



## Ethnobotanical Study of the Use of Soursop Leaves (*Annona muricata* L.) as Traditional Medicine in Lagosi Village, Wajo Regency

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### ABSTRACT

This study is an ethnobotanical study that aims to describe and analyze the use of soursop leaves (*Annona muricata* L.) as traditional medicine by the community of Lagosi Village, Wajo Regency. The research method used is qualitative descriptive with data collection techniques through semi-structured interviews with informants selected purposively. The results of the study indicate that soursop leaves are used to treat swelling caused by sprains, headaches, and high blood pressure. The methods of use include rubbing the leaves in one direction on the swollen part of the body, the traditional practice of ma'boso for headaches, and boiling the leaves to drink as a blood pressure reducer. Knowledge about the use of soursop leaves is passed down orally from generation to generation and is part of the local wisdom of the Lagosi community. This study emphasizes the importance of documenting traditional knowledge to preserve cultural heritage and as a foundation for further research in the development of natural medicines based on local plants.

Keywords: ethnobotany, soursop leaves, traditional medicine, local wisdom, Lagosi Village

### I. INTRODUCTION

Ethnobotany is a branch of science that explores the relationship between humans and the plants around them through pure scientific research that utilizes traditional knowledge and experience to improve the quality of human life and preserve the quality of the environment (Helmina & Hidayah, 2021). Ethnobotany studies plants used by specific ethnic groups for clothing, food, and medicine in their daily lives. Ethnobotany of medicinal plants studies plants with medicinal properties that are utilized to meet the needs of life in the field of medicine by communities according to the customs of a particular ethnic group (Anti et al., 2024). Ethnobotanical knowledge often develops through the empirical experiences of communities, passed down from generation to generation. In Indonesia, known as a megabiodiversity country, traditional plant-based medicine practices are still widely used, particularly in rural areas. One commonly utilized plant is soursop leaves (*Annona muricata* L.), which have long been recognized for their various health benefits.

Soursop leaves (*Annona muricata* L.), a member of the *Annonaceae* family, which includes around 130 genera and 2,300 species (Purnamasari, 2021). Saputra & Sukanty (2024) note that these compounds exhibit various pharmacological activities, including anti-inflammatory, analgesic, antihypertensive, and antimicrobial effects, as well as promising

antioxidant, antiparasitic, and antitumor properties for the development of natural therapies. However, at the local community level, the use of soursop leaves is often carried out in distinctive ways that reflect local wisdom, including processing methods, application techniques, and beliefs in their efficacy—these practices have scientific value but remain poorly documented in a systematic manner.

The village of Lagosi, located in Wajo Regency, South Sulawesi, is one of the areas that still preserves traditional medicine using local plants, including soursop leaves. Based on interviews with local residents, soursop leaves are used to treat various health complaints such as swelling caused by sprains, headaches, and high blood pressure. One unique practice known to the people of Lagosi is *ma'boso*, a traditional method involving pounding soursop leaves, mixing them with a little water, and then applying the mixture to the entire scalp like shampoo to relieve headaches. Additionally, soursop leaves are also used by rubbing them directly onto swollen body parts and boiling them to drink the resulting tea as a blood pressure reducer.

The practice of using soursop leaves in Lagosi Village not only demonstrates the richness of local knowledge, but also reflects the close cultural relationship between the community and its natural resources. Documenting this practice through an ethnobotanical approach is important, not only for cultural preservation, but also as a starting point for scientific research that can explore the phytopharmaceutical potential of this plant.

This study aims to describe and analyze the use of soursop leaves by the people of Lagosi Village in the context of traditional medicine. The study covers aspects such as methods of use, types of diseases treated, and the perceptions of the Lagosi Village community regarding the efficacy of soursop leaves. The results of this ethnobotanical study are expected to contribute to the preservation of traditional knowledge and open up opportunities for further research in the fields of pharmacology and the development of natural medicines.

## II. METHODS

This study used a descriptive qualitative approach. Data were obtained through direct interviews with a number of Lagosi villagers who were purposively selected based on their experience using soursop leaves for traditional medicine. Interviews were conducted in a semi-structured manner to gather information on the types of diseases treated, how to use, and the effects felt after use. Interview data were thematically analyzed to reveal patterns of soursop leaf use, and then presented in a scientific narrative.

## III. RESULTS AND DISCUSSION

### The Use of Soursop Leaves by the Lagosi Village Community

Based on interviews conducted in Lagosi Village, Wajo Regency, it was found that soursop leaves (*Annona muricata L.*) are widely used by the community as traditional medicine. These leaves are used to treat various ailments such as swelling caused by sprains, headaches, and high blood pressure. The use of the plant is passed down through generations and is an integral part of local knowledge embedded in daily practices.

One unique use of soursop leaves is for treating swelling caused by sprains. The community uses the upper part of the leaf (the smooth surface) by rubbing it in one direction on the swollen area of the body. This process is repeated several times, and the community believes that this method can accelerate the healing process and reduce pain. This method is performed without prior softening or boiling, demonstrating a very practical and experience-based approach.

To alleviate headaches, people apply soursop leaves directly to the head. Additionally, the people of Lagosi Village have a method called *ma'boso*. *Ma'boso* refers to the practice of applying a leaf extract (sap) to the entire scalp, similar to using shampoo. The preparation

process involves pounding the soursop leaves and adding a small amount of water to extract the leaf sap.

Furthermore, to lower blood pressure, soursop leaves are boiled. The boiled water is then filtered and drunk regularly. According to residents, using this concoction helps lower blood pressure slowly but safely, without any noticeable side effects. This use demonstrates local adaptation to the pharmacological benefits of plants based on empirical experience.

