

# Ethnobiology of plants and animals used as *ubarampe* in the *Kepungan* tradition of the Javanese Community of Somongari, Purworejo District, Indonesia

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Manuscript received: 3 June 2024. Revision accepted: 12 August 2024.

**Abstract.** Adinugraha F, Zubaidah S, Lestari SR, Chua KH. 2024. Ethnobiology of plants and animals used as *ubarampe* in the *Kepungan* tradition of the Javanese Community of Somongari, Purworejo District, Indonesia. *Biodiversitas* 25: 2521-2532. The Somongari Javanese community of Purworejo District, Central Java Province, Indonesia utilizes plants and animals as traditional ritual equipment, called *ubarampe*, which are offerings in the *Kepungan* tradition. The concept of *ubarampe*, comprising plants and animals, holds a distinct purpose and philosophical significance for the Somongari Javanese community. Unfortunately, knowledge about *ubarampe* in the *Kepungan* tradition has only been transmitted through oral and demonstration, and not yet been recorded in written and visual documentation, resulting in the younger generation being unaware of the use of plants and animals for *ubarampe* and their associated philosophical meanings. This study examines the *ubarampe* in the *Kepungan* tradition, including the types and their philosophical meanings as well as the plants and animals utilized. This study documented 19 types of *ubarampe* used by Somongari Javanese community in the *Kepungan* tradition, each of which utilizes plants and animals. Some plants and animals require cooking first, while others are directly used as *ubarampe* without cooking. The plant specimens utilized in *ubarampe* include eudicots (10 species), monocots (11 species), and magnoliids (1 species). The botanical components include leaves, flowers, seeds, fruits, bulbs, tubers, and rhizomes. Only one animal species from the Aves class was utilized for *ubarampe*. The utilization of species in *ubarampe* is the result of philosophical considerations of the ancestors of the Somongari Javanese community regarding the relationship between humans, nature, God, and ancestors. Consequently, the findings of this research are anticipated to facilitate an enhanced comprehension of plant and animal biodiversity as a valuable cultural legacy for present and future generations.

**Keywords:** Biodiversity, offerings, philosophy, Somongari Javanese Community, *ubarampe*

## INTRODUCTION

The Somongari Javanese community in Purworejo District, Central Java Province, Indonesia utilizes various plants and animals in their traditional rituals. The aforementioned plants and animals fabricate a ritual apparatus called *ubarampe*, or offerings. *Ubarampe*, or offerings, is the term used to describe the equipments utilized by certain communities to perform traditional rituals, such as those performed by the Somongari Javanese community. *Ubarampe* typically draws upon the biodiversity of the surrounding community, including plants (Arce and Cerdas 2019; Permanasari 2017; Sujarwo et al. 2020), mushrooms (Arce and Cerdas 2019), and animals (Permanasari 2017; Salmi et al. 2018). *Ubarampe* plays a pivotal role in rituals, as it holds a specific significance (Sujarwo et al. 2020).

In the Somongari Javanese community, *ubarampe* is a central element in traditional ritual activities. During traditional events, the community comes and prays for the *Kepungan*, which can be understood as a practice of gratitude towards God and reverence towards ancestors.

The tradition of feast and prayer as a form of gratitude for safety, strength, and wealth is a significant aspect of the gratitude event (Austiyana 2021; Sulistyorini et al. 2022). The offering of *ubarampe* is a prominent manifestation of this tradition. Usually, *ubarampe* are presented to God or gods and ancestors (Astina et al. 2021; Ndemanu 2018; Saddhono et al. 2019).

The utilization of plants and animals for *ubarampe* by the Somongari Javanese community represents a form of indigenous knowledge. Indigenous knowledge is defined as knowledge that is passed down from ancestors to the next generations. Indigenous knowledge can be expressed in various forms, including principles, skills, practices, rituals, and customs (Adam et al. 2019). These are developed and passed down from generation to generation by a particular race or tribe (Adam et al. 2019; Cajete 2020; Gonçalves et al. 2021). Indigenous knowledge is predominantly transmitted through oral tradition and demonstration (Malekani 2020; Ogar et al. 2020).

The integration of indigenous knowledge in natural resource management has been demonstrated to be an efficacious approach for the conservation of biodiversity

(Kosoe et al. 2020; Ogar et al. 2020). This is due to the intrinsic connection between biodiversity and indigenous knowledge (Adam et al. 2019; Ali 2021; Kosoe et al. 2020), as evidenced by the use of plants and animals in *ubarampe*. However, because undocumented, the oral and unwritten inheritance of indigenous knowledge, such as *ubarampe*, might gradually erode its knowledge base.

The utilization of plants and animals as *ubarampe* has been the subject of study by numerous researchers. Arce and Cerdas's research (2019) examined the ritual consumption of mushrooms and psychoactive plants by ancestors in Costa Rica. Permanasari's research (2017) examined the philosophy of bananas for Javanese cultural rituals. Research by Sujarwo et al. (2020) investigated the patterns of plant use in religious offerings in Bali (Indonesia). Nonetheless, the previous research has not discussed the *ubarampe* as indigenous knowledge from an ethnobiological and philosophical perspective. Ethnobiology is a discipline that integrates local and global knowledge, connects cultural and academic approaches, and links biological and social aspects of human experience with the environment (Albuquerque and Alves 2016). The study of *ubarampe* in terms of the use of plants and animals associated with philosophical meaning has yet to be undertaken in the Somongari Javanese community, where it would undoubtedly yield valuable insights.

