

The 11th International, Invention, Innovation & Design 2022



Ushering in the Age of Endemic

**THE 11TH INTERNATIONAL INNOVATION,
INVENTION & DESIGN COMPETITION
INDES 2022**

EXTENDED ABSTRACTS BOOK



e ISSN 2756-8733



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Perpustakaan Negara Malaysia

Cataloguing in Publication Data

No e-ISSN: e-ISSN 2756-8733



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Typesetting : Wan Nurul Fatimah binti Wan Ismail

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The 11th International Innovation, Invention and Design Competition 2022

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Community & Alumni Networking (PJIM&A)
Universiti Teknologi MARA Perak Branch*

and

*Academy of Language Study
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HAICO (HAIR TONIC COFFEE)

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ABSTRACT

Coffee has various benefits for beauty, especially to overcome hair problems like reducing hair loss, increasing hair growth, making hair softer and shiny, and balancing hair pH. Hair is an important part of humans and hair is considered like a crown. It can be seen from the test of coffee grounds; coffee waste can accelerate rabbit hair growth. This study aims to determine how much caffeine content in coffee ground extract can be useful for dealing with hair loss and accelerate hair growth.

Keywords: Coffee Grounds, Hair, Caffeine

1. INTRODUCTION

Indonesians enjoy coffee in the morning or hang out with friends. According to Bung Karno's words, "It is better to enjoy a coffee and cigarettes while talking about the fate of the nation rather than the poles of books that only think about themselves". Indonesia is one of the largest coffee producers and exporters of coffee in the world. It occupied the 4th position in the world after Brazil, Vietnam, and Colombia in 2017, with a total production of 660,000 tons of coffee beans. According to the US Department of Agriculture, it is known that Indonesia is the largest producer of coffee exports after Vietnam among ASEAN countries. This is a bonus from a country that is located on the equator with a tropical climate so it's easy to cultivate coffee because it has enormous potential and many highlands.

The millennial generation today mostly works in the informal sector, additionally because of the COVID-19 pandemic, which requires several sectors to work from home (WFH). This condition makes coffee shop has become a popular choice as a workplace. Especially in Yogyakarta, the number of coffee shops in 2017 reached 1,200 and continues to grow each year. This proves that coffee is a friend to various activities such as hanging out, doing homework, and working.

However, the public must know that there is waste from coffee dregs that can be used or recycled into various products such as masks, bio hair tonics, scrubs, etc. The caffeine content in coffee dregs can enhance the hair-lengthening process (Fischer et al., 2013). The test results say that shampoo containing caffeine can prevent hair loss by up to 7.1 in 3 months and 13.45% in 6th month.

2. METHODOLOGY

Based on the various benefits above, we are motivated to process bio hair tonic from coffee dregs. The methodology includes processing bio hair tonic from coffee dregs by purchasing raw material coffee dregs with production that is not mixed with other chemicals, sorting (distilling) the coffee dregs, processing the coffee grounds, and then distributing the hair tonic products.

Firstly, the coffee dregs were dried under indirect sunlight (covered with black cloth). After the coffee dregs were completely dry, they were extracted. Next, 200 grams of coffee dregs were soaked in 1500 ml of 70% ethanol and then stored for 36 hours while stirring it continuously. They were filtered using a flannel, and the filtrate obtained was distorted (Filtrate A). The remaining precipitate was soaked in 500 ml of 70% ethanol for ± 12 hours and then filtered using a flannel to obtain filtrate B and was precipitated again. Filtrate B is mixed with filtrate A and then left overnight and concentrated by heating it over a pot of water boiled on the stove until the solvent evaporated completely and became thick, and the solvent evaporated completely. Finally, each extract obtained is stored in the bottle.

3. CONCLUSION

Coffee has various benefits for beauty, especially in overcoming hair problems, such as reducing hair loss, increasing hair growth, making hair softer and shiny, and balancing hair pH. It is proven that coffee dregs made into hair tonic can help hair grow faster, as supported by Fischer et al., (2007)

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Surat kami : 700-KPK (PRP.UP.1/20/1)

Tarikh : 20 Januari 2023

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Sekian, terima kasih.

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