


## A Description of The Use of Traditional Medicines For Self Medication in Hampalit Village

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Article Info	ABSTRACT
<p><b>Keywords:</b> Medicinal Plants, Traditional Medicine</p>	<p>Self-medication is a self-medication effort using traditional medicine. Local knowledge on the use of medicinal plants in Hampalit Village is still not well documented. Local knowledge is usually only passed down orally from generation to generation. Over time, the younger generation's interest in preserving local knowledge will decrease, so that the knowledge will gradually become extinct. This study aims to obtain data in the form of plant species, parts used, and processing methods, and to find out what are the health benefits. This research was conducted with a descriptive research design, and data collection techniques using observation, interviews, and documentation. The results of this study are that there are 32 types of medicinal plants used. The most commonly used part of medicinal plants is the leaves. The most commonly used way of processing medicinal plants is by boiling. There are 24 uses for medicinal plants, namely treating high blood sugar, cancer, fever, high blood pressure, fever spasms, sciatica, acute cystitis, blood circulation, stroke, gout, lung and heart health, gray hair, as supplements, cough, vomiting blood, stomach pain, constipation, cholesterol, allergies, treating eye disorders, wounds, malaria, and helping to dissolve kidney stones.</p>
<p>This is an open access article under the <a href="https://creativecommons.org/licenses/by-nc/4.0/">CC BY-NC</a> license</p> 	<p><b>Corresponding Author:</b> Nurul Qamariah Program Studi DIII Farmasi, Universitas Muhammadiyah Palangkaraya <a href="mailto:nurulqamariah@umpr.ac.id">nurulqamariah@umpr.ac.id</a></p>

### INTRODUCTION

Health is very important for life. Someone who feels sick will make efforts to regain their health. Options for seeking recovery from an illness include seeing a doctor or self-medicating (Purnamasari et al., 2019). Our ancestors with their knowledge and simple equipment used various types of plants for the treatment of diseases (Maulidiah, 2019). Minor and severe illnesses are treated using certain types of herbs found around the yard and in the forest (Wibisono & Azham, 2017). Treatment with medicinal plants (herbs) has long been recognized by the Indonesian people as an effort to overcome health problems. The back-to-nature lifestyle that is currently trending has brought people back to utilizing natural materials (Wismarini et al., 2012).

Indonesia was known for centuries as the spice center of the world. It is so famous that Europeans and Asians are always competing to buy spices such as medicinal plants, food

flavorings, and aromatic ingredients from the Indonesian archipelago, including cloves, pepper, nutmeg, cinnamon, ginger, and vanilla. There are hundreds of types of medicinal plants that grow in Indonesia which are ingredients for traditional medicine, aka herbal medicine, herbal medicine, or phytopharmaceuticals. Indonesia is indeed one of the exporters of medicinal plants, aromatics, and spices which is known on the international market. Referring to data from the Central Statistics Agency (BPS), throughout 2022 Indonesia exported medicinal plants, aromatics, and spices weighing 279.3 thousand tons, an increase of 5.55% from the previous year. The total export value reached USD 607.86 billion.

In 2018, the percentage of the Indonesian population who used traditional medicine reached 59.12%. According to the Food and Drug Supervisory Agency, traditional medicines are divided into three categories and have been used by people for generations using simple processing methods. Thus, statistical data on the use of medicinal plants in Indonesia shows that the use of traditional medicines and the production of biopharmaceutical plants continues to increase, and there are variations in consumption and distribution in various regions and communities.

According to the Decree of the Minister of Health of the Republic of Indonesia Number H.K.01.07/Menkes/187/2017 concerning the Formulary of Indonesian Traditional Medicinal Herbs, traditional medicine is a material or mixture of materials in the form of plant materials, animal materials, mineral materials, preparation of essence, or a mixture of these materials which have been used for generations for treatment and can be applied under the norms prevailing in the community. According to the Indonesian Ministry of Health 2007, the community's efforts to treat themselves are known as self-medication. Self-medication is an alternative taken by the community to increase the affordability of treatment. Self-medication is usually done to overcome complaints and minor illnesses that many people experience, such as fever, pain, dizziness, cough, influenza, stomach ulcers, helminthiasis, diarrhea, skin diseases, and others.

