

---

---

# **Veterinary and Phytosanitary Regulation Department**

## **Plant Health Directorate**

---

---

### **I. BACKGROUND**

The Plant Health Directorate is the National Plant Protection Organisation set up within the Veterinary and Phytosanitary Regulation Department within the Parliamentary Secretariat for Agriculture, Fisheries and Animal Rights and under the Ministry for Sustainable Development, the Environment and Climate Change (MSDEC) to prevent the introduction into the community of organisms harmful to plants or plant products or their spread within the Community, in line with the Community's plant health regime, as established by 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 and its amendments. The general principles are based upon provisions laid down in the International Plant Protection Convention concluded at the United Nation Food and Agriculture Organisation and, in the World Trade Organisation Agreement on Sanitary and Phytosanitary Measures.

The Plant Health Directorate is also responsible to monitor the market of propagation material in the Maltese territory with the aim of having available in circulation high quality propagation and planting material. The Directorate also deals with plant variety rights and the conservation of plant genetic resources. The Plant Health Directorate also deals with services to the public in relation to soil and water testing.

### **2. INTRODUCTION**

As in previous years, in 2014 the Plant Health Directorate (PHD) continued to implement measures for the prevention and spread of harmful organisms within the community during 2014.

The PHD persisted with its monitoring and inspections in Malta, Gozo and Comino to further control the spread of the Red Palm Weevil pest, also with the eradication of this pest through the felling of palm trees. Also in this regard, the PHD drafted a Cabinet Memoranda on the Control of the Red Palm Weevil.

In 2014, the PHD also continued with its endeavours to continue following preventive steps for an effective control strategy against the *Tuta Absoluta* pest and the Fig Tree Borer and strictly monitor any outbreak of pests. Monitoring inspections and lab testing on citrus trees

in Gozo and local nurseries were carried out in order to monitor the Citrus Tristeza Virus. In 2014, the Directorate has notified to the Commission new pests (*Apate monachus* on carob trees, TSWV on peppers and *Spilococcus mamillariae* on cactus plants).

During 2014, the PHD carried on with implementation of the project on conservation varieties through EAFRD (M214) after successfully securing funds for such a project which is expected to be completed by 2015.

### 3. LEGISLATION

In 2014, the Directorate has consulted stakeholders and registered MOR's on a number of EU Directives, and Decisions that have been adopted during this year which were transposed directly.

- LN 113 of 2014 - Plant Quarantine Act (Cap 433)  
Seeds of Agricultural Plants and Vegetable (Amendment) Regulations, 2014  
Government Gazette of Malta No. 19,227 dated 28<sup>th</sup> March, 2014
- LN 114 of 2014 - Plant Quarantine Act (Cap 433)  
Seeds of Vegetable Landraces and Varieties (Amendment) Regulations, 2014  
Government Gazette of Malta No. 19,227 dated 28<sup>th</sup> March, 2014
- LN 115 of 2014 - Plant Quarantine Act (Cap 433)  
Vegetable Propagation and Planting Material (Amendment) Regulations, 2014  
Government Gazette of Malta No. 19,227 dated 28<sup>th</sup> March, 2014
- LN 162 of 2014 – Plant Quarantine Act (Cap 433)  
Plant Quarantine (Harmful Organisms) (Amendment) Regulations, 2014  
Government Gazette of Malta No. 19,252 dated 16<sup>th</sup> May, 2012
- LN 201 of 2014 - Plant Quarantine Act (Cap 433)  
Examination of Varieties of Vegetable Species (Amendment) Regulations, 2014  
Government Gazette of Malta No. 19,266 dated 10<sup>th</sup> June, 2014
- LN 202 of 2014 - Plant Quarantine Act (Cap 433)  
Examination of Varieties of Agricultural Plant Species (Amendment) Regulations, 2014  
Government Gazette of Malta No. 19,266 dated 10<sup>th</sup> June, 2014
- LN 334 of 2014 - Plant Quarantine Act (Cap 433)  
Plant Quarantine (Harmful Organisms) (Amendment No.2) Regulations, 2014  
Government Gazette of Malta No. 19,311 dated 19<sup>th</sup> September, 2014

### 4. EU AFFAIRS

#### Meetings

The Plant Health Directorate continued to participate in various EU meetings and training on Plant Health and Plant Reproductive Material related topics. A number of officials attended the meetings organised by the EU Commission and other EU structures. Instructions notes including country positions were drawn up accordingly with respect to the topics of concern to Malta. PHD officers also participated in a number of training workshops under the BTSF initiative.

## EU Reporting Obligations

During 2014, Malta submitted a total of 26 reporting obligations to the EU.

## Communications

Feedback on various issues that fall under the remit of the Plant Health Directorate and Plant Reproductive Material was sent to the EU Commission throughout the year. Mostly most of the Communications stemmed from the Standing Committee on Plant Health whereby Malta was requested to submit comments in writing on various EU topics in relation to Plant Health. Such communication was sent to the EU in relation to various Emergency Decisions which are reviewed and discussed during the Standing Committee. Malta also communicated to the EU a detailed questionnaire pertaining to harmful organisms.

