
Plant Health Directorate

I. BACKGROUND

The Plant Health Directorate is the National Plant Protection Organisation set up within the Veterinary and Phytosanitary Regulation Department under the Ministry for Resources and Rural Affairs 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. 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.

2. INTRODUCTION

In 2012, the Plant Health Directorate (PHD) persisted with the implementation of measures for the prevention and spread of harmful organisms within the community.

In July of this year, the Plant Health Directorate started the process of updating the Plant Health Malta Official Register (MOR). This process consisted of calling all those who are already registered with the Directorate to update the information contained in the MOR as per the original registration form. This new information will help to better conduct any phytosanitary inspections as are deemed necessary so as to ensure more control to further prevent the spread of harmful pests and to promote appropriate measures for their control.

During 2012, the PHD pursued with its fight against the Red Palm Weevil adopting various measures and updating of legislation for the monitoring and the inspections of palm trees, and also continued with the eradication of the pest through palm felling.

The PHD also continued with its endeavours to continue following preventive steps for an effective control strategy against the eradication of the *Citrus Tristeza* Virus especially in the island of Gozo.

3. LEGISLATION

A number of directives, regulations and decisions that have been adopted during this year were either transposed or adopted directly.

A Draft Legal Notice regards the Control of the Red Palm Weevil (Amendment) Regulation, is currently in the process of being adopted after the necessary legal vetting is finalised. This LN clarifies the movement of palm trees from within Member States, and from Third Countries to Malta.

4. EU AFFAIRS

The Plant Health Directorate continued to participate in EU meetings for discussion of new proposals of EU legislation and the review of the Community Acquis on plant health and plant reproductive material. Instructions notes, comments and justification of country positions and reports were drawn up. A number of officials attended the meetings organised by the EU Commission and other EU structures.

Communications

Feedback on various issues that fall under the remit of the Plant Health Directorate was sent to the EU Commission throughout the year. In addition, the PHD continued to report on a number of directives and decisions in line with its reporting obligations.

Notifications

During this year 21 notifications were sent to the European Commission through the online EUROPHYT database. These notifications were related to infringements of wood packaging material, which were not stamped in accordance with ISPM No. 15 Standard; finding of PepMV and missing information on the phytosanitary certificates and plant passports. Apart from these, during this year 4 notifications were also sent according to article 16 (1) and (2) of Council Directive 2000/29. These dealt with PepMV, the presence of the *Rhynchophorus furrugineus* (Oliver), *Potato Spindle Tuber Viroid* on *Burgmansia* spp. and the presence of *Spongospora subterranean*.

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 Documentation

A number of documents related to EU Affairs have been received by the Plant Health Directorate and which have been reviewed throughout the year and comments/updates/clearance/instruction notes/briefing notes were forwarded when requested. These included, among others, the varietal names that have been accepted in various supplements to the 30th complete edition of the Common Catalogue of varieties of agricultural plants and vegetables; the inclusion of plant health and plant reproductive material under the Regulation (EC) No 882/2004 on official controls; the review of the European Commission Working Paper No. 12 on the rules governing the financing of official controls in connection with the review of the legislation on seeds/propagation material and Regulation (EC) No 882/2004.

5. MULTILATERAL, INTERNATIONAL AND NATIONAL AFFAIRS

The Plant Health Directorate continued to respond to questionnaires and take part in consultations on draft standards and other items circulated for members' opinion by the International Plant Protection Convention Office, the European and Mediterranean Plant Protection Organisation, 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 Plant Protection Board, the Pesticides Control Board, the Food Safety Commission, the Scientific and Technical Committee (National Certification Schemes) and the Food Advisory Service Registration Board.

6. DIAGNOSIS AND CONTROL

Monitoring and Surveys

As in previous years, in 2012, the Plant Health Directorate continued its programme of annual surveys 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 2012 a total of 23 surveys/monitoring were carried out in relation to the following areas of diagnosis – virology, bacteriology, mycology, entomology, and nematology covering approximately 522.87 hectares during which a total of 3,390 samples were collected and a total of 3,592 tests were performed. A more detailed list of the surveys conducted in 2012, including details of the commodity surveyed, the inspection sites, the number of inspections carried out and the area covered, as well as the number of samples collected, is found in Annex I.

