Introduction

Joan R. Davenport

Potato (*Solanum tuberosum*) is recognized as a crop requiring high nitrogen (N) fertility to maintain production (Ojala et al., 1990). Potato production areas are also associated with a high potential for nitrate (NO_3) contamination to groundwater (Nolan et al., 1998). Estimates of NO_3-N leaching under potatoes have been reported to range from 62.5 lb/acre (70 kg·ha^{-1}) to more than 178.4 lb/acre (200 kg·ha^{-1}) (Errebhi et al., 1998; Hill, 1986; Meissinger, 1976; Saffinga et al., 1977).

Research has been ongoing to look to alternative approaches for N management in potato cropping systems to maintain productivity while reducing the potential for negative environmental impact. To this end, a workshop was developed to cover a broad spectrum of issues revolving around potato N management. Topics covered showed an array of different management techniques, from genetics to manure, as well as approaches such as simulation modeling to predict nitrogen uptake and utilization potential. The papers presented in the following section cover three of these diverse topics. Other material that was covered in the workshop is currently in press elsewhere.

Literature cited

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Department of Crop and Soil Sciences, Washington State University, Prosser, WA 99350.