

**EFFICACY OF VARIOUS GEL FORMULATIONS FROM POMELO (*Citrus maxima*)  
PEEL EXTRACT AS MOSQUITO REPELLENT IN NEW ZEALAND ALBINO RABBITS**

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**ABSTRACT**

Most citrus plants have repellent activity for mosquitoes that can help the community decrease dengue. The limonene which was the active constituent was extracted from the pomelo peel and was proved useful in developing mosquito repellent. Mosquito repellent in various formulations are superior for the prevention of mosquito-borne disease as well as uncomfortable mosquito bite. Determining the effectiveness of pomelo peel extract as mosquito repellent was the specific goal of this study. Specifically, it intends to obtain essential oil and formulates it into gel formulation. The rabbit with four quadrants at their back that was shaved was used by the researchers. Labelled A, B, C, and D according to the formulation assigned to know the repellency effect of the gel formulation, the mosquitoes are released freely in the cage for them to fly, and the results have shown that there are no landing or bites on the quadrant A and D which was the gel formulation. The pomelo peel in a recent study was found useful and effective as a natural alternative for mosquito repellent. The result of this study would provide information regarding pomelo peel extract as a mosquito repellent. Additionally, this study produced significant and relevant information for future studies regarding mosquito repellent.