The use of medicinal plants in healing diseases is the oldest form of medicine in the world, the use of medicinal plants has been carried out by humans since the introduction of the process of gathering and still going on today. Each region has a variety of plant utilization used as traditional medicine, knowledge about the use of medicinal plants is the nation's cultural heritage based on knowledge and experience passed down from generation to generation. Hampalit Village, Katingan Hilir Subdistrict, Katingan Regency, Central Kalimantan has natural resources that can be used by the community, these resources include medicinal plants either deliberately cultivated by the community or growing freely in nature. In this paper, Hampalit Village will be referred to as the location for this research.

Local knowledge about the use of medicinal plants in Hampalit Village, Katingan Hilir Subdistrict, Katingan Regency, Central Kalimantan, is still not well documented. The local knowledge is usually only passed on orally from generation to generation. Over time, the younger generation's interest in preserving this local knowledge will gradually become extinct.

Based on this background, researchers are interested in conducting more in-depth research related to self-medication using traditional medicine and researchers feel the need to

preserve this local knowledge by collecting data and documentation regarding the empirical efficacy of medicinal plants used especially in the community in Hampalit Village, Katingan Hilir District, Katingan Regency, Central Kalimantan to find out data on the types of medicinal plants used by the community for self-medication in Hampalit Village, Katingan Hilir District, Katingan Regency, to find out data about the parts of medicinal plants used by the community for self-medication in Hampalit Village, Katingan Hilir District, Katingan Regency and to find out data about how to process medicinal plants by the community for self-medication in Hampalit Village, Katingan Hilir District, Katingan Regency.

## METHODS

This study used observational qualitative research methods. Qualitative research in this study is a study that examines the description of the use of traditional medicine for self-medication in the community in Hampalit Village, Katingan Hilir District, Katingan Regency, Central Kalimantan. In this study, the observations used were observing the description of the use of traditional medicine for self-medication in the community in Hampalit Village, Katingan Hilir District, Katingan Regency, Central Kalimantan in the form of plant names, parts used in processing, and empirical efficacy. The population in this study were traditional healers in Hampalit Village, Katingan Hilir District, Katingan Regency, Central Kalimantan. The sample in this study were traditional healers in Hampalit Village, Katingan Hilir District, Katingan Regency, Central Kalimantan. According to Sugiyono (2019), the sample is part of the number and characteristics of the population. In this study, the data source sampling technique used was the snowball sampling technique.

The selection of informants in this study using the snowball sampling technique aims to get as much data as possible following the research objectives so that the data taken can truly be represented. There are 3 (three) informants involved in this research, namely 1 (one) key informant, then 1 (one) informant recommended by the key informant, and 1 (one) more informant recommended by the previous informant.

Data collection techniques using observation guidelines and interview guidelines were given to research respondents. The tools used in this research are stationery used to record the results of direct interviews with respondents and field observations, photo cameras to document the location, voice recorders or cellphones to record interviews with respondents, and a list of questions.

Observation is the initial stage of research conducted in Hampalit Village, Katingan Hilir District, Katingan Regency, Central Kalimantan, namely by seeking information about traditional healers who utilize medicinal plants in the area. Furthermore, interviews were conducted in accordance with the interview guidelines. Based on the data from this interview, researchers obtained data on medicinal plants used by the community for self-medication in Hampalit Village, Katingan Hilir District, Katingan Regency, Central Kalimantan.

Documentation of this research is taking pictures or photos of informants interviewed by researchers to strengthen the data obtained. The results of data processing in this study were obtained using interview techniques so that accurate data could be analyzed. The data

analyzed in the form of data on plant names, parts used, processing methods, and empirical properties are presented in the form of tables and graphs accompanied by discussion.

