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Inventory of potential spice plants as care cosmetics

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ABSTRACT

This research is motivated by the absence of previous research that examines the use of spice plants as care cosmetics by the people of Belonsat Village. This result can make vanished of knowledge about the efficacy of spice plants as care cosmetics, so it is necessary to have a instrument used to document in writing about spice plants used as care cosmetics by the people of Belonsat Village. This study aims to 1) identify the types of spice plants that are used as care cosmetics, 2) identify parts of spice plants that are used as care cosmetics, 3) identify how to use them as care cosmetics. The research uses a qualitative descriptive approach, the research method used is a survey. The source of the data from this research was obtained from the main informant who also served as a key informant. Data obtained through in-depth interviews and participatory observation. The results of an interview with a key informant as well as a key informant showed that there were 11 species of spice plants that have the potential as care cosmetics. These spice plants include: basil, cardamom, kencur, temu giring, ginger emprit (ginger rice), elephant ginger, red ginger, temulawak, lime, orange chili sauce, and garlic. There are uses that are singular, there are also those that must be combined.

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INTRODUCTION

Spice plants in development, has used as spice kitchen, booster flavors, fragrances, and food preservatives which are used on a limited basis. (Robby, Siti, & Muflihati, 2019). Besides beneficial as spice cooking, spices it turns out role also in treatment, good for disease light nor disease chronic (Winarto & Karyasari, 2003). Spice plants have other benefits that are no less important, namely they can be used as care cosmetics. Some people often use spice plants for cosmetic ingredients (Wathoni, et al., 2018; Batubara & Prastya, 2020; Hussain et al., 2022). The content in several

spices is suitable for treating facial skin. Examples include pepper, ginger, and turmeric which can actually be efficacious in treating facial skin to be cleaner and brighter (Widyawati, 2016).

Knowledge of spice plants that have the potential to be used as cosmetic ingredients for treatment as well as processing and application techniques that have been passed down from generation to generation by Indonesian women in various regions, has made the processing of spices for facial skin care a genuine Indonesian heritage science (Alya, 2018). Susanti (2014) explains that many studies have paid great attention to medicinal plants and herbs or spices that are beneficial to skin health. The use of spices as a natural facial skin care ingredient can be a safer alternative for women who have sensitive skin, or women who want to keep their skin healthy and not have sensitive skin (Alya, 2018). This is supported by the nutritional content contained in the spice plants that you want to use, for example in ginger. Ginger alcohol extract has strong antioxidant activity. Antioxidants can function in helping to deal with the aging process by stabilizing free radicals that play a role in photoaging, carcinogenesis, and immunosuppression (Andarina & Djauhari, 2017). Apart from the antioxidants in ginger, there are also other antioxidants consisting of tannins, flavonoids, steroids, alkaloids, and quercetin which are beneficial for the health of the body and skin (Tunas et al., 2019; Perwita, 2019).

Judging from this role, there has been an increase in cosmetic ingredients both in Indonesia and abroad (Gigitatiastutiet al., 2020) including the people of Belonsat Village, which is in the Melawi district. Because of this, many cosmetic industries process various medicinal plants and spices. The people of Belonsat Village cultivate spice plants in their yards or on plantations, because spice plants are very important and are believed to have good properties, namely as traditional medicines or used for body care according to local beliefs and knowledge of the community. The potential of spice plants as ingredients for cosmetic treatments in the area explains that the people of Belonsat Village have traditional knowledge and are very closely dependent on nature, especially regarding the use of spice plants as cosmetic care ingredients.

Knowledge about spice plants as care cosmetics is not well documented, so that people are not familiar with existing spices. In fact, there are those who do not know the appearance of spices, so that the transfer of knowledge about spices and their properties is increasingly interrupted. This happened as a result of socio-cultural changes that threatened the local wisdom of the community, including the Belonsat Village community, regarding the use of plant values in everyday life. This threat can be in the form of a consumptive style that can erode local wisdom norms in society (Suhartini, 2009). Submission of information about the use of plant values only uses verbal or verbal communication (Supiandi & Leliavia, 2019) and does not have written documentation (Rashid et al., 2018). The influence of foreign culture, forest degradation due to shifting cultivation plantations, and forest fires (Setyawan, 2010). Therefore, it is very important to document knowledge about the use of spice plants as care cosmetics of the people of Belonsat Village through this research.

RESEARCH METHODS

Research Design

The research approach used was descriptive qualitative. This approach was used because the data obtained is descriptive data in the form of written and spoken words from the people of Belonsat Village who understand the use of spice plants as care cosmetics. The method used in this research is a survey method.The survey method was used to collect field data relating to data on spice plants that have the potential as care cosmetics of the people of Belonsat Village.

