INTEGRATED PEST MANAGEMENT

Working with nature

Pl. VII

Agronomic practices
Monitoring
Physical control
Biological control

steinernema carpocapsae
Mating disruption
Virus Cpgv
intercropping
Cydia pomonella
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Pl. XI

Tuta absoluta

Bacillus Thuringiensis

Mass trapping

Trichogramma achiæa

Mating disruption

nesid iocoris tenuis
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Pl. II
Integrated Pest Management

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Design: www.41109.be

Pl. V

Ampelomyces quisqualis

Powdery mildew

Resistant variety

Disease forecasting models

Pruning
Chemical control

Biological control

Mechanical, physical, natural control

Monitoring, forecasting, warning systems

Agronomic practices such as crop rotation, resistant varieties, undersowing, intercropping, protection and enhancement of beneficia
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25 novembre 2014

8 céréaliers et 3 polyculteurs éleveurs
Photo prise à Bézu la foret, proche de Etrepagy Bordure du plateau du Vexin Normand

50% de réduction de l’usage de produits phytosanitaires est possible pour ces céréaliers et polyculteurs éleveurs
50% reduction of plant protection products use is possible for these cereal producers and mixed crops and livestock farmers

Photo © Catherine Voisin
establishing a framework for Community action to achieve the sustainable use of pesticides

ANNEX III

GENERAL PRINCIPLES OF INTEGRATED PEST MANAGEMENT

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.
MS can encourage reductions of pesticide use e.g. by supporting voluntary integrated farming methods (incl. voluntary elements of Integrated Crop Management) through agri-environment-climate schemes.

Some MS are already doing so, it remains to be seen how the introduction of the general principles of IPM will influence baseline of such schemes.

**Greening of Direct Payments**

MS must implement ecological focus areas and the crop diversification scheme and promote good farming practices for pesticides reduction.

It remains to be seen how MS will implement the greening and if they will promote the non-use of pesticide in the EFAs.

**Rural Development**

Farm Advisory Systems

MS must offer farmers advises on rules under Cross Compliance but also on the SUDP and the WFD in particular aiming at reducing pesticide usage and informing about IPM.

It remains to be seen, what kind of advice, including on IPM, will be offered.

**Insurance linked to yield**

Dynamic approaches, increasing the IPM baseline

Mandatory crop rotation in the CAP

**Fruit & Vegetable Regulation**

Cross compliance

MS must link the Regulation on Pesticides to CAP payments through Cross Compliance.

The GAEC provide also a tool for a better use of pesticides (buffer strips, etc.).

In the future certain aspects of the SUDP and WFD will become part of Cross Compliance after all MS have defined the obligations directly applicable to farmers.

It remains to be seen when and what kind of measures, including IPM.

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**EFAs**: Ecological Focus Areas

**GAEC**: Good Environmental and Agricultural Practice

**ICM**: Integrated Crop Management

**IP**: Integrated Production

**IPM**: Integrated Pest Management

**SUDP**: Directive on Sustainable Use of Pesticides

**WFD**: Water Framework Directive

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**Agronomic practices**

**Monitoring**

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B R A S S I C A

Buckwheat

Cornflower

Leasel

Borage

Lady phacelia

Perennial cornflower

Birds

Hover flies

Parasitic wasps

Lady bugs

Borage

Hover flies

Parasitic wasps

Lady bugs

Borage

Hover flies

Parasitic wasps

Lady bugs

FURTHER INFORMATION AT WWW.ECOSTAC.CO.UK
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**Further information at** [www.ecostac.co.uk](http://www.ecostac.co.uk)

**Pl. III**

*Wheat*

- Buckwheat
- Cornflower
- Leasel
- Boragé
- Phacelia lacy
- Perennial cornflower
- Birds
- Hoverflies
- Parasitic wasps
- Ladybugs
- Sitobion avenae
- Rhopalosiphum padi

*Birds*
- Parasitic wasps
- Wild bees pollination

*Plants*
- Borage
- Hoverflies