

## Ethnopharmacological Study of Traditional Medicinal Plants in Coastal Communities

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### A B S T R A C T

**Background** Ethnopharmacy is a branch of pharmacy that focuses on the study of the use of medicines and healing methods based on local wisdom applied by communities in a particular region. The use of medicinal plants in traditional medicine practices has become an important part of the culture and life of coastal communities, including in Masiri Village, Batauga District, South Buton Regency. **The purpose** of this study was to identify the types of medicinal plants, the parts used, and the processing methods used by the local community. **The method** used was qualitative descriptive with data collection techniques in the form of semi-structured interviews and observations of 15 informants who were considered to have knowledge of traditional medicine. **The results** showed that there were 42 plant species from 32 families used as traditional medicine. The most commonly used part of the plant was the leaves (62.26%), while the most common processing method was boiling (45%). These plants were used to treat various health complaints such as fever, external wounds, coughs, and respiratory tract disorders. **The conclusion** from these results shows that the utilization of local biodiversity based on traditional knowledge plays an important role in efforts to maintain public health and is a fundamental potential for the sustainable development of natural-based medicines.

## INTRODUCTION

Indonesia is known as a tropical archipelago with a very high level of biodiversity. Its abundant flora makes Indonesia one of the world's biodiversity hotspots with great potential for the development of traditional medicine (Puspita Wati *et al.*, 2023). This plant diversity has long been utilized by the community as a source of traditional medicine to maintain health and treat various diseases (Radam *et al.*, 2016).

Indonesia's coastal regions have complex geographical conditions and ecosystems, contributing to significant biological diversity. Climate, ocean currents, and coastal ecosystems make this area a habitat for various plant species with medicinal potential (Katili *et al.*, 2021). Parts of plants such as leaves, stems, roots, flowers, and fruits have been empirically used by communities in the form of herbal remedies for health therapy (Dan *et al.*, 2016). Additionally, variations in plant morphological structures are an important basis for identifying medicinal plant species (Djufri *et al.*, 2022).

Plants are known to contain secondary metabolites that play an important role in disease prevention and treatment. These bioactive compounds make plants remain the primary source for the search for new drugs despite the rapid development of synthetic drugs (Susilasanti dan Syafah, 2017). Ethnopharmacy is an interdisciplinary field that studies the relationship between the use of medicinal plants and local culture (Nita *et al.*, 2023). This knowledge is passed down from generation to generation and is often believed to be safer to use than modern drugs because it is considered to have fewer side effects (Islami *et al.*, 2017). In practice, coastal communities demonstrate a lifestyle closely linked to the use of surrounding natural resources, including medicinal plants that form part of their health strategy (Sabarisman, 2017).

The use of medicinal plants in Indonesia has been going on for a long time and has become part of people's daily lives. A number of ancient manuscripts, such as *Usada* in Bali and *Lontarak Pabbura* in South Sulawesi, record traditional healing practices that have been passed down from generation to generation (Amin, 2012). However, this knowledge has mostly been passed down orally, putting it at risk of being lost if not systematically documented (Handayani *et al.*, 2022). Therefore, an ethnopharmaceutical approach is crucial not only to document but also to verify the active compounds in the plants used by the community (Syahputra *et al.*, 2021). Scientific validation is necessary to

ensure that traditional knowledge can continue to be utilized sustainably in the field of health (Cahyawati, 2020).

Previous research shows that the Buton tribe in Binongko District utilizes 51 species from 35 families of medicinal plants (Wa Ode Irma Indrayangingsih & Anam, 2015). Another study on the Kalende sub-ethnic group in Buton Regency identified 72 species from 46 families of medicinal plants (Hamzah *et al.*, 2022). This indicates that there are variations in plant utilization between regions, so studies in other locations are needed to complete the ethnopharmacy data in Southeast Sulawesi.

Based on this, this study was conducted to identify the types of medicinal plants used by coastal communities in Masiri Village, Batauga Subdistrict, South Buton Regency. This study also aims to determine the morphological parts of plants that are used and how they are processed. Focusing on the Masiri coastal area, which has not been widely documented, the results of this study are expected to enrich the ethnopharmacy literature while providing practical information for the community and serving as a basis for further pharmaceutical research.

## METHOD

This study used a descriptive research design with a qualitative approach. The data used were primary data obtained directly from informants through semi-structured interviews, field observations, and documentation. The research was conducted among coastal communities in the Masiri neighborhood, Masiri Village, Batauga District, South Buton Regency, from June to July 2025.

