The potentials of organic farming in the European Innovation Policy

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Organic farmers are innovative by nature

- they always tested on their farm alternatives and solutions
- they are keen, able and used to interact with researchers and advisors
- they always used a multidisciplinary approach
- they are often the source of innovation

that's why they have now the best potentials for being active part of the EIP-AGRI (European Innovation Partnership for Agricultural <u>Productivity</u> and <u>Sustainability</u>) initiatives

Compost to control weeds in organic carrots and the machine to facilitate its use



Prevention and control of weeds, pests and diseases 61

Composts prevents weeds

An organic grower of the Innovation Network Weed Control came up with the idea of covering direct-sown onions and carrots with a thin layer of compost that is free of any weed seeds. By preventing the germination of annual weeds during early crop development, this compost layer substantially reduces the required amount of hand weeding. This reduces the application of finger and torsion weeders, which cannot manoeuvre well between

the small plants and can damage them. One of the research questions was how much compost should cover the onion seed. The thickness of this layer proved to be very critical. A layer of about 2 cm resulted in the best crop emergence combined with good weed suppression. Results of a 2-cm compost layer again

Participatory breeding for potatoes resistant to blight

Groene Veredeling

BIOIMPULS 2009-2013: Perspectieven op phytophthora resistente aardappelrassen

Na 2007 was ook 2012 een zwaar 'phytophthora selaaen'. Dat maakt waar de taalagtache sector de noodzaak van resistente aanlagpeirassen averduidelijk. Tot vaar kort wezen die er wet. Om meer prinsiteit aan phytophthora verdeling te geneen is vier jaar gesiden het Blamssuks verdeleingsprogramma als 10-jarig project apgestart. Traditionelle veredeling om nieuwe esistenties uit wilde soorten over te bengen mag dan wei een kange weg zijn, maar heeft het woordeel dat onderweg op meentere eigenschappen gestectzerel kan wanten. In deze brachtwet een avezicht van de staad van zoken na vier joar.



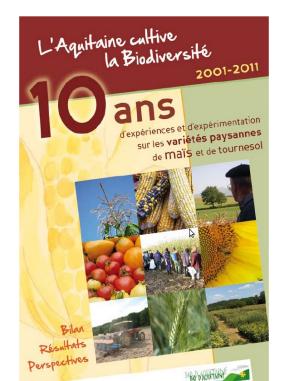
Biolenguis-klonen in de bezichtiging Botes Aurthoppinserents

Nieuwe resistenties uit wilde soorten

Het vereidelingspreject Bloimpuls werkt va een korte, midden en lange termijn traject aan resistenties tegen phytophthora. De baais van het project is het krusingswerk met wilde aphytophthora-resistente aantappelsoorten izle futo pagina 2) die Wageningse onderzoekers al decomia gelieden verzanneid hebben uit Midden- en Zuid-Amerika. Het is een Jange weg on de wilde soorten met cultaarroaterkaat is kruisen tot een niveau waartop ze als bruktbare geniteurs kunnen denen voor een commercieel veredelingsprogramma. Dat vergt drie tot viee Terugkruiningsgenerates van eis viee di al aar den to room 19 ze on soorten.

Door herhande inden te kruisen met culturmateriaal feen inodern rati wordt upproblem fest verkrapen plantinateriaal aan te pensen aan onze lange deglengte. Werder wordt gevallenteerd op de geveensre resisteristick, maar ook sogen opge-

Participatory breeding in cereals and other crops for characteristics that make them fit to organic and low input systems



Networking and exchange of experiences on

organic viticulture and wine-making



Peri-urban organic agriculture

In Gallec (Barcelona): participation,

natural resources preservation, education,

minimum tillage and organic





EIP-AGRI Focus group on organic farming Optimising Arable <u>Yields</u> and reduce the yield <u>gap</u>

Running in 2013-2014, composed by 20 experts of different background

Main outcomes:

"redefinition" of <u>yield</u>: **performance stands for production, its quality and ecosystem services provided**

"redefinition" of gap: difference in performance between best organic farmers and their organic colleagues in similar conditions

> list of main areas where to act to improve farm performance

ideas for topics and methods to be used in the establishment of local operational groups (OGs)

* examples of existing OGs

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Side products: list of research needs and proposals for training and education

