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The Use Value of Medicinal Plant Species of Dawan (Amanatun) Community in Hoineno Village, South Central Timor District

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ABSTRACT

This research aims to determine the use of plants in traditional medicine. This ethnobotany study is quantitative and descriptive and includes exploratory survey techniques and interviews. The research sample included 30 people who identified as shamans/healers or had expertise in medicinal herbs. In this study, quantitative descriptive analysis was employed to analyze the data. Indonesian names, local names, scientific names, family names, organs used, and their advantages are all recorded. Species Use Value is used to calculate the use value of a plant species (SUV). The Dawan community (Amanatun) used 42 species found in this study to cure 30 ailments divided into 13 disease categories. Based on the species use value (SUV) assessment, Dawan (Amanatun) has a pretty high confidence level in 13 of the 42 medicinal plant species identified. Zingiber officinale Rosc. has the highest use value (SUV of 0.97), whereas Milletia sericea (Vent.) has the lowest value (SUV of 0.03).

Nilai Guna Spesies Tanaman Obat Masyarakat Dawan (*Amanatun*) di Desa Hoineno Kabupaten Timor Tengah Selatan

ABSTRAK: Penelitian ini bertujuan untuk mengetahui pemanfaatan tanaman sebagai obat tradisional. Studi etnobotani dalam penelitian ini merupakan penelitian deskriptif kuantitatif dengan teknik survey ekploratif dan wawancara. Sampel penelitian sebayak 30 orang yang tergolong dukun/tabib dan masyarakat yang memiliki pengetahuan tentang tanaman obat. Analisis data yang digunakan dalam penelitian ini adalah analisis deskriptif kuantitatif. Data yang dicatat adalah nama indonesia, nama lokal, nama ilmiah, nama family, organ yang digunakan, dan manfaatnya. Menghitung nilai guna suatu spesies tanaman dengan menggunakan perhitungan Spesies Use Value (SUV). Sebanyak 42 spesies yang teridentifikasi dalam penelitian ini dimanfaatkan oleh masyarakat Dawan (Amanatun) untuk mengobati 30 jenis penyakit yang dikelompokan dalam 13 kategori penyakit. Berdasarkan hasil perhitungan nilai guna spesies (SUV) menunjukan bahwa dari 42 spesies tanaman obat yang teridentifikasi, masyarakat Dawan (Amantun) memiliki tingkat kepercayaan yang cukup tinggi pada 13 spesies. Nilai guna paling tinggi yaitu Zingiber officinale Rosc. (SUV sebesar 0,97), dan terendah yaitu Milletia sericea (Vent.) (SUV sebesar 0,03).

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INTRODUCTION

Indonesia is a tropical country (Elsifa et al., 2019; Syaifullah, 2015) and has the potential to overtake Brazil as the world's second producer of medicinal plants. Thirty thousand of the world's approximately 40,000 identified medicinal plant species are reportedly found in Indonesia (Nuroho, R. A., & Ningsig, 2017). Furthermore, with thousands of islands, Indonesia has a diverse range of traditional and cultural knowledge in using plants to support necessities (Faisal, 2021; Hermawati, 2018). The community uses human-plant resource interaction for various purposes, including medicine (E. A. M. Zuhud, 2019), traditional ceremonies, garment colors, household items, and so on (Iswandono et al., 2015). Community interactions passed down from generation to generation have resulted in unique and diverse traditional knowledge in each region of Indonesia (Irsyad et al., 2013; Maharani et al., 2021).

Medicinal plants have been scientifically proven to possess bioactive substances or components and whose usage can be justified therapeutically (Fauziah et al., 2017; Hidayat & Napitupulu, 2015; Larasati et al., 2019; Nurdin et al., 2022), (Zuhud, EAM., Siswoyo., Soekmadi, R., Sandra, E., Adhiyanto, 2004). Traditional medical herbs mainly employ plants as the primary ingredient. At the same time, some use animals, mineral compounds, or combinations of these ingredients that have been used for generations for treatment and can be applied in accordance with societal norms (KEMENKES, 2017). In general, 15 (fifteen) plant components are utilized as medicine, including leaves, roots, bark, fruit, all parts, woody stems, seeds, flowers, sap, shoots, rhizomes, tubers, branches/twigs, body water, and soft-top part of plants (Indarto et al., 2019; Maretta et al., 2019). These plant parts can be utilized to treat approximately 25 different types of ailments (E. A. M. Zuhud, 2019). Traditional medicine is still very much needed and developed for health maintenance and the first treatment for various diseases (Supriani et al., 2021), notably during the Covid-19 pandemic, people choose to use traditional components as medicine to maintain health and boost immunity (Perdani & Hasibuan, 2021; Susilawati & Hikmatulloh, 2021; Tresnawati et al., 2022).

