MINISTRY FOR THE ENVIRONMENT,
SUSTAINABLE DEVELOPMENT AND CLIMATE CHANGE
PLANT PROTECTION DIRECTORATE

Guidelines for the Registration of Integrated Pest Management Technical Advisor/Agronomist

These guidelines shall regulate the registration of Technical Advisor/Agronomist to assist farmers by providing professional advice on Integrated Pest Management (IPM).

In these guidelines, unless the context otherwise requires, the following definitions apply:

"Competent Authority" means the Plant Protection Directorate within the Ministry for the Environment, Sustainable Development and Climate Change;

"the Board" means the Plant Protection Board established under Regulation 4 of the Plant Quarantine Act;

"integrated pest management" means careful consideration of all available plant protection methods and subsequent integration of appropriate measures that discourage the development of populations of harmful organisms and keep the use of plant protection products and other forms of intervention to levels that are economically and ecologically justified and reduce or minimise risks to human health and the environment. Integrated pest management emphasises the growth of a healthy crop with the least possible disruption to agro-ecosystems and encourages natural pest control mechanisms;

<u>Objectives of Plan drafted by the Technical Advisor/Agronomist</u>

The primary objective of the service shall be to provide a plan to farmers on Integrated Pest Management who are engaged in AECM 4: Measure for the implementation of an Integrated Pest Management Plan targeting Vineyards and Orchards under the Rural Development Programme – 2014 – 2020. The objective of this measure is to incentivise farmers to have an Integrated Pest Management Plan in place and implementation of same. The objective is to reduce the use of pesticides on a calendar spraying basis, incentivise the application of pesticide only when necessary and ultimately result in lower pesticide application rates. IPM has to forecast pests most likely to affect, amongst others, orchards and vineyards, and plan for them accordingly.

Application for registration

Applications for registration shall be submitted to the competent authority in terms of a notice to be published in the Government Gazette.

Criteria for registration

In order to be registered as a Technical Advisor/Agronomist for IPM, the experts:

- must demonstrate that they are knowledgeable in Integrated Pest Management;
- are capable of producing Integrated Pest Management Plans based on the general principles given in Annex II and III;
- must demonstrate that they are is in possession or have at their disposal the required equipment and resources;
- must be in possession of a MQF level 5 qualification or higher directly relevant to agriculture. Relevant qualification shall include modules in pest management. Qualifications which do not include pest management modules will also be considered if the expert has undertaken specialised training in pest management.

Application Process

The application form which can be requested from the Plant Protection Directorate email (plantprotection.mesdc@gov.mt) is to be submitted to the Competent Authority, together with a *curriculum vitae and* a transcript of the credits which show evidence of the qualification and modules covered. Any other supporting documentation showing knowledge or specialised training in Integrated Pest Management must also be attached to the application. The expert shall also provide a declaration indicating that there is no conflict of interest with his clients and he shall raise with the Competent Authority any potential conflict in the future, should such conflict occurs.

Applications will be assessed by the Board, who will decide on whether the applicant meets the registration criteria. The Board shall prepare a list of all experts which, in the opinion of the

Board, meet the requirements for registration and which therefore may be issued with a certificate of registration. The Board shall also provide reasons for its decisions.

The decisions of the Board to accept or to refuse an application for registration in the Register shall be notified in writing by the Competent Authority to the applicant within thirty days from the decision. The expert shall be registered following the payment of a registration fee of €50. This registration fee shall not be refundable.

Applicants who do not agree with the outcome of the registration process will have the right to appeal from such decision in writing to the Malta Arbitration Centre, within fifteen days from when the decision is issued. The decision of the Malta Arbitration Centre shall be final.

The Competent Authority shall be responsible for keeping the register and shall issue a certificate of registration in the Register, and shall also note therein all suspensions, cancellations and reinstatements of those certificates. The list of the registered entities shall be made public and will be updated regularly with any changes therein.

Registered advisors shall be obliged to follow advice and recommendations given by the Competent Authority; moreover, the experts are bound to ensure that correlated work shall not be re-diverted to, or requested from the Competent Authority or any public entity. They shall take full responsibility for all the information provided and services rendered to their clients, and they shall provide a signed declaration to this effect, upon provision of such documents to the client.

Registration Certificate

The certificate of registration shall contain the following information:

(*a*) the name of the expert or other means of identification;
(*b*) the date when the certificate is issued;
(c) the validity period.

Certificates issued to experts shall be valid for three year. Certificates may be renewed following the submission of a new application.

Upon advise by the Board, the Competent Authority may cancel any certificate granted when the holder of that certificate if the holder:

(*a*) is found guilty by a court of criminal jurisdiction of a crime committed through imprudence, carelessness, unskilfulness in an art or profession, or non observance of guidelines issues by the Competent Authority; or

(*b*) has, in the opinion of the Competent Authority following consultation with the Board, submitted substandard or deliberately misleading work in any advisory procedure; or

(c) upon failure to provide the necessary documentation and, or evidence as requested by the Competent Authority within one month from the request.

