IDENTIFICATION OF INFLUENTIAL OBSERVATIONS ON MINTHOSTACHYS GENDER SAMPLES

Daniel Cañari CASAÑO[1]
Doris Gómez TICERÁN [2]
Olga Lidia Solano DÁVILA[1]
Yakov Quinteros GÓMEZ[3]
Joaquina Albán CASTILLLO[3]

- *ABSTRACT: This paper explores the possibility of identifying influential observations in discriminant analysis framework, 100 botanical specimens of the genus* Minthostachys*, pubescent and pubescent not collected in the province of Cajatambo department of Lima. The evaluation of morphological variables in the main branch of each* Minthostachys *being studied was: length of petiole, leaf length and width of the blade. Taxonomic and systematic studies of the samples were performed at the Laboratory of Ethnobotany and Economic Botany of the Natural History Museum and the determination of the species are held in the herbarium of the San Marcos University, using the Cronquist classification system, which marked 51 plants such as non-pubescent and pubescent 49. For the full sample and removing each time one of the samples or observations, we calculated the value of the Mahalanobis Distance, the probability of misclassification, the weightings and scores of discriminant function of Fisher (Campell, 1978; Fung, 1992 , 1995). Comparison of the values of the estimates, with and without the observation under evaluation, it was concluded that observations 64, 90 and 100 were identified as influential.*

- *KEYWORDS*: *Influence measures; influential observation; linear discriminant analysis; Gender* Minthostachys.

[1] Ministerio de Vivienda, Construcción y Saneamiento, Oficina de Estadística, CEP: 31, Lima, Perú. E-mail: *dcanari@vivienda.gob.pe*.

[2] UNMSM, Facultad de Ciencias Matemáticas, Departamento de Estadística, CEP: 31, Lima, Perú. E-mail: *dorisgomezt@gmail.com / solano_2010@gmail.com*

[3] UNMSM, Museo de Historia Natural, Departamento de Etnobotánica y Botánica Económica, CEP: 31, Lima, Perú. Yakov281@hotmail.com. E-mail: *yakov281@hotmail.com / jalbanc@gmail.com*