

Indonesian Traditional Cosmetics, In Review

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Abstract. Indonesia is known for its culture, one of which is traditional cosmetics that have been used by the ancestors of the Indonesian people for decades and have proven their efficacy. This heritage must be preserved because it is a national culture. Also, the effectiveness of this herb is not inferior to that of modern herbs. Traditional cosmetics are derived from plants, animals, minerals, galenic preparations, or a mixture of the four, which have been used for generations. This audit points to supply data around conventional beauty care products in Indonesia that are valuable for skin care, hair care, postnatal care, and vaginal care.

Keywords: traditional cosmetic, skincare, hair care, postnatal care, vaginal care

1 Introduction

Cosmetic products have played an essential role in our lives for thousands of years. The term "cosmetics" comes from the Greek "kosmetikos," meaning "having the control to arrange, talented in decoration" [1]. The Canadian Council on Health provides the following definition: "cosmetic" is any substance utilized to clean, move forward, or alter the complexion, skin, hair, nails, or teeth. Beauty care products incorporate excellent arrangements (make-up, fragrance, skin cream, nail clean), and preparing them helps (body cleanser, hair cleanser, shaving cream, antiperspirant) [2].

In Indonesia, as is the case in many other countries around the world, traditional societies have always used natural substances such as plants and animal extracts, minerals, and galenic preparations for several reasons, including skin care, hair care, postnatal care, and vaginal care called traditional cosmetics [3].

Indonesia is one of the most biodiverse nations in the world, and there may be a need for worldwide preservation. Despite having the world's fourth largest population, Indonesia is the most densely forested country after the Amazon. It is domestic to generally 11% of the world's blossoming plants, 13% of its well-evolved creatures (counting 46 primate species), 6% of its creatures of land and water, 7% of its reptiles, 16% of its winged creatures, and 14% of its fish (counting freshwater and saltwater species) [4]. These flora and fauna have biopharmaceutical functions and potential as medicine, wellbeing nourishment, and nutraceuticals for people, creatures, and plants. For example, it can be used as an ingredient in traditional cosmetics.

2 Research Method

The strategy of composing audits utilized by writing considers procedures to analyze the substance of libraries related to traditional makeup in Indonesia. A fact-finding project that supports written information and materials for reference uses material from various diaries from 1999 to 2022.

Focusing on traditional beauty, this work highlights how wealthy Indonesia's plants are and how they can provide for human needs. As knowledge of how skin and hair behave deepens, at the same time, more logical evidence is gathered on plant physiology and plant potential in skin care, hair care, postnatal care, and vaginal care. Yet, it is still to be fully explored.

3 Results and Discussion

3.1 Development of traditional cosmetics in Indonesia

The craftsmanship of magnificence in Indonesia, especially hair care, is recorded in sanctuary reliefs from the 9th to 17th centuries, which are found in Borobudur Temple. The sculpture depicts the pounding of a mixture of leaves, which is then smeared on a woman's body and intended for health and beauty, but no one had access to these mystery formulas without regal authorization. As it were, only a few knew which ingredients went into the Kraton's intriguing elixirs [5]. The Kraton is where traditional cosmetic science has a place to develop. The aristocrats' written documents are a precious cultural heritage, such as Serat Centhini, Candra Rini's manuscript, and Serat Wulang Estri. The manuscripts describe how to achieve inner and outer beauty through treatments that result in total body health so that the face will be clean and beautiful because it is healthy [6]. All species of plants are utilized in conventional beauty care products, which can be separated into five bunches: confront, excellence, hair, body care, and sedated beauty care products [5].

Traditional cosmetics cannot be separated from chemicals, but these chemicals are indeed safe to use in specific amounts and within limits [7]. Cosmetic ingredients are chemicals, even though they come from nature, and the body organ that is affected is the skin. In that case, the cosmetics will cause reactions and changes in skin physiology. No chemicals are independent (do not cause any effect) when applied to the skin. Therefore, in 1955, Lubowe coined the term "cosmedics," a combination of cosmetics and drugs whose properties can positively affect skin physiology. At the same time, Faust used the term "Medicated Cosmetics" in 1982. Currently, the term "cosmeceutical" is developing. The term "cosmetic" or "cosmeceutical" was first coined by Albert Kligman (Pennsylvania State University) in 1984 to refer to substances that provide benefits both as cosmetics and therapies [8]. There are no drugs, and as long as these cosmetics do not contain harmful ingredients that are pharmacologically active on the skin, the use of this type of cosmetic is beneficial. valid for the body. Examples include brightening, anti-acne, and antibacterial properties [9].