Local community knowledge is passed down from generation to generation based on the experiences and talents of their forefathers (Rachman, 2012; Salim, 2016; Wae et al., 2022). Local knowledge is passed down orally and is restricted to family members and close relatives (Nasution et al., 2022; Rosmanita & Saharuddin, 2017), which can lead to the extinction of local cultural assets as a result of cultural shift (Haka et al., 2020). Various communities worldwide practice traditional medicine (Supriani et al., 2021). In China, around 11,146 species have been identified and used as traditional medicine by minority people living in rural places (Irmawan, 2017). Furthermore, plants have been utilized in traditional medicine in various Asian countries, including India, Nepal, Pakistan, and Bangladesh, dating back to 4500 - 600 BC (Sheng-Ji, 2001). In Indonesia, many ethnic groups (indigenous tribes) living in and surrounding woods (Margarethy et al., 2019; E. A. Zuhud, 2009), from Sabang to Merauke, have employed diverse plant species from forests to preserve health and treat various maladies (Supriani et al., 2021). Various ethno-phytomedical-ethnobotanical research conducted by Indonesian researchers has discovered at least 78 species of medicinal plants used by 34 ethnic groups to treat malaria, 133 species of medicinal plants used by 30 ethnic groups to treat fever, 110 species of medicinal plants used by 30 ethnic groups to treat digestion disorders, and 98 species of medicinal plants used by 27 ethnic groups to treat skin diseases (E. A. M. Zuhud, 2019).

So far, just one study has been published on the usage of medicinal plants for the Dawan (*Amanatun*). Loinenak found

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39 varieties of medicinal plants in the village of Meusin, Boking District (Loinenak, 2018). As a result, research on Dawan (Amanatun) community in Hoineno village was conducted as a strategic study to gain additional data or information on plants that the community believes are valuable as traditional medicines. This study's findings differ from earlier research because they provide extra data for 16 plant species. Furthermore, this study discovered the same plant used by people to treat different conditions. This research is predicted to be valuable as a database of traditional medicinal plants; also, knowledge of these medicinal plants is very significant in maintaining the Dawan (*Amanatun*) as a community's tradition.

METHOD

Research Design

This ethnobotanical study is a quantitative descriptive study using exploratory survey and interview techniques. The informants were selected based on the purposive sampling technique with the criteria of the members of the Dawan community (Amanatun) who acted as healers/shamans or people who had consumed medicinal plants. Meanwhile, the snowball sampling method was used to find more informants based on key informants due to the researchers' limited knowledge of the Dawan community members who know medicinal plants. A map of the research location can be seen in Figure 1.
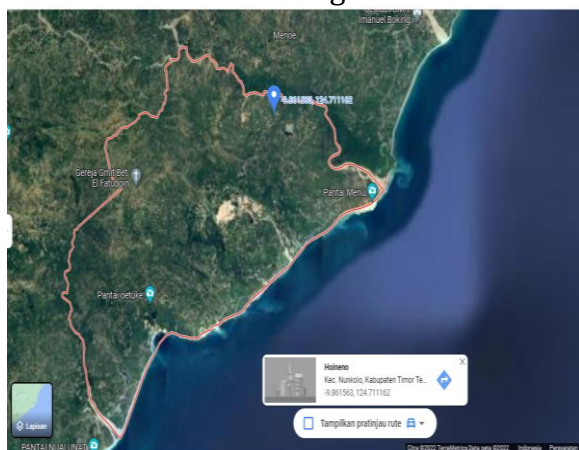

Figure 1. Map of the Research Location, Hoineno Village, Nunkolo District, South Central Timor District

Popultion and Samples

This study was carried out in June 2022. This study was conducted in Hoineno, Nunkolo District, South Central Timor Regency, East Nusa Tenggara Province. The Dawan community (Amanatun) in Hoineno served as the research population. The research sample included 30 people who identified as shamans/healers or had expertise in medicinal herbs. The number of respondents questioned in this study follows guidelines (Sugiyono, 2012), which specify that an ideal sample size in a study is between 30 and 500 people.