The research population consisted of all coastal communities in the Masiri neighborhood who were considered to be knowledgeable about and still practiced the use of traditional medicinal plants. The sampling technique used was purposive sampling with inclusion criteria such as being aged 30–80 years, being a native coastal resident, and having knowledge of medicinal plants, followed by snowball sampling based on the recommendations of the initial informants.

Data collection was conducted through semi-structured interviews using a list of questions, direct observation of the medicinal plants used, and documentation in the form of photographs and field notes. The research instruments used were interview guidelines, observation sheets, and documentation tools in the form of cameras and writing instruments.

The collected data was then analyzed descriptively by grouping the information based on plant type, parts used, properties, and processing methods. Next, percentages were calculated to determine the distribution of plant parts used and processing methods using the following formula:

$$f = \frac{A}{B} \times 100\%$$

Explanation:

$f$  = Percentage of plant parts used or processing methods

A = Number of occurrences of a particular plant part or processing method

B = Total number of occurrences of plant parts or processing methods observed

The results of the analysis are presented in the form of frequency distribution tables and percentages so that they can clearly illustrate the patterns of utilization of traditional medicinal plants by coastal communities.

## RESULTS AND DISCUSSION

Based on interviews with coastal communities in the Masiri area, 42 plant species belonging to 32 families were found. Complete information on the scientific names, local names, parts of the plant used, properties, and processing methods is presented in Table 4.1 below.

**Table 4.1** Plants used as traditional medicine by coastal communities in the Masiri neighborhood

| No                    | Famili dan spesies             | Indonesian Name | Local Name | Parts Used | Benefits/Diseases        | How to Process |
|-----------------------|--------------------------------|-----------------|------------|------------|--------------------------|----------------|
| <b>ACANTHACEAE</b>    |                                |                 |            |            |                          |                |
| 1                     | <i>Andrographis paniculata</i> | Sambiloto       | Samburoto  | Leaves     | Fever, malaria, diabetes | Boiled, drunk  |
| <b>AMARYLLIDACEAE</b> |                                |                 |            |            |                          |                |
| 2                     | <i>Crinum asiaticum</i> L.     | Bakung Putih    | Babala     | Leaves     | Broken bones, sprains    | Warm, wrapped  |
| <b>ANNONACEAE</b>     |                                |                 |            |            |                          |                |

