

# Documentation of the traditional Gayo food in Lokop Village, East Aceh, Indonesia

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**Abstract.** *Ramaidani, Navia ZI. 2022. Documentation of the traditional Gayo food in Lokop Village, East Aceh, Indonesia. Biodiversitas 23: 2017-2024.* The Gayo Tribe community in Lokop Village, Serbajadi Sub-district, East Aceh, Indonesia, has known the traditional use of plants to meet food needs for a long time. However, this knowledge has not been widely documented. Therefore, it is necessary to conduct a study to document the typical food of the Gayo Tribe in Lokop Village, Serbajadi Sub-district, East Aceh, Indonesia. This study was conducted using the Snowball sampling method and semi-structured interviews involving 37 respondents. A total of 14 types of traditional Gayo food were documented, namely *Cecah bajik*, *Cecah kekulit*, *Cecah ries*, *Jurung pengat*, *Masam jing*, *Apam*, *Berteh*, *Brahrum*, *Gutal*, *Lepat*, *Pulut berkerabu*, *Pulut manis*, *Pulut semplah*, and *Tumpi*. In contrast, 52 plant species belonging to 46 genera and 31 families were used in traditional Gayo food. The most widely used family was Zingiberaceae with 5 species, the most widely used growth form was herb at 39%, and the most widely used plant parts were leaves and fruit, with 21% each. The frequency of using plants as the food was 100% for the species of *Diplazium esculentum* (Retz.) Sw. and *Colocasia esculenta* (L) Schott. The Gayo Tribe uses plants in their traditional food to contribute to economic value, health maintenance, and conservation efforts.

**Keywords:** East Aceh, Gayo Tribe, Lokop, traditional food, traditional knowledge

## INTRODUCTION

Tropical forest ecosystems store a high level of biodiversity and provide significant benefits in meeting human needs. More than 300 million people, primarily local communities, rely on the forest for life (Vinceti et al. 2013). Indonesia is known as a mega biodiversity country with enormous potential, particularly in indigenous plant research (von Rintelen et al. 2017). Furthermore, Indonesia is noted for its vast cultural diversity, with over 1300 ethnic groups inhabiting the country's territory (The Central Bureau of Statistics 2021). Each of these ethnic groups has distinct qualities in their social lives, notably environmental preservation. Traditional and cultural values are deeply ingrained in Indonesian communities, particularly in rural areas (Sutrisno et al. 2020). Cultural values comprise knowledge, belief, art, legislation, morals, conventions, and behavioral characteristics (Abdulla 2018), while cultural factors are social norms, values, and beliefs passed down from generation to generation in an ethnic group and are impacted by society's social structure, language, and religion (Cencen and Berk 2014).

Aceh Province, Indonesia, has a high level of biodiversity due to its location within the Mt. Leuser National Park Ecosystem (Djufri 2015). Acehnese people have long used plant diversity in various aspects of their lives, including traditional rituals (Sutrisno et al. 2020), functional food (Elfrida et al. 2020; Suwardi et al. 2020; Navia et al. 2021a), traditional cuisine (Sutrisno et al. 2021), spices and condiments (Navia et al. 2020), and medicine (Elfrida et al. 2021; Navia et al. 2021b; Suwardi

et al. 2021). In addition, forest areas are one of the potential storage locations for wild plants used as a source of daily food for people who live nearby (Setiawan and Qiptiyah 2014; Sumarlin et al. 2015; Suwardi et al. 2022; Syamsuardi et al. 2022).

Lokop is located in Serbajadi Sub-district, East Aceh, Indonesia, which borders Gayo Lues, where the area is still in the Leuser Ecosystem (Djufri 2015). The majority of the people who inhabit the village are Gayo people who make a living as farmers and river fishers. According to previous studies, it is known that the Gayo people use wild plant parts as functional food, especially tubers (Suwardi et al. 2018) and fruits (Noverian et al. 2020). Until now, the people of Lokop Village still follow the traditions of their ancestors, such as ceremonies of the rice harvest, hot spring, and weddings. People carrying out their traditions cannot be separated from the traditional food served. The food source comes from the vicinity of natural resources, such as *Mangifera foetida* Lour., *Alpinia galanga* (L.) Willd., *Citrus x aurantifolia*, *Solanum lycopersicum* L., and *Zingiber officinale* Roscoe. Knowledge about the use of plants is usually passed down from generation to generation (Sujarwo and Caneva 2016). Plant diversity has the potential to improve nutrition and food security, food diversity and health, conservation of animals, i.e., honeybees, and the livelihoods of millions of people around the world (Jasmi et al. 2014; Dogan et al. 2017). Several studies on plant diversity as food have been conducted, including in Turkey (Dogan et al. 2017; Ceylan and Ozcelik 2018), in Ecuador (Penafiel et al. 2019), and Malaysia (Kamaruzaman et al. 2020). Similar studies have

