

Experiences On Different Types of On-Farm Research in Eastern Finland

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Introduction

In Finland, as well as in many other countries, on-farm research is becoming more and more common. The reasons are manifold:

- Agricultural research stations are closed down due to economic constraints
- Researchers want to have 'real data' from the farms under wider variation of conditions
- Advisors see it as a new and efficient tool to show farmers good practices and to gain experiences
- Farmers find it an attractive way of testing suitable farming practices in the environment of their own farm

In eastern Finland, three different methods of doing on-farm research were tested. All on-farm research actions aimed at increasing the self-sufficiency of protein feeding of organic dairy farms.

Combination of small plot measures and farm scale harvester

- Topping of grasses in spring for higher clover content in silage
- 4 x 0,25 m² samples and farmer's wagon equipped with scales
- 2 fields

-> Higher yields with small plot measurements

→ Yield difference was constant

→ Time of topping was not ideal – new methods often have this problem



Yield measurement with farm scale combine harvester

- Different seed mixtures of peas and cereals
- Combine harvester equipped with yield measures
- 2 fields with 5 mixtures each

-> Results did not show large yield differences – quite surprisingly

-> Experiments were easy to carry out because of good machinery

-> High interest of the farmers, since the research question came from them



Collection and analysis of plant samples

- peas, vetches, faba beans and cereals were analysed from whole crop silages
- 13 fields

-> easy for farmers since an advisor took all the samples and measurements

-> Results on-farm confirmed the earlier results from scientific research

-> Farmers will change the harvesting time of the whole-crop silage based on these results



Conclusions

There is no preference for different ways of doing on-farm research. You need to find the best way to answer the actual need and question.

Observational actions are most suitable to be done by a researcher or an advisor from small plots, but the overall yields of fields or larger plots are better to harvest with farm-scale machines by the farmers.

Most important phases in the on-farm research are the discussions before and after the experimental work together with farmers, advisors and researchers to find out the research questions and to make common and useful conclusions.