

Ethnobotanical Study In The Traditional Mangrara Banua Ceremony Of Tongkonan Toraja

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Abstract. One of the traditional rituals performed by the Toraja community, the Mangrara Banua ceremonial, involves the use of plants. The Tongkonan House, the Toraja tribe's traditional house, holds an annual celebration of thankfulness known as the Banua Mangrara. The goal of this ethnobotany study is to identify the kinds of plants that the Toraja people employ in their Banua Mangrara rite. The Mangrara Banua Tongkonan Randan Aya' Bebo's, the Northern Sangalla District, and the Banua Tungkonan Tok Serrek, Maruang Batu Rongko, Sopai District were the locations of the research from November 2022 to April 2023. Observations, interviews, and documentation are used to gather data. Purposive sampling and snowball sampling are used to choose respondents. Utilizing qualitative descriptive analysis, the data was examined. According to research, the Mangrara Banua Tongkonan ceremony of the Toraja tribe uses 23 species of plants from 15 families that are significant. Different roles for these plant species are played during the course of traditional ceremonies. The organs of plants that are most commonly used in this traditional ceremony are the leaves and stems, while certain species also use the fruit and umbilia. The plants used in these traditional ceremonies cannot be changed because they are an ancestor's tradition. Therefore, in an effort to protect the plants, the Toraja community is pursuing planting operations in the fields surrounding Tongkonan houses and gardens.

1. INTRODUCTION

Plants are one of the many natural resources that support human life. Plants are used in human life not only as food, raw materials for shelter and clothing, but also in rituals and ceremonies. The Toraja people use plants in their customary rituals as one of their uses. One of the ethnic groups in Indonesia, specifically in the province of South Sulawesi, known for their local knowledge is the Toraja. The Toraja people have great respect for their traditional culture and rituals.

It is not unexpected that traditional Toraja festivities like Rambu Tuka, Rambu Solo, Ma' Nene', Mangrara Banua, and other traditional rites are often held because the Toraja population values culture greatly. The traditional house known as Tongkonan is one of the cultural elements present in Toraja. Tongkonan is more than simply a traditional house or a big family home for the Toraja people; it also serves as a location to keep families together and, according to Pasande^[1], even acts as a bridge between living relatives and those who have passed away. Research indicates that Tongkonan is crucial to the execution of Toraja's ancient rites. The Mangrara Banua traditional ceremony, which is the Tongkonan house's consecration rite, must therefore be performed after it has been built before it may be used. Even if the house is constructed in a very spectacular style, the Toraja people believe that the Mangrara Banua traditional ceremony must be performed because otherwise, the Tongkonan is said to bring dishonor to the family members^[2].

The Tongkonan house, the traditional home of the Toraja tribe, is honored during the Mangrara Banua traditional event. This ritual is performed utilizing a variety of plants, each of which has a unique meaning. The plants are used as materials, instruments, or media in this ritual in accordance with tradition. Toraja is abundant in natural resources, including many plant species, due to its highland location. An ethnobotanical study is carried out as a

result of the significance of plants in the Mangrara Banua ceremonial. In accordance with Suryadarma (2008), ethnobotany is the study of how plants are used. It also serves to record traditional knowledge about the many plant species that are used to support local livelihoods.

Ethnobotanical studies place a strong emphasis on the direct and indirect connections between community culture (anthropology) and plant resources (botany) in the community's environment^[3]. Studies on ethnobotany are important because they can show how plant biodiversity, human survival, and humanity are related. When people are aware of what they are experiencing, add value to environmental challenges, and look for long-term beneficial solutions in the usage of natural resources, local wisdom in the relationship between humans and their environment can be more sustainable and resilient^[4].

There are now problems as a result of humans using plants more and more without making an effort to protect them. Due to a lack of understanding among the local community, one possible effect is that plants that should be utilized in traditional ceremonies become uncommon in the area. In order to comprehend the connection between culture and flora among the Toraja indigenous people, ethnobotanical studies are carried out. According to research done by Eko Atmojo^[5], the community's knowledge of how to use plants has increased as a result of the introduction of ethnobotany, making them more careful in managing plants.

