ABSTRACT

**Background.** Wound is integrity tissue disruption that causes damage and usually related to loss of function. Wound healing is an important biological process which involves tissue repair and regeneration. The use of herbal plants as traditional medicine which has an important role in wound healing has been widely known as cocor bebek which has some useful content for wound healing activities such as tannins, ascorbic acid, flavonoids (quercetin), saponins.

**Purpose.** To determine whether an increase in fibroblasts in the socket on the wound healing process after tooth extraction in guinea pigs.

**Method.** This study is an experimental research laboratory, using 42 experimental animals were divided into 3 treatment groups and 3 control groups. Extraction was done of the left incisivus and put in the cocor bebek (kalanchoe pinnata) extract in the treatment group, whereas the control group was given a carboxyl methyl cellulose (CMC Na) each one on days 3, 5, 7. After that was fibroblasts observed under a microscope that has made preparation. The data were analyzed using one-way ANOVA and independent t-test.

**Results.** There is significant difference between the groups treated with the cocor bebek extract 100 mg/200 g weight and control group.

**Conclusion.** Cocor bebek leaf extract (Kalanchoe pinnata (L.)Pers) dose 100 mg per 200 g weight had the accelerating effect of wound healing post tooth extraction, which is characterized by an increased number of fibroblasts.

**Key words:** Wound Healing, Fibroblast, Kalanchoe pinnata(L.)Pers