

Abstract

The research project was conducted at the Royal Agriculture Station Inthanon, Royal Project Foundation and Mae la Noi Royal Project. The experiment, wool ewes were used in group comparison design and ewes were randomly divided into 2 groups include female sheep and ewes, group 1, female sheep (n=10) and group 2, ewes (n=30). Both of female sheep and ewes received the intravaginal insertion of CIDR for 5 days (from day -5 to day 0) concurrent with injections of GnRH, PG and eCG (5-day CIDR+GnRH+PG+eCG program). And the hormone program will be used in conjunction with fixed time AI, or breeding by using a rams. On day 52 was diagnosed the pregnancy status by transrectal ultrasonography. Jugular vein blood samples (3 ml) were collected on day -5, day 0, day 23, and day 52 to determine progesterone and estradiol concentration. These results were described as follows. In group 1 Estrous rate (93.3% vs. 100%) and pregnancy rate (66.67% vs. 60.0%) did not differ ($P>0.05$) between ewes and female sheep. In group 2 Estrous rate (100% vs. 100%) did not differ ($P>0.05$) between ewes and female sheep but female sheep had pregnancy rate a higher ($P=0.04$) compared to ewes (55.0% vs. 100%) ($P=0.04$). In addition ewes pregnancy and female sheep pregnancy have progesterone concentrations most than 1.0 ng/ml and ewes non pregnancy and female sheep non pregnancy have progesterone concentrations less than 1.0 ng/ml after day 52 and estradiol concentrations decreasing the level of estradiol confirmed the pregnancy of ewes. Therefore, Hormonal Protocol can Increase Lambing Rate of Wool Ewes under a Condition of the Highland Region

Key words: female sheep, ewes, hormone program, lambing rate, highland