



Ethnobotany of medicinal plants in the dayak limbai tribe



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ABSTRACT

The use of medicinal plants by the Dayak Limbai tribe has been going on for a long time, it's just that knowledge related to the use of plants as medicinal ingredients has not been well documented. The aims of this study are 1) to identify plant species that have the potential as medicinal ingredients; 2) describe the part of the medicinal plant used; 3) describe how to use plants as medicine by the Dayak Limbai people. This research was conducted with a qualitative descriptive approach. The data collected consisted of the diversity of medicinal plants (local names of medicinal plants, scientific names of medicinal plants, medicinal plant families, parts used, and their utilization). Data collection using structured interview sheets. Data analysis using content analysis. The results obtained as many as 82 types of plants used to treat 64 types of diseases. The most widely used plant species by the Dayak Limbai people are from the Zingiberaceae family.

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INTRODUCTION

The Dayak tribe is one of the indigenous tribes of Kalimantan. The Dayak have different customs and traditions from each other. Dayak is a common designation in Kalimantan, which indicates one of the tribes in Indonesia that inhabit the island of Kalimantan. Geographically and populations generally live along watersheds (Hamidah, Rijanta & Marfai, 2014). The existence of the Dayak tribe is divided into 405 sub-tribes, one of which is the Dayak Limbai tribe (Riwut, 1993). Administratively the Dayak Limbai people are in Batas Nangka Village, Menukung Subdistrict, Melawi Regency has traditional knowledge in using medicinal plants to treat various types of diseases.

Medicinal plants are defined as a type of plant in which part or all of the plant in the form of roots, stems, leaves, flowers, fruits, and seeds are used as medicine, ingredients, or medicinal



herbs (Herbie, 2015). Medicinal plants are the use of biodiversity around us, both cultivated plants and wild plants. Medicinal plants have a relationship with traditional medicine because most of the utilization of medicinal plants is based more on the experience of use by some people who are already qualified (Harmida, Sarno & Yuni, 2011). Knowledge and use of medicinal plants are only limited to knowledge in terms of the processing, use, and efficacy of plants (Haryono, Wardenaar & Yusro, 2014). The utilization of traditional medicinal plants for the maintenance of health and disease disorders is still needed (Efremila, Wardenaar & Sicily, 2015).

Dayak Limbai people use plants as traditional medicine for several reasons, among others: a) plants have the potential to be very much in the forest, b) plants are used as an alternative to healing if there are no health workers, c) processing can be done simply and does not require costs. These reasons are also supported by Lestari, Jamhari & Isnainar (2017) which state that the reason a community group uses plants as traditional medicine is that it has the potential of adequate natural resources and human resources.

Knowledge in the Dayak Limbai tribe about the use of medicinal plants to treat various diseases is threatened with extinction due to several factors, namely: a) knowledge of medicine is only controlled by the elderly, b) young people today are less motivated to explore knowledge from the elderly, c) have entered palm oil companies and forests are cut down so that the types of plants are reduced, d) fields move in various forests, e) the high cost of medicines. Conditions like this over time will cause traditional knowledge in utilizing plants as medicine to experience extinction in the original place (Noorcahyani, 2012; Efremila et al., 2015). One way to reduce the threat of extinction to knowledge about utilizing plants as a medicine is to document through ethnobotany study of medicinal plants.

Ethnobotany is a study that studies the relationship of human culture to the plant-based nature around it without damaging or exploiting it (Artha, 2016). Ethnobotany science revolves around the use of plants by people around them, in its application can increase human life (Kandowanko, 2011). Ethnobotany to protect the intellectual property of local people in the form of knowledge of the use of plants as medicine to avoid the possibility of exploitation, not only physical objects but also documentation (Munawaroh, 2012).

Ethnobotany science is important to develop because with ethnobotany research, an understanding of the success or fallacy of traditional societies in understanding their environment, to avoid the same mistakes in the present or the future (Walujo, 2011). Ethnobotany science must also be applied in the student environment, one of which is as a support for botany courses. Ethnobotany understanding is also expected to open students' insights about the importance of local knowledge so that it needs to be preserved and expected while increasing students' love for local wisdom in the community (Silalahi, 2020). The study of botany is not only about botany, but also concerns traditional ethnobotany knowledge owned by local people (Dharmono, 2007). The purpose of this study is to gather information from the Dayak Limbai people about how to use plant organs as traditionally processed drugs.