|                       |                                  |               |                   |                            |                                                           |                                                  |
|-----------------------|----------------------------------|---------------|-------------------|----------------------------|-----------------------------------------------------------|--------------------------------------------------|
| 3                     | <i>Annona squamosa</i> L.        | Srikaya       | Srikaya mpu       | Leaves                     | Fever, internal diseases, kidney stones                   | Chopped, filtered, drunk<br>Boiled, drunk        |
| 4                     | <i>Annona muricata</i> L.        | Sirsak        | Srikaya Walanda   | Leaves,<br><br>young fruit | Fever, internal diseases, hypertension<br>Cancer          | Chopped, strained, drunk<br><br>Boiled, drunk    |
| <b>ARECACEAE</b>      |                                  |               |                   |                            |                                                           |                                                  |
| 5                     | <i>Arenga pinnata</i> Merr.      | Aren          | Konau             | Root                       | Internal diseases                                         | Boiled, drunk                                    |
| 6                     | <i>Cocos nucifera</i> L.         | Kelapa        | Kaluku            | Root<br><br>young fruit    | Internal diseases<br><br>fever, boosts immunity, antidote | Boiled, drunk<br><br>Split open, drink the juice |
| <b>ASTERACEAE</b>     |                                  |               |                   |                            |                                                           |                                                  |
| 7                     | <i>Chromolaena odorata</i> L.    | Kirinyuh      | Kokomba           | Leaves                     | External wounds, stomach                                  | Rubbed, applied<br>Boiled, drunk                 |
| <b>CALOPHYLLACEAE</b> |                                  |               |                   |                            |                                                           |                                                  |
| 8                     | <i>Calophyllum inophyllum</i> L. | Nyamplung     | Dongkala          | Leaves                     | Cataract                                                  | Chopped, soaked                                  |
| <b>CARICACEAE</b>     |                                  |               |                   |                            |                                                           |                                                  |
| 9                     | <i>Carica papaya</i> L.          | Pepaya        | Kapaeya           | Leaves                     | External wounds                                           | Rubbed, applied                                  |
| <b>CONVOLVULACEAE</b> |                                  |               |                   |                            |                                                           |                                                  |
| 10                    | <i>Ipomoea pes-caprae</i> L.     | Katang-katang | Larere            | Leaves                     | External wounds<br>Promotes milk production               | Pounded, applied<br>Warmed, applied              |
| <b>CRASSULACEAE</b>   |                                  |               |                   |                            |                                                           |                                                  |
| 11                    | <i>Kalanchoe pinnata</i> Lam     | Cocor bebek   | Kamodindi         | Leaves                     | Fever,<br>Cough, asthma, internal heat                    | Pounded, applied<br>Warmed, squeezed, drunk      |
| <b>CUCURBITACEAE</b>  |                                  |               |                   |                            |                                                           |                                                  |
| 12                    | <i>Coccinia grandis</i>          | Timun tikus   | Papasa            | Leaves                     | Fever,                                                    | Rubbed, applied to the body                      |
| 13                    | <i>Momordica charantia</i> L.    | Pare          | Paria             | Leaves                     | Cough, sore throat<br>Itch remedy                         | Boiled, drunk<br>Rubbed, applied                 |
| <b>EUPHORBIACEAE</b>  |                                  |               |                   |                            |                                                           |                                                  |
| 14                    | <i>Jatropha curcas</i> L.        | Jarak         | Tantanga          | Stem                       | External wounds, mouth ulcers                             | Cut, dripped                                     |
| <b>FABACEAE</b>       |                                  |               |                   |                            |                                                           |                                                  |
| 15                    | <i>Guilandina bonduc</i> L.      | Kebiul        | Dadara            | Seeds                      | Worm medicine                                             | Roasted, ground, brewed, drunk                   |
| 16                    | <i>Senna alata</i> L.            | Ketepeng      | Saubanjara        | Leaves                     | Skin disease                                              | Pounded, mixed with lime, applied                |
| 17                    | <i>Sesbania grandiflora</i> L.   | Turi          | Kambajawa         | Leaves                     | Deep wounds,                                              | Boiled, drunk                                    |
| <b>GOODENIACEAE</b>   |                                  |               |                   |                            |                                                           |                                                  |
| 18                    | <i>Scaevola taccada</i>          | Ambong-ambong | Bunculo           | Fruit                      | Maintaining eye health                                    | Juiced, dripped                                  |
| <b>LAMIACEAE</b>      |                                  |               |                   |                            |                                                           |                                                  |
| 19                    | <i>Orthosiphon aristatus</i>     | Kumis kucing  | Bulusumpino mbuta | Leaves, roots              | Sprains, broken bones<br>Lower back pain, kidney stones   | Pounded, applied, bandaged<br>Boiled, drunk      |
| 20                    | <i>Ocimum tenuiflorum</i> L.     | Kemangi hutan | Ntulasi           | Leaves                     | Flu, cough, asthma, digestive disorders                   | Boiled, drunk<br>Chewed, swallowed               |
| <b>LYTHRACEAE</b>     |                                  |               |                   |                            |                                                           |                                                  |
| 21                    | <i>Lawsonia inermis</i> L.       | Pacar kuku    | Pacirangga        | Leaves                     | Cough,<br>External wounds                                 | Boiled, drunk<br>Pounded, applied                |
| 22                    | <i>Sonneratia alba</i>           | Perepat       | Borucu            | Leaves                     | Hypertension,<br>External wounds                          | Boiled, drunk<br>Rubbed, applied                 |
| <b>MALVACEAE</b>      |                                  |               |                   |                            |                                                           |                                                  |
| 23                    | <i>Ceiba pentandra</i> L.        | Kapuk         | Kapajawa          | Leaves                     | Boil remedy,<br>Hot compress                              | Chopped, applied<br>Boiled, drunk                |
| <b>MELIACEAE</b>      |                                  |               |                   |                            |                                                           |                                                  |