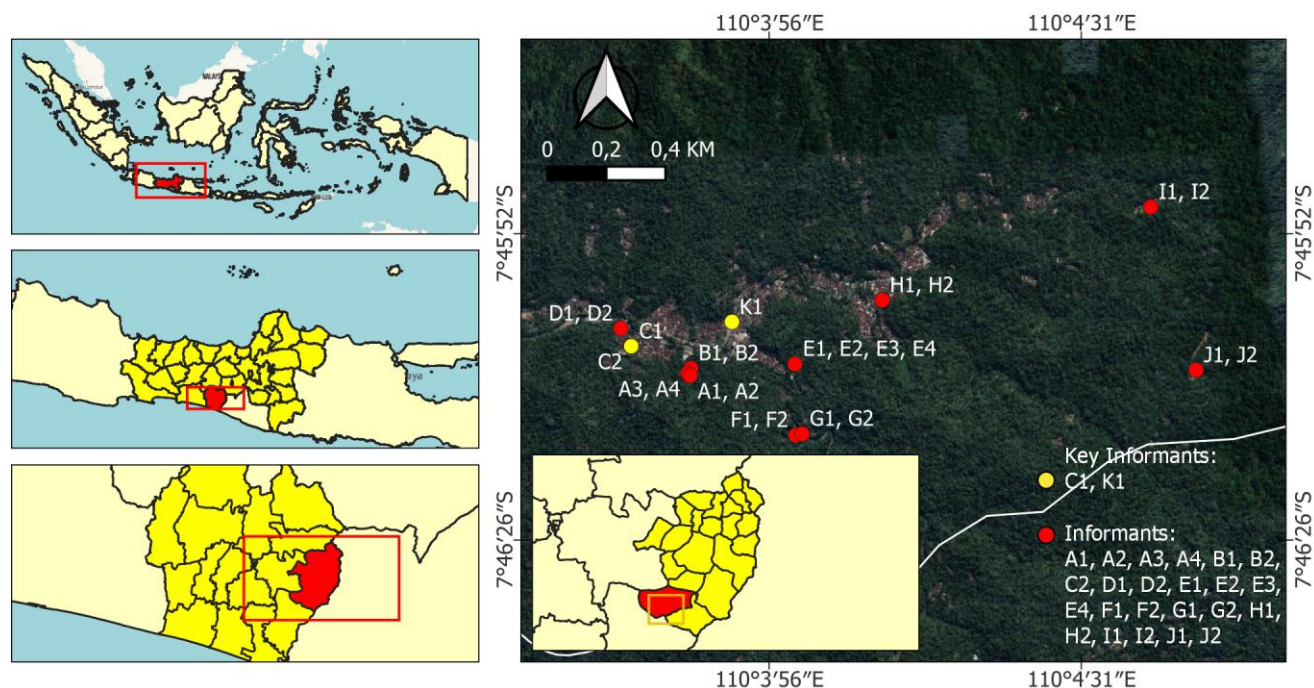
*Ubarampe* is not merely a ritual tool; it also employs unique species with philosophies that are not widely known, particularly among younger generations. There is an increasing trend that the younger generation respects foreign culture more than local culture, resulting in a lack of awareness among the younger generation to maintain local culture (Dharma et al. 2021), including the utilization of species and culture-related philosophies. These species

and philosophies are related to the harmony of nature, humans, ancestors, and God. The Somongari Javanese community has employed the use of plants and animals in the construction of *ubarampe* for centuries. The selection of these plants and animals is meticulous and cannot be substituted with other species, as they are imbued with specific philosophical meanings. The arrangement and processing of these plants and animals into distinct *ubarampe* types is largely oral and demonstrative. As there is a paucity of written documentation on *ubarampe*, the existence of written documentation will help prevent the extinction of this knowledge and teach the younger generation about the harmony of human life with biodiversity. This research aims to analyze the types of *ubarampe* that must be used in the *Kepungan* tradition of the Javanese Somongari community, including their philosophical meanings. At the end of this research, an educational video is embedded to teach *ubarampe* to the younger generation as a concrete manifestation of biodiversity conservation through indigenous knowledge.

## MATERIALS AND METHODS

### Study area

This research was conducted in Somongari Village, Kaligesing Subdistrict, Purworejo District, Central Java Province, Indonesia (Figure 1). The population under investigation in this study is the Javanese community of Somongari, which adheres to the *Kepungan* tradition. In 2022, the population of Somongari Village was 2,809 individuals, comprising 1,411 men and 1,398 women (Pemdes Somongari 2021, 2022).



**Figure 1.** Map of study area showing the distribution of informants to research the *ubarampe* in the *Kepungan* tradition in Somongari Village, Kaligesing Sub-district, Purworejo District, Central Java Province, Indonesia

### Data collection procedure

This research used exploratory research methods within the Javanese Somongari community. The exploratory research was conducted over a period of 9 months, from July 8, 2022, to April 23, 2023. The research employed ethnobiology tenets, which examined indigenous knowledge regarding philosophy and biodiversity. This research employed the guidebook by Albuquerque et al. (2014a).

The sample consisted of 25 informants, comprising 23 villagers who adhere to the *Kepungan* tradition and two key informants who are traditional elders, or *sesepuh*. The sampling technique employed was snowball random sampling. This technique is employed for the purposeful selection of informants, whose role is to explore local systems within a community (Albuquerque et al. 2014b). The informants are selected based on their social legitimacy and recognized expertise in a specific area of knowledge (Albuquerque et al. 2014b). The criteria for informants were based on the identification of villagers who were knowledgeable about the *ubarampe* and engaged in the *Kepungan* tradition. The selection of informants was based on input from previous informants who provided guidance on the identification of the next informant, who demonstrated a more comprehensive understanding of the *ubarampe* in the *Kepungan* tradition. It should be noted that not all informants possessed comprehensive knowledge regarding the various types of *ubarampe* and their associated meanings. This was due to the fact that their role was merely that of a traditional bearer. Consequently, the inclusion of two key informants, who were traditional elders, or *sesepuh*, proved to be invaluable in this study. These key informants were able to provide insights that were not only accurate but also well-informed, given their involvement in the recital of prayers, or *ikrar*, related to the *ubarampe* during the *Kepungan*.

The interview technique was employed to elicit data pertaining to the types of *ubarampe*, the utilization of plants and animals associated with each type of *ubarampe*, the purposes behind the offering of *ubarampe*, and the philosophical significance of *ubarampe*. The interview employs cross-referenced and repeated information techniques (Albuquerque et al. 2014b) to ensure the validity of the data, which is corroborated by key informants. The distribution of informants is presented in Figure 1.

The interview was also supported with the use of documentation and observation. These included audio and video documentation of interviews and observations of the *ubarampe* in the *Kepungan* tradition. Documentation and observation were conducted throughout the research period, depending on the information of interest. These observations were guided by key informants and other informants involved in the research. The *ubarampe* was observed on eight occasions during the course of the *Kepungan* tradition.

### Data analysis

The data were subjected to qualitative analysis, which entailed reducing data from informants and describing

observations. The data obtained from informants and key informants was tabulated in a table and subsequently subjected to a process of selection, whereby terms or explanations that were deemed to have similar meanings were chosen. The resulting terms or explanations that have similar meanings and explanations represent the final results of the interviews conducted as part of this study.

Following the conclusion of this exploratory research, a video was produced to educate the public about the biodiversity value of *ubarampe*, based on the findings of the research team. A review of the literature was conducted to analyze data related to plant and animal species. The nomenclature of all plant species adheres to the guidelines set forth in the APG IV system of Byng et al. (2016), while animal species are classified in accordance with the taxonomic framework proposed by Lal (2010).

## RESULTS AND DISCUSSION

### *Kepungan* tradition by the Somongari Javanese community

The Somongari Javanese community resides in Somongari Village, within the Kaligesing Sub-district of the Purworejo Regency in Indonesia. The village's topography is characterized by hills, which are located in proximity to the Menoreh hills. This geographical feature is advantageous, as it maintains biodiversity and indigenous knowledge and is less susceptible to external influences. Furthermore, the village's geographical setting fosters a sense of harmony between humans, nature, ancestors, and God. This harmony is exemplified by the traditional rituals frequently observed by the Somongari Javanese community.

The implementation of traditional rituals in the Somongari Javanese community is determined using the Javanese calendar by the customary task force, or, *satgas adat*, a group of elders who act as advisors in implementing customary rituals. The Javanese calendar uses the term *sasi* for months, and there is also *dina pasaran*, which indicates the day in the Javanese calendar. The determination of the implementation of the tradition is contingent upon certain calculations, which have been agreed upon by the customary task force.

The customary task force determines the day of customary rituals, including *Punggahan*, *Selikuran*, *Suran*, and *Jolenan*. *Punggahan* is held when the village community is about to enter *Sasi Pasa*, the month of fasting observed by the Somongari Javanese community (or Ramadhan in Muslim community) before Eid al-Fitr. *Selikuran* is held when the village community enters the 21<sup>st</sup> day of *Sasi Pasa* (month of Ramadhan). *Suran* is held on *Sasi Sura*. *Suran* is held every two years. *Saparan*, or *Jolenan*, is held on *Sasi Sapar*. The ritual is always carried out by gathering and praying in the village's house, hall of the village, or grave. Figure 2 illustrates the traditional rituals of the Somongari Javanese community.

Every traditional ritual of the Somongari Javanese community is conducted by gathering to pray. This practice, often called a *Kepungan*, is a common occurrence



within the Javanese community. The *Kepungan* is typically led by the *kaum*, or religious leaders, who facilitate the prayer. Villagers engage in prayers with guidance from the people or religious leaders. The gathering is a gesture of gratitude and requesting prayers from God and their ancestors. The tradition of *Kepungan* always entails the provision of *ubarampe* by the villagers.

The *ubarampe* described in this article must be present in every *Kepungan*. The *ubarampe* is pledged, or *ikrar* by the *kaum*, or the individual responsible for leading the prayers, with the assistance of symbols from the *ubarampe*. In Figure 2, individuals also present additional *ubarampe* that exemplify their traditional rituals. This is because each traditional ritual employs its own distinctive set of *ubarampe*. The *ubarampe* is a supplementary element within the *Kepungan* tradition observed in Somongari Village.

### Type and philosophy of *ubarampe* in the Somongari Javanese community

*Ubarampe* has been observed among the Somongari Javanese community since ancient times. According to key informants, *ubarampe* represents a cultural acculturation from previous beliefs, namely Hinduism and Javanese beliefs, before Islam entered Java. Until the writing of this article, the majority of the Somongari Javanese population was Muslim. This is also evident in the prayers used in the rituals, which emphasize Islamic teachings. *Ubarampe* is still employed to sustain the tradition as a form of spirituality directed towards ancestors and God.

The spirituality symbolized by the *ubarampe* can be enhanced by the presence of products made from plants and animals. Some plants used to prepare *ubarampe* must be processed first into ethnic or traditional food products. In addition, some plants can be directly utilized for *ubarampe* without being processed or cooked first. Animals used for *ubarampe* also need to be cooked first before being used for *ubarampe*. In the *Kepungan* tradition, the *ubarampe* is situated at the front and close to the individual engaged in reciting the prayer or making the pledge.

The *ubarampe* that is pledged as a means to pray consists of 19 types of *ubarampe* that are used as symbols in prayer. The types of *ubarampe* are *Bonang-baning*, *Sekar Setaman*, *Jenang Abrit Pethak*, *Kepala kependhem*, *Jajan pasar/jajan rakan*, *Rujak Degan*, *Adhem-adhem*, *Gedhang Raja*, *Sekul suci*, *Inkung*, *Golong cacah 12*, *Kupat*, *Lepet*, *Srabi*, *Sekul lulut*, *Sekul byar*, *Sekul punar*, *Sekul tumpeng*, and *Sekul ambeng*. The types of *ubarampe* are presented in Figure 3.

