

ETHNOBOTANICAL STUDY OF PLANTS USED FOR HAIR CARE BY GAYO WOMENS IN BENER MERIAH

¹Ernilasari, ²Saudah, ³Rizky Ahadi and ⁴Rubiah ^{1,2,4} Serambi Mekkah University, Banda Aceh, Indonesia ³Islamic University of Ar-Raniry Banda Aceh, Indonesia Email: ernilasari@serambimekkah.ac.id

DOI: 10.22373/biotik.v11i2.19938

ABSTRAK

Wanita Suku Gayo di Kabupaten Bener Meriah merupakan salah satu komunitas masyarakat yang masih mempertahankan penggunaan tumbuhan sebagai kosmetik, salah satunya digunakan dalam perawatan rambut. Setiap etnis memiliki cara tersendiri dalam pemanfaatan tumbuhan sesuai dengan kearifan lokalnya, namun pengetahuan tersebut hanya diturunkan secara lisan dari generasi ke generasi tanpa adanya dokumentasi tertulis. Penelitian ini bertujuan untuk mengetahui tentang jenis tumbuhan yang digunakan dalam perawatan rambut oleh wanita suku Gayo di Bener Meriah. Penelitian ini menggunakan metode survey eksploratif. Penentuan sampel dilakukan secara snaw ball sampling. Sampel meliputi para ibu rumah tangga dari suku gayo, remaja, serta masyarakat yang memanfaatkan tumbuhan sebagai perawatan rambut. Data dianalisis secara deskriptif kualitatif dan tampilan data dalam bentuk tabel dan gambar. Hasil penelitian menunjukkan terdapat 11 spesies tumbuhan yang digunakan dalam perawatan rambut wanita suku Gayo.

Kata Kunci: Etnobotany, Gayo, Perawatan_Rambut.

ABSTRACT

Gayo womens in Bener Meriah Regency is one of the communities that still maintains the use of plants as cosmetics, one of which is used in hair care. Each ethnicity has its own way of utilizing plants in accordance with its local wisdom, but this knowledge is only passed down orally from generation to generation without written documentation. This study aims to find out about the species of plants used in hair care by Gayo women in Bener Meriah. This research used an exploratory survey method. Sampling was done by snaw ball sampling. Samples include housewives from the Gayo ethnic group, teenagers, and people who use plants as hair care. Data were analyzed descriptively qualitatively and data display in the form of tables and figures. The results showed that there were 11 plant species used in hair care by Gayo women.

Keyword: Etnobotany, Gayo, Hair_care.

INTRODUCTION

Ethnobotany is a scientific study that combines ethnology (the science of culture) with botany (the science of plants). Ethnobotany aims to understand the relationship between humans and plants in the context of culture and society both in terms of interaction, use and management of plants [1].

Indonesian people have always had a lifestyle and culture that tends to utilize plants for clothing, food, herbal medicines, pesticides, traditional events, industrial raw materials to cosmetics [2][3][4]. This is due to the large number of raw materials available in nature, namely more than 40,000 species of plants found in Indonesia, of which around 9,606 species have pharmaceutical effects [5][6][7].

One of the uses of plants in everyday life is used as traditional cosmetics for beauty care. Active compounds from traditional cosmetics are believed to be relatively safer, suitable for all skin types, minimal side effects and more environmentally friendly [8], when compared to cosmetics with synthetic chemicals [9]. Cosmetics are materials or preparations used to treat the outside of the human body such as epidermis, nails to hair [10].

Hair care is a periodic action that aims to keep the hair always in a clean and healthy state. Protect the scalp and hair from damage-causing factors such as: sunlight, air pollution (dust, smoke or chemicals released by factories, sea air and so on), prevent the outermost layer of the scalp and hair from dryness, keep the scalp and hair in normal condition, and change the appearance, color and appearance of hair [11].