Outbreak of Pests

Gozo was defined as a demarcated area for Red Palm Weevil in October 2012.

Contingency, Emergency and Eradication Plans

During 2012, action Plans for the following pests and diseases have been drawn up and/or updated: Fig Borers, and Red Palm Weevil which was also submitted to the Commission.

Control of Red Palm Weevil

As in the previous years, the control against Red Palm Weevil continued. According to continuous monitoring carried out in Malta, the pest is still active but under control. Nevertheless, in October 2012, the pest was also intercepted on the island of Gozo.

Citrus *Tristeza* Virus Contingency Plan

During 2012, the Plant Health Directorate concluded the contingency measures set up in March 2009, with the aim of controlling the spread of *Citrus Tristeza Virus* (CTV) in the

areas of San Blas and Dahlet Qorrot Valleys in Gozo. These areas were put under contingency measures after a number of citrus trees were confirmed infected with CTV. During 2012, intensive monitoring of the area continued together with laboratory testing and eradication of CTV infected trees. A total of 1976 trees were sampled in this area during 2012.

Tuta Absoluta

In 2012, the Plant Health Directorate pursued with its efforts to fight the *Tuta absoluta* pest. The dissemination of information and further education about this pest continued either through direct contact or through the use of information material such as leaflets about the pest and its control, posters and published articles. The PHD also pursued with the monitoring inspections for *Tuta absoluta*.

7. SEEDS AND OTHER PROPAGATION MATERIAL

Production and marketing of plant material

During this year, 84 physical and documentary inspections (a number of which were follow-ups) were carried out on plant material being produced and/or marketed in Malta and Gozo. On the whole, minor shortcomings were noted. Information was gathered in one of the visits on the viewing of the tomato seed extraction process. The detailed reports on each inspection were drafted and forwarded to the relevant supplier/producer.

Other visits were carried out to particular establishments in order for the Seeds and other Propagation Material Unit to gather information on various aspects of their current and future activities related to the production and trade.

Work was carried out on the development of a registration system of new varieties of agricultural plants and vegetables at national level and the testing of new varieties for distinctness, uniformity and stability and included the drafting of a cabinet memo on the approval of the procedure and cost of the registration process.

During this year, the relationship between the registration by the Plant Health Directorate of persons/entities involved in the production and marketing of propagation material and plants and the trade licences that are issued in Malta was tackled. Liaison with the Commerce Department on the development of collaboration for the registration of plant propagation traders was held.

The marketing of seeds of vegetables that belong to local varieties in view of the implementation of the national legislation on the marketing of local conservation varieties of agricultural plants and vegetables was worked upon. Throughout the year, six letters covering a total of 10 different crops were sent to registered seed traders/producers for the notification of seed production of local varieties. A total of 3 replies were received.

Agri-measures and rural development funds

Agri-environmental measure 3

Seed samples have been analysed for purity in connection with agri-environmental measure 3 of the Rural Development Programme 2007-2013 and the respective test reports were issued. Relevant farmers have been made aware if a significant number of weed seeds and the

presence of the fungal disease (common bunt) have been noted in their samples during testing.

Agri-environmental measure 9

During this year, 1,162 old carobs, olives, mulberry and citrus trees have been registered with the SPMU by 6 farmers/entities during this year 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.

Measure 214

Administrative work on projects submitted under this measure was carried out this year as indicated in other parts of this report (Vide 12. Projects - Project on conservation varieties)

8. SURVEILLANCE AND INSPECTORATE

Registration

During 2012 there were 19 new entries in the Traders Registration as per LN 97/2004 regulation 6. Thus the total number of importers, traders of various agricultural products and timber imports now amounts to 308.

Certification

During 2012, 126 inspections took place in nurseries and garden centres in accordance with LN 97/2004 regarding the annual inspections for plant passports. A total of 1,138 plant passports and 32 export phytosanitary certificates were issued. There were 3 re-export phytosanitary certificates issued during 2012.

Market Surveillance

All consignments imported in Malta are subject to documentary checks. A total of 284 documentary checks took place in 2012. All 284 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 *Monoctonus* spp.

