Ethnobotanical Study of Plants Used For The Wedding Ceremony in The Boyolangu Subdistrict, Tulungagung District, East Java Province

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DOI: 10.18860/elha.v7i4.10830

Abstract
Javanese ethnic still upholds local wisdom including marriage customs. Traditional wedding ceremonies inherited from ancestors are still practiced up to present in the Boyolangu subdistrict, Tulungagung District, East Java Province. Traditional wedding ceremonies in this area are often carried out by utilizing plants during the procession, especially at the procession of temu manten. The use of plants in this procession is closely related to ethnobotany. Ethnobotany is an ecological discipline and the principle of the community's conception of local plants sources that can be used as a protector of cultural values. This research aims to find out the types of plants that are used as in the traditional wedding ceremonies and to provide an understanding of conservation of certain plants typically used for traditional wedding ceremonies. This research used quantitative descriptive design and applied a purposive sampling technique. It involved 10 respondents of community and 1 key informant (dukun manten or shaman). Based on the results of the study, the community in this area uses a total of 14 species of plants of 11 families at a traditional wedding ceremony. Commonly, the community utilizes the leaves and other parts of plants such as fruit, seeds, stems, and flowers. They are directly arranged in a certain way and used. The plants are obtained from around the yards of the community’s house.

1. INTRODUCTION
Indonesia has a high diversity of plant species (Komalasari, 2018). The high biodiversity provides potential plants that are not widely known by the public (Prananingrum, 2007). Besides, this country has high ethnicity and cultural diversity (Purwanti et al, 2017). Javanese, one of the Indonesian ethnics still upholds local wisdom which can be seen in its traditional wedding ceremonies (Pratama and Wahyuningsih, 2018). The Javanese traditional wedding
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ceremony is passed down from one generation to the next. The traditional wedding ceremony utilizes some plants that are believed to have a philosophy of kindness for those who run the ceremony.

The wedding ceremony tradition is still widely practiced in East Java areas including Tulungagung district. This district is bordered by Blitar district on the east side, Kediri district on the north side, Trenggalek district on the west side and Hindia Ocean on the south. The wedding ceremony tradition is still practiced in this district because Tulungagung has a close history with the ancient kingdoms in Indonesia. This is proven by Sanggrahan Temple and Gayatri Temple which is the heritage of Majapahit Kingdom (Wasisto, 2009).

Boyolangu is one of the subdistricts in Tulungagung district that still widely practice the traditional wedding ceremonies. The traditional wedding ceremony often utilizes some plants for its procession. The use of plants in the wedding ceremony in this area is related to ethnobotany. Ethnobotany is one of the disciplines of ecology and the principle of community conception of local plants resources that can be used as a protector of cultural values (Supriyati et al., 2017).

Plants are used in the procession of temu manten or when the bride and groom meet. Temu manten is one of the Javanese traditional wedding processions conducted at the bride’s house which is held after the marriage contract procession. This procession covers a series of stages including kembar mayang, balangan gantal, wiji dadi, sindur binayang, pangkon, kacak-kucur and sungkeman (Pratama and Wahyuningsih, 2018).

Considering the elaboration above, it is necessary to study the use plants based on traditions in procession of temu manten. This research aims to find out the types of plants, the parts of the plants, the procedure to get the plants, and the philosophy of plants used in traditional wedding ceremonies in Boyolangu. Further, it is to provide understanding for the public about conservation for certain plants that are used for traditional wedding ceremonies as well as the preservation of cultures.

2. MATERIALS and METHODS

Data Collection
Boyolangu is a subdistrict in Tulungagung district with an area of 37,69 km² and total of 17 villages. Boyolangu subdistrict is bordered by Tulungagung subdistrict in the north, Sumbergempol subdistrict in the east, Campurdarat subdistrict in the south and Gondang subdistrict in the west. Data obtained through five weddings in three villages in Boyolangu subdistrict.