One community that still maintains the use of plants as traditional cosmetics for hair care is the Gayo tribe women in Bener Meriah Regency. The Gayo tribe has specific characteristics and customary and cultural values as well as Indonesian society in general [12]. Local experiences and knowledge related to the use of plants in hair care are passed down orally from generation without to generation written documentation. Such information must be preserved to avoid information degradation over time. Therefore, this study aims to examine the types of plants and how they are used as hair care by Gayo women.

RESEARCH METHOD

This research was conducted on Gayo women in Bener Meriah Regency. This study used an exploratory survey method, snaw ball sampling including housewives from the Gayo tribe, teenagers, and people who use plants as hair care.

Materials

The tools and materials used include: camera, voice recorder, map of the research location, oven, sasag, plant scissors, cutter, spray bottle, collection bottle, plastic bag, raffia rope, tape, label paper, questionnaire, log book, notebook, pen, pencil, marker, ruler, newsprint and 70% alcohol.

Data Collection

Data collection was carried out using semi-structured interview techniques with selected informants/correspondents and direct observation of plant species used in making traditional scrubs. Research parameters include the types of plants used, organ parts used, and their use as scrubs. Researchers also made direct observations of plant species used as traditional scrubs in the field [13]. The plants from the research were then identified at the MIPA Laboratory of Serambi Mekkah University. Plants obtained from direct observations in the field are preserved into herbarium, and then identification is carried out at the MIPA Laboratory of Serambi Mekkah University. Identification information includes taxonomy and classification.

RESULTS AND DISCUSSION

Based on the results of observations and interviews conducted with Gayo women, 11 species of plants used as hair care were obtained, which are spread into 11 families. The details are shown in Table 1. below:

No.	Local Name	Scientific Name	Family	Parts Used	Benefits	How to make & use
1	Urang Aring	Eclipta prostrata	<u>Asteraceae</u>	Leaves, Stems	Blackening hair	Pounded and squeezed out the water. The juice is applied to the hair for ± 10 minutes, then rinsed.
2	Jeruk Nipis	Citrus aurantifolia	Rutaceae	Fruit	Removing Dandruff	 Oranges are squeezed out of the water, then given a creambath. The lime is cut into 2 parts. The inside of the lime is rubbed directly onto the surface of the dandruff-covered scalp.
3	Lidah Buaya	Aloe vera	Liliacea	Leaves	Removing Dandruff	The gel-like flesh of the leaves is taken and smeared on the scalp.
4	Kelapa	Cocos nucifera	Palmae	Coconut milk	Blackens and makes hair shiny	Coconut is grated, then take coconut milk. The coconut milk is coated on the hair and left to stand for 30 minutes and rinsed.
				Coconut oil	Overcoming head lice	Coconut oil is applied to the hair and rubbed in with bar soap, left for 20 minutes and rinsed
6	Daun Pacar	Lawsenia inermis	Lythraceaea	Leaves	Hair coloring	Henna leaves are ground with a millstone, once smooth it is applied to the part of the hair that you want to color. Leave to dry. Rinsed clean.
7	Kemiri	Aleurites moluccana	Euphorbiace ae	Fruit	 Accelerates hair growth in infants, Fertilizes hair 	Candlenut (Kemiri) fruits are ground until smooth, mixed with water, smeared on the baby's scalp, left to dry, and rinsed.

Tabel 1. Plant Species used as Hair Care by Gayo Women in Bener Meriah Regency

No.	Local Name	Scientific Name	Family	Parts Used	Benefits	How to make & use
8	Kenanga	Kananga odorata	<u>Annonaceae</u>	Flowers	Dyeing Hair	The flowers are infused in coconut oil. Coconut oil can be used every day. Flowers in a bun (hair roll).
9	Mawar	<i>Rosa</i> sp.	Rosaceae	Flowers	Dyeing Hair	The flowers are infused in coconut oil. Coconut oil can be used every day.
10	Jahe	Zingiber officinale	Zingiberace ae	Tubers	Treats dandruff, hair loss, and split ends	Ginger (Jahe) is grated and squeezed, mixed with lime juice, and <i>zitun</i> oil is added. The preparation is ready for use. The preparation was applied to the hair and left on for 20 minutes. Rinsed with clean water.
11	Alpukat	Persea americana	Lauraceae	Fruit	Hair Care	Avocado (Alpukat) is mashed, then applied to all parts of the hair. left to stand and rinsed using warm water.