EIP-AGRI Focus group on organic farming Optimising Arable <u>Yields</u> and reduce the yield <u>gap</u> outcomes

Causes of yield losses/ area for improvement:

1) Poor soil fertility management;

2) Inadequate nutrient supply;

3) Insufficient weed management;

- 4) Pest and disease pressure
- 5) Variety choice

Main topics suggested for Operational Groups relate to:

- farming systems co-design;
- information and decision support systems;
- how to increase soil microbial activity and biodiversity by farming techniques;
- fine-tuning of composting techniques;
- nutrient release of organic fertilisers;
- Fine-tuning of new machines;

- organising joint purchase/use of machinery;
- selecting locally appropriate varieties;
- developing innovative tillage techniques;
- fostering the use of companion planting and cover crops;
- introducing new crops and variety trials;
- developing new fertilisers appropriate to the organic concept



Innovation in RDPs 2014-2020

It is a key-word! Several measures to tackle it and specific attention to agroecological methods is recommended.

Main tool: Operational Groups

Multi-actor group active on a specific problem using experience and knowledge (scientific and practical) of participants.

It is not a discussion group and it is not research (i.e. mis. 124)

Driven by practitioners and focused on a problem to be solved

Innovation is not only technology but also organization or social change

And is not only "new knowledge" but often stems by a combination of experience, existing knowledge with new knowledge

Innovation in H2020

Thematic Networks

Projects aiming to facilitate and speed up the combined use of available knowledge (empirical and scientific)

Multi-actor research and innovation projects

Research and innovation projects where non-researchers (farmers, associations, advisory, Smes ...) have a relevant role (not stakeholder!)

But also vice-versa

from OGs requests to H2020 for specific topics (also from already existing OGs)



Focus Groups outcomes and OGs

Topics and recommendations from FGs may be considered and used by OGs but each managing authority should assess local needs

and viceversa OGs and RDP managing authorities may suggest further FGs topics

Problem is timing!

How to be active at local level

make use of FGs (not only the organic)outcomes in OGs setting up

OGs: Regional, interregional or National?

There is the need of active and proactive organic farmers and associations!

We have all the knowledge and skills to be front-runners!

Soil management and organic matter preservation Water conservation (quality and quantity) Biodiversity efficient "use" Several pests management Alternatives to copper Innovative systems for perennials (vineyards and olive grooves)

Extensive animal husbandry

How to keep the contacts internationally?

Thematic network on organic arable farming starting in March 2015

Thematic network on grapevine wood diseases Starting in March 2015

Formal and informal cooperation with other MSs OGs (via Ministries but also via associations and researchers)

Using EIP-AGRI facilities.

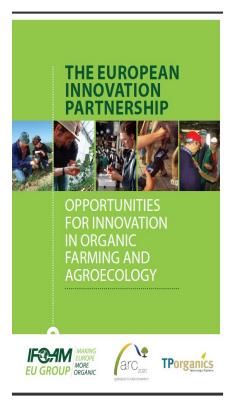


Dossier from

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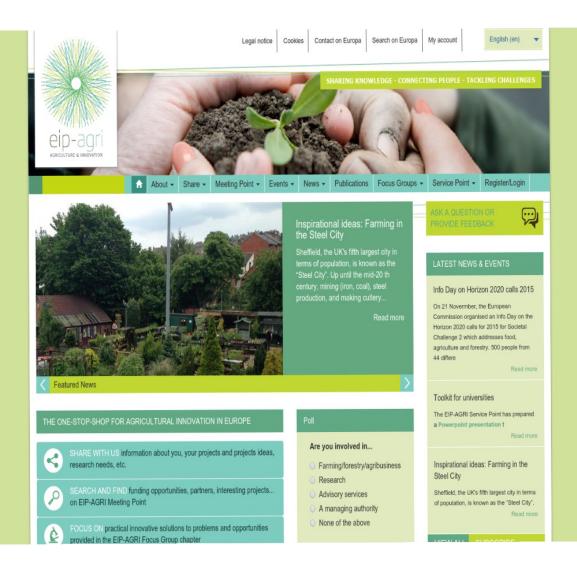
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www.ifoam-eu.org



And keep an eye on the EIP-AGRI web page

www.eip-agri.com





Thank-you for the attention!