

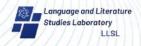
JOURNAL OF SOCIETY INNOVATION AND DEVELOPMENT

The multidisciplinary journal of society for development

JSID















JOURNAL OF SOCIETY INNOVATION AND DEVELOPMENT

The multidisciplinary journal of society for development

Journal homepage: https://journal.institutre.org/index.php/jsid



The Use of Papaya Leaves (Carica Papaya) and Calm Flower (Clitoria Ternatea) as Tea Dyed Herbs

Rahil Thahira Putri^{1*}, Nurmahni Harahap²

1,2MTsN 1 Model Banda Aceh, Indonesia

Abstract

This herbal tea is a variation of herbal tea made from a mixture of papaya leaves and calm flowers, which can increase the human body's immune system. This research was conducted to determine the health benefits of herbal tea bags made from papaya leaves (Carica papaya) and calm flowers (Clitoria Ternatea). Making this herbal tea uses an expressional method. From this research, it can be concluded that this tea is widely liked because of its delicious aroma, taste, and unique texture and color. The panelists' assessment of the taste of papaya leaves and calm flower tea was carried out using their sense of taste (tongue), then assessing the panelists' preferences on a scale of perceived liking when tasting the tea.

Keyword: Herbal tea; Papaya leaves; calm flowers

Received 24 January 2024; Received in revised form 23 February 2024; Accepted 1 April 2024; Available online 04 May 2024 https://doi.org/10.63924/jsid.v5i2.58

Page 112-119 © The Authors

Published by Journal of Society Innovation and Development. This is an open access article under the CC BY-SA 4.0 license (https://creativecommons.org/licenses/by-sa/4.0/).

^{*} Corresponding author, email: rahilthahira01@gmail.com

INTRODUCTION

Human life today tends to return to nature, including in the world of medicine. People tend to use herbal medicines rather than chemical drugs, because herbal medicines have no side effects when used correctly. With the wealth of flora in Indonesia, we can make herbal medicines from plants in the area around us (Abubakar & Khaerah, 2022; Rahman, 2023; Paull, 2024).

The most commonly used herbal medicine is a traditional plant that is made into herbal tea, because its manufacture is practical and easy. According to (Simanjuntak, Harun, & Efendi, 2014; Tiara, 2022) This herbal tea is usually made from plants that are believed to overcome a disease, herbal tea is one of the teas that does not come from tea leaves (synthetic Camellia), herbal tea usually comes from flowers, leaves, and seeds, roots, and fruits from plants other than tea (Ravikumar, 2014; Azizi, 2023; Johan, 2024). The ingredients used in making this herbal tea are ingredients that are very easy to find in the environment around us such as Telang flowers, papaya leaves, sunflowers, rosella, red dragon fruit skin, and others (Purnomo, Hamzah, & Johan, 2016; Rudi., Wijaya., & Murdani, 2021; Rahmadani, 2024).

Papaya plants (Carica papaya) are native to Mexico, and can also grow in tropical and subtropical regions, including India, Ceylon, Malaysia, the Philippines, South America, Hawaii and Indonesia. Papaya leaves are in the form of leaves that are netted and have a long stalk that is hollow in the middle. Papaya tree is one plant that can grow anywhere, papaya plants are often found in the yard of the house.

The nutritional content of papaya leaves is quite diverse, including A 18250 SI, vitamin B1 0.15 milligrams per 100 grams, vitamin C 140 milligrams per 100 grams of papaya leaves, 79 calories per 100 grams, fat 2.0 grams per 100 grams. In addition, papaya leaves contain flavonoids, alkaloids, saponins, tannins and glycosides so that they can help increase platelet count in blood cells. (Anniza, 2019; Cristina, 2024). Papaya leaves also have health benefits, namely:

- As an energy source.
- Increase stamina for the body.
- Balances blood sugar levels.
- Supports digestive function.
- Relieves joint inflammation.