|                       |                               |             |                 |                                   |                                                        |                                                               |
|-----------------------|-------------------------------|-------------|-----------------|-----------------------------------|--------------------------------------------------------|---------------------------------------------------------------|
| 24                    | <i>Sandoricum koetjape</i>    | Kecapi      | Katapi          | Stem, leaves                      | Shortness of breath,<br>diarrhea                       | Boiled, drunk                                                 |
| <b>MENISPERMACEAE</b> |                               |             |                 |                                   |                                                        |                                                               |
| 25                    | <i>Tinospora crispa</i> L.    | Brotowali   | Martawali       | Stem, leaves                      | Jaundice,<br>rheumatism,<br>diabetes, stomach          | Boiled, drunk                                                 |
| <b>MORACEAE</b>       |                               |             |                 |                                   |                                                        |                                                               |
| 26                    | <i>Ficus septica</i> Burm. F  | Awar-awar   | Libo            | Leaves<br>Stem                    | Hemorrhoids<br>eye medicine                            | Warmed, applied<br>Grated, dripped                            |
| <b>MORINGACEAE</b>    |                               |             |                 |                                   |                                                        |                                                               |
| 27                    | <i>Moringa oleifera</i> Lam.  | Kelor       | Kaudawa         | Leaves                            | Clear sap, motion<br>sickness,<br>maintains eye health | Boiled, drunk<br>Pounded, dripped                             |
| <b>MUSACEAE</b>       |                               |             |                 |                                   |                                                        |                                                               |
| 28                    | <i>Musa paradisiaca</i> L.    | Pisang      | Kadese          | Dried leaves                      | Stroke medicine                                        | Boiled, used for bathing                                      |
| <b>MYRTACEAE</b>      |                               |             |                 |                                   |                                                        |                                                               |
| 29                    | <i>Psidium guajava</i> L.     | Jambu batu  | Bomlaka         | Leaves                            | Vomiting blood,<br>diarrhea                            | Boiled, drunk                                                 |
| <b>OXALIDACEAE</b>    |                               |             |                 |                                   |                                                        |                                                               |
| 30                    | <i>Averrhoa bilimbi</i> L.    | Belimbing   | Takulela        | Leaves                            | Constipation,<br>hypertension                          | Boiled, drunk                                                 |
| <b>PANDANACEAE</b>    |                               |             |                 |                                   |                                                        |                                                               |
| 31                    | <i>Pandanus tectorius</i>     | Pandan laut | Ponda           | Leaves                            | Gout,<br>antidote for stingray                         | Boiled, drunk<br>Pounded, applied                             |
| <b>PHYLLANTHACEAE</b> |                               |             |                 |                                   |                                                        |                                                               |
| 32                    | <i>Phyllanthus amarus</i>     | Meniran     | Kakaluku wolawo | All                               | Kidney                                                 | Boiled, drunk                                                 |
| <b>PIPERACEAE</b>     |                               |             |                 |                                   |                                                        |                                                               |
| 33                    | <i>Piper betle</i> L.         | Sirih       | Karoo           | Leaves                            | Asthma                                                 | Boiled, drunk                                                 |
| <b>POACEAE</b>        |                               |             |                 |                                   |                                                        |                                                               |
| 34                    | <i>Cymbopogon citratus</i>    | Serai       | Padamalala      | Roots, stems,<br>Leaves<br>Leaves | Broken bones,<br>sprains<br>Gout                       | Pounded, applied,<br>bandaged<br>Soaked, drunk                |
| 35                    | <i>Imperata cylindrica</i> L. | Alang-alang | Dhana           | Root                              | diabetes                                               | Boiled, drunk                                                 |
| <b>RUBIACEAE</b>      |                               |             |                 |                                   |                                                        |                                                               |
| 36                    | <i>Morinda citrifolia</i> L.  | Mengkudu    | Bangkudu        | Fruit, leaves                     | Internal wound<br>medicin                              | Boiled, drunk                                                 |
| <b>RUTACEAE</b>       |                               |             |                 |                                   |                                                        |                                                               |
| 37                    | <i>Aegle marmelos</i> L.      | Maja        | Kabonde         | Fruit<br>Leaves                   | Internal disease,<br>diabetes                          | Soaked, drunk<br>Boiled, drunk                                |
| 38                    | <i>Citrus aurantifolia</i>    | Jeruk nipis | Munte nipi      | Fruit                             | Cough,<br>Puncture wound                               | Squeezed, mixed with<br>brown sugar, drunk<br>Warmed, applied |
| <b>SAPINDACEAE</b>    |                               |             |                 |                                   |                                                        |                                                               |
| 39                    | <i>Schleichera oleosa</i>     | Kesambi     | Kosambi         | Leaves                            | Coughing up blood                                      | Chewed, swallowed                                             |
| <b>VERBENACEAE</b>    |                               |             |                 |                                   |                                                        |                                                               |
| 40                    | <i>Lantana camara</i> L.      | Tembelekan  | Kamba kabesi    | Leaves                            | Coughing up blood,<br>stomach, stroke                  | Boiled, drunk                                                 |
| <b>ZINGIBERACEAE</b>  |                               |             |                 |                                   |                                                        |                                                               |
| 41                    | <i>Curcuma longa</i> L.       | Kunyit      | Suni            | Rhizome                           | External wounds,<br>Internal wounds                    | Grated, applied<br>Grated, consumed                           |
| 42                    | <i>Zingiber officinale</i>    | Jahe        | Lokia           | Rhizome                           | Internal wounds                                        | Grated, consumed                                              |

