

ETNOPHARMACOLOGY OF SPICES AS TRADITIONAL MEDICINE IN ACEH RURAL COMMUNITIES, CENTRAL ACEH

¹Ernilasari, ²Yuslinaini, ³ Saudah and ⁴Rizky Ahadi

^{1,2,3}Serambi Mekkah University, Banda Aceh, Indonesia

⁴Islamic University of Ar-Raniry, Banda Aceh, Indonesia

Email: ernilasari@serambimekkah.ac.id

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ABSTRAK

Penggunaan tumbuhan rempah sebagai obat maupun ramuan tidak lepas kaitannya dengan budaya dan kearifan lokal yang dianut, sehingga dalam praktiknya dibutuhkan pengetahuan dan ketrampilan khusus guna menghasilkan obat maupun ramuan yang diyakini mampu menjaga kesehatan dan menyembuhkan berbagai penyakit. Tujuan dari penelitian ini adalah untuk menggali informasi masyarakat pedalaman Aceh Tengah terkait penggunaan rempah dalam pengobatan tradisional. Penelitian ini dilakukan pada Masyarakat Desa Paya Tungel Kecamatan Jagong Jeget Aceh Tengah. Penelitian ini menggunakan metode survei eksploratif dengan penentuan sampel secara *purposive sampling*. Pengumpulan data dilakukan dengan cara wawancara semi strukur pada koresponden yang telah ditentukan, dan pengamatan langsung tumbuhan rempah di lapangan. Berdasarkan hasil penelitian terdapat 21 jenis tumbuhan rempah yang digunakan sebagai obat yang tersebar dalam 9 familia. Tumbuhan rempah dimanfaatkan untuk pemeliharaan kesehatan, anti nyeri, anti radang dan penyembuhan penyakit infeksi dan penyakit gangguan metabolisme lainnya. Bagian tumbuhan yang paling banyak digunakan adalah rimpang. Cara pengolahan yang paling sering ditemukan dengan cara direbus untuk kemudian dikonsumsi dengan cara diminum.

Kata kunci: Etnofarmakologi, Rempah, Aceh Tengah.

ABSTRACT

The use of spice plants as medicine and potions cannot be separated from the culture and local wisdom adopted, so that in practice, special knowledge and skills are needed to produce drugs and potions that are believed to be able to maintain health and cure various diseases. The purpose of this study was to obtain information from the Rural Communities of Central Aceh about utilization of spices in traditional medicine. This research was conducted on the Paya Tungel Villagers, Jagong Jeget District, Central Aceh. This study used an exploratory

survey method with purposive sampling. Data collection was carried out by semi-structured interviews with predetermined correspondents, and direct observations of spice plants in the field. Based on the results of the study, there are 21 species of spices used as medicine belonging to 9 families. Spices are used for health maintenance, anti-pain, anti-inflammatory and healing of infectious diseases and other metabolic disorders. The most widely used part of the plant is the rhizome. The most processing is boiling and then consuming it by drinking.

Keyword: Ethnopharmacology, spice, Central Aceh.

PENDAHULUAN

Spices are plants which one or all of its parts contain active substances that can be used as spices, flavor enhancers, fragrances, and food preservatives that are used on a limited basis [1]. The characteristic of spice plants is that they have an aromatic characteristic that comes from their phytochemical compounds [2][3][4]. In addition to being used as spices, flavor enhancers, fragrances and food preservatives, spice plants are also believed by the community to be used as medicines or ingredients in traditional medicine [5]. Currently, spice plants are also used as antioxidants which are believed to be able to increase the body's immunity, namely as an immunodulator that triggers cell proliferation [6][7].

Spice plants are biological resources that have an important role in people's lives. Historically, spice plants

have been an important commodity in the global economy [4][8]. Until 2021 the value of international spice trade will increase 41 times, with a demand rate of 10.38% per year, this position is higher than the overall increase in food trade [9]. This shows that spice commodities have an important role in the international market.

