

## ANSC/TPSS 603

### Assignment 7 - Components of Variance/Expected Mean Squares

An experiment is installed to evaluate the performance of 3 varieties of taro in a randomized complete block design with 3 replicates. The experiment is installed on 4 islands to test the varieties in different environments.

1. Write out the combined analysis of variance for this experiment over the 4 islands.
2. Write out the components of variance/expected mean squares for this combined analysis on the fixed model, the random model, and the mixed model with locations fixed and varieties random.
3. For the random model, show the appropriate F tests.