RESEARCH METHODS

Research Design

This study uses a qualitative descriptive approach that describes the data as-is and by the facts found in the Dayak Limbai tribe about the use of plants as medicine. Qualitative descriptive research is one of the types of research included in the type of qualitative research (Moleong, 2010). The purpose of this study is to reveal the events or facts, phenomena, and circumstances that occur during the study by presenting what happened. This study interprets and deciphers data related to the situation that is happening in society by existing conditions (Nazir, 2011)

Respondent

Respondents to this study are people who in their daily lives use plants as medicinal ingredients and people who know medicinal plants. The technique of selecting respondents using purposive sampling. The purposive sampling technique was chosen because it suits the needs of research, namely the respondents selected must be indigenous people of the Dayak Limbai tribe and used to use plants for medicine. Some of the respondents selected in this study consisted of 1 customary administrator, 1 traditional medicine, 4 people who had an understanding of the use of medicinal plants.

Instruments

The instrument used in this study was a structured interview sheet. A structured interview is a type of interview where the question to be asked has been made before and becomes a guideline for the questions asked during the interview. The interview was addressed to indigenous administrators, traditional medicine, and Dayak Limbai people who know the traditional use of medicinal plants.

Procedures

The research procedure conducted by the researcher consists of several stages presented in table I.

Table I. The research procedure

No	Time	Stages of Activity	Activity Details
1	February 2021	Compile an interview sheet	The interview sheet is arranged in the form of a table that contains the local name of the plant, the name of the disease, the part used, how it is used.
2	March 30, 2021	Research licensing	Researchers delivered a research license to the Head of Batas Nangka Village.
3	March 31, 2021 - April 5, 2021	Interview	Researchers conducted interviews with 6 respondents consisting of 1 customary administrator, 1 traditional medicine, and 4 people who have an understanding of the use of medicinal plants.
4	6 – 7 April 2021	Photo taken of medicinal plants	Researchers assisted by traditional medicine take photos of plants in the forest.
5	May 2021	Analysis of research data	Researchers determine the scientific name of medicinal plants obtained from the field.

Data Analysis

Data analysis techniques in this study in the form of qualitative descriptive by analyzing ethnobotany of medicinal plants using content analysis based on data that has been obtained. The interview data will be grouped by plant type (local name, scientific name, family), disease name, part of the plant used, and how it is used.

RESULTS



The results of this study were obtained through interviews and field observations with respondents in the tribe community of Dayak Limbai. The results showed different numbers for the number of plant species used as medicine by the tribe of Dayak Limbai community, consist of 6 species from the *Zingiberaceae* family, 4 species from the *Euphorbiaceae* family, 4 species from the *Moraceae* family, 4 species from the *Poaceae* (*Gramineae*) family, 3 species from the *Lamiaceae* family, each 2 species from several families which include *Solanaceae*, *Musaceae*, *Anacardiaceae*, *Malvaceae*, *Myrtaceae*, *Cucurbitaceae*, *Piperaceae*, *Alliaceae*, *Rubiaceae*, *Arecaceae*, *Fabaceae*, and *Acoraceae*. For several other families including *Blechnaceae*, *Schizaeaceae*, *Umbiliferae*, *Araceae*, *Iridaceae*, *Clusiaceae*, *Amaryllidaceae*, *Phyllanthaceae*, *Athyriaceae*, *Oxalidaceae*, *Caricaceae*, *Convolvulaceae*, *Simaroubaceae*, *Leguminosae*, *Melastomataceae*, *Amaranthaceae*, *Nephrolepidaceae*, *Louraceae*, *Meliaceae*, *Polyaceae*, *Louraceae*, *Menispermaceae*, *Dipterocarpaceae*, *Annonaceae*, *Dilleniaceae*, *Crassulaceae*, *Marantaceae*, *Rutaceae*, and *Lycopodiaceae* each consisted of only 1 species used. There is 1 species that has not been identified. The results of the study are presented on the appendix I.

The tribe community of Dayak Limbai people use plants as medicine in 18 ways, namely by pounding, dicing, boiling, smearing, eating, drinking, scraping, sticking, burning, cutting, heated over a fire, eaten raw, eaten directly, woven, wrapped, chewed, sprayed, and dripped. Of the 18 ways of utilization, the most widely used method is by smearing, because the type of disease being treated requires treatment outside the body. For treatment in the body, it is still done by eating (after vegetables or boiling), drinking (after boiling or making drinks), eaten raw (without vegetables or boiled or burned), eaten directly (usually because the fruit is ripe from the tree). The parts of plants used for medicine include rhizomes, leaves, roots, fruit, sap, bark, shoots, dry leaves, young leaves, stems, flowers, tubers, seeds, stem pulp, buds, bulbs (tuber layers), water in leaf shoots, dried fruit, old corn silk, fruit skin, old fruit, ripe fruit, young flowers, young stems, fruit juice, and stem shoots. Of the 26 plant parts that can be used for medicine, the most widely used is the leaf, which can be young or old.

