

SoildiverAgro project

Adoption of new management practices to increase crop production and quality



THE WHAT AND WHY

Stakeholder perceptions of soil related problems in wheat farming and how to solve them

The survey implemented in SoildiverAgro identified relevant agri-environmental problems in the present wheat production as well as the most effective farming practices to face these problems. In Finland 48 respondents provided survey answers: farmers producing wheat, agricultural technical advisors and other stakeholders such as researchers or administrators. The most severe problems identified were soil compaction, low and variable yields, soil waterlogging but also rainfall scarcity during the growing period. There was also a concern with the low soil microbial biodiversity and the loss of organic matter. The priority given by stakeholders to different solutions points at the improvement of soil structure to increase aeration, water retention and to favor plant rooting. These were followed by the increase in the soil organic matter content, in soil fertility and

in soil biodiversity and the improvement of drainage systems. To solve the soil related agronomic problems of the wheat farming the results highlighted crop diversification. Adding solid organic matter or green manure was seen to provide solutions. The opportunities were seen in applying minimum and shallow tillage. The interviewed stakeholders thought that the implementation of more sustainable soil conservation practices in wheat production is diffculted by the lack of farmers' knowledge regarding their effectiveness and strong traditions in practices combined with low interest to try new practices. Other barriers indicated were the costs associated with the new practices and the incompatibility of crop diversification practices with the existing farm machinery. These barriers need to be addressed in advising farmers.



1. Wheat with ladybird.



2. Wheat field.

KEYWORDS

Stakeholders, farmers, wheat field, Finland

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