In this study, the frequency of use of plant parts and processing methods was analyzed to find out what plant parts were most often used in medicine and how to process medicinal plants that were most often used. The data processing is analyzed in the form of a percentage (%) using the formula:

$$P = \frac{f}{n} \times 100\%$$

Description:

P = Percentage

f = Frequency

n = Value (number)

## RESULTS AND DISCUSSION

Treatment of disease, recovery, and maintenance of health using traditional medicine by capitalizing on empirical knowledge that until now many medicinal plants are still an alternative to traditional medicine for self-medication among the community, one of which is the community in Hampalit Village. The reason people still use traditional medicine is because the distance to the hospital is quite far and the health center available there is not open 24 hours. So people still choose traditional medicine.

The first step taken by the researcher was to go to the Hampalit Village Head's office to ask for an observation/research permit. Then the researcher made observations to find out information about traditional healers who indeed live in Hampalit Village, Katingan Hilir District, Katingan Regency. Information was obtained from several residents and close people who had indeed used the traditional medicine.

After obtaining information, the researcher went directly to the informant, a 58-year-old woman named Mrs. Yuli Hartati, who became the key informant in this study. Then she recommended 1 (one) informant, and the researcher immediately went to the next informant, a 67-year-old man named Mr. RA. Prabowo. Then informant 2 (two) recommended 1 (one) last informant. Informant 3 (three) is named Mr. Saimuri, he is 47 years old. Of the three informants work as massage therapists and traditional healers.

Based on the results of research that has been conducted using the interview method, 32 types of medicinal plants were obtained. Research data in the form of plant names, parts used, processing methods, and empirical properties. The following table describes the use of medicinal plants for self-medication in Hampalit Village, Katingan Hilir District, Katingan Regency, Central Kalimantan:

**Table 1.** Presentation of Empirically Corresponding Plant Data

No	Plant Name	Part Used	Processing Method	Empirical Efficacy	Reference
1	Local: Bajakah kalalawit	Stem	Stems are boiled for about 15	Lowers blood sugar	(Arifin et al., 2020)

No	Plant Name	Part Used	Processing Method	Empirical Efficacy	Reference
	Common: Bajakah kalalawit Latin/Species: <i>Psydrax dicoccos</i> Gaertn.		minutes and then drink it	and treats cancer	
2	Local: Mengkudu Common: Noni Latin/Species: <i>Morinda citrifoliae</i>	Fruit	Fruit is mashed first then boiled, filtered, and then drink it	Relieves fever and lowers high blood pressure	(Buku TOGA, 2019).
3	Local: Kambang sepatu Common: Hibiscus Latin/Species: <i>Hibiscus rosasinensi</i>	Leaves	Leaves are squeezed with ice cubes and then attached to the head	Treats convulsive fever	(Buku TOGA, 2019).
4	Local: Cinnamon Common: Cinnamon Latin/Species: <i>Cinramomum zaylanicum</i>	Bark	The stem bark is soaked using hot water and allowed to stand for about 10 hours then drink the water	Lowers blood sugar	(Buku TOGA, 2019).
		Stem	Stems are mashed, boiled, and then drink it	Relieves body aches	
5	Local: Korsen Common: Kersen Latin/Species: <i>Muntingia calabura</i> L.	Leaf	Leaves are boiled for about 2 minutes and then drink it	Lowers blood sugar	(Verdayanti, 2009)
		Fruit	The fruit is eaten directly	Lowers high blood pressure	
6	Local: Kumis Kucing Common: Kumis Kucing Latin/Species: <i>Orthosiphon aristatus</i>	Root	Roots are boiled and then drink it	Treat urinary tract infections	(Buku TOGA, 2019).

