COMPARISON EFFECT OF TRANSFLUTHRIN AND PRALLETHRIN AS INSECT REPELLENT ON MICE (Mus musculus) BRONCHIOLES HISTOPATHOLOGY

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ABSTRACT

The aim of this study was to know the effect of transfluthrin and prallethrin as an insect repellent on mice (Mus musculus) bronchioles histopathological changes. The measured parameter was bronchioles epithelial damage. The experimental animals consist of 18 male mice, divided into three group of treatment, P0 as control was not exposed to repellent, P1 was exposed to transfluthrin, P2 was exposed to prallethrin. On day 14, all mice were euthanasia used chloroform and took the lung and processed following parafin routine methods. Examined histopathological changes of bronchioles used a microscope with magnification of 100x. Experimental design was used completely randomized design with three treatments and six replications. Kruskall Wallis Test were used as a data analyzed, followed by Mann-Whitney Test if any significantly difference among treatment groups. The result of the study was transfluthrin and prallethrin caused desquamation and proliferation of bronchioles epithelial higher than control treatment. Kruskall Wallis test showed significantly difference between control and treatment group (p<0.05). Mann-Whitney Test was seen that were not significantly difference between treatments transfluthrin and prallethrin (p>0.05).

Key words: transfluthrin, prallethrin, mice, bronchioles epithelial.