Integrated Production IP
is a concept of sustainable agriculture based on optimal use of agro-ecology to improve and preserve the quality of agro-ecosystems and to replace potentially polluting inputs.
• Integral systems approach, entire farm based.
• Balance of preventive measures and biological/physical/chemical methods.
• IPM (Integrated Pest Management) is the part of IP focusing on weed, pest and disease management

IOBC International Organization for Biological and Integrated Control of Noxious Animals, Diseases and Plants
• Non-profit, scientific community and „think-tank“. 
• Promotes R&D of IP and biological/integrated control (IPM).
• Provides independent expertise and advice for policy makers, advisors and farmers.
• IOBC commission provides IP guidelines and supports implementation on farm level.
• www.iobc-wprs.org

Guidelines

Objectives / Principles
✓ To optimize the use of agro-ecology in designing and managing sustainable production systems.
✓ To support and enhance biological diversity.
✓ To use ecologically preferable and safe technologies, to achieve maximum replacement of off-farm inputs.
✓ To balance nutrient cycles and minimize losses, to preserve intrinsic integral soil fertility.
✓ To sustain farm income.

Guidelines II and III include:
✓ site selection and site management.
✓ biodiversity / ecological infrastructures.
✓ propagation material, cultivar choice.
✓ rotation/cropping system.
✓ soil management and fertilization.
✓ irrigation.
✓ integrated crop protection and weed control.
✓ harvest, post harvest management and storage.
✓ animal production on mixed farms.
✓ worker health, safety, welfare.

Guidelines

Example of topics: grape production guideline
4. Site Management: “Alleyways and Weed-free Strip: … alleyways with cover plants to avoid soil erosion and compaction without detriment to yield and quality, to maintain and enhance plant species diversity (…), and to minimize the use of herbicides.”

8.1.1. Prevention (indirect plant protection)
“The prevention and/or suppression of key pests and diseases should be supported by the … utilization of ecological infrastructures inside and outside production sites to enhance a supportive conservation biological control of key pests by antagonists.”

Tools for implementation

All tools are adapted to individual farm level.
✓ Passport: describes key pest and disease problems and key antagonists.
  ⇒ sets IPM priorities.
✓ Green list: preventive measures, decision support options, “green” control measures.
  ⇒ emphasizes non-chemical methods.
✓ Yellow list: defines (mostly) chemical direct control options if no adequate green solutions available. Focus on pesticides with least side effects.
✓ IOBC database on pesticide side effects on non-target arthropods and beneficials (under reconstruction).
✓ SESAME: checklists and inspection protocol.
  ⇒ facilitates self control and inspection audits of IP schemes.

Conclusions

IOBC IP guidelines transfer the IP concept into methods and measures that can be implemented on farm-level.
IOBC IP guidelines consist of crop-specific measures that have been thoroughly tested in practise.
IOBC IP toolbox facilitates the design of IP guidelines and their implementation on farm-level.
IP is the focus on agro-ecology; the ideal context for optimal use of IPM.