



DIVERSITY AND UTILIZATION OF MEDICINAL PLANTS BY SASAK ETHNIC AT CENTRAL LOMBOK DISTRICT, WEST NUSA TENGGARA

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ABSTRACT

Sasak ethnic is one of the ethnics that inhabit Lombok Island, located in West Nusa Tenggara Province. One of the local wisdom or traditions which still maintained by the Sasak ethnic is treatment performed by a *belian* by using a particular plant species to treat a certain type of disease. *Belian* is an expert on traditional medicine. The purpose of this study were 1) to document the types of herbs that are used daily by the people of Mas-Mas, Pejanggik, and Rembitan Village; 2) to reveal how the people village of Mas-Mas, Pejanggik and Rembitan to obtain the medicinal plants; 3) to reveal how the villagers of Mas-Mas, Pejanggik, and Rembitan in utilize certain types of plants as traditional medicine. Data were collected mainly medicinal plant species diversity, traditional wisdom Sasak community and other supporting data. Data collection methods used were interviews, field surveys, making of herbarium and library research. The results of this study were identified 71 species of medicinal plants with 38 kind of different family used by the people of Central Lombok. The conclusion from this study is the medicinal plants that are known and used by Sasak ethnic in Central Lombok district is relatively diverse, medicinal plants are grown around the *belian* houses and to use medicinal plants must to be adjusted based on the type of an illness.

Key Word: *belian*, Medicinal Plants, Sasak Ethnic, Traditional Wisdom

INTRODUCTION

Lombok Island is located in West Nusa Tenggara Province, east of Bali Island and west of Sumbawa Island. Conditions Lombok island territory shaped plains, hills and mountains. The island has an area of approximately 4738.62 km². Is administratively divided into the district of East Lombok, Central Lombok, West Lombok, North Lombok, and the city of Mataram.

The diversity of ethnics that inhabited in Lombok island resulted the people are really appreciate any differences. Sasak is an indigenous ethnic in Lombok Island. Sasak ethnic live in harmony side by side with other ethnic who inhabit in that Island. Sasak people still hold tight to tradition.

Some Sasak Ethnic villages who still adhere to the teachings or traditions of ancestors, such as 1) Segenter and Bayan traditional village are located in

North Lombok; 2) the hamlet of sade at Rembitan village which located in Central Lombok; 3) traditional village of Sapit at East Lombok which located around the foot of Mount Rinjani, etc. Tradition or teaching that are retained from the spiritual aspects, the ethical aspects of social life, how to dress, how to get married, to a way to treat or cure a disease by using a certain type of medicinal plants.

Syafitri *et al.* (2014) suggested that Ethnobotany able to describe and explain the link between culture and uses of plants, how plants are used, treated, and is considered to provide benefits to humans. For example as food, medicine, cosmetics, dyes, clothing, ceremony, and in public life.

Utilization of a plant species is a basic knowledge of the local communities. The knowledge system is needed in order to survive (Setyowati & Wardah, 2007). Research about using medicinal plants

by local communities has been widely practiced in Indonesia. For example, Rahayu *et al* (2006) suggested that people on Wawonii Island, Southeast Sulawesi utilizing 73 types of plants as well as the traditional treatment for postpartum care.

Hidayat & Hardiyansyah (2012) obtain data on 42 species of medicinal plants used by the community in the surrounding area IUPHHK PT. Sari Bumi Kusuma Camp Tontang at the district of Sintang. Then Suryana *et al.* (2014) recorded 132 plant species used by villagers Cibanar as traditional medicine, mostly used for the treatment of beauty and femininity.

Rasy (2013) describes 30 types of herbs can be used to treat various diseases and explain habitat, classification, content, benefits, and how to use medicinal plants are explained. For example Asam Jawa (*Tamarindus indica* L.) can treat asthma, dry cough, fever, arthritis, abdominal pain, allergies, etc.

Similarly, on the island of Lombok, Riswan & Andayaningsih (2008) recorded 25 species of plants that can be used as a medicinal plant medicine in West Lombok, one species of which has a rare plants status, namely Pulai (*Alstonia scholaris* (L.) R.Br). A total of 16 kinds of diseases utilizing medicinal plant for the treatment such as a cough, diarrhea, wounds, worms, itching because nettle, fever, itching, smallpox, bitten by scorpions, malaria, red eyes, dysentery, shortness of breath and exposed snakebite. Then Metananda *et al.* (2012) find as many as 156 species of plants used by the community Sasak ethnic in the village of Jeruk Manis as a traditional medicine.

Sasak local wisdom in the use of certain plant species in traditional medicine is a type of cultural wealth that needs to be explored, so that cultural heritage inherited by ancestors for generations are not extinct. Purwadi (2012) states that the cultural tradition of Java, Bali, and Lombok need to be assessed on an ongoing basis. Therefore, research to identify the diversity of medicinal plants species based on local wisdom community Sasak Ethnic at Central Lombok district needs to be held.

Each ethnic has its local wisdom values respectively, as well as community Sasak. Sasak has lofty values that apply in their interaction with fellow human beings and nature. Such as, *bretes* or *retesembet* (respecting placenta of newborn baby) who use *daun lekoq* (*Piper betle*) and seeds of *buaq odaq* (*Areca catechu* L.) as an *andang-andang* (a requirement or condition or material which is then submitted to *belian*),

molang maliq (naming the baby) that uses plant *lemundi* (a type of shrubs plants) in the *maliq molang* ritual. (Suhupawati, 2013). One characteristic of culture in developing countries is still dominant traditional elements in everyday life (Rahayu *et al.* 2006).