been conducted in Indonesia including Alas Tribe in Southeast Aceh (Sutrisno et al. 2021), Anaeuk Jame Tribe in South Aceh (Syamsuardi et al. 2022), Batak Toba in North Sumatra (Silalahi et al. 2018), and Bali (Sujarwo et al. 2016). There has been no documentation of the Gayo Tribe community using wild plants as food until now, despite being critical for the community's local wisdom. This study is required so that current and future generations can maintain and preserve local wisdom, particularly traditional culinary knowledge. This is conducted by documenting the Gayo Tribe's traditional food. It can also be a baseline data to develop a local product with economic value in the future, contribute to maintaining health, and as a conservation effort.

## MATERIALS AND METHODS

### Study area

The study was conducted in Lokop Village, Serbajadi Sub-district, East Aceh, Indonesia (Figure 1). Lokop Village is located in Serbajadi Sub-district, East Aceh, Indonesia, and has an area of 2165.66 km<sup>2</sup>. It is situated at an altitude of 240 meters above sea level, is about 77.0 kilometers from the capital city, and has a population of roughly 488 people (with details of 235 men and 253 women). The village is dominated by the Gayo Tribe as a local tribe, followed by other tribes such as Aceh and Java (The Central Bureau of Statistics of East Aceh District 2021). Lokop village has a large land area, thus the community is surrounded by mountains, and the inhabitants make a living as farmers and fishers, then eat wild

vegetation for their daily needs (The Central Bureau of Statistics of East Aceh District 2021).

### Data collection

Interviews were conducted in August-November 2021 with 37 informants (Table 1) selected using the snowball sampling method (Alexiades and Sheldon 1996). The respondents were residents of the Gayo Tribe aged 17-90 years. Information regarding the diversity of wild plant species used as food, plant parts used, processing methods, and wild plant habitats was obtained through in-depth semi-structured interviews and participatory observation to select the informants. The guide for conducting interviews followed the method developed by Alexiades and Sheldon (1996). The data can be completed using questionnaires and field observations, and these were conducted face-to-face in the local language (Gayo language). Identification of wild plants was carried out at the Biology Laboratory of Universitas Samudra, and the voucher specimens were stored in Herbarium Bandungense.

### Data analysis

Data analysis used both qualitative and quantitative techniques. Qualitative analysis was carried out with data from interviews and questionnaires grouped based on plant species, vernacular name, part used, growth form, and habitat. Quantitative analysis was carried out by calculating the ratio of citation frequency (RFC) and habitus presentation. Relative frequency of citation was carried out to determine the frequency of citations using food plants within the community represented by the selected informants (Kumar and Bharanti 2014).

