

E-ISSN: 2829-9728.

Ethnobotany Bua-Bua: Foodstuff and Medical

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Received: 5 Oktober 2024 Accepted:25 November 2024 Available online:21 Desember 2024

ABSTRACT

Bua-Bua people utilize plants as traditional medicines in forest areas. It is easy to find simple to process. The study goals are to describes the knowledge of the Bua-Bua community to using plants as medicine and plants utilization as traditional medicines and how to process medicinal plants in Bua-Bua village. The observation method used is qualitative with a descriptive analysis approach. The data collection was done by observation and semi-structured interviews with key informants. Determination of key informants is done by the snowball technique. Data collected in the form of primary data and secondary data. Primary data is related to the use of medicinal plants and medicinal plants. The interview results showed that there were 46 types of plants that were used to treat various types of diseases commonly suffered by the people of Bua-Bua Village. Commonly used plants as medicine include cinnamon, nutmeg, ketapang, noni, soursop, mangosteen, avocado, candlenut, lemongrass, cat whiskers, betel, gofasa, mayana, kencur, star fruit, angsana, yellow, greetings, and 7 types other unknown scientific names are ngoyo, yellow root, giha, galala, ligagamo, saiyo, utulage and firoro. Due to time constraints, 7 species of plants were not identified. These plants are obtained from forest areas and around forest areas. How to use plants that have medicinal motley begin by boiling, grinding, burning and mashed fruit, eat directly, and soak in water. The benefits of plants that are utilized by Bua-Bua people generally can treat various diseases that are often suffered by the community such as malaria, stomach ulcers, fever, diarrhea, hypertension, anemia, mild strokes, and various other diseases.

Keywords: ethnobotany, foods, medical, plants, Bua-Bua

Abstract.Bahasa Inggris

I. INTRODUCTION

Bua-Bua village is one of the villages in the Gubukusuma sub-district, North Tidore District, Tidore Isle, which is located adjacent to the forest area. The people of Bua-Bua village tend to use forest products because they are close to forest areas as the fulfillment of their daily needs and still maintain their customs and traditions in the use of natural resources, especially medicinal plants in the forest. Not only that, the wealth of knowledge from the indigenous Tidore tribe regarding traditional medicine using plant is also passed down orally from generation to generation. However, this knowledge is not documented and it is feared that it will erode along with the loss of natural habitat and the extinction of medicinal plants, especially forest plants due to excessive land exploitation and conversion. The lack of interest of the younger generation in learning the knowledge of traditional medicine using plants can also make this traditional heritage gradually become extinct.

Medicinal plants are one of the important components in medicine, which are traditional rorano ingredients and have been used for hundreds of years. Medicinal plants have been used for centuries by the Indonesian people in the form of herbs to solve various health problems they face and are a wealth of Indonesian culture that needs to be nurtured and preserved. Development of natural medicine is indeed deserved greater attention not only due to the open development potential, but also the market demand for raw materials to traditional medicines is rising for domestic and international needs.

The development of medicinal plants has a very broad meaning, not only as a source of herbal raw materials (agro medicine), but more than that medicinal plants can be used as agro-tourism, botanical laboratories, germplasm sources, green area pathways, non-oil, and gas export commodities, and as community income in Bua-Bua Village. But the habit of people who tend to take directly from nature for treatment without any interest in

DOI: <u>https://doi.org/10.33387/jpk.v3i2.9286</u>

cultivating medicinal plants. In addition, the lack of public awareness to reduce medication from the old to the young causes the unknown type of plants that function as medicinal plants among the community. Along with changing times, changes in traditional culture and the environment often occur too. Cultural modernization results in the erosion of traditional community knowledge. Likewise, the culture of the use and management of plants that are traditionally used as medicines by the community is possible to be lost (Bodeker, 2000; Kinho et al., 2011).

Based on this, research was conducted to determine the use of plant as medicine by the people of Bua-Bua Village, Gubukusuma Subdistrict, North Tidore Subdistrict became important as part of an effort to document community knowledge and conservation of biological natural resources.

II. METHODS

This research was conducted in Bua-Bua Village qualitative descriptive analysis method. The use of qualitative methods is intended to describe community knowledge with the emic approach (community perspective) and ethics supported by scientific literature.

