

Local Wisdom of Riau Mascot Flora (*Oncosperma Tigillarium* (Jack) Ridl.) in Baganbatu, Bengkalis District Riau Indonesia

Desti

*Biology Education Department
Education Faculty
of Universitas Islam Riau
Pekanbaru, Indonesia
email: destibio@edu.uir.ac.id*

Fitmawati

*Biology Department
Mathematics and Sciences Faculty
of Universitas Riau
Pekanbaru, Indonesia
email: fitmawati2008@yahoo.com*

Putri Ade Rahma Yulis

*Chemistry Education Department
Education Faculty
of Universitas Islam Riau
Pekanbaru, Indonesia
email:
putriaderahmayulis@edu.uir.ac.id*

Mayta Novaliza Isda

*Biology Department
Mathematics and Sciences Faculty
of Universitas Riau
Pekanbaru, Indonesia
email: maytaaisda@yahoo.com*

Abstract—This research aims to describe the local wisdom of nibung as Riau's Mascot Flora. The survey method used in this research. The research method used included field observations, discussions and deeply personal interviewed with the local community in Baganbatu Regency, Bengkalis District, Riau Province. Data collection techniques were carried out directly with questionnaire assisted communication. The information about local wisdom was gathered from the local community through interviews of the respondents. Data collected from the informants were selected randomly. We found that Riau's Malay People in Bengkalis Regency are very caring for, respecting and supporting efforts to conserve nibung plants. They using nibung with full of wisdom, good-value and full of wise. Wisdom of local people in the use of nibung plants can be seen in various aspects, namely cultural, social economy, and eco-tourism, which is harmony existed in the communication between nature, human and built environment between them. It is implemented in cultural values, rituals, and spiritual beliefs in the local community. It can be concluded that the utilization of nibung plant in Bengkalis, Riau is supported by the local community and conducted by wisely.

Keywords—local wisdom, Riau's mascot flora, utilization of nibung plant

I. INTRODUCTION

Local wisdom is one of the systems that exist in society in terms of cultural, social, economic life and environment and its harmonious relationship. The balance in the interaction between humans and their environment is related to various aspects of life, especially in the terminology of culture and habits. There are many crucial

issues to explore in terms of those facts, consisting of environmental degradation [1]; deforestation activities [2; 3; 4], and reducing of biodiversity [5; 6; 7].

Local wisdom is a system in the social, political, cultural, economic, and environmental life structure that contains meaning inherent in traditional wisdom in society. This is implemented in the form of knowledge, rules, and skills as well as ethics in the interaction between humans and their environment as a result of man as a cultural process by following their natural environment, which is acquired in a long period time and is passed from generation to generation [8].

Nibung plant (*Oncosperma tigillarum*) is one of the flora making up the mangrove ecosystem in Riau Province. This plant occupies a special place in the order of Malay society's life. Therefore he was made as the mascot flora of Riau Province, which illustrates the cultural symbols of the Riau Malay people. In this case, this fact becomes one of the important factors in supporting its conservation efforts [9; 10; 8].

Previous research has described the morphological, and anatomical characterization of nibung plants in Riau Province and its development for material teaching [11; 12]. In the study of its spread, nibung plants are generally widespread in the Sumatra region, one of which is in Bengkalis Regency, Riau. Until now, information about how the use and role of local wisdom carried out by the community on the Nibung tree has not been revealed. This research aims to identify their local wisdom and describe the efforts of the local community for supporting of nibung conservation.

II. MATERIALS AND METHODS

This research was conducted from March until July 2019. It is located in Bukitbatu District, Bengkalis Regency, Riau, Indonesia, which is focused on data collection in two villages, namely Temiang Villange, and Tenggayun Village. This research was qualitative descriptive method through in-depth interviews and participant observation which is 20 participants are involved. Data also collected by observation directly at the nibung's habitat.

III. RESULTS AND DISCUSSION

Local people who live on the coast of Bengkalis Regency are very caring for, respecting and supporting efforts to conserve nibung plants which store huge potential in supporting their daily lives. They using nibung with full of wisdom, good-value and full of wise. Wisdom of local people in the use of nibung plants can be seen in various aspects, namely in aspects of culture, social economy, and tourism, which is harmony existed in the communication between nature, human and built environment. It is implemented in cultural values, rituals, and spiritual beliefs.

Firstly, in the cultural aspect, in the system of culture of Riau Malay People, it can be read clearly that cultural value of them is giving a direction to keep their environment perfectly. The Riau Malay people can act towards the value of their environmental wisdom by thinking, respecting and encouraging environmental preservation efforts, especially nibung plants. In Malay culture, there is also a relationship between traditional and religious values in terms of nature conservation. In preserving the environment, Malay people have a cultural system that has a good content to manage the environment in a harmonious style. Riau Malay community is very full of cultural wisdom values in utilizing nibung plants as a symbol of their area. In its natural habitat in nature, the nibung tree which grows together is considered a symbol of the spirit of community unity and brotherhood, so it was chosen as one of the flora identities of Riau Province.

Riau's Malay People assume that nibung plant is not only a source of their livelihood, but also a source of their identity, philosophical symbol, and culture. In this case, traditional ecological knowledge is owned collectively and can be conveyed in the form of cultural values, songs, and stories in Malay People in Riau Province. For this reason, nibung plant is used by them in the phrase "*pancang nibung di arus berdengung, sudah berapa damar hinggap disitu*" its means that "*sapling nibung in a buzzing current, how many amber perched there*". Nibung is also used as a reference in the lyrics of Malay songs "*laya betikat supo kapas gulong, tiyeny tegak dari batey nibung, panji kaen suluk atma, tenuney kekasih wajah di kama*". The lyrics give meaning about the parable of the Riau Malay people about the robustness of the Nibung plant as a symbol in their daily lives. It is in line with the physics of nibung stem, which is strong, grow in the group and indescendant [13].

