

THE APPLICATION OF EQUINE CHORIONIC GONADOTROPIN (*eCG*) AND PROSTAGLANDIN F₂ α TO INCREASE THE RATE OF PREGNANCY IN BALI CATTLE AT BULELENG, BALI.

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ABSTRACT

This research objective was to increase the rate of pregnancy in Bali cattle using *eCG* and PGF₂ α at Buleleng, Bali. The experimental animal used in this study comprised of 18 female Bali cattles, with normal estrus cycle and 18 months old of age. The Bali cattles are all healthy with a body score of at least 2. The Control Group was injected with PGF₂ α 25 mg intramuscular twice on day 0 and day 11. Treatment Group 1 was injected with PGF₂ α 25 mg and *eCG* dosage of 400 IU intramuscular. Treatment Group 2 was injected with PGF₂ α 25 mg and *eCG* dosage of 600 IU intramuscular. On day 14, the female Bali cattle both Treatment Group 1 and 2 respectively showed signs of estrus. Few hours' later artificial insemination was performed on the same day. On Day 30, all 18 female Bali cattle were checked for pregnancy using Ultrasonography (USG). The female Bali cattle were assumed to be pregnant because there were signs of enlargement in cornua uteri unilaterally. Therefore, this indicates that there was no significant difference between Treatment Group 1 and Treatment Group 2 in pregnancy rate. The results from Control Group showed 4 pregnant and 2 not-pregnant; Treatment Group 1 showed 6 pregnant; Treatment Group 2 showed 6 pregnant. Based on the results, Control Group showed 88% of the Bali cattle were pregnant. Meanwhile, Treatment Group 1 and Treatment Group 2 showed 100% pregnant from the total 18 Bali cattle. Therefore, this research showed a positive feedback consistent with the objective.

Keywords: Bali Cattle, *eCG*, PGF₂ α and The Rate of Pregnancy.