According to Irsyad ethnobotanical study in Sukolilo Village, Central Java, the locals have excellent understanding of the use of plants in the Kendeng Pati hilly region. It is common knowledge that plants are used for food, traditional herbal medicine, firewood, animal feed, building materials, craft supplies, fiber and cordage materials, hazardous compounds, and other purposes^[6]. According to subsequent research by Astria et al., 33 kinds of medicinal plants are used by the locals in the Semoncol Hamlet, Balai District, and Sanggau Regency as cures; nevertheless, processing these plants is still done in the old-fashioned way, only using customary methods and experience^[7]. The results of the subsequent ethnobotanical study by Slamet, A., and Andarias, revealed that the former Sultanate of Buton community employed 126 species from 57 plant families as medicine. The leaves of these plants are used by boiling the leaves^[8]. According to Ziraluo's, subsequent ethnobotanical study on medicinal plants, which is also a legacy of the village's ancestors, there are 16 different types of plants that are thought to be used to treat ailments in the Bawodobara village community. Additionally, by combining them with other plants or components, the village community has even created its own proprietary therapeutic herbs^[9].

The investigation of conventional ceremonial procedures is connected to additional ethnobotanical studies carried out by earlier academics. According to research by Purwanti et al., 31 species from 22 plant families are used in the Saluan Tribe's (Pasokan Village, Tojo Una-Una Regency) traditional rites. It is important to use these plants in traditional rituals to get blessings for survival, long life, intelligence, fertility, and to fend off diseases and supernatural beings from the indigenous people^[10]. In the Dukuh Indigenous Village in the Garut Regency, where 16 plant species were used in ritualistic celebrations, more ethnobotanical studies were carried out. This town actively makes use of and protects natural resources, especially plants, because they understand how important they are^[11]. Putri et al.'s ethnobotanical study on Serangan Island in Bali came to the conclusion that about 70 plant species are used as supporting plants in rituals and ceremonies. Due to the extensive use of plants in Hindu religious ceremonies and rituals, ongoing conservation efforts are therefore required^[12]. Another study carried out in Bali by Ristanto et al. (2020) revealed that 91 plant species, especially their floral parts, are used in Hindu-Balinese religious rites^[13]. Because

plants are so crucial to human existence, ethnobotany is important for preserving biodiversity^[14]. This study aims to identify the variety of plant species utilized by the Toraja Tribe in the Mangrara Banua traditional ceremonies based on their practical utility and to shed light on the viewpoint of the local Toraja community towards the usage of plants in ceremonial rituals.

2. METHOD

Tools and Materials

It is qualitative descriptive study employing survey methods that is being done. Tana Toraja Regency served as the site of the research. The study was carried out between November 2022 and April 2023. A camera, writing instruments, sample interview questions, and various kinds of plants used in rituals are among the equipment and materials used in the study.

Instruments

A list of interview questions concerning the kinds of plants utilized in the Mangrara Banua traditional ceremonial served as the study tool. Traditional ceremony participants and community members who served as guides for the event were chosen as respondents for the study.

Working Method

Three methods of data collecting were used in this ethnobotanical study: observation, interviews, and documentation.

a. Observation

The initial method employed is observation. The Mangrara Banua traditional ceremonial location was observed, and the plants used in the ceremony were noted, along with the quantities of each plant utilized. The findings of this observation gave a general summary of the kinds of plants that were utilized.

b. Interview

The interview technique is the second method. This method entailed posing many inquiries on the subject of the study. Purposive sampling and snowball sampling strategies were used to select respondents for the research sample. By choosing respondents who were thought to be the most informed about the Mangrara Banua traditional rite, a purposeful sampling was conducted. Based on recommendations from the primary respondents, snowball sampling entailed choosing respondents. The names of the plant species used and the portions of the plants used were among the information gleaned from interviews with informants. Through these conversations, information was also acquired regarding the use of each plant.

c. Documentation

Photos of the traditional ceremonial events, pictures of the plants utilized in the ceremony, and other documentation were gathered through this data gathering technique. In order to support the information gleaned from observations and interviews, documentation was required.

Utilizing qualitative descriptive data analysis methodologies, the research activities' data were examined. Based on the findings of the interviews and observations made during the traditional Mangrara Banua ceremony, a descriptive analysis was carried out.

