

RELATIONSHIP BETWEEN MORPHOMETRY OF UDDER MARES AND MILK PRODUCTION IN BIMA DISTRICT WEST NUSA TENGGARA

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ABSTRACT

Objective from this research was to determine the relationship of *udder morphometry* which consists of the height of the front udder, the height of the rear udder and the circumference of udder on milk production in the Bima District of West Nusa Tenggara. One of ways to choose a good lactational mare is to pay attention at the shape of the part external body which is udder. The sample had used 32 mares that were in lactation period. Milk production has been measured from the average milk production per day in the lactation period. Milking process in Bima District, West Nusa Tenggara has done in three to four times a day in the span of four to five hours per day. Body length had been measured from os thoracalis to os coxae, chest circumference had been measured from os vertebrae thoracalis to os thoracalis, posterior abdomen of pelvic to os pelvis and the last of os lumbar vetebrae. The research design in this study was survey on every wild mares rancher. Data that has been collected and processed using Multiple Regression with SPSS program version 23th. The result showed that there was a strong relationship between height of rear udder and udder circumference to milk production with back udder with height coefficient of 0.21 ($P < 0.05$) and udder circumference was 0.11 ($P < 0.05$) and equation in $Y = 2.423 - 0.398LA + 0.793TAB$. However, there is no significant relationship between the height of the front udder and milk production.

Keywords : *morphometry*, udder mares, milk production