

Barley Coordinated Agricultural Project Work Plan FY06 (3/1/06 – 2/29/07)
Mitchell L. Wise, USDA, ARS, Cereal Crops Research

1) Describe the research, education, and outreach activities you are planning for the next year (3/1/06 – 2/29/07)

Research: We will analyze the 960 CAP breeding lines for beta glucan content as delineated in the CAP Participants Guide. The analytical method will be a flow injection analysis utilizing the calcofluor fluorescence assay. Each acquisition will be analyzed a single time.

Education: An undergraduate student worker, under the supervision of a USDA scientist, will be employed to conduct these analyses.

2) List specific outcomes and deliverables that will be accomplished in the first 6 months (3/1 – 8/31). These will be used as benchmarks for your bi-annual progress report.

The beta glucan content data from approximately half the germplines will be provided to the appropriate CAP coordinator (Kevin Smith, University of Minnesota).

3) List specific outcomes and deliverables that will be accomplished in the second 6 months (9/1 – 2/29). These will be used as benchmarks for the bi-annual progress report.

The remaining germline data for beta glucan content will be provided as above.

Barley Coordinated Agricultural Project Annual Report FY06 (3/1/06 – 2/29/07)
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- 1) We have received grain samples (96 lines each) from two of the participating breeders, Pat Hayes (Oregon State University) and Carl Griffy (Virginia Tech University). All 192 lines have been analyzed for beta-glucan content. The results from the OSU samples were transmitted to Dr. Kevin Smith (University of Minnesota) on Sept 27 for inclusion in the database. The VaTech samples have only recently been completed. Results will be forwarded within the next day or two.**
- 2) With respect to outreach and education, a new undergraduate student is being trained in the laboratory procedures to conduct these analyses.**