

***DETERMINING THE RELATIONSHIPS AMONG BOTH PRODUCTIVE AND REPRODUCTIVE PERFORMANCES AND SOME WOOL TRAITS IN BARKI SHEEP***

S. El Kaschab(1), I. Saddick(1), M. El Ganaieny(2), Elham M. Ghoneim(1) and A. Gad-Allah(2)

(1) Animal Production, Dep. Fac. of Agric. Minufiya Univ. Egypt, (2) Wool Production and Technology Dep., Animal Production Division, Desert Research Center, Matariey,.

***ABSTRACT:***

Barki sheep flock of 489 animals maintained on Mariout Research Station close to Alexandria were studied during three years to determine the relationships among productive and reproductive performances and some wool traits in Barki Sheep. Flock management was typical for commercial conditions in the area. The average number of matings per conception in Barki ewes was 1.31. Ewes of low Kemp score had significantly the lowest number of matings ( $1.24 \hat{\pm} 0.04$ ) than those of medium Kemp ( $1.32 \hat{\pm} 0.03$ ) and abundant Kemp ( $1.38 \hat{\pm} 0.05$ ). Generally, it could be seen that correlation coefficients showed high values between Point of Break, length (POBL) with Point of Break, weight (POBW); Coarse fibres (CF%) with Fine fibres (-FF%); Medullation index (MI) with Fine fibres (-FF%) and Kemp fibres (KF%) with Medullation index (MI). Correlation coefficients were of medium magnitude between Resilience (RES) with Bulkiness (BUL); Staple Crimp (SC) with Fibre diameter (-FD); (SC) with (-KF%) and (MI); (RES) with (-KF%) and (-MI); (FD) with (-FF%); (FD) with (KF%); (FD) with (MI); (FF%) with Heterotype fibres (-HF%); (FF%) with (-KF%); (HF%) with (MI). Other correlation coefficients were of low magnitude. It could be concluded that selection for low values of fibre diameter could result in an increase in FF%, BUL and RES and a decrease in KF% and MI. These results also indicated that selection for high values of bulkiness could result in an increase in FF%, RES and yield ( $r=0.22$ ) and a decrease in FD, KF% which might cause a decrease in wool production. Phenotypic correlation coefficients between some objective wool characteristics of Barki sheep and yarns properties were also studied.

***Key words:*** Barki sheep, Relationship, Productive, Reproductive, Wool characteristics and yarn properties.

***EFFECT OF NIGELLA SATIVA AND THYMUS VULGARIS ON  
DIGESTIBILITY, NITROGEN BALANCE AND PERFORMANCE OF NEW  
ZEALAND WHITE RABBITS***

B.M. Ahmed, S. S. Omar, Elham M. Ghoneim, A. S. Khalifa  
Department OF Animal Production, Fac. of Agric., Minufiya University,,

***ABSTRACT:***

A study was carried out on forty growing NZW rabbits to test the effect of *Nigella sativa* and/or *Thymus vulgaris* as feed additives. Rabbits were fed on a control diet (C) and 3 experimental diets containing the medical herbs *Nigella sativa* seeds (NS) or *Thymus vulgaris* herb (TV) or mixture of both (MIX) for the experimental period of 10 weeks. Parameters studied included digestibility, N balance, growth performance. The results obtained showed that supplementing the basal diet with herbs did not affect the digestion coefficients. The diet containing the mixture of NS and Tv were higher in their DCP. The MIX group recorded the best value TDN. Rabbits received the MIX ration retained more nitrogen (1.37g/d) than the other three groups. Rabbits in all the experimental groups grew at almost the same rate. The highest performance index was recorded with group fed diet MIX.

***Key words:*** *Nigella sativa* seeds, *Thymus vulgaris* herb, rabbits, digestibility, performance.

***EFFECT OF STIMULATION TYPES ON MACHINE MILKING PROCESS IN EGYPTIAN BUFFALOES***

Elham M. Ghoneim, S. El Kaschab, S. Omar, E. Eldahshan  
Animal Production, Dep. Fac. of Agric. Minufiya Univ. Egypt,,

***ABSTRACT:***

The present study was carried out at a commercial buffalo farm named "El-koumy farm", located in Elbeheera province, Nubaria, El-shagaha village on the desert road (Cairo – Alexandria, Egypt) at 90 km, from Alexandria. The experiment was conducted to study the effect of stimulation type on milking process such as parlor waiting management, milk yield per milking and milk flow rate. Animals were classified according to: type of stimulation, milking frequency per day, times of milking; and milkers team. A total numbers of 92 randomly chosen machine milked animals in their second to sixth lactation were used in the present experiment. Data were analyzed using SPSS program version 10, (1999). Results revealed that type of stimulation had a highly significant effect on stimulation period and parlor waiting period. In general, milking process duration can be arranged in the following descending order: hand massage and machine stimulated buffaloes (7.85 min.), only machine stimulated buffaloes (7.16 min.) and finally oxytocin treated buffaloes (6.53 min.). Type of stimulation had a highly significant effect on stimulation period, the longest stimulation period was achieved in hand massage and machine stimulated Buffaloes (9.66 min.) which was significantly higher than oxytocin administrated animals (7.68 min.). The lowest period was observed in only machine stimulation which was significantly lower than another two groups. Type of stimulation had no significant effects on milk yield per milking or milk flow rate

***Key words:*** Machine milking, Parlor management, stimulation type, milk yield, flow rate, Oxytocin, Buffaloes