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### Profiling Glycoprotein of epithelial cell of oviduct at two-stages estrous cycle on Peranakan Ettawah (PE) Goat

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**Abstract :** Environmental condition inside the oviductal tube plays important roles for ovum viability after ovulation, sperms transport, fertilization, and early embryonic development. The composition of oviductal fluid derived from the estrogen-dependent activity of epithelial cell on its lumen is valuable in order to improve the in vitro fertilization (IVF) medium using additional specific glycoprotein of the oviduct epithelial cell secretion. The present investigation was carried out to find out whether the protein composition differs between the phases in the estrous cycle, both follicular and luteal phase and to determine composition of glycoprotein range 10-150 kDa from both phases. Electrophoresis SDS-PAGE was used to identify the oviductal glycoprotein derived from oviductal epithelial cell (OEC) in 12,5% gel concentration. Gel Documentation was used to identify varying intensity and molecular weight of each bands of the gels. Ten proteins of molecular weight in the range of 17– 74 kDa were expressed between the two phases, for sample of luteal 1 and follicular 1 expressed less than 10 proteins on the gel. Only one prominent bands corresponding to 67 kDa were observed in the OEC in every samples, and heavily stained proteins of 45 kDa, 50 kDa, 74 kDa and 98 kDa were present in some samples. In conclusion, oviductal secretions derived from OEC undergo alterations in an oestrus-dependent manner and these changes were supportive for the functional role of oviducts in PE reproductive tract.

**Keywords :** oviduct, glycoprotein profile, estrous cycle, goat.

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