Respondents.
This research uses the descriptive qualitative method. The data were collected using a semi-structured interview. It applied a purposive sampling technique for selecting the informant based on certain considerations (Sugiyono, 2007). The selected informant was dukun manten (shaman) as key informants. Whereas the selection of the respondents was based on snowball sampling by getting the recommendation from the key informant and it involved a total of 10 respondents.

Data Analysis
The data obtained in the form of qualitative and quantitative data which are then analyzed using descriptive statistical analysis.
3. RESULTS

Based on the results of the interview with the key informant and 10 respondents, the community in the study areas uses 14 species of plants of 11 families at a traditional wedding ceremony (Table 1.). The community used 14 types of plants in temu mante procession. The use of these plants is based on knowledge passed down from one generation to the next.

Table 1. Types of Plants that used in the Wedding Ceremony of the Boyolangu Subdistrict Community

| No | Common/Local Name | Scientific Name | Family | Used Part | Utilization | Philosophical Meaning |
|----|-------------------|-----------------|--------|-----------|-------------|-----------------------|
| 1. | Coconut (Kelopo)  | Cocos nucifera  | Areca  | Young     | Formed like the Cave Swiftlet bird | Give meaning that the bride and groom can cross the household without fear of danger |
|    |                   | Arecaleae       |        | leaves    |             |                       |
|    |                   |                 |        |           |             |                       |
|    |                   |                 |        |           |             |                       |
|    |                   |                 |        |           |             |                       |
|    |                   |                 |        |           |             |                       |

Table continues...
| Plant Name | Genus | Species | Part Used | Preparation | Meaning |
|------------|-------|---------|-----------|-------------|---------|
| Cocos nucifera | Areca ceae | Young leaves | Formed into pecut samandiman | So that the bride and groom are able to live a life without relying on others |
| Cocos nucifera | Areca ceae | Young leaves | Formed like a fish bone | So that the bride and groom are always protected by god |
| Cocos nucifera | Areca ceae | Fruit | One length is placed at the entrance of the tarub and used for offerings | Give a sturdy household meaning |
| Banana (Gedhang) | Musa sp. | Musaceae | Fruit | It is hung at the entrance of the tarub and used at offerings | Give meaning to the household which is bestowed fortune |
| Musa sp. | Musaceae | Stem | Used as a base on kembar mayang | Give meaning that the bridal have strong households |
| Banyan Tree (Ringin) | Ficus benjamin a | Moraceae | Petiole and leaf | Plugged into the kembar mayang | Gives great meaning to the bride's family |
The most widely used plants in the traditional wedding ceremony in this area are coconuts (18%) (Figure 3) because the parts of coconuts are used in *kembar mayang*,...
offerings, welcome gate, and marker poles. Some of the plants that are least utilized in are sticky rice, rice, puring leaves, andong leaves, banyan, sugar cane, areca flower, betel leaves, jasmine and kantil flowers with a percentage of 5% (Figure 3). They are less likely used because they are only used at kembar mayang, a welcome gate or balangan gantal procession only.

**Figure 3.** Percentage of Plant that used at the Wedding Ceremony of Boyolangu Subdistrict

The most widely used parts of plants at the traditional wedding ceremony in this area are flowers and leaves (29%) (Figure 4). The flowers cover roses, jasmine, cananga, kantil and areca flower. The use of leaves reaches 29% while fruit and seeds only reach 12% of each. The fruits cover bananas and coconuts, while the seeds are sticky rice and rice which are still in their stalks.

**Figure 4.** Percentage of Plant Parts that used at The Wedding Ceremony of Boyolangu Subdistrict

4. **DISCUSSION**

**Species of Plants Used at the Wedding Ceremony**

This study focused on analyzing plants used at the procession of temu manten. Suwarno (2006) defines temu manten as panggih or dhaup in which the bride and groom meet. This procession consists of a series of processes such as kembar mayang, balangan gantal, wiji dadi, sindur binayang, pangkon, tanem, kacar-kucur and sungkeman. Not all procession used plants. The procession that uses plants only kembar mayang, balangan gantal, wiji dadi and kacar-kucur.

Based on interviews with one key informant (shaman manten) and 10 respondents (people who are good at creating kembar mayang), the study found that the community in this area used 14 types of plants at the traditional wedding ceremony (Table 1.). These plants are from 11 families.