1. Interview

This type of research is descriptive exploratory with survey techniques or methods and semi-structured interviews. Interviews are useful for exploring information about the potential use of medicinal plants. The selection technique of respondents used in this initial observation was a purposive sampling method (the selection technique of respondents with consideration of having more knowledge about medicinal plants) Sugiyono, 2007. Snowball is the technique of selecting respondents conducted based on recommendations from previous respondents starting with hamlet heads (Bernard, 2002).

2. Data analysis

Data processing is processed descriptively. The processed data includes supporting data, namely name, age, gender, education, and occupation. The main data includes the names of the types of medicinal plants, parts of the plants used, groups of diseases treated, and how they are treated.

III. RESULT AND DISCUSSION

1. The community of Bua-Bua Village

The Bua-Bua community uses plants around their homes as traditional medicine because these plants are easy to find and simpler to process. Medicinal plants have a very important role for the Bua-Bua people in rural areas whose health facilities are still very limited and the distance or access to the clinic is quite far. The use of medicinal plants by the Bua-Bua community can have a positive influence on fulfilling the community's living needs, especially in terms of health.

Traditional medicine using medicinal plants is more popular because this treatment is easy to obtain and has no side effects. In addition, the price is relatively low compared to drugs and chemicals, economically it is still affordable for people who live in villages or in rural areas (Widi and Asianto, 2007). Looking at the potential of plants and culture of the people in Bua-Bua village in utilizing the surrounding medicinal plants, it shows the interaction of the community with medicinal plants in the region. The level of traditional knowledge of local foodstuffs and medical plants varies between age groups, because age is related to the amount of time needed to interact with plants (Ratnani et al, 2024). However, data and information about the types of plants used as medicines by the community and how to use them are not yet available. Disclosure of traditional community knowledge about the management of biodiversity and the environment needs to be done immediately before the knowledge is increasingly lost (Purwanto, 1999). To anticipate that public knowledge about the use of medicinal plants does not decrease. written documentation must be carried out by researching the ethnobotany of medicinal plants, namely the knowledge of the community about the use of plants potentially as medicine in North Tidore District.

2. Types of Plants

Based on the results of interviews, medicinal plant species that are used by the people of Bua-Bua village as traditional medicines can be presented in the following Table 1.

Based on the table above, it can be explained that the people of Bua-Bua village generally use plants that are familiar and easily found. There are 46 species of plants with 7 species of which there is no known scientific name, this is due to the lack of documentation of medicinal plants with medicinal properties and a lack of information to the public regarding the type of THBO so that people only recognize medicinal plants as used in regional languages. This condition is that research Amrullah *et al* (2023) research that the plants found are usually used as fruit food.

2. Parts of Plants Used

Based on the results of interviews conducted in the Bua-Bua village community, plant parts that are commonly used as traditional medicine can be presented in the following Table 2.