No	Plant Name	Part Used	Processing Method	Empirical Efficacy	Reference
7	Local: Ginger Common: Ginger Latin/Species: Zingiber officinale Roscoe	Rhizome	The rhizome is mashed and then boiled, and then drink it	Warm the body and improve blood circulation	(Departemen Kesehatan Republik Indonesia, 2017)
8	Local: Cemot Common: Ciplukan Latin/Species: Physalis peruviana Linn.	Fruit Stem Roots	Boiled and then drink it	Treat stroke	(Redaksi AgroMedia., 2008)
9	Local: Mangosteen Common: Mangosteen Latin/Species: Garcinia mangostana L.	Bark	Stem bark is taken a little then boiled, and then drink it	Lower blood sugar	(Departemen Kesehatan Republik Indonesia, 2017)
10	Local:Dayak onion Common: Dayak onion Latin/Species: Eleutherine americana Merr.	Rhizome	Rhizome mashed then boiled, and then drink it	Relieves body aches	(Noorcahyati, 2012)
11	Local: Bay leaf Common: Bay leaf Latin/Species: Syzgium polyanthum (Wight) Walp.	Leaf	Leaves are boiled and then drink it	Treats gout	(Departemen Kesehatan Republik Indonesia, 2017)
12	Local: Lemongrass Common: Citronella Latin/Species: Adropogons nardus	Stem	Stems are boiled and then drink it	Treats gout	(Buku TOGA, 2019).
13	Local: Secang Common: Secang Latin/Species: Caesalpinia sappan L.	Stem	Stems are chopped into small pieces boiled, and then drink it	For lung and heart health	(Departemen Kesehatan Republik Indonesia, 2017)
14	Local: Kastela Common: Papaya Latin/Species: Carica papaya	Leaves	Leaves are pounded fresh and young leaves then filtered and then drink it	For gray hair	(Buku TOGA, 2019).

No	Plant Name	Part Used	Processing Method	Empirical Efficacy	Reference
5	Local:Dutch jackfruit Common: Soursop Latin/Species: Annona muricata L.	Leaves	Leaves are boiled, and then drink it	Treats gout	(Farmakope Herbal Indonesia Edisi II, 2017).
16	Local: Garu Common: Agarwood Latin/Species: Aquilaria malaccensis	Leaves	Leaves are boiled and then drink it	Normalizes blood sugar levels	(Wahyuni et al., 2016)
17	Local: Moringa Common: Moringa Latin/Species: Moringa oleifera L.	Leaves	Leaves are dried and then made into tea to be consumed every day	Adds body ions and	(Departemen Kesehatan Republik Indonesia, 2017)
18	Local: Lime Common: Lime Latin/Species: Citrus aurantiifolia (Christm.)	Fruit	Burned then drink the juice	Relieves cough	(Departemen Kesehatan Republik Indonesia, 2017)
19	Local: Banyan Common: Banyan Latin/Species: Ficus benjamina Linn.	Leaves	Banyan leaves are taken as much as possible, pounded and added a little water then filter the mashed water collected about 1.5 liters to drink	Treat vomiting of blood	(Buku Pintar Tanaman Obat, 2008).
20	Local: Red fruit Common: Red fruit Latin/Species: Pandanus conoideus	Fruit	The juice is squeezed out and then drink it	For heart health	(Noorcahyati, 2012)



No	Plant Name	Part Used	Processing Method	Empirical Efficacy	Reference
21	Local: Gembili Common: Cassava Latin/Species: Manihot esculenta	Tuber	Cassava tubers are mashed then squeezed out the the starch	Treats stomach pain and constipation	(Buku Pintar Tanaman Obat, 2008).
22	Local: Turmeric Common: Turmeric Latin/Species: Curcuma domestica	Rhizome	Boil the mashed rhizome add a little salt and then drink it	Treat allergies such as hives	(Buku TOGA, 2019).
23	Local: Bitter melon Common: Bitter melon Latin/Species: Momordica charantia (L)	Fruit	Thinly sliced, take 7-8 pieces then soaked in hot water, wait until it cools, then drink it.	Lower cholesterol	(Kemenkes RI, 2017)
24	Local: Cataract flower Common: Kitolod flower Latin/Species: Laurentia longiflora (Linn.)	Flower	Take a little part of the flower pistil put it in water then drip the pistil on the eyes	Treating eye problems such as cataracts	(Buku TOGA, 2019).
25	Local: Cocor bebek Common: Cocor duck Latin/Species: Kalanchoe pinnata Pers.	Leaves	Boil the leaves and then drink it	Overcoming stomach pain	(Noorcahyati, 2012)
26	Local: Chinese betel Common: Chinese betel Latin/Species: Paperomia pellucida	Leaves Stem Roots	Boiled, and then drink it	Treat back pain	(Buku Pintar Tanaman Obat, 2008).
27	Local: Binahung Common: Binahong Latin/Species: Anredera cordifolia (Ten.)	Leaves	Leaves are pounded then applied to the wounded skin surface	Accelerate wound healing	(Departemen Kesehatan Republik Indonesia, 2017)