Instrument

A questionnaire was employed in this study as an instrument. Questionnaires are used to obtain information. The researcher created the questionnaire by compiling a list of questions about medicinal plant knowledge and use. The title and identity of the research respondents are included in the first section of the questionnaire. The second section includes a series of questions with two question indicators: one for medicinal plant knowledge and one for medicinal plant use in the Hoineno village community.

Procedure

This study collected data in three stages: observation, interviews, and documentation of the Dawan community (Amanatun), who are defined as shamans/healers/people who know and understand medicinal plants. The observation stage was carried out to determine the general condition of the research site, gather information about people who were knowledgeable about medicinal plants, and obtain permission to become research subjects. The interview stage started with visiting people who wanted to become respondents. Then, the researchers gathered information through interviews guided by research questions regarding the community's understanding and use of plants as medicine. The

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interviews were conducted in the Dawan (uab meto) and Indonesian languages. The documentation step was carried out to record the different varieties of medicinal plants in the form of photographs and videos for later identification. The researchers utilized the Leafsnap tool and the PlantNet application to match the traits with photographs (Hidayat & Napitupulu, 2015), (Tefu, Meti & Sabat, 2021). The researchers also browsed the internet and supported the literature.
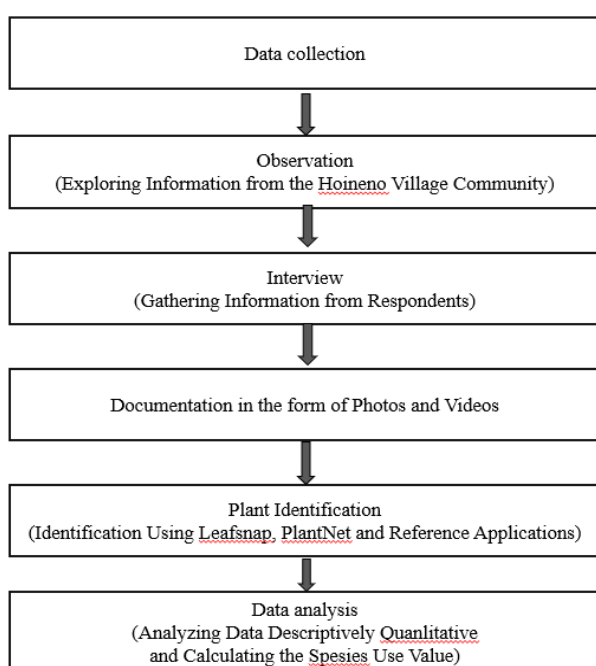

Figure 2. Research Procedure

Data Analysis Techniques

The quantitative descriptive analysis technique was utilized to analyze the data. Indonesian names, local names, scientific names, family names, organs used, and their advantages are all recorded. Calculating the use value of a plant species using the Species Use Value (SUV) formula (Hoffman & Gallaher, 2007):

$$Uvs = \frac{\sum Uvi}{n}$$

Description:
UVs   = Use value
UVis   = The number of uses mentioned for one species

