

Peerayut Nilchuen 2011: Superovulation with Different Doses of Follicle Stimulating Hormone in Kamphaeng Saen Beef Cattle. Master of Science (Animal Production), Major Field: Animal Production, Department of Animal Science. Thesis Advisor: Associate Professor Srisuwan Chomchai, M.S. 79 pages.

The experiment was conducted to investigate the effect of different doses of follicle stimulating hormone (FSH) using in superovulation program on numbers of corpora lutea, total ova/embryos and transferable embryos in Kamphaeng Saen beef cattle. Cyclic cows (n=4) and heifers (n=4) of Kamphaeng Saen beef breed were assigned for two levels of FSH (200 and 250 mg. NIH-FSH-P1) in Change-over Design by which two change over treatments were studied over two periods in all animals. Cows and heifers were estrous synchronized by Cloprostenol (500 µg). Estrus detection was performed by teaser bull (Day 0 = day of the onset of standing estrus). On day 9 after the onset of standing estrus, all animals were treated with FSH twice daily decreasing doses over 4 days. On day 3 of FSH injection, each animal was treated with Cloprostenol (500 µg). At the first standing estrus, all animals were artificially inseminated three times with 12 h interval, two straws of frozen-thawed semen of Kamphaeng Saen bull were used per insemination. All animals were treated with gonadotropin releasing hormone (10 µg of Buserelin) at first insemination. Numbers of corpora lutea were determined by rectal palpation and embryos were flushed seven days after the onset of standing estrus and classified according to the development stage and quality. The results showed that numbers of corpora lutea, percentages of total ova/embryos and percentages of transferable embryos and stages of embryo development were not significantly different ( $P>0.05$ ) between treatments (FSH: 200 versus 250 mg) in cow and heifer.

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