
<thead>
<tr>
<th>Legal Reference</th>
<th>Official Journal</th>
<th>Title</th>
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<tbody>
<tr>
<td>Dec. 2012/270/EU</td>
<td>OJ L 132, 23.5.2012, p. 18-21</td>
<td>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 Epitrix cucumeris (Harris), Epitrix similaris (Gentner), Epitrix suberinita (Lec.) and Epitrix tuberis (Gentner)</td>
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<tr>
<td>International Standard</td>
<td>Title</td>
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