Once the prayer has been concluded, the assembled villagers will partake of a variety of *ubarampe*, a traditional food. Some of the *ubarampe* are traditional foods and edible fruits. However, there are also types of *ubarampe* that are only used as ritual requirements, such as flowers, leaves, water, and small change. The 19 types of *ubarampe* have a philosophical significance for the Javanese community. The villagers adhere to this tradition because they adhere to the advice of their ancestors and wish to preserve their heritage.



**Figure 2.** The *Kepungan* tradition in Somagari Village, Purworejo District, Central Java Province, Indonesia. The *Kepungan* tradition is carried out by villagers when performing traditional rituals: A. *Punggahan*; B. *Selikuran*; C. *Suran*; and D. *Saparan* or *Jolenan*. The villagers have granted permission for the publication of the photographs





**Figure 3.** *Ubarampe*, or offerings in the *Kepungan* tradition by Somongari Javanese community, Purworejo District, Central Java Province, Indonesia

We conducted interviews with informants and key informants to gain insight into the plants and animals used in the *ubarampe*, the philosophical meaning, and the purpose of these *ubarampe*, or offerings. The philosophical meaning of each *ubarampe* is typically a life guide, particularly for the Javanese population of Somongari Village. A detailed analysis of the 19 types of *ubarampe* is presented in Table 1.

### Plants and animals used in the *ubarampe*

*Ubarampe* demonstrates the intimate connection between indigenous knowledge and biodiversity. Using plants and animals in *ubarampe* represents the indirect value of biodiversity, namely the value of spirituality and culture. Concerning biodiversity, the *Kepungan* tradition encompasses 22 species utilized in *ubarampe*. An analysis of the botanical specimens utilized in *ubarampe* revealed that it consists of ten species belonging to the eudicots, 11 species classified as monocots, and a species categorized as magnoliids. Eudicots represent the largest group of angiosperms, comprising a basal grade and a large core eudicot clade (Forest and Chase 2023; Ronse De Craene 2012). They are distinguished by the singularity of tricolpate pollen grains, or their derivatives (Forest and Chase 2023). A primary distinction between monocots and other angiosperms is the presence of a single cotyledon (in contrast to the two cotyledons observed in other

angiosperms) (Chase 2004). Monocot leaves are frequently elongated and narrow, exhibiting straight, parallel venation and a lack of branching in the stems (Perner and Michael 2020). Magnoliids represent the sister group to monocots and eudicots (Shen et al. 2023). The magnoliid clade is distinguished by the presence of paracytic stomata, which feature a pair of distinct lateral auxiliary cells that wrap around the guard cell (Rudall 2023).

The plant components utilized for *ubarampe* encompass a diverse array of organs, including leaves, flowers, seeds, fruits, bulbs, tubers, and rhizomes. In the context of ritual traditions observed in certain regions, these plant components frequently emerge as integral elements within traditional rituals. Leaves are typically utilized as wrappers for *ubarampe* (Permanasari 2017) and specific offerings (Sujarwo et al. 2020). In some cases, flowers placed in *ubarampe* are positioned in containers of water (Permanasari 2017) or situated freely within containers of banana leaves or bowls (Sujarwo et al. 2020; Sulistyorini et al. 2022). Fruits, tubers, and rhizomes are typically presented for specific purposes (Permanasari 2017; Sujarwo et al. 2020) and subsequently consumed at the conclusion of the event, which is referred to as "*nggaoki*" in the local language. Additionally, seeds of specific plants are utilized in the *ubarampe* (Sujarwo et al. 2020), typically undergoing prior processing to create traditional food items within the *ubarampe*.

**Table 1.** The types of *ubarampe* in the *Kepungan* tradition are based on the species used and their philosophical meanings by Somongari Javanese community, in Purworejo District, Central Java Province, Indonesia

