

NEGATIVE BINOMIAL-JANARDAN DISTRIBUTION WITH APPLICATIONS IN COUNT DATA

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SUMMARY

We introduce a three-parameter count model which can be useful for modeling over-dispersion. Various properties including moments, over-dispersion have been discussed. Two popular methods namely method of moments(MOM) and maximum likelihood estimation(MLE) have been used for estimating the parameters involved in the proposed model. In order to check the efficacy of the model in practical fields, two real life data sets have been taken into consideration.

Keywords and phrases: Count data, Negative binomial-Janardan distribution, Over-dispersion.

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