

A COMPARISON OF FREQUENTLY USED COTTON BOLL SAMPLING METHODS**Tyson Andrew Phillips****Gerald O. Myers****LSU Agcenter****Baton Rouge, LA****Abstract**

It is often assumed that samples consisting of 50 cotton bolls will produce the most representative sample from a cotton plot. Samples of this size are quite time consuming to collect especially in tests with a large number of entries and/or replications. Alternative methods of plot sampling are samples of 25 boll size or collecting grab samples while harvesting. While these two methods are certainly less time consuming than collection of 50 cotton boll samples, a question arises regarding the representativeness of the data they produce. To address this issue we conducted an experiment with 2 commercial varieties and 2 experimental varieties in one location during the 2007 & 2008 growing season. The test conducted in 2007 had two replications and the test conducted in 2008 had four replications. Three sampling methods were used in each plot; 50-boll, 25-boll and grab. HVI data was used to compare the three sampling methods with data obtained for the entire plot by using a micro-gin to simulate a commercial setting. Analysis showed virtually no difference existed between 50-boll and 25-boll samples; grab samples were typically most similar to the entire plot data.