

Local Knowledge of the Sugihwaras Village Community of the Larung Offerings Tradition on Mount Kelud, Kediri Regency

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Abstract

Larung Offerings Kelud tradition is a traditional ceremony that requires plants. The relationship between plants and humans is studied in ethnobotany which has the potential to reveal local knowledge about biological resource diversity, conservation and culture. Therefore, this study aims to analyze the local knowledge of the community and the importance of plants used in the tradition of Larung Offerings Kelud. This study used a descriptive method with observation and interviews of five key informants as well as questionnaires to 30 participants. Participants were grouped by age, namely young (17-30), adult (31-44), middle-aged (45-60) and old (> 60 years). Community perception data were analyzed using a Guttman scale while the importance value used the fidelity level formula. The results showed that the perceptions people of aged 17-30 and 31-44 were good and low on the meaning of offerings and plants. Age 45-60 and >60 years old are very good and classified as good on the meaning of offerings and the meaning of offering plants. The highest importance of plants were rose (96.6%), cantil, jasmine and ylang (93.3%), coconut (90%), plantain (86.6%) and pandan wangi 83.3%; these plants were special plants that must be present in the tradition of Larung Offerings Kelud. The introduction of traditions along with plant species and their meanings needs to be carried out especially for the younger generation so that traditional knowledge is not lost. Research on local knowledge should be well documented because it is important information and plant diversity and culture in Indonesia remain sustainable.

Keywords: biodiversity; conservation; culture; ethnobotany; perception

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INTRODUCTION

Indonesia has high biodiversity. Indonesia's biodiversity ranks second after Brazil (Ahmad, 2020). Indonesia is also known to have various types of ethnicity. Biodiversity and ethnicity show traditional knowledge about the benefits and preservation of plants used to fulfill needs such as food, building materials, medicine, traditional ceremonies and culture. The relationship between ethnic groups and various types of plants can be seen from the number of ethnicities in Indonesia, which is approximately 350 ethnicities that utilize plants for activities, one of which is traditional ceremonies (Kartiwa and Wahyono, 1992). Therefore, plants play a general important role for the community, especially as a complement to tradition. One tradition that uses plants in the process is Larung Offerings. The implementation of Larung Offerings is usually found in areas that are close to water, for example, rivers, beaches, and ponds. The use of plants used for Larung Offerings is different in each region. The utilization and management of plant diversity has differences in each region due to differences in culture, customs, and living environment (Indah *et al.*, 2021).

The Banyuwangi community conducts Larung Offerings in the sea called Petik Laut by utilizing 66 types of plants from 37 families with the Poaceae family being the most widely used (Purwanti *et al.*, 2020). The Ponorogo community carries out Larung Offerings in the lake, namely Telaga Sarangan, which is named Larungan Buceng Agung. The types of plants used include fruit types, namely water guava, monkey guava, pineapple, orange, banana, kako, pepino, apple, mango, star fruit, watermelon, and dragon fruit and vegetable types, namely mustard greens, red chilies, long beans, carrots, tomatoes, eggplants, and petai and leaf types, andong leaves, cypress leaves, banyan

leaves, seeds, namely brown rice, glutinous rice, white rice and flower types, namely mayang (Rusmawati and Suharti, 2016). The Tengger people carry out Larung Offerings in the crater of Mount Bromo at the Kasada ceremony. There are 16 types of plants used, namely edelweiss, rice, potatoes, leeks, putihan, cabbage, earrings, plantains, telotok, kenikir, bananas, banyan, danglu, coconut leaves, betel nut and corn.

The people of Sugihwaras Village, Kediri Regency, is an area in Indonesia that also carries out Larung Offerings. Larung Offerings Kelud is different from traditions carried out in other areas. Because Mount Kelud is a volcano, crops are thrown into the crater of Mount Kelud which aims to ask God Almighty to be given safety, health, and other blessings. The tradition provides evidence that there is a balance between humans and nature (Kurnia, 2018). The difference between Larung Offerings Kelud and the Kasada ceremony held on the mountain is in the type of plants used. The Larung Offerings tradition uses various types of plants for the process in raw or processed form. The offerings in the Larung Offerings Kelud tradition include rice, side dishes, vegetables and fruit arranged in the form of tumpeng (Bambang, 2016). The tumpeng consists of tumpeng yellow rice and white rice equipped with side dishes including tofu, tempeh, eggs, grated coconut sauce, and urap (Kurnia, 2018).