ni   = The total number of respondents interviewed

RESULTS AND DISCUSSION

For years, the Dawan (Amanatun) community of Hoineno Village, South Central Timor District, has known traditional medicinal plants (Indarto et al., 2019). Except for plant species that are difficult to obtain or types of plants that are generally used as a spice in the kitchen that are cultivated, medicinal plant species grow wild in the yard of the house and the forest (Sembiring et al., 2014). Based on the morphological identification results, it was discovered that the Dawan (Amanatun) community of Hoineno Village, which consisted of 25 families, employed 42 species of medicinal herbs (Table 1). Compared to previous research on the Dawan (Amanuban) tribe, which revealed 103 species, the number of medicinal plant species identified in this area is quite minimal (MOFI & Sabat, 2022). Furthermore, the number of plants identified in this locality was quite tiny when compared to the 1316 species of medicinal plants recognized by the Indonesian Ministry of Health in East Nusa Tenggara. The community's minimal number of plants utilized as traditional medicine is due to a lack of public information about employing various existing plants. This is because knowledge regarding medicinal herbs is only passed down through family members. As a result, other people whose parents do not know how to use medicinal plants will be unaware of the benefits of the plants around them. Even though the community is aware of the benefits of medicinal herbs from many sources, they are hesitant to use them because they are dubious of their usefulness (Jo, 2016). Medicinal plants can be used alone or in conjunction with other plant species. The processing methods are boiling, pureeing, dripping, frying, withering in the fire, and eating directly.

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Table 1. The Species of Medicinal Plants Used by Amanatun-Dawanese

Indonesian Name	Lokal Name	Scientific Name	Family Name
Sugar apple (Sugar apple)	Ata	*Annona squamosa* L.	Annonaceae
Seledri (Celery)	Daun Sop	*Apium graveolens* L.	Apiaceae
Gebang (Cabbage palm)	Tune	*Corypha utan*	Arecaceae
Kelapa Coconut)	Noah	*Cocus nusufera* L.	
Pinang (Areca nut)	Puah	*Areca catechu* L.	
Sembung	Buanao	*Blumea balsamifera* (L.) DC.	Asteraceae
Kirinyu	Sufmuti	*Chromolaena odorata* (L.) King & H.E. Robins	
Tapak Liman	*Ak-aki*	*Elephantopus scaber* L.	
Kapuk (Kapok)	Neke	*Ceiba pentandra* (L.) Gaertn.	Bombacaceae
Pepaya (Papaya)	Ukase	*Carica papaya* L.	Caricaceae
Pare (Bitter gourd)	Pniu	*Momordica charantia* L.	Cucurbitaceae
Jarak Pagar (Poison nut)	Paku Pnun Muti	*Jatropha curcas* L.	Euphorbiaceae
Kemiri (Hazelnut)	Feno	*Aleurites moluccana* (L.) Willd	
Meniran (Gale of the wind)	Fuakoti	*Phyllanthus niruri* L.	
Asam (Tamarind)	Kiu	*Tamarindus indica* L.	Fabaceae
Kacang Gude/ Turis (Pigeonpea)	Tunis	*Cajanus cajan* (L.) Millsp.	
Kacang Hijau (Mung bean)	Fuanutu	*Vigna radiata* var. *radiata* (L.) R. Wilczek	
Kacang Pintoi (Pinto peanut)	Po Kase	*Arachis pintoi* Krapov. & W.C.Greg	
Flamboyan (Royal poinciana)	Nankai	*Delonix regia* (Bojer ex Hook.) Raf.	
Avokad (Avocado)	Atfokat	*Persea americana* P. Mill.	Lauraceae
Andong (Ti plant)	Hauhoni	*Coryline fruticosa* (L.) A. Chev.	Liliaceae
Bawang Merah (Shallot)	Pio Me	*Allium cepa* var. *aggregatum* L.	
Bawang Putih (Garlic)	Pio Muti	*Allium sativum* L.	
Kapas (Upland cotton)	Abas	*Gossypium hirsutum* L.	Malvaceae
Pisang Mas (Dwarf banana)	Uik Noni	*Musa acuminata* Colla	Musaceae
Mahoni (Swietenia)	Mahoni	*Swietenia mahagoni* (L.) Jacq	Meliaceae
Jambu Biji (Common guava)	Koe	*Psidium guajava* L.	Myrtaceae
Belimbing Manis (arambola)	Kalambo	*Averrhoa carambola* L.	Oxalidaceae
Akar Tuba	Nono	*Milletia sericea* (Vent.) W. et A.	Papilionaceae
Sirih Wangi (Betel Vine)	Maun Mina	*Piper betle* L.	Piperaceae
Sirih Hutan (Wild betel)	Unono	*Piper sarmentosum* Roxb.Ex Hunter	
Alang-Alang (Cogongrass)	Humusu	*Imperata cylindrica* (L.) P. Beauv.	Poaceae
Tebu (Sugar cane)	Tefu	*Saccharum officinarum*	
Delima (Pomegranate)	Linkase	*Punica granatum* L.	Punicaceae

