

NAME. SARTIKA RAJAK. MORPHOMETRIC, QUANTITATIVE AND QUALYTATIVE CHARACTERISTICS OF FREE-RANGE CHICKENS USING TRADITONAL REARING SYSTEMS IN SOUTH HALMAHERA DISTRICT, NORTH MALUKU

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ABSTRACT

This research aims to determine the qualitative and quantitative morphometrics of adult male and female village chickens. The qualitative observations are feather color, beak color, shank color and comb shape. Quantitative measures observed were body weight, tarsometatarsus/shank bone length, beak length, chest width, back length and chest circumference. This research was carried out in South Kayoa and North Kayoa Districts from June to August. The number of village chickens studied was 120 (60 males and 60 females). The data used in this research is descriptive analysis and *principal component analysis* (PCA). The results of research on the size of male native chickens are shown with the highest value, namely 0.516 (X_2), which is characterized by the length of the Tarsometatarsus/shank. Meanwhile, the characteristic of the shape of the chest circumference (X_5) is the size of the chest circumference. Meanwhile, the female village chickens duck has the characteristic of (X_5), namely the chest circumference with a value of 0.634 and the shape characteristic of the back length with a value of 0.687. The highest eigenvalue was obtained at 0.7447 which is a characteristic of the size of female village chickens. Meanwhile, the highest total diversity was found in shape characteristics as well as in female village chickens. This proportion is the largest among other proportions

Keywords: qualitative and quantitative morphometrics