

**ACUTE DERMAL TOXICITY OF POMELO (*Citrus maxima*) ESSENTIAL OIL  
EXTRACT AS SPRAY IN RABBITS**

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**ABSTRACT**

It is a known fact that mosquitoes carry many deadly diseases, and the continued increase of their numbers is considered a threat to humanity. The search for an efficient way of preventing mosquito bites has been a priority to the country. In this study the Pomelo (*Citrus maxima*), one of the largest citrus fruits from the family Rutaceae in 100% of peel extract concentration is as effective as the common commercial mosquito repellent in repelling mosquitoes. The effect of different treatments repelling mosquitoes is highly significant according to research findings. This study aimed to determine the acute dermal toxicity of Pomelo (*Citrus maxima*) peel extract as essential oil spray mosquito repellent on rabbits. Four rabbits were utilized in this study, two rabbits for the Patch test and also two rabbits for the Scratch test. Both composed of one male and one female. The fur was removed from the dorsal area of the trunk of the test animal by clipping or shaving. The fruit extract is reported to possess a variety of pharmacological benefits including antioxidant, antimicrobial anti-obesity, and antidiabetic properties. The fruit juice is reported to contain several flavonoids hence showing high antioxidant activity. However, no study of its toxic effect has been ignited. This study therefore is aimed to evaluate the acute dermal toxicity effect of the Pomelo essential oil as mosquito repellent formulated in to spray using the Draize test scaling.