

Article Abstract

Title:	Bayesian estimations in the Kumaraswamy distribution under progressively type II censoring data
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Abstract:	This paper seeks to focus on the study and Bayesian and non-Bayesian estimators for the shape parameter, reliability and failure rate functions of the Kumaraswamy distribution in the cases of progressively type II censored samples. Maximum likelihood estimation and Bayes estimation, reliability and failure rate functions are obtained using symmetric and asymmetric loss functions. Comparisons are made between these estimators using Monte Carlo simulation study. With prior information on the parameter of the Kumaraswamy distribution, Bayes approach under squared error loss function in the reliability function has been suggested based on the pervious observations, this approach can be used for both progressively type II censorings. The study is useful for researchers and practitioners in reliability theory and quality also for scientists in physics and chemistry special hydrological literatare, where Kumaraswamy distribution is widely used.
Keywords:	Kumaraswamy distribution; Bayesian estimation; progressively Type II right censoring data; Reliability; Failure rate; simulation study.