Until now, it is estimated that there are 400-500 spices in the world and the center is in Southeast Asia, where there are an estimated 275 species. These important spices include cardamom, cloves, ginger, nutmeg, black pepper, cinnamon, ginger, turmeric and others [6].

Ethnopharmacology is the study of the use of plants as medicine by people in certain areas [10]. The study is related to local wisdom and culture adopted by the local community [11]. The use of plants as traditional

medicine in Indonesia has clear cultural characteristics and identity, so that people's perceptions and conceptions of the resources in their environment are also different, including the use of spice plants in traditional medicine [12].

One of the areas that until now is still very firmly holding on to customs and culture is the interior of Central Aceh Regency, namely Paya Tungal Village, Jagong Jeget District. For generations, rural communities in the area have used various types of

spice plants to be used as traditional medicines in curing various diseases, of course in accordance with local wisdom in the area. In this case, ethnopharmacology has an important role to study various types and ways of using plants, especially spice plants that have pharmacological effects in the treatment and maintenance of public health, especially in Paya Tungal Village, Jagong Jeget District, Central Aceh Regency.

METHOD

This research was conducted in July 2022 on the community in Paya Tungal Village, Jagong Jeget District, Central Aceh Regency. The method used in this research is an exploratory survey, purposive sampling [10], with criteria that are customary stakeholders, traditional healers (hattra), and indigenous people who often use traditional medicinal ingredients [13].

Tools and Materials

Tools and materials include: camera, voice recorder, map of research

location, oven, sasag, crop scissors, cutter, spray bottle, collection bottle, plastic bag, raffia rope, masking tape, label paper, list of questions, log book, notebook , pens, pencils, markers, rulers, newsprint and 70% alcohol.

Data Collection

Data was collected by using semi-structural interview techniques to selected informants/correspondents as well as direct observation of the types of spice plants used as medicine. The parameters of the research include the type of spice plant used, the part of the

organ used, its use, the type of disease being cured, and how to use it as an ingredient. Researchers also made direct observations of the types of spice plants used as medicine. The data from the research were then identified at the

MIPA Laboratory, Serambi Mekkah University.

Data Analysis Techniques

The data obtained from the interviews were then analyzed descriptively. Data display is presented in tabular form.

RESULTS AND DISCUSSION

Based on the results of interviews with respondents and the results of identification at the MIPA Laboratory, Serambi Mekkah University, there are 21 species of spices from 9 families that are used as traditional medicine by the people of Paya Tungel Village, Jagong Jeget District, Central Aceh Regency. (Table. 1).

Based on Table 1, it shows that the species most widely used as medicine came from the Zingiberaceae family (9 species), which was as much as 45% of the total types of spices used (Figure 1).

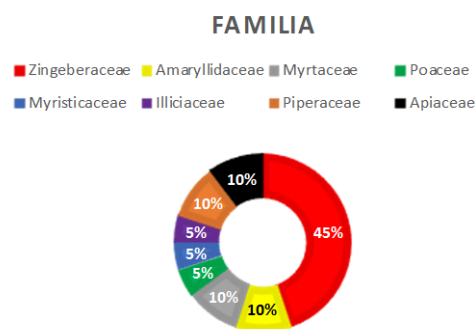


Figure 1. Graph of the Percentage of Plant Families Used by the Community of Paya Tungel Village, Jagong Jeget District, Central Aceh Regency

Species of spices that are used are very easy to find in the market, even people generally plant them in their yards to facilitate availability, because in everyday life people often use this Zingiberaceae family plant as a kitchen spice. Meanwhile, the families with the least amount utilized were from the Poaceae, Myristicaceae, Rutaceae, Illiciaceae and Pandanaceae

families. Each with the number of only one species.

Utilization as Medicine

Spices are used as medicine in maintaining health and healing certain diseases. Turmeric is used in health care in postnatal care for mothers, the use of turmeric and kecombrang is believed by local residents to be able to maintain women's vital organs. In addition to maintaining the health of herbs, spices are also used to treat infectious diseases such as influenza, and diarrhea. The use of spices is also used as an anti-pain, anti-inflammatory and to cure metabolic diseases such as cholesterol, high blood pressure and gout.