The problem in today's modern era is that knowledge about the customs and culture of a region is starting to fade. The lack of desire to preserve the culture of one's own country is caused by globalization (Musa, 2015). This is due to the dynamic and adaptive nature of traditional knowledge. The inheritance of customs carried out orally causes the quality and quantity to decline. Based on the pre-research conducted, the younger generation of Sugihwaras Village community lacks knowledge of the plants used in Larung Offerings Kelud, so it is necessary to conduct a study that can document properly to prevent cultural extinction along with the plants used. Ethnobotanical studies are an approach to preserving traditional knowledge through documentation and research activities (Indah *et al.*, 2021). One form of study to document traditional wisdom is carried out by studying the local knowledge of the community towards plants used in traditions.

Local knowledge is a collection of distinctive knowledge developed by communities with a history through a long process of interaction with nature. The knowledge system about plants is an important basic knowledge to fulfill the needs of life (Pramita *et al.*, 2013). The people of Sugihwaras Village have a dependence on plants, especially for the tradition of Larung Offerings Kelud. Consensus index is used to calculate the utilization of plants that involve many people in order to know how important plants are for tradition (Pramita *et al.*, 2013). The importance of this plant will result in the important value of the plant or fidelity level. Knowledge of the important value of plants can help people realize that plants are important for traditions that must continue to be carried out so that people will make efforts to conserve plants. Efforts to conserve biodiversity and germplasm conservation based on the recognition of local knowledge are the benefits of applying ethnobotany (Purwanto, 1999).

The local knowledge of the community regarding the utilization of plants used in traditions in certain regions is a unique and interesting study and needs to be preserved and well documented. In addition, the use of plants involving traditional elements is rare because there are not many traditional processions using plants related to ethnobotany. Research by Hidayah *et al.* (2021) states that the local knowledge of a community in the utilization of cultural plants for daily life is important information that must be well documented, therefore similar research must continue to be carried out so that information on plant and cultural diversity in Indonesia does not become extinct and can be passed on to the next generation. The use of traditional plants in a region is a unique study and the use of plants involving traditional elements is rare because there are not many traditional processions using plants related to ethnobotany.

Recent journals and research such as Leksikowati *et al.* (2020) prove that studies on ethnobotany are still very much needed because there are still many plants that are utilized by local communities, especially in this traditional ceremony, one of the rituals that will continue to be carried out because it is a hereditary tradition that must be preserved so that it is not lost because culture is a valuable asset of a country. In addition, research by Hidayah *et al.* (2021) states that local knowledge of the community in the utilization of cultural plants for daily life is important information that must be well documented, so that similar research must continue to be carried out so that there is no extinction of information on plant and cultural diversity in Indonesia. Based on this background, it is necessary to conduct research aimed at analyzing the local knowledge of the community about plants

and the importance of plants used in the Larung Offerings traditional ceremony at Mount Kelud, Sugihwaras Village, Ngancar District, Kediri Regency.

MATERIALS AND METHODS

This was a descriptive research with observation and interview techniques as well as distributing questionnaires to the Sugihwaras Village community. Data from direct observation were recorded and documented. The research was conducted in August-December 2022 in Sugihwaras Village, Ngancar District, Kediri Regency, East Java Province (Figure 1). The astronomical location of Sugihwaras Village on longitude and latitude is at 7° 56' 00 LS and 112° 18'30 BT with an altitude of 1,731 meters above sea level.

