

**Growth performance in crossbred of Local goats with Damascus and
Morcia Grinada goats**

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ABSTRACT

The Local goat (Mahali) breed in Libya counts approximately 1.5 – 2.0 million heads. They are widely distributed over regions of Libya especially the coastal area. Local goat breed (M) comprises 90% of total number of goats in Libya. Some studies (Magid, 1995) indicated lower production of Mahali goat in comparison with some other breeds. For this reason Damascus goats (D) and Morcia Grinada (G) breeds were imported for crossing with Mahali goats in order to improve their productivity.

This study was conducted in Bir-Elghanam Research Station to evaluate the growth characteristics in crossbred of Mahali X Damascus and Mahali X Mortia Grinada. The studied traits were weighed at: birth, weaning, 6 and 8 month for crossbred ($\frac{3}{4}M \frac{1}{4}D$, $\frac{3}{4}D \frac{1}{4}M$ and $\frac{3}{4}M \frac{1}{4}G$). The model used to analyze the data include effects of sex, birth type and years on all weights.

Results showed significant superiority of $\frac{3}{4}D \frac{1}{4}M$ in birth weight (3.42 kg), weaning weight (19.75 kg), weight at 6 and 8 months of age (25.9 and 30.3 kg respectively), daily growth rate before weaning (129.2 g/ day) and daily growth rate from weaning until 6 and 8 month of age (75.2g/ day and 92.2g/day, respectively) over the crossbred $\frac{3}{4}M \frac{1}{4}D$ and $\frac{3}{4}M \frac{1}{4}G$. The crossbred $\frac{3}{4}M \frac{1}{4}D$ was significantly superior in birth weight (2.92 kg) over the crossbred $\frac{3}{4}M \frac{1}{4}G$ (2.5kg). The crossbred groups $\frac{3}{4}M \frac{1}{4}D$, $\frac{3}{4}M \frac{1}{4}G$ and $\frac{3}{4}D \frac{1}{4}M$ showed increase in birth weight being 13.84% , 10.38 % and 9.0% respectively . While crossbred groups $\frac{3}{4}M \frac{1}{4}D$, $\frac{3}{4}D \frac{1}{4}M$ and $\frac{3}{4}M \frac{1}{4}G$ showed increase in weaning weight being 6.93% , 6.4% and 5.68% .