Kulip (2003) uncovered 91 species of plants that can be utilized for the needs of the community, 68 of which are used as herbal medicine by the people of Sabah, Malaysia. Meanwhile Lense (2012) explains there are 99 species of plants can be used as a traditional medicine by Community Manokwari, Papua. Mesfin *et al.* (2013) also uncovered 31 species of plants used by the people of Gemad District, Northern Ethiopia. The research that has been conducted shows that in many countries also have local knowledge in using plants to meet the needs of human life.

But on the other hand, knowledge utilization and how to mix medicinal plants have eroded due to the inclusion of modern medicine from the outside. To prevent extinction and reduce the rate of destruction of ecosystems, species and genetic, then the need for some form of conservation that guarantee its sustainability through the establishment of National Parks (Setyowati and Wardah. 2007). There is a traditional village in Lombok who still maintain the culture and beliefs sasak (Sukawi and Zulkifli. 2010). The traditional village still use a medicine from *belian* to treat a certain type of disease. Therefore, areas that still maintain traditional medicine must be preserved.

METHODS

This research was conducted in three villages in Central Lombok district. The village in question were the village of Mas-Mas, Pejanggik, and Rembitan. The study uses qualitative research designs when retrieving data in the field.

Data to be retrieved sourced informants. They were selected using the purposive sampling technique. Informants were selected based on certain characteristics that are thought to provide complete information related to the formulation of the problem to be examined. Informants which were selected based on purposive sampling technique are 1) *belian* village; 2) communities around the village, which consists of a married man, a married woman and a citizen who is not married; 3) traditional leaders or village head.

Belian village was chosen to be the data source or informant because *belian* has a relatively greater depth

of knowledge about certain types of plants are used as medicine.

RESULT AND EXPLANATION

Type of Medicinal Plants

There are 25 types of disease are used as acuar questions to determine the types of medicinal plants used by the people of the village of Mas-Mas, Pejanggik, and Rembitan in Central Lombok. Based on interviews of 12 informants and 3 *belian* as key informants, found as many as 71 species with 38 kind of different family of medicinal plants used to cure 25 types of diseases.

Fabaceae family is widely use. There are 8 types of medicinal plants used, such as *Tamarindus indica*, *Erythrina variegata* L., *Vigna radiata*, *Senna alexandrina*, *Sesbania grandiflora*, *Lablab purpureus*, *Mimosa pudica* and *Abrus precatorius*, as presented in Appendix 1.

How to Obtain Medicinal Plants

Some medicinal plants are grown in private gardens belonging to *Belian* houses, while others come from outside *belian* residence. When a patient came to *belian* houses, these patients will express complaints theirs illness. After knowing the type of disease patients such as pain, kidney disease, delaying pregnancy, etc., *belian* will be looking for one particular plant or even some plants such as certain to be a concoction.

Furthermore, if the plants are not found in the garden or yard of *belian* houses, the plant will be sought after in the traditional market or even ask for the patient's family to locate the plant in another village. In other words, it could be Pejanggik *belian* take herbs from the village of Mas-Mas, or Rembitan. For example, in the village Rembitan *Kembang kuning* (*Senna Alexandrina*) is rarely found, while in the village of Mas-mas still be found. Another case, a person suffering from kidney diseases will be given *daun beluntas* (*Pluchea indica*) by Pejanggik *belian*, or *daun brore* (*Kleinhovia hospita*) by Rembitan *belian*, or herb leaves kecibling (*Stachytarpheta mutabilis*) plus *daun semet meong* (*Orthosiphon aristatus*) plus *daun gedang* (*Carica papaya*). Each *belian* has a different knowledge in treating a disease, this is what causes the diversity of medicinal plants occur in Central Lombok.

How to Utilize Medicinal Plants

How to utilize medicinal plants depends on the type of illness. There are plants that enumerated first, then squeezed the water, then drank the water like a *daun pandan betawi* (*Dracaena angustifolia*) to overcome the dirty blood. There are also plants that do not need to be crushed, but only need to be cooked and then consumed as *daun ketujur* (*Sesbania grandiflora*) to add breast milk.

Eyedrops, like flowers of *kerodak* (*Isotoma longiflora*) after the dipped or soaked into water for some time, then dripped the water into the eyes have cataracts. As for the treatment of wounds caused by bites of venomous animals such as scorpions or snakes could use *kaktus* (*Opuntia spp.*) or *gedang* (*Carica papaya*) by heating the plant then the plant sap dripping in areas such venomous animal bites .

There is also the only smeared just like the scab disease that uses an old coconut water (*Cocos nucifera*). The scab disease can also be cured using *puntiq ketip* (*Latundan bananas*), *puntiq ketip* cut horizontally and then taped in place that suffer ulceration. Besides smeared can also be massaged after previously chopped as in patients with fractures that uses *sanggarguri* (*Sida rhombifolia*).

CONCLUSION

Based on the result and explanation above, the medicinal plants that are known and used by Sasak ethnic in Central Lombok district is relatively diverse, medicinal plants are grown around the neighborhood of *belian* and to use medicinal plants must to be adjusted based on the type of an illness.

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