PI: Gary Y. Yuen **PI's E-mail: GYUEN1@unl.edu**

Project ID: 0405-YU-106 **FY03 ARS Agreement #: 59-0790-1-079**

Research Area: **CBC** **Duration of Award: 1 Year**

Project Title: Standardized Evaluation of Biological Control Agents.

PROJECT 2 ABSTRACT
(1 Page Limit)

Evaluation of biocontrol agents for Fusarium head blight (FHB) over a wide range of environmental conditions and genotypes of wheat and barley is crucial for assessing their true potentials and for identifying weakness that must be overcome before commercialization. The Uniform Fungicide and Biological Control Trials (UFBT) provides an avenue for wide-scale, standardized field testing, but biological control agents currently being investigated for FHB are only in the early stages of development. It is difficult to propagate these agents to produce sufficient materials for the UFBT and none are yet formulated to permit handling as in the same manner as chemical fungicides. Recognizing that biocontrol agents for FHB, in their current state, require special procedures as to propagation, handling and quality control, a SEB program separate from the UFBT is proposed. The objectives of this project are to coordinate efforts for a standardized evaluation of biological control agents (SEB), and to provide a field test site in Nebraska for the SEB effort. The coordinator will organize participating testers and researchers who wish to submit organisms for testing at a meeting. Subsequently he will serve as the conduit for information specific to each biocontrol agent. Lastly, he will compile, analyze and report the collective results. The Nebraska evaluation of biocontrol agents will involve a winter wheat, but otherwise will use methodology standard across all sites in the program. Among those aspects that are standardized are plot size, application method methods and rates, and types of data to be collected. In addition, special procedures for propagating and handling biocontrol agents, and for quality control (determination of pre- and post-application populations of biocontrol agents) will be followed.