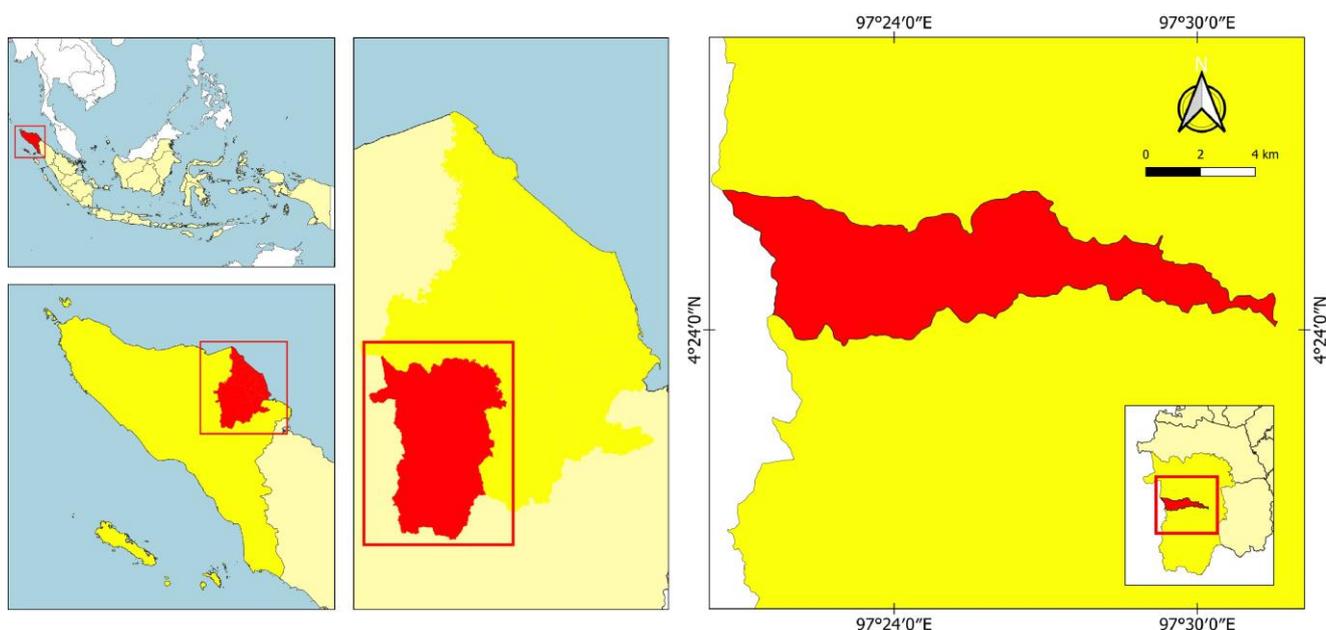


Figure 1. Lokop Village, Serbajadi Sub-district, East Aceh, Indonesia

**Table 1.** The demographic structure of respondents

Parameter	Specification	Frequency	Percentage
Gender	Male	18	48.64
	Female	19	51.35
Age	17-27	5	13.51
	27-37	3	8.1
	37-47	3	8.1
	47-57	10	27.07
	57-67	5	13.51
	>77	11	29.73
Education	None	15	40.54
	Elementary School	7	18.91
	Junior High School	6	16.21
	Senior High School	5	13.51
	University	4	10.81
Marital status	Single	12	32.43
	Marriage	25	67.56

## RESULTS AND DISCUSSION

### Gayo traditional food and preparation

The Gayo Tribe is one of the tribes in Aceh Province that its people still practice the culture that their ancestors passed down to them. A variety of traditional Gayo food and snacks made from various plant species are two examples of the cultures and traditions still practiced in the Lokop village. This study documented 14 traditional Gayo foods in Lokop village, including 5 types of traditional Gayo cuisine and 9 traditional Gayo snacks (Figure 2).

### Traditional cuisine

#### *Cecah bajik*

*Cecah bajik* is a typical Gayo dish that resembles chili sauce, but the difference is that typical Gayo *cecah* is not fried like chili in general. *Cecah bajik* is a term that refers to young jackfruit, approximately the size of an adult thumb. Young jackfruit (*Artocarpus heterophyllus* Lam) is used to make *cecah bajik*, which is then combined with young banana (*Musa x paradisiaca*), *terong padol* (*S. lycopersicum*), *nanas* (*Ananas comosus* (L.) Merr.), *jambu kelutuk* (*Psidium guajava* L.), *papaya* leaves (*Carica papaya* L.), salt, and palm sugar. *Cecah* virtuous is prepared traditionally with a wooden pestle to produce a distinct flavor.

#### *Cecah kekulit (Cecah reraya)*

*Cecah kekulit* is a traditional Gayo dish prepared during Ramadan and served to guests or relatives during *Eid al-Fitr*. As a result, this dish is also known as *Cecah reraya*. The dish is typically made with buffalo parts, i.e., meat, skin, heart, and liver that have been cooked with spices such as *sere* (*Cymbopogon citratus* (DC) Stapf) and *galangal* (*Alpinia purpurata* (Vieill.) K.Schum.) before being combined with one of the traditional Gayo spices. Next, the *Tengango* stem (*Alpinia* sp.) is chopped to get water and mixed into the buffalo skin to provide a chelate flavor.

#### *Cecah ries*

*Cecah ries* is a traditional Gayo dish made with banana stems as the primary ingredient (*M. x paradisiaca*). First, the inner stem of the banana is combined with shredded chicken or roasted bird. Then, various spices such as pepper (*Piper nigrum* L.), coriander (*Coriandrum sativum* L.), salt, red onion (*Allium cepa* L.), garlic (*A. sativum* L.), lime (*C. x aurantifolia*), and coconut (*Cocos nucifera* L.) are mashed and applied to the innermost part of the banana stem. The spices given are believed to be community-processed spices passed down from generation to generation to produce a distinct taste. It is made from natural ingredients and no preservatives, so the food prepared is extremely nutritious.

#### *Jurung pengat*

One of the Gayo Tribe's traditional foods is *Jurung pengat*. *Pengat* is a dish that uses *jurung* fish, which is endemic to the Lokop area and is prepared like *Pepes*. This dish is made with *keloang* (*Diplazium esculentum* (Retz.) Sw.), red chili (*Capsicum annum* L.), small chili (*C. frutescens* L.), *galangal* (*A. galanga*), *sesame* (*C. citratus*), red onion (*A. cepa*), garlic (*A. sativum*), *terong padol* (*S. lycopersicum*), turmeric (*Curcuma longa* L.), *kanis* (*Tamarindus indica* L.), coconut milk (*C. nucifera*), and the cooking time is about an hour. This food is typically served at rice-field harvest ceremonies or hot spring ceremonies. *Jungpeng* food is high in protein and vitamins, found in *jurung* fish, vegetables, and other spices.

