

THE UTILIZATION OF YARDS WITH MEDICINAL PLANT POTENTIAL IN THE COMMUNITY OF BAGAN DELI VILLAGE, MEDAN BELAWAN SUBDISTRICT

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Abstract: This text discusses various plant types utilized by the Bagan Deli Village, Medan Belawan District community. The research objective is to identify plant species with the potential for use as medicinal herbs by various ethnic groups in Bagan Deli Village. The research method employed in this study is exploratory descriptive research using a survey method and semi-structured interview techniques. Respondents were selected using purposive sampling, with 10 representatives chosen from the community in Bagan Deli Village. The research process involves initial surveying, data collection (through interviews and questionnaires), plant sample collection, herbarium creation, and the identification of plant species used as medicinal herbs. The research findings reveal 20 plant species with potential medicinal uses in Bagan Deli Village. Parts of the plants used for medicinal purposes include leaves, stems, roots, flowers, fruits, rhizomes, and bulbs. These plants are obtained through cultivation in home gardens, wild harvesting, and markets.

INTRODUCTION

The Bagan Deli Village is located along the mouth of the Deli River to the edge of Kuala Deli. In the past, this area was known as Pulau Putri, which served as a stopover for the Sultan Deli's family. Bagan Deli Village covers an area of approximately 304.74 hectares, consisting of residential areas, docks, offices, tourist zones, and protected areas. The majority of the population in Bagan Deli Village belongs to the Malay ethnic group, followed by the Javanese, Batak, Mandailing, Padang, and Karo ethnic groups. The predominant religions in Bagan Deli Village are Islam and Buddhism. Given that the majority of the population is Malay, Islam is the most widely practiced religion (BPS, 2022). Additionally, two traditional healers (tabib) are also present in this village and will serve as key informants in this research.

Ethnobotany is a valuable tool for documenting the knowledge of traditional communities and the general public who have been using various plant resources to

support their lives. These plant resources are utilized for food, medicine, construction materials, traditional ceremonies, cultural practices, dyes, and more. Every community, based on its regional characteristics and traditions, relies on various plants, at the very least for sustenance. In modern life, over a hundred plant species are recognized as sources of food, but in reality, thousands of plant species are used across different regions by various ethnic groups. Moreover, numerous plant species are used for medicinal purposes.

The use of plants as medicine dates back to ancient Egypt around 2500 BCE. Indonesia is home to 30,000 plant species out of the total 40,000 plant species found worldwide, and 940 of them are used as traditional medicines in daily life. Several studies have shown that traditional herbal remedies made from medicinal plants are easier for the body to digest and generally have fewer side effects. Many developed countries have also begun producing herbal medicines.

Research on the use of plants as medicines has been conducted extensively. For example, Lestari's (2016) research identified approximately 38 plant species in North Sumatra with potential medicinal uses. Sada and Tanjung's research in 2010 found 48 medicinal plant species used by the people of Supiori District in Papua. Similarly, Kandowangko et al. conducted a study in 2011, identifying 32 medicinal plant species used by the people of Bone Bolango District. Mamahani et al. also conducted a similar study in 2016, identifying 40 medicinal plant species used by the Tonsawang ethnic group.

Given the diversity of ethnicities in the community, it is believed that these communities share similarities and differences in their use of plants as medicines. Hence, research on the use of medicinal plants by the residents of Bagan Deli Village is essential. The objectives of this study are as follows: To identify and document the various plant species used as medicinal herbs in the vicinity of households; to determine the plant parts and purposes for which plants are utilized as medicines by the residents of Bagan Deli Village. The results of this research are expected to serve as a source of information about the various plant species commonly used as medicines by the people of Bagan Deli and can be used as a basis for plant conservation efforts.