<i>Ubarampe</i> type	Meaning	Organisms and objects used in the ritual	Offering Purpose	The symbol, or <i>saloka</i> in the Javanese tradition
<i>Bonang-baning</i>	<i>Piring utawa mangkok sing diwenei godhong dhadhap serep, banyu, lan dhuwit recehan.</i> (A plate or bowl filled with <i>dadap</i> leaves, water, and coins).	<i>Dadap serep</i> ( <i>Erythrina variegata</i> L.); <i>Banyu</i> (Water); <i>Dhuwit receh</i> (Small nominal money)	<i>Asung bekti kagem sedherek sepuh kawitan.</i> (Offered to brothers from the beginning until now, for all brothers).	<i>Ngadhemake pikir lan rasa. Supados diparingi kasarasan.</i> (Calm or relaxed mood and hopefully given health).
<i>Sekar Setaman</i>	<i>Piring utawa mangkok sing diwenei kembang mawar, banyu, lan dhuwit recehan.</i> (A plate or bowl filled with roses, water, and coins).	<i>Mawar</i> ( <i>Rosa</i> sp.); <i>Banyu</i> (Water) ; <i>Dhuwit receh</i> (Small nominal money)	<i>Asung bekti kagem malaekat aruman ingkang paring gandarasa tiyasing gesang.</i> (Offered to the angel who gives the spirit of life).	<i>Manungsa lair amarga roh saking malaekat aruman sing gawe manungsa nindake pikir.</i> (Humans were born because there is an angel named <i>Aruman</i> who gives them a spirit so that humans can do and think). <i>Manungsa saka bapa lan biyung. Warna putih nglambangke sperma lan warna abang nglambangke rah wektu 'haid'.</i> (Humans come from father and mother. The white color represents sperm, and the red color represents menstrual blood).
<i>Jenang Abrit Pethak</i>	<i>Jenang saka glepung beras sing warna abang diwenehi gula klapa lan sing warna putih diwenei uyah.</i> ( <i>Jenang</i> porridge is made from rice flour. Red <i>jenang</i> is mixed with coconut sugar, and white <i>jenang</i> is mixed with salt).	<i>Beras</i> ( <i>Oryza sativa</i> L.); <i>Klapa</i> ( <i>Cocos nucifera</i> L.).	No purpose	<i>Nalika budidaya utawa tani diajab bisa ngasilake asil sing maksimal.</i> (When cultivating or farming, it is hoped that it will produce maximum yields).
<i>Kepala kependhem</i>	<i>Woh utawa pala sing nang lemah banjur didang: tela, uwi, kirut, lan tales.</i> (Fruits or tubers that grow on the ground and are then steamed: cassava, sweet potato, irut, and taro).	<i>Tela pohung</i> ( <i>Manihot esculenta</i> Crantz.); <i>Uwi</i> ( <i>Ipomoea batatas</i> Lamarck.); <i>Irut</i> ( <i>Maranta arundinacea</i> L.); <i>Tales</i> ( <i>Colocasia esculenta</i> (L.) Schott)	<i>Asung bekti kagem kyai among tani dan nyai among tani.</i> (Offered to gods or famer ancestors).	
<i>Jajan pasar/jajan rakan</i>	<i>Jenis panganan sing seka pasar, kayata kacang goreng, mentimun, cemilan, lan roti.</i> (Types of snacks in the market, such as fried peanuts, chips, and bread).	<i>Timun</i> ( <i>Cucumis sativus</i> L.); <i>Kacang brol</i> ( <i>Arachis hypogaea</i> L.); Various foods are sold in the market.	<i>Asung bekti kagem tiyang ingkang nyiptaaken dinten, pasaran, sasi, taun, lan windhu.</i> (Dedicated to the person who created the day, <i>pasaran</i> (Javanese), month, year, and cycle of 8 years in Java).	<i>Nalika nindakake, kita kudu ngetung lan nimbang risiko sing bakal kedadeyan.</i> (When doing something, we have to calculate and weigh the risks that will occur).
<i>Rujak Degan</i>	<i>Degan sing banyu degane diweheni gula kelapa.</i> (A young coconut whose coconut water is added with coconut sugar).	<i>Degan/Klapa</i> ( <i>Cocos nucifera</i> L.)	<i>Asung bekti kagem sedherek sepuh (kawah/ketuban lan rah) kacecer ing plataran nganti keli tekan segara (sang kamadlewer lunturing getih).</i> (Offered to older siblings (amniotic fluid and blood) that were scattered in the yard until they were washed away into the sea).	<i>Roh sing ana ing banyu ketuban lan rah (getih) ora ngganggu sapa wae.</i> (The spirit in the amniotic fluid and blood does not bother anyone).
<i>Adhem-adheman</i>	<i>Godhong kelor lan pace sing dibungkus godhong gedhang banjur didang.</i> ( <i>Moringa</i> and <i>Noni</i> leaves are wrapped in banana leaves and then steamed).	<i>Kelor</i> ( <i>Moringa oleifera</i> ); <i>Pace</i> ( <i>Morinda citrifolia</i> L.); <i>Gedhang</i> ( <i>Musa</i> sp.)	<i>Asung bekti kagem syahwat lungguhing kuwat.</i> (Offered to <i>syahwat lungguhing kuwat</i> ).	<i>Ngadhemke pikir.</i> (Cools the mind).
<i>Gedhang Raja</i>	<i>Gedhang raja.</i> (Banana “raja”).	<i>Gedhang raja</i> ( <i>Musa x paradisiaca</i> cv. 'Raja')	<i>Asung bekti kagem Gusti Hyang Maha Agung.</i> (Offered to God Almighty).	<i>Diwenehi agung ganjarane lan luhur pangaribawane.</i> (Given great gifts and noble authority or degree).