Inspections, eradication and enforcement

During 2012, a number of inspections were carried out in relation to quarantine harmful organisms, and samples collected. These were sent to the various laboratories within the Plant Health Directorate for further analyses.

The surveillance of Red Palm Weevil continued and there were 267 inspections of which 183 were in private residences, 61 in public areas, 21 in Government entities and 2 MGOZ. During these visits, the stakeholders were informed about pesticide treatment which could be utilized for control purposes. Inspections were carried out during the different stages of growth. A total of 661 palms had to be destroyed as a consequence of red palm weevil. In total 189 enforcement letters were sent to various individuals for palm removal.

Also as part of its enforcement endeavours, during 2012 the SIU continued to follow court cases and also issue warning letters and implemented enforcement measures with regards to the illegal felling and movement of palm trees, movement of other plants without a prior written approval from the PHD, surveillance on palm planting to ensure that all the planted palm trees have the required plant passports, seed varieties which were not in the EU common catalogue and with regards to infected citrus trees, unregistered activities and infected fig trees.

During 2012, 52 inspections took place with regards to *Tuta Absoluta* and tomato viruses. 14 inspections took place on the market place whereas 38 inspections were conducted in greenhouses and open fields.

In 2012 the Plant Health Directorate did not issue any destruction notices to destruct the infested plant material in accordance with Government Notice No. 831 (Procedures for the Destruction of Tomato Plant Material in Fields and Greenhouses), since such infestation was not higher than 50 percent. This also included market places since no infected material in accordance with Government Notice No. 830 (Procedures for Traders for the Destruction of Infested Tomato Fruit) was found.

Update of Plant Health Malta Official Register

This year the Plant Health Directorate has initiated the update of the Plant Health Malta Official Register according to Government Notice 774. Up till the end of this year, the Register contained 308 registered activities and out of these, 198 activities centres had their information updated. This exercise is to be continued during the coming year.

9. LABORATORIES

Lab quality systems

LIMS – Laboratory Information Management System:

During 2012 the tender of “Procurement of a Laboratory Information Management System relating to Plant Health PE08/010” was awarded and a contract was signed with MITA as consultants and project managers.

Good laboratory practice:

Draft guidelines have been drawn up regarding Good Laboratory Practice across all PHD Labs. These are being discussed with all the Units and an SOP based on these guidelines is expected to come into force in 2013.

Accreditation:

An extensive exercise has been carried out and a GAP analysis was compiled regarding the status of the diagnostic laboratories within PHD vis-à-vis accreditation according to ISO standards.

Lab fees:

The Plant Health Directorate continued to work on the cabinet memo on the application of fees for the analysis of samples and other services at the laboratories of such Directorate.

Diagnostic Laboratories (Harmful Organisms)

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 2001. Diagnostic techniques implemented in the laboratories are in accordance with EU Directives and EPPO standards where applicable.

During 2012 a total of 3,390 samples were collected and a total of 3,592 tests were performed 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 2012, 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. The number of samples received in the first batch and that were submitted between September 2011 and May 2012 and amounted to 196 on which 196 tests have been carried out. The second batch of seed samples started to be submitted in July 2012 until end of August 2012. An extension was granted for a week in October 2012. From July to October 2012, 213 samples were submitted and 213 tests were 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 2012, the laboratory received a total of 385 samples which consisted of 235 soil samples and 150 water samples and conducted a total of 3,095 tests. These tests include routine and non-routine analysis for various nutrients and characteristics of soil as well as irrigation water quality (salinity).

Tissue Culture Lab

Micropropagation

Ornamental plants:

Micropropagation of the ornamental plants, Boston ferns and African violets was continued during 2012. During this year, a total of 195 Boston ferns and 1,552 African violet plantlets were produced and acclimatised in the glasshouse. *In vitro ex situ* conservation of local tulips and orchids was also continued throughout the year.

Globe artichokes:

The trial on the micropropagation of globe artichokes (*Cynara scolymus*) was continued during the first half of this year after which a total of around 1,100 plantlets were produced by the Tissue Culture Lab. 300 of these plantlets were transferred to rooting medium and an acclimatization trial took place locally.

