

**PENDUGAAN BOBOT BADAN CALON INDUK SAPI BALI
MELALUI BEBERAPA UKURAN PERMUKAAN TUBUH**

(A Formula Estimating The Body Weight of The Cow Candidate Bali Cattle Based on Some of Her Body Measurement.)

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ABSTRACT

Weighing is a great way to find an animal's body weight. However, in certain circumstances, especially in conditions of traditional farms, where scales are not available, then another method is required that is considered practical to estimate an animal's body weight. This research was conducted with the aim to find a formula estimating the body weight of the cow candidate Bali cattle (ages 1 ½ - 2 years) based on some of her body measurement. Accordingly, we conducted the data collection body weight (BW), chest circle (LD), body length (PB), and body height (TB) of 35 cow candidate Bali cattle (ages 1 ½ - 2 years). Data obtained from Bali Cattle Breeding Centre in the province of Bali. Data analysis was performed using a Best Subset Regression. The results indicated that body weight of cow candidate Bali cattle age of 1 ½ - 2 years old ($BB_{1\frac{1}{2}-2th}$) can be estimated by the formula $BB_{1\frac{1}{2}-2th} = 2,93 LD + 1,02 PB - 342$, with $R^2 = 90,4\%$. With the discovery of body weight estimation formula of cow candidate Bali cattle is the main candidate selection is expected to improve the genetic quality of Bali cattle can be done at the level of farm people.

Key Words: cows candidate of Bali cattle, body weight, body length, body height, breast circle.

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