THE EFFECT OF CROSSBREEDING BETWEEN GABALI AND BAUSCAT RABBIT BREEDS ON PRODUCTIVE PERFORMANCE OF THEIR CROSSES

By

AHMED IBRAHIM ABDELMABOUD ELDOMYITY
B. Sc. Agric. Sc. (Poultry Production), Menofiya Univ. (2009)

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effect ($_{G}$m) and direct additive effect ($_{G}$i) on Carcass traits.

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ABSTRACT

Ahmed Ibrahim Abdelmaboud Eldomyati: The Effect of crossbreeding Between Gabali and Bauscat Rabbit Breeds on Productive Performance of their Crosses. Unpublished M.Sc. Thesis, Department of Poultry Production, Faculty of Agriculture, Ain Shams University, 2018.

Data of 518 litter traits (litter size at birth, LSB, and at weaning, LSW, and litter weight at birth, LWB, and at weaning, LWW) produced from 4 genetic groups (2 purebreds and 2 crossbreds) were used. Data were analyzed using crossbreeding effect program to estimate crossbreeding components (additive, heterosis and maternal effect) .

Generally the experiment was conducted on Bauscat (B) and Gabali (GAB). The rabbits were fed pellets *adlibitum*, and slaughtered at 12 weeks of age . The following traits were recorded: body weight and average daily gain at birth to slaughter, average feed consumption from weaning to slaughter, slaughter age, carcass weight, meat, bone and fat content of carcass, prime cuts weight (fore part, loin and hind part), and dressing percentage. The results indicated that reciprocal crossbred B × GAB and GAB × B rabbits were heavier than purebred animals. B × GAB crosses attained the slaughter body weight earlier, and had lower feed consumption. The dressing percentage in B × GAB crosses was highest, while the lowest was observed in Gab rabbits. For other slaughter traits, except the fat content of carcass, effects of crossing rabbits were small. The magnitude of the crossbreeding effects depended on the direction of crossbreeding. Maximum effects in crosses for slaughter age, body weight and dressing percentage were obtained when the Bauscat breed was used as a maternal component.

Results showed that differences between Bauscat and Gabali breeds were significant for all the studied litter traits. The differences among some crossbred groups and purebreds were significant ($P<0.05$). Estimates of dominance (direct heterosis) effect were of moderate importance on LSB as these were negative (decreased the general mean