Table. 1. Types of Plants

No.	Local Common Names	Names of Plants	Botanical Name	Utility		
1	Nangka	Sourson	Annona muricata	Fruit, Medicine		
1	Balanda	Soursop	Annona maricala			
2	Kayu Manis	Cinnamon	Cinnamomum Burmani	Spices,Medical		
3	Linggua	Linggua	Pterocarpus indicus	Medical		
4	Kamiri	Candlenut	Aleurites moluccana	Spices, Medical		
5	Gora Bagea	Jambu Bol	Syzygium malaccense	Friut, Medical		
F	Lansa	Langsa	Lansium domesticum Corr.	Fruit, Medical		
7	Afokat	Avocado	Persea Americana	Fruit, Medical,		
8	Balimbing	Starfruit	Averrhoa carambola	Fruit, Medical		
9	Kayu Gofasa	Gofasa	Vitex cofassus	Medical		
10	Katapang	Ketapang	Terminalia catappa	Fruit, Medical		
11	Giyawas	Guava	Psidium guajava	Fruit,Medical		
12	Pinang	Areca nut	Areca Catechu	Friut, Medical		
13	Mangga Dodol	Dodol dodol	Mangifera sp.	Fruit, Medical		
14	Daun Salam	Salam	Syzygium polyanthum	Spice,Medical		
15	Mengkudu	Noni	Morinda citrifolia	Fruit, Medical		
16	Daun Mangkok	Bowl leaves	Polyscias scutellaria	Medical		
17	Amo	Breadfruit	Artocarpus altilis	Fruitu8y		
18	Kembang Sepatu	Hibiscus	Hibiscus rosa-sinensis	Medicine		
19	Manggustan	Mangosteen	Garcinia mangostana	Medicine, FRUIT		
20	Kanari	Walnuts	Canarium ovatum	Medicine, FRUIT, Spic		
21	Pala	Nutmeg	Myristica fragragrans	Medicine.FRUIT		
22	Bengkoang	Bengkoang	Pachyrhizus erosus	Medicine, FRUIT		
23	Kuning Hutan	Kunvit	Curcuma alba	Medicine spice		
24	Keladi Hutan	Taro	Colocasia esculenta	Medicine		
25	Lida buaya	Aloe vera	Aloe vera	Medicine		
26	Papaya	Panava	Carica Papaya	Medicine FRUIT		
27	Kuning	Kunvit	Curcuma longa	Medicine		
28	Mayan	Mayana	Benthic coleus	Medicine		
29	Sereh	Lemongrass	Cymbonogon citratus	Medicine vegetables		
30	Jahe/Guraka	Ginger	Zingiher officinale	Medicine spice		
31	Kumis Kucing	Cat whiskers	Ortosiphon aristatus	Medicine		
32	Labusiyam	Pumpkin siyam	Sechium edule	Medicine vegetables		
34	Penahong	Pinahong	Basella ruhra Linn	Medicine		
35	Bangle	Dlingo Bengle	Zingiher nunureum	MedicineFRUIT		
36	Sirih	Betel	Piner hetle I	Medicine		
37	Seledri	Celery	Anium grafiolens	vegetables		
38	Batako	Kencur	Kaempferia galangal	Spice		
30	Galala	Galala	Erithrina variaaata I	Spice		
<u> </u>	Jaiaia	Ligagamo	*			
40 /1		Sagino	*			
41		Ngoyo	*			
42		Ciba	*			
43		Ulua	*			
44 45		Eirono	*			
43		LILOLO				

No. Name of species Local Common Name Botanical name A Bit B2 B3 D R 1 Annona sp. Soursop Annona muricata V	Table. 2. Parts of Plants Used									
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30 $2ingiber sp.$ $ingen$ $2ingiber ogneticateingen$	20	Cymbopogon sp.	Cincor	Zingibar officingle	2		v			2
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35Zinguber sp.Diningo BengleZinguber pupureum $$ 36Piper sp.BetelPiper betle L $$ 37Apium sp.CeleryApium grafiolens $$ 38Kaempferia sp.KencurKaempferia galanga39*Saiyo $$ 40*Ligagamo $$ 41ErithrinaGalalaErithrina variegata L $$ 42*Ngoyo $$ 43*Giha $$ 44*Utulage $$ 45*Firoro $$	34 25	Basella sp. Ziu aih an an	Pinanong Dlingo Bonglo	Basella rubra Linn Zingihan mumunaum	2				N	
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38 Kaempferia sp. Kencur Kaempferia galanga 39 * Saiyo √ 40 * Ligagamo √ 41 Erithrina Galala Erithrina variegata L √ 42 * Ngoyo √ 43 * Giha √ 44 * Utulage √ 45 * Firoro √	3/	Apium sp.	Celery	Apium grafioiens					N	
39 * Salyo N N 40 * Ligagamo √ 41 Erithrina Galala Erithrina variegata L √ 42 * Ngoyo √ 43 * Giha √ 44 * Utulage √ 45 * Firoro √ 45 * Yellow root √	38	Kaempferia sp.	Kencur	Kaempferia galanga			.1		.1	
40 * Ligagamo N 41 Erithrina Galala Erithrina variegata L √ 42 * Ngoyo √ 43 * Giha √ 44 * Utulage √ 45 * Firoro √ 45 * Yellow root √	39	т 	Saiyo				N		N,	
41 Erithrina Galala Erithrina variegata L N 42 * Ngoyo √ 43 * Giha √ 44 * Utulage √ 45 * Firoro √ 45 * Yellow root √	40	*	Ligagamo				1		N	
42 *Ngoyo \vee 43 *Giha \checkmark 44 *Utulage \checkmark 45 *Firoro \checkmark 45 *Yellow root \checkmark	41	Erithrina	Galala	Erithrina variegata L			N			
45 \uparrow Giha \checkmark 44 *Utulage \checkmark 45 *Firoro \checkmark 45 *Yellow root \checkmark	42	ጥ 	Ngoyo				N			
44*Utulage $$ 45*Firoro $$ 45*Yellow root $$	43	ጥ 	Giha				N			
45*Firoro $$ 45*Yellow root $$	44	*	Utulage				N			
45 * Yellow root $$	45	*	Firoro				N			
	45	*	Yellow root				N			