DISCUSSION

Based on interviews and field observations with respondents in the Dayak Limbai tribe, Menukung Subdistrict, Melawi Regency obtained as many as 82 types of plants used to treat 64 types of diseases. The number of medicinal plants found in the Dayak Limbai tribe because the area still has a large enough forest so that the forest has the potential as a place or habitat for medicinal plants used by the local community. This is in line with what was conveyed by Anisah (2021) that forests in Indonesia (including the Dayak Limbai tribe) are known as mega biodiversity and as producers of plants that have medicinal ingredients. Furthermore, Simamora (2018) stated that forests are natural resources that have many benefits, among others, beneficial for ecology, socio-culture, economy, and produce non-timber for medicine.

Dayak Limbai people use parts (organs) of plants namely roots, rhizomes, stems, skin, leaves, flowers, fruit, seeds, sap, and eye buds to perform the treatment of various types of diseases traditionally. The use of these plant parts or organs is due to the following reasons: (a) the knowledge is obtained from dreams, (b) the knowledge is conveyed for generations, (c) the parts of the plant are easily acquired and the availability in the forest is very much, (d) the harvesting of the plant's organs for treatment will not result in the plant dying. These reasons are also supported by the results of research Julung, Supiandi, Ege, Mahanal & Zubaidah (2018); Supiandi & Leliavia (2020) who reported that the use of medicinal plant parts was obtained from ancestral messages and Bala Petara through dreams and passed down from ancestors or parents.

In theory or the results of previous research explained various reasons why society uses the roots, rhizomes, stems, skin, leaves, flowers, fruit, seeds, sap, and eye buds. As for the detailed

description as reported by Supiandi, Julung, Ege, Mahanal, & Zubaidah (2020) that the Dayak people utilize the root part for traditional medicine because it is believed that the root part has high efficacy and efficacy in curing disease when accompanied by certain spells. Supriadi (2020) mentioned that rhizomes have antioxidant content for disease prevention and health care. According to Sofiah (2014) reported that the stem has the function to transport water and food substances and become a stockpiling of food substances so that the stem contains many substances that are good for the body. According to Sofiah (2014), the utilization of stem skin is usually used for the treatment of external diseases.

Oktavia, Darma & Sujarwo (2017) mentioned that the leaf part is also easy to obtain, easy to extract, and is a place of accumulation of photosynthetic that can cure diseases. Furthermore, Lestaridewi, Jamhari & Isnainar (2017) mentions that the leaves have a soft structure so that it is easy to process. Pardede (2013) mentions the use of fruit as a drug because chemically the fruit contains water, carbohydrates, proteins, vitamins, and minerals needed by the body. According to Sofiah (2014) reported that seeds have substances that are beneficial to the body. According to Rahayu, Sunarti, Sulistriani & Prawiroatmodjo (2006) mentions the utilization of plant sap aims so that the content of compounds in the material can be maintained. According to Adfa (2005) that in general the active compounds found in the plant (roots, rhizomes, stems, skin, leaves, flowers, fruits, seeds) in the form of secondary metabolites such as alkaloids, flavonoids, terpenoids, steroids, coumarins, which have effects as antiviral, anti-cancer, anti-inflammatory, antioxidant, anti hepatotoxic, and anti-diabetic.

Dayak Limbai people use plants as traditional medicine by pounding and smearing, boiled and drunk, taped, chewed and sprayed, cooked and eaten, burned and smeared, chewed and wrapped. These methods are simple and still very traditional. This is done by the community for several reasons, namely: (a) it does not require expensive costs or even does not require costs, (b) the process of doing or concocting does not take a long time, (c) simply use simple equipment so that anyone can do it. These reasons are also supported by the results of relevant research conducted by Adyana (2012); Supiandi, Zubaidah, Mahanal, Julung & Ege (2019) mentioned that the majority of Dayak tribe processing easily and simply.