Source: Processed data, 2025

This ethnopharmaceutical research was conducted through semi-structured interviews and direct observation of 15 informants who were considered to have traditional knowledge of the use of medicinal plants in the coastal area of Masiri. During the data collection process, each plant mentioned

by the informants was recorded in detail, including the local name, Indonesian name, scientific name, parts of the plant used, efficacy or diseases treated, and how it was processed, as presented in Table 4.1. Based on these results, 42 plant species belonging to 32 families were obtained. These plants are generally found growing naturally or cultivated around residential yards, community gardens, and some grow wild in forest areas.

A total of 42 medicinal plant species belonging to 32 families were identified in this study. The families with the highest number of species were *Annonaceae*, consisting of *Annona squamosa* L. and *Annona muricata* L., and *Fabaceae*, which included *Guilandina bonduc* L. and *Senna alata* L. Other families that also had more than one species, although not dominant, were *Arecaceae* (*Arenga pinnata* Merr. and *Cocos nucifera* L.), *Cucurbitaceae* (*Coccinia grandis* and *Momordica charantia* L.), *Lamiaceae* (*Orthosiphon aristatus* and *Ocimum tenuiflorum* L.), *Lythraceae* (*Lawsonia inermis* L. and *Sonneratia alba*), *Poaceae* (*Cymbopogon citratus* and *Imperata cylindrica* L.), *Rutaceae* (*Aegle marmelos* L. and *Citrus aurantifolia*), and *Zingiberaceae* (*Curcuma longa* L. and *Zingiber officinale*). Meanwhile, 23 other families each consist of only one species, namely *Acanthaceae* (*Andrographis paniculata*), *Amaryllidaceae* (*Crinum asiaticum* L.), *Asteraceae* (*Chromolaena odorata* L.), *Calophyllaceae* (*Calophyllum inophyllum* L.), *Caricaceae* (*Carica papaya* L.), *Convolvulaceae* (*Ipomoea pes-caprae* L.), *Crassulaceae* (*Kalanchoe pinnata* Lam), *Euphorbiaceae* (*Jatropha curcas* L.), *Goodeniaceae* (*Scaevola taccada*), *Malvaceae* (*Ceiba pentandra* L.), *Meliaceae* (*Sandoricum koetjape*), *Menispermaceae* (*Tinospora crispa* L.), *Moraceae* (*Ficus septica* Burm. F), *Moringaceae* (*Moringa oleifera* Lam.), *Musaceae* (*Musa paradisiaca* L.), *Myrtaceae* (*Psidium guajava* L.), *Oxalidaceae* (*Averrhoa bilimbi* L.), *Pandanaceae* (*Pandanus tectorius*), *Phyllanthaceae* (*Phyllanthus amarus*), *Piperaceae* (*Piper betle* L.), *Rubiaceae* (*Morinda citrifolia* L.), *Sapindaceae* (*Schleichera oleosa*), and *Verbenaceae* (*Lantana camara* L.). This composition shows that although most families have only one species, the diversity of plants used in traditional medicine practices among coastal communities is quite extensive.

The plant most widely used by coastal communities in the Masiri Environment is srikaya (*Annona squamosa* L.), whose leaves are used to treat fever, internal diseases, and kidney stones by boiling or chopping them according to the intended treatment. The high frequency of mention is supported by the availability of the plant in the surrounding environment and the belief in its effectiveness, which has been passed down through generations. According to (Al Kazman *et al.*, 2022), srikaya (*Annona squamosa* L.) contains acetogenins, alkaloids, and flavonoids that have antibacterial, anti-inflammatory, and antidiabetic activities.

