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## The Effect of Dose of Pregnant Mare Serum Gonadotropin (PMSG) on Reproductive Efficiency in Ouled Djellal Ewes

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**Abstract :** The aim of the present study was to evaluate different doses of PMSG on reproductive performance in Ouled Djellal ewes synchronized during the breeding season period. A total of 200 ewes were used in this experiment, were divided in two groups, 100 uniparous (A) and 100 multiparous (B). All animals in both groups were divided equally into four groups homogeneous lots of then a single intramuscular (IM) injection of PMSG, Lot T1, A1 (400 IU), A2 (500 IU), A3 (600 IU) and (lot T2, B1 (400 IU), B2 (500UI), B3 (600UI), T1, and T2 are batch control groups received a single injection of progestin treatment without PMSG. The results showed that the fertility rate ranges from 79.16% to 92% with no significant difference (P > 0.05) between uniparous and multiparous ewes. The prolificity rate varies from 100% to 140% in uniparous ewes with the respective doses of 0 IU for the control group and 600 IU for lot A3. A significant difference between multiparous ewes prolificacy and uniparous receiving 500UI PMSG (respectively 142% vs 109%). The productivity rate has increased significantly among uniparous ewes with 82% for lot A1 to 112.5% for lot A3, as in multiparous ewes 66.66% for lot B1 to 133.33% for lot B3. At the same we recorded a positive correlation between the number of born products and increasing the dose of PMSG injected into the two categories of ewes (112.5% to 133.33% for multiparous uniparous VS 83% for and 66.66 uniparous % for multiparous).

Keywords: Ouled djellal ewe, PMSG, reproductive performance, Fertility

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