

ZMATH 2006e.03258

Kadilar, Cem; Cingi, Hulya

New ratio estimators using correlation coefficient.

InterStat, No. 3, 11 p. (2006).

We propose a class of ratio estimators for the estimation of population mean by adapting the estimators in Singh and Tailor (2003) to the estimators in Kadilar and Cingi (2004). We obtain mean square error (MSE) equations for all proposed estimators, and find theoretical conditions that make each proposed estimator more efficient than the traditional estimators, and similarly for comparison to the ratio estimator in Singh and Tailor (2003), and for those in Kadilar and Cingi (2004). In addition, these conditions are supported by a numerical example. (orig.)

Classification: K90

Keywords: ratio estimator; auxiliary variable; simple random sampling; efficiency