

**TIME OF ARTIFICIAL INSEMINATION OF DAIRY CATTLE
INDUCED THEIR ESTROUS USING PROSTAGLANDIN $F_{2\alpha}$ (PGF $_{2\alpha}$)
AND GONADOTROPIN HORMONE**

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ABSTRACT

Time of artificial insemination is measured by injection to estrous until artificial insemination has done. The aim of this study was to explore the time of artificial insemination of dairy cattle induced their estrous using Prostaglandin (PGF $_{2\alpha}$) and Gonadotropin hormone. The experimental animals consist of twenty four female dairy cattle, divided into three treatment groups were P $_0$ is control treated by PGF $_{2\alpha}$ intra uterine; P $_1$ treated by PG-600[®] single dose (PMSG 400IU + hCG 200IU) intra muscular; and P $_2$ was PG-600[®] half dose (PMSG 200IU + hCG 100IU) intra muscularly. Experimental design used was completely randomized design with three treatments and eight replication. Analysis of Variance (ANOVA) was used using SPSS (Statistical Programs for Social Scientific). This study showed that between PGF $_{2\alpha}$ and PG-600[®] one dose or half dose can induced estrous but there was no difference on the time of artificial insemination between PGF $_{2\alpha}$ and PG-600[®].

Key words: dairy cattle, *Prostaglandin* $F_{2\alpha}$ (PGF $_{2\alpha}$), PG-600[®], estrous, time of artificial insemination