Ethnobotany of Mendong Plants (*Fimbristylis globusa*) As Handicrafts in Wajak District of Malang Regency

Siti Fitrianti Aminah Febryana¹, Ainun Nadhifah¹ and Eko Budi Minarno¹
¹Biology Department, Faculty of Science and Technology, State Islamic University of Maulana Malik Ibrahim Malang, Indonesia E-mail: budi_minarno@bio.uin-malang.ac.id

Abstract- Mendong (Fimbristylis globusa) is a grass plant that morphologically looks similar to rice and is used for a variety of handicrafts. Handicrafts from mendong plants are often found in Blayu Village, Wajak District. The purpose of this research is to get information related to the utilization of mendong plant (Fimbristylis globusa). The type of research used is descriptive exploratory through survey and interview method. The community in Wajak District, specifically Blayu Village, Meduran and Bebekan Sub-village utilize mendong plants (Fimbristylis globusa) as handicrafts such as mats and ropes.

Keywords—Mendong Plant (Fimbristylis globusa); Handicraft; Wajak District

I. INTRODUCTION

Mendong plant (*Fimbrystilis globusa*) is a grass-type plant from Cyperaceae family that naturally grows and reproduces wildly in swampy areas and all-year-round waterlogged lands. This plant can be utilized to produce webbings; as a result, it is cultivated by the community.

Webbing handicraft is a creative work made of mendong plants (*Fimbristylis globusa*) [1]. Therefore, the community cultivates the mendong plant to fulfill the needs of natural fibers used as the raw material for producing handcrafted products. The plant is refined and processed by the community to produce raw materials for handicrafts with a higher economic value.

Handicrafts made of Mendong (Fimbrystilis globusa) as the raw material can be found in Blayu Village, Wajak District, Malang Regency, East Java Province. Blayu Village is a supporting village for the capital of Wajak District situated at an altitude of 495 meters above sea level. In the village, some community groups gather to produce raw materials and webbing handicrafts, such as mats. For the craftsmen, the quality of the material and color are a significant concern for producing excellent handicraft products.

Mendong (Fimbristylis globusa) has a triangular flower stalk; the stem is green-colored, tightly arranged, easy to be rigid, cylindrical, and relatively flattened under the flower stalk. The stem (flower stalk) grows upright; it is long segmented, hollow, and flexible (not hard) so that it is convenient to be utilized for various handicrafts [2].

The purpose of this research is to get scientific information related to the utilization of mendong plants (*Fimbristylis globusa*) through the survey method and open interview technique.

II. RESEARCH METHOD

This research was carried out at Blayu Village, Wajak District, Malang Regency, East Java Province (Figure 1). The instruments used in this research were a camera, a tape recorder, an interview guideline, and stationery. Additionally, mendong plant (*Fimbristylis globusa*) was the primary material for producing webbing handicrafts that could be found in the community's local environment (Figure 2).

PETA KABUPATEN MALANG



Fig. 1. Map of Wajak District

This research is categorized as descriptive exploratory research while employing a survey method and interview



technique. The total of respondents was 16 people. The respondents consisted of non-key persons that involved two heads of sub-villages, two local public figures who understood the history of webbing handicraft with mendong (Fimbristylis globusa) as the raw material, and twelve key-persons who were webbing craftsmen. They were selected for this research through purposive sampling. The interview for key-persons included questions about mendong plant (Fimbristylis globusa), the methods from obtaining and processing the plant to producing the webbing handicraft.



Fig. 2. Mendong fields in Blayu Village

RESULTS AND DISCUSSION

The utilized part of mendong plant (Fimbristylis globusa) for the handicraft was its stem. This organ of Mendong plant (Fimbristylis globusa) was obtained by the craftsmen from farmers who owned mendong fields. After the harvesting process, the harvested mendongs were dried with wood ash. It was intended to make the mendongs dried, withered, and flexible. Nevertheless, it would not damage the plants; it would only result in the change of color from green to brownish-gray (Figure 3). The drying process with wood ash needed ± 1 day, depended on the weather.

Once dried, the mendongs were collected and tied. This drying process of plants for handicraft was intended to reduce the starch and sugar content in the plant [3]. As for producing ropes, the dried mendongs were twisted traditionally with the help of tools made of wood. (Figure 4). In addition, for the production of mendong mats, the dried mendongs were weaved by using a simple weaving tool.

The production of ropes have undergone a technological advancement; initially, the craftsmen applied a manual technique by holding a log of wood or bamboo with mendongs tied to it alternately and then pulling it till the mendongs stretched. In its advancement, from the production of ropes made of mendong, it develops into webbing handicrafts such as mats made of mendong (Fimbristylis globusa) as the raw material.



Fig. 3. Mendongs that had changed its color to brownish-gray



Fig. 4. Mendong ropes

The production of handcrafted mats was mainly conducted by the community in Blayu Village, Bebekan and Meduran Subvillage (Figure 5). The number of craftsmen of handcrafted mats decreased because of the low request for webbing handicrafts made of mendong (Fimbristylis globusa), and also because of the consequence of the production of plastic mats made of synthetic materials which are not environmentally friendly.