A : Root, B1: Fruit, B2: Rods, B3: Flowers, D: Leaves, R: Rhizomes)

Based on the table above, it can be explained that the people of Bua-Bua village generally use plants that are familiar and easily found. Plant parts that are often used to treat the highest disease are leaves and stems/bark with a number of processing of 22 types of plants, then the use of fruit parts as many as 9 types, the use of root parts 6 types of plants and the lowest is in the flower with the type of use plants are 3, this is because the people of Bua-Bua village are more convinced that the medicinal parts are in the leaves and stems. But, this does not rule out the possibility that the fruit is also used as food and medicine for the nutritional needs of the community. According to the fruit Amrullah et al (2023) is the main source for various uses of processed foods that contain lots of vitamins and minerals, fiber and antioxidants, and do not contain plant cholesterol parts of the fruit that are beneficial to human health

Processing method

Based on interviews with the Bua-Bua village community, it is known that the methods of processing plants used as traditional medicines by the Bua-Bua village community can be presented in the following Table 3.

Та	ble	3.	How	to	treat	med	icinal	p	lants
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No.	Local Nama	Potenical nome	Processing method				T 14*1*4
	Local Name	Botanical name	В	R	Р	L	- Othity
1	Soursop	Annona muricata					Ulcer, fever.
2	Cinnamon	Cinnamomum Burmani	\checkmark		Ń		Aches, sprains,
-				,			Facilitates labor appetite
3	Linggua	Pterocarpus indicus		\checkmark			enhancer
4	Condlenut	Alguritas moluceana	2	N			Wound
5	Lambu Pol	Aleunies molaccona	v	J.			Increase appetite
5		syzygium maiaccense		Ň			increase appente,
0	Langsa	Lansium aomesticum Corr.		N			Malaria, bone lever,
-		D		.1			Mild stroke, lower blood
1	Avocado	Persea americana		N			pressure (leaves), raise blood
						1	(fruit),
8	Starfruit	Averrhoa carambola		,	,	\mathbf{v}	Lower blood pressure,
9	Gofasa	Vitex cofassus		V	N		Ulcer, internal medicine
10	Ketapang	Terminalia catappa		N	\checkmark		Eliminates swelling, aches,
11	Guava	Psidium guajava					Diarrhea,
10	A	America Cartesta			al		Tonsils, rituals, internal
12	Areca nut	Areca Catecnu		N	N		medicine,
13	Dodol dodol	Mangifera sp.					Blood,
14	Regards	Syzveium polyanthum					Uric acid.
		~)~) 8,500 F = 1,9			,	,	Sprains asthma
15	Noni	Morinda citrifolia				N	/hosa mild stroke
16	Bowl leaves	Polyseigs soutellaria		N			Blood
10	Broadfruit	A moogmus altilis		J.			A shas
17		Artocarpus attuits		v	al		Aches,
18	Hibiscus	Hibiscus rosa-sinensis			N		Headache,
19	Mangosteen	Garcinia mangostana					Stomach ache, internal
•		- · ·	1				medicine,
20	Walnuts	Canarium ovatum	N				Smooth face
21	Nutmeg	Myristica fragragrans					Relieve aches, warm the body,
	1 (duineg	1197 ibrica ji agi agi anib		·	,		skin itching
22	Bengkoang	Pachyrhizus erosus			N		Acne, facial care
23	White yellow	Curcuma alba					Cancer, diarrhea,
24	Taro	Colocasia esculenta					Smooth menstruation,
25	Aloe vera	Aloe vera	\checkmark		\checkmark		Acne, smooths the face
26	Papaya	Carica Papaya		\checkmark		\checkmark	Internal medicine, malaria,
27	Yellow	Curcuma longa			\checkmark		Diarrhea, smooth menstruation,
28	Mayana	Benthic coleus					Malaria,
29	Lemongrass	Cymbonogon citratus		V			Sore foot
30	Ginger	Zingiber officinale		Ń	Ń		Sprains body warmers gout
31	Cat whiskers	Ortosiphon aristatus		Ń			Malaria internal medicine
32	Pumpkin siyam	Sechium edule		•	N		Maag smooth the skin
24	Dinahong	Pasalla rubra Linn	2	N	J.		Internal medicina, wounds
25	Dingo Dangla	Zin aih an numun aum	v	N.	v		Catarasta zita star
20	Dilligo Beligie	Dingiber pupureum		N			Ded breath and be december
30	Beter	Piper betie L		N		N	Bad breath and body, aches,
31	Celery	Apium grafiolens		N			Lower blood pressure,
38	Kencur	Kaempferia galanga					Gout, hoarse voice, increase
		FJ 888					appetite,
30	Saivo	*					Ulcer, appetite enhancer, body
57	Salyo			•			ache,
40	Ligagamo	*					Remove scars,
41	Galala	Erithrina variegata L					Cough, sick body
42	Naorio	*					The sick body, removes
42	таболо	4.		v			the mali-mali
43	Giha	*		\checkmark			Internal medicine .
44	Utulage	*					Internal medicine, liver.
45	Firoro	*		V			Deep heat, liver
46	Yellow root	*		J.			Lumbago malaria
	1010 1001			1			Dambago, maiana,