Research Data Sources

Data in this study were obtained from informants, events or activities, places or locations, objects, images and recordings, as well as written or unwritten documents. This study explored

information from three informants, namely the main informant, key informant, and recommendation informant. The main informants were determined by purposive sampling technique. Key informants and recommendations using snowball sampling. Snowball sampling is a technique for selecting informants from the recommendations of previous informants.

Instruments

The instruments used in this study were interview guidelines related to knowledge of spice plants and interview guidelines related to conservation practices related to spice plants. The interview guide used is a structured and open interview guide, so that researchers can dig up a lot of information from predetermined informants.

Procedures

The data obtained from this research will be related to spice plants which have the potential as care cosmetics. The data was obtained through in-depth interviews with one (1) informant. The informant was the main informant and at the same time a key informant for this research, while there was no recommendation informant because there was no other person who could be recommended by the main informant and head of the PKK (the village head of Belonsat Village). In-depth interviews are obtained by asking structured and open-ended questions that allow the informant to provide broad answers. Questions were directed to informants to reveal the life of the Belonsat Village community regarding concepts, perceptions, roles, activities, and events related to the focus under study.

Data Analysis

The research data were analyzed by: (1) determining the species of each plant, (2) determining the parts used, the method of processing, the technique of taking the plants, and their benefits as care cosmetics. Furthermore, the data that has been collected is described clearly, so that readers understand the research results properly and in depth.

RESULTS

The research was conducted on Friday, November 25, 2022, at Belonsat Village. The main informant was also a key informant in this research, because there was no other informant who could be recommended by the head of the PKK (the village head of Belonsat Village). The results of data collection showed that there were only 11 species of spice plants that were often used or had been used as care cosmetics of people in Belonsat village, especially women.

Table 1. Results of Data Retrieval

No	Name	used part	Processing Method	How to Use and Benefits	Plant Intake Techniques
1	Basil (*Ocimum basilicum* L.)	Leafyoung	For remove body odor	Eaten raw	picked
2	Cardamom (*Amomum compactum* Sol. Ex Maton)	Fruits and seeds (fresh / dry)	Cardamom, kencur, curcuma, and white rice grind fine in a manner together, next rounded up and then dried. Dough this for	It is used for scrubbing the face and body especially for mothers after giving birth so that the skin on	Released from the sign
3	Kencur (*Kaempferia galanga* L.)	Rhizome			Dug and cut into

4	Temugiring (*Curcuma heyneana* Val. & V)	rhizome	cold powder (first potion)	the face is smooth and the skin on the stomach becomes tight	pieces
5	Emprit ginger/ Rice ginger (*Zingiber officinale* var *amarum*)	rhizome	Cardamom, kencur, emprit ginger (rice ginger)/elephant ginger/red ginger and white rice grind fine in a manner together, next rounded up and then dried. Dough this for warm powder	Used for scrubbing on the mother's body after giving birth with her baby so that the skin of the body becomes warmer	Dug and cut into pieces
6	Elephant ginger (*Zingiber officinale* var *officinarum*)	rhizome			
7	Red ginger (*Zingiber officinale* var *rubrum*)	rhizome			
8	Temulawak (*Curcuma xanthorrhiza* Roxb.)	rhizome	Cardamom, ginger/ temugiring, and white rice grind fine in a manner together, next rounded up and then dried. Dough this for cold powder (second potions)	Wiped all over the body serves to smooth the skin	Dug and cut into pieces
			Curcuma mashed without mixture other materials	Used for the whole-body mask serves to smooth the skin of the body	
9	Lime (*Citrus aurantifolia* (Christm.) Swingle)	Fruit	Squeezed, just take the juice	Smeared to face for masks to work for tighten facial skin (however no all type skin suitable use the ingredient)	picked
10	Jeruk sambal/jeruk limau (*Citus amblycarpa* (Hassk.) Ochse)	Fruit	Fruit split two	Rubbed to nails, this this ingredient function for cleaning nails	picked

11	Garlic (*Allium sativum* L.)	tubers	Each clove halved	Clip the clove nails that have been split, this material serves to harden the soft nails	Separatedfr omtubers

Based on Table 1 shows that there are ways to utilize spice plants, some are used singly, but some must be collaborated. This is related to the benefits of the ingredients for the health of the face, nails, and body. Spice plants in Table 1, some grow in Belonsat Village, some are not, for example cardamom. Based on information from informant, cardamom grows a lot on the island of Java, but for the island of Kalimantan, especially Belonsat Village, no one has planted or cultivated it.