The FD&C Act characterizes drugs as those items that remedy, treat, relieve, or anticipate illness or that influence the structure or work of the human body; in the event that an item makes such claims, it'll be directed as a drug [10]. Makeup is aiming to decorate, advance allure, modify the appearance, or cleanse; the FDA does not approve them for dealing, nor are they planning to influence the structure or work of the body. Companies and people who advertise traditional beauty care products have a legitimate duty to guarantee that their items and fixings are secure for their intended use [11]. To summarize, excellence care in Indonesia may contribute to the magnificence framework for the mind and body. Traditional

pharmaceutical and beauty products are fundamentally part of the same program for Indonesians [5].

3.2 Indonesian plants for traditional cosmetics

Some plants in Indonesia have a tall potential as crude materials in manufacturing traditional cosmetics preparations are listed in Table 1.

Table 1. The Beauty Products Group of A Few Plants in Indonesia with Their Phytochemical Contains

Group	Traditional Cosmetic	Ingredients	Phytochemical contain	Reference
Skin Care	<i>Bedak Dingin</i>	Rice (<i>Oryza Sativa</i>)	Vitamin E	[12]
		Jicama (<i>Pachyrizus erosus</i>)	Vitamin C, Vitamin B	[13]
		Aromatic Ginger (<i>Kaempferia galangal</i>)	Antioxidant, cytotoxic, anti-inflammatory, sedative, vasorelaxant, anti-angiogenic, anti-nociceptive	[14]
		Turmeric (<i>Curcuma longa</i>)	Curcuminoid consists of curcumin, desmetoxicumin, and bisdesmetoksikurkumin as well as unstable oils, fat, carbohydrate, protein, starch, vitamin C, press, phosphorus, and calcium	[15]
		Fennel (<i>Foeniculum vulgare</i>)	Antibacterial, antifungal, antioxidant, antithrombotic, anti-inflammatory, oestrogenic, hepatoprotective, antidiabetic	[16]
	<i>Lulur Pengantin</i>	Rice (<i>Oryza sativa</i>)	Vitamin E	[12]
		Temu Giring (<i>Curcuma heyneana</i>)	Saponin, flavonoid, antioksidan, dan antiinflamasi.	[17]
		Ylang ylang flowers (<i>Cananga odorata</i>)	Benzoic, farnesol, geraniol, linalool, benzyl acetate, eugenol, safrol, cadinene, and pinene	[18]
		Kaffir Lime (<i>Citrus hystrix</i>)	Glycerolglycolipids, tannins, tocopherols, furanocoumarins and flavonoids and alkaloids, antibacterial, antifungal, anticancer, chemopreventive, antioxidant, anticholinesterase	[19]
		Orange Jessamine Leaf (<i>Murraya paniculata</i>)	Essential oils, flavonoid, alkaloid, and tannin	[15]
		Krangean (<i>Litsea cubeba</i>)	alkaloid, flavonoid, saponin, tanin, glikosida and steroid	[20]
	<i>Bedak Mangir</i>	Rice (<i>Oryza Sativa</i>)	Vitamin E	[12]
		Jicama (<i>Pachyrizus erosus</i>)	Vitamin C, Vitamin B	[13]
		Cinnamon	Flavonoids, cinnamaldehyde,	[21]