Other issues were the provision of Maltese names of the pests and diseases affecting fruit trees that shall be included in the new EU directive on the marketing of CAC and certified material and the details that pertain to the Maltese national authorities in connection with forest reproductive material, Commission Regulation (EC) No 217/2006, Commission Decision 2004/842/EC and the EU common catalogues of vegetable and agricultural plant species, the provision of reference samples to other EU Member States for official post-control tests and the certification of varietal mixtures (OECD and EU seed) in view of the OECD Seed Schemes.

With respect to the Regimes, Malta has submitted official comments to the Council in relation to the Official Controls Regulation (COM 265 2013), Plant Health (Protection and Inspection) (COM 267 2013) and also on Plant Reproductive Material (PRM) (COM 262 2013).

## Notifications

Notifications of pests are carried out in accordance with Council Directive 2000/29/EC. The following three pest species have been notified to the EU. These include the presence of (a) *Spilococcus mamillariae* on cactus plants (b) Tomato Spotted Wilt Virus TSWV on tomatoes and (c) *Apate monachus Fabricius* on *Ceratonia siliqua* (carob trees).

Notifications from various other Member States on the availability of seeds of cereals, fodder plants and oil and fibre plants and derogations to market seeds which do not satisfy the minimum germination capacity specified in EU legislation were reviewed on a regular basis. Notifications on authorisations for the marketing of seeds of not yet listed varieties according to Commission Decision 2004/842/EC, modifications to the status of already listed varieties of seeds of agricultural plants and vegetables that are authorised for marketing at EU level and new varieties accepted at national level and which eventually will be marketed in the EU were reviewed daily.

## EU regimes

The official controls Regulation has been discussed extensively. A number of issues are still pending notably accreditation of labs and the issue of fees. The Plant Health Regulation seems to be at a more advanced stage, however, a way forward on the new import regime needs to be agreed by all Member States since disagreements with respect to an “open system” vis a vis “closed system” has been addressed during the meetings. As regards the EU proposal on the production and making available on the market of PRM which has been rejected by the EU Parliament, the PHD provided its clearance/feedback/instructions on the relevant agenda items and documentation that was

to be presented during Attachées (Seeds and Propagating Material), MERTENS, AGRIFISH and COREPER meetings.

### **Survey Programme**

In April 2014, Malta submitted its Survey Programme for 2015 concerning the presence of Pests for Year 2015 in accordance to Regulation 652/2014 of the European Parliament and of the Council on the Management of expenditure relating to the food chain which has been published on the 15TH May, 2014. The programme has been accepted by the Commission during the Standing Committee on Plant Health in December. The total amount of the programme is €170, 267 (at 50 % co- financing rate).

## **5. MULTILATERAL, INTERNATIONAL AND NATIONAL AFFAIRS**

The Plant Health Directorate continued to respond to questionnaires, documentation, working documents, protocols, standards and take part in consultations on draft standards and other items circulated for members' opinion by the International Plant Protection Convention Office (IPPC), the European and Mediterranean Plant Protection Organisation (EPPO), the Community Plant Variety Office (CPVO), the European and Food Safety Authority (EFSA) and the International Treaty on Plant Genetic Resources for Food and Agriculture.

The Plant Health Directorate continued to participate in a number of national committees including the Scientific and Technical Committee, Farm Advisory Service Registration Board, Plant Protection Board, the Food Safety Commission, the National Accreditation Board, The Red Palm Weevil Commission and had various consultations with EU Affairs and MEPA.

## **6. MONITORING AND CONTROL UNIT**

### **Monitoring and Surveys**

As in previous years, in 2014, the Plant Health Directorate continued its programme of annual surveys/monitoring to assess the local situation with respect to emerging pests. The monitoring and testing of certain quarantine and harmful organisms is also regulated by Council Decisions and Directives.

During 2014 a total of 45 surveys/monitoring plus monitoring of other harmful organisms that arise from time to time were carried out in relation to the following areas of diagnosis – virology, bacteriology, mycology, entomology, and nematology covering approximately 854.96 hectares during which a total of 1,430 samples were collected as indicated in (Annex 1). These samples were then forwarded to the Plant Health Diagnostic Laboratories for analysis.

### **Control of Red Palm Weevil**

The control against the Red Palm Weevil ensued as in previous years. Continuous monitoring and inspection of palm trees, felling and monitoring of pheromone traps was carried out in Malta, Gozo and also Comino, where it was intercepted in 2013. Such monitoring and control measures resulted in the pest still being active but under control.

### ***Tuta Absoluta***

As in the previous years, in 2014 the Plant Health Directorate continued with its efforts to control the *Tuta absoluta* pest. The dissemination of information and further education about this pest continued through direct contact with tomato growers during the monitoring inspections for *Tuta absoluta* in marketplaces, greenhouses and fields.

