

Notes from the ELN-FAB seminar workshop on ‘The role of in-field and below-field measures in FAB’

Facilitator: Mirjam Pulleman, Wageningen University, supported by Wijnand Sukkel, Applied Plant Research

Rapporteur: Ben Delbaere (ECNC)

17 participants

The workshop session was facilitated by focusing on two questions, which were discussed by three parallel groups. The groups were given 20 minutes per question to list as many elements as possible in response to the given questions. Then the results per group were presented and compiled into a single list. The results of the compilation are listed here.

1. Is FAB around fields enough? Why (not)?

- FAB is more than pest control and pollination. Also soil productivity, erosion prevention and other ecosystem services (ES) are supported by FAB.
- Organic matter in soils provides a very important contribution to ES in terms of erosion reduction, carbon sequestration, water retention, fertility increase, etc.
- Measures on the field margins are not sufficient to reach the centre of a field; therefore in-field measures are necessary as well.
- Often a single type of FAB measure is not enough in terms of effect; a combination of two or more FAB measures (both in-field and on the edges) has more impact.
- It is recognized that what happens above the ground influences soil biodiversity and vice versa.
- FAB should be looked at in a landscape context and in terms of lateral as well as vertical relations.
- In addition to FAB measures, measures to increase landscape heterogeneity are needed.
- Soil biodiversity is often neglected, although very important. There appears to be a lack of knowledge and evidence on its role within ecosystems and on what ES are provided by which (group of) organisms. Reference was made to the EcoFINDERS project (<http://ecofinders.dmu.dk/>) and to a Dutch publication on knowledge transfer on soil biodiversity (<http://www.kennisakker.nl/document/kennisontsluiting-bodem biodiversiteit>).
- FAB measures at field margins seem to be more widely applied because they appear to be easier and more attractive and visible.
- Also, in-field FAB measures face more agronomic limitations (e.g. reduced tillage may increase presence of weeds) and are more long-term in effect (beyond usual business practice).
- Soil-related FAB measures and soil biodiversity are more difficult to communicate.

2. What is needed to stimulate implementation of in-field FAB-related measures?

Most of the solutions identified revolved around communication, knowledge generation and transfer, and multidisciplinary practices.

- Raise awareness of the importance of soils and soil biodiversity.
- Make research results more easily accessible to non-academic audiences.
- Make soil-related issues visible (e.g. develop webcam-based apps, underground 'aquarium')
- Communicate examples of the importance of soil (biodiversity) that lay people can understand.
- Demonstrate benefits and speak 'economics'.
- Apply branding (e.g. Healthy soil = healthy product).
- Facilitate direct contact between farmers and researchers.
- Develop/implement indicators for quality of soil life.
- Generate/transfer knowledge on how to develop a 'healthy' soil.
- Generate/transfer knowledge on what ES are provided by which soil organisms and farmers can stimulate them.