Documents

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Bayesian and non bayesian estimations on the exponentiated modified weibull distribution for progressive censored sample
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Abstract
The four-parameter Exponentiated Modified Weibull (EMW) is considered as an important lifetime distribution. Based on progressive Type-II censored sample, maximum likelihood and Bayesian estimators of the parameters, reliability function, and hazard rate function are derived. Two cases are considered: first, the case of one unknown exponent parameter of EMW and second, the case when two parameters of the EMW are both unknown. The Bayes estimators are studied under squared error and LINEX loss functions. The standard Bayes and importance sampling are considered for the estimation. Monte Carlo simulations are performed under different samples sizes and different censoring schemes for investigating and comparing the methods of estimation. Copyright © Taylor & Francis Group, LLC.

Author Keywords
Exponentiated modified Weibull; Importance sampling technique; LINEX loss function; Monte Carlo simulation; Progressive Type-II censored; Squared error loss function

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