### **Public Perception of the Efficacy of Soursop Leaves**

The people of Lagos Village generally believe that soursop leaf concoctions are effective in relieving symptoms such as swelling caused by sprains, headaches, and high blood pressure. This perception is based on direct experience, both personal and collective, passed down through generations within families. Reported effects after using soursop leaves include reduced pain in the swollen area, a sense of lightness in the head after performing *ma'boso*, and a decrease in headache intensity. However, the community also acknowledges that traditional medicine typically does not provide instant effects, so the remedy is used repeatedly and regularly over several days.

### **Transmission of Knowledge and Local Wisdom**

Knowledge about the use of soursop leaves is transmitted orally, usually from parents or grandparents to their children and grandchildren. This transmission is informal, without written documentation, and relies heavily on personal beliefs and experiences. This leads to possible differences in usage techniques between families, although the basic principles are generally the same.

This practice demonstrates that local wisdom remains alive and relevant in modern society, particularly in rural areas. However, without systematic documentation, this knowledge is vulnerable to loss as times change and younger generations lose interest in traditional medicine. Therefore, documentation through ethnobotanical studies such as this is important as a form of preservation and strengthening of local cultural identity.

The results of this study indicate that the use of soursop leaves in Lagos Village is a form of local adaptation to available natural resources. The simple yet effective methods of use, such as one-way rubbing and *mabboso*, reflect the empirical knowledge of the community gained through repeated experience. Nurhidayah et al., (2023) state that such traditional medicinal knowledge and skills are passed down from parents or ancestors, or acquired by learning from medicinal experts.

Soursop leaves are known to contain chemicals such as alkaloids, tannins, coumarins, steroids/terpenoids, flavonoids, and acetogenins (Pribadi, 2020). Public knowledge of these properties may not be based on modern science, but it has been proven to be consistent with scientific research results. This proves that traditional and scientific knowledge can complement each other.

The way knowledge is passed down orally in the Lagos community also reflects the characteristics of ethnobotanical knowledge, which is unwritten and passed down through social practices. If it's not documented soon, this kind of wisdom could disappear, replaced by modern lifestyles and the commercialization of health products. Therefore, this study is not only important for cultural preservation but can also serve as a foundation for further exploration in the development of phytopharmaceutical products based on local plants.

#### IV. CONCLUSION

The results of this ethnobotanical study show that the people of Lagos Village, Wajo Regency, still use soursop leaves (*Annona muricata L.*) as traditional medicine to treat various health complaints, such as swelling due to sprains, headaches, and high blood pressure. This use is carried out through simple but distinctive methods, such as rubbing the leaves directly in a single direction, the ma'boso method, and boiling the leaves. Knowledge about the use of soursop leaves is passed down orally from one generation to the next, reflecting the strong connection between the community and local wisdom and natural resources in their surroundings.

Documenting these practices is important to preserve traditional knowledge that is at risk of being lost due to changes in times and a lack of interest from younger generations. Additionally, the findings of this research can serve as a foundation for further scientific research in the fields of pharmacology and natural-based medicine.

#### V. REFERENCES

- Anti, S., Dewi, I. R., Kholid, R., Miranti, I. P., & Ramadhan, M. F. (2024). *STUDI ETNOBOTANI TANAMAN BERKHASIAT OBAT UNTUK PENGOBATAN TRADISIONAL*. 13(4), 171–180. <https://doi.org/https://doi.org/10.32583/far.v13i4.2343>
- Helmina, S., & Hidayah, Y. (2021). Kajian Etnobotani Tumbuhan Obat Tradisional Oleh Masyarakat Kampung Padang Kecamatan Sukamara Kabupaten Sukamara. *Jurnal Pendidikan Hayati*, 7(1), 20–28. <https://jurnal.stkipbjm.ac.id/index.php/JPH/article/view/1285>
- Nurhidayah, D., Saprin, S., Walukou, M. A., & Rabani, A. I. (2023). KAJIAN ETNOBOTANI TUMBUHAN OBAT PADA MASYARAKAT LOKAL DI KECAMATAN SABULAKOA KABUPATEN KONAWE SELATAN. *AMPIBI: Jurnal Alumni Pendidikan Biologi*, 8(1), 1–7. <https://doi.org/https://doi.org/10.36709/ampibi.v8i1.1>
- Pribadi, T. W. (2020). REVIEW: SENYAWA AKTIF, AKTIVITAS FARMAKOLOGI, DAN MEKANISME KERJA DAUN SIRSAK (*ANNONA MURICATA L.*) DAN DAUN TEMPUYUNG (*SONCHUS ARVENSIS L.*) SEBAGAI ANTIHIPERURISEMIA. *Farmaka*, 18(2), 89–93. <https://doi.org/https://doi.org/10.24198/farmaka.v18i2.29551>
- Purnamasari, F. (2021). Identifikasi Senyawa Aktif dari Ekstrak Daun Sirsak (*Annona muricata L.*) dengan Perbandingan Beberapa Pelarut pada Metode Maserasi. *Window of Health : Jurnal Kesehatan*, 04(03), 231–237. <https://doi.org/10.33096/woh.v4i03.234>
- Saputra, I. P. B. A., & Sukanty, N. M. W. (2024). Analisis GC-MS dari Senyawa Bioaktif Ekstrak Etanol Daun Tanaman Sirsak (*Annona muricata L.*) sebagai Obat Tradisional. *Bioscientist : Jurnal Ilmiah Biologi*, 12(1), 565. <https://doi.org/10.33394/bioscientist.v12i1.10330>