3. RESULTS AND DISCUSSION

During the Mangrara Banua Tongkonan Tok Serrek Traditional Ceremony, Maruang Batu Rongko, Sopai District, and the Mangrara Banua Tongkonan Randan Aya' Bebo' Traditional Ceremony, North Sangalla District, the questionnaire survey and in-depth interviews were done. 40 respondents received questionnaires, and Mr. Tando, the important respondent who served as the procession leader and leader of prayer for the traditional ritual, was the subject of in-depth interviews. Following respondents were chosen in accordance with advice from the conventional sources. Tables 1 and 2 show the findings of the data gathering for the research.

Table 1. Plant Species in the Mangrara Banua Traditional Ceremony by the Toraja People

Num	Plant Name			Family	Plant Status
	Local Name	English Name	Scientific Name		
1	Sambako	Tobacco	<i>Nicotiana tabacum</i> L.	Solanaceae	Cultivation
2	Kalosi	Areca nut	<i>Areca catechu</i> L.	Arecaceae	Cultivation
3	Bolu	Betel	<i>Piper betle</i> Linn	Piperaceae	Cultivation
4	Pare Pulu' Lia	Red sticky rice	<i>Oryza sativa</i>	Graminae	Cultivation
5	Pare Kasalle	Aromatic rice	<i>Oryza sativa</i>		
6	Pare Lotong/ Pare Ambo'	Black sticky rice	<i>Oryza sativa</i>		
7	Kayu Uru	Forest chrysanthemum	<i>Elmerrillia ovalis</i> (Miq)	Magnoliaceae	Cultivation
8	Kayu Tarra	Tarra fruit	<i>Artrocarpus</i> sp.	Moraceae	Cultivation
9	Sendana	Sandalwood tree	<i>Santalum album</i>	Santalaceae	Cultivation
10	Pattung	Betung bamboo	<i>Dendrocalamus asper</i>	Poaceae	Cultivation
11	Tallang	Gutter bamboo	<i>Schizostachyum brachycladum</i>	Poaceae	Cultivation
12	Ao'	Aur bamboo	<i>Bambusa vulgaris</i>	Poaceae	Cultivation
13	Induk/ Mayang	Palm tree	<i>Arenga pinnata</i>	Arecaceae	Cultivation
14	Tuyu	Mendong grass	<i>Fimbristylis umbellaris</i>	Cyperaceae	Cultivation
15	Punti Langkiran	Plantain	<i>Musa acuminata</i>	Musaceae	Cultivation
16	Tabang	Hanjuang plant	<i>Cordyline terminalis</i>	Asparagaceae	Cultivation
17	Puring	Croton	<i>Codiaeum variegatum</i>	Euphorbiaceae	Cultivation
18	Tarrung	Eggplant	<i>Solanum melongena</i>	Solanaceae	Cultivation
19	Coklat	Cocoa plant	<i>Theobroma cacao</i>	Malvaceae	Cultivation
20	Kuni'	Turmeric	<i>Curcuma longa</i>	Zingiberaceae	Cultivation
21	Ra'pak – Ra'pak	Miracle leaf	<i>Kalanchoe pinnata</i> L.	Crassulaceae	Cultivation
22	Dadinding	Chickweed tropis	<i>Drymaria cordata</i> (L.) Willd. ex Schult.	Caryophyllaceae	Wild
23	Bunga passakke	Canna lily	<i>Canna hybrida</i>	Cannaceae	Cultivation

Table 2. Utilization of Plant Organs in Traditional Mangrara Banua Toraja Ceremonies

Num	Local Name	English Name	Scientific Name	Used Plant Organs						
				Root	Stem	Leaf	Flower	Fruit	Seed	Tuber
1	Sambako	Tobacco	<i>Nicotiana tabacum</i> L.			√				
2	Kalosi	Areca nut	<i>Areca catechu</i> L.					√		
3	Bolu	Betel	<i>Piper betle</i> Linn			√		√		
4	Pare Pulu' Lia	Red sticky rice	<i>Oryza sativa</i>						√	
5	Pare Kasalle	Aromatic rice	<i>Oryza sativa</i>						√	
6	Pare Lotong/ Pare Ambo'	Black sticky rice	<i>Oryza sativa</i>						√	
7	Kayu Uru	Forest chrysanthemum	<i>Elmerrillia ovalis</i> (Miq)		√					
8	Kayu Tarra	Tarra fruit	<i>Artrocarpus</i> sp.		√					
9	Sendana	Sandalwo	<i>Santalum album</i>		√					

