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KEY WORD: NON-SURGICAL / EMBRYO RECOVERY / SWAMP BUFFALO

ALONGKOAD TANOMTONG : NON-SURGICAL EMBRYO RECOVERY IN SWAMP

BUFFALO (Bubalus bubalis Linn.). THESIS ADVISOR : ASSO.PROF.

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The efficiency of the embryo recovery by non-surgical method in swamp buffalo was studied. Three experiments were preformed, the recovery of embryo from the donor was carried out by superovulation with pregnant mare serum gonadotrophin (PMSG), PMSG and human chorionic gonadotrophin (HCG), and with PMSG and anti pregnant mare serum gonadotrophin. (Anti-PMSG) for the first, second and third experiments respectively. Deviated penis bull was used for estrus detection of 22 donor cows aged 5-9 years old. Each buffalo was subjected to superovulation by using PMSG, 2000-3000 IU and PGF2 alpha 15 mg. 48 hours later. Artificial insemination was done 12 hours after the standing heat, another 2 AI was carried out every 12 hours. For the first AI, animal will be given HCG 2500 IU (the second experiment) and Anti-PMSG 5 mg. (the third experiment). Embryo collection was performed on day 6.0-6.5 after standing heat.

Three groups of the donor using PMSG, PMSG and HCG, and with PMSG and Anti-PMSG were able to obtain 4, 1 and 0 embryo, average 0.5 \pm 1.07, 0.12 \pm 0.35 and 0 or 12.5%, 4.76% and 0% respectively.

The period of the embryo development form three group of donor are 1 embryo in the compact morula and 4 embryos in the early blastocyst, 6.0-6.5 days after the standing heat.

The embryo from the three experiments, using PMSG, PMSG and HCG and with PMSG and Anti-PMSG are in the good quality (grade B); 75%, 100% and 0% and in the fair quality (grade C); 25%, 0% and 0% respectively.