

DUODENAL HISTOPATHOLOGY OF MICE (*Mus musculus*) THROUGH CARBOFURAN PESTICIDE EXPOSURE

Reza Mahendra Yudha Permana

ABSTRACT

The aim of this study was explore small bowel tissue injury by duodenal histopathology of mice (*Mus musculus*) through carbofuran exposure. The measured parameter was duodenal epithelial integrity. The experiment animals consist of thirty female mice, divided into four treatments were, P₀ control was not exposed by carbofuran but substituted by NaCl 0,9%; P₁ was exposed 0.0104 mg/Kg Body Weight carbofuran; P₂ was exposed 0.0208 mg/Kg Body Weight carbofuran; P₃ was 0.0407 mg/Kg Body Weight carbofuran. Experimental design was used completely randomized design with four treatments and five replications. Kruskal Wallis Test were used as a data analyzed, followed through Mann-Whitney Test if any significantly difference among treatment groups. The result of the study suggested that carbofuran caused desquamation and ephitelial erosion. However, the effective dose of carbofuran exposure change duodenal histopathology was 0.208 mg/Kg Body Weight.

Key words : duodenum, carbofuran, mice, epithelial integrity