CHAPTER 6

Conclusions

In conclusion, all of the results in this study can be summarized as follows:

6.1 Effect of concentrate supplementation levels on growth performance of local female goats in Laos

1. The total dry mater intake increased by the increasing level of concentrate in the diet was significantly different among the different treatment groups (*P<0.01*).

2. Higher dry mater intake lead to higher nutrient intake, body weight change and ADG were significantly different compared with the supplementation of concentrate groups and control group (*P<0.01*). Highest feed intake, body weight change and ADG were found in treatment supplemented of concentrate at the level to 400g/head/day with paper mulberry leaves as basal diet.

3. The apparent nutrient digestibility of DMD, OMD, CPD, EED, and NFED of concentrate supplementation groups were significantly higher than without concentrate supplementation (*P<0.01*). The better digestibility was found in supplemented of concentrate at the level to 400 g/head/day.

4. The FCR of goats fed with PML *ad libitum* was significantly highest in control group compared the treatment groups (*P<0.017*).

6.2 Effect of concentrate supplementation levels on response to estrous synchronization of local female goats in Laos

1. On the growth performance of the experiment all animals, it was found that the positive changes in body weight and ADG by using PML + CONc (400g/head/day) had greater value compared the control group fed only PML (*P<0.05*).

2. After post synchronization, animal displaying estrous behavior at 48 h after CIDR withdrawal was significantly higher in group that received the PML + CONc (400 g/head/day) diet than in the group that received only the PML (*P<0.05*).

3. The female goats that received the PML + CONc (400 g/head/day) diet had significantly greater diameters of largest preovulatory follicle than the female goats that received the PML diet ($P<0.05$).

4. The productivity of local female goats was tended to be greater in the group that received the PML + CONc (400 g/head/day) diet than in the group that received only the PML diet ($P=0.08$).

In conclusion, the present study can be indicated that female goats fed paper mulberry leaves as basal diet and the concentrate at the level to 400 g/head/day improved feed intake, growth performance, digestibility, increased response to synchronization of estrus, rate of preovulatory follicle growth, ovulation rate, and tended to be greater productivity of local female goats in Laos.