

**COMPARISON OF COLORING RESULTS
EOSIN HEMATOXYLIN USING BEETROOT EXTRACT IN EOSIN AND
SECANG WOOD ON HEMATOXYLIN**

Fauzya Fahrani P17334117418

ABSTRACT

Preparation of preparations for cell or tissue observation requires a dye. The dyes that are often used are synthetic chemicals, namely Hematoxylin Eosin. Exploration of the use of alternative dyes that are safer because they can avoid carcinogenic properties and have high affinity for cell components are carried out by utilizing natural dyes produced by beetroot extract and sappan wood. The purpose of this study was to determine whether or not there were differences in the results of hematoxylin eosin staining using beetroot extract and sappan wood with hematoxylin eosin staining which has become a standard operating procedure. The sampling technique used is purposive sampling. The parameters used are the color intensity of the blue nucleus and the red cytoplasm seen with a microscope with a magnification of 40x. Then assessed with a validated ordinal scale. Statistical testing using the Mann Whitney-U test, showed the results of Asymp. Sig. (2-tailed) $0.000 > 0.05$ which means that there is a significant (significant) difference in the results of hematoxylin-eosin staining using beetroot and wood extracts with hematoxylin-eosin which has become the standard operating procedure. It can be concluded that there are differences in the results of hematoxylin eosin staining using beetroot extract and sappan wood with hematoxylin eosin staining which has become a standard operating procedure.

Key words : Beetroot extract, Secang wood extract, Hematoxylin Eosin, Nucleus color intensity, Cytoplasm color intensity