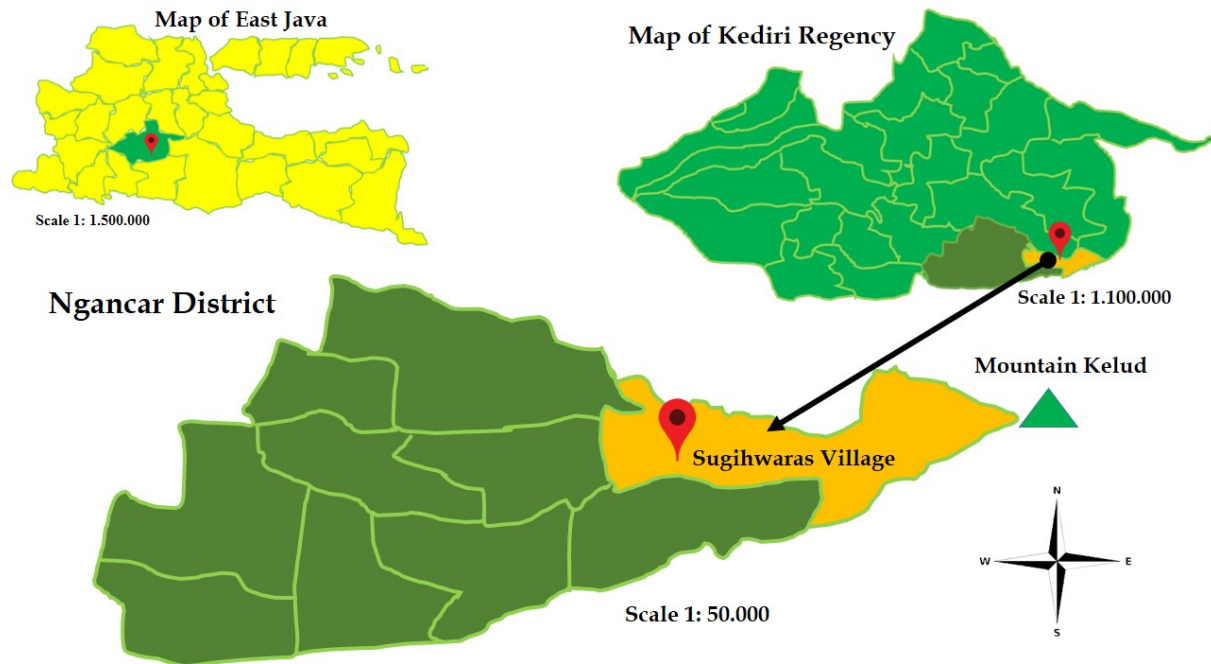


Figure 1. Map of Sugihwaras Village area

Data collection began with observation of the research location to find out the research location, namely Sugihwaras Village, determining informants as research respondents in obtaining research data, knowing the address of key informants and village administrators and asking permission from the Sugihwaras village head to conduct research. Further data collection was conducted by interviewing and distributing questionnaires. Interviews were conducted with five key informants, namely three elders and two village officials using semi-structured interview techniques guided by interview guidelines. Data on the types and meanings of plants used in Larung Offerings Kelud were obtained through interviews with key informants because they were considered to have good knowledge about the plants used in Larung Offerings on Mount Kelud. The list of questions regarding the type of plant is the local name, the part that is used, how to use and how to obtain the plant and the status of the plant. The list of questions about the meaning of plants are local names, types of offerings in the procession of Larung Offerings Kelud, meaning, and types of plants used.

Plant species used in Larung Offerings Kelud were documented, identified and a dry herbarium was made if the scientific name was unknown. The questionnaire was given to 30 participants from Sugihwaras village who were selected based on age, namely young (17-30 years), adult (31-44 years), middle-aged (45-60 years) and old (>60 years) without regard to education level and gender. The number of questions was 20 items. The questionnaire consisted of a semi-structured questionnaire and an open-ended questionnaire. The semi-structured questionnaire was used to determine the local knowledge of the community with eleven aspects, namely the meaning of the Larung Offerings tradition, the contents of the questionnaire on the meaning of Larung Seaji (number 1), the purpose of the implementation (number 2), the time of implementation (number 4), equipment (number 8), the meaning of each type of offering and plant (numbers 9 and 10), the process (number

17), the type of plant (number 11), plant organs (number 12), how to use (number 13) and how to obtain (number 14). An open-ended questionnaire was used to obtain important value data. The questions consisted of two items, namely plant utilization and its utilization parts.

Data on plant species of Larung Offerings Kelud tradition were identified based on local names, scientific names, families, plant parts used and processing methods by referring to the book Flora of Java (Backer and Van Den Brink, 1965), Flora for Schools (Steenis and Van, 2013), Plants of the Word Online (POWO) <https://powo.science.kew.org/>.

Data analysis was conducted descriptively qualitatively using a quantitative approach. The data analyzed descriptively qualitative include information about the type of plant, namely scientific names, local names of parts used, and uses, while the data analyzed quantitatively is ethnobotanical knowledge, namely the types of plants used in Larung Offerings Kelud and the importance of plants used in the tradition of Larung Offerings Kelud. Local knowledge of the community is the typical knowledge of the community about the plants studied. Local knowledge of the community using the formula equation of Witjoro and Sulisetijono (2016). The following formula Local knowledge of the community using the formula equation (Witjoro and Sulisetijono, 2016):

$$P = \sum_{k=1}^n \frac{x.k}{n.k_{maks}} \cdot 100\%$$

Where:

X = number of respondents in one answer choice

k = answer weight

n = number of respondents x

kmax = highest answer weight

P = % of respondents' knowledge of Larung Offerings Kelud.