In theory or the results of previous research explained various reasons why a concocting medicinal plants by boiling and drinking, pounded and applied, taped, chewed and sprayed, cooked and eaten, burned and smeared, chewed and wrapped. As for the description in detail as reported by Supiandi et al (2020); Uzlifah (2014) reported that processing by boiling and drinking will produce preparations containing active substances and able to increase antioxidant activity. Efremila et al (2015) mention the processing of plants by pounding and smearing mostly to treat external diseases and will give a reaction when applied to the sick part. Nurhaida, Usman & Tavita (2015) reported that the use of plants medicine by taping, the disease they feel will heal and have a reaction so quickly. Shah, Usman & Yusro (2014) mentions processing by cooking and eating mostly to treat internal diseases, plants that have been cooked and eaten will have a good impact on healing. Wulandari, Fitmawati & Sofiyanti (2014) reported that processing by burning and smearing to treat external diseases, the processing is seen from the part of plant organs used, to take sari and active substances contained in the plant has more benefits for healing. Depdikbud (1991) reported processing by chewed and sprayed used to treat diseases that are not visible, and also sometimes to treat pain due to physical statehood. Depdikbud (1991) mentions the processing of treatment by dressing mostly to treat diseases that are visible from the physical outside and only wrapped in the sick part.

CONCLUSION



Plants are used as medicine by the Dayak Limbai tribe as many as 84 types of plants are used to treat 64 types of diseases. The parts used to treat various diseases start from the roots, rhizomes, stems, skin, leaves, flowers, fruit, seeds, sap, and eye buds and are still done simply. The number of medicinal plants found in the Dayak Limbai tribe because the area still has a large enough forest so that the forest has the potential as a place or habitat for medicinal plants used by the local community.

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Appendix I. List of medicinal plants in the Dayak Limbai tribe

N o	Local Name	Scientific Name	Family	Name of disease	Parts Used	How to Use
1	Kunyet	<i>Curcuma domestica</i> Vahl	<i>Zingiberaceae</i>	Allergy	Rhizome	Pounded with rice, smeared on the allergic part
2	Pakuk nait	<i>Stenochlaena palustris</i> (Burm.) Bedd	<i>Blechnaceae</i>	Anemia (lack of blood)	Leaf	Vegetabled, eaten
	Pelok	<i>Manihot esculenta</i> Crantz	<i>Euphorbiaceae</i>			Vegetabled, boiled, eaten
3	Empuing	<i>Zingiber purpureum</i> Roxb.	<i>Zingiberaceae</i>	Gout	Rhizome	Pounded with rice, smeared on the gout part
	Liok miroh	<i>Zingiber officinale</i> Roxb.				Pounded, boiled, drink
4	Pakuk enturuk halus	<i>Lygodium flexuosum</i> (L.) Sw.	<i>Schizaeaceae</i>	Acute asthma	Leaf, root	Boiled, drink
5	Idu	<i>Centalla asiatica</i> (L.) Urb.	<i>Umbelliferae</i>	Swelling due to insect stings	Root	Pounded, smeared on the part affected by the sting
	Kayu patoh tulong	<i>Euphorbia tirucalli</i> L.	<i>Euphorbiaceae</i>		Latex	Smeared on the part affected by the sting
	Keladi	<i>Colocasia esculenta</i> (L.) Schott	<i>Araceae</i>			
	Rangki alus	<i>Capsicum frutescens</i> L.	<i>Solanaceae</i>		Fruit	Cuttet, smeared on the part affected by the sting
6	Baong lembak	<i>Eleutherine americana</i> Merr.	<i>Iridaceae</i>	Dysentery	Bulbs (tubers)	Boiled, drink
	Gandis	<i>Garcinia xanthochymus</i> Hook. f. ex T. Anderson	<i>Clusiaceae</i>		Bark	Scraped, boiled, drink
7	Baong putih	<i>Allium sativum</i> L.	<i>Alliaceae</i>	Blain	Tuber	Smeared around blain
	Pisong emas	<i>Musa acuminata</i> L.	<i>Musaceae</i>		Shoots	Pounded, smeared on blain