Table 1 shows that there are 11 plant species used in hair care by Gayo women. These species are also distributed in 11 different families. The community finds these plants easily, either in the yard, or in the garden. Some species are also easily found in traditional markets. Urang aring is the only wild plant used in hair care by Gayo women in Bener Meriah.

Eclipta prostata is a herbaceous plant belonging to the Asteraceae family that has been used for a long time by local communities in the world and Indonesia as a medicine and as an ingredient in beauty treatments [14], a plant has also been studied to have activities as treating neurodegeneration, asthma, anti-cancer. overcoming baldness, anti-diabetes mellitus, antianti-inflammatory, oxidant, antimicrobial, hepatoprotective, antiosteoporosis, and antihypercholesterolemia [14]. Some of these activities are due to urang aring having secondary metabolites such as neurotoxin 6-hydroxydopamine, ethyl acetate, demethylwedelolactone, wedelolactone, echinocystic acid and ecclalbasaponin [14]. Ecclalbosaponin is reported to be able to repair damaged scalp [15][16]. This plant has also been shown to have antifungal activity against *Candida albicans* [17]. The alcohol extract of this plant has also been studied to have antiviral activity. *Urang aring* also contains activity in inhibiting the microbial growth of *Trichophyton mentagrophytes*, the cause of skin diseases [18].

The utilization of plants in hair care is done either singly or mixed in potions. The mixture of several plants can maximize the efficacy in its use [19]. In addition to treating hair from damage, the use of plants is also done to color and fragrance the hair. Henna leaves are used to color the hair and *Kenanga* flowers are used to fragrance the hair either by putting in coconut oil or directly used on the bun. *Kenanga* essential oil (*Cananga* odorata) is one type of aromatherapy that has several natural compounds such as bensoic acid, geraniol, farnesol, geraniol, eugenol, linalool, sadrol [20]. *Kenanga* essential oil has also been tested to have an effect on lowering blood pressure in hypertensive patients [21].

CONCLUSION

There are 11 plants that are used in hair care by the Gayo community. They are used to fertilize the hair, nourish the hair, treat various infections on the scalp and color the hair.

ACKNOWLEDGMENTS

We would like to thank Ministry of Education, Culture, Research, and Technology, Directorate General of Higher Education, Research, and Technology for the funds provided this research in PDP scheme.

REFERENCE

- [1] Anak A.K. Darmadi. Etnobotani, Ragam Etnobotani di Bali. Bali: Udayana University Press. 2017
- [2] Nasir, Tamalene, M. et al. Study of ethnobotany of medicinal plant of Tobelo Dalam (Togutiethnic group of Halmahera Island Indonesia. Jurnal Medicinal Plant.

2016; 8 (2), 127-136. doi : 10.5958/0975-6892.2016.00016.2

 [3] Anisatu Z. Wakhidah, Tatik Chikmawati, & Y. Purwanto. Homegarden Ethnobotany of Two Saibatin Villages in Lampung, Indonesia: Species Diversity, Uses, and Values. Forest and Society. 2020; 4(2): 338-357. http://dx.doi.org/10.24259/fs.v4i2 .9720