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Indonesian Name	Lokal Name	Scientific Name	Family Name
Ingu/ Aruda (Rue)	Alul	*Ruta Angustifolia* L. Pers	Rutaceae
Jeruk Nipis (Acid lime)	Leon Sumlili	*Citrus aurantifolia* (Christm.) Swingle, orth.	
Jeruk Manis (Sweet orange)	Leon kase	*Citrus sinensis* (L.) Osbeck (pro sp.) [maxima reticulata]	
Mengkudu (Indian mulberry)	Baok Ulu	*Morinda citrifolia* L.	Rubiaceae
Kusambi (Kusum tree)	Usapi	*Schleichera oleosa* (Lour.) Oken	Sapindaceae
Tembakau (Tobacco)	Bako	*Nicotiana tabacum L.*	Solanaceae
Jahe (Ginger)	Naije	*Zingiber officinale* Rosc.	Zingiberaceae
Kunyit (Turmeric)	Huki	*Curcuma longa* L.	

Based on the data in Table 1, medicinal plant species are then grouped according to disease categories based on (E. A. M. Zuhud, 2019): Blood Circulatory Disorder (BCD), Malaria (MAL), Respiratory Tract Disease (RTD), Antidote (ANT), Pregnancy and Birth Treatment (PBT), Muscles and Joint Disease (MJD), Wound Healing (WH), Sexually Transmitted Disease (STD), Oral Disease (OD), Skin Disease (SD), Headache and Fever (HF), Digestive Tract Disease (DTD) and diseases that do not fall into the categories mentioned are included in the Others category (OT) (Figure 1).
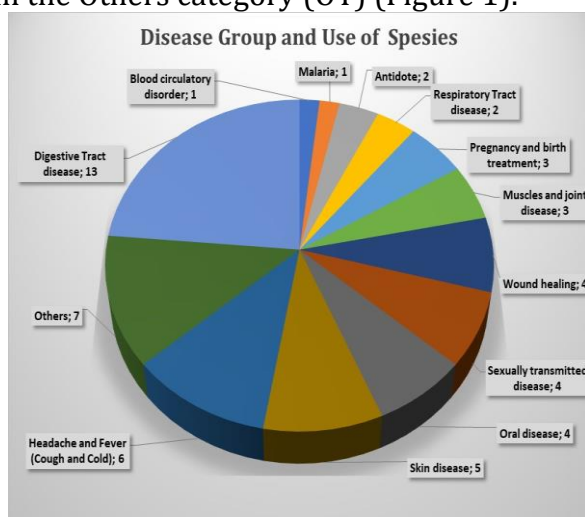

Figure 1. Species of Disease and the Number of Species Used in Every Disease Group

According to Figure 1, the Digestive Tract Disease (DTD) category has the most species, with 13 species, followed by Others (OT), with seven species, and Headache and Fever (HF), with six species. Among the 13 species employed by the Dawan community (Amanatun) for Digestive Tract Disease (DTD) treatment are: common guava leaves (*Psidium guajava* L.) used to treat diarrhea; Gewang leaves (*Corypha utan*) to treat worms; Andong leaves (*Coryline fruticosa* (L.), sweet orange peels (*Citrus sinensis* (L.), and Indian mulberry (*Morinda citrifolia* L.) to treat vomiting of blood. Avocado tree bark (*Persea americana* P. Mill.), sugar cane leaves (*Saccharum officinarum*), betel leaves (*Piper betle* L.), areca nut (*Areca catechu* L.), sugar apple leaves (*Annona squamosa* L.), poison nut tree bark (*Jatropha curcas* L.), Papaya tree bark (*Carica papaya* L.) are used to treat flatulence. Pomegranate peel and leaf shoots (*Punica granatum* L.) treat bloody bowel movements.