#### *Masam jing*

The flavor of *Masam jing* is unique to the Gayo highlands. The dish is made of fish that has been combined with a light concoction of spices and cooked in a slightly different way, resulting in a distinct flavor due to the addition of *Garcinia atroviridis* Griff. ex T.Anderson. The fish used are also diverse, including pomfret, tilapia, cork, and *jurung* fish. The *Masam Jing* is prepared with *G. atroviridis*, *C. sativum*, *C. annum*, *A. cepa*, and *A. sativum*. The dish is traditionally served at weddings and religious holidays like *Eid al-Fitr* and *Eid al-Adha*.

### Traditional snacks

#### *Apam*

Gayo special *apam* is made with rice flour, formed into a dough and baked in a clay pan. *Apam*, like *serabi*, is eaten with cooked coconut milk (*C. nucifera*) that has been mixed with sugar to make it sweeter. It is usually served when a death prayer is carried out. *Apam* is also served with rice-based tea since it is made from rice flour. This snack is high in carbohydrates and can be used as a staple food.

#### *Berteh*

*Berteh* is traditionally served with *apam* and is always present at weddings and funerals. Rice, leaves of *Melastoma malabathricum* L., and salt is used to make *Berteh*. The snack is made by roasting rice with a mixture of *M. malabathricum* leaves, then adding salt after it has become like popcorn.

### *Brahrum*

Gayo people eat traditional snacks such as *Brahrum* or *Boh rom-rom*. This snack is made from glutinous rice flour in a round shape and filled with palm sugar pieces in the center, served with grated coconut. *Brahrum* tastes sweet from palm sugar, chewy from glutinous rice flour, and savory from grated *C. nucifera*. The snack is served at reading the Quran and after prayer events, even though it has now been traded to have an economic value. *Brahrum* can be considered a nutritious snack because it is made from natural ingredients and no preservatives that the general public can consume. *Brahrum* snacks can be found in the Gayo Tribe's Lokop village and the Alas Tribe under *Khum-khum* fruit (Sutrisno et al. 2021).

### *Gutal*

*Gutal* is made from rice flour, coconut, sugar, and water. The ingredients are mixed and formed into an oval size of a chicken egg, which is then coagulated and wrapped in the leaves of *Pandanus amaryllifolius* Roxb. The snack is frequently used as food supplies when traveling into the forest to hunt or when fighting against invaders in the past. In addition, *Gutal* used to be a special food during the rice harvest season. In addition to snacks, *Gutal* is a staple food for the Gayo Tribe in Lokop Village, Serbajadi Sub-district, East Aceh, Indonesia.

### *Lepat*

*Lepat* is made from glutinous rice flour, stuffed with smooth brown sugar, topped with grated *C. nucifera* roasted, wrapped in banana leaves, and steamed. This snack is typically served during the celebration of Gayo people's holidays and can last for several months or even a year. To make it last, this *lepat* is usually hung above the kitchen ceiling, directly above the cooking stove, so it is always smoked. *Lepat* Gayo is also a traditional Ramadan snack only available once a year.

### *Pulut berkerabu*

*Pulut berkerabu*, or steamed white sticky rice, is a traditional Gayo dish. After cooking, the sticky rice is ground into a smooth paste and wrapped in banana leaves to be considered a rice cake. At weddings, this snack is cut and served. It is known as *gemblong* in Malay.

### *Pulut manis*

*Pulut manis* is a traditional sweet snack of the Gayo, and Aceh tribes make it from white sticky rice that has been flavored and colored with brown sugar. It is served at traditional wedding events. Sweet rice can be cooked in various ways, including sticky rice that must be soaked before steaming to soften faster during the steaming process, and *P. amaryllifolius* leaves are added to the dough to make it more fragrant.

### *Pulut semplah (Pulut berinti)*

*Pulut semplah* is made from sticky rice in which grated coconut (*C. nucifera*) is cooked in brown sugar and wrapped in banana leaves. The snack is usually served during weddings and *Qatam Quran* events.

### *Tumpi*

*Tumpi* is made from the flour of *Oryza sativa* L., *Arenga pinnata* (Wurmb) Merr., *C. nucifera*, and salt. All ingredients are combined to make a dough, formed into balls, flattened, and fried. This snack is frequently served at wedding receptions and circumcision ceremonies. *Tumpi* is a traditional snack for the Gayo Tribe in Lokop village and the Alas tribe (Sutrisno et al. 2021).

