

Management of Potato Diseases in Organic Farming

R.K.Arora*

Central Potato Research Station, P B. No.1, Model Town P.O., Jalandhar 144003, Punjab, India

Management of potato diseases without use of pesticides is a great challenge in organic farming. Experiments carried out at this Institute revealed several eco-friendly measures which could be employed in organic potato production. These include soil solarization, cultural practices, use of microorganisms and combination of one or more of these methods. Soil solarization by transparent polyethylene mulching during hot summer months controlled black scurf and russet scab where as adjustments in time of planting and harvesting were helpful in management of late blight, russet scab, charcoal rot and black scurf. Antagonistic microorganisms such as *Trichoderma viride*, *Bacillus subtilis*, *B. cereus* and *Acromonium strictum* exhibited promise against potato pathogens such as *Rhizoctonia solani*, *Sclerotium rolfsii*, *Fusarium oxysporum*, *Macrophomina phaseolina*, *Ralstonia solnacearum* and *Phytophthora infestans*. An integrated approach involving use of the above methods in combination was superior to the methods used individually.

Key Words: Management, Potato diseases, Organic farming, Eco-friendly methods, Integrated approach

Corresponding author: rkacprs2003@yahoo.co.in