Important value is the percentage of participants who claim the use of certain plant species for the Larung Offerings Kelud tradition. Important value data was analyzed using descriptive quantitative. Important value data was obtained using the formula equation Pramita *et al.* (2013), namely :

$$FL = \frac{IP}{IU} \cdot 100\%$$

Where:

FL = Importance value of plant species

IP = Number of participants who answered that the species is utilized

UI = Total number of participants who said the species is widely utilized.

The values obtained from the calculation of knowledge and important value of plants will be grouped into the lowest value of 0 (zero) means the respondent has the lowest knowledge and the highest value is 5 (five). The values are then grouped into five categories, namely very good (81-100%), good (66-80%), fair (51-65%), less good (31-50%) and not good ($\leq 30\%$) (Witjoro and Sulisetijono, 2016).

RESULTS

The results obtained from interviews with five key informants, namely elders and village officials who really understand the tradition of Larung Offerings Kelud and 30 participants from the Sugihwaras Village community, namely obtained community perceptions about the meaning, purpose, implementation time, equipment, meaning of offerings and the implementation process and plants used in Larung Offerings Kelud. The 30 participants were grouped into 4 categories: young (17-30 years), adult (31-44 years), middle-aged (45-60 years) and old (>60 years). The old age category has very good local knowledge, namely the meaning of 89.28%, purpose 92.85%, time 92.86%, equipment 80.55%, process 82.14%, types of plants, plant organs and how to obtain 85.71% and how to use 89.28% and classified as good in the meaning of offerings and the meaning of offering plants 78.57%. Meanwhile, young and old people have poor knowledge on the meaning of offerings (39.28%) and the meaning of plants (32.14% of young people and 39.28% of old people) (Table 1).

Table 1. Local community knowledge of the Kelud Larung offerings tradition

No.	Aspect	Age (Years)	Percentage (%)	Category
1.	The meaning of offerings	17-30	60.71	Fair
		31-44	60.71	Fair
		45-60	75	Good
		>60	89.28	Very Good
2.	Objective	17-30	87.85	Good
		31-44	75	Good
		45-60	88.88	Very Good
		>60	92.85	Very Good
3.	Time	17-30	75	Good
		31-44	75	Good
		45-60	91.67	Very Good
		>60	92.86	Very Good
4.	Equipment	17-30	60.17	Fair
		31-44	60.17	Fair
		45-60	80.55	Good
		>60	85.57	Very Good
5.	The meaning of offerings	17-30	39.28	Less good
		31-44	39.28	Less good
		45-60	66.66	Good
		>60	78.57	Good
6.	Process	17-30	60.71	Fair
		31-44	57.14	Fair
		45-60	72.22	Good
		>60	82.14	Very Good
7.	Plant type	17-30	60.71	Fair
		31-44	67.85	Good
		45-60	77.77	Good
		>60	85.71	Very Good
8.	Plant meaning	17-30	32.14	Less good
		31-44	39.8	Less good
		45-60	66.66	Good
		>60	78.57	Good
9.	Plant organs	17-30	64.28	Fair
		31-44	67.85	Good
		45-60	77.77	Good
		>60	85.71	Very Good
10.	How to use	17-30	60.71	Fair
		31-44	67.85	Good
		45-60	77.77	Good
		>60	89.28	Very Good
11.	How to earn	17-30	64.26	Fair
		31-44	67.85	Good
		45-60	77.77	Good
		>60	85.7	Very Good

Based on Table 1, local knowledge of the Sugihwaras Village community at a young age related to the purpose and time of the implementation of Larung Offerings is classified as good with a percentage of 67.85% and 75%, and is classified as fair about the meaning of Larung Offerings Kelud, equipment, processes, types of plants, how to use with a percentage of 60.71%, plant organs 64.28%, and how to obtain plants 64.26%. Local knowledge of the community at adulthood is classified as good regarding the purpose and time, namely 75% and the type of plant, organ used, how to use and how to obtain 67.85%, classified as fair meaning and equipment 60.71%, and process 57.14% and classified as low on the meaning of offerings and plants, namely 39.28%. Local knowledge of the community at middle age is classified as very good regarding the purpose and time, namely 88.88% and 91.67% and good at 75% meaning, 80.55% equipment, 66.66% meaning of offerings, 72.22% process and 77.77% related to plant species, plant organs, how to use and how to obtain plants. Local knowledge in old age is very good, namely the meaning of 89.28%, purpose 92.85%, time 92.86%, equipment 80.55%, process 82.14%, types of plants, plant organs and how to obtain 85.71% and how to utilize 89.28% and classified as good on the meaning of offerings and the meaning of offering plants,

namely 78.57%. The results of community knowledge related to traditions and plants used in Larung Offerings Kelud related to the meaning of offerings and the meaning of plants are still lacking. This is because only elders and some people who know the meaning of these plants are classified as middle-aged and old.

