ABSTRACT

EFFECT OF PARAQUAT DICHLORIDE HERBICIDES ORALLY ON THE STAGING OF ESOPHAGUS DAMAGE IN MALE RATS (*Rattus norvegicus*) *Sprague dawley* STRAIN

By

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Using of herbicide in Indonesia especially in agriculture sectors lately increased. Paraquat is one of active ingredient graminaxone type that most widely used in the world. Using of paraquat can damage many organs, include gastrointestinal tract. This study aims to determine the effect of parquat dichloride herbicides orally on the staging of esophagus damage in male rats (*Rattus norvegicus*) *Sprague dawley* strain.

This is a laboratory experimental with post test only control group design. Total samples in this research are 25 rats which divide in 5 groups. K is control group given aquadest. P1 is given paraquat 25mg/kgWB, P2 is given paraquat 50mg/WB, P3 is given paraquat 100mg/kgWB and P4 is given paraquat 200mg/kgWB. The data was analysed by using One Way ANOVA test and the alternative test is Kruskal Wallis. Meanwhile, to see the closeness of the relation between the variables used Mann Whitney test.

This result show that there is a effect of paraquat dichloride herbicides orally to histopathological of esophagus in male rats (*Rattus norvegicus*) *sprague dawley* strain (p=0.002). This result also show there is a effect of increasing dose paraquat dichloride herbicides orally on the staging of esophagus damage in male rats (*Rattus norvegicus*) *sprague dawley* strain.

Keyword: increasing dose, paraquat, staging of esophagus damage.