<i>Sekul suci</i>	<i>Sega setengah mateng sing diwenehi uyah, godhong salam, lan santen banjur dikukus.</i> (Half-cooked rice is seasoned with salt, bay leaves, and coconut milk and then steamed).	<i>Beras (Oryza sativa L.); Salam (Syzygium polyanthum (Wight) Walpers); Klapa (Cocos nucifera)</i>	<i>Sekul suci lan Ingkung: Asung bekti kagem Nabi Muhammad, Adam Rasul, Putra, Garwa, lan sekabatipun.</i> (Sekul suci and Ingkung: Offered to the Prophet Muhammad, Adam the Apostle, his children, wife and friends).	<i>Nyuwun pangapunten menawi wonten kalepatan anggenipun ngawontenaken acara Kepungan amargi ngrusak taneman utawi mateni kewan kangge ritual adat.</i> (Ask God for forgiveness if there is a mistake in holding the Kepungan event because it damages plants or kills animals for traditional ceremonies).
<i>Ingkung</i>	<i>Pitik kampung utuh sing dimasak nganggo bumbu rempah (tumbar, merica, bawang, kunir, uyah, gula klapa, lan jahe) ditambah laos lan santen.</i> (Whole free-range chicken cooked using spices (coriander, pepper, garlic, turmeric, salt, coconut sugar, and ginger) plus galangal and coconut milk).	<i>Pitik Kampung (Gallus domesticus L.); Tumbar (Coriandrum sativum L.); Mrica (Piper nigrum L.); Bawang (Allium sativum L.); Kunir (Curcuma longa Linn Klapa (Cocos nucifera L.); Jahe (Zingiber officinale); Laos (Alpinia galanga)</i>		
<i>Golong cacah 12</i>	<i>Sega sing digawe bunder lan dibungkus godhong gedhang.</i> (The rice is made round and wrapped in banana leaves).	<i>Beras (Oryza sativa L.); Gedhang (Musa sp.)</i>	<i>Asung bekti kagem: 1) Leluhur ingkang manggen wonten griya lan pekarangan; 2) Leluhur ingkang manggen wonten jlanggrung prosekawanan; dan 3) Leluhur ingkang manggen wonten kiblata sekawan gangsal pancer.</i> (Offered to: 1) Ancestors in the house and yard; 2) Ancestors at the crossroads; and 3) Ancestors occupying the points of the wind).	<i>Golongake tekad.</i> (Make a determination or goal).
<i>Kupat</i>	<i>Sega sing dimasak nganggo janur.</i> (Rice cooked using wrapped-young coconut leaves).	<i>Beras (Oryza sativa L.); Klapa (Cocos nucifera L.)</i>	<i>Kupat, lepet, srabi: Asung bekti kagem Baginda Ali lumintu Mbok Dewi Siti Fatimah.</i> (Kupat, lepet, srabi: Offered to Baginda Ali and Dewi Siti Fatimah)	<i>Kupat: Nyuwun kalepatan kanggo pepadha manungsa.</i> (Kupat: Apologize to fellow human beings)
<i>Lepet</i>	<i>Ketan sing dimasak nganggo janur.</i> (Glutinous rice cooked using wrapped-coconut leaves).	<i>Ketan (Oryza sativa L. Var. Glutinosa); Klapa (Cocos nucifera L.)</i>		<i>Lepet lan Srabi: Tirakat mesuraga.</i> (Lepet and Srabi: The form of a symbol of fasting for worldly things).
<i>Srabi</i>	<i>Olahan glepung beras diwenehi santen lan uyah.</i> (Processed rice flour with coconut milk and salt).	<i>Beras (Oryza sativa L.); Klapa (Cocos nucifera L.)</i>		
<i>Sekul lulut</i>	<i>Sega seka beras ketan sing digawe bunder.</i> (Rice from glutinous rice, which is made round).	<i>Ketan (Oryza sativa L. Var. Glutinosa);</i>	<i>Asung bekti kagem Kyai Joko Lulut lan Nyai Joko Lulut.</i> (Offered to Kyai Joko Lulut and Nyai Joko Lulut).	<i>Ngraketake paseduluran.</i> (Bond brotherhood)
<i>Sekul byar</i>	<i>Sega saka beras sing dimasak setengah mateng.</i> (Half cooked rice).	<i>Beras (Oryza sativa L.)</i>	No purpose	<i>Ngluwari nadzar lan nglakoni apa sing diangen-angen.</i> (Free from dreams and desires that have been achieved).
<i>Sekul punar</i>	<i>Sega saka beras sing dinei duduh janganan.</i> (Cooked rice topped with vegetable gravy).	<i>Beras (Oryza sativa L.)</i>	No purpose	<i>Nglebet ngluwari ngimpi utawa sing diimpekake ala</i> (Free from dreams, or if the dreams are bad).
<i>Sekul tumpeng</i>	<i>Sega saka beras sing digawe bentuk kerucut dilemeki godhong gedhang.</i> (Cone-shaped rice and topped with banana leaves).	<i>Beras (Oryza sativa L.); Gedhang (Musa sp.)</i>	<i>Asung bekti kagem Nabi Adam dan Ibu Hawa.</i> (Offered to Prophet Adam and Mother Eve)	<i>Manungsa saya tuwa saya eling yen diciptaake Gusti Allah uga wajib manembah marang Gusti Allah.</i> (The older people are, the more they remember God and are obliged to worship God).

<i>Sekul ambeng</i>	<i>Sega saka beras sing digawe bentuk setengah bunder lan dilemeki godhong gedhang. (Cooked rice that is formed in half rounds and put on banana leaves).</i>	<i>Beras (Oryza sativa L.)</i>	<i>Asung bekti kagem: 1) leluhur sing trukayasa desa; 2) leluhur sing sumare ing tanah Mekah Medinah lumintu Pajang, Bagelen, lan desa; 3) Leluhur wiwit tapel Adam sakmrikinipun. (Offered to: 1) Ancestors who opened villages; 2. Ancestors in Mecca, Medina, Pajang, Bagelen, and villages; 3) Early ancestors of Adam to the present).</i>	<i>Nggambarake bumi supaya wong-wong eling marang leluhur sing wis pernah nempati bumi. (Depicting the earth, reminding humans of their ancestors who once inhabited the earth).</i>
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**Table 2.** Plants and animals used in *ubarampe* in the *Kepungan* tradition by Somongari Javanese community, Purworejo District, Central Java Province, Indonesia

