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“Bridging the gap between increasing knowledge and decreasing resources”

## Calving Time and Birthweight of Bali Cattle under Semi-Intensive Rearing System in West Timor, Indonesia

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### Abstract

Studies have revealed that high calf mortality rate and slow growth rate of Bali cattle under extensive rearing system in West Timor, Indonesia, is attributable to wrong mating time (September-November) and calving time (July-October) when nutritional inadequacy is apparent. Thus, improving nutritional status of the dams would have a positive effect on calf. This experiment aimed at assessing calving time and birth weight of Bali cattle calves under semi-intensive rearing system where nutrient deficiency is not an issue. A total of 162 productive cows were monitored in the period of 2012–2013. The cows were grazed in groups consisted of 25–30 cows and one tested bull per group. Eight paddocks (approximately 1 ha) of *Bothriochloa timorensis* dominated native grass pasture were rotationally grazed during the course of the study. The cows and bulls were allowed to graze in the morning from 8.00h to 12.00h, and in the afternoon from 15.00h to 19.00h. All cattle were kept in a 4 m × 50 m collective pen during non-grazing time. Chopped palm pith were offered in the morning before the 1<sup>st</sup> grazing period, and freshly harvested king grass (*Pennisetum purpureum*) was provided to cows when they reentered the pen at midday and after the afternoon grazing. The amount of palm pith and king grass offered was not measured. Body condition score of the cows were recorded monthly and at the time of giving birth. Calf birth weight was recorded soon after the birth. The results showed that 49.9% calves were born in dry season (July-October). The mean birth weight was 12.72 kg with no difference between male (12.86 kg) and female (12.61 kg) calves. There was no correlation between body condition score of the dam and calf birth weight. It might be concluded that calving time and calf birth weight of Bali cattle under semi-intensive rearing system were not different from those of extensive rearing system in West Timor, Indonesia.

**Keywords:** Bali cattle, birth weight, calving time, semi-intensive system