1067-62-1380 **Lauren Mondin*** (lnm007@shsu.edu), 1900 Avenue I, Lee Drain Building, Suite 420, Sam Houston State University, Huntsville, TX 77340, **Scott Clark**, 1900 Avenue I, Lee Drain Building, Suite 420, Sam Houston State University, Huntsville, TX 77340, **Courtney Weber**, 1900 Avenue I, Lee Drain Building, Suite 420, Sam Houston State University, Huntsville, TX 77340, **Jessica Winborn**, 1900 Avenue I, Lee Drain Building, Suite 420, Sam Houston State University, Huntsville, TX 77340, and **Melinda Holt**, 1900 Avenue I, Lee Drain Building, Suite 420, Sam Houston State University, Huntsville, TX 77340. *Statistical Analysis of Diagnostic Accuracy With Applications to Cricket.*

In the game of Cricket, spectators and officials are interested in making the games as fair as possible. One way to accomplish this is to evaluate the umpires and the correctness of their calls. Estimates of statistical accuracy were used as a basis for comparison. Another way to ensure the objectivity of the game is to be able to, as consistently as possible, determine the winner of the game if it is interrupted for some reason. In the traditional Fifty50 cricket game, the Duckworth-Lewis (DL) method of determining a winner is the preferred procedure. However, with the growing popularity of shorter Twenty20 matches, a new Bhattacharya-Gill-Swartz (BGS) method has also been introduced. We created both frequentist and Bayesian intervals to estimate the true accuracy of each. Using past game data from 2005-2010, we compared the DL and BGS methods using the new accuracy intervals and Receiver Operator Characteristic (ROC) curves, which compare true positives vs false positives. (Received September 20, 2010)