

**PERBANDINGAN PENGARUH PAPARAN PENGHARUM RUANGAN
CAIR DAN GEL TERHADAP GAMBARAN HISTOLOGI PULMO
(Studi *in vivo* pada Tikus Putih (*Rattus norvegicus*))**

***THE COMPARISON OF THE EFFECT OF LIQUID AND GEL AIR
FRESHENER EXPOSURE ON HISTOLOGY OF PULMO
(Study in vivo in White Rat (*Rattus norvegicus*))***

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ABSTRACT

*Air freshener is a product that contains chemical substance to lose the odor in closed room. Modern air freshener available in form of liquid (aerosol) and gel. It contains addictive material and solvent such as 1,4-dichlorobenzene that can influence the function of pulmo. This research is about to know the influences and the differences of air freshener exposure in form of liquid and gel towards *Rattus norvegicus* pulmo histological image. Research design used post-test only control group design method. Post test is conducted by observing pulmo's rat histological image after gel and liquid air freshener exposure during 8 hours/day in 15 days. Research subject is 18 rats that divided into 3 groups, control group (K), liquid room freshener exposure group (PA), and gel air freshener exposure group (PB). Days 16 the surgery is to be done to all animal subjects. Pulmo organ was taken, soaked and fixed into formalin 10% solvent and then made in histological preparation using Hematoxylin and Eosin (HE) pigmentation. Data is analyzed by One Way Anova and continued by Post Hoc Tukey. The result of the research shows that there's changing on pulmo histological image especially in the alveolus that is the thickening of the septum alveolar. P value between control group and others group is $p=0,000$. It means that there's significant influences and changes in rat's pulmo that is exposed by gel and liquid air freshener. The effects of the gel group is worst than liquid group although statistically there's no significant differences.*