Javanese local name	Scientific name	Family	Clade/Class*	Parts used
<b>Plants</b>				
<i>Dadap serep</i>	<i>Erythrina variegata</i> L.	Fabaceae	Eudicots	Leaf
<i>Mawar</i>	<i>Rosa</i> sp.	Rosaceae	Eudicots	Flower
<i>Beras</i> or <i>Pari</i>	<i>Oryza sativa</i> L.	Poaceae	Monocots	Seed
<i>Klapa/Degan</i>	<i>Cocos nucifera</i> L.	Aracaceae	Monocots	Fruit
<i>Tela pohung</i>	<i>Manihot esculenta</i> Crantz.	Euphorbiaceae	Eudicots	Tuber
<i>Uwi</i>	<i>Ipomoea batatas</i> Lamarck.	Convolvulaceae	Eudicots	Tuber
<i>Irut</i>	<i>Maranta arundinacea</i> L.	Marantaceae	Monocots	Tuber
<i>Tales</i>	<i>Colocasia esculenta</i> (L.) Schott	Araceae	Monocots	Tuber
<i>Timun</i>	<i>Cucumis sativus</i> L.	Cucurbitaceae	Eudicots	Fruit
<i>Kacang brol</i>	<i>Arachis hypogaea</i> L.	Fabaceae	Eudicots	Seed
<i>Kelor</i>	<i>Moringa oleifera</i> Lam.	Moringaceae	Eudicots	Leaf
<i>Pace</i>	<i>Morinda citrifolia</i> L.	Rubiaceae	Eudicots	Leaf
<i>Gedhang Raja</i>	<i>Musa x paradisiaca</i> cv. 'Raja'	Musaceae	Monocots	Fruit
<i>Gedhang</i>	<i>Musa</i> sp.	Musaceae	Monocots	Leaf
<i>Salam</i>	<i>Syzygium polyanthum</i> (Wight) Walpers	Myrtaceae	Eudicots	Leaf
<i>Tumbar</i>	<i>Coriandrum sativum</i> L.	Apiaceae	Eudicots	Seed
<i>Mrica</i>	<i>Piper nigrum</i> L.	Piperaceae	Magnoliids	Seed
<i>Bawang</i>	<i>Allium sativum</i> L.	Amaryllidaceae	Monocots	Bulb
<i>Kunir</i>	<i>Curcuma longa</i> Linn.	Zingiberaceae	Monocots	Rhizome
<i>Jahe</i>	<i>Zingiber officinale</i> Roscoe.	Zingiberaceae	Monocots	Rhizome
<i>Laos</i>	<i>Alpinia galanga</i> (L.) Willd.	Zingiberaceae	Monocots	Rhizome
<i>Ketan</i>	<i>Oryza sativa</i> L. var. <i>Glutinosa</i>	Poaceae	Monocots	Seed
<b>Animal</b>				
<i>Pitik Kampung</i>	<i>Gallus domesticus</i> L.	Phasianidae	Aves	All body

Note: \*: Clade based on phylogeny for plants and class based on taxonomy for animal

There is only one animal species used for *ubarampe*. The animal utilized in the *ubarampe* is a chicken belonging to the Class Aves. Aves, the scientific name for birds, is derived from the Latin word "avis" meaning "bird" (Hickman et al. 2024; Pough and Janis 2019). Birds are distinguished by their feathers, beaks, and wings and are often associated with their ability to fly (Pough and Janis 2019; Slobodian et al. 2021). All components of the chicken's anatomy, save its feathers, are utilized, including all regions from the head to the feet. Before consumption, the chicken must be prepared under traditional culinary practices, which involve cooking it into a dish known as *ingkung*. Table 2 presents a comprehensive enumeration of the various species of *ubarampe*.

The primary objective of *ubarampe* is to facilitate a direct connection with God. The Javanese community in Somongari Village continues to rely on God. Reliance on God is a conscious and confident attitude to depend on God through prayer (Büssing et al. 2015). The type of *ubarampe*, namely *Gedhang raja* (*Musa x paradisiaca* cv. 'Raja'), symbolizes human gratitude to God for the fortune given. Banana plants occupy a significant position in Javanese culture, serving as a source of food and drink and as offerings for various ceremonies and rituals (Permanasari 2017). Furthermore, *Sekar setaman* in the form of roses are presented to the angel who gives spirit.

*Ubarampe* is also meant for the ancestors of the Somongari community. The ancestors are the people who founded the village, ancestors from the Kingdom of Bagelen and before, and ancestors of prophets in the Middle East. Ancestors are the spirits of people who lived on this earth, died, and went to live in a special place (Koranteng-Green 2018). The relationship between the villagers and the ancestors is manifested in the *ubarampe*, namely *Kepala kependhem*, *Jajan pasar*, *Rujak degan*, *Sekul suci*, *Inkung*, *Golong cacah 12*, *Kupat*, *Lepet*, *Srabi*, *Sekul lulut*, *Sekul tumpeng*, and *Sekul ambeng*. The attitude of respecting and remembering the ancestors shows the value of modesty. Modesty is a person's attitude toward lowering their self-esteem, abilities, and achievements (Allhoff 2010).

*Ubarampe* has its own philosophical meaning. Somongari Javanese people use *ubarampe* to remind them of the harmonious relationship between humans living on earth and nature. The relationship between man and nature shows the value of goodness. Goodness is a concrete good attitude related to the emotion of love (Platovnjak 2017). Goodness is seen in the type of *ubarampe*, namely *bonang-baning*. The value of goodness is also seen in the traditional activities of the *Kepungan*, where villagers gather and pray to maintain good relations among fellow human beings.

*Ubarampe* is also a reminder of human nature and spirit. This trait refers to the human spirit's forgiveness, courage, and self-control values. Forgiveness is the positive thoughts of individuals to face and get rid of guilt for the sake of physical and mental health (Lijo 2018; Tucker et al. 2015). *Courage* is an action taken after weighing the risks, including motivation, goals, and emotions (Rate et al. 2007). *Self-restraint* is the set of skills and behaviors required as self-regulatory feedback (Gillebaart 2018). *Ubarampe*, aimed at human nature and spirit, is *Adhem-adheman*. *Ubarampe* related to the spirit of hope is symbolized by *Sekul punar* and *Sekul byar*.

Some components of *ubarampe*, such as *Jenang Abrit Pethak*, are not offered to God and the ancestors. However, the *ubarampe* also recalls the origin of human life, such as in *Jenang Abrit Pethak*, which illustrates the origin of human beings from father and mother. The use of plants and animals in the *ubarampe* results from the philosophical thinking of the ancestors of the Somongari Javanese community. The reason for determining the types of plants in the *ubarampe* that cannot be explored in this article is because this indigenous knowledge is very difficult to trace and is the oral thoughts of ancestors, so it needs a more in-depth study. The knowledge of indigenous peoples is typically transmitted orally and has not been recorded in written form as a written tradition (Malekani 2020; Ogar et al. 2020) for hundreds to thousands of years (Ogar et al. 2020).