B : Burn , R : Boil. P : Squeeze and drink immediately, L: Eat / eat directly)

Based on the above table it can be explained that the villagers Bua-Bua generally utilize herbs with boiled, burned, spread, squeezed the water and drunk, or in a salad immediately. The highest way to process medicinal plants to be used as medicine by the people of Bali is to process them in boiled (R) with 33 species of plants, then squeeze the water (P) with 18 types of plants, then burn (B) 6 types and in direct vegetables (L) with 5 types of plants, this is because the people of Bua-Bua village believe that boiling medicinal plants can kill germs found in parts of the plant and by boiling parts of plants can excrete substances that have medicinal properties perfectly.

3. Synthesis

Utilization of medicinal plants by the community in Bua-Bua Village, Gubukusuma Sub-District, North Tidore District, Tidore Kepulauan City is still limited to traditional processing. This is evidenced by the frequency of people consuming plants as alternative treatments. The people of Bua-Bua Village are people who still believe in traditional medicine in their daily lives. Based on the results of the analysis that has been obtained, the synthesis can be explained as follows.

Types of Plants

Based on the analysis it was explained that the villagers Bua-Bua is a society that still maintains traditional treatments inherited from the ancestors. From the results obtained there are found several types of plants that are often used as drugs with a total of 46 species and 7 of them are not known scientific names. This is due to a lack of information and strong culture in the community because they still maintain the name of the area of the plant.

Parts of Plants Used

Based on the results of the analysis, it can be explained that the people of Bua-Bua village use more parts of their leaves and stems to be mixed into traditional medicines (rorano). This proves that the villagers Bua-Bua still maintaining the sustainability aspects of forest plants, namely by processing plants for everyday purposes, but did not take part who are sensitive. In addition, the part taken is also a part that has a fairly good regeneration ability. So that it can preserve the preservation of forest resources.

Processing method

Based on the results of the analysis, it can be explained that the Bua-Bua village community has traditional knowledge that is in line with the development of science. From the results found that the local people cultivate medicinal plants as the highest, by boiling. This proves with the confidence of the local community that hygiene and hygiene of a plant and the decomposition of substances have an effect on a plant. Diseases that can be treated by various types of medicinal plants also vary from minor illnesses, infectious diseases, noncommunicable diseases to chronic diseases.

IV. CONCLUSION AND RECOMMENDATIONS

Conclusion

Based on the results of analysis and synthesis, the conclusions from writing this scientific paper are as follows:

1. The people of Bua-Bua Village have the potential to develop the use of medicinal forest plants, the types of medicinal plants commonly used by local people are quite high including cinnamon, nutmeg, ketapang , noni,

soursop, mangosteen, guava bol, langsa, avocado, pecan, lemongrass, cat whiskers, betel, gofasa, mayana, kencur, star fruit, angsana, yellow, salutation, ketapang, guava, areca nut, soursop, mango dodol, noni, mangkok leaves, breadfruit, hibiscus, mangosteen, walnut, taro, papaya, lemongrass, pumpkin siyam, dlingo bengle, celery, kencur, yellow-white etc. And seven types of them were not identified, namely ngoyo, utulage, ligagamo, saiyo, firoro, giha, yellow root.