The types of plants used in the tradition of Larung Offerings Kelud are 57 species from 33 families. Some types of plants used are the result of the yard of Sugihwaras Village community and some are from outside Sugihwaras Village. Plants from the yard are flowers (roses, jasmine, kenanga) and sweet potatoes (cassava, sweet potatoes, waluh) while from outside are fruits such as apples, sawo and salak. The types of plants most often used in tradition come from the Fabaceae family. The plant that has the highest importance value is rose 96.6% while pineapple, which is the main commodity of Sugihwaras Village, has an importance value of 70% (Table 2).

Table 2. Importance value of plants used in the tradition of Larung offerings in Mount Kelud

No.	Family	Plant Name		Parts used	How to use	Importance Value (%)
		Local Name	Scientific Name			
1	Achariaceae	Kluwek	<i>Pangium edule</i> R.	Seed	Food seasoning	36.6
2	Amaranthaceae	Spinach	<i>Amaranthus tricolor</i> L.	Leaf	Food	36.6
3.	Amaryllidaceae	Red onion	<i>Allium cepa</i> L.	Bulbs	Food seasoning	36.6
4.	Amaryllidaceae	Garlic	<i>Allium sativum</i> L.	Bulbs	Food seasoning	36.6
5	Annonaceae	Cananga	<i>Cananga odorata</i>	Flower	Offerings	93.3
6	Apiaceae	Coriander	<i>Coriandrum sativum</i> L.	Seed	Food seasoning	43.3
7	Apiaceae	Carrot	<i>Daucus carota</i> L.	Bulbs	Food complement	66.6
8	Araceae	Mbothe	<i>Colocasia Esculenta</i>	Bulbs	Food	76.6
9	Arecaceae	Jambe (Pinang)	<i>Areca catechu</i> L.	Seed	Offerings	43.3
10	Arecaceae	Coconut	<i>Cocos nucifera</i> L.	Fruit, Flower, Leaf	Offerings dan seasoning	90
11	Arecaceae	Snakefruit	<i>Salacca zalacca</i>	Fruit	Food	26.6
12	Astaraceae	Lettuce	<i>Lactuca sativa</i>	Leaf	Tumpeng decoration	66.6
13	Bromeliaceae	Pineapple	<i>Ananas comosus</i> L.	Fruit	Food	70
14	Cannaceae	Ganyong	<i>Canna discolor</i>	Bulbs	Food	80
15	Caricaceae	Papaya	<i>Carica papaya</i> L.	Leaf	Food	40
16	Clusiaceae	Mangosteen	<i>Garcinia mangostana</i>	Fruit	Food	20
17	Convolvulaceae	Sweet potato	<i>Ipomoea batatas</i> L. Lam.	Bulbs	Food	80
18	Cucurbitaceae	Cucumber	<i>Cucumis sativus</i> L.	Fruit	Tumpeng decoration	70
19	Cucurbitaceae	Pumpkin	<i>Cucurbita moschata</i> Duch.	Fruit	Food	53.3
20	Dioscoreaceae	Uwi	<i>Dioscorea alata</i> L.	Bulbs	Food	76.6
21	Euphorbiaceae	Candlenut	<i>Aleurites moluccana</i>	Seed	Food seasoning	33.3
22	Euphorbiaceae	Cassava	<i>Manihot esculenta</i>	Bulbs	Food	80
23	Fabaceae	Long beans	<i>Vigna unguiculata</i> L.	Fruit	Food	53.3
24	Fabaceae	Peanuts	<i>Arachis hypogaea</i> L.	Seed	Food	73.3
25	Fabaceae	Soya bean	<i>Glycine max</i> L.	Seed	Food	33.3
26	Fabaceae	Koro	<i>Canavalia Ensiformis</i>	Seed	Food	46.6
27	Magnoliaceae	Kantil	<i>Michelia alba</i>	Flower	Offerings	93.3
28	Marantaceae	Garut	<i>Maranta</i>	Bulbs	Food	76.6

