

**THE INFLUENCE OF CARBOFURAN EXPOSURE  
TOWARD WHITE PULP DIAMETER OF  
SPLEEN OF MICE (*Mus musculus*)**

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**ABSTRACT**

The aim of the research was to observed the white pulp diameter of mice spleen histopathology through carbofuran exposed. Eighteen females Balb/C strain mice (*Mus musculus*) were aged 10 weeks and average body weights 30 grams has been used. The population of mice were divided into three groups i.e. P<sub>0</sub>, P<sub>1</sub>, and P<sub>2</sub>, each consist of six. Doses of each sample was 1 ml orally administered through gastric lavage, once a day, every morning, until day 10<sup>th</sup>. The P<sub>0</sub> was given NaCl physiologic 0,9%, while both treatment groups were P<sub>1</sub> and P<sub>2</sub> given carbofuran doses 0,0208 and 0,0417 mg/kg of body weight, respectively. All of mice were sacrificed on day 12<sup>th</sup>, and followed through necropsy to observed the spleen. After that, the spleen histopathology was carried out in hematoxylin eosin (HE) stained. The spleen histopathology observation was carried out through light microscope at 200 times of magnification. The spleen histopathology examination was done to measure the average diameter of white pulp. The white pulp average was analyzed by F test of ANOVA with SPSS 16.0 for Windows program. The result showed that there was a significantly difference between both control and treatment groups ( $p < 0,05$ ). However, carbofuran exposure reduced the white pulp diameter of spleen of mice.

**Key words:** white pulp diameter, carbofuran