The plants of 11 families are divided into 3 groups of use at the wedding ceremony, namely offerings (sesajen), kembar mayang and temu manten. The offering used red and white roses (kembang telon), cananga flowers, a bunch of banana (pisang raja), young coconut fruit, sticky rice seeds, and Javanese chicken eggs (Figure 5.). The offering was placed on a plaited tray and then placed in certain places such as the wedding hall, kitchen, tables for placing kembar mayang, and near the sound system. The offering means for protecting the series of events from any distractions.

**Figure 5.** Coconut fruit, banana fruit and kembang telon on sesajen
Most of the plants are used for *kembar mayang*. Kembar mayang is a bunch of young coconut leaves (*janur*), some other leaves and areca flowers. The shaman prepared two *kembar mayang* for each wedding ceremony. Kembar mayang means as a tree of life that can provide everything desired (Widayanti, 2008).

The mostly used plant for *kembar mayang* is young coconut leaves (*janur*). *Janur* has a flexible texture so that it can be easily formed and not easily torn. Then, *janur* is formed into certain shapes such as sriti birds, *keris*, mountain, umbrella, *pecut samandiman*, and fish bones with the philosophical meaning that it is believed to bring blessings to the couple. Other plants used in *kembar mayang* are *puring* leaves, *andong* leaves, banyan leaves, banana stems and areca flower. In the Javanese tradition, typically *kembar mayang* was brought by two virgin girls and 2 virgin boys during the procession of *temu manten*.

The plants used during the *temu manten* are betel leaves for *balangan gantal*. The betel leaves are rolled and tied using yarn and then the bride and groom throw the rolled leaves to each other. In this procession, the groom steps on eggs, and then the bride wash his feet. The waster used in this process (*wiji dadi*) contains white roses, red roses, and cananga flowers (Figure 6.). The plants consisted of bananas, coconuts, sugar cane, rice, and young coconut leaves (*janur*). Young coconut leaves (*janur*) are also used as markers in the aisles of houses arranged lengthwise on a pole.

![Figure 7. The gate of wedding ceremony](image)

**Parts of the Plants Used at the Wedding Ceremony**

The results of interviews with key informants and 10 respondents showed that the parts of the plant used from coconut trees (*Cocos nucifera*) are young leaves (coconut) and coconut fruit. The coconut leaves were mostly used for *kembar mayang*, welcome gate, marker pole in the alley of the house. The coconut leaf (*janur*) has a flexible texture so that it can be easily formed and not easily torn.

Parts of banana trees (*Musa* sp.) which are used for the wedding ceremony are fruit and stems. A stalk of bananas was used for offerings and also placed on welcome get. The banana stems were used as the base of *kembar mayang*. The banana stems are soft and it is easy to plug the components of *kembar mayang* into the banana stems.

The part of banyan trees used at the wedding ceremony is the leaves (*Ficus benjamina*). The leaves were used in *kembar mayang* in which they were plugged into the banana stem. *Puring* leaves (*Codiaeum variegatum*) and *andong* leaves (*Cordyline fruticosa*) have beautiful colors and patterns and believed by the community in this area to bring happiness to the bride's family. The beautiful color of *andong* leaves is due to its content of tannins and saponins which can be used as textile dyes (Widia, 2014). The use of...
parts of the plant is based on community knowledge that has been passed down for generations.

The next parts of plants used for the wedding ceremony are rice stems and leaves (*Oryza sativa*). They were placed on welcome gate tied with others such as sugarcane stalks, bananas, and coconuts, and *janur* that have been curved. Red and white roses and cananga flowers were used for offering added with Javanese chicken eggs, a bunch of bananas, and one coconut. Jasmine and *kantil* flowers are arranged in certain ways for decorative use at the traditional wedding ceremony in this area. These flowers have a distinctive and fragrant flower aroma due to their essential oils content.

In *temu manten*, there was *balangan gantal* procession which used rolled betel leaves. The leaves were tied with white thread. The roll will be thrown at one another by the bride and groom during the exchange of *kembar mayang*. Each roll consisted of one wide betel leaf.