2. The community of Bua-Bua Village uses more plant parts for medicine, which are the leaves and stems. This proves that the local community understands the sustainability aspects of natural resources so that it utilizes parts of plants that have high regeneration capabilities. People are also more processing medicinal herbs by boiling, this is believed to kill germs or bacteria attached to the plant and thereby easily consumed substances required. As well as the use of medicinal plants that are often used by the community is treating, malaria, treating internal diseases, cancer, minor strokes, gout, menstruation, eliminating lumbago, headaches, fever, and so forth.

Recommendation

Based on the above conclusions, several recommendations can be explained as follows:

- 1. There is a need for further laboratory testing to determine the toxicity and safety content of substances found in various plants that are used as medicines by the community, and also the concern of the government and the community at large to maintain and develop these cultural heritage in order to become a regional asset and improve people's lives.
- 2. It is necessary to conduct socialization and training on the cultivation of potential plant species as a drug for the community together with the local government, the material must cover upstream to downstream (post-harvest processing and marketing) so that the community can experience the benefits of increasing the income from medicinal plants.

REFERENSI

- Amrullah, L., Gaffar, A., Marsahip. 2023. Etnobotani keragaman tumbuhan pangan dan pemanfaatannya di Desa Labulia Kecamatan Jonggat Lombok Tengah. Jurnal Kridatama Sains dan Teknologi, 5(2):518-527.
- Bernard, H. R. 2002. *Research methods in antropology* : qualitative and quantitative approaches (3rd ed.). Walnut Creek, CA : Altamira Press.
- Bodeker, G. 2000. Indegenous medical knowledge: The law and politics of protection. *Oxford*

intellectual property research centre seminar in st. peter's college, 25th January 2000. Oxford.

- Jumiarni, WO, and Komalasari, O. 2017. Inventory of Medicinal Plants As Utilized By Muna Tribe In Wuna Settlement City. *Traditional Medicinal Journal*, 22 (1): 45-56. Download time 10/11/2018.
- Karim, KA Mahmud T and Sumardjo. 2016. Utilization of Plant Genetic Diversity by the Tugutil Community Around Aketajawe Lolobata National Park. *Media Conservation* 11 (3):1– 12. Download time 02/03/2018.
- Kinho, J., Arini, D., Tabba, S., Kamma, H., Kafiar, Y., Shabri, S., dan Karundeng. M. 2011. *Tumbuhan Obat Tradisional di Sulawesi Utara : Jilid I. Manado*: Badan Penelitian dan Kehutanan Manado.
- Mutaqin, AZ, et al. 2016. Ethnobotany Studies Utilization of Types of Plants Used as Medicine by the Community of Pangandaran Village, Pangandaran District, Pangandaran Regency. ISBN 978-602-72216-1 1.
- Purwanto, Y. 1999. Peran dan Peluang Etnobotani Masa Kini di Indonesia dalam menunjang upaya konservasi dan pengembangan keanekaragaman hayati. Prosiding seminar hasil-hasil penelitian bidang ilmu hayati. Bogor : Pusat Antar Universitas Ilmu Hayati IPB.
- Ratnani, S. A. S., Junitha, I. K., Yuni, E, K., Budiningsih, D. N. 2024. Ethnobotany of Local Foodstuff plants used by bugbug Community in Karangasem, Bali, Indonesia. *International Journal of Applied Science and Sustainable Development (IJASSD)*, 6 (1): 40 – 52.
- Setiawan. H, and Maryatul Qiptiyah. 2014. Ethnobotany Study of the Moronene Tribal Indigenous Peoples in Rawa Aopa Watumohai National Park. Wallacea Forestry Research Journal. Vol.3No.2. Matters : 107-117.Download time 14/10/2018.
- Simanjuntak, HA 2016. Ethnobotany of Medicinal Plants in the Simalungun Ethnic Society of Simalungun

Regency, North Sumatra Province. BioLink. Vol. 3 things 75-80. Download time 14/10/2018.

- Sugiyono. 2007. *Metode penelitian Pendidikan, pendekatan kuantitatif, kualitatif dan R&D.* Bandung. Alphabeta.
- Widi & Asianto. 2007. Mari menanam berbagai sayuran. Pontianak: Wanda Putra Persada.