8	Cekur	<i>Kaempferia galanga</i> L.	Zingiberaceae	Wormy	Rhizome, leaf	Eaten right away
9	Paoh	<i>Mangifera timorensis</i> Blume	Anacardiaceae	Hiccup	Bark	Scraped, boiled, drink
10	Kabu	<i>Ceiba pentandra</i> (L.) Gaertn.	Malvaceae	Fever	Leaf	Pounded with rice, smeared all over the body
	Komong sepatu	<i>Hibiscus rosa sinensis</i> L.				
	Rumput ngamenano k	<i>Phyllanthus urinaria</i> L.	Phyllanthaceae			
11	Jambu biji	<i>Psidium guajava</i> L.	Myrtaceae	Diarrhea	Leaf	Boiled, drink
	Lajok	<i>Alpinia galanga</i> (L.) Willd.	Zingiberaceae		Rhizome	Pounded, boiled, drink
	Liok miroh	<i>Zingiber officinale</i> Roxb.				
12	Empuing	<i>Zingiber purpureum</i> Roxb.	Zingiberaceae	Dysentery (intestinal infection)	Bud eye	Burned, taped to the anus
13	Entimon batong	<i>Cucumis sativus</i> L.	Cucurbitaceae	Black spots on face	Fruit	Cutted, smeared on the face
	Pakuk pantai	<i>Diplazium esculentum</i> Schwartz.	Athyriaceae		Stem, leaf	Pounded, smeared on the face
14	Kemaouk	<i>Piper betle</i> L.	Piperaceae	Itchy redness	Leaf	Kneaded, smeared on the itchy part when bathing
	Puring	<i>Codiaemum variegatum</i> A. Juss.	Euphorbiaceae			
15	Kobajarah	<i>Hyptis capitata</i> Jacq.	Lamiaceae	Swollen gums	Leaf	Pounded with rice, smeared on the swollen gums
16	Kunyet	<i>Curcuma domestica</i> Vahl.	Zingiberaceae	Nasal congetion	Rhizome	Smeared on the bridge of the nose
17	Empuing	<i>Zingiber purpureum</i> Roxb.	Zingiberaceae	Hernia (dropped down)	Rhizome, shoots	Burned, smeared on the lump
18	Baong putih	<i>Allium sativum</i> L.	Alliaceae	Hypertensio n (High	Tuber	Boiled, drink (5 cups to 2 cups)

	Belimbing tunjuk	<i>Averrhoa bilimbi</i> L.	<i>Oxalidaceae</i>	Blood Pressure)	Leaf	Boiled, drink
	Mengkudu	<i>Morinda citrifolia</i> L.	<i>Rubiaceae</i>			
	Pepaya	<i>Carica papaya</i> L.	<i>Caricaceae</i>			
19	Pelok rampuk	<i>Ipomoea batatas</i> Lam.	<i>Convolvulaceae</i>	Breast cancer	Leaf	Pounded with rice, smeared on the breast
	Puring miroh	<i>Codiaeum variegatum</i> A. Juss.	<i>Euphorbiaceae</i>			
20	Nyiur	<i>Cocos nucifera</i> L.	<i>Arecaceae</i>	Food poisoning	Coconut water	Drink right away
	Pasok bumi	<i>Eurycoma longifolia</i> Jack	<i>Simaroubaceae</i>		Root	Boiled, drink
21	Empuing	<i>Zingiber purpureum</i> Roxb.	<i>Zingiberaceae</i>	Sprain	Rhizome	Pounded with rice, smeared on the sprained part
	Kunyet	<i>Curcuma domestica</i> Vahl.				Burned, pounded with rice, smeared on the sprained part
22	Nangkok	<i>Artocarpus heterophyllus</i> Lam.	<i>Moraceae</i>	Water flea	Dry leaf	Burned to ashes, mixed with cooking oil, smeared on the part affected by water fleas
23	Nangkok	<i>Artocarpus heterophyllus</i> Lam.	<i>Moraceae</i>	Scratched by falling	Dry leaf	Burned to ashes, mixed with cooking oil, smeared on the blisters
24	Jungka	<i>Crinum Asiaticum</i> L.	<i>Amaryllidaceae</i>	Liver	Leaf	Pounded, smeared on the chest to the stomach
	Kunyet	<i>Curcuma domestica</i> Vahl.	<i>Zingiberaceae</i>		Rhizome	Pounded with rice, smeared on the chest to the stomach
	Pinong	<i>Areca catechu</i> L.	<i>Arecaceae</i>		Leaf	Heated in the fireplace, taped on the chest to the stomach