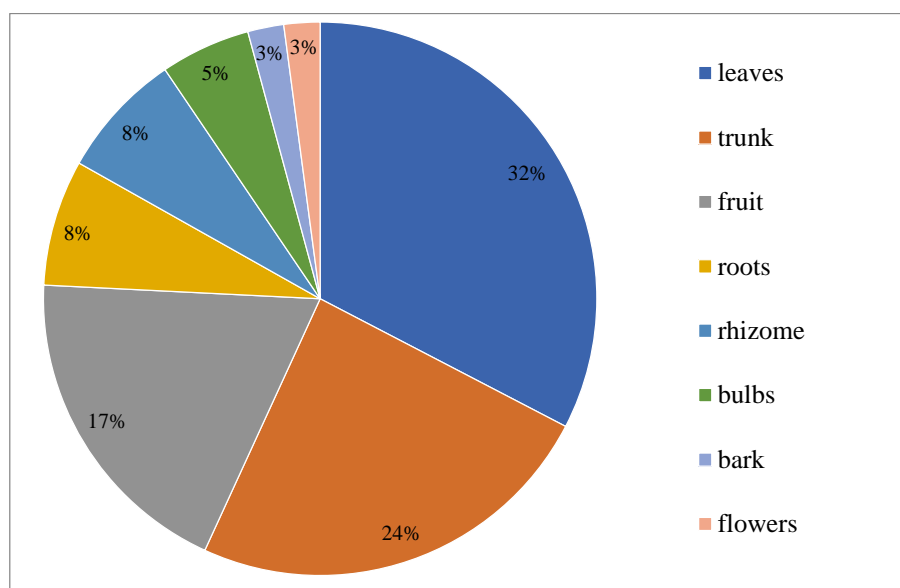
No	Plant Name	Part Used	Processing Method	Empirical Efficacy	Reference
28	Local: Brotowali Common: Brotowali Latin/Species: <i>Tinospora cirspa</i> (L.)	Stem	Stems are chopped into small pieces and then dried in the sun, pounded until smooth and then put into capsules	Treat malaria	(Buku Pintar Tanaman Obat, 2008).
29	Local: Kecibring Common:Keji beling Latin/Species: <i>Sericocalyx crispus</i> (L.)	Leaves	Leaves are boiled and then drink it	Helps dissolve kidney stones	(Departemen Kesehatan Republik Indonesia, 2017)
30	Local:Young coconut Common: Coconut Latin/Species: <i>Cocos nucifera</i>	Fruit	The coconut fruit is burned and then drink it	Improve blood circulation and lower cholesterol	(Buku Pintar Tanaman Obat, 2008).
31	Local: Banana tree Common: Kepok banana tree Latin/Species: <i>Musa acuminata balbisiana</i> Colla	tuber	Hollow out the center of the tuber then cover it tightly, let it sit overnight then drink the water that comes out of the tuber	Lowering wet and dry blood sugar	(Buku Pintar Tanaman Obat, 2008).
32	Local: Daun sop Common: Celery leaf Latin/Species: <i>Apii graveolens</i> L.	Trunk	Boil the lower stem, and then drink it	Treats gout	(Departemen Kesehatan Republik Indonesia, 2017)

Based on the results of research on the use of medicinal plants by the community in Hampalit Village, Katingan Hilir District, Katingan Regency, Central Kalimantan, data on the parts of plants used were obtained, namely:

**Table 2.** Plant parts used

No	Plant Parts Used	Type of Plant
1	Leaf ( <i>folium</i> )	12
2	Stem ( <i>caulis</i> )	9

No	Plant Parts Used	Type of Plant
3	Fruit ( <i>fructus</i> )	7
4	Root ( <i>radix</i> )	3
5	<i>Rhizome (rhizoma)</i>	3
6	Tuber ( <i>bulbus</i> )	2
7	Bark ( <i>cortex</i> )	1
8	Flower ( <i>flos</i> )	1



**Figure 1.** Use of medicinal plant parts

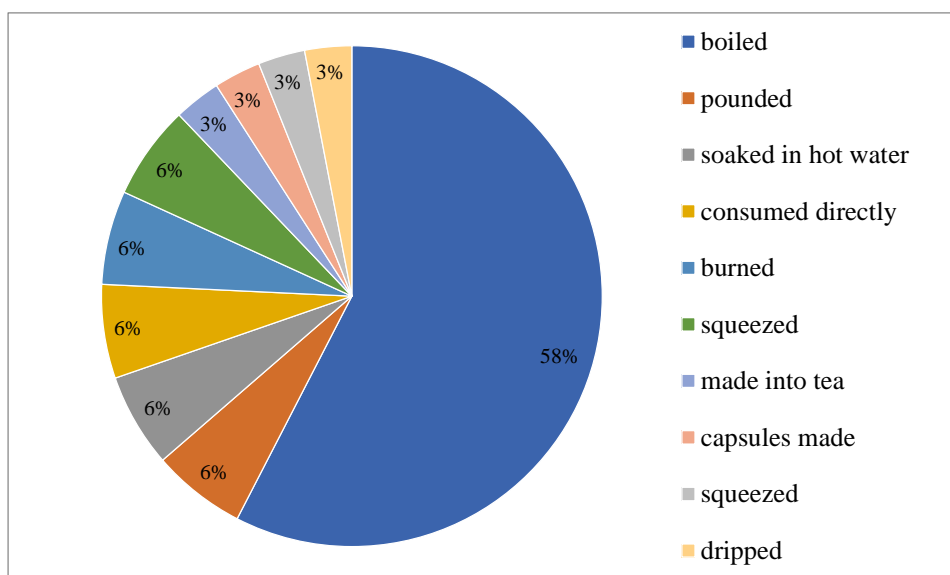
Figure 1, illustrates the amount of use of medicinal plant parts in Hampalit Village, Katingan Hilir District, Katingan Regency, Central Kalimantan. The most widely used plant part is the leaves, with a percentage of 32%. This is because the content of drugs/necessary substances contained in the leaves is more, and the leaves are easy to process with their soft structure compared to other plant parts, the leaves are also always available continuously and are more often used by the community to treat for generations (Lestari & Susanti, 2019)

The use of leaves as a part for treatment in addition to not damaging medicinal plant species, the leaves are also easy in terms of taking and compounding medicinal herbs. The use of leaves as the most widely used part of the plant is based on the efficacy of medicinal plants found generally to treat external diseases or injuries to external organs. In addition to treating external diseases, leaves from medicinal plants can also be used to treat diseases of the internal organs by boiling and drinking the water (Susanti et al., 2018). The processing of medicinal plants by the community in Hampalit Village, Katingan Hilir District, Katingan Regency, Central Kalimantan is still fairly simple, consisting of:

**Table 3.** Processing methods of medicinal plants

No	Processing Method	Plant Type
1	Boiled	19

No	Processing Method	Plant Type
2	Pounded	2
3	Soaked in hot water	2
4	Consumed directly	2
5	Burned	2
6	Squeezed	2
7	Made into tea	1
8	Made into capsules	1
9	Squeezed	1
10	Dripped	1



**Figure 2.** Processing of medicinal plants

Figure 2 illustrates how medicinal plants are processed in Hampalit Village, Katingan Hilir Sub-district, Katingan Regency, Central Kalimantan. The most widely used way of processing medicinal plants is boiled, namely with a percentage of 58%. This is because boiled processing is very easy and very effective because people generally prefer the plant to be processed into boiled water compared to consuming it directly. In addition, the healing process is faster because it is directly processed in the body's metabolism (Due, 2013). Based on the results of research by (Kandowangko et al., 2011), internal medicine is a type of treatment by drinking preparations from medicinal plants. When viewed from the way of processing medicinal plants, most of them are only boiled.