Sanitation of local varieties

With regards to sanitation of local citrus species through somatic embryogenesis, trials were carried out on three local lemon varieties. Some explants responded well and callus, followed by somatic embryogenesis was produced.

Communication was held this year between the Plant Health Directorate, the Agricultural Directorate and the Viticulture Unit so as to discuss the way forward with regards to the attempted sanitation of the local vine accessions of *Girgentina* and *G'ellegza* which form part of an FP7 project on the valorisation of the vine varieties of Malta. An acclimatization trial of 8 *Girgentina* and 8 *G'ellegza* vine plantlets was carried out.

10. ADVISORY AND INFORMATION SERVICES

During 2012, 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 when necessary.

In addition, the Plant Health Directorate has organised meetings and information seminars in 2012 for stakeholders as part of awareness and information campaigns.

Officials also participated in a number of local television and radio programmes.

A number of press releases and notices were published during 2012 to solicit further the control of harmful organisms. These include:

	<u>Date</u>	<u>Topic addressed</u>
PR 0440	27 th February, 2012	Statement by the Plant Health Directorate concerning <i>Citrus Tristeza Virus</i> (CTV)
PR 0666	22 nd March, 2012	Guidelines for palms to be used during Palm Sunday (<i>Hadd il-Palm</i>)

PR 1532	7 th July, 2012	Steps for an effective control strategy against the tomato leafminer moth (<i>Tuta Absoluta</i>)
PR 1782	10 th August, 2012	Press Release regarding palms to be used by fishermen

In 2012, the Plant Health Directorate also updated and published a number of leaflets on plant health pests and diseases of local importance.

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.

Five (5) students also carried out testing/work experience at the Soil and Irrigation Water Lab and Tissue Culture Lab for their dissertations/ and projects/studies as part of the course they are following at secondary and post-secondary institutions.

In summer, four other University students also carried their work experience with the PHD.

Parliamentary Questions

During 2012, the Plant Health Directorate received eighteen (18) Parliamentary Questions. These mainly focused on the importation of trees in general from foreign markets, different species of trees imported in Malta, phytosanitary inspections on trees, potato seeds, red palm weevil, registered flower growers in Malta, various experiments on plants at the Plant Biotechnology Centre, diseases, exportation of potatoes and other agricultural products, and fruit trees.

11. COMMUNICATION AND CONSULTATION

During 2012 the Plant Health Directorate continued taking part in the evaluation of the Community Plant Health regime, on the Community *Acquis* on the marketing of seeds and other plant propagation material and the Community Plant Variety Rights Regime commissioned by DG SANCO.

The Directorate also conducted consultation with relevant stakeholders on the draft Legal Notice regards the Control of the Red Palm Weevil (Amendment) Regulation. The scope of this consultation was to get feedback from the stakeholders on how to better clarify the issue of movement of palm trees from within Member States, and from Third Countries to Malta.

12. PROJECTS

Project on conservation varieties

The Plant Health Directorate submitted a project under measure 214 of the Rural Development Programme 2007-2013 on the support for the conservation of genetic resources in agriculture.

An area that presently forms part of the Plant Health Directorate in the limits of *Tal-Kmand* between *Lija* and *Attard* will be converted into a public garden through a project that will cost around €2.7 million. The funds to be allocated towards this project are through the European Agricultural Fund for Rural Development (EAFRD). The 4,000 square metre area will be divided into different typical Maltese habitats dedicated for the conservation and studying of plants that form part of the local eco-system. Visitors will be able to learn more about the different varieties of plants and trees while at the same time they can use the place for recreation. The new project will also include new laboratories, offices, a visitors' centre and a place where to hold seminars and meetings. MEPA issued a full development permit for this project in October. The project is expected to take eighteen months to be completed.

Life+ project on nitrates

The PHD was also involved on MRRA's Life+ project on information and communication campaign for the proper use and management of nitrates in agriculture and livestock. A considerable amount of time was spent this year on the lab items to be purchased, purchase of soil test kits, calls for position of clerk/interviews, evaluation boards for the tenders and call for quotations for the collection of soil samples for testing/lab analysis of soil samples/purchase of soil test kits/purchase of chemicals/consumables/interpretation of results.