Plant Parts Used

The most widely used part of the spice plant is the rhizome of the plant, followed by the leaves, flower seeds and stems. Rhizome is a modified part of the stem, grows creeping in the soil and can produce new shoots and roots.

Turmeric rhizome contains compounds that are very beneficial for the health of the body including

essential oils, starch, bitter substances, resins, cellulose, several minerals and the pigment curcumin which gives turmeric its yellow-orange color [15].

The essential oil contained in turmeric is efficacious to regulate the release of stomach acid so that it is not excessive and reduces the performance of the intestines that are too heavy in the digestion of food substances. Curcumin is one type of antioxidant and is very efficacious as a hypocholesterolemic, cholagogue, choloretic, bacteriostatic, spasmolytic, antihepatotoxic and anti-inflammatory in wound healing process [16].

Processing and Usage

The method of using traditional medicine for the inland people of Central Aceh is relatively simple, the plant parts used are generally processed by pounding, boiling, squeezing and drinking the water. And there are also processed products that are used by means of smearing on the part of the body that feels sick.

Turmeric (*Curcuma domestica*) is used by the rural people of Central Aceh for various kinds of complaints such as ulcers, facilitating

menstruation, post-natal treatment, wound medicine and appetite enhancer. Fresh turmeric rhizome is processed by pounding, grating or finely blending and adding water to make it easy to drink. The results of the process are drunk with the dregs, or it can also be filtered first and added honey to taste to enhance the taste of the turmeric chelate. For treatment of wounds, people usually attach the results of this turmeric collision to the sore area, twice a day until the wound dries.

The same processing was also carried out on types of Ginger (*Zingiber officinale*) and Red Ginger (*Zingiber officinale* var. *Rubrum*). The result of the collision of the rhizome is drunk which is used for several types of disease disorders such as: symptoms of Covid-19, coughs and colds, colds and maintaining body resistance in the rainy season. You can also add citronella to get rid of the ginger aroma which some people don't really like.

Based on the method of use, the people of Paya Tungel Village, Jangong Jeget District, Central Aceh

Regency use traditional medicine by drinking and smearing it. Most often done is by drinking. According to the local community, processed medicinal ingredients are more effective or have a quick effect by minimizing only 5 (five) types of preparations which are smeared on the outside of the sick body. They have done this method from generation to generation, considering that the area where they live has access that is quite far from the city center.

CONCLUSION

Based on the results of the study, there are 21 species of spices used as medicine belonging to 9 families. Spices are used for health maintenance, anti-pain, anti-inflammatory and healing of infectious diseases and other metabolic disorders. The most widely used part of the plant is the rhizome. The most processing is boiling and then consuming it by drinking.

Table-1.Species of Spices used in Traditional Medicine of the Paya Tungel Community, Jagong Jeget District, Central Aceh Regency

