

Some Generalized Discrete Compound Geometric Distributions and their Properties

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Geometric distribution has a vital role in the field of distribution theory. Extended geometric, Harris and negative binomial distributions are generalizations of this distribution. Compounding of these distributions give rise to compound geometric (CG), compound extended geometric (CEG), compound Harris (CH), and compound negative binomial (CNB) distributions. We present here some distributional, statistical and reliability properties of these distributions with discrete uniform and geometric distributions as secondary distributions. Estimation of parameters are carried out using moment and BHHJ methods of estimation. Real life data are used to illustrate applicability of these distributions.