**Procedures to Use the Plants at the Wedding Ceremony**

According to the key informant and the respondents, the parts of the plant which were used directly are bananas, stems, and seeds of rice, roses, cananga flowers, puring leaves, andong leaves, banyan and coconuts. The direct use here means that the parts of the plant were directly taken from the plants without going through any process. Betel leaves used in this tradition were rolled with white thread. Banana stems were cut into 30 cm length as the base of *kembar mayang*. *Janur* was formed into some shapes which certain philosophical values. Jasmine and *kantil* flowers are arranged in a certain way for decorative use.

**Procedure to Get the Plants for the Wedding Ceremony.**

Based on responses from key informants and respondents, plants used in the traditional wedding ceremony of the Boyolangu subdistrict were obtained from the yard such as coconut, banana, andong leaves, puring leaves, areca flower, betel, banyan, betel, and rice. However, jasmine and *kantil* flower could be ordered from the person in charge of the bridal makeup. It has been ordered a few days before the procession as it would take longer if the community arranged it. Rose, sugar cane and sticky rice were purchased at traditional markets.

The plants used for wedding ceremonies in the Boyolangu sub-district were taken from the yard of the house because the plants grow wildly and abundantly for example areca flower, banyan, puring leaves and andong leaves. Some were deliberately planted by women and they could easily grow without complicated care, for example, coconut, banana, betel and rice.

**Meaning of the Plants Used at the Wedding Ceremony**

According to key informants, *janur* (young leaves of coconut) comes the Arabic word of ‘nur’ which means light. It was mostly used in *kembar mayang* (Figure 8A.). The use of *janur* has some philosophical meanings such as expecting blessings for the couple, protecting the couple from any distractions, and being respected by many people. The use of puring leaves in *kembar mayang* means to avoid the couple from conflict of opinions and quarrels (read: uring-uringan in Javanese, in which it comes from the word puring) (Figure 8B.). Andong leaves have the meaning of beauty expecting that the couple is expected to live beautifully and peacefully without any disturbance. Areca flower embedded in *kembar mayang* means that the bride and groom have a firm attitude and are not easily influenced by others (Figure 8C.).
Banyan leaves used on kembar mayang means that the bride and groom's family have a big soul in accordance with the morphology of banyan trees which can grow large and sturdy. Banana stem (debog) used for kembar mayang means foundation expecting that the marriage has a strong foundation. Flowers such as roses, jasmine, kantil flowers and cananga flowers mean beauty and expecting that the bride and groom's family can become a happy family without any harm. The use of seeds means that the bride and groom will be able to fulfill their daily needs.

**Conservation Efforts to Maintain Plants Used in the Wedding Ceremony**

The effort to maintain the plant used in the wedding ceremony was by planting the plants in the yard (Figure 9). The plants used by the community in the Boyolangu subdistrict were easily grown and required simple nursery. The number of plants around the area was still abundant. The plants were mostly planted by women (housewives). Conservation efforts are based on the self-awareness of each community. There was no conservation program for those plants.
Identifying conservation efforts is intended to determine the role of society in preserving traditional wedding ceremonies. According to the respondents, only people aged 45 years or older could make kembar mayang with the meaning of kindness. The adolescents do not play roles in the conservation of the plants because they lacked a sense of patience. According to respondents, people aged younger than 40 do not know the meaning of the parts of the shaped janur which required complex ways to create. Further, it requires patience and training for designing the shape which in accordance with heritage. Thus, they are less likely to take roles in this aspect.

5. CONCLUSION

A total of 14 types of plants are utilized by the community in Boyolangu subdistrict at the traditional wedding ceremony. Parts of plants that are widely used at wedding ceremonies are leaves. The other parts are fruit, seeds, stems and flowers. The plants are used directly and formed or arranged in a certain way. The plants are obtained by from yards.

6. Acknowledgment

Author thanks to the Boyolangu subdistrict community, our parents, lecturers of ethnobotany courses, and everyone who helped complete this research

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