The purpose of boiling medicinal plants is to transfer the efficacious substances in the plant into a water solution, then drunk for medicinal needs. The way of boiling is believed by the community to kill germs on plants, safer and more content compounds in plants come out. Processing medicinal plants by boiling can reduce blandness and bitterness compared to being eaten directly, and boiling is more sterile because it can kill germs or pathogenic bacteria. The boiled process can lift the substances contained in plants and have a reaction that is so

fast when drunk. Whereas by slicing, rubbing, juicing, roasting and drinking or others, the processing process is also longer and the substances contained in the plant also come out a little so that the healing process can cause a longer time (Lestari & Susanti, 2019).

The people of Hampalit Village use noni plants as traditional medicine, namely the fruit part which is used to relieve fever and reduce high blood pressure. According to the Ministry of (Arifin et al., 2020), *Morinda citrifolia* is used for hypotensive, and anthelmintic.

The cat's whisker plant as a traditional medicine is the root part which is used to treat urinary tract infections. According to (Efayanti et al., 2019), *Orthosiphon aristatus* is used for kidney stones and urine leakage (Parwata, 2016). Dayak onion plants as traditional medicine, namely the rhizome part which is used to relieve body aches. Empirically, some ethnic Dayaks in Kalimantan use the bulbs of this plant to treat various diseases such as diabetes, cholesterol and cancer (Noorcahyati, 2012). The Brotowali plant as a traditional medicine is part of the stem which is used to treat malaria. According to Editorial (Redaksi AgroMedia., 2008), fresh Brotowali stems are efficacious in relieving pain (analgesic), reducing heat (antipyretic), and stimulating appetite.

The Cocor Bebek plant as a traditional medicine is the leaf part which is used for gray hair. The results of research by (Yuniarti, 2008), the leaves of Cocor Bebek are used by the community for flatulence and to lower cholesterol. Cocor bebek plants as traditional medicine, namely the leaves used to treat gastric pain (Yatias, 2015). Cocor Bebek is used by ethnic natives of Kalimantan to overcome hot fever in children (Noorcahyati, 2012)

## CONCLUSION

Based on the results of research on the use of medicinal plants by the community in Hampalit Village, Katingan Hilir District, Katingan Regency, Central Kalimantan, it can be concluded that 32 types of medicinal plants are used, namely Bajakah Kalalawit, Noni, Kambang Sepatu, Cinnamon, Corsage, Cat's Whisker, Ginger, Cemot, Mangosteen, Dayak Onion, Salam Leaf, Lemongrass, Secang, Kastela, Dutch Jackfruit, Garu, Moringa, Lime, Banyan Tree, Red Fruit, Gembili, Turmeric, Bitter Gourd, Cataract Flower, Cocor Bebek, Chinese Betel, Binahung, Brotowali, Kecibring, Young Coconut, Pohong Pisang, Sop Leaf. The most commonly used part of medicinal plants is the leaves. The most commonly used way of processing medicinal herbs is by boiling. There are 24 uses of medicinal plants, namely lowering wet and dry blood sugar, treating cancer, relieving fever, lowering high blood pressure, treating spastic fever, relieving aches and pains, treating urinary tract infections, warming the body and improving blood circulation, treating stroke, treating gout, for lung and heart health, for gray hair, add ions, treat complications, relieve cough, treat vomiting blood, overcome stomach pain, overcome constipation, lower cholesterol, treat allergies such as hives, treat eye problems such as cataracts, accelerate wound healing, treat malaria, help dissolve kidney stones.

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