

ABSTRACT

STUDY OF GLYCOCONJUGATE N-ACETYLGLUCOSAMINE (*GlcNAc*) AND SIALIC ACID (*NeuNAc*) DISTRIBUTION IN JAVAN MONGOOSE (*Herpestes javanicus*) STOMACH BY WHEAT GERM AGGLUTININ (WGA) LECTIN HISTOCHEMISTRY STAINING METHOD

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Javan Mongooses (*Herpestes javanicus*) included in order of carnivore that eat insects, amphibians, reptiles, birds, eggs of birds and reptiles, rodents and fish. Distribution of glycoconjugate can indicate function of cells in stomach. WGA has capability to bind with N-acetylglucosamine (GlcNAc) and Sialic Acid (NeuNAc) specifically. The purpose of this study is to know distribution of glycoconjugate in Javan Mongoose stomach by WGA lectin histochemistry.

This study used three adult mongooses stomach as samples. The study was divided into three steps, beginning with taking gastric, tissue processing includes dehydration, clearing, embedding, blocking, and tissue sectioning, and WGA lectin histochemistry staining that visualized with *Diaminobenzidine tetrahidrokloride* (DAB). Results were analyzed descriptively.

The results showed N-Acetylglucosamine and sialic acid in cardiac area distributed on surface mucous cells, neck mucous cells, body mucous cells, and basal mucous cells. Distribution of glycoconjugate in fundic area located on the neck mucous cells, body mucous cells, and basal mucous cells. Glycoconjugate in pyloric area distributed on surface mucous cells, gastric pit mucous cells, neck mucous cells, body mucous cells, and basal mucous cells.

N-Acetylglucosamine may has role in interaction regulation and permeability of cell membrane, while sialic acid may has role to trap microorganisms and defense functions.

Keywords: Javan mongoose, Stomach, WGA, *GlcNAc*, and *NeuNAc*