	Terong tuluh	<i>Solanum torvum</i> Sw.	<i>Solanaceae</i>			Pounded, mixed with slices of wooden cauldron lid, sliced wood chili pounder and added soot from the top of the wood stove, plus steamed rice (burned), smeared on the chest to the stomach
25	Engkereban g	<i>Psychotria vividiflora</i> Reinw. ex Blume	<i>Rubiaceae</i>	Burns	Leaf	Pounded, taped to the burnt area
	Keladi	<i>Colocasia esculenta</i> var. <i>esculenta</i> (L.) Schott	<i>Araceae</i>		Latex	Taped to the burnt area
	Ngingo	<i>Psychotria nervosa</i> Sw.	<i>Rubiaceae</i>		Leaf	Pounded, taped to the burnt area
	Rumput sapi	<i>Paspalum conjugatum</i> Berggr.	<i>Poaceae</i> (<i>Gramineae</i>)			
26	Selasih	<i>Ocimum basilicum</i> L.	<i>Lamiaceae</i>	Deep wound	Leaf, fruit	Boiled, drink
27	Empuing	<i>Zingiber purpureum</i> Roxb.	<i>Zingiberaceae</i>	Paralysed	Rhizome	Pounded with rice, smeared on the paralyzed body part
	Kepuak	<i>Artocarpus elasticus</i> Reinw. ex Blume	<i>Moraceae</i>		Young leaf	
	Kunyet	<i>Curcuma domestica</i> Vahl.	<i>Zingiberaceae</i>		Rhizome	
28	Gelinggam	<i>Cassia alata</i> L.	<i>Leguminosae</i>	Ulcer	Leaf	Pounded, drink
	Terong tuluh	<i>Solanum torvum</i> Sw.	<i>Solanaceae</i>		Fruit	Raw eaten
29	Kelopuk	<i>Nauclea speciosa</i>	<i>Rubiaceae</i>	Malaria	Fruit	Raw eaten
	Pasok matohari	<i>Clidemia hirta</i> (L.) D.Don	<i>Melastomatacea</i> <i>e</i>		Root, bark	Boiled, drink

	Pepaya	<i>Carica papaya</i> L.	<i>Caricaceae</i>		Leaf	
30	Arum	<i>Amaranthus spinosus</i> L.	<i>Amaranthaceae</i>	Malnutrition (lack of nutrition)	Leaf, stem	Vegetabled, eaten
	Pelok	<i>Manihot esculenta</i> Crantz	<i>Euphorbiaceae</i>		Leaf	Pounded, vegetabled, eaten
31	Empuing	<i>Zingiber purpureum</i> Roxb.	<i>Zingiberaceae</i>	Bruised from falling	Rhizome	Pounded with rice, smeared on the bruise
32	Kelopuk	<i>Nauclea speciosa</i>	<i>Rubiaceae</i>	Accelerate breast feeding	Leaf	Vegetabled, eaten
	Konong	<i>Ficus variegata</i> Blume	<i>Moraceae</i>		Leaf, young stem	
	Nyiur	<i>Cocos nucifera</i> L.	<i>Arecaceae</i>		Young flower, shoots	
	Pakuk korok	<i>Polypodium verrucosum</i> Hook.	<i>Nephrolepidaceae</i>		Young stem, leaf	
	Pelok rampuk	<i>Ipomoea batatas</i> Lam.	<i>Convolvulaceae</i>		Latex	Smeared on the breast
33	Kedaung	<i>Parkia javanica</i> (Lam.) Merr.	<i>Fabaceae</i>	Accelerate defecate	Ripe fruit	Eaten right away
	Pepaya	<i>Carica papaya</i> L.	<i>Caricaceae</i>			
	Pisang	<i>Musa paradisiaca</i> L.	<i>Musaceae</i>			
34	Putri malu	<i>Mimosa pudica</i> L.	<i>Fabaceae</i>	Accelerate and reduce menstrual pain	Leaf	Pounded with rice, smeared around the vagina
35	Lajok	<i>Alpinia galanga</i> (L.) Willd	<i>Zingiberaceae</i>	Make birth easier	Rhizome	Pounded with rice, smeared on the stomach and around the vagina
36	Empuing	<i>Zingiber purpureum</i> Roxb.	<i>Zingiberaceae</i>	Overcoming prickly heat	Rhizome	Pounded with rice, smeared on the part affected by prickly heat
37	Padi	<i>Oryza sativa</i>	<i>Poaceae</i>	Overcoming	Old fruit	Pounded (mixed