Secondly, the wisdom of the Malay people of Riau in environmental preservation can be seen in their socio-economic system, for example in preserving forests, ecosystems, water resources and land, in the use of nibung

plants in their daily lives. In this case, there is a myth that developed in the community which states that before cutting down the Nibung tree must perform a kind of ritual first. It is linked to their spiritual beliefs on their daily activities. On the other hand, before cutting down a nibung tree, they choose a nibung tree that is truly mature and ready to be cut down and they do not cut a nibung tree in which there are no saplings/shoots. Thus, Riau's Malay People use nibung plant to wisely their daily needs. It by following [19] state that spiritual belief is one of the aspects that give good effects to the human for ecological conservation in Thailand.

Nibung consumption is carried out by the community with consideration and wisdom. This is related to the utilization of nibung plant stems and leaves which are used by the community for building materials. The community only takes the mature nibung tree and leaves the saplings to grow well (Figure 1). It is because of their very high dependence on nibung wood as a pole and construction materials.

The natural resources consumption of nibung by the Riau's Malay People is not too high. Traditional wisdom in using the nibung plant implemented by the regulation of the utilization of those resources, and are still within the limits of sustainable use.

The utilization of nibung plant is conducted by deciding of the function and sustainability of nibung, whereas the nibung plant that is taken by the people is from the biggest group of seedlings. So, a native of nibung's plants are still able to grow naturally gain and can grow in the good conditions in the good supporting of its habitat. The use of nibung plants by the community is used for several purposes, which consist of: the use of nibung as a building material, for food sources and rice fragrance, and used as medicines. There are many parts of the nibung plant can be used by the Riau's Malay People in Bengkalis, Riau, namely: stem, leaves, fruit, and root of nibung (Figure 2).



Figure 1. The habit of Nibung group in its habitat

Percentages of parts of nibung that used by people

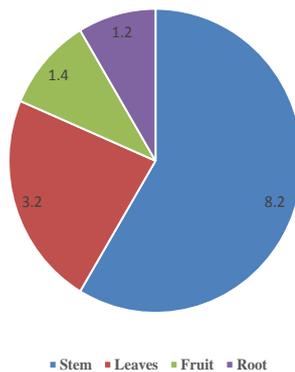


Figure 2. The percentages of nibung plant that used by the local community in Bengkalis, Riau

In general, the most widely used part of the nibung plant by the Riau Malay community in Bengkalis Regency is the stem part. This is related to its use as building materials, such as building materials for houses on stilts, house poles, bridges and docks and supporters in the manufacture of shipyards. This condition is by following with the characteristics of the house in the coastal area or around the river flow. This fact is in line with the use of plants in the construction of houses and other typical buildings in several areas, for example Lanting House in South Sumatra [8; and 15], Lamban Tuha [14], and Sentani's Tribe Regency [15]. The local community was utilized their natural resources wisely [16].

Thirdly, eco-tourism potential aspect. Riau's Malay People seem that nibung (*O. tigrillarium*) is one of the important plants in the mangrove ecosystem in their area. Local wisdom of local communities in Bengkalis about nibung plant is implemented in their assumption that nibung is one of the crucial species that is found in the mangrove vegetation. For this reason, their habit has a big commitment to takepart in participation to the conservation efforts to support their identity as flora for the future. It is in line with [17; 18] states that mangrove is one of the important ecosystems in the Coastal Area.

On the other hand, current threats and future challenges that are faced by the existence of nibung, consisting of habitat destruction, deforestation, land fire, and substitution of land uses for farming and palm oil plantations. Data in the field shows that in Bengkalis Regency, nibung has added value and potential opportunities for an ecotourism area. This literally can be achieved if Nibung is maintained and protected. Local wisdom, besides providing awareness of the importance of protecting nibung plants, is also able to provide increased knowledge and application of wisdom in conservation efforts. Local people stated that the concept of nibung conservation needs to be continually developed as long as it can support its sustainability. Forms of nibung preservation that have been carried out by local communities include in the form of planting and maintaining nibung plants, making nibung as a fence in processing land for their rubber plantations or oil palm plantations, and opposing all forms of excessive exploitation of nibung by irresponsible persons.

IV. CONCLUSIONS

Based on the results of the research that has been conducted, it can be concluded that the utilization of the nibung plant in Bengkalis, Riau is supported by the local community and conducted wisely. Local wisdom of nibung's utilized by the people in the use of nibung plants can be seen in various aspects, namely: in aspects of culture, social economy, and tourism, which is harmony existed in the communication between nature, human and built environment. It is implemented in cultural values, rituals, and spiritual beliefs by the community. Riau's Malay People assume that nibung plant is not only a source of their livelihood, but also a source of their identity, philosophical symbol, and culture. Furthermore, the wisdom of the Malay people of Riau in environmental preservation can be seen in their socio-economic system, for example in preserving forests, ecosystems, water resources and land, in the use of nibung plants in their daily lives.

Based on suvey result, it concluded that stem is at the highest percentage as a one of the part of nibung that used by local people for their daily activities. Root is at the least. This fact by following with its use as building materials.

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