EBIO-Network: a web-based platform for knowledge sharing on functional agrobiodiversity in organic apple production.

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Abstract

The web-based platform "EBIO-Network" (European Biodiversity Orchards Network), created within the framework of the CoreOrganic plus project EcoOrchard, will provide an interactive communication tool between stakeholders in European organic fruit production at different levels (practice, science, advisory etc.). The website will offer the opportunity to share, extract and use stakeholder knowledge in Europe in a participatory approach. As an outcome of this ongoing exchange, the aim is to provide technical information how to create, keep and assess functional agrobiodiversity (FAB) in apple production.

Keywords: Functional agrobiodiversity, sustainable agriculture, biocontrol, networking

Introduction

Organic crop production is particularly dependent on the existence of functional agrobiodiversity (FAB) in the agroecosystem. Elements of FAB (e.g. hedges, floral strips, stone pills, permanent soil cover) benefit essential ecosystem services like biological control of pests and pathogens, soil conservation or pollination. Fruit orchards are very suitable cropping systems to implement sustainable FAB techniques due to their perennial nature. Organic production allows a low-input management system where important FABelements like beneficial arthropods are less affected by negative side effects of plant protection products. Farmers are in the position to influence the maintenance of FAB in their orchards by suitable management techniques. Science, research and advisory services try to develop guidelines and recommendations on how to manage FAB. On the other hand, the farmers evaluate techniques for their feasibility and value under real practical conditions. We consider that the biodiversity impact shall be visible to improve farmers' commitment. A key element for any future progress is easy communication between stakeholders that will allow sharing practical knowledge and to learn from each other. For this purpose, the internet-platform EBIO-Network has been created under the umbrella of the Core-Organic Plus project EcoOrchard. The aim of this platform is to provide an easy applicable tool for communication between all the different levels of stakeholders and to allow guick exchange of ideas and experiences.

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Material and Methods

The EcoOrchard project[#] (*Innovative design and management to boost functional biodiversity of organic orchards*) will collect, test and provide methodology to improve FAB in organic apple production. Within EcoOrchard, methods for creating but also assessing FAB in the orchards will be tested. Eleven partners in nine different European countries take part, thus presenting a wide range of European conditions in organic apple production. In a first step, various stakeholders in the several countries have been interviewed and will be further involved in a participative approach. Outputs were directly used to build the EBIO-Network: on the one hand by providing practical knowledge on FAB-techniques and monitoring tools to share and on the other hand, to identify a first network of stakeholders motivated to actively contribute to the platform. In parallel, this practical knowledge is being completed with scientific and technical references by the EcoOrchard team.

Results and Discussion

The establishment of the EBIO-Network platform is an important deliverable within the work of EcoOrchard. The platform is hosted as thematic portal at the Julius Kühn-Institute, Federal Research Centre for Cultivated Plants, one of the partners of the project. The web-based platform is currently available draft version as а at http://ebionetwork.jki.bund.de. We will present the portal at the Ecofruit conference with the aim to discuss with different stakeholders especially on the best way to communicate inherent context specific information at the European level. Comments and contributions from the outside will help to build up this platform as an important centre of multi-source knowledge. Useful literature or other knowledge sources will be available. Technical sheets and other media (e.g. technical videos on-site, reports from field visits) describing methods used for FAB maintenance and assessment in orchards will be elaborated by the EcoOrchard team and interested stakeholders. The official language is English; however, we intend to create also country-specific web pages where material in the particular language could be found. The possibility to communicate via a registration tool and a discussion forum as well as during regular meetings will allow adapting the content to the various needs of stakeholders. We hope that due to its open nature the EBIO-Network will be a long-lasting vivid tool for information, exchange and discussion on FAB in organic fruit production.

Acknowledgements

We thank all people who already submitted useful information material for building-up the draft version of the website, especially growers and advisors which volunteered the interviews. The German partner is funded by the "Bundesministerium für Ernährung und Landwirtschaft im Rahmen des Bundesprogrammes Ökologischer Landbau und anderer Formen nachhaltiger Landwirtschaft (FKZ: 2814OE005)". The authors acknowledge the financial support for the project EcoOrchard, provided by transnational funding bodies, being partners of the FP7 ERA net project, CORE Organic Plus, and the cofund from the European Commission.

Citation of the full publication

The citation of the full publication will be found on Ecofruit website as soon as available and on the database of organic-e-print.

[#]http://coreorganicplus.org/research-projects/ecoorchard/