## Gayo traditional food and health

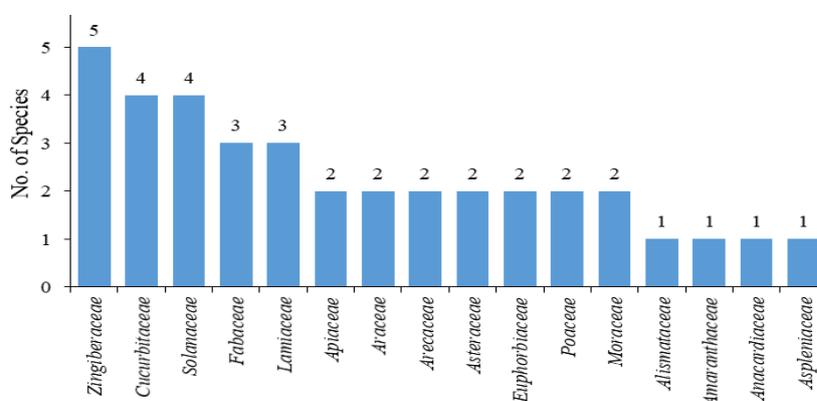
Gayo traditional foods contain ingredients that are linked to improving human health. The Gayo Tribe uses medicinal plants such as *Aleurites moluccanus* (L.) Willd., *Z. officinale*, and *A. purpurata* as cooking spices in their food tradition, one of which is *Cicah Ries*. This is also consistent with studies conducted in North Kayong (Irawan et al. 2020) and the Tamiang Tribe (Navia et al. 2020; Navia et al. 2021b) as cooking spices and medicine. The three plants also have anti-diarrheal and anti-viral properties (Singh et al. 2021). Gayo people frequently prepare *Pengat Jurung* with a combination of *Keloang* (*D. esculentum*) vegetables. The plant can be easily found near forests or riversides. Combining river fish and vegetables with spices can satisfy nutritional needs due to the protein and vitamin contents. This is because *D. esculentum* is high in antioxidants and vitamins and has antimicrobial properties (Gupta et al. 2020). Vegetable foods are plant-based, high in antioxidants, and contain vitamins, minerals, protein, and dietary fiber (Turnbull and Ensaff 2018). Plants are used as vegetables and fruits because they are readily available and easy to find in a home garden, farmland, and forests. This contributes to the community's healthy lifestyle as well as future plant conservation efforts. Several plants, including *Metroxylon sago* Rottb, *Colocasia esculenta* (L) Schott, and *Manihot esculenta* Crantz, are also used as alternative foods to replace rice in famine Lokop Village. This has been done in Lokop Village for generations. This is consistent with the study of Rauf and Lestari (2011), who revealed that local Papuan tribes select food plant species based on the availability of the surrounding environment or cultural heritage.

## Species composition of Gayo traditional food in Lokop Village

A total of 52 plant species belonging to 46 genera and 31 families were used as traditional food (Table 2). Zingiberaceae was the most represented plant family with 5 species, followed by Cucurbitaceae and Solanaceae (4 species each), Fabaceae and Lamiaceae (3 species each) (Figure 3). Each species has one or two representatives in the other 27 families. Plants from the Zingiberaceae family are used as vegetables and culinary spices in the Lokop community. For example, the flowers of *Etligeria elatior* (Jack) RMS m. are eaten as vegetables, and the rhizomes of *A. galanga* and *Z. officinale* are used as cooking spices since they can add flavor and aroma to cuisine, the Zingiberaceae family is widely used as condiments (Navia et al. 2020; Sutrisno et al. 2021).



**Figure 2.** Traditional food of Gayo Tribe, East Aceh, Indonesia. A. *Masam jing*, B. *Jurung pengat*, C. *Cecah kulit* (*Cecah reraya*), D. *Cecah bajik*, E. *Cecah ries*, F. *Gutal*, G. *Lepat*, H. *Brahrum*, I. *Apam*



**Figure 3.** Number species of plants by family

### Plant parts used and growth form as food

Plant parts used as food by the Gayo community in Lokop Village were rhizomes, tubers, stems, leaves, flowers, fruits, and seeds (Figure 4). The most commonly used parts were the leaves and fruit (21% of each part). *Penein* (*P. amaryllifolius*), *rerukut* (*Ocimum tenuiflorum* L.), *cememis* (*Passiflora edulis* Sims), and *paret* (*Nasturtium officinale* R. Br) are examples of leaf plants that are commonly used as food ingredients. *Pete* (*Parkia speciosa* Hassk), *bebelur* (*M. foetida*), *asam kuyun* (*C. x aurantifolia*), and *kemiri* (*A. moluccanus*) are examples of plants that use fruit parts. The leaves and fruit were the most commonly used parts because they can be eaten raw

or do not require special processing and often can be used as spices and condiments (Juliana et al. 2013; Amboupe and Alex 2019; Elfrida et al. 2020; Navia et al. 2021a).

