

**Effect of Pregnant Mare Serum Gonadotropin (PMSG) and Follicle Stimulating Hormone (FSH) Combination For Superovulatory Treatments on the Onset and Duration of Estrus in Fat Tailed Ewes (*Ovis aries*)**

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**ABSTRACT**

This research aimed to determine the effect of superovulatory treatments using combination between Pregnant Mare Serum Gonadotropin (PMSG) and Follicle Stimulating Hormone (FSH) on the onset and duration of estrus in fat tailed ewes synchronized with Prostaglandin (PGF<sub>2</sub>). Ewes were randomly divided into three groups. At day-9 (luteal phase) ewes in each group respectively received 250 IU of PMSG, 150 IU of PMSG + 20 of FSH and 100 IU of PMSG + 40 mg of FSH. ANNOVA followed by HSD 5% using Statistical Programme for Social Science (SPSS) program version 16.0. showed there was no significant difference on the onset of estrus among groups ( $p > 0.05$ ). For duration of estrus, there were significant differences ( $p < 0.05$ ) between superovulatory treatment using only PMSG and in combination with FSH. In conclusion the use of PMSG combined with FSH for superovulatory treatment did not alter onset of estrus but shortened duration of estrus by three days.

**Key words :** *PMSG, FSH, Fat Tailed Ewes, Onset and duration of estrus, Superovulation.*