Fig. 5. Mendong mats

the 10th International Conference on Green Technology

©reenTech

Faculty of Science & Technology, Universitas Islam Negeri Maulana Malik Ibrahim Malang, Indonesia 2nd – 3rd October, 2019

Based on the mentioned data, we can infer about the value and benefit of the environmentally friendly webbing handicrafts made of mendong (*Fimbristylis globusa*). According to [4], it said that if products from mendong plant were damaged, it could be burned to collect its ash because it could be used as fertilizer. Accordingly, this local wisdom or indigenous knowledge of the community of Blayu Village, Wajak District, Malang Regency, East Java Province needs to be conserved and developed in the form of webbing handicraft diversification so various products, not limited to mats, can be produced. Besides, mendong plant (*Fimbristylis globusa*) conservation in the form of mendong cultivation is also equally important, in the purpose that the supply of raw materials for the handicraft is continuously available.

Mendong (Fimbristylis globusa) cultivation can be cultivated on a large scale or enterprise-scale as well as limited scales such as on the scale of garden or village. The cultivation period of mendong (Fimbristylis globusa) was not vastly different than of paddy, which was about 3-4 months. The post-harvest growth process was also simple because after harvesting the field, mendong (Fimbristylis globusa) plant would regrow naturally. Furthermore, mendong (Fimbristylis globusa) cultivation did not require any seed provisions like the cultivation and planting of agricultural plants in general. This mendong (Fimbristylis globusa) cultivation has a positive impact towards the biodiversity and the earning of the people of Blayu Village, Wajak District, Malang Regency either as the farmers who provide the raw material, craftsmen, or even the merchants who sell handicrafts made of Mendong (Fimbristylis globusa).

IV. CONCLUSION

The parts of Mendong plant (*Fimbristylis globusa*) primarily its stem and flower organs have been utilized by the community in Blayu Village, Wajak District, Malang Regency, East Java Province as handicrafts, either finished webbing handicrafts (such as mats) or half-finished materials that need to be processed further (such as ropes).

REFERENCES

- [1] Rohidi, Tjetjep Rohendi. (2000). Kesenian dalam Pendekatan Kebudayaan. Bandung: Sekolah Tinggi Seni Indonesia Press.
- [2] Sunanto, Hatta. (2000). Budidaya Mendong. Yogyakarta: Kanisius
- [3] Simon, H. (1998). Pengantar Ilmu Kehutanan. Yogyakarta: Faculty of Forestry of Gadjah Mada University.
- [4] Batoro, J., Indriyani dan Rahardi, B. (2015). Etnobotani Masyarakat Lokal, Struktur Anatomi Jenis Pandan (Pandanaceae) Bermanfaat di Jawa Timur. Research Journal Of Life Science, 2 (2).

- [5] Hikmasari, R., Muhaimin, A. W., dan Setiawan, B. (2013). Efisiensi Teknis Usaha Tani Minamendong dengan Pendekatan Stochastic Production Frontier. *Jurnal Habitat*, 24 (1).
- [6] Marbun, J., Sudarmadji, dan Suprayogi, S. (2016). Penurunan Budidaya Tanaman Mendong Sebagai Bahan Baku Kerajinan Tangan Di Padukuhan Parakan Kulon dan Plembon Desa Sendangsari, Kecamatan Minggir Kabupaten Sleman. Majalah Geografi Indonesia, 30 (1).
- [7] Abdillah, F. F., Surjono, dan Prayitno, G. (2010). Pengembangan Sentra Agroindustri Kerajinan Mendong Kabupaten Malang dengan Pendekatan Pengembangan Ekonomi Lokal. *Jurnal Tata Kota dan Daerah*, 2 (2).
- [8] Rudianto, Semedi, B., dan Lelono, T. D. (2015). Analisis Efektivitas Pengembangan Kapasitas Pengrajin Tampar Mendong Melalui Bantuan IPTEK di Desa Blayu, Kecamatan Wajak, Kabupaten Malang. *Journal of Innovation and Aplied Technology*, 1 (1).
- [9] Gerbono, Anton dan Djarijah, Abbas. (2009). Kerajinan Mendong. Yogyakarta: Kanisius.
- [10] Arikunto, S. (2006). Prosedur Penelitian: Suatu Pendekatan Praktik. Jakarta: Rineka Cipta.
- [11] Taufikkurrahman dan Sulistyo, B. (2010). Pengembangan Sistem Pertanian Terpadu Mina Mendong Metode Teras Dalam di Desa Wajak, Kecamatan Waiak. 11 (3).
- [12] Ummah, Hidayatus S. (2011). Etnobotani Tumbuhan Sebagai Bahan Kerajinan oleh Masyarakat Suku Using Kabupaten Banyuwangi. Unpublished thesis. Malang: Department of Biology, Faculty of Science and Technology, State Islamic University Malang.