### ***Fig tree Borer (Hypocryphalus scabricollis)***

Monitoring of local fig trees was ongoing during 2014, with inspections carried out in open fields following reports by farmers. Information and control measures were disseminated through information leaflets and direct contact with growers during inspections or through customer care. An Action Plan for the control of this borer was drawn up.

## **7. SEEDS AND OTHER PROPAGATION MATERIAL**

### ***Production and marketing of plant material by nurseries and suppliers***

During 2014, eighty-one (81) annual/follow-up inspections were carried out by the SPMU together with the Surveillance and Inspectorate Unit (SIU) on plant material being produced and/or marketed in the Maltese Islands. The necessary administrative work was carried out such as updates to databases, registration of new producers/sellers, etc. The SPMU also worked on the checklists and forms for its inspections, checklists with critical control points, templates of inspection reports and notifications for inspections at registered sellers/producers' premises which needed some updates.

The SPMU carried out technical/administrative duties and when appropriate, was in communication with other PHD units and relevant stakeholders mainly on the following topics in 2014:

#### ***Common bunt***

The SPMU continued to work on the following issues in connection with the fungal disease, common bunt - possible treatment and control on wheat, information provided by EU Member States and other countries/entities on the standards on and any treatments of grain applied by such countries, updates to the statistics of the SPMU with respect to the presence of common bunt in wheat and barley seed samples tested for purity by the SPMU from 2009 to date, evaluation and compilation of its findings on the disease following visits by the SPMU to all registered local cereal seed producers and sellers and actions/advice in connection with a cereal seed seller having a high % of common bunt in the sample submitted for the seed purity analysis.

#### ***Seed potatoes***

The SPMU worked on the following: review of the MCU draft measures for the prevention of spread of potato cyst nematode through infected soil through grading of potatoes for export, checks on the EU common catalogue of agricultural plant varieties and with the current EU law on Union grades were done by the SPMU on a list of varieties and grades of seed potatoes introduced from the EU, provision of information on the variety and origin of seed potatoes that has been found locally to be affected by scab, compilation of a document by the SPMU with photographs on a number of seed potato diseases, collection of information on the problems the sellers of seeds potatoes are facing and with regards to diseases encountered, varieties, trials with new varieties, etc., Union grades of seed potatoes and the current and new standards on the marketing of seed potatoes.

#### ***Importation of plant material***

Checks were held in connection with the importation of various varieties of seeds of vegetables (checks of varietal names in the EU Common Catalogues of varieties, updates on varieties that are in the process of being registered), the information to be provided in cases of consignments of one variety exceeding two kilograms and the use of vegetable varieties for rootstock production and importation of wheat from third countries during 2012 and 2013.

### ***Registration of varieties***

Communication continued with the relevant PHD units and local supplier on the registration of a squash variety in the national and EU Common Catalogue of varieties by such local supplier. Communication was also held with the Italian authorities with regards to distinctness, uniformity and stability testing supposedly being carried out in Italy on this particular squash variety and with the third party interested in registering the variety. Information on these issues is being gathered in connection with the Cabinet memo on the registration of varieties in Malta. The Cabinet memo on the local registration of plant varieties was updated by the SPMU in view of the new legislature and the draft EU law on the placing on the market of plant reproductive material.

### ***Introduction of plant material***

The SPMU provided information and advice on the legal obligations for the introduction of various fruit tree species from the EU for personal use and for ornamental use and on the introduction of seed potatoes for marketing in Malta.

### ***Seed repackaging***

The SPMU is working on the establishment of national rules on repackaging of seeds of agricultural plants and vegetables before being released on the local market.

### ***Local onion trial***

This onion varietal selection trial being held by the Agriculture Directorate with the aid of the SPMU continued this year. The onion bulbs were picked up from the trial plot, placed in numbered boxes and stored for the next cultivation season. Records were taken on what is encountered during the trial. Photos of each onion and of the whole onion lot were taken for record keeping. The storage of these onions and the way forward of this trial was the main issue discussed.

### ***Local seed production***

The SPMU was in communication with a local seed producer on isolation distances between field plots on which vegetable plants are being cultivated and intended for seed production and the consequences that might arise such as effects on the identity and purity of the variety resulting from foreign pollination.

The SPMU gathered all reports of each local seed producer and trader that were issued by the SPMU after conducting seed purity tests in connection with Agri-Environmental Measures 3 (AEM3) of the Rural Development Programme from 2009 onwards. Comparison was made between the annual seed purity results and the standards stated in the Legal Notice 331 of 2010 on the production and marketing of seeds of agricultural plants. The information gathered was utilised for the first visits that were held in 2014 by the SPMU at local cereal and fodder plant seed producers that sell seeds at national level. The basis for these visits is to gather information and knowledge on the local cereal and fodder seed production and on the fungal disease known as common bunt. During these visits, the SPMU gave relevant information to the seed producers. 11 field visits were conducted. The seed activity checklist used during these field visits was updated accordingly and the data

gathered was compiled and evaluated. The SPMU analyzed the weed seeds found in the cereal/fodder plant seed samples that were brought to the SPMU in 2014 by seed producers/sellers for the seed purity analysis in connection with the standards on noxious seeds specified in above mentioned national legislation on the marketing of seeds of agricultural plants.