DISCUSSION

Based on the results of the research, it shows that there are 11 species of spice plants that are often used or have been used as care cosmetics for people in Belonsat Village, especially women. Eleventh plant the including Basil (*Ocimum basilicum* L.), Cardamom (*Amomum compactum* Sol. Ex Maton), Kencur (*Kaempferia galanga* L.), Temugiring (*Curcuma heyneana* Val. & V), Emprit ginger/rice ginger (*Zingiber officinale* var *amarum*), Elephant ginger (*Zingiber officinale* var *officinarum*), Red ginger (*Zingiber officinale* var *rubrum*), Temulawak (*Curcuma xanthorrhiza* Roxb.), Lime (*Citrus aurantifolia* (Christm.) Swingle), Jeruk sambal/jeruk limau (*Citrus amblycarpa* (Hassk.) Ochse), Garlic (*Allium sativum* L.).

Basil (*Ocimum basilicum* L.), the part used by young leaves, functions to eliminate body odor. Basil leaves are generally taken by picking and used by eating raw. Basil is one of the plants that spread in Indonesia. According to Aluko et al. (Oktaviana et al., 2019) this plant belongs to the Lamiaceae family, and contains various chemical compounds, including phenols, saponins, alkaloids, flavonoids, tannins, and essential oils. Basil leaf essential oil contains linalool (3.42%) which has the potential as an antibacterial.

Cardamom (*Amomum compactum* Sol. Ex Maton), the part used for fruit and seeds, both fresh and dry. Processing is finely ground, but cardamom must be combined with kencur and temugiring to make special cold powder for mothers after giving birth. Kencur (*Kaempferia galanga* L.) and temu giring (Curcuma *heyneana* Val. & V), the parts used are the rhizomes. Processing is finely ground and combined with cardamom. Kencur and temugiring taken by digging and cut into small pieces so that it is easy when grinding is done. The cold powder concoction is used for masks on the face and body scrub especially for mothers after giving birth so that facial skin be smooth and stomach skin becomes tight. Cold powder is a traditional cosmetic because it is made from natural ingredients that are less likely to have a negative effect due to its use and natural ingredients that are easy to find in the surrounding environment (Paradilla, Hidayah, and Atmanto, 2019).

Emprit ginger/rice ginger (*Zingiber officinale* var *amarum*) or elephant ginger (*Zingiber officinale* var *officinarum*) or red ginger (*Zingiber officinale* var *rubrum*) is used for the rhizome. The use of this type of ginger must be combined with cardamom and kencur to make warm powder, which is made for postpartum women and their babies. On the other hand ginger also contains the necessary antioxidants as intake for hinder radical free (Suhendy , 2021)

Temulawak (*Curcuma xanthorrhiza* Roxb.) contains many of antioxidants that are beneficial for the skin (Rosidi, et al., 2014). Temulawak (*Curcuma xanthorrhiza* Roxb.), the part used is the rhizome. Temulawak rhizome is taken by digging and cutting into small pieces. There are two ways of processing it, namely making it into cold powder and making a concoction without a mixture of other ingredients. The two processed products are rubbed all over the body which functions to

smooth the body's skin. for cold powder with mixed ingredients, you can add cardamom, ginger or temugiring, and white rice flour.

Lime (*Citrus aurantifolia* (Christm.) Swingle), the part used for the fruit. Jeruk sambal/jeruk limau (*Citus amblycarpa* (Hassk.) Ochse), the part used for the fruit. Lime and jeruk sambal/jeruk limau is taken to treat facial skin. For facial skin care using the juice, it cannot be applied to all skin types, it is not permitted to use it for sensitive skin. Lime has a role as a tyrosinase inhibitor (Hindun et al, 2017).

Garlic (*Allium sativum* L.), the part used for the tuber. Garlic is cut in half and used to clamp nails. Garlic contains *allicin* as an antimicrobial, besides that garlic also functions as an anti-inflammatory, antidiabetic, antibacterial and antifungal. Onion white contain antioxidants that have role for health skin (Purnamasari et al, 2022).

CONCLUSION

Based on the findings and analysis of the results of the research that has been done, it can be concluded that there are only 11 types of medicinal plants that have the potential as care cosmetics in Belonsat Village. The parts used are leaves, rhizomes, fruit, seeds, and tubers. The parts of the spice plants are used in body scrubs, face masks, body deodorizers, and nail strengtheners. The results of this research are expected to be able to provide information to the public to see the ingredients of spices that can be used for care cosmetics.

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