13. PLANT BIOTECHNOLOGY CENTRE MANAGEMENT

Facilities Management

During 2012 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.

Work on cleaning one of the reservoirs dating back to the 16th century at the PBC has been carried out in 2012 due to the fact that a substantial amount of water was being lost. During the cleaning exercise, it was noted that the structure needs extensive maintenance and repair. In this regard an architect from the Maintenance directorate was called for surveying this reservoir in order that a tender is issued for the repair works required.

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 2012.

Wheat sown in the fields forming part of PBC was later harvested and donated to *Ghammieri* farm.

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

Globe artichokes, Vines, Ferns 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 2012 the PHD sold a total of 70 plants amounting to €377.50. In addition, a total of 1,104 ornamental plants were donated to various entities of the Ministry, governmental organisations and other non-governmental organisations. Moreover, 195 plants were lent to various governmental and non-governmental organisations for the various activities held throughout the year.

173 straw bales were donated to the Agriculture, Directorate; 310 *Chaemaerops* seedlings were donated to Naturetrust Malta while 110 *Tamarisk* seedlings were donated to the PARK's Directorate.

Participation in Fairs

In 2012 the PHD participated in the following fairs organised by the MRRA:

- *Festa tal-Halib*
- Flower, Arts & Crafts Festival
- Food Day held at *Ghajn Tuffieha*
- Christmas Village – *Ta' Qali*

During these fairs plants propagated and grown at PBC were exhibited and sold.

Risk Assessment within the PBC

Following the commencement of a Risk Assessment within the PBC in 2010 and follow up in 2011, during 2012 the Directorate continued to take action and implement numerous necessary changes as requested in the Risk Assessment report. These included placing of various safety signs, procurement of new filters for face masks, disposable gloves and raincoats used for pesticide application, installation of railings to staircase and ramp, all staircases and ramps were rendered non-slip, replenishment of first aid boxes, servicing of existing fire extinguishers, further distribution of ergonomic mouse mats, laptop risers, tower stands and foot rests.

Actions in response to the Risk Assessment reports which were drawn up for the Border Inspection Post at the Malta International Airport and the *Ghammieri* premises in 2011 were commenced during 2012. These included placing of safety signs, fire extinguisher, changing of electric plugs and elimination of socket outlets, replenishment of first aid boxes, organisation of PC cables and identification of assembly point in case of emergencies.

Other activities

In 2012, maintenance and repair works on the boundary damaged walls in the area of the proposed public garden project at the PBC were finalised.

In 2012 MEPA also issued a permit No. PA01566/11 for the construction of workers' rest rooms at the Plant Biotechnology Centre. Such tender has been published in the Government Gazette and after being evaluated, recommendations were submitted by the relevant Evaluation Committee. Construction works for these rooms are to commence in the beginning of 2013.

During 2012, various meetings and discussions ensued between the PHD, MRRA and *Lija* Local Council in connection with the construction of a culvert or the repair of the existing one in *Annibale Preca* Street in *Lija* so as to relieve excess water inconvenience from the residents, and also for the rainwater not to be lost and to be environmentally re-used for irrigation purposes by the Plant Biotechnology Centre. A road hump was also requested by the PHD for the same purposes. In view of this and following complaints by residents living further down the premises, the road hump as well as the culvert were installed in *Annibale Preca* Street in front of the PBC.

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 management, self development and leadership skills, EU affairs, ICT skills, training on psychosocial and disability issue of work, handling work stress, evaluation techniques of projects, negotiation skills, Maltese Language, Data Protection and Customer Care. 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 under DG SANCO.

In-house training was also organised within the PHD. These include a training course to SPMU officials on seed certification administration, seminar on Laboratory Health and Safety issues for lab Officers within the PHD, Information Session about the Amendment to the Red Palm Weevil Regulation, internal training on GIS and surveillance/inspection on seeds and other propagation material and internal training on surveillance & inspection on harmful organisms and emergency pests.

Procurement

During August 2012, the PHD published a call for tenders (Advt. No. 146/2012) on the Government Gazette for the construction and finishing of worker's rest rooms at the PBC, *Lija*.