ANNEX II: GENERAL PRINCIPLES OF INTEGRATED PEST MANAGEMENT
Extract from Schedule III of Subsidiary Legislation 430.08, Sustainable Use of Pesticides Regulations

1. The prevention and, or suppression of harmful organisms should be achieved or supported among other options especially by:

- crop rotation,
- use of adequate cultivation techniques (e.g. stale seedbed technique, sowing dates and densities, under-sowing, conservation tillage, pruning and direct sowing),
- use, where appropriate, of resistant/tolerant cultivars and standard/certified seed and planting material,
- use of balanced fertilisation, liming and irrigation/drainage practices, - preventing the spreading of harmful organisms by hygiene measures (e.g. by regular cleansing of machinery and equipment),
- protection and enhancement of important beneficial organisms, e.g. by adequate plant protection measures or the utilisation of ecological infrastructures inside and outside production sites.

2. Harmful organisms must be monitored by adequate methods and tools, where available. Such adequate tools should include observations in the field as well as scientifically sound warning, forecasting and early diagnosis systems, where feasible, as well as the use of advice from professionally qualified advisors.

3. Based on the results of the monitoring the professional user has to decide whether and when to apply plant protection measures. Robust and scientifically sound threshold values are essential components for decision making. For harmful organisms threshold levels defined for the region, specific areas, crops and particular climatic conditions must be taken into account before treatments, where feasible.

4. Sustainable biological, physical and other non-chemical methods must be preferred to chemical methods if they provide satisfactory pest control.

5. The pesticides applied shall be as specific as possible for the target and shall have the least side effects on human health, non- target organisms and the environment.

6. The professional user should keep the use of pesticides and other forms of intervention to levels that are necessary, e.g. by reduced doses, reduced application frequency or partial applications, considering that the level of risk in vegetation is acceptable and they do not increase the risk for development of resistance in populations of harmful organisms.

7. Where the risk of resistance against a plant protection measure is known and where the level of harmful organisms requires repeated application of pesticides to the crops, available anti-resistance strategies should be applied to maintain the effectiveness of the products. This may include the use of multiple pesticides with different modes of action.

8. Based on the records on the use of pesticides and on the monitoring of harmful organisms the professional user should check the success of the applied plant protection measures.

ANNEX III: Extract from Agri Environmental Climate Measures for Malta and Methodological Grids for Payment Calculations - AECM 4: Measure for the implementation of an Integrated Pest Management Plan targeting Vineyards and Orchards

There is the potential to reduce pesticide application through an IPM by reducing/ eliminating the following practices:

- Calendar based preventative pesticide applications;
- Use of insecticides, while insect damage is likely to remain within levels that can be compensated by the plant;
- Use of herbicides, while weed problems can be economically managed through cultural practices;
- Use of fungicides, while fungal diseases can be avoided by better selection of crop varieties and better fertilizer management.

An Integrated Pest Management plan is not a single pest control method but, rather, a series of pest management evaluations, decisions and controls. In practicing IPM, growers are aware of the potential for pest infestation follow a four-tiered approach.

Before taking any pest control action, the IPM first sets an action threshold, a point at which pest populations or environmental conditions indicate that pest control action must be taken. Sighting a single pest does not always mean control is needed. The level at which pests will either become an economic threat is critical to guide future pest control decisions.

The IPM will also aim at monitoring and identifying pests. Not all insects, weeds, and other living organisms require control. Many organisms are innocuous, and some are even beneficial. IPM programs work to monitor for pests and identify them accurately, so that appropriate control decisions can be made in conjunction with action thresholds. This monitoring and identification removes the possibility that pesticides will be used when they are not really needed or that the wrong kind of pesticide will be used.
As a first line of pest control, IPM programs work to manage the crop, to prevent pests from becoming a threat. Control methods can be very effective and cost-efficient and present little to no risk to people or the environment.

Once monitoring, identification, and action thresholds indicate that pest control is required, and preventive methods are no longer effective or available, IPM programs then evaluate the proper control method both for effectiveness and risk. Effective, less risky pest controls are chosen first, including highly targeted chemicals, such as pheromones to disrupt pest mating, or mechanical control, such as trapping or weeding. If further monitoring, identifications and action thresholds indicate that less risky controls are not working, then additional pest control methods would be employed, such as targeted spraying of pesticides. Broadcast spraying of non-specific pesticides is a last resort.

Generally, IPM involves a combination of techniques. IPM is about an approach and not a set of techniques, adaptive to an individual holding and its requirements. Farmers will be required to retain a record, which must cover the date when monitoring was performed, the pest the farmer was monitoring for and the number of pest(s) recorded (if any). Annex VIII is a template of the record to be kept.

Some examples of techniques which can be included in an IPM for vineyards and orchards are the following:

- Cultural practices that can help prevent build up of pests (e.g. pruning and tillage methods)
- Field sanitation and seed bed sanitation,
- Use of pest-resistant varieties,
- Managing sowing, planting or harvesting dates
- Water/irrigation management,
- Soil and nutrient management (including mulching, zero/low tillage, fertilizer management)
- Practices to enhance the build-up of naturally existing predator populations □ Use of traps or trap crops

Biological inputs

- Biological control through release of predators, parasites or pathogens
- Bio-pesticides
- Biological preparations (e.g. name extract)

Chemical inputs

- Chemicals that disrupt insect behaviour (e.g.: pheromones)
- Growth-regulators