Seven species belong to the Other category, namely tamarind (*Tamarindus indica* L.), coconut (*Cocus nusufera* L.), and cotton (*Gossypium hirsutum* L.) are used to treat earache. Flamboyant (*Delonix regia* (Bojer ex Hook.) Raf.) treats epilepsy. Betel vine treats (*Piper betle* L.) foul body odor. Meniran (*Phyllanthus niruri* L.) is used to treat atheroma. Curcuma (*Curcuma longa* L.) is used to boost immune system.

Furthermore, six species are used to treat Headaches and Fever (HF). Shallot (*Allium cepa* L.), Ingu (*Ruta Angustifolia* L. Pers), and Acid lime (*Citrus aurantifolia* Swingle, orth.) are used to treat baby fever. Kusambi (*Schleichera oleosa* L.), areca nut (*Areca catechu* L.), and betel vine (*Piper betle* L.) are used to treat headaches/dizziness.

Based on the data obtained, two species are used to treat more than one

disease in different categories, such as betel vine (Piper betle L.) and areca nut (Areca catechu L.) that are used as antidotes (ANT), genital infection (STD), digestive tract disease (DTD), headache and fever (HF), and reduce body odor (OT). In addition, turmeric (Curcuma longa L.) is also used for treating wounds (WH) and enhancing the immune system (OT). A total of 42 species identified in this study are used by the Dawan (Amanatun) community to treat 30 types of diseases grouped into 13 disease categories (figure 1).

Using species for various treatments demonstrates a species' high utility value (Handayani et al., 2017). The Species Use Value (SUV) refers to the level of utility of a plant species in treating a specific type of sickness. Figure 2 depicts the use value of the Dawan (Amanatun) community's traditional medicinal plant species based on the data in table 1.

According to the species use value analysis results, the 13 medicinal plant species with the highest calculated use value are *Zingiber officinale Rosc.* (*SUV* value of 0,97), *Piper betle* L. and *Psidium guajava* L. (*SUV* sebesar 0,90), *Areca catechu* L. and *Punica granatum* L. (*SUV* value of 0,87), *Aleurites moluccana* L. (*SUV* value of 0,80), *Annona squamosa* L. and *Cocus nusufera* L. (*SUV* value of 0,77), *Allium cepa* L. and *Tamarindus indica* L. (*SUV* value of 0,73), *Curcuma longa* L. and *Chromolaena odorata* L. (*SUV* value of 0,70), *Allium sativum* L. (*SUV* value of 0,63).

Coughs and sore throats are relieved by ginger rhizome (*Zingiber officinale Rosc.*) by consuming fresh ginger rhizome and roasted coconut directly. Secondary metabolites found in ginger rhizomes include alkaloids, flavonoids, phenolics, triterpenoids, and saponins. Ginger rhizome's alkaloid concentration benefits it as an analgesic (pain reliever), cough medication, and migraine relief (Sari & Nasuha, 2021).

Diarrhea is treated using guava leaves (*Psidium guajava* L.) (Afifi, 2018;

Fatimatuzzahra et al., 2020). It is used by boiling guava leaves and then drinking them. Flavonoids and tannins are two substances found in guava leaves that play an essential role in diarrhea treatment (Fitriyah et al., 2022; Pranoto, 2021; Ujan et al., 2019).
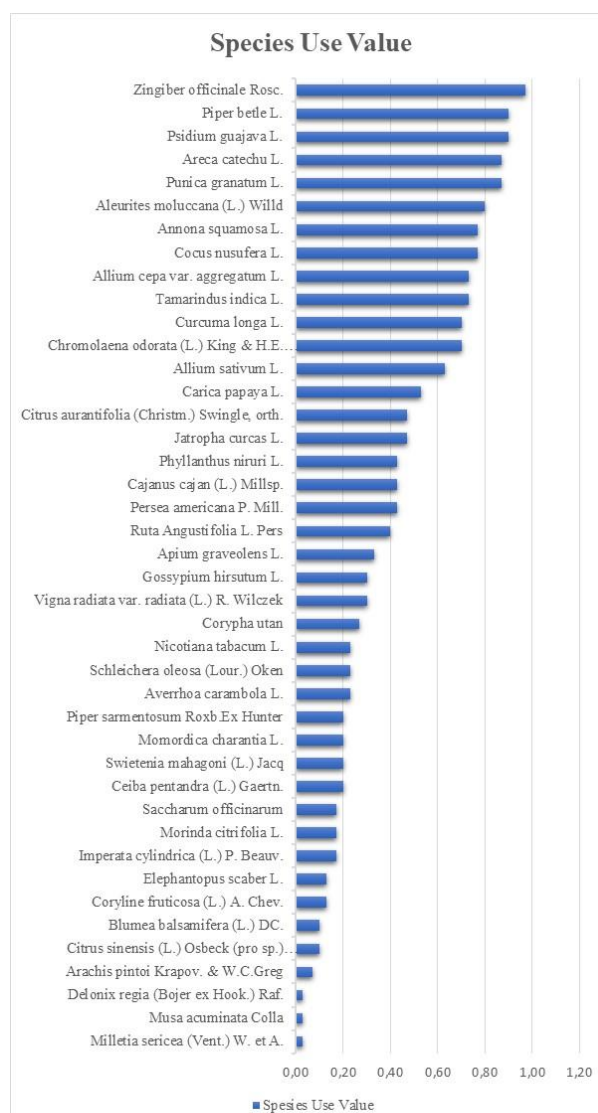

