Oral Communication(s)

GLYCOANALYSIS OF THE SEMINAL PLASMA AND EJACULATED SPERMATOZOA OF DROMEDARY CAMELS

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Seminal plasma (SP) in dromedary camels is a complex fluid rich in glycoproteins, which can influence sperm function and interaction with the female reproductive tract. The aim of this study was to characterize the glycomic patterns of ejaculated spermatozoa before and after centrifugation using Tris-Citrate-Fructose (TCF) to evaluate the effects of SP removal. Fluorescent lectins were used to analyze the glycan composition of both SP and spermatozoa. The results showed that some SP glycoproteins adhere to the sperm surface, modifying its glycan profile. After TCF washing, specific changes in glycan expression were observed, indicating that SP components can mask or expose different sperm surface glycans. These findings provide new insights into the role of SP in sperm protection and fertilization mechanisms, contributing to a better understanding of camelid reproduction and potential applications in assisted breeding.