Biocontrols

State of play of the work of DG AGRI on biocontrol solutions for agriculture.

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#FutureofCAP
Integrated Pest Management (IPM)

**Principle 4**
Sustainable biological, physical and other non-chemical methods must be preferred to chemical methods if they provide satisfactory pest control.
The current green architecture

Eco-schemes in Pillar I
- Cross-compliance (Statutory Management Requirements and standards for Good Agricultural and Environmental Condition of land)
- Greening (3 detailed obligations on crop diversification, permanent grassland and EFA)
- Climate/Env. measures in Pillar II (AECM, Forestry measures, investment measures...)

Mandatory for farmers:
- Cross-compliance
- Greening

Voluntary for farmers:
- Sectorial operational programmes
- Farm advisory system
- Research
- Investments

Organic farming

Area covered

Level of requirement
Legal Provisions

**Current**

- Implementation obligatory but Member States decide the way the principles are implemented.

- Not currently part of CAP cross compliance
Agri-environmental and climate measures

• Many measures part of integrated farming (fruits and vegetable, vines and olive are the main crops concerned) encourage replacing certain chemical treatments with biological control methods
• Organic farming!
Green Deal

**New CAP proposals**

“The strategic plans will need to reflect an increased level of ambition to reduce significantly the use and risk of chemical pesticides,”

Member States describe in their National Action Plan how they ensure the implementation of the principles of integrated pest management, with priority given wherever possible to non-chemical methods of plant protection and pest and crop management.
Horizon 2020 Societal Challenge 2 projects related to innovations in plant protection

Running projects

- **EcoStack** (EU contribution €10M): develop sustainable crop production strategies via stacking of biodiversity service providers and **bio-inspired tools for crop protection**; enhance the impact of **natural antagonists** through biologically-inspired technologies.

- **RELACS** (EU contribution €4M) and **Organic PLUS** (EU contribution €4M): looking at pathways for the replacement and phasing-out of contentious inputs in **organic farming**, including **biocontrol** measures.

More information & research projects to be found on the [plant health](#) and [ecological approaches & organic farming](#) factsheets and [CORDIS](#). Many more projects also under MSCA & ERC!
In the pipeline/funding opportunities for innovation in plant protection under Horizon 2020 – Societal Challenge 2

Work programme 2018-2020
SFS-04-2019-2020: Integrated health approaches and alternatives to pesticide use (total EU contribution envisaged €35M)

Details of the topic:
Weed biological control in Europe

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Classical biological control: importation of specialist natural enemies from the weed’s native range to reduce the abundance of a weed in its introduced range

Augmentation biological control: periodic releases of an abundant supply of a native or exotic biocontrol agent over the entire weed population to be controlled
IWMPRAISE - Biological control of the native weed *Rumex* spp.

**Biological control agents**

- The two clearwing moths *Pyropteron doryliforme* and *P. chrysidiforme* are native to Europe.
- Both species were assessed for classical biocontrol of invasive *Rumex* spp. in Australia.

**Goal: augmentative biocontrol**

- *P. doryliforme* was released and significantly suppressed *Rumex*.
- Develop a commercial biocontrol product with the European clearwing moths for Europe.
- Natural densities in Europe too low – mass rearing and mass releases needed.
- Particularly useful for organic production.
- Ongoing field trials in Switzerland.

Use of biocontrol products is common in pest control, but new in weed control in Europe.
THANK YOU!

Further information is available at:

