

SoildiverAgro project

Adoption of new management practices to increase crop production and quality

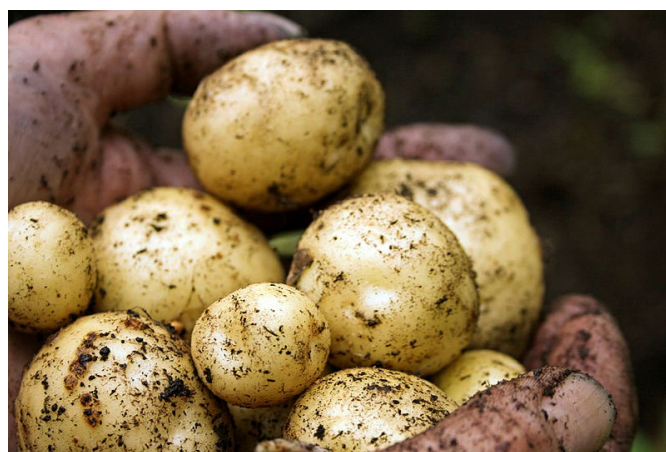


THE WHAT AND WHY

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

The survey implemented in SoildiverAgro identified relevant agri-environmental problems in the present potato production as well as the most effective farming practices to face these problems. In Finland 48 respondents provided survey answers: farmers producing potatoes, agricultural technical advisors and other stakeholders such as researchers or administrators. The most severe problems identified were the scarcity of rainfall during the growing period, the loss of organic matter and soil compaction. There were also some concerns with soil waterlogging, fungal diseases, low soil microbial biodiversity and low soil fertility. 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 mobilization of soil nutrients. To solve the soil related agronomic problems of the potato farming the results highlighted crop diversification. Adding solid organic matter or green manure was seen to provide solutions. The little effectiveness was seen in tillage practices, but some opportunities were seen in minimum tillage. The interviewed stakeholders thought that the implementation of more sustainable soil conservation practices in potato production is diffculted by the lack of farmers' knowledge regarding their effectiveness and the lack of tradition. Other barriers were the expected lack of profitability and the incompatibility of crop diversification practices with the existing farm machinery. These barriers need to be addressed in advising farmers.



1 and 2. Photos of potatoes

KEYWORDS

Stakeholders, farmers, potato farming, Finland

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