

DIFFERENCES ON DAY-21 NON RETURN RATE AND DAY-75
CONCEPTION RATE OF DAIRY CATTLE SYNCHRONIZED
THEIR ESTROUS USING PROSTAGLANDIN $F_{2\alpha}$ ($PGF_{2\alpha}$)
WITH GONADOTROPIN (COMBINATION PMSG AND hCG)

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ABSTRACT

This research was aimed to provide an overview of the Non Return Rate day 21 and Conception Rate day 75 Friesien Holstein dairy cattle after estrous synchronization using $PGF_{2\alpha}$ with Gonadotropin. Twenty four dairy cattle were divided into four groups P1, P2, P3, P4 and six replication. P1 was a natural estrous, P2 was given Prostaglandin $F_{2\alpha}$ doses of 8,25 mg intrauterine, P3 was given Gonadotropin dose of 2,5 ml (PMSG 200 IU and hCG 100 IU) and P4 was given Gonadotropin dose of 5 ml (PMSG 400 IU and hCG 200 IU) intramuscular. After injection of the hormone, the cows that showed symptoms of estrous were artificially inseminated. After that estrous was observed at day 21 of gestation to determine the non return rate and up to day 75 of gestation to know the conception rate with rectal palpation. Experiment design used was randomized complete (RAL), data analysis using Chi-Square. The results showed the percentage of dairy cattle with a estrous natural and $PGF_{2\alpha}$ Non Return Rate reached 83% and Conception Rate 50%, the dairy cattle were injected estrous using Gonadotropin (combination of PMSG and hCG) doses of 2,5 ml showed the Non Return Rate 67% and Conception Rate 67%, and the dairy cattle were injected estrous using Gonadotropin (combination of PMSG and hCG) doses of 5 ml showed the Non Return Rate 67% and Conception Rate 50%. It was concluded that the research Non Return Rate and Conception Rate indicated there were no significant different ($P>0,05$) among all four groups.

Key words: dairy cattle, $PGF_{2\alpha}$, Gonadotropin, NRR, CR