No.	Local Name	Scientific Name	Family	Utilization (Medicine)	Used Part	Processing	Usage
1.	Turmeric	<i>Curcuma domestica</i>	Zingiberaceae	<ol style="list-style-type: none"> 1. Treating Gastritis 2. Streaming menstruation 3. Postpartum treatment 4. Wound medicine 5. Appetite enhancer 	rhizome	<ol style="list-style-type: none"> 1. Pounded , blended or shredded singly 2. Pounded turmeric with the addition of rice, ginger, garlic, kaffir lime, lempuyang (Postnatal care) 	<ol style="list-style-type: none"> 1. Taken singly along with grated dregs 2. Filtered or squeezed, only drink the water 3. Drink with the addition of honey 4. Pounded turmeric is affixed to the injured body part 5. The herb is smeared all over the body of the mother giving birth
2.	Ginger	<i>Zingiber officinale</i>		<ol style="list-style-type: none"> 1. Symptoms of Covid-19 2. Cough with flu and fever 3. Have a cold 4. Body endurance 	rhizome	Brewed or boiled , fine by single nor with addition lemongrass fragrant and garlic	Drink
3.	Ginger Red	<i>Zingiber officinale var. rubrum</i>		<ol style="list-style-type: none"> 1. Warm the body 2. Have a cold 3. Cough 	rhizome	Pounded , Brewed or boiled , fine by single nor with addition lemongrass fragrant	Drink
4.	Aromatic ginger	<i>Kaempferia galanga</i>		Cough and have a cold on child	rhizome	pounded or grind fine	Oiled on part crown child
5.	Galangal	<i>Alpinia galanga</i>		<ol style="list-style-type: none"> 1. Bad breath 2. Sore throat 3. Fungus on the skin 	rhizome	Boiled	<ol style="list-style-type: none"> 1. Drink boiled water 2. For Fungi: Galangal is cut and rubbed directly on the skin that is infected with the fungus
6.	Lempuyang	<i>Zingiber zerumbet</i>		Treatment Indigestion	rhizome	Boiled	Drink
7.	Curcuma	<i>Curcuma xanthorrhiza</i> Roxb		<ol style="list-style-type: none"> 1. Treating Gastritis 2. Cholesterol 3. Children's appetite enhancer 	rhizome	Boiled	<ol style="list-style-type: none"> 1. Drink alone 2. Mixed with honey and lemon for an appetite boost

8.	Kecombrang	<i>Etlingera elatior</i>		1. Postpartum Treatment 2. Relieves muscle pain 3. Diarrhea 4. Cough	rhizome, fruit	Burned, Boiled by single,boiled after burned with gambier (Diarrhea), Boiled with mixture ginger, pepper, coriander, cumin black , nutmeg, pepper, lempuyang and sugar (Post give birth)	Drink
9.	Cardamom	<i>Amomum compactum</i>		Influenza and gout	rhizome	Boil the rhizome part and let it sit until it's warm	Drink
10.	Onion Red	<i>Allium ascalonicum</i>	Amaryllidaceae	Sick stomach ache _ head , come in wind	bulbs	pounded then mixed 2 spoon oil coconut	Oiled
11.	Onion White	<i>Allium sativum</i>		Sick head, bite insects, symptoms of covid	bulbs	Boiled for covid pounded or sliced tubers	Drink, smeared
12.	Clove	<i>Syzygium aromaticum</i>	Myrtaceae	Toothache	flower	pounded	Oiled on Toothache
13.	Regards	<i>Syzygium polyanthum</i>		Gout, Cholesterol, high blood pressure	leaf	Boiled	Drink
14.	Lemongrass	<i>Cymbopogon citratus</i>	Poaceae	Bloating and colds, Covid	stems and leaves	Boiled alone or mixed with ginger	Drink alone or with a tea blend
15.	Nutmeg	<i>Myristica fragrans</i>	Myristicaceae	Sprain	seed	Dried and finely ground	Oiled
16.	Flower Mace	<i>Illicium verum</i>	Illiciaceae	Cough and cold	flower	Dried and boiled	Drink
17.	Pepper	<i>Piper nigrum</i>	Piperaceae	1. Fever, 2. Headache 3. Post-natal care for mothers	seed	Braised with sliced pear	Drink

18.	Kasturi orange	<i>Citrofortunella microcarpa</i>	Rutaceae	1. Lower cholesterol 2. Reduce fever in children	fruit	Squeezed in warm water Burned until charred, sliced and mixed with oil	Drink, Smear all over the baby's body
19.	Caraway Black	<i>Cuminum cyminum</i>	Apiaceae	Diarrhea	seed	Boiled	Drink
20.	Coriander	<i>Coriandrum sativum</i>		Menstrual pain	seed	Pounded and soaked in hot water	Drink
21	Fragrant Pandan	<i>Pandanus amaryllifolius</i>	Pandanaceae	Lowers cholesterol	leaf	Boiled	Drink

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