RESEARCH METHODS

Ethnobotanical data collection was carried out using an emic (knowledge) and ethical (science) approach. This anthropological approach was carried out using structured and semi-structured interviews. During the interview, primary data was collected consisting of cultural background, attitudes, and knowledge about nature, as well as traditional norms towards nature. Two types of questions were asked in the interview, namely open-ended questions addressed to the village healer or shaman as the key informant, and close-ended (closed) questions addressed to the community in Bagan Deli Village. Close-ended questions are questions that describe options for respondents to respond, and respondents can provide free and open responses or answers. In this closed-ended question, it is easier for the interviewer to control the respondent, and the questions asked will avoid free answers from the respondent. The sampling method is purposive sampling which refers to Singarimbun and Effendi in 1995, where samples are taken using certain criteria, aimed at village shamans and community users or those who know about the use of plants as medicines. The number of respondents in this study was 20 people. The research was carried out in July-September 2019 in Bagan Deli Village.

RESULTS AND DISCUSSION

Plant Species Around The Yard that Are Used as Medicine

Various types of plants can be used as medicines. These plants are obtained from the yard or yard where they are planted, obtained by buying at the market, and also by taking them from the forest. The types of plants used by the Bagan Deli community as medicines are presented in Table 1.

Table 1. Various types of plants that used for medicine by the Bagan Deli Community

No	Species Name		Family	Parts used	Used
	local	Latin			
1	Kecubung	<i>Datura Metel</i>	Solanaceae	Leaf	Cough medicine
2	Jarak	<i>Jatropha curcas</i>	Euphorbiaceae	Leaf	Stomach ache
3	Sidingin	<i>Kalanchoe</i> sp	Crassulaceae	Leaf	Fever
4	Sugi-sugi	-		Leaf	Fever
5	Pepaya	<i>Carica papaya</i>	Caricaceae	Leaf	Have a cold
6	Mengkudu	<i>Morinda citrifolia</i>	Rubiaceae	Fruit	Stomach ache, Diabetes
7	Delima	<i>Punica granatum</i>	Lythraceae	Leaf	Diabetes
8	Daun Bidara	<i>Ziziphus</i> sp	Rhamnaceae	Leaf	Fever
9	Kunyit Bangle	<i>Zingiber purpureum</i>	Zingiberacea	Rhizome	Fever
10	Sirih	<i>Piper betle</i>	Piperaceae	Leaf	Fever

11	Kumis kucing	<i>Orthosiphon aristatus</i>	Lamiaceae	Leaf	Kidney stone
12	Jambu Klutuk	<i>Psidium guajava</i>	Myrtaceae	Leaf	diabetes
13	Daun Naga	<i>Hylocereus sp</i>	Cactaceae	Leaf	diabetes
14	Kunyit putih	<i>Curcuma mangga</i>	Zingiberaceae	Rhizome	high blood pressure, Have a cold
15	Jerangau	<i>Acorus calamus</i>	Acoraceae	Rhizome	Have a cold
16	Mahkota Dewa	<i>Phaleria macrocarpa</i>	Thymelaeaceae	Leaf/fruit	glandular medicine, Fever
17	Jeruk nipis	<i>Citrus aurantifolia</i>	Rutaceae	Fruit	cough
18	Nipah	<i>Nypa frutican</i>	Arecaceae	Fruit	Diabetes
19	Bunga kanti(melati)	<i>Jasminum sp</i>	Oleaceae	Flower	Eye medication
20	Pegagan	<i>Centella asiatica</i>	Mackinlayaceae	Leaf, root, stem	Senile

The Bagan Deli community is a coastal community where most of the residents' houses are above the water (river/sea). Most of them do not have land pages. Several residents interviewed received medicinal plants from other villages, bought them, or planted them in pots. Most of it is obtained by planting in the yard as much as 65%. The percentage of ways the community obtains medicinal plants is presented in Figure 1. Utilization of the yard by planting medicinal plants is also carried out by the people of Mangunan Village, where according to Irwan et al., (2018) 20% of the yard land is planted with herbs which also function as raw materials. drug.

