

On estimation of parameters of double-Weibull distribution using U-statistics based on best linear functions of order statistics as kernels

K.V. Baiju*, P. Yageen Thomas & N.V. Sreekumar

* Department of Statistics, Government College for Women, Trivandrum, Kerala

Email: baijukv@gmail.com

ABSTRACT

In this work, we have obtained estimators for the location and scale parameters of double Weibull distribution using U-statistics based on best linear functions of order statistics as kernels when its shape parameter is known. The efficiency comparisons of the proposed U-statistics with respect to some standard estimators are also described.

KEY WORDS

Best linear functions based on order statistics, double Weibull distribution, Gini's mean difference, U-statistics based on best linear functions of order statistics as kernels, relative efficiency.