		od tree								
10	Pattung	Betung bamboo	<i>Dendrocalamus asper</i>	√						
11	Tallang	Gutter bamboo	<i>Schizostachyum brachycladum</i>	√						
12	Ao'	Aur bamboo	<i>Bambusa vulgaris</i>	√						
13	Induk/ Mayang	Palm tree	<i>Arenga pinnata</i>		√					
14	Tuyu	Mendong grass	<i>Fimbristylis umbellaris</i>	√						
15	Punti Langkiran	Plantain	<i>Musa acuminata</i>		√					
16	Tabang	Hanjuang plant	<i>Cordyline terminalis</i>		√					
17	Puring	Croton	<i>Codiaeum variegatum</i>		√					
18	Tarrung	Eggplant	<i>Solanum melongena</i>			√				
19	Coklat	Cocoa plant	<i>Theobroma cacao</i>			√				
20	Kuni'	Turmeric	<i>Curcuma longa</i>					√		
21	Ra'pak – Ra'pak	Miracle leaf	<i>Kalanchoe pinnata L.</i>	√						
22	Dadin-ding	Chickweed tropis	<i>Drymaria cordata (L.) Willd. ex Schult.</i>		√					
23	Bunga passakke	Canna lily	<i>Canna hybrida</i>	√						
		Total		-	7	9	-	4	3	1

The Mangrara Banua ceremony is one of the rites used to dedicate a Tongkonan (traditional Toraja house), signifying harmony among the family, according to the interview with Mr. Tando, the traditional guide. The family thanks the construction team for Banua Tongkonan (Tongkonan House) by participating in this customary ritual. Depending on the consent of the family, the ceremony's timing is decided. It is not appropriate to hold this customary ceremony at the same time as a time of grief. Therefore, the traditional Mangrara Banua ceremony should not be performed if there is still a deceased person present in the family's home, or, to put it another way, if the family is still in mourning. The Rambu Tuka traditional ceremonies, which are happy celebration events and must be kept apart from the Rambu Solo traditional ceremonies (mourning/death rites), include the Mangrara Banua ceremony. The Rambu Solo traditional ritual must face west while the Mangrara Banua ceremony must face east because, in accordance with Aluk Todolo believe (ancestral belief), the spirits of the deceased go toward the west.

It is clear from the research results shown in Tables 1 and 2 that plants are essential to human life. Plants are used in traditional ceremonial rites in addition to serving as a source of food and medicine, particularly in the Mangrara Banua Toraja traditional ceremonies. According to the data collection's findings, 23 plant species belonging to 15 distinct families are employed as the main and auxiliary components of Mangrara Banua Tongkonan Toraja traditional rites. These 23 species are divided into those that are utilized directly in the ritual and those that are processed or combined with additional components.

The most often used plant organ in Mangrara Banua ceremonial rituals is a leaf. Nine of the 23 plant species that are utilized employ their leaves. Several plant components, including the leaves of the enau palm, betel leaves, areca nut fruits, king banana leaves, red sticky rice (pare pulu' lia), turmeric, and bamboo stems, are used in the preparation of "pesung" (offerings made to Deata or ancestors in Aluk Todolo).

1. Initially, red glutinous rice is transformed into "Ra'tuk" (rice that has been roasted till it resembles popcorn).

2. Because using king banana leaves as a food container is a custom carried on from ancestors, king banana leaves are used as a base or container for keeping "pesung" (offerings). Interviews indicate that alternative banana leaves cannot be used in place of king banana leaves.
3. "Belundak," a traditional Toraja dish made from red, white, and black glutinous rice, is prepared using enau palm leaves. Enau palm leaves are also used to manufacture "ketupat" in addition to "belundak."
4. Betel leaves and areca nuts are used immediately on the "pesung" (offering) without being processed first. The traditional Toraja drink container (tuak), however, is made of bamboo stems because using glasses or cups during this ritual is not allowed.



Figure 1 shows the various components needed to make flour, brown sticky rice, belundak, and plantain leaves.