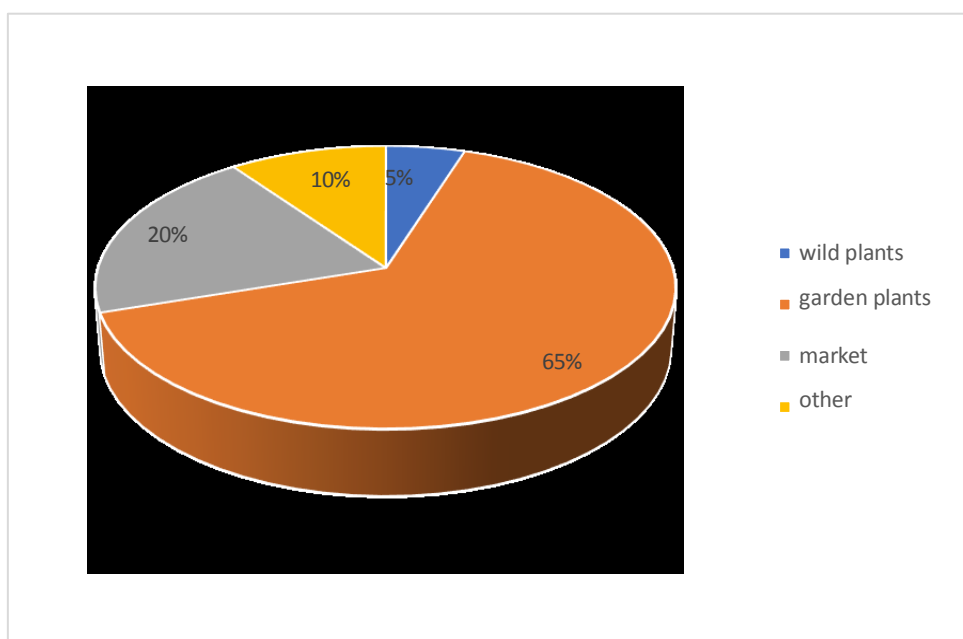


Figure 1. Percentage of Ways the Bagan Deli Community Obtains Medicinal Plants

Types of Medicinal Plant Utilization by the Bagan Deli Community

a. Fever Medicine

The use of medicinal plants in overcoming fever is done by utilizing Sidingin (*Kalanchoe* sp), Sugi-sugi (*Ocimum* spp), Bidara leaves (*Ziziphus* sp), Kunyit Bingle (*Zingiber purpureum*) and Betel (*Piper betle*). Some of these plants are used as one type only (single) and some are used in the form of concoctions (compound).

b. Cough Medicine

The utilization of medicinal plants in overcoming cough is done by utilizing Amethyst (*Datura Metel*) and Lime (*Citrus aurantifolia*). Some of these plants are used only one type (single) and some are used in the form of concoctions (compound).

c. Diabetes Medicine

The use of medicinal plants in overcoming cough is done by utilizing Noni (*Morinda citrifolia*), Dragon Leaf (*Hylocereus* sp), Jambu Klutuk (*Psidium guajava*) and Nipah (*Nypa frutican*). Some of these plants are used as one type only (single) and some are used in the form of concoctions (compound).

d. Colds

The utilization of medicinal plants in overcoming colds is done by utilizing Papaya (*Carica papaya*), White Turmeric (*Kaempferia* sp) and Jerangau (*Acorus calamus*). Some of these plants are used only one type (single) and some are used in the form of concoctions (compound).

e. Stone urination

The utilization of medicinal plants in overcoming stone urination is done by utilizing Kumis kucing (*Orthosiphon aristatus*). This plant is used only one type (single) and some are used in the form of concoctions (compound).

f. High Blood Pressure

The utilization of medicinal plants in overcoming high blood pressure is done by utilizing White Turmeric (*Kaempferia* sp). This plant is used only one type (single) and some are used in the form of concoctions (compound).

