

Carcass Traits and Feed - lot Performance of Barki, Merino and Awassi Breeds of Sheep and some of their Crosses

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This investigation involved a study on carcass and feed-lot performance of 84 yearling rams falling into 9 breeding groups; the pure breeds : Barki (B), Merino (M) and Awassi (A) and the crosses : $\frac{1}{2}$ M $\frac{3}{4}$ B, $\frac{3}{8}$ M $\frac{5}{8}$ B, $\frac{1}{2}$ M $\frac{1}{2}$ B, $\frac{5}{16}$ M $\frac{3}{8}$ B, $\frac{3}{4}$ M $\frac{1}{4}$ B and $\frac{1}{2}$ A $\frac{1}{2}$ B. Sheep were born and raised in Ras-El-Hekma desert station and fattened for 9 weeks in the Desert Inst. in Cairo.

Results indicated that under fattening conditions M excelled the other two breeds in performance while B was generally the poorest. M was the heaviest, the largest and gained more than the other two breeds. The MB crosses fell in between the two parental breeds in gain but excelled both in weights and size, especially the $\frac{1}{2}$ M $\frac{1}{2}$ B and $\frac{5}{8}$ M. The AB crosses scored the highest daily gain.

Generally, the crossbreds excelled the purebreds in dressing percent. Among the purebred Awassi had the highest dressing percent, mainly because of its heavy tail. As for carcass measurements, the weight and dimensions showed similar trends as those of results on live body.

Weights of *biceps femoris*, *triceps brachii* and *psaos major* and the depth and the width of the *longissimus dorsi* were reported for different breeding groups. The 9-10-11 rib cut physical separation analysis showed that breeding groups did not differ significantly in fat and lean percentages while they differed in bone percentage with the Merino having the highest value.

Also, simple correlations were estimated between trials that could be of predictive value.

Attempts for the improvement of sheep production in the Egyptian Northwestern Coastal Desert involved research with the local breed of Barki, Hungarian and German Fleisch Merinos, Syrian Awassi and some of their crosses. Various studies have been carried out to follow up the performance of these breeds and their crosses regarding wool production (Ghanem, 1964 ; Guirgis, 1965 and 1967; Awad, 1966; Seoudy, 1966, and Fahmy, Galal Ghanem and Khishin, 1969 a) and body growth (Fahmy, Ghanem and El-Essawy, 1964 ; Ghanem, Fahmy and El-Essawy 1964 ; Galal, 1968 and Fahmy and Galal, 1968) as well as estimating the genetic parameters of these traits (Galal, 1968 and Fahmy, Galal, Ghanem and Khishin, 1969b). A study that deals with carcass was that of Galal, Seoudy, Younis and Khishin (1971).