Telang flower (Clitoria ternatea) is one of the herbal medicines because all parts can be used as medicine (Marpaung, 2020; Siadeka, G., Yasin., & Shadiqin, 2020; Ibrahi, 2024). The plant is often used in the manufacture of tea. Telang flowers can usually be found in the yard of the house. Striped flowers multiply by seeds that are in pods. Inside the pods contain 5 to 10 seeds. The Telang flower belongs to monocotyledonous plants that commonly live in lowlands and creepers. The flower of the Telang resembles the clitoris with a standard shape, a large obovat, about 4 cm long and 3 cm wide. (Imayanti, Rochmah, Aisyah, & Alfaris, 2019; Munidar, 2024). Telang flowers also have health benefits, namely:

- Reduces depression.
- Improve brain memory.
- Helps improve health eye.
- Helps relieve asthma.

Based on research that has been done previously regarding the efficacy of making herbal tea, a study was conducted with the title "Utilization of Papaya Leaves (Carica papaya) and Telang Flowers (Clitoria ternatea) as Herbal Tea Bags". This study was conducted to determine the efficacy of tea bags made from a mixture of papaya leaves and Telang flowers.

METHOD

The research method used in this study is an experimental method. According to (Setyanto, 2013), an experiment is a study where a researcher controls one or more independent variables and observes other dependent variables to find new variations. Tea product testing is based on the table of dry tea requirements according to standards, especially checking the condition of steeping water (color, smell, taste) with special requirements for tea products.

Time and Place of Research

The location of the study was carried out in the MTsN 1 Model Science Lab Banda Aceh This research schedule was carried out from November to December.

Target/Subject of Research

The source of data in this study is untrained panelists totaling 12 (Twelve) people. The panelists were research teachers, and several MTsN 1 Banda Aceh students.

Procedure

The papaya leaves that have been provided are separated from the leaf bones, then washed thoroughly in running water and dried at room temperature of approximately 24oC for 7 days to dry completely. The same treatment is also done on Telang flowers. After drying, papaya leaves and Telang flowers are mashed using a blender. After that, 10 grams of papaya leaves and 8 grams of Telang flowers are taken, then mixed, taken 0.6 grams of papaya leaves and flowers that have been mixed then put into a tea bag. In this study, 12 tea bags were obtained.

Data Collection, Instruments, and Techniques

The Data Collection Tools in this study are: Organoleptic test questionnaire.

Data analysis techniques

Data analysis in this study using the percentage formula with the equation:

$$P = \frac{F}{N} \times 100 \%$$

(Kamelta, 2013)

Information:

P = percentage number.

F = Frequency of questionnaire scores on the efficacy of herbal tea, papaya leaves, and Telang flowers.

N = Number of panelists.

Therefore, the analysis carried out in this study is the percentage calculation by organoleptic test with hedonic scale on steeping herbal tea papaya leaves and Telang flowers with parameters of taste, aroma, and color and texture.

FINDING AND DISCUSSION

This tea is made from the main ingredients that have health benefits. Papaya leaves are a source of energy for the body, and Telang flowers can improve brain memory. In this study there were several factors tested, namely aroma, taste, color and texture. This study requires 12 (twelve) panelists consisting of grade VIII-1 students. The following research results are presented in table 4.1 below.

Aroma			
			Answer
Answer	Total	Score	Percentage (%)
SS	7	21	58,33
S	5	10	41,67
TS	0	0	0

Table 1. The Aroma of Papaya Leaf Tea and Telang flower

From the table above, it can be explained that the percentage of very likes (SS) is 58.33%, those who like (S) are 41.67% and those who don't like (TS) 0%. According to (Ariva, Widyasanti, & Nurjanah, 2022) SNI 3836:2013, the standard aroma of dry tea is a distinctive aroma and does not smell foreign. Panelists' assessment of the taste of cascara tea was carried out using the sense of taste (tongue), then assessed the panelists' liking in the form of a scale of liking felt when tasting tea. This research is in accordance with research (Saragih, 2014) which states that the aroma in the t2w2 treatment is preferred by panelists, because the t2w2 treatment is dried at 50 °C with a drying time of 3 hours until the aroma comes out. The evaporating compounds made Torbangun tea making highly appreciated by many panelists.