The analysis of growth forms revealed that herbaceous plants accounted for the highest proportion (39%), followed by trees (21%), shrubs (19%), climbers (17%), and palms (4%) (Figure 5). Herbal plants are widely used because they are easy to be obtained in areas ranging from settlements to forests. In addition, some herbaceous plants, such as *A. cepa*, *A. sativum*, *A. galanga*, and *Z. officinale*, are also used as herbs and spices by the Tamiang tribe (Navia et al. 2020).

**Relative Frequency of Citation (RFC)**

Relative Frequency of Citation (RFC) can identify the most commonly used plant species. *Diplazium esculentum* and *C. esculenta* had the highest citation frequency values

(100%) (Figure 6). The two plants are frequently used by the people of Lokop village in their daily lives, and their existence can still be found easily and abundantly. It is also used as a typical Gayo Tribe food ingredient.

**Table 2.** List of plants used in the traditional food of Gayo Tribe in Lokop Village, Serbajadi Sub-district, East Aceh, Indonesia

Family	Scientific Name/Specimen	Vernacular name	Growth form	Used part	Habitat
Alismataceae	<i>Limnocharis flava</i> (L.) Buchenau	Muloh/ Genjer	H	Le, St	Fa
Amaranthaceae	<i>Amaranthus tricolor</i> L.	Bayem/ Bayem	H	Le, St	Fa
Anacardiaceae	<i>Mangifera foetida</i> Lour.	Bebelur/ Mancang	T	Fr	Fo
Apiaceae	<i>Centella asiatica</i> (L.) Urb.	Pegagan/ Pengagan	H	Le	Hg
	<i>Coriandrum sativum</i> L/R017	Ketumer/ Ketumbar	H	St, Le, Se	Fa
Araceae	<i>Colocasia esculenta</i> (L.) Schott	Lumu/ Keladi	H	Bu	Fo
	<i>Xanthosoma sagittifolium</i> (L.) Schott	Deng/ Keladi hutan	H	Bu, St	Fa, Fo
Arecaceae	<i>Cocos nucifera</i> L.	Keramil/Kelapa	P	Fr	Fa, Hg
	<i>Metroxylon sago</i> Rottb	Rumbia/ Salak hutan	P	St	Fo
Aspleniaceae	<i>Diplazium esculentum</i> (Retz.) Sw.	Keloang/ Pakis sayur	H	Ys, Le	Fo, Ri
Asteraceae	<i>Crassocephalum crepidioides</i> (Benth) S.Moore/ R01	Kekapas/ Daun kapas	H	Le	Fo, Ri
	<i>Mikania congesta</i> DC. / R07	Daun hijau/ Daun hijau	C	Le, St	Fo
Brassicaceae	<i>Nasturtium officinale</i> R. Br/ R020	Daun paret/ Daun paret	S	Le, St	Ri
Clusiaceae	<i>Garcinia atroviridis</i> Griff. ex T.Anderson	Kania/ Asam gelugur	T	Lb, Fr	Fo
Convolvulaceae	<i>Ipomoea aquatica</i> Forssk/ R08	Rempon/ Kangkung	C	Le, St	Fa, Ri
Cucurbitaceae	<i>Cucurbita pepo</i> L./ R010	Penggele/ Gundur	C	Lb, Fr	Ri
	<i>Luffa acutangula</i> (L) Roxb	Perterle/ Gambas	C	Fr	Fa
