

THE ACCUMULATIVE EFFECT OF FINNSHEEP BREEDING IN CROSSBREEDING SCHEMES: EWE PRODUCTIVITY UNDER AN ACCELERATED LAMBING SYSTEM

Ewes representing DLS, Finnsheep (F) and seven of their crosses were subjected to a system of lambing every 8 mo on a commercial farm. Ewes were mated in spring (Apr.), autumn (Aug.) and winter (Dec.). For the three mating seasons, fertility was 80, 86 and 87% while number of lambs born alive was 1.85, 2.21 and 2.25 and those weaned were 1.84, 2.38 and 1.67 lambs, respectively. Fertility was highest in Finnsheep (98%) and 6/8F (97%). The largest (2.8) and smallest (1.2 lambs) litters were born to 7/8F and DLS ewes, respectively. The average interval between lambings was 264 d corresponding to 1.38 lambings producing 2.3 lambs ewe⁻¹ yr⁻¹. The 6/8F ewes had the highest productivity (3.27 lambs, 55.3 kg ewe⁻¹ yr⁻¹) followed by 5/8F and Finnsheep ewes.

Key words: DLS, Finnsheep, accelerated lambing, crossbreeding

[Effet cumulatif de la race ovine Finnish Landrace dans un programme de croisement: la productivité des brebis sous un système d'agnelage accéléré.]

Titre abrégé: Productivité de brebis Finnish Landrace et croisées.

Un système d'agnelage à chaque 8 mois a été appliqué chez un éleveur commercial avec des brebis de races DLS, Finnish Landrace (F) et sept de leurs croisements. Les brebis ont été accouplées au printemps (avril), en automne (août) et en hiver (décembre). La fertilité pour les trois saisons d'accouplement était de 80, 86 et 87%, le nombre d'agneaux nés vivants était de 1.85, 2.21 et 2.25 tandis que le nombre d'agneaux sevrés était respectivement de 1.84, 2.38 et 1.67. La fertilité était plus élevée chez les brebis de race Finnish Landrace (98%) et les 6/8F (97%). Les portées de plus grande taille (2.8 agneaux) et de plus petite taille (1.2 agneaux) ont été observées chez les brebis 7/8F et les brebis DLS respectivement. L'intervalle de temps moyen entre les mises bas était de 264 jours, ce qui représente 1.38 agnelages et 2.3 agneaux par brebis par année. La productivité la plus élevée a été observée chez les 6/8F (3.27 agneaux, 55.3 kg par brebis par année) ensuite chez les brebis 5/8F et Finnish Landrace.

Mots clés: DLS, Finnish Landrace, agnelage accéléré, croisement

Crossing native sheep with prolific breeds has been a fast and assured means of improving ewe productivity (Jakubec 1977). Productivity can also be enhanced by subjecting ewes to an accelerated lambing system (Notter and Copenhagen 1980). It is possible to improve ewe productivity further by applying accelerated breeding systems on prolific breeds and their crosses (Dzakuma et al. 1982). The objective of the present study is to report on ewe productivity of Finnsheep and its crosses with the DLS breed under an accelerated lambing system.

Data were collected between 1985 and 1989 on a commercial farm located at St. Augustin,

Quebec (49°N and 72°E), on 145 ewes born at the La Pocatière Experimental Farm. After the ewes had lambed at least four times at La Pocatière, they were relocated at St. Augustin in 1985 (ewes born in 1979) and 1986 (ewes born in 1980 and 1981). The ewes represented Finnsheep (F), DLS and seven of their crosses ranging between 1/8F 7/8F DLS (1/8F) and 7/8F 1/8 DLS (7/8F). Details on the origin of the ewes and their performance at La Pocatière under a system of mating once per year in the autumn were reported by Fahmy and Dufour (1988).

In winter, animals were fed grass silage ad libitum. In spring and autumn the ration was supplemented with small amounts of hay. During the lambing season the ewes were fed