No.	Family	Plant Name		Parts used	How to use	Importance Value (%)
		Local Name	Scientific Name			
29	Moraceae	Banyan	<i>arundinacea</i> L. <i>Ficus benjamina</i> L.	Leaf	Offerings	50
30	Musaceae	Plantain	<i>Musa paradisiaca</i> L.	Stem, Leaf, Fruit	Food, wrapping	90
31	Myrtaceae	Guava	<i>Psidium guajava</i>	Fruit	Food	40
32	Myrtaceae	laurel	<i>Eugenia polyantha</i>	Leaf	Food seasoning	50
33	Oleaceae	Jasmine	<i>Jasminum sambac</i> L.	Flower	Offerings	93.3
34	Oxalidaceae	Star fruit	<i>Averrhoa carambola</i>	Fruit	Food	60
35	Pandanaceae	Fragrant pandan	<i>Pandanus amaryllifolius</i> R.	Leaf	Offerings dan seasoning	86.6
36	Piperaceae	Pepper	<i>Piper nigrum</i>	Seed	Food seasoning	43.3
37	Piperaceae	Betel	<i>Piper bettle</i> L.	Leaf	Offerings	56.6
38	Poaceae	Bamboo	<i>Bambusa</i> sp	Stem, Leaf	Decorative frame	66.6
39	Poaceae	Black sticky rice	<i>Oryza sativa</i> L. <i>var glutinosa</i>	Seed	Food	33.3
40	Poaceae	White sticky rice	<i>Oryza sativa</i> L. <i>var glutinosa</i>	Seed, Stem	Food	33.3
41	Poaceae	Corn	<i>Zea mays</i> L.	Leaf	Offerings	56.6
42	Poaceae	Rice plant	<i>Oryza sativa</i>	Seed	Food, Offerings	36.6
43	Poaceae	Lemongrass	<i>Cymbopogon citratus</i>	Leaf	Food seasoning	50
44	Rosaceae	Apple	<i>Malus domestica</i>	Fruit	Food	26.6
45	Rosaceae	Rose	<i>Rosa hiproida</i>	Flower	Offerings	96.6
46	Rosaceae	Pear	<i>Pyrus pyrifolia</i>	Fruit	Food	20
47	Rubiaceae	Coffee	<i>Coffea arabica</i> L.	Seed	Drink	76.6
48	Rutaceae	Gambir	<i>Uncaria gambir</i>	Fruit	Offerings	63.3
49	Rutaceae	Orange	<i>Citrus sinensis</i>	Fruit	Food	23.3
50	Sapotaceae	Sapodilla	<i>Manilkara zapota</i>	Fruit	Food	26.6
51	Solanaceae	Chilli	<i>Capsicum frutescens</i> L	Fruit	Food seasoning	76.6
52	Solanaceae	Potato	<i>Solanum tuberosum</i> L	Bulbs	Food	43.3
53	Solanaceae	Tobacco	<i>Nicotiana tabacum</i> L.	Leaf	Offerings	40
54	Solanaceae	Tomato	<i>Lycopersicum esculentum</i>	Fruit	Seasoning Food, tumpeng decoration	63.3
55	Styracaceae	Incense	<i>Styrax benzoin</i> Dryand	Sap	Offerings	30
56	Zingiberaceae	Turmeric	<i>Curcuma domestica</i> Valeton	Root	Food seasoning	53.3
57	Zingiberaceae	Galangal	<i>Alpinia galanga</i> L.	Root	Food seasoning	46.6

The importance value of plants in Table 2 is obtained from the number of participants who mentioned plants in the Larung Offerings Kelud tradition divided by the total number of participants multiplied by one hundred. Plants that have a high importance value are rose (96.6), jasmine, ylang ylang and cantil (93.3), coconut and plantain (90). According to the elders, these plants are special or staple plants used for offerings.

DISCUSSION

Larung Offerings on Mount Kelud has the meaning of a tradition that has magical and sacred values as a form of gratitude to God Almighty carried out once a year in the month of Suro. The purpose of implementing this tradition is as a form of gratitude to God Almighty and a request for safety and a form of respect for the ruler of Mount Kelud. In line with the opinion of Yuliamalia (2019) that larung Offerings has goals such as preserving the culture of noble values that are unique and characteristic of local communities in continuing the ancestral heritage. Larung Offerings Kelud is held once a year in the month of Suro. The equipment in this tradition is in the form of offerings and cone and crops. The offerings used have their own meaning. The offerings in Larung Offerings Kelud consist of rice, vegetables, side dishes, fruits packed in the form of tumpeng (Bambang, 2016).