	<i>Momordica balsamina</i> L/ R03	Peria/ Peria hutan	C	Le, Fr	Fo
	<i>Sicyos edulis</i> Jacq/ R02	Labu Jipang/ Labu jipang	C	Le, Fr	Fa
Euphorbiaceae	<i>Aleurites moluccanus</i> (L.) Willd.	Kemili/ Kemiri	T	Se	Fo
	<i>Manihot esculenta</i> Crantz	Gadung/ Ubi	S	Bu, Yl	Fo
Fabaceae	<i>Parkia speciosa</i> Hassk	Petai/ Pete	T	Se	Fo
	<i>Psophocarpus tetragonolobus</i> (L). DC	Kecipir/ Kecipir	C	Lb, Le	Fa, Fo
	<i>Tamarindus indica</i> L.	Asam ledak/ Asam Jawa	T	Fr	Fo, Hg
Gnetaceae	<i>Gnetum gnemon</i> L.	Melinjo/ Melinjo	T	Le, Fr	Fa
Lamiaceae	<i>Ocimum tenuiflorum</i> L.	Kemangi/ Kemangi	S	Le	Fa
	<i>Ocimum tenuiflorum</i> L.	Daun Rerukut/ Daun ruku-ruku	S	Le	Fa
	<i>Premna</i> sp.	Daun Debuas/ Daun debuas	H	Le	Fo
Lauraceae	<i>Cinnamomum verum</i> J. Presl/ R015	Kulit manis/ Kayu manis	T	St	Fo
Melastomataceae	<i>Melastoma malabathricum</i> L./ R09	Cembeke/ Senggani	S	Le	Ri
Moraceae	<i>Artocarpus heterophyllus</i> Lam.	Majek/ Nangka	T	Fr	Fo
	<i>Ficus insipida</i> Willd/ R016	Gele/ Gele	T	Fr	Fo
Musaceae	<i>Musa x paradisiaca</i> L.	Ries/ Pisang	H	St	Fa, Fo
Myrtaceae	<i>Syzygium polyanthum</i> (Wight) Walp	Salam/ Salam	T	Le	Fa
Pandanaceae	<i>Pandanus amaryllifolius</i> Roxb	Penein/ Pandan	H	Le	Fa
Passifloraceae	<i>Passiflora edulis</i> Sims / R04	Cemenis/ Jame	S	Le	Ri
Piperaceae	<i>Piper nigrum</i> L.	Leuda Pedeh/ Merica	C	Se	Fa
Poaceae	<i>Cymbopogon citratus</i> (DC) Stapf	Sere/ Sere	H	St	Fa
	<i>Bambusa vulgaris</i> Schard	Tuwis/ Rebong bambu	H	Ys	Fa, Fo
Rosaceae	<i>Rubus moluccanus</i> Poir/ R012	Cengkenir/ Cengkenir	H	Fr	Ri
Rubiaceae	<i>Paederia foetida</i> L.	Kentutan/ Kentutan	C	Le	Ri
Rutaceae	<i>Citrus x aurantiifolia</i> Christm	Asam kuyun/ Jeruk nipis	T	Fr	Fo
Schisandraceae	<i>Illicium verum</i> Hook. F /R018	Bunga lawang/ Bunga lawang	S	Fl	Fo
Solanaceae	<i>Solanum americanum</i> Mill/ R019	Rukut/ Miranti	H	Le	Fo
	<i>Solanum bahamense</i> L. / R06	Ongke Rimbang/ Cempokak	S	Fr	Fa
	<i>Solanum lycopersicum</i> L.	Terong Padol/ Tomat cerry	S	Fr	Fa, Fo
	<i>Solanum violaceum</i> Ortega/ R011	Cempokak Pahit/ Cempokak pahit	S	Fr	Fo
Zingiberaceae	<i>Alpinia</i> sp./ R013	Kayu Teganggo/ Kayu putih	H	Rh	Fo, Hg
	<i>Alpinia galanga</i> (L.) Willd.	Lengkuas/ Lengkuas	H	Rh	Fa, Hg
	<i>Etilingera elatior</i> (Jack) RMS m./ R014	Palang/ Kecombrang	H	Fl	Fo, Hg
	<i>Zingiber officinale</i> Roscoe	Baing/ Jahe	H	Rh	Fa, Hg
	<i>Zingiber zerumbet</i> (L.) Roscoe ex sm/ R05	Lempuyang/ Lempuyang	H	Rh	Fo, Hg

