

## Nitrogen Fertilizer Does Not Enhance Yield or Quality of Forage-Pea in Low-Nitrogen Environments

Patrick M. Carr, Woodrow W. Poland, and Lee J. Tisor  
North Dakota State University  
Dickinson Research Extension Center  
Dickinson, ND

### Summary

Some seedsmen claim that forage yield of inoculated pea (*Pisum sativum* L. subsp. *sativum*) can be enhanced in low-nitrogen (N) soils by applications of N-fertilizer. A 3-yr study was conducted at Dickinson, to determine if applications of N-fertilizer enhanced pea yield or quality in soils containing < 30 lb nitrate-N/acre at planting. Nitrogen was broadcasted as urea (46-0-0) at 3 rates in plots prior to sowing the variety 'Arvika'. Check plots (0 N) were included. Peas were inoculated with *Rhizobium leguminosarum* prior to sowing. Yield along with concentrations of crude protein, acid- and neutral-detergent fiber were determined. Applications of N-fertilizer failed to affect forage yield or quality. Results of this research indicate that applications of N-fertilizer are not necessary for optimum yield and quality of forage produced by pea when seed is inoculated with *R. leguminosarum*.

*A complete paper describing the study will be published in the 2001 Proceedings of the annual meeting of the American Forage and Grasslands Council.*

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