- [4] Isna Rasdianah Aziz, et al. Ethnobotany of traditional wedding: a comparison of plants used by Bugis, Palembang, Sundanese and Karo ethnic in Indonesia. Journal of Physics: Conference Series. 2019; 1-6. doi:10.1088/17426596/1175/1/01 2005
- [5] Ziraluo, Y. P. B. Tanaman Obat Keluarga dalam Perspektif Masyarakat Transisi (Studi Etnografis pada Masyarakat Desa Bawodobara). Jurnal Inovasi Penelitian. 2020; 1(2), 99–106. https://doi.org/10.47492/jip.v1i2. 55.
- [6] Widodo, H., Rohman, A., & Sismindari, S. Pemanfaatan Tumbuhan Famili Fabaceae untuk Pengobatan Penyakit Liver oleh Pengobat Tradisional Berbagai Etnis di Indonesia. Media Penelitian dan Pengembangan Kesehatan. 2019; 29 (1), 65-88. https://doi.org/10.22435/mpk.v29i 1.538
- [7] Rizki dan Leilani, I.
 Etnofarmakologi Tumbuhan
 Familia Rhizophoraceae oleh
 Masyarakat di Indonesia. Jurnal
 BioCONCETTA. 2019; 1 (3), 51-60.
- [8] Syavira Marwa, Raisya Hasina dan anggit l. Sunarwidhi. Studi Etnobotani Bahan Kosmetik Asli Masyarakat Desa tanjung luar kabupaten lombok timur,

indonesia. Jurnal Sosains. 2022; 2(1).77-88. http://sosains.greenvest.co.id.

- [9] Cleber Barros and Rosana Bevenuto Guilhen Barros. Natural and Organic Cosmetics: Definition and Concepts. J Cosmo Trichol, 2020; 6 (2): 1-9. DOI: 10.4172/2471-9323.1000143
- [10] Yosef P.N Murago. Potensi Kosmetik Natural Indonesia dan Persyaratan Berkelanjutan sebagai Referensi Pasar di Uni Eropa. KBRI Brussel. 2021.
- [11] Made. D. A. Rambut Indah dan Cantik dengan Kosmetika Tradisional. JPTK, UNDIKSHA. 2012; 9 (1), 25 – 36
- [12] Sukiman. Nilai-nilai Pembangunan Islam dalam Masyarakat Gayo. MIQOT. 2014; XXXVIII (1): 215-237.
- [13] Nasir, Tamalene, M. et al. Study of ethnobotany of medicinal plant of Tobelo Dalam (Togutiethnic group of Halmahera Island Indonesia. Jurnal Medicinal Plant. 2016; 8 (2), 127-136. doi: 10.5958/0975-6892.2016.00016.2
- [14] Marina S. Review Article *Eclipta* prostrata (L.) L. (uses and bioactivities). GSC Biological and Pharmaceutical Sciences, 2022; 18(01), 001–007. https://doi.org/10.30574/gscbps. 2022.18.1.0371
- [15] Asri B. Yulianti dan Ferry F. Sofian. Review artikel :Aktivitas

Ethnobotanical Study of Plants...

Farmakologi Ekstrak Urangaring (*Eclipta alba* L.). Farmaka ; 15 (2). 178-185.

- [16] Pavan *et al.* Formulation and Evaluation of herbal hair oil. International Journal of Pharmaceutical Research and Applications, 2021; 6 (5), 1285-1299.
- [17] Bakht J, Islam A, Shafi M.
 Antimicrobial potentials of Eclipta Alba By Well DiffusionMethod. Pak. J. Bot. 2011; 43: 169-174.
- [18] Billi A. dkk. Uji Efektifitas Ekstrak Tumbuhan Urang Aring (eclipta alba (l.) Hassk) terhadap Pertumbuhan Jamur Colletotrichum sp. Penyebab penyakit antraknosa. urnal Biologi Eksperimen dan Keanekaragaman Hayati. 2018; 5(1). 49-56.
- [19] Ernilasari, Yuslinaini, Saudah. Etnopharmacology Of Spices As Traditional Medicine In Aceh Rural Communities Central

Aceh. BIOTIK. 2022; 10 (2), 151-161.

- [20] Sharma, S. (2008). The secret benefits of aroma therapy: Secret guides. New Delhi: Sterling Paperbacks.
- [21] Kristina L Silalahi, Fajar A. Ariga, Patimah S Siregar. Pengaruh Aromaterapi Kenanga (*Cananga Odorata*) Terhadap Penurunan Tekanan Darah Pada Pasien Hipertensi. Jurnal Keperawatan Priority. 2020; 3(2). 101-108