Furthermore, this study is also in line with research that says that according to SNI 03-3836-2012, the good taste for soursop leaf tea is ordinary, namely the distinctive aroma of tea (Anggorowati, Priandini, & Thufail, 2016). Furthermore, the percentage of taste of papaya leaf tea and Telang flowers:

Taste			
			Answer
Answer	Total	Score	Percentage (%)
SS	0	0	0
S	12	24	100
TS	0	0	0

Table 2. Tea Flavors of Papaya Leaves and Telang Flowers

From the table above it can be explained that the percentage of very likes (SS) is 0%, those who like (S) are 100% and those who dislike (TS) 0%. This is also in line with the results of research (Dewitayani, Sulaiman, & Widayat, 2019) that the concentration of ginger in ruku-ruku tea bags has a real effect (P>0.01) on the taste of ruku-ruku tea. This happens because the ginger

flavor dominates the taste of ruku-ruku, so that if brewed it can mask the taste of ruku-ruku tea. Furthermore, the percentage of tea texture of papaya leaves and Telang flowers:

Table 3. Tea	Texture of 1	Papaya	Leaves and	Telang	Flowers

Texture				
A	Total	Caoro	Answer	
Answer	Total	Score	Percentage (%)	
SS	6	18	50	
S	6	12	50	
TS	0	0	0	

From the table above it can be explained that the percentage of very likes (SS) is 50%, those who like (S) are 50% and those who dislike (TS) 0%. This research is also in line with research (Kusuma, Putra, & Darmayanti, 2019), namely SNI: (01-3836-2013) moisture content to make tea 8.0% maximum dryness. Research results in accordance with SNI are available at temperatures of 85oC (P3) and 95oC (P4). Finally, the percentage of tea color of papaya leaves and Telang flower:

Table 4 Tea Color of Papaya Leaves and Telang

Color			
			Answer
Answer	Total	Score	Percentage (%)
SS	11	33	91,67
S	1	2	8,33
TS	0	0	0

From the table above, it can be explained that the percentage of very likes (SS) is 91.67%, those who like (S) are 8.33% and those who don't like (TS) 0%. This study is in accordance with the results of research (Saragih, 2014) that the relationship between temperature and drying time is very influential on the color preference of Torbangun leaf tea.

CONCLUSION

Papaya leaf tea and Telang flower are teas derived from plants that are easily available. This herbal tea is one variation of herbal tea in general because it is made from a mixture of plants. This tea has many benefits, one of which is that it can increase the immune system of the human body. This tea can be used as an alternative medicine. Based on the discussion, it can be concluded that this tea is widely preferred because of its delicious aroma and taste and unique texture and color. SNI 3836:2013 the aroma of tea in accordance with the standard is an aroma that has its own distinctive and does not have a foreign odor. Panelists' assessment of the taste of papaya leaf tea and Telang flowers was carried out using the taste buds (tongue), then assessed the panelists' liking in the form of a scale of liking felt when tasting tea.

