# Evaluation of North American Isolates of Kura Clover-Nodulating Rhizobia. (C06-seguin124442-Poster)

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## Abstract:

Kura clover (Trifolium ambiguum) is a promising forage legume whose use is limited by establishment problems attributable in part to nodulation difficulties. Commercial rhizobial inoculants are available for Kura clover but many are not highly efficient. The goal of this study is to identify more efficient Kura clover rhizobial strains. The efficiency of strains isolated from established Kura clover stands in North America was compared to strains used in commercial inoculants. Strains were also compared to nitrogen controls (with and without) when used as inoculants with Kura clover in growth chamber and field studies. Results in growth chambers demonstrated that strains we isolated could increase total plant dry matter weight by as much as 75% after 60 days of growth relative to the best commercial strain tested. Plant weight was however still only half of that of the plants fertilized with nitrogen. Results from field studies in Quebec and Minnesota also suggest the superiority of our rhizobial isolates compared to strains used in commercial inoculants. Additional studies are required to determine the viability and potential of using these isolates in various carrier materials.

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