In September 2012, the PHD also published a call for quotations (Quot. No. 67/2012) on the Government Gazette for the Provision of Engineering Consultancy Services for the PBC, *Lija*.

Income

During 2012, the Plant Health Directorate had a total income of €25,049.09 from laboratory testing, sale of plants, import inspections and issuance of plant passports.

Customer Care

Following a monitoring exercise by an Associate Consultant from the Management and Efficiency Unit on the Plant Health Directorate's compliance with Directive 4 which commenced in 2011, and wherein all communications with the public, stakeholders and customer complaints were reviewed, during 2012 it was concluded that the PHD complied most satisfactorily with very positive results.

Better Regulation

During 2012, all the Units within the Plant Health Directorate continued with their endeavours to implement best practices and to reduce administrative burdens as per guidelines issued by the Better Regulation Unit within the Management and Efficiency Unit, Office of the Prime Minister.

Green Measures

As part of the ongoing green measures at the Plant Health Directorate, in 2012 the PHD continued to implement and discuss green measures amongst which more fittings and lights were changed to energy saving ones both at the PBC and at *Ghammieri*. At this point most of the traditional lights within the PHD have been changed to energy saving ones. Also, most lugging around the pipes of the AC units is being changed in order to preserve energy.

During 2012, the Directorate's Green Leader also continued with his efforts in raising awareness about environmental measures to be followed at the workplace.

Memorandum of Understanding

Communication was held with the Ministry of Gozo regarding the way forward on the work on seeds and propagation material to be done as specified in the memorandum of understanding between the Plant Health Directorate and the Ministry for Gozo.

Website of the Plant Health Directorate

During 2012 the PHD website was updated as necessary from time to time. These updates included the uploading of various news items, Legal and Government Notices, various guidelines, PHD posters and leaflets, as well as implementing necessary corrections.

MARICA GATT

Director Plant Health

Annex 1: Details of surveys, samples collected and tests performed by the Diagnosis and Control Unit in 2012

	AIM	LEGAL OBLIGATION	COMMODITY INSPECTED / SAMPLED	UNIT OF INSPECTION	NO. OF INSPECTIONS MADE BY DCU	AREA COVERED (HA)	NO. OF SAMPLES COLLECTED	NO OF TESTS	NO. OF POSITIVE / SUSPECT SAMPLES
VIROLOGY									
1	Citrus Tristeza Virus Survey	Council Directive 2000/29/EC and amendments	Citrus spp.	Orchards; public gardens; garden centre and horticultural supplier	16	5.68	514	516	0
2	Citrus Tristeza Virus Contingency Area	Council Directive 2000/29/EC and amendments and Legal Notice 97 of 2004	Citrus spp.	Orchards	48	16.04	1976	1997	21
3	Pepino Mosaic Virus Survey	Commission Decision 2004/200/EC and amendments	Tomato seeds; seedlings and plant samples	Greenhouses; open fields; warehouses; stores and nursery	31	12.48	151	144	1
4	Tomato Spotted Wilt Virus Survey	Council Directive 2000/29/EC and amendments	Tomato seeds; seedlings and plant samples	Greenhouses; open fields; warehouses; stores and nursery	20	11.12	126	126	0
5	Tomato Yellow Leaf Curl Virus Survey	Council Directive 2000/29/EC and amendments	Tomato seeds; seedlings and plant samples	Greenhouses; open fields; warehouses; stores and nursery	21	11.16	128	204	0