### ***Fruit trees***

The SPMU was in frequent communication with the Surveillance and Inspectorate Unit (SIU) on the present situation on the labelling, controls, certification and marketing of citrus propagation material/trees belonging to various categories (especially CAC) that is obtained from other EU Member States and that is available on the Maltese market. The findings of the annual inspections by the SPMU and SIU were discussed. The SPMU reviewed all communications that were sent to the local suppliers by the SIU on the above matters. The SPMU continued communication with the Agriculture Directorate and the SIU regarding the labelling and certification of citrus trees which are being marketed at the government nursery. Queries also arose with regards to citrus trees being sold as ornamental plants without any certification and with the problem that these could also be infected with harmful organisms. The SPMU provided to the SIU the requirements to be met by these trees in accordance to the national legislation on the marketing of propagation material of ornamentals.

The SPMU worked on the new standards for the production and marketing of figs of the CAC category in accordance to the draft EU directive that has been voted upon favourably during the meeting of the Standing Committee on fruit trees (June 2014). This information has been requested in view of the phytosanitary problems being encountered in Malta on fig trees. During the year, samples of labels were received by the SPMU from the SIU in order to verify if these labels had all the relevant information requested by LN 223 of 2010 on the marketing of fruit trees. These were checked accordingly.

Comparison of all data collected by the SPMU and the Agriculture Directorate (Government Nursery) on the morphological characterisation of the Maltese June pear over the last few years was done by the SPMU in order to see if there are any discrepancies between the two sets of data. Following this, communication was held with this nursery. Communication was also held by the SPMU with the SIU regarding varieties of fruit trees assumed to be local and which are produced and marketed in Malta.

### ***Agri-environmental-measures and rural development funds***

As regards the PHD EAFRD project funded under measure 214 of the Rural Development Programme 2007-2013 on the support for the conservation of genetic resources in agriculture, the SPMU carried out a lot of administrative and technical work. More information is found in this report. (please vide 12. Projects)

The SPMU reviewed the draft letter that shall be sent by the Paying Agency to all farmers that have applied for financial aid under agri-environmental measure 3 of the Rural Development Programme. The SPMU is involved in seed purity testing with respect to this measure.

Six (6) old mulberry trees have been registered with the SPMU by a farmer during this month in connection with agri-environmental measure 9 of the Rural Development Programme that provides financial aid on old fruit trees that are in danger of genetic erosion. The SPMU updated the form and guidelines that are used for the registration of old fruit trees with the PHD mainly in connection with agri-environmental measure 9 of the Rural Development Programme.

## 8. SURVEILLANCE AND INSPECTORATE

### Registration

In 2014, there were 12 new entries in the Traders Registration as per LN 97/2004 Regulation 6. By the end of the year, the total number of importers, traders of various agricultural products and timber imports in the MOR register, amounted to 349; 235 files of which are active/re-active, 1 exempt file and 113 closed files.

### Certification

During 2014, 92 inspections took place in nurseries and garden centres in accordance with LN 97/2004 regarding the annual inspections for plant passports. A total of 153 plant passports and 35 export phytosanitary certificates were issued.

### Import checks

All consignments imported in Malta are subject to documentary checks. A total of 302 documentary checks took place in 2014. All 302 consignments were also inspected both for identity and for phytosanitary checks. In addition, all consignments containing any wood packaging material (WPM) which varies from dunnage to pallets were also physically inspected. These were inspected to check if they conform with the ISPM no.15 standards (WPM) and for the presence of Pine Wood Nematode and *Monochamus* spp. There were 140 inspections on wood packaging material accompanying commodities from third countries, 73 inspections on wood shavings imported from third countries, 15 inspections on WPM coming from EU Member States and 18 inspections in warehouses having both WPM coming from third countries and EU Member States. Throughout 2014 a total of 53 samples were collected for Pine Wood Nematode and no positive samples were recorded.

### Inspections, eradication and enforcement

In 2014, a number of inspections were carried out in relation to quarantine harmful organisms, and samples were collected. These were sent to the various laboratories within the Plant Health Directorate for further analyses.

The surveillance of Red Palm Weevil ensued in 2014. A total of 390 inspections were carried out, 258 carried out in Malta and in 132 in Gozo and Comino. 623 palms had to be destroyed, of which 474 palm trees were destroyed as a consequence of RPW, whereas 149 palm trees were destroyed but were not infected with the RPW.

Also as part of its enforcement endeavours, during 2014 the SIU continued to follow court cases and also issued warning letters and implemented enforcement measures accordingly with regards to unauthorised movement and removal of palm trees; destruction of *Citrus L.* plants, *Ficus carica* and *Olea europea* plants; missing documentation/phytosanitary certificates; unregistered activities; and interception of unregulated material. During the year 2014, the SIU logged 25 EUROPHYT notifications and 14 enforcement actions following interceptions in trade (both in internal market and plant material and or plant products introduced from Third Countries).

In 2014, 14 inspections took place with regards to *Tuta Absoluta* and tomato viruses. 9 inspections took place on the market place whereas 5 inspections were conducted in greenhouses and open fields.



## **9. LABORATORIES**

### ***Lab quality systems***

#### ***LIMS – Laboratory Information Management System:***

During 2014, the Plant Health Directorate continued to engage in the implementation of a Laboratory Information Management System (LIMS) which was commenced in 2013. This is in line with the preparations that the Directorate has been undertaking in preparation for the accreditation of the laboratories. In 2014, various correspondence and meetings ensued with parties concerned and PHD officials carried out testing on the live BIKA system.

Training on the BIKA LIMS system was provided by the supplier to various PHD officials during 2014. PHD officials carried out testing of the BIKA system and compiled test cases and incident reports, which were forwarded to MITA accordingly.

Presently, the project has been put on hold because the third party concerned was not able to deliver a proper system applicable to the whole business process related to the Plant Health Directorate. This project is expected to resume in 2015.

#### **Plant Health Diagnostic Unit**

The diagnostic laboratories within the Plant Health Directorate are responsible for the detection and identification of plant diseases caused by plant pests and pathogens with special reference to Council Directive 2000/29/EC and the Plant Quarantine Act and its amendments. Diagnostic techniques implemented in the laboratories are in accordance with EU Directives and EPPO standards where applicable.

In 2014, specifications for a call for quotations / tender for outsourcing of diagnostic tests during 2015 were drafted. These specifications were drafted taking into consideration the 2015 pest survey programme submitted to the EU and other tests included in the Directorate's Workplan.

In 2014 a total of 1,404 samples were received at the lab and a total number of 1,368 were tested in relation to the following areas of diagnosis – virology, bacteriology, mycology, entomology, and nematology. A more detailed breakdown of the number of samples collected and tested in relation to the target organism and the number of positive or suspect samples detected can be found in Annex 1.

#### **Seed Testing Laboratory**

In 2014, the Seed Testing Laboratory continued seed testing for purity determination. This is being carried out in connection with the use of high quality local seeds of cereals and fodder plants for which financial aid is being given to local farmers under agri-environmental measure 3 of the Rural Development Programme 2007-2013. During the same test, the presence of the fungal disease, common bunt is checked for. The number of samples received by the laboratory during the year 2014 was 165 commencing from June to November of 2014, with the same amount of tests carried out.

#### **Soil and Irrigation Water Laboratory**

The main aim of the Soil and Irrigation Water Laboratory is to provide a service to farmers and the general public through the testing of soil and irrigation water in support of fertiliser planning and irrigation control.

In 2014, the laboratory received a total of 452 samples which consisted of 317 soil samples and 135 water samples and conducted a total of 3,005 tests. These tests include routine and non-routine analysis for various nutrients and characteristics of soil as well as irrigation water quality

## Tissue Culture Lab

### *Micropropagation of Ornamental plants*

In 2014, micropropagation of the ornamental plants, namely Boston ferns and African violets, was continued which necessitated regular transfers. During this year, a total of 80 Boston ferns and 1504 African violet plantlets were produced and acclimatised in the glass house. Attempts at *in vitro ex situ* conservation of local tulips and orchids were carried out throughout this year while regular globe artichoke transfers were carried out, however these are being kept in low quantities as they are being retained as stock. Various trials were also carried out on seeds belonging to the traditionally locally grown plant, green leopard plant (*Farugium japonicum*). However such trials were unsuccessful due to the growth of moulds and a lack of seed germination. As a result, trials had to be postponed to the following year as seeds are only available for short periods of time.

### *Sanitation of local varieties*

Clonal selection and sanitation of local citrus species through somatic embryogenesis was continued throughout the year 2014 at the Tissue Culture Lab. The trials which had commenced on three local lemon varieties and three local orange varieties in the year 2013 were continued as was the trial which had commenced during the year 2012 on three local lemon varieties. The aim of such trials is to attempt to valorise local citrus varieties. During this year, trials on acclimatisation of the citrus plantlets obtained through somatic embryogenesis were stepped up and a total of 2,388 lemon plantlets were transferred from the above-mentioned lab to the glasshouse for acclimatisation. As reported in scientific papers, the orange trees have proven to be more difficult to work with so much so that a total of 4 orange plantlets were transferred to the glasshouse for acclimatisation.

## 10. ADVISORY AND INFORMATION SERVICES

During 2014, the Plant Health Directorate continued to assist farmers and the general public on a number of phytosanitary issues. Most queries are resolved by the telephone, by email and others investigated on site and samples taken if and when necessary.

Two press releases were published during 2014:

	<u>Date</u>	<u>Topic addressed</u>
PR 140711	7th April, 2014	Guidelines for palms to be used during Palm Sunday (Hadd il-Palm)
PR 141412	23rd June, 2014	Press Release regarding palms to be used by fishermen

A number of leaflets and communications on plant health, pests and diseases of local importance were also updated and published during this year as part of PHD's continuous dissemination of information.

The Directorate also took on board the EPPO don't risk it campaign, in order to create awareness amongst passengers/travellers about the possibility of transmission of pests and diseases in personal luggage.

PHD Officials also participated in a number of radio programmes with regards to (i) *Tuta absoluta*; (ii) Guidelines to marketing requirements and plant passports; Grapevine *Flavescence Doree* and the role of the Monitoring and Control Unit within the PHD; (iii) the role of the Seed and Propagation Material Unit within the PHD namely, the quality of seed and plant propagating material, legislation, origin and controls concerning quality of seed and plant propagating material, plant variety rights and the importance of the marketing sector of plant propagating material; (iv) Effective control of the Red Palm Weevil; (v) Status of Citrus *Tristeza* Virus (CTV) in Malta; (vi) *Xylella fastidiosa* on Olive Trees; (vii) Colorado Beetle; (viii) Inspections on potatoes and Brown Rot/Ring Rot disease.

During 2014, the Plant Health Directorate has organised informative talks, meetings and presentations on plant health in general as part of ongoing awareness, informative and educational campaigns. The PHD also liaised with Local Councils for a more effective dissemination of information.

The PHD laboratories hosted a number of visits by students from various local primary and secondary schools, colleges and post-secondary institutions during this year. During such visits, students were given a general overview of the work carried out on in the respective laboratories visited. Trials on grapevines and on citrus by MSc students were carried in the controlled environment compartment of the glasshouse at the Plant Biotechnology Centre in Lija. Assistance and supervision was given by the Soil and Irrigation Water Lab and Tissue Culture Lab officials to third parties and 2 students who used the facilities of these laboratories in order to conduct soil testing in preparation of EU/local projects and dissertations. Nine (9) students also carried out testing/work experience at the Soil and Irrigation Water Lab, Tissue Culture Lab of the PHD for their studies as part of the course they are following at secondary, post-secondary and tertiary institutions.

Five (5) students from MCAST carried out a work experience within the various units of the Plant Health Directorate.

Six (6) University students and one (1) student from Sixth Form also carried out their summer work experience with the PHD.

### **Parliamentary Questions**

During 2014, the Plant Health Directorate received twenty-nine (29) Parliamentary Questions. These mainly focused on palm trees; Red Palm Weevil; importation of trees; agricultural products - exportation, border inspections and experiments; experiments on new products; phytosanitary certificates; fig tree borer; EU funding applications; fees and tariffs; protection of trees; requests for trees; scope of the publication of Legal Notice 453 of 2013 and persons employed in the agricultural sector. Four of the PQ's received were not relevant to the PHD.

## **11. PROJECTS**

### **PROJECT ON THE STUDY AND SUSTAINABLE CONSERVATION OF VARIETIES OF LOCAL PLANTS**

After signing the Grant agreement for the implementation of the project on conservation varieties through EAFRD (M214) in April 2013, relative works related to this project continued throughout 2014. This was possible after the Directorate successfully secured funds (about 2.5 million euro) for such a project. An area presently forming part of the Plant Health Directorate in the limits of Tal-Kmand between Lija and Attard will be converted into a public garden. This area which measures 4,000 square meters is being divided as follows:

- Construction and finishing of the visitor's centre which shall also include the seed testing laboratory, offices and the garden;
- Construction and the extension of the Plant Health Diagnostic Unit laboratories;
- Cultivation of crop wild relatives and traditional local plant species;
- Creation of habitats where wild relatives are known to grow in the wild;
- Sanitary assessment of the chosen citrus trees and the resulting plantlets;
- Clonal and sanitary selection and ex situ conservation of local citrus varieties;
- Exploration, documentation, collection and ex situ conservation of local crop wild relatives;
- Exploration and documentation of local landraces and varieties of agricultural plants and vegetables.
- Collection of knowledge and plant material, technical examination and conservation of plant material of local landraces and varieties of agricultural plants and vegetables.

This designated area, besides being divided into different typical Maltese habitats dedicated for the conservation and studying of plants that form part of the local eco-system, makes it also possible for visitors to use the place for recreational purposes. The extension of the present diagnostic laboratories is intended to consolidate all the diagnostic labs in one location. The construction of a seed quality laboratory and visitors' centre will serve as a catalyst for further scientific study on the subject and the clonal and sanitary selection of local citrus varieties.

A considerable amount of administrative (mainly on the drafting of tenders/quotations/forms/interim reports/evaluation reports/presentations, evaluation of bids, appeals following adjudication of tenders and communication with suppliers regarding the delivery/installation/commissioning of apparatus) and technical work (mainly sample collection, lab work including in vitro sanitation/chemical analysis/phytosanitary testing, morphological characterisation, acclimatisation in the glasshouse, map design, research for scientific literature, installation of services in offices and labs, collection of specifications, compilation of descriptors and drafting of standard operating procedures) on all of the above mentioned subjects was carried out by various PHD administrative, scientific and technical officials on this EAFRD project throughout the whole year.

## **12. PLANT BIOTECHNOLOGY CENTRE MANAGEMENT**

### **FACILITIES MANAGEMENT**

In 2014, several maintenance works and services were carried out at the PBC premises (*Tal-Kmand, Lija*) related to the upkeep of the laboratories, offices, glasshouses and ancillary equipment.

Throughout the year routine work such as general cleaning, cleaning of benches and pots, application of pesticides and fertilisers, weeding, pruning and propagation were carried out in the glasshouses, screen houses, shade house, mother block and outdoor areas. Routine

works for the up keeping of the PBC grounds formed also part of the work carried out, including general cleaning and maintenance, caring of the various plants and trees situated around the premises, weeding and cultivation of fields. A continuous production of herbaceous indicator and indexing plants for virus diagnosis was continued throughout the whole year. The production and upkeep of herbaceous indicator mother plants which are kept for seed collection was also continued during 2014. Cucumbers and tomatoes were sown to be used for mechanical transmission. *Phaseolus vulgaris*, *Chenopodium quinoa* and *Chenopodium amaranticolor* were also sown in 2014.

Ornamental plants were continually cared for with regular applications of insecticides where necessary to control pests. Continuous conventional propagation of various ornamental plants was also carried out within the glass house. Other work consisted in the acclimatisation of Ferns, Citrus plantlets and African violets transferred from the Tissue Culture laboratory.

The screen houses containing healthy and infected plants/trees required regular irrigation, pruning, weeding, application of pesticides and drenching with fungicides for the control of pests and fungal diseases.

### **SALE AND DONATION OF PLANTS**

In 2014, the PHD sold a total of 60 plants amounting to €337.50. In addition, a total of 1,326 ornamental plants were donated to various entities of the Ministry, governmental organisations and other non-governmental organisations. Moreover, 157 plants were lent to various governmental and non-governmental organisations for the various activities held throughout the year.

### **RISK ASSESSMENT WITHIN THE PBC**

During 2014, the Risk Assessment which had already commenced within the PBC continued to be implemented and monitored as necessary as in previous years.

### **OTHER ACTIVITIES**

Various consultation and periodical meetings between Director PHD, FMMU, contractors, mechanical and electrical engineers, project manager and architects took place in 2014 regarding the commencement of works on the new building and visitors' centre in connection with the project on the conservation of local varieties through the EARFD. (Please vide 11. Projects). Construction work on the watchmen's room has started in 2014. Other meetings, consultations and coordinating of work regarding the preparation for the publication of various tenders in connection with the EAFRD project also took place during 2014.

In 2014, works on the restoration and maintenance of one of the reservoirs at the Plant Biotechnology Centre in Lija dating back to the 16<sup>th</sup> century resumed again as the issue of substantial amounts of water being lost was still not fully resolved. Various correspondence and meetings took place throughout 2014 in order to establish the way forward for the optimum restoration of this reservoir of such historical value.

Coordination of works on the repair of the collapsed boundary wall at the PBC continued in 2014. Works on the rubble walls within the PBC were finalized with further restoration on new areas required and planned accordingly in the near future.

Works regarding the upgrade of the Climatic Control of the Propagation Facility at the PBC have commenced in 2014. These included wiring of the new system replacing the previous

one, purchasing of a PC and successful installation of the required software, and further correspondence to also purchase and air-conditioning unit and automation of shading.

## **13. AUDITS**

### **Internal Audit**

During 2014, an internal audit was conducted to evaluate the official controls carried out by the Surveillance and Inspectorate Unit (SIU) on the importation of plants, plant products and other objects from third countries. During the audit, controls carried out by the SIU on importation of wood (including wood packaging material) from USA, including checks at the place of destination were observed. An audit report was compiled by the auditors and an action plan to address the findings arising from this audit was compiled by the SIU.

### **EU Audit – Red Palm Weevil Solidarity Fund**

An EU Audit was conducted in 2014 with regards to the Red Palm Weevil Solidarity Funds for years 2008-2009 and 2010-2011. All related correspondence and documentation was compiled by various PHD Officials involved in preparation for such an audit, and various meetings took place so as to ensure that everything was in order.

## **14. OPERATIONAL AND ADMINISTRATIVE**

### **Human resources development**

A number of officials within the Plant Health Directorate attended courses, both locally and abroad in a wide range of topics, including EU affairs; EU Structures; *Taħrig fil-lingwa Maltija*; Windows 8; registry procedures; ethics; principles of equality; ECDL; training supervisory skills; how to organise and minute meetings; writing reports; The Public Service Management Code - Conditions of Service; First Aid courses; Training Programme for Newly Appointed Executive Officers; Training Programme for Newly Appointed Assistant Principals and Data Protection Training.

Technical staff also attended a number of courses and meetings specific to the area under their responsibility, these included courses organised by Better Training for Safer Foods (BTSF) under DG SANCO.

In-house training on Laboratory Information Systems (LIMS) was organised in conjunction with Seasus and MITA; in-house training relating to the Plant Health Malta Official Register (MOR); and in-house training organised by SIU on Citrus Pests and Diseases.

### **Procurement**

The following is a list of tenders as published on the Government Gazette during 2014:

- Quot. No. 2/2014 – Supply and Delivery of ELISA Diagnostic Kits for the PHD
- MSDEC Advt. No. 3/2014 – Services of plant health scientist for the project on the study and sustainable conservation of varieties of local plants
- Quot. No. MSDEC 5/2014 - Supply of uniforms for the Surveillance and Inspectorate Unit within the Plant Health Directorate

- Advt. No. MSDEC 8/2014 - Services of a technician for the project on the study and sustainable conservation of varieties of local plants
- MSDEC Advert 10/2014 – Supply, delivery, installation and commissioning of a mobile office for the project on the study and sustainable conservation of varieties of local plants
- MSDEC Advt No. 30/2014 - Provision of public relations services for the EU Life Saving Buskett Project executed by the PARK and Initiates Directive
- MSDEC Advt No. 31/2014 - Provision of silt/debris flow monitoring services for the EU Life Saving Buskett Project executed by the PARK and Initiates Directive
- MSDEC Quot No. 10/2014 - Supply and delivery of chemicals and consumable for diagnosis for the PHD
- MSDEC Quot No. 11/2014 - Provision of Occupational Health and Safety Supervision at the building site that also includes finishing works at the Plant Biotechnology Centre, Lija
- \*MSDEC Advt. No. 57/2014 - Provision of environmentally friendly cleaning services at the premises of the PBC, Lija
- MSDEC Adv. 57/2014 - Provision of environmentally friendly cleaning services at the premises of the PBC
- MSDEC Adv. 58/2014 - Services of two scientists for the project on the study and sustainable conservation of varieties of local plants.
- MSDEC Adv. 63/2014 - Provision of theoretical and hands-on training on plant diagnosis for the study and sustainable conservation of varieties of local plants.
- MSDEC Adv. 72/2014 - Supply, delivery, installation and commissioning of a mobile office and furniture produced with environmentally friendly materials and processes for the project on the study and sustainable conservation of varieties of local plants.
- Advt MSDEC No. 37/2014 - Upgrading of insect-proof screen house at the PBC
- Advt MSDEC No. 76/2014 - Supply, installation, certification and commissioning of a passenger lift at the PBC, Lija.
- Advt MSDEC No. 78/2014 - Provision of Theoretical and Hands on Training on Plant Diagnosis for the Project on the Study of and Sustainable Conservation of Varieties of Local Plants
- Advt MSDEC No. 83/2014 - Felling, removal from site, transportation and disposal of palm trees infected with RPW in Malta, Gozo and Comino in an environmentally friendly manner as and when required.
- Advt MSDEC No. 85/2014 - Upgrade of a plant growth room and a plant thermotherapy using environmentally friendly materials at the PBC Lija for the Project on the Study of and Sustainable Conservation of Varieties of Local Plants

- Advt MSDEC No. 85/2014 - Services of an educational material creator and coordinator for the Project on the Study of and Sustainable Conservation of Varieties of Local Plants
- Advt. No. MSDEC 102/2014 - Upgrade of a plant growth room and a plant thermotherapy room using environmentally friendly materials at the PBC, Lija for the project on the study and sustainable conservation of varieties of local plants.
- Advt. No. MSDEC 103/2014 - Theoretical and hands on training on the conservation methods of plants, on seeds sampling/seed quality testing and on the sanitation of plants for the project on the study and sustainable conservation of varieties of local plants.
- Advt. No. MSDEC 109/2014 - Supply, delivery installation and commissioning of a growth chamber for the project on the study and sustainable conservation of varieties of local plants.

In 2014, various meetings between PHD officials concerned and EAFRD Project Manager were held with regards to the tenders on technical expertise in terms of requirements and timing of expert missions and related documentation; specifications relating to Laboratory accreditation and Diagnostic testing; specifications for the procurement of various laboratory equipment for the diagnostic laboratory such as a fume cupboard, biosafety cabinet , ice making machine, cupboard for the storage of chemicals, a balance table and an analytical balance for the tissue culture laboratory; and specifications for the growth chamber and ultrafreezer. Tender specifications for these expert missions and laboratory equipment were drafted by PHD officials. Evaluation Reports were also drawn up for the services of a Scientist for the EAFRD project and for the services of an Education Material Creator and Coordinator

### **Revenue**

During 2014, the Plant Health Directorate had a total income of € 20,840.87 from laboratory testing, sale of plants, import inspections and internal inspections, and issuance of export and re-export phytosanitary certificates.

### **Customer Care**

As in the previous years, in 2014 the PHD continued with its endeavours to assist the general public, stakeholders and handling of customer complaints. Generic queries and calls were redirected to respective sections for feedback and advice and dealt with as necessary in a prompt and effective manner.

### **Website of the Plant Health Directorate**

In 2014, the website of the Plant Health Directorate was updated as necessary from time to time. These updates included the uploading of news items; Legal Notices; notices and guidelines regarding plant health issues; PHD leaflets; as well as implementing amendments as necessary.



**SHARLO CAMILLERI**  
**Director - Plant Health**