ABSTRACT

EFFECTIVENESS OF PEGAGAN LEAF EXTRACT (CENTELLA ASIATICA) 25% WITH PETAI CINA LEAF EXTRACT (LEUCAENA LEUCOCEPHALA) 30% FOR HEALING OF BURNS OF WHITE RATS (RATTUS NORVEGICUS)

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Infections of burns require extensive effective care. Pegagan leaf extract 25% contains triterpenoid glycoside called saponins, containing asiaticoside which useful for wound healing. Petai china leaf extract 30% contains alkaloids, saponins, flavonoids, lectins and tannins thought to be anti-inflammatory and antioxidants are flavonoids. They are expected healing burns more quickly.

The research aim is to analyze the effectiveness difference between pegagan leaf extract 25% with petai china leaf extract 30% for healing of burns. The sample of this study is the white rats (Rattus norvegicus) Sprague dawley strain induced by superficial partial thickness burns and amount of sample are 28 tails that selected based on inclusion criteria. The samples of this study are divided into 4 groups randomly: pegagan leaf extract group 25% (K1), petai china leaf extract 30% group (K2), gel base group (K3) and control group (K4). The research design is true experiment with the randomized post test only control group design and analyzed by Anova and Post Hoc Duncan. There are 3 types of sub-variables measured namely the number of fibroblasts, the number of neovascularization and wound healing time.

The results of ANOVA and Duncan test of mean number of fibroblasts showed that petai china leaf extract group 30% has significant differences with other groups with a p-value <0.05. The results of ANOVA and Duncan test of mean number of neovascularization showed that fourth groups have no significant difference with p-value> 0.05. The results of ANOVA and Duncan test of mean length of time the healing of burns showed that the extract group petai china 30% has significant differences with other groups with a p-value <0.05.

Treatment of burns using petai china leaf extract 30% is more effective than pegagan leaf extract 25% in healing burns in white rat (Rattus norvegicus) as evidenced by low amount of fibroblasts and fastest healing time of burns.

Key words: pegagan, petai china, burns healing.