The tradition of Larung Offerings Kelud is started at 7 a.m by wearing black clothes. Based on direct participation in the Larung Offerings Kelud tradition and interviews with key informants, the implementation process is divided into two. The first is only carried out in the upper parking lot to the Kelud crater, namely departure, opening, cultural arts performances of jaran kepeng and dance offerings, remarks, legendary stories, reading prayers to "consecrate" tumpengan, reading prayers of various religions, distributing tumpeng food and crops to the community. The second is carried out to the crater, namely departure, reading prayers, burning ubo rampe, delivering offerings, reading prayers by elders, and launching offerings in the crater of Mount Kelud. The implementation to the crater of Mount Kelud is only carried out by certain people, namely trusted people who are authorized, respected, and respected by the people of Kediri as the caretaker of Mount Kelud. This process was different in the year before Covid-19, where the event process was carried out at the top of Mount Kelud. Based on interviews with key informants, the Larung Offerings tradition begins with the departure of the Kediri community, starting with Ratu Kilisuci and Prince Panji, pgenerated by Kediri girls and youths, dayang and prince's companion, to the top of Mount Kelud. This is also different from when Covid-19 hit. The process of Larung Offerings Kelud is only carried out by elders and confidants of elders.

The results obtained from interviews with key informants consisting of caretakers, elders, village heads, Larung Offerings Kelud committees who really understand the tradition of Larung Offerings Kelud are community perceptions. Local knowledge of the community related to Larung Offerings Mount Kelud is seen from eleven aspects and age, namely young (17-30 years), adult (31-44 years), middle-aged (45-60 years) and old (>60 years). Local knowledge of the Sugihwaras Village community at a young age related to the purpose and time of Larung Offerings is classified as good with a percentage of 67.85% and 75%, and classified as fair about the meaning of Larung Offerings Kelud, equipment, processes, types of plants, how to use with a percentage of 60.71%, plant organs 64.28%, and how to obtain plants 64.26%. Local knowledge of the Sugihwaras Village community at the age of adulthood is classified as good regarding the purpose and time, namely 75% and the type of plants, organs used, how to use and how to obtain 67.85%, classified as fair meaning and equipment 60.71%, and the process 57.14% and classified as low on the meaning of offerings and plants, namely 39.28%. Local knowledge of the Sugihwaras Village community at middle age is classified as very good regarding the purpose and time, namely 88.88% and 91.67% and good at 75% meaning, 80.55% equipment, 66.66% meaning of offerings, 72.22% process and 77.77% related to the type of plant, plant organs, how to use and how to obtain plants. Local knowledge of the Sugihwaras Village community in old age is very good, namely the meaning of 89.28%, the purpose of 92.85%, time 92.86%, equipment 80.55%, process 82.14%, types of plants, plant organs and how to obtain 85.71% and how to use 89.28% and classified as good on the meaning of offerings and the meaning of plant offerings, namely 78.57%. The results of community knowledge related to traditions and plants used in Larung Offerings Kelud related to the meaning of offerings and the meaning of plants are still lacking. This is because only elders and some people who know the meaning of these plants are classified as middle-aged and old.

The community has a relationship with plants that cannot be separated from the local knowledge of the community. The local knowledge of the community related to the plants of Larung Offerings Kelud varies by age. Young people (17-30 years old) have good perceptions regarding the purpose and time of implementation, moderately related to the meaning of Larung Offerings, equipment, processes, types of plants, how to use plant organs and how to obtain plants and are classified as less good regarding the meaning of offerings and the meaning of plants. Adults (31-44 years old) have good perceptions of the purpose and time, types of plants, organs used, how to use

and how to obtain, moderate in the meaning of Larung Offerings, equipment and processes and poor in the meaning of offerings and plants. Middle-aged (45-60 years) have very good perceptions related to the purpose and time, good at the meaning of Larung Offerings, equipment, the meaning of offerings, the process related to the type of plant, plant organs, how to use and how to obtain plants. Old age (>60) has a very good perception on all aspects and is classified as good on the meaning of offerings and the meaning of offering plants. This difference in knowledge can be due to different levels of knowledge and experience. The development and improvement of knowledge is dynamic and will increase with individual experience (Berk, 2017).

Community perceptions that are classified as good at all ages are the purpose and time of implementation. This is because Larung Offerings Kelud is held regularly in the month of Suro every year and is sacred so people know it well. The equipment, the meaning of the offerings and the process are quite well known because the community only follows and sees, not participating in the preparation and making. Community perceptions related to plant species, knowledge of types, parts, how to use and how to obtain are good. However, the meaning of plants is still lacking. This is because only elders and some people know the meaning of these plants so that the inheritance of the meaning of offerings and plants is needed at a young and mature age so that there will be no extinction of sacred traditions. It is important to create awareness among the younger generation about the use of traditionally used ritual plants (Geng *et al.*, 2017).

