

Assessment of Potato Farmers Perception and Practices on Management of Red Ant (*Dorylus Orientalis* Westwood) in Dailekh District

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Abstract

Potato production has been suffering significant yield loss due to various abiotic and biotic factors including invasive pests like red ant (*Dorylus orientalis*). To assess farmers' perception of red ant and the management practice adopted by farmers, this study was carried out in the Dailekh district of Nepal. 110 households involved in potato cultivation were selected through the purposive random sampling technique and were surveyed using a pretested questionnaire. From the total cultivated area, 45.5% of the area had a major infestation, 30% area was moderately infested whereas 24.5% of the area had a minor red ant infestation. Various practices like cultural, mechanical, chemical and botanicals were used in the management of red ant. The use of physical methods combined with botanicals was the major practice in its management. About 60% of the farmers relied on botanicals namely ketuki and 38% of farmers used chemical insecticides. Around 64% of farmers used ash, 27% used urine and 4% used both ash and urine as a local management practice. Insect pest damage was a major problem for potato cultivation mentioned by farmers with an index of 0.94. The unavailability of insecticide and lack of concern authority towards management were the major problems for the management of pest with an index of 0.77 and 0.72 respectively. The study highlights the need to develop management strategies that are eco-friendly and economical and meets the farmers' need which provides the baseline for government and concerned authorities for the formulation of viable policies and strategies aiming at sustainable potato production, marketing and researchers.

Keywords: biotic, botanicals, urine, ash