

# PROTEIN PROFILE AND GLYCOSIDASE ACTIVITIES OF PROSTATE AND BULBOURETHRAL GLANDS SECRETION IN CAMELS (*Camelus dromedarius*)

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## ABSTRACT

This study was aimed to investigate protein profiles and glycosidase activities of bulbourethral and prostate glands secretion in dromedary camels. Sixteen healthy male camels (5-13 years old) were slaughtered and both glands were collected. The obtained secretions of both glands were used for determination of protein profile by 7-20% gel electrophoresis. Activities of  $\beta$ -N-acetylglucosaminidase,  $\alpha$ -N-acetylgalactosaminidase and  $\alpha$ -L-fucosidase were also determined. The current findings showed 11 (175.7, 129.3, 126.8, 94.9, 77.8, 74.4, 71.1, 53.3, 21.8, 15.9 and 9 kDa) and 15 (124.6, 89.7, 81.1, 75.5, 72.1, 60, 54.4, 48.9, 43.3, 40, 32.5, 24, 17.8, 13.3 and 9 kDa) protein bands in secretion of bulbourethral and prostate gland, respectively. Three (77.8, 53.3 and 9 kDa) and 6 bands (81.1, 75.5, 48.9, 17.8, 13.3 and 9 kDa) showed higher staining intensities in bulbourethral and prostate secretion, respectively. Both secretions shared a band of 9 kDa with higher intensity in bulbourethral secretion. Activities of glycosidase in bulbourethral and prostate secretions were verified and were higher in bulbourethral than in prostate secretion.  $\alpha$ -L-fucosidase showed higher activity in glands secretions compared to other enzymes. Conclusively, bulbourethral and prostate secretions may be involved in coagulation processes of dromedary semen due to their contents of secretory proteins and glycosidases.

**Key words:** Accessory sex glands, bulbourethral, camels, electrophoresis, glycosidases, prostate, proteins