**Table 4.2** Percentage of plant parts utilized as medicine by coastal communities in the Masiri Environment

| Plant Part | Number | Percentage |
|------------|--------|------------|
| Leaves     | 33     | 62,26%     |
| Roots      | 5      | 9,43%      |
| Stem       | 5      | 9,43%      |
| Fruit      | 6      | 11,32%     |
| Rhizome    | 2      | 3,77%      |
| Seeds      | 1      | 1,88%      |
| All        | 1      | 1,88%      |
| Total      | 53     | 100%       |

Source: Processed data, 2025

These plants are utilized in various parts according to their desired properties. As seen in Table 4.2, the most commonly used part of the plant is the leaf, with 62.26% utilization, followed by the fruit at 11.32%, the root at 9.43%, the stem at 9.43%, and the rhizome at 3.77%. Meanwhile, the use of seeds and all parts of the plant is 1.88% each. Leaves are the most commonly used part in traditional medicine because they contain various bioactive compounds, such as essential oils, fats, resins, mineral salts, triterpenoids, tannins and flavonoids (Helmy *et al.*, 2024).

These results are in line with the statement (Bekele *et al.*, 2022) in the journal *Ethnobotanical Investigation of Medicinal Plants in Buska Mountain Range, Hamar District, Southwestern Ethiopia*, which states that in the world of herbal medicine, leaves occupy the top position as the most widely used part of plants, surpassing other parts in terms of both quantity and usefulness. This preference is

based on several factors, namely that fresh leaves are considered to have high potential, are easy to obtain and harvest, and are simple to process .

**Table 4.3** Percentage of plant processing methods used as medicine by coastal communities in the Masiri Environment

| Processing Method            | Number | Percentage |
|------------------------------|--------|------------|
| Boiled                       | 26     | 38,23%     |
| Warmed                       | 5      | 7,35%      |
| Chopped                      | 4      | 5,88%      |
| Filtered                     | 2      | 2,94%      |
| Split                        | 2      | 2,94%      |
| Rubbed                       | 5      | 7,35%      |
| Smoothed                     | 13     | 19,11%     |
| Squeezed                     | 3      | 4,41%      |
| Roasted                      | 1      | 1,47%      |
| Brewed                       | 1      | 1,47%      |
| Mixed with other ingredients | 2      | 2,94%      |
| Chewed                       | 2      | 2,94%      |
| Soaked                       | 2      | 2,94%      |
| Total                        | 68     | 100%       |

Source: Processed data, 2025

Based on Table 4.3, the methods used by coastal communities in the Masiri area to process medicinal plants are dominated by boiling, warming, chopping, filtering, splitting, rubbing, grinding, squeezing, roasting, brewing, mixing with other ingredients, chewing, and soaking. Boiling is most widely used because it is considered effective for extracting active compounds from plants, especially in the treatment of internal diseases, while other methods such as grinding and rubbing are more often used for external treatment. According to (Hamzah *et al.*, 2022) boiling is the most widely used processing method because it is simple and easy for everyone to do.

The types of diseases treated or the medicinal properties of plants by the coastal community in the Masiri area include internal and external diseases. Internal diseases include fever, hypertension, kidney stones, stomach diseases, internal heat, digestive disorders, rheumatism, diabetes, vomiting blood, diarrhea, thrush, cough, asthma, flu, shortness of breath, motion sickness, jaundice, hemorrhoids, constipation, stroke, kidney disorders, maintaining eye health, facilitating breast milk production, boosting immunity, and antidotes for poison. Common external ailments treated include external wounds, boils, sprains, broken bones, skin diseases, nail puncture wounds, and antidotes for stingray venom.

The most common types of diseases based on the findings are fever, external wounds (*vulnus*), and respiratory disorders such as cough and asthma. These conditions are closely related to the lifestyle of coastal communities, most of whom work as fishermen, farmers, or manual laborers who work outdoors with high physical intensity (Riry *et al.*, 2022). External wounds are commonly experienced due to work activities such as logging, fishing, or farming, so the use of plants with antiseptic and wound-healing properties such as *Chromolaena odorata*, *Kalanchoe pinnata*, and *Carica papaya* is common. Fever also often occurs due to the influence of the humid coastal environment, fluctuating temperatures, and exposure to seawater, which can lower the body's resistance. Plants such as *Andrographis paniculata*, *Phyllanthus amarus*, and *Coccinia grandis* are used to treat these conditions. In addition, exposure to cold air while at sea and extreme weather changes trigger respiratory tract disorders, so the community relies on plants such as *Ocimum tenuiflorum*, *Momordica charantia*, and *Piper betle* as remedies for coughs, asthma, and shortness of breath.