BIBLIOGRAPHY

- Abubakar, A. N., & Khaerah, A. (2022). Formulasi Biji Alpukat dan Daun Eukaliptus Sebagai Teh Herbal Antioksidan. *Jurnal Ilmiah Farmako Bahari*, 11-14.
- Anggorowati, D. A., Priandini, G., & Thufail. (2016). Potensi Daun Alpukat (Persea Americana Miller) Sebagai Minuman Teh Herbal Yang Kaya Antiksidan. *INDUSTR INOVATIF*, 1-7.
- Anniza, A. (2019). Riview: Pengaruh Daun Pepaya (Carica papaya L) Terhadap Peningkatan Trombosit Pada Pasien Demam Berdarah Dengue. . *Jurnal Dunia Farmasi*, 34-44.
- Ariva, A. N., Widyasanti, A., & Nurjanah, S. (2022). Pengaruh Suhu Pengeringan Terhadap Mutu Teh Cascara dari Kulit Kopi Arabika (Coffea arabica). *Jurnal Teknologi dan Industri Pertanian Indonesia*, 21-28.
- Azizi, A. (2023). People's Views on Stereotypes of Pidie and Padang Communities. *Journal of Society Innovation and Development (JSID)*, 5(1), 101-115.
- Cristina, G. (2024). The Acehnese Folklore and Social Behavior. *JOURNAL OF ACEH STUDIES* (*JOAS*), 1(1), 51-60.
- Dewitayani, Sulaiman, M. I., & Widayat, H. P. (2019). Studi Pembuatan Teh Celup Daun Ruku-Ruku (Ocimum Tenuiflorum L.) dengan Penambahan Bubuk Jahe sebagai Minuman Penyegar. . *Jurnal Ilmiah Mahasiswa Pertanian Unsyiah*, 510-516.
- Ibrahi, A. (2024). The Teumatok Culture in Aceh Singkil. *JOURNAL OF ACEH STUDIES* (*JOAS*), 1(1), 1-8.
- Imayanti, R. A., Rochmah, Z., Aisyah, S. N., & Alfaris, M. R. (2019). Pemberdayaan Masyarakat Dalam Pengolahan Bunga Telang Di Desa Panggreh Kecamatan Jabon Kabupaten Sidoarjo. *Seminar Nasional Hasil Pengabdian*, 77-82.
- Johan, D. (2024). The Keuneunong Dating and Acehnese Society. *JOURNAL OF ACEH STUDIES* (*JOAS*), 1(1), 21-30.
- Kamelta, E. (2013). Pemanfaatan Internet Oleh Mahasiswa Jurusan Teknik Sipil Fakultas Teknik Universitas Negeri Padang. *CIVED ISSN*, 142-146.
- Kusuma, I. G., Putra, I. N., & Darmayanti, L. P. (2019). Pengaruh Suhu Pengeringan Terhadap Aktivitas Antioksidan Teh Herbal Kulit Kakao (Theobroma Cacao L.). *Jurnal Ilmu dan Teknologi Pangan*, 85-93.
- Marpaung, A. M. (2020). Tinjauan Manfaat Bunga Telang (Clitoria Ternatea L) Bagi Kesehatan Manusia. *Journal of Functional Food and Nutraceutical*, 1-23.
- Munidar, F. (2024). The Acehnese Literature and Social Behavior. *JOURNAL OF ACEH STUDIES* (*JOAS*), 1(1), 31-40.

- Paull, J. (2024). The Impact of Coffee Shops on Aceh's Economic Sustainability. *JOURNAL OF ACEH STUDIES (JOAS)*, 1(1), 41-50.
- Purnomo, B. E., Hamzah, F., & Johan, V. S. (2016). Pemanfaatan Kulit Buah Naga Merah (Hylocereus polyrhizus) Sebagai Teh Celup Herbal. *Jom Faperta*, 1-10.
- Rahmadani, A. (2024). The Writing Culture of Scholars of The Aceh kingdom. *JOURNAL OF ACEH STUDIES (JOAS)*, 1(1), 9-20.
- Rahman, F. (2023). Caregiver's Interpersonal Communication Approach to The Elderly. *Journal of Society Innovation and Development (JSID)*, 5(1), 116-123.
- Ravikumar. (2014). Review on Herbal Teas. *Journal of Pharmaceutical Sciences and Research*, 236-238.
- Rudi, D. A., Wijaya, T. S. I., & Murdani, T. (2021). Socio-Economic Correlation of Scavenger Community in Religious Life. *Journal of Society Innovation and Development (JSID)*, 3(1), 16-20.
- Saragih, R. (2014). Uji Kesukaan Panelis Pada Teh Daun Torbangun (Coleus Amboinicus). Program Studi Teknologi Industri Pertanian, 46-52.
- Setyanto, A. E. (2013). Memperkenalkan Kembali Metode Eksperimen dalam Kajian Komunikasi. *Jurnal Ilmu Komunikasi*, 37-48.
- Siadeka, G., Yasin, T. M., & Shadiqin, S. I. (2020). The Spirituality of Urban Society. *Journal of Society Innovation and Development (JSID)*, 2(1), 01-021.
- Simanjuntak, L., Harun, N., & Efendi, R. (2014). Penerimaan Panelis Terhadap Teh Herbal Dari Kulit Buah Manggis (Garcinia mangostana L.) Dengan Perlakuan Suhu Pengeringan. *SAGU*, 7-18.
- Tiara, A. (2022). Society: Solutions for Building Ethics Communication on Social Media. *Journal of Society Innovation and Development (JSID)*, 3(2), 013-017.