CHARACTERIZATION OF OVARIAN FOLLICLES IN PHILIPPINE WATER BUFFALOES (*BUBALUS BUBALIS*)

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ABSTRACT

Ovarian samples were collected either through ovariectomy or slaughtering of Philippine water bufalloes at the Philippine Carabao Research and Development Centre (PCRDC), Philippines were examined and classified as either primary, secondary, growing, tertiary, graafian, corpus luteum or corpus albican. Numerous primary follicles were observed in the outer layer of the stroma surrounded by a single layer of follicular cells. Two or more layers of polygonal cells characterized the growing follicles while in the secondary follicles, tremendous increase in follicular cells by mitosis was seen. Changes such as the increased in size of the oocytes, appearance of the zona pellucida, cumulus oophorus and accumulation of follicular fluid in the antrum were observed in the tertiary follicles. In the graafian or preovulatory follicles, the antrum gets bigger and is fluid-filled. These mechanism of events in relation with others lead to the rupture of the follicle and expulsion of the egg. Atresia of the antral follicles was recognized by the pulling away of the follicular epithelium from the theca interma and the presence of pyknotic nuclei in the follicular cells. Corpus-albican which represents regressed corpus luteum contains ovarian stroma and is left as a scar on the ovary.

Keywords: Characterization, ovarian follicle and water buffaloes