An overview of participants who know well about Larung Offerings Kelud and the plants used are participants who pgeneral an active role in the Larung Offerings Kelud tradition, have good knowledge of offerings and have the opinion that offerings are prayers in which the offerings use symbolic plants. An overview of participants who know but do not really understand the meaning is that participants who pgeneral a less active role argue that the Larung Offerings Kelud tradition is an annual tradition held every month of Suro without knowing the deep meaning of this tradition, participants only know by word of mouth. This participant thinks that offerings are a complement to the tradition, follows Larung Offerings because they follow along and are afraid of being bad and know the plants used without knowing their meaning. The picture of general participants is that they think that Larung Offerings Kelud is a cultural attraction, only limited to the spectacle of cultural entertainment. General participants think that offerings are a complement to tradition and offerings to other than God.

Local people's knowledge about plants serves to fulfill the needs of life. The community's local knowledge system about plants is important knowledge to sustain life (Pramita *et al.*, 2013). The Sugihwaras Village community's need for plants is used in the Larung Offerings tradition. The results obtained from interviews with key informants consisting of caretakers, elders, village heads, Larung Offerings Kelud committee obtained 57 types of plants in 33 families. The most widely used plant species come from the Poaceae family, with six plant species, namely bamboo, white sticky rice, corn, rice, lemongrass and black sticky rice. The Leguminosae and Poaceae families are the most widely used families in ceremonies as well as in daily life by the Hindu community of Jagaraga Village (Tantowi *et al.*, 2022).

Plant parts used in the Larung Offerings Kelud tradition are classified into roots, tubers, stems, leaves, flowers and seeds. Fruit is the most widely used part of the plant. Fruit is not only consumed as food, but can be used as a requirement to fulfill ritual needs (Suaria *et al.*, 2020). The part of the plant that is widely used is also the leaf. Leaves are used for offerings, containers, wrappers and food. Leaves are also one part of the plant that is easily obtained from other parts because its existence does not depend on the season (Ratnani *et al.*, 2021).

People utilize plants in accordance with their local knowledge. People have knowledge about magical and spiritual plants. Communities utilize plants for traditional ceremonial equipment differently depending on the knowledge and ethnic traditions of each region. Knowledge of plant species, socio-cultural activities, households, and ritual practices among various communities reflects interdependence and harmony with living things in the surrounding area (Mohanty *et al.*, 2011). The way plants are utilized is by being used as offerings, food, food seasonings, drinks, food supplements. The most common way of utilizing plants is used as food with a total of 27 types of plants followed by being used as offerings 14, food seasonings 13, tumpeng decoration three and food ingredients, food wrappers, food complements, and drinks only one.

Plants have many benefits and pgeneral an important role in tradition. The importance of plants analyzed will produce a value of fidelity level to find out how important the plants used in

Larung Offerings Kelud are. The highest value of plant use is rose (96.6%), jasmine, ylang ylang and cantillation (93.3%), plantain and coconut (90%), fragrant pandanus (86.6%). Plants that have a high importance value, based on interviews with elders, are key plants that must be present in offerings. The low importance value of plants are salak, apple, sapodilla (26.6%), orange (23.3%), mangosteen and pear (20%). This is because these plants cannot grow in the fields of Sugihwaras Village so the way to get them is by buying them in the market. Knowledge of the importance of plants can help communities to realize that plants are important for traditions that must continue so that people will make efforts to conserve plants. The application of biodiversity management through cultural practices can help strengthen cultural values that are compatible with conservation to maintain plant resources for biodiversity and to support human needs (Cunningham, 2014). The Sugihwaras Village community planted plants used for the Larung Offerings Kelud tradition such as roses, jasmine, ylang ylang, kantil and pineapple in their yards, gardens or rice fields. This shows that the community has made efforts to conserve plants for tradition. However, the community must continue to maintain and care for plants so that the tradition can run smoothly and needs can be met. Good plants can live in the surrounding environment is one of the potentials that must be maintained and utilized with Good, so that environmental balance can occur (Sartini, 2004).

CONCLUSION

Based on the research, it can be concluded that the people of Sugihwaras village have diverse local knowledge about Larung Offerings Kelud. Most people understand this tradition as a cultural heritage that aims to honor ancestors, maintain the balance of nature and as an expression of gratitude. However, there are different views among the community, where general participants tend to consider Larung Offerings as mere entertainment and symbolic ceremonies, while groups who understand the tradition better see it as an important part of spiritual and social values. The introduction of traditions along with plant species and their meanings needs to be carried out especially for the younger generation so that traditional knowledge is not lost. Research on local knowledge should be well documented because it is important information and plant diversity and culture in Indonesia remain sustainable.

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CONFLICT OF INTEREST

There is no conflict of interest.

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