	L.	(Gramineae)	fatigue		empuing rhizome and red ginger), drink	
38	Ati-ati	<i>Plectranthus scutellarioides</i> (L.) R.Br	Lamiaceae	Treat miscarriage	Stem, leaf	Pounded with rice, smeared around the vagina
	Pakuk pantai	<i>Diplazium esculentum</i> Schwartz.	Athyriaceae			
39	Tembulan	<i>Lansium domesticum</i> var. aquaeum	Meliaceae	Fever (high fever, chills)	Seed, rind	Eaten right away
40	Terong tulih	<i>Solanum torvum</i> Sw.	Solanaceae	Nauseous	Fruit	Raw eaten
41	Jerangau miroh	<i>Acorus sp</i>	Acoraceae	Vomiting blood	Rhizome	Pounded, drink or raw eaten
	Pasok bumi	<i>Eurycoma longifolia</i> Jack	Simaroubaceae		Root, bark	Boiled, drink
	Tembulan	<i>Lansium domesticum</i> var. aquaeum	Meliaceae		Root, rind	
42	Benalu	<i>Loranthus L</i>	Loranthaceae	Stomach pain	Leaf	Pounded with rice, smeared on the stomach
	Putri malu	<i>Mimosa pudica</i> L.	Fabaceae			
	Sisit nago	<i>Drymoglossum piloselloides</i> (L.) Presl.	Polypodiaceae			
43	Empuing	<i>Zingiber purpureum</i> Roxb.	Zingiberaceae	Back pain	Rhizome	Pounded with rice, smeared on the back
	Kunyet	<i>Curcuma domestica</i> Vahl.				
44	Baong kucai	<i>Allium schoenoprasum</i> Rottler ex Spreng. dan A. Ramous	Alliaceae	Postpartum (thin, black, lethargic, likes to sleep)	Bulbs (tubers)	Pounded with rice, smeared around the vagina
	Kunyet	<i>Curcuma domestica</i> Vahl.	Zingiberaceae		Rhizome	
	Liok miroh	<i>Zingiber officinale</i> Roxb. var.				Pounded, boiled, drink

		<i>rubrum</i> Rosc				
	Pakuk rabun	<i>Lycopodium cernuum</i> L.	<i>Lycopodiaceae</i>		Root	Pounded with rice, smeared around the vagina
45	Kayu aro	<i>Ficus benjamina</i> L.	<i>Moraceae</i>	Fracture	Bark	Woven, then wrapped in a broken place (mixed with chopped chicks, honey, free-range chicken eggs)
46	Eceng gondok	<i>Eichhornia crassipes</i> (Mart.) Solms.	<i>Pontederiaceae</i>	Breast enlargement	Leaf	Pounded with rice, smeared on the breast
	Pelok rampuk	<i>Ipomoea batatas</i> Lam.	<i>Convolvulaceae</i>			
47	Jungka	<i>Crinum asiaticum</i> L.	<i>Amaryllidaceae</i>	Testicular enlargement	Leaf	Pounded with rice, smeared on the testicles
	Kunyet	<i>Curcuma domestica</i> Vahl.	<i>Zingiberaceae</i>		Rhizome	
48	Ati-ati	<i>Plectranthus scutellarioides</i> (L.) R.Br.	<i>Lamiaceae</i>	Bleeding	Leaf, young stem	Pounded with rice, smeared around the vagina
	Engkereban g	<i>Psychotria vividiflora</i> Reinw. ex Blume	<i>Rubiaceae</i>		Leaf	
	Pakuk korok	<i>Polypodium verrucosum</i> Hook.	<i>Nephrolepidaceae</i>			
	Pakuk pantai	<i>Diplazium esculentum</i> Schwartz	<i>Athyriaceae</i>		Stem, leaf	
	Tobu (the one with bear bite marks)	<i>Saccharum officinarum</i> L.	<i>Poaceae</i> (<i>Gramineae</i>)		Stem dregs	
49	Cahong	<i>Piper nigrum</i> L.	<i>Piperaceae</i>	Impotent	Dry fruit	Pounded (7 items). smeared on the penis
	Tebelian	<i>Eusideroxylo n zwageri</i>	<i>Lauraceae</i>		Leaf (handful)	Cut the tip and base, take the