The medicinal plants used are both wild and cultivated. This biodiversity reflects the interconnection between the lifestyle of coastal communities and their natural environment. Most of these plants are easy to grow in flat, sandy, or damp areas and do not require special care. Examples include *Ipomoea pes-caprae* (katang-katang) and *Scaevola taccada* (ambong-ambong), which grow

wild on the coast and sandy beaches. Plants such as *Cocos nucifera* (coconut), *Pandanus tectorius* (sea pandan), and *Sonneratia alba* (mangrove) grow naturally on the coast or in tidal areas. In addition, there are also cultivated plants or those commonly grown in yards, such as *Moringa oleifera* (moringa), *Curcuma longa* (turmeric), *Zingiber officinale* (ginger), *Psidium guajava* (guava), *Annona squamosa* L. (srikaya), and *Ocimum tenuiflorum* (forest basil).

These findings reinforce that the use of medicinal plants by the community is influenced by local biodiversity, the availability of plants in the surrounding environment, traditional cultural knowledge, and lifestyle factors that adapt treatment to local ecological conditions (Radam *et al.*, 2016).

## CONCLUSION

This ethnopharmaceutical study successfully identified 42 species of medicinal plants belonging to 32 families that are used by coastal communities in the Masiri area. The parts of the plants that are used include leaves, fruit, roots, stems, rhizomes, seeds, and the entire plant. The methods of processing also varied, including boiling, warming, chopping, filtering, splitting, rubbing, grinding, squeezing, roasting, brewing, mixing with other ingredients, chewing, and soaking. The analysis shows that leaves are the most widely used part of the plant, while boiling is the most common processing method. However, this study has limitations, particularly in terms of language, as there are several types of plants that are only known in the local language without an equivalent name in Indonesian, and these plants are also rare or difficult to find, making them impossible to identify directly.

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## REFERENCES

- Al Kazman, B. S. M., Harnett, J. E., & Hanrahan, J. R. (2022). Traditional Uses, Phytochemistry and Pharmacological Activities of Annonaceae. In *Molecules* (Vol. 27, Issue 11). <https://doi.org/10.3390/molecules27113462>
- Amin, A. (2012). Skrining Farmakognosi Tanaman Etnofarmasi Asal Kabupaten Bulukumba yang Berpotensi sebagai Antikanker. *Journal of Tropical Pharmacy and Chemistry*, 1(4), 263–272. <https://doi.org/10.25026/jtpc.v1i4.36>
- Bekele, M., Woldeyes, F., Lulekal, E., Bekele, T., & Demissew, S. (2022). Ethnobotanical investigation of medicinal plants in Buska Mountain range, Hamar district, Southwestern Ethiopia. *Journal of Ethnobiology and Ethnomedicine*, 18(1), 1–26. <https://doi.org/10.1186/s13002-022-00558-0>
- Cahyawati, N. (2020). Studi Etnofarmakologi Tanaman Obat di Desa Sumberjaya, Kecamatan Waway Karya, Kabupaten Lampung Timur sebagai Sumber Literasi Keanekaragaman Hayati. In *Sustainability (Switzerland)* (Vol. 11, Issue 1).
- Dan, L., Kirinyuh, D., Syahruramadhan, M., Yanti, N. A., & Darlian, L. (2016). 5030-14373-1-Pb. 1(2), 7–12.
- Djufri, K., Luang, L., & Araie, F. H. (2022). Identifikasi Pemanfaatan Morfologi Tumbuhan Sebagai Obat Tradisional Oleh Mahasiswa Biologi STKIP Kie Raha Ternate. *Journal of Biology Education And Science*, 2(2), 86–94. <https://jurnal.stkipkieraha.ac.id/index.php/jbes>
- Hamzah, H., Mursalim, M., & Sapril, S. (2022). Studi Etnofarmasi Tumbuhan Berkhasiat Obat Suku Buton Sub Etnis Kalende, Kecamatan Kapontori Kabupaten Buton Sulawesi Tenggara. *Jurnal Sains Dan Kesehatan*, 1(2), 18–29. <https://doi.org/10.57151/jsika.v1i2.52>