Figure 2. Use Value of Traditional Medicinal Plant Species of the Dawan Community (Amanatun) Hoineno Village, Nunkolo District, South Central Timor Regency

Betel seeds (*Areca catechu* L.) heal female reproductive organ wounds, headaches/dizziness, and flatulence. Meanwhile, the bark of the areca nut is employed as an antidote. The treatment combines areca nut and other species. Areca nut, tuba roots, mung bean seeds, and Siri leaves are mashed and applied to the

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wounded portion to cure female reproductive organs (A. U. Dewi & Wicaksono, 2020). Areca nut seeds, avocado peels, sugarcane leaves, and Siri leaves are mashed and rubbed on the stomach to alleviate flatulence. Headache is treated with areca nut, kusambi skin, and Siri leaf, which are mashed and then applied to the head. The areca nut bark is burned, combined with Siri fruit, mashed, and administered to a wound as an antidote to poison. Alkaloids, saponins, flavonoids, and tannins are all in areca nuts. Tannins, which have antiseptic and burn-healing effects, can be utilized to prevent wound infections. Flavonoids work as antiseptics, and alkaloids work as antibacterials (Handayani et al., 2017).

The fruit peels and leaves of the pomegranate (*Punica granatum* L.) are used to treat bloody bowel motions. Boiling pomegranate peel and leaf shoots are eaten three times a day till healed. Flavonoids, saponins, and tannins found in pomegranate trees have antibacterial properties (Yunus et al., 2019). Alkaloids and tannins are chemicals hypothesized to be active as antibacterials in treating diarrhea (Prasetyo et al., 2021).

Hazel nut (*Aleurites moluccana* L.) treats sharp-object stab wounds. The hazelnut seeds are crushed, heated, and applied to the wound as a paste. The chemical components of the candlenut fruit were analyzed and found to include saponins and alkaloids (Irwan, A, 2017). Saponins have the advantage of accelerating hemolytic action, which aids in antibacterial, antiviral, and antioxidant activities (A. U. Dewi & Wicaksono, 2020).

Sugar apple (*Annona squamosa* L.) is used to alleviate flatulence (Rupilu & Watuguly, 2018; Tansil et al., 2016). leaves are mashed and then applied to the stomach. Sugar apple leaves contain carminative effects, which can reduce stomach wind by eliminating gas from the digestive tract. Phytochemical analysis revealed that sugar apple leaves include flavonoids, saponins, and tannins. Sugar apple leaves have

antioxidant, anti-diabetic, hepatoprotective, and anti-tumor properties (Budianta et al., 2019; Purwita et al., 2013; Wasilah et al., 2018).

Coconut (*Cocus nusufera* L.) is used to cure newborn earache and gomak (Rohana et al., n.d.). The cure involves burning coconut flesh combined with tamarind rind and applying it to the painful ear. To treat gomak in babies, roasted coconut and meniran root are mashed and rubbed on the baby's mouth before cleaning the rest of the mixture with Jatropha curcas sap. Because it includes chemical substances such as polyphenols, flavonoids, tannins, steroids, and