The Effect of Multivitamin and Gonadotrophin Releasing Hormone (GnRH) Administration on Conception Rates of Postpartum Brahman Crossbred Cows

Abstrak:

The objective of the study is to increase the conception rates of postpartum Brahman crossbred cows by administering multivitamin and GnRH injected intramuscularly. A total 40 heads of Brahman crossbred cows one month after calving, clinically healthy, approximately 2.5 years old, were used in the study. The animals were randomly divided into 4 groups. Group I (n=10), each animal was given with 3 ml multivitamin (Vigantol®, Bayer, Indonesia) once every three days for 45 days, after showing estrus symptoms the animal was artificially inseminated and followed by injecting 250 µg GnRH (Fertagyl®, Intervet, Indonesia). Group II (n=10), each animal was given the same protocol of multivitamin injections, injected with 250 µg GnRH on the last day of multivitamin administration, then artificially inseminated based on estrus symptoms and followed by injection of 250 µg GnRH at the same day. Group III (n=10), each animal was given the same protocol of multivitamin injections only. In group IV (n=10), as control animals, no treatment were given, but artificial insemination was performed also based on estrus symptoms as in the last two groups. Pregnancy diagnosis showed that conception rates of groups I to IV were 40%, 50%, 40% and 40%, respectively. The present study showed that administration of multivitamin and GnRH in postpartum Brahman crossbred cows had no effect on the conception rates. However, the first estrous of treated cows were significantly faster than the control animals.

Keyword:

Brahman crossbred cows, estrous postpartum, multivitamin, Gonadotrophin releasing hormone.