		(<i>Cinnamomum burmannii</i>)	eugenol, coumarin	
		Mesoyi (<i>Cryptocarya massoy</i>)	Flavonoid, alkaloid, fenolat, steroid, saponin, triterpenoid, tanin, coumarin, and kuinon	[22]
		Fenugreek (<i>Trigonella foenum-graecum</i>)	Flavonoids, saponins, coumarin	[23]
		Aromatic Ginger (<i>Kaempferia galangal</i>)	Antioxidant, cytotoxic, anti-inflammatory, sedative, vasorelaxant, anti-angiogenic, anti-nociceptive	[14]
		Fennel (<i>Foeniculum vulgare</i>)	Antibacterial, antioxidant, antifungal, antithrombotic, oestrogenic, anti-inflammatory, hepatoprotective, antidiabetic	[16]
		Temu Giring (<i>Curcuma heyneana</i>)	Saponin, flavonoid, antioksidan, dan antiinflamasi.	[17]
Hair Care	Minyak Cemceman	Pandan (<i>Pandanus amaryllifolius</i>)	Alkaloids, flavonoids, saponins, polyphenols, saponins, polyphenols	[24]
		Mangkokan (<i>Polyscias scutellaria</i>)	Saponin, alkaloid, flavonoid	[25]
		False daisy (<i>Eclipta alba</i>)	Coumestans, alkaloids, flavonoids, glycosides, polyacetylenes, and triterpenoids.	[26]
		Coconut oil (<i>Cocos nucifera</i>)	Saponin	[27]
	Minyak Kemiri	Candlenut (<i>Aleurites moluccana</i>)	Minerals such as phosphorus, calcium, potassium, magnesium	[28]
Postnatal Care	Tapel	Fenugreek (<i>Trigonella foenum-graecum</i>)	Flavonoids, saponins, coumarin	[23]
		Ginger (<i>Zingiber officinale</i> Rosc.)	Thiamine, riboflavin, niacin, pyridoxine, vitamin C, vitamin A, vitamin E	[29]
		Cinnamon (<i>Cinnamomum burmannii</i>)	Flavonoids, cinnamaldehyde, eugenol, coumarin	[21]
		Rice (<i>Oryza sativa</i>)	Vitamin E	[12]
		Fennel (<i>Foeniculum vulgare</i>)	Antibacterial, antioxidant, antifungal, antithrombotic, oestrogenic, anti-inflammatory, hepatoprotective, antidiabetic	[16]
		Aromatic Ginger (<i>Kaempferia galangal</i>)	Antioxidant, cytotoxic, anti-inflammatory, sedative, vasorelaxant, anti-angiogenic, anti-nociceptive	[14]
		Bangle (<i>Zingiber cassumunar</i>)	Flavonoid, tannin, terpenoid, alkaloid	[30]

	<i>Pilis</i>	Ginger (<i>Zingiber officinale</i> Rosc.)	Thiamine, riboflavin, niacin, pyridoxine, vitamin C, vitamin A, vitamin E	[29]
		Lenglgan (<i>Leucas lavandulifolia</i>)	flavonoid, saponin, alkaloid, tanin, fenol	[31]
		Fennel (<i>Foeniculum vulgare</i>)	Antibacterial, antioxidant, antifungal, antithrombotic, oestrogenic, anti-inflammatory, hepatoprotective, antidiabetic	[16]
		Amylum Oryzae (<i>Oryza Sativa</i>)	Vitamin E	[12]
Vaginal Care	<i>Ratus</i>	Secang (<i>Biancaea sappan</i>)	Tannin, resin, resorsin, brazilin, brazilein, d- α -phellandrene, oscime, essential oil	[32]
		Turmeric (<i>Curcuma longa</i>)	Curcuminoid consists of curcumin, desmetoxicumin, and bisdesmetoksikurkumin as well as unstable oils, fat, carbohydrate, protein, starch, vitamin C, press, phosphorus, and calcium	[15]
		Rose petal (<i>Rosa L</i>)	Essential oil, flavonoid, olyphenols	[33]
		Curcuma (<i>Curcuma xanthorrhiza</i>)	Vitamin C	[34]
		Nutmeg (<i>Myristica fragrans</i>)	vitamin C, tocopherols, carotenoids, flavonoids, phenolic carotenoids, terpenoids, alkaloids, lignans	[35]
		Vetiver grass (<i>Chrysopogon zizanioides</i>)	Essential oil	[36]

Bedak dingin was once used by women to treat and cool their facial skin; even cold powder can treat skin problems such as acne and dull skin [37]. Bedak dingin is made of rice, jicama, aromatic ginger, turmeric, and fennel, which contain vitamins, antioxidants, anti-inflammatory properties, and antibacterial properties that are suitable for maintaining healthy skin. Specifically, rice contains tocopherols (tocopherols and tocotrienols), gamma-oryzanol, and ceramides. Tocopherols and tocotrienols are unadulterated, normal forms of vitamin E. Vitamin E has been widely known as a substance that's useful as an anti-oxidant and is good for wellbeing. Gamma-oryzanol may be a valuable anti-oxidant that protects the skin from UV rays and is also thought to be an anti-aging agent [12]. Jicama is also known to contain antioxidants; yam tubers contain antioxidants, including vitamin C, flavonoids, and saponins, that can anticipate skin harm from free radicals [13].

