

Barley Coordinated Agricultural Project Work Plan for Year 4 (4/1/2009 – 3/30/2010)
Rex Bernardo, University of Minnesota

1) Describe the research, education, and outreach activities you are planning for the next year (4/1/2009 – 3/30/2010)

Research

Continue refining *QTL Miner* as needed.

Prepare a short journal article announcing the availability of *QTL Miner*.

Education and Outreach

Educate students and breeders on the use of *QTL Miner* and on more general aspects of marker-assisted selection.

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

Make any needed minor modifications in *QTL Miner* as per user input.

Provide technical assistance to Barley CAP breeders on the use of *QTL Miner* for analyzing breeder data sets.

Help teach a summer short course on marker-assisted selection and on finding marker-trait associations with *QTL Miner*.

3) List specific outcomes and deliverables that will be accomplished in the second 6 months. These will be used as benchmarks for the bi-annual progress report.

Continue to make any needed minor modifications in *QTL Miner* as per user input.

Continue to provide technical assistance to Barley CAP breeders on the use of *QTL Miner* for analyzing breeder data sets.

Barley Coordinated Agricultural Project Six-Month Progress Report
(4/1/2008 – 9/30/2008)

Rex Bernardo, University of Minnesota

1) Describe the research, education, and outreach activities you completed in the first half of FY07 (4/1/2008 – 9/30/2008)

Research

- Developed the first working version of *QTL Miner*.

Education and Outreach

- Helped teach the Barley CAP short course on association mapping and marker-assisted selection (16-18 June 2008, University of Minnesota).

2) List specific outcomes and deliverables accomplished (4/1/2008 – 9/30/2008).

- Completed the user interface and C++ code for *QTL Miner*.
- Distributed a working version of *QTL Miner* at the Barley CAP workshop.
- Began to modify the user interface and C++ code to accommodate the computation of inbred relatedness on the basis of marker data (as proposed by the Scientific Advisory Board).