



MINISTRY OF JIHAD-E-AGRICULTURE

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Monitoring of crossbreeding program of LoriBakhtiari with Romanov and Pakistan sheep breeds in flocks of Khuzestan province

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Abstract:

This project was carried out to study crossbreeding program of Lori-Bakhtiari with Romanov and Pakistani sheep in Khuzestan province, as well as to evaluate the satisfaction level of the sheep breeders. The data used in this study included pedigree and weights records (birth to puberty) of crossbred lambs from crossing Lori-Bakhtiari ewes with Romanov rams and Lori-Bakhtiari ewes with Pakistani rams, which has been collected by the Improvement of Livestock Production Deputy of Jihad-e-Agriculture Organization of Khuzestan. These data included 344 weight records of Lori-Bakhtiari ×Romanov and 50 weight records of Lori-Bakhtiari× Pakistani. The average birth weight for 173 Lori-Bakhtiari×Romanov and 17 Lori-Bakhtiari×Pakistani lambs were 3.92 ± 0.10 and 4.37 ± 0.13 kg, respectively. The effect of three factors of flock, birth year and sex were significant for the birth weight of Lori-Bakhtiari×Rumanov lambs ($p<0.05$). The mean of 3 month weight for 24 Lori-Bakhtiari×Romanov and 8 Lori-Bakhtiari×Pakistani lambs were 13.87 ± 0.40 and 12.88 ± 0.40 kg, respectively. Birth weight, as an covariate factor, with the effects of two factors of flock and lamb sex were not significant for this trait ($p<0.05$). Also, the birth weight as covariate factor was not significant for 6 month weight of the Lori-Bakhtiari×Romanov female crossbreds ($P>0.05$). The mean of 6 month and puberty weight for these crossbreds were 32.43 ± 0.81 (29 lambs) and 38.96 ± 0.44 (108 lams) kg, respectively. In general, the results of the available data analysis showed that Lori-Bakhtiari×Romanov crossbred lambs had high growth rate, but in total, they had less weight than pure Lori-Bakhtiari and also Lori-Bakhtiari×Pakistani crossbreds. In the second part, among the flocks covered by the program, the information was collected through a questionnaire and personal interview with sheep breeders form 9 flocks of 7 cities of Khuzestan province. There was satisfaction among livestock breeders in the subject of communication with livestock centers and using expert's opinions. However, regarding the conducted crossbreeding program, all livestock breeders cited the issue of protecting sheep breeders and aid them in the implementation of the program. The interview also showed that there is a trend in livestock breeders to increase multiple birth in flocks, but this should be done with an appropriate program with complete knowledge of the

livestock breeders. The overall difficulties of crossbreds were expressed as high mortality, certain diseases, hot weather intolerance and small body size. According to livestock breeders, Lori-Bakhtyari×Pakistani crossbreds were better adapted to the hot weather of Khuzestan province, and also had food consumption and growth rate as same as Lori-Bakhtiari sheep; but Lori-Bakhtiari×Rumanov crossbreds consumed less food and they had higher growth rates, on the contrary. It was also concluded that laparoscopic surgery was not successful for weak ewes or in poor feeding situation. In general, it is suggested that after determining the results of the program in research situation, the proposed plan should be conducted among the pioneer livestock breeders (under non-traditional breeding conditions, with appropriate flock nutritional conditions as well as good economic conditions of breeder) with a complete and comprehensive program, with a predetermined purpose and complete knowledge and training of the breeders and completely controlled and managed during the project. The failure in livestock breeding projects which conducted in the flocks, leads to damage to the livestock breeders as well as to create the negative attitude of the livestock breeders towards the experts opinions and the implementation of future programs.

KeyWords:

Sheep, Romanov, growth traits, Khuzestan, crossbred, Lori-Bakhtiari, laparoscopy.