Lulur is a complement to the bridal shower and bath ceremony, which is contained in self-care called the bidadari bath [6]. Lulur pengantin is usually used by the bride and groom

before the wedding day with the aim of making the skin clean, moist, and shiny because it is made from rice, temu giring, and krangan, which contain vitamins, antioxidants, anti-inflammatory agents, and antibacterial agents so that the bride's appearance on her wedding day is more perfect. In addition, lulur pengantin can help relax the bride and groom's minds with essential oils from ylang-ylang, kaffir lime, and orange jessamine leaf.

Mangir Jawa is a traditional Java scrub used by Keraton princesses to treat skin health and beauty [38]. Mangir is made from rice, jicama, cinnamon, mesoyi, fenugreek, aromatic ginger, fennel, and temu giring, which contains vitamins, antioxidants, anti-inflammatory properties, and antibacterial properties. Mangir is used to remove dead skin cells that have accumulated so that the skin looks new and beautiful, as well as to whiten and brighten. Typically performed every two weeks [39].

Minyak cemceman is a hair oil made from coconut oil and several other valuable ingredients for nourishing and blackening hair [6]. Minyak cemceman is made from pandan, mangkokan, false daisies, and coconut oil, which contains alkaloids, flavonoids, saponins, polyphenols, and others that act as antioxidants, antibacterials, and anti-inflammatory agents. Mangkokan leaves can empirically be used to stimulate hair growth. The components of the mangkokan leaf can promote hair growth. Saponins can form a foam, which means they can clean the skin from dirt and are counter-irritants, which can increase peripheral blood circulation so that it can increase hair growth. Alkaloids are chemicals that can affect hair growth by acting as an irritant that can enlarge the hair shaft so that the supply of food substances increases to nourish the hair [25].

Minyak kemiri is used to stimulate hair health and overcome hair loss and dullness because it has numerous stores of phosphorus, calcium, potassium, magnesium, and other minerals [28]. Tapel is one of the traditional ingredients made from spices that is applied to the abdomen before the mother uses a post-delivery bend; it helps shed the black layer of skin on the stomach due to stretching and enlargement during pregnancy [40]. Tapel is made from fenugreek, ginger, cinnamon, rice, fennel, aromatic ginger, and bangle, which have ingredients that are good for the skin, such as vitamins A, C, and E, antioxidants, antibacterials, and anti-inflammatory agents.

Pilis is a traditional herb that is used as one of the treatments for new mothers. How to use it: as a compress on the forehead to relieve symptoms of headaches, blurred vision, or even dizzy eyes after giving birth [41]. Pilis is made from ginger, lenglengan, fennel, and *Amylum oryzae*, which contain vitamins A, C, and E, cancer prevention agents, and antibacterial and anti-inflammatory properties suitable for restoring the fitness of new mothers. It is recommended to use this pill for 40 days after giving birth.

Ratus vaginal treatment is the treatment of the female organs using a vaporized concoction consisting of herbs, spices, and plant roots such as sevan, turmeric, rose petal, curcuma, nutmeg, and vetiver grass. These spices contain vitamins, antioxidants, antibacterial, anti-inflammatory, and essential oils that can relieve vaginal discharge, unpleasant odor, and itching in the vaginal area. This tradition originated from the habits of the palace princesses, especially the Surakarta Kingdom concubines [42].

4 Conclusions

Traditional cosmetics have long been used in Indonesia, and they contain hereditary keratin ingredients that, at the time, could only be obtained by those of noble descent. Magnificence care in Indonesia is equally important for the intellect and body because the body's health will impact beauty. Indonesia is one of the countries with the foremost biodiversity in the world and could be a global conservation need. Indonesia is overgrown

with plants containing vitamins, antioxidants, antibacterial, anti-inflammatory, and essential oils, which have great potential for developing cosmetic products.

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