Note: Growth form: H: Herbaceous, S: Shrub, T: Tree, P: Palm, C: Climber; Used part: Bu: Bulb, St: Stem, Le: Leaf, Fl: Flower, Fr: Fruit, Se: Seed, Rz: Rhizome, Ys: Young stem, Yl: Young Leaf, Lb: Leaf buds; Habitat: Fa: Farmland, Fo: Forest, Hg: Home garden, Ri: Riverside

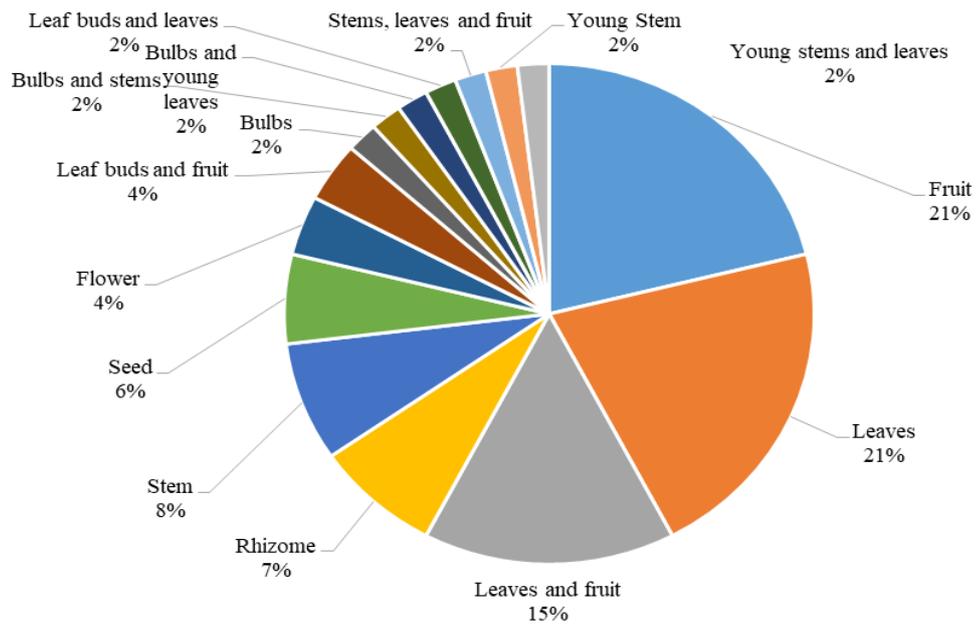


Figure 4. Plant parts used in traditional food

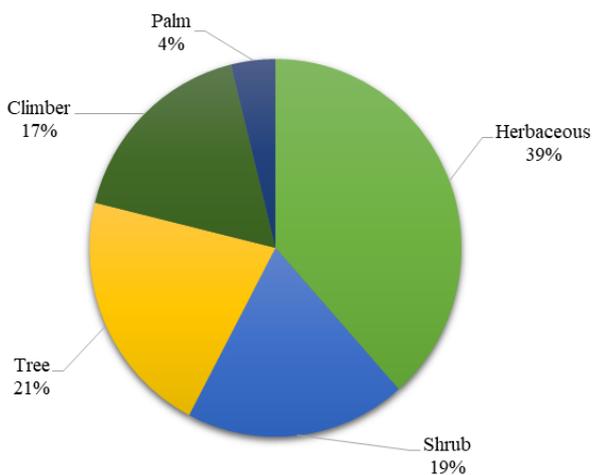


Figure 5. The growth form of traditional food plants

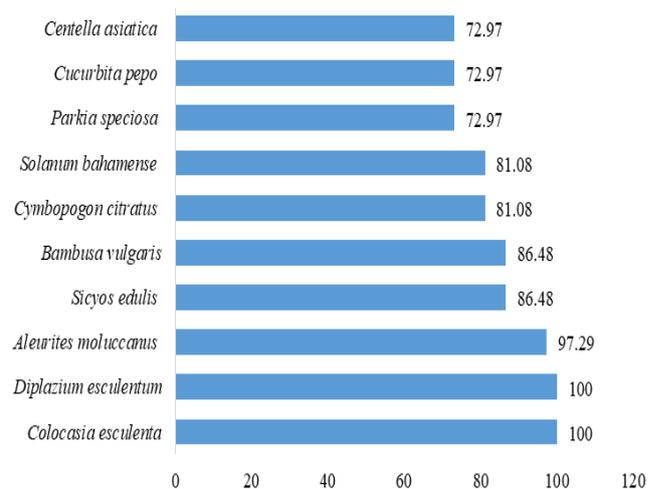


Figure 6. Ranking of most citation frequency

### Transfer knowledge among Gayo Tribe in Lokop

Lokop Village has 14 traditional Gayo foods, including five types of traditional dishes and nine types of snacks. All respondents are familiar with the various types of traditional foods and food ingredients. Respondents know the types of traditional Gayo food in varying degrees, ranging from 45.67% (17-27 years) to 52.33% (>77 years). Keloang (*D. esculentum*) and Lumu (*C. esculenta*) were the most common plant species of all respondents. Meanwhile, some plant species, such as *Crassocephalum crepidioides* (Benth) S.Moore, *Mikania congesta* DC, *Psophocarpus tetragonolobus* L, *Premna* sp., *Rubus molluccanus* Poir, *Paederia foetida* L., and *A. galanga*, were only recognized by less than 20% of the respondents. These plants can be found in various environments, including home gardens,

riversides, farmlands, and forests. Although knowledge about the use of wild plants is not related to the respondent's age, it is not only by parents but also by teenagers. This demonstrates that parents have passed on their knowledge of the use of wild plants to the younger generation. This is usually accomplished by introducing Gayo tribal food at traditional weddings and incorporating it into daily meals. Typically, the younger generation is asked to look for wild plants for food and the parents help make them. This is consistent with Sutrisno et al. (2021) study in Southeast Aceh and Syamsuardi et al. (2022) in South Aceh, Indonesia. This study is expected to be able to develop the village's potential in terms of the use of plants as food.

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