- Handayani, V., Dahlia, A. A., & Nurvadillah, A. F. (2022). Studi Etnofarmasi Tanaman Obat Tradisional Pada Masyarakat Di Kecamatan Penrang, Kabupaten Wajo, Provinsi Sulawesi Selatan. *As-Syifaa Jurnal Farmasi*, 14(1), 72–83. <https://doi.org/10.56711/jifa.v14i1.841>
- Helmy, J., Syafriah, W. O., & Yolandari, S. (2024). Preparation Of Srikaya Leaf Tea Bag (*Annona squamosa* L.). *Ejournal.Poltekbaubau.Ac.Id*, 1(1), 119–125. <https://ejournal.poltekbaubau.ac.id/index.php/ijml/article/view/885>
- Islami, M. Y., Ibrahim, N., & Nugrahani, A. W. (2017). Studi Etnofarmasi Suku Kaili Moma Di Kecamatan Kulawi, Kabupaten Sigi, Provinsi Sulawesi Tengah. *Jurnal Farmasi Galenika (Galenika Journal of Pharmacy) (e-Journal)*, 3(1), 27–33. <https://doi.org/10.22487/j24428744.2017.v3.i1.8136>
- Katili, A. S., Utina, R., Dama, L., & Husain, I. H. (2021). Pemanfaatan Ekosistem Pesisir Dalam Eksplorasi Pengetahuan Lokal Tumbuhan Obat Berbasis Komunitas Etnis Bajo Torosiaje Serumpun. *Journal of Tropical Ethnobiology*, 2021(Prosiding Seminar Nasional Pmei V 2020), 1–6. <http://jte.pmei.or.id/index.php/jte/article/view/114>
- Nita, N. L. K. A. A. D., Gusti Ayu Putri Cantika Dewi, Megawati, F., Megawati, P. E. S. K. Y., & Megawati, E. C. (2023). Kajian Empiris dan Etnofarmasi Tumbuhan Hutan Berkhasiat Obat Asal Desa Adat Tenganan Pegringsingan Karangasem Bali sebagai Antinyeri dan Antiinflamasi. *Jurnal Tumbuhan Obat Indonesia*, 16(2), 124–136. <https://doi.org/10.31002/jtoi.v16i2.873>
- Puspita Wati, N. P., Anita Dewi, N. L. K. A., Suradnyana, I. G. M., Kusuma Yuda, I. P. E. S., Cahyaningsih, E., & Megawati, F. (2023). Kajian Etnofarmasi Kelompok Masyarakat Banjar Saraseda Tampaksiring Gianyar Bali. *Usadha*, 2(4), 33–41. <https://doi.org/10.36733/usadha.v2i4.7376>
- Radam, R., Soendjoto, M. A., & Prihatiningtyas, E. (2016). Pemanfaatan Tumbuhan yang Berkhasiat Obat oleh Masyarakat di Kabupaten Tanah Bumbu , Kalimantan Selatan *Utilization of Medicinal Plants by Community in Tanah Bumbu Regency , South Kalimantan. Prosiding Seminar Nasional Lahan Basa*, 2(November 2016), 486–492.
- Riry, N. R. J., Silalahi, P. Y., Kalilola, N. E., & Tahitu, R. (2022). Karakteristik Pola Penyakit Pada Nelayan Pesisir Pulau Ambon di Kecamatan Nusaniwe Tahun 2022. *PAMERI: Pattimura Medical Review*, 4(2), 36–53. <https://doi.org/10.30598/pamerivol4issue2page35-52>
- Sabarisman, M. (2017). Identifikasi Dan Pemberdayaan Masyarakat Miskin Pesisir. *Sosio Informa*, 3(3), 216–235. <https://doi.org/10.33007/inf.v3i3.707>
- Susilasanti, & Syafah, L. (2017). Studi Etnofarmasi Tumbuhan Berkhasiat Obat di Desa Aikmel Utara Kecamatan Aikmel Kabupaten Lombok Timur Provinsi Nusa Tenggara Barat *Etnopharmaceutical Study Plant Medicine for in the Village of North Aikmel Aikmel East Lombok District of West Nusa Tenggara. Akademi Farmasi Putra Indonesia Malang*, 1–2.
- Syahputra, G. S., Astuti, M. A., Piter, P., & Arbain, D. (2021). Kajian Etnofarmasi dan Fitokimia Tumbuhan Obat Kampung Adat Urug, Kecamatan Sukajaya, Kabupaten Bogor, Jawa Barat. *Jurnal Tumbuhan Obat Indonesia*, 14(1), 15–35. <https://doi.org/10.22435/jtoi.v14i1.3016>
- Wa Ode Irma Indrayangingsih, N. I., & Anam, S. (2015). Indrayaningsih et al./Galenika Journal of Pharmacy. *Journal of Pharmacy*, 1(October), Pramita, N. H., Indriyani, S., Hakim, L. (2013).