Placenta is a remarkable feto-maternal organ that constitutes the site for the communication and exchange of substances between mother and fetus and makes many physiological activities between mother and fetus possible. Therefore, it is a critical organ influencing the outcome of pregnancy. Fetal growth is directly related to placental development and function. Glycoconjugates play a key role in accurate placental development and function. Lectins for different carbohydrate residues of glycoconjugates have been used to study the distribution of these residues in many tissues. They have been used as histochemical reagents to demonstrate changes in glycosylated components associated with cell differentiation, proliferation and transformation. The aim of this study was to analyse the expression of glycoconjugates in bovine term placenta.

Following routine histological tissue processing, tissue sections were labelled with the lectins ConA (Canavalia ensiformis), UEA-I (Ulex europaeus), PNA (Arachis hypogaea), WGA (Triticum vulgare), HPA (Helix pomatia), DBA (Dolichos biflorus), PSA (Pisum sativum), AIA (Artocarpus integrifolia) and SBA (Glycine max). The results of lectin staining indicated that ?-GalNAc, ß-GlcNAc, ß-Gal and ?,ß-GalNAc sugars were the most abundant on the uterine epithelial cell surface, with changing intensities on other uterine parts and cells. ß-GlcNAc and ß-Gal sugars were strongly expressed by cytotrophoblasts syncytiotrophoblasts although being Gal-ß1-3GalNAc-?-1 in changing intensity. Expression of ß-GlcNAc, ?-Man and ?-Fucose were detected in endothelium and some blood cells in varying degrees. The data obtained from this study can provide new insights into understanding placental function in both normal- and abnormal states.

**Keywords:** Placenta, bovine, glycoconjugate, lectin.