The Mangrubak ritual, which involves gathering around the Tongkonan House and then fishing for meat from its roof, is a part of the Mangrara Banua traditional ceremony. Several plant parts, including kasalle rice, palm leaves, and turmeric tubers, are used in this practice. By soaking it in turmeric, kasalle rice is used to make yellow rice. Later, this yellow rice will be scattered all throughout the Tongkonan House. In the Mangrubak procession, enau leaves are utilized as meat fishing equipment. According to the findings of an interview with Mr. Tando', in the yard of the Tongkonan House, palm leaves were strung together to mimic a rope that could pick up meat. As was already said, taking or fishing for meat is done from the Tongkonan House's roof, which denotes that the home will be a blessing and a source of food for the family. The procession of blessing the Tongkonan House, which is led by a prayer or traditional ceremony guide, is called Ma'passakke and is the following procession of the Mangrara Banua traditional ritual. Three different plant leaf types—sicepat, cemplanan, and tasbih leaves—are used in this procession. These three different leaf varieties are blended together, put in a kandian laun container, and then mingled with water before being sprinkled on the Tongkonan House.

One of the plant's components that is most important for traditional Mangrara Banua ceremonies is enau leaves. Along with the previously described applications, palm leaves are also used to construct huts or shelters for those who attend this customary rite. Barrung, the sounds that signal the start of a traditional rite, are also produced with enau leaves. The food made for the ancestors to be utilized for Ma'pangan (one of the customs that parents in Toraja typically do by chewing a mixture of these three items) also contains tobacco leaves, betel leaves, and betel nuts.

Lettoan decorations include croton leaves, hanjuang leaves, eggplant fruit, and chocolate fruit. Pig transportation equipment known as a lettoan is carved with distinctive Toraja designs and embellished with red leaves, keris, and/or beads^[2]. The Lettoan's more elaborate decorations reveal the family's financial resources and whether they are of aristocratic ancestry. There was a lettoan with rice and goldfish decorations in this study. This demonstrates that Lettoan's owners are a sugi (wealthy) family because they own numerous rice fields.

In addition to using leaf organs, the Mangrara Banua ceremony also makes extensive use of stem organs, such as the aur bamboo stems used to create lettoan. Talang bamboo is used to manufacture piong, a staple dish of the Toraja people that is also weaved into gallas used to hold offerings during traditional ceremonies. Huts are built from the stems of betung bamboo. This is a

custom from our ancestors that must not be broken; hence, the use of these three species of bamboo cannot be substituted with other forms of bamboo. Mendong stems can also be processed into mats known as ampa, which are used as seating surfaces during rituals. Modern mats shouldn't be used in place of these mats. A drum is used as a musical instrument during the Mangrara Banua traditional ritual. The drum is played at the beginning of the ceremony to signal the start of the traditional ceremony. Sandalwood, tarra, or uru tree trunks are used to make the drums. These three tree trunk kinds were picked because of their sturdy construction. The stems of the tarra plant, in addition to being strong and able to produce a loud sound, are even employed to make issongs, one of the noises that are struck, according to Mr. Yunus Lote.



Figure 2 shows the several Lettoan varieties that families offered during the traditional Mangrara Banua ritual.

It is clear from the study of the questionnaire responses that the local Toraja people have a thorough understanding of the value of plants in their daily lives. This is demonstrated by the fact that people are conscious of growing plants in their yards, particularly those that serve as food, medicine, or are used in customary rituals. In addition, trees have been planted in the yard of the Tongkonan House, where the event is being performed. One of the Mangrara Banua processions included planting sandalwood trees to the east of Tongkonan.

In ethnobotany, research is conducted on plants, their habitats, and their interactions with humans in order to enhance human sensitivity to plant life[15]. As a result, ethnobotany is able to bring numerous concepts about plant life to humans. The significance of plants in each and every Toraja traditional ceremony demonstrates the necessity for conservation efforts to be made in order to prevent the extinction of these plants, which will have an impact on the execution of traditional ceremonies[12].

4. CONCLUSION

There are 23 plant species from 15 different families that are valued in the Toraja Tribe's Mangrara Banua Tongkonan ceremonial rituals. These are the plants in question: palm oil, bamboo (aur, talang, and betung), tobacco, betel, areca nut, plantain, si cold, cemplonan, tasbih, mendong, uru wood, tarra, sandalwood, hanjuang, croton, eggplant, cacao, and turmeric. The plant portion that is most frequently used in the Mangrara Banua ceremony is the leaves. The Tongkonan House's yards and grounds have been planted with plants as part of the community's effort to raise awareness of the usefulness of plants, particularly in traditional ceremonies.

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