

## Artificial Insemination of Bali Cattle with Frozen-Thawed Sexed Sperm Under District AI Station Conditions in Lombok: A Preliminary Trial

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**Abstract :** The present study was undertaken to synchronize oestrus of bali cattle and artificially inseminated with frozen-thawed sexed-semen. The experiment was carried out at District AI Station. Four pluriparous cows and four nulliparous heifers were used in this study and they were housed in free stall barns. The heifers fed with corn silage supplemented with UMMB, while the cows fed with green fodder. All animals were given 500 mg cloprostenolum i.m. injections PGF2 $\alpha$  twice, 11 days apart, to synchronize the occurrence of estrus. Estrus was detected by visual observation twice a day and determined if all cattle accepted mount from other females. All animals were inseminated twice with Bali sexed-semen at 72 and 76 h after observed oestrus. Results suggested that the percentage of calving rate either for pluriparous cows or nulliparous heifers were recorded to be 75 percent. One cow and one heifer did not produce calves because of embryonic lost. Regardless the sex of calves, the mean of birth weight of calves in cows was higher than that of heifers (18.50  $\pm$  2.60 kg vs 13.83  $\pm$  5.20 kg). One female calf from heifer with lower birth weight (8.0 kg) was dead one day after born. In pluriparous group, two cows delivered male calves and the other delivered female calf. Conversely in nulliparous group, two heifers delivered female calves and the other male calf. It is concluded that under the conditions of this preliminary trials, the sex ratio between pluriparous and nulliparous groups was found to be 50:50 (male:female).

**Keywords :** artificial insemination, bali cattle, calves, sexed sperm

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