The existence of *ubarampe* provides evidence that the Somongari Javanese people continue to make use of plants and animals in a manner that is both spiritually and culturally valuable. *Ubarampe* typically employs biodiversity within the local community (Arce and Cerdas 2019; Permanasari 2017; Sujarwo et al. 2020). Biodiversity and indigenous knowledge cannot be separated because they have a close relationship (Adam et al. 2019; Ali 2021; Kosoe et al. 2020). The philosophical meaning of the *ubarampe*, as interpreted by the Somongari Javanese people, underscores the interdependence of humans and nature. This understanding motivates them to respect nature and biodiversity. The knowledge of *ubarampe* can serve as a valuable supplement to the education of younger generations on the subject of biodiversity.

Knowledge about *ubarampe* must be disseminated as a first step to overcoming the gap between indigenous knowledge and Western science. Public recognition of indigenous knowledge is still lacking compared to Western science (Ogar et al. 2020). Therefore, the integration of indigenous knowledge with Western science is needed to complement each other to teach biodiversity (Chakrabarty et al. 2022; Sen and Bhakat 2022; Wilder et al. 2016). One of the efforts is through educational videos. The educational videos were made by the researchers from the documentary data collected during the research. The videos were made in Indonesian with English subtitles and lasted 17 minutes and 26 seconds. Educational videos are uploaded on YouTube, namely through the link <https://youtu.be/7ngWH0KN5Ks>.

*Ubarampe*, as a product of indigenous knowledge, can be considered a valuable knowledge heritage related to

biodiversity and philosophy. *Ubarampe* is a tangible manifestation of how the Javanese indigenous people in Somongari village use nature for their spiritual and cultural values. The value of spirituality can be evidenced by the expression of human identity through cultural practices such as rituals and seasonal celebrations (Pinto and Vilaça 2023). The use of nature still maintains the norms of manners because it does not damage the environment. The philosophical meaning and purpose of the offerings are a tangible form of the spiritual relationship between humans, nature, God, and ancestors.

This article is limited to discussing only the obligatory *ubarampe* spoken during prayer in Kepungan tradition. Consequently, it has not discussed specific *ubarampe* for each traditional ritual in the Somongari Javanese community. Furthermore, the research is also still limited to ethnobiology and analysis of the use of plant and animal species for *ubarampe*. This research has not identified *ubarampe* as a traditional or ethnic food. Ethnic food is linked to the Javanese philosophy of living in harmony with the natural environment (Herminingrum 2019). Future research should also examine the process of preparing traditional *ubarampe* food, with a focus on ethnochemistry and nutritional content. The meanings and purposes of the offerings presented in this article are specific to the Somongari Javanese community, and it is possible that Javanese communities in other areas may have different meanings and names for *ubarampe*.

Research on indigenous knowledge about *ubarampe* and the like needs to be mainstreamed in learning, especially in areas still rich in culture. The approach to local wisdom and culture through ethnobiological studies needs to be carried out by teachers (Adinugraha 2022). Therefore, future researchers must design an approach to learning about biodiversity incorporating indigenous knowledge. Indonesia is rich in culture and biodiversity that can be used as a means of learning science (Zubaidah and Arsih 2021), such as *Randai* (Arsih et al. 2019), medicinal plants (Azis et al. 2020; Lestari et al. 2020; Silalahi and Nisyawati 2018), and even animals as medicine (Supiandi et al. 2023).

*Ubarampe*, or offerings, are primarily given to God. In addition, *ubarampe* is also offered to the ancestors of Somongari village and the surrounding nature. The philosophical meaning of each *ubarampe* shows that people should always remember God and their ancestors. In addition, it is important to know that on earth, some plants and animals play an important role in supporting human life. These *ubarampe* can be a valuable educational tool to increase the understanding of biodiversity among the younger generation. By increasing knowledge about biodiversity, we can foster a sense of responsibility and commitment to biodiversity awareness.

In conclusion, the *Kepungan* tradition is a gathering and prayer activity performed by the Javanese community in Somongari Village. This tradition is performed as part of a traditional ritual, using *ubarampe* as a complement to the ritual. The *ubarampe* vary in shape and type, with philosophical meanings and specific offering purposes. A total of 19 *ubarampe* are considered obligatory in the

*Kepungan* tradition. These include *Bonang-baning*, *Sekar Setaman*, *Jenang Abrit Pethak*, *Kepala kependhem*, *Jajan pasar/jajan rakan*, *Rujak Degan*, *Adhem-adhem*, *Gedhang Raja*, *Sekul suci*, *Inkung*, *Golong cacah 12*, *Kupat*, *Lepet*, *Srabi*, *Sekul lulut*, *Sekul byar*, *Sekul punar*, *Sekul tumpeng*, and *Sekul ambeng*. The botanical specimens used in *ubarampe* include ten species belonging to the eudicots, 11 to the monocots, and one to the magnoliids. The botanical components include leaves, flowers, seeds, fruits, tubers, bulbs, and rhizomes. Notably, only one animal species from the class Aves is used for the *ubarampe*. *Ubarampe* provides insight into the philosophical concept of harnessing biodiversity for spiritual and cultural values. It is a common practice among various tribes and ethnic groups to incorporate plants and animals into their traditional rituals. A study of the utilization of these plants and animals would provide insight into the value of biodiversity for the community. It is imperative that knowledge of the value of biodiversity with respect to *ubarampe* be integrated into the curriculum of educational institutions, with the aim of fostering greater awareness of the importance of biodiversity.

## ACKNOWLEDGEMENTS

Universitas Negeri Malang supported this work by providing the Dissertation Research Grant [grant number: 5.4.1/UN32/KP/2023]. We are deeply indebted to the head of Somongari village (*Bapak Subagiyo*), village secretary (*Bapak Dwi Anggoro Deskianto*), village officials, informants, key informants (*Bapak Sungkono* and *Bapak Puji Utomo*), *pepundhen* of Somongari, and Somongari villagers who allowed us to collect data about *ubarampe* and helped with this research.

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