Effect of organic manure and panchagavya on potato quality and yield

Name: Raksha Sharma, Ramesh Karki, Rajendra Pandey, Ritambar Ghimire
Affiliation: Faculty of Agriculture, Far Western University, Tikapur, Kailali
Contact number: +977-9851163991 | Email address: agr.fwu.2020@gmail.com

Introduction

Potato has a significant place as a cash crop in Nepalese farms, and in the kitchen as vegetable crop. Poor nutrient management is one of the key problems for low potato yields.

Research questions

- Which organic manure is effective in increasing both the quality and yield of potato tubers?
- What is the effect of *panchagavya* on quality and yield of potatoes?

Methodology

A field experiment was conducted using RCBD at Boldik, Bajura to identify the effect of locally available organic manure viz. farmyard manure, poultry manure, goat manure and panchagavya, a plant tonic, on the growth and yield of potato (var. Desiree) with four replications.

Key findings

Poultry manure outperformed all the applications in generating plant height, leaf count, total tuber yield and marketable tuber yield, followed by goat manure and farmyard manure. The percentage of marketable tuber numbers were significantly higher for poultry manure, goat manure and panchagavya than for farmyard manure, revealing potential of panchagavya as a biotonic.

Conclusion

Respondents trained by the GRAPE project exhibited higher levels of awareness and use of organic inputs compared to non-GRAPE sites. Local stakeholders could consider the project approach of knowledge dissemination to promote organic agriculture. However, unavailability of commercial organic inputs in the study area limits organic production.