

FORMULATION OF GREEN TEA (*Camellia sinensis* L. Kuntze) TO STIMULATE HAIR GROWTH

Anis Yohana Chaerunisaa, Emma Surachman

Faculty of Pharmacy, Padjadjaran University Jatinangor – Indonesia

ABSTRACT

A research on formulation of cream for hairloss with various concentration of green tea extract (*Camellia sinensis* L) has been conducted. The chemical and physical stability investigation of the cream, included the observation of the consistency, colour, odour, viscosity, pH, effectivity, and safety of the cream during the storage. From the research , it was found that during the storage, there were no physical changes in creams with various concentration of green tea (*Camellia sinensis* L) except in viscosity and pH. The research also showed that the cream which were made in varied concentration (2, 5 and 8%) had an activity in promoting prosperity of rabbits' hair. It was also safe to be used.

Keywords: green tea, *Camellia sinensis*, hair growth, cream.

INTRODUCTION

Loosing hair frequently comes up as a problem. Hair which falls off in quite serious condition could cause boldness. Tea (*Camellia sinensis*) had been used for the treatment of hair problem. Tea leaves contain caffeine (2-3%), theobromin, theophylin, tannin, xantin, adenin, volatile oil, quersetin and natural fluoride. Every 100 grams of tea leaves has 17 kj of calories, 75-80% water, 25 % polyphenol, 20 % protein, 4 % carbohydrate, and 6 % pectin

(Luise,1998; Winarmo, 2004; Mc Elwee, 2004).

Drinking tea can give protection on cancer formation, step up trhombocytes production, lower the risk on heart attack, increase the prosperity, prevent from diabetic risk, reduce fatigue and reduce the headache. Tea leaves can also blacken and thicken hair (Dalimarta, 1999; Kusumadewi. 1994; Sibuea, 2003; Chalimah, 2004; Luise,1998; Mc Elwee, 2004).

EXPERIMENTALS

Materials

Tea extract was obtained from green tea leaves which was extracted using ethanol. The following chemicals were used as received from the manufacturers: Cera alba, Cetaceum, Cutina[®] MD (PT. Cognis), Emulgin[®] B1 (PT. Cognis), Glycerin,

Paraffin liquidum, Sodium tetraborate, Tri aethanol amine stearate.

Animal used for this experiments were four months old white wistar rabbits, received from Laboratory of animals, Health Polytechnics Bandung.