Ovum Pick-up in Non-pregnant and Postpartum Swamp Buffaloes

*(Bubalis bublis)* after FSH Pretreatment

Akachart Promdireg¹, Mongkol Techakumphu¹, Wanpen Adulyanubap¹, Ancharlie. Na-Chiengmai¹

**Abstract**

The objective of the study was to evaluate the efficiency of Ovum Pick Up (OPU) in non-lactating, pluriparous non-pregnant (*n* = 5) and lactating, postpartum swamp buffaloes, started 3 mts after calving (*n* = 6) with gonadotropin stimulation. OPU was performed every two weeks in the two groups of animals for a total of 6 sessions. To buffaloes receiving hormonal stimulation, a total of 400 mg of FSH was administered for three days in decreasing dose together with 100 µg of GnRH 24 h after the last FSH injection. The number of aspirated follicles between non-pregnant and postpartum buffaloes was not significantly different, 7.2 ± 3.7 (217) and 9.0 ± 3.2 (285), respectively (Table 1) (*P* > 0.05). Recovered oocytes between the two groups of hormonally stimulated animals was also not statistically different: 3.7 ± 2.7 (112) in the non-pregnant and 5.9 ± 3.5 (198) in the postpartum group, respectively (*P* > 0.05). Among stimulated buffaloes, most aspirated follicles were of the small size (*≤* 5mm). Overall oocyte recovery rate in both the groups was 61.8% (41-77.4%). Collectively the majority of recovered oocytes were single- and multi-layered, at a higher rate in non-pregnant than postpartum buffaloes. In conclusion, as already reported in cattle, this study confirms the possibility of retrieving oocytes by OPU from non-pregnant and postpartum buffaloes. The number and quality of recovered oocytes was similar in both groups of buffaloes.

**Keywords**: Ruminants, Buffaloes, Swamp buffaloes, *Bubalis bublis*, OPU, Oocytes, Hormones, FSH, Ovum pick-up

¹Department of Obstetrics Gynaecology and Reproduction, Faculty of Veterinary Science, Chulalongkorn University

²Department of Livestock Development, Division of Animal Husbandry, Ministry of Agriculture and Cooperatives, Bangkok, Thailand

E-mail: tmongkol@chula.ac.th

This project was supported by National Research Council, Thailand, year 2002