g. Glandular Medicine

The utilization of medicinal plants in overcoming glands (lumps on the surface of the skin) is carried out with the use of Mahkota Dewa (*Phaleria macrocarpa*). This plant is used in the form of one type only (single) and some are used in the form of concoctions (compound).

h. Eye Medicine

The utilization of medicinal plants in overcoming eye pain is done by utilizing

Cantil/Jasmine (*Jasminum* sp). This plant is used in the form of one type only (single) and some are used in the form of concoctions (compound).

i. Overcoming Senile Dementia

The utilization of medicinal plants in overcoming senile dementia is done by using Pegagan (*Centella asiatica*). This plant is used only one type (single) and some are used in the form of concoctions (compound).

The utilization of medicinal plants by the community also has different functions. Amrul et al., (2022) mentioned that the Batak Parmalim community utilizes various types of plants as raw materials for making Hare which is useful as a content booster and health drink.

Plant Parts Utilized for Medicine

Plant parts that can be used as medicines are leaves, flowers, fruits, rhizomes, tubers, stems, and roots. The percentage of plant parts used as medicines can be seen in Figure 2.

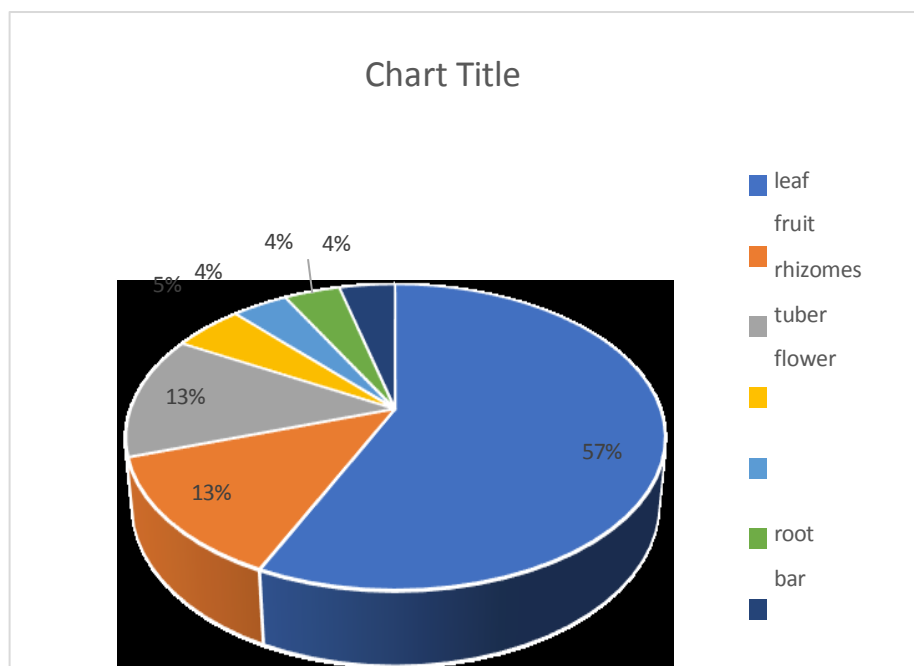


Figure 2. Percentage Use of Plant Parts as Medicines

The most widely used plant parts as medicines are leaves as much as 57% of all types of medicines used. The use of fruits and rhizomes as medicines is 13% each and the use of tubers is 5%.

The use of leaves as medicines has the highest order, this is likely due to the leaves of plant data obtained at any time and at a very small age can be found. Unlike the case with flowers or fruits that can be obtained in certain seasons only.

CONCLUSION

The discovery of 20 types of medicinal plants commonly used by the community in Bagan Deli Village. These medicinal plants are used to cure coughs, fever, diabetes, colds, glands (swelling), high blood pressure and senility. Plant parts used as medicine are leaves, stems, roots, flowers, fruits, rhizomes and tubers. The types of medicinal plants used, most of which are garden plants cultivated by the people of Bagan Deli Village, Medan Belawan Subdistrict.

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