

Comparative Study on the Effects of Gumamela (*Hibiscus rosa sinensis* Linn), Okra (*Abelmoschus esculentus*) and Tomato (*Lycopersicon esculentum*) Pure Crude Extract on 2nd Degree Burns of Albino rats (*Rattus norvegicus*)



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ABSTRACT

This study entitled **Comparative Study on the Effects of Gumamela (*Hibiscus rosa sinensis* L.), Okra (*Abelmoschus esculentus*) and Tomato (*Lycopersicon esculentum*) Pure Crude Extract on Second-Degree Burns of Albino rats (*Rattus norvegicus*)** was conducted to determine the healing effects of the gumamela flowerbud, okra leaf and tomato fruit pure crude extract on the second-degree burns of albino rats. A total of thirty rats were acclimatized for 7 days. Then, they were shaved and a second-degree burn was induced at the upper lateral part of the right thigh of the albino rat's skin by heating the head of a three inch nail which was placed on the skin for three seconds. The collected plants were mashed and pounded using mortar and pestle and were filtered in a cheesecloth. The extracts were applied to the second-degree burn of albino rats as the emollient. The albino rats were treated with the pure crude extracts once a day. The healing process of the second-degree burn was noted daily by observing the three parameters of burning which are: absence of reddening, scab removal, and reappearance of fur.

Results showed that there is significant difference in the healing rate of induced second-degree burns between gumamela and the four other treatments (okra, tomato, Terramycin and water). It indicated that the gumamela flower bud pure crude extracts can heal burns faster. However, there is no significant difference in the healing rate of burns treated with okra, tomato and Terramycin which shows that they can heal burn at the same rate.