		Teijsm. et Binn.				middle, pounded and smeared on the penis
50	Belimbing tunjuk	<i>Averrhoa bilimbi</i> L.	<i>Oxalidaceae</i>	Heart disease and cholesterol	Leaf	Boiled, drink
	Cengkeh	<i>Syzygium aromaticum</i> (L.) Merr. dan L.M. Perry	<i>Myrtaceae</i>		Old fruit	Boiled (5 cups to 2 cups), drink
	Jolik	<i>Zea mays</i> L.	<i>Poaceae</i> (<i>Gramineae</i>)		Old corn hair (sufficientl y)	Boiled, drink
	Manggo	<i>Mangifera indica</i> L.	<i>Anacardiaceae</i>		Dry leaf (handful)	
	Pisong	<i>Musa paradisiaca</i> L.	<i>Musaceae</i>			
51	Gelinggam	<i>Cassia alata</i> L.	<i>Leguminosae</i>	Skin disease (<i>Tinea versicolor</i>)	Leaf	Pounded, smeared on the part that has <i>Tinea versicolor</i>
	Lajok	<i>Alpinia galanga</i> (L.) Willd.	<i>Zingiberaceae</i>		Rhizome	
52	Akar kuning	<i>Arcangelisia flava</i> L.	<i>Menispermaceae</i>	Hepatitis	Root	Boiled, drink
	Engkabong	<i>Shorea beccariana</i> Roxb. ex Gaertn.	<i>Dipterocarpaceae</i>		Leaf	
	Liok miroh	<i>Zingiber officinale</i> Roxb. var. <i>rubrum</i> Rosc	<i>Zingiberaceae</i>		Rhizome	Pounded, boiled, drink
53	Cekur	<i>Kaempferia galanga</i> L.	<i>Zingiberaceae</i>	Flatulence in children	Rhizome	Chewed, sprayed on the stomach
	Jerangau putih	<i>Acorus calamus</i> L.	<i>Acoraceae</i>			
54	Cahong	<i>Piper nigrum</i> L.	<i>Piperaceae</i>	Dizzy (cold)	Dry fruit	Pounded with rice, smeared on the forehead
	Cekur	<i>Kaempferia galanga</i> L.	<i>Zingiberaceae</i>		Rhizome	
	Empuing	<i>Zingiber purpureum</i>				

	Pinong	Roxb. <i>Areca catechu</i> L.	<i>Arecaeae</i>		Old Fruit	
55	Sorai	<i>Cymbopogon citratus</i> (DC.) Stapf	<i>Poaceae</i> (<i>Gramineae</i>)	Laryngitis	Stem	Burned, eaten
56	Empuing	<i>Zingiber purpureum</i> Roxb.	<i>Zingiberaceae</i>	Rheumatism	Rhizome	Pounded with rice, smeared on the part affected by rheumatism
	Nangkok belando	<i>Annona muricata</i> L.	<i>Annonaceae</i>		Leaf	Boiled, drink
	Putri malu	<i>Mimosa pudica</i> L.	<i>Fabaceae</i>		Leaf, flower	
	Rumpot sakong	Belum teridentifikasi			Leaf	Pounded with rice, smeared on the part affected by rheumatism
57	Simpur	<i>Dillenia suffruticosa</i> Griff. ex Hook.	<i>Dilleniaceae</i>	Toothache	Leaf	Pounded with rice, pasted on the tooth
58	Lilum	<i>Kalanchoe pinnata</i> (Lam.) Pers.	<i>Crassulaceae</i>	Headache	Leaf	Pounded with rice, pasted on forehead
	Pasok matohari	<i>Clidemia hirta</i> (L.) D.Don	<i>Melastomataceae</i>			Pounded, pasted on the forehead
	Rangki alus	<i>Capsicum frutescens</i> L.	<i>Solanaceae</i>		Ripe fruit	
59	Bomban	<i>Donax canniformis</i> (G.Forst.) K.Schum.	<i>Marantaceae</i>	Eye pain/sore	Shoots leaf water	Dripped into the sore eye
60	Cekur	<i>Kaempferia galanga</i> L.	<i>Zingiberaceae</i>	Stomachache	Rhizome	Pounded, smeared on the stomach
	Empuing	<i>Zingiber purpureum</i> Roxb.				Pounded with rice, smeared on the stomach
61	Malai	<i>Benincasa hispida</i> Cogn.	<i>Cucurbitaceae</i>	Earache	Old fruit	Pounded with rice, smeared behind the earlobe
	Pelok	<i>Manihot esculenta</i> Crantz	<i>Euphorbiaceae</i>		Tuber	

62	Limau alus	<i>Citrus aurantiifolia</i> Swingle	<i>Rutaceae</i>	Septic throat	Fruit	Eaten right away or make drinks
	Sorai	<i>Cymbopogon citratus</i> (DC.) Stapf	<i>Poaceae</i> (<i>Gramineae</i>)		Stem	Burned, eaten
63	Paku enturuk alus	<i>Lygodium flexuosum</i> (L.) Sw.	<i>Schizaeaceae</i>	Tuberculosis	Leaf	Boiled, drink
64	Empuing	<i>Zingiber purpureum</i> Roxb.	<i>Zingiberaceae</i>	Hemorroids	Rhizome, shoots	Pounded with rice, smeared on the anus