

1116-VP-389

**Qasim M Al-Shboul\*** (z9889@zu.ac.ae), Zayed Universit, University College, Department of Mathematics and Statistics, Dubai, 19282, United Arab Emirates, and **Elies Kouider**. *Best linear invariant estimators using both double ranked set sampling and a modified double ranked set sampling procedures.*

The use of ranked set sampling for estimating the mean and its advantage over the use of a simple random sampling for the same purpose has become known in the literature. The best linear invariant estimators of the location and scale parameters and consequently the population mean when using both the double ranked set sampling (DRSS) and a modified double ranked set sampling (MDRSS) techniques are introduced. The relative precisions of the best linear invariant estimators (BLIEs) using both DRSS and MDRSS relative to the best linear unbiased estimators (BLUEs) using DRSS are obtained for some selected distributions and sample sizes. Computations indicate that regardless of the sample size or distribution being used, the BLIEs using MDRSS outperform the BLIEs using DRSS, which in turns do better than the BLUEs using DRSS for estimating the mean, location, and scale parameters. (Received August 30, 2015)