6	Potato Spindle Tuber Viroid Survey	Commission Decision 2007/410/EC	Seed and ware potatoes; tomato plants; <i>S. Jasminoides</i> and <i>Brugmansia</i> spp.	Open field potatoes; greenhouse and open field tomatoes; warehouses and garden centres	57	26.99	96	105	5
7	Grapevine Flavescence Doree Survey	Council Directive 2000/29/EC and amendments	Grapevine	Vineyards	9	21.49	8	8	0
8	Plum Pox Virus monitoring	Council Directive 2000/29/EC and amendments	Stone fruit	Warehouse and garden centres	0	0	40	40	0
	Other diseases	-	Cucumber and tomato plants	Greenhouse and open field	1	0.12	3	3	0
BACTERIOLOGY									
9	Potato Brown Rot Survey	Council Directive 2006/63/EC	Seed, ware and export potatoes; tomato plants;	Open field potatoes; greenhouse and open field tomatoes; watercourses and warehouses	57	29.33	77	150	0
10	Potato Ring Rot Survey	Council Directive 2006/56/EC	Seed, ware and export potatoes; tomato plants;	Open field potatoes; greenhouse and open field tomatoes; watercourses and warehouses	57	29.33	77	150	0
	Other diseases	-	Seed potato	-	0	0	2	2	0
MYCOLOGY									
11	<i>Giberella circinata</i> Survey	Commission Decision 2007/433/EC	Pines	Forested sites; nature reserves; woodland areas; national parks and nurseries	8	78.33	5	5	0
12	<i>Phytophthora ramorum</i> Survey	Commission Decision 2002/757/EC	<i>Quercus ilex</i> ; <i>Laurus nobilis</i> and <i>Viburnum</i> sp.	Woodland areas; nature reserves, forested sites; national parks and nurseries	9	45.99	4	4	0
13	<i>Tilletia indica</i>	-	Wheat	Grain terminal	0	0	4	4	0
	Other diseases	-	Cucumber; soil; turf; poplar	Greenhouse; public garden;	10	4.93	23	14	0

			wood; cypress; strawberry; vinca; heuchera; mango leaf; tomato plant; potato; lettuce; stone fruit; oak trees and olive trees	container; forested site; national park; open fields; nurseries and private gardens					
ENTOMOLOGY									
14	Colorado Potato Beetle Survey	Council Directive 2000/29/EC and amendments	Potato	Open field potatoes and warehouse	50	27.18	0	0	0
15	<i>Epirix</i> Survey	Commission Implementing Decision 2012/270/EU	Potato	Open field potatoes and warehouse	29	16.57	0	0	0
16	<i>Anoplophora chinensis</i> Survey	Commission Decision 2008/840/EC	Citrus; <i>Quercus</i> spp.; Prunus spp.; <i>Cratageous</i> spp.; <i>Populus</i> spp.; <i>Ficus</i> spp.; <i>Morus alba</i>	Open field; public garden; forestry site; government entity; nature reserve and woodland area	41	51.52	0	0	0
17	Red Pal Weevil monitoring	As per RPW action plan	Palm spp./Traps	Private and public areas; government property and open fields	692	5.26	4	0	RPW present or symptoms attributed to it
18	Brown citrus aphid monitoring	To maintain protected zone status, as required by Directive 2000/29/.EC	Citrus spp.	Open fields; orchards; private and public areas	22	14.29	6	6	0
19	<i>Scaphoideus titanus</i> monitoring	Monitoring vector of Grapevine Flavescence Doree	Placing of traps in vineyards	Vineyards	9	21.49	8	0	0
20	<i>Tuta absoluta</i> monitoring	As per tuta absoluta action plan	Tomato	Greenhouse and open field	24	10.36	1	1	1
21	Fig tree monitoring	-	Fig trees	Open field	26	6.44	6	0	0
	Other diseases	-	Fig trees; rucola plant; citrus; vines; leucanthemum superbum; veronica lungifolia; potentilla fructicosa; lavandula angustifolia; artichokes; lettuce; prunus spp; cypress; almond trees;	Open field; orchard; nursery; public garden; imported material and private gardens	10	0.97	30	13	0

			oak; stone fruit; seeds; insects; olive trees and vine leaves						
NEMATOLOGY									
22	Potato Cyst Nematode Survey	Council Directive 2007/33/EC	Soil	Open field potato crops	21	10.75	38	38	0
23	<i>Bursaphelenchus xylophilus</i> (PWN) Survey	Commission Decision 2006/133/EC that was repealed by Commission Implementing Decision 2012/535/EU	Wood material and <i>Pinus</i> spp.	Nature reserve; forestry site; trade and nurseries	3	65.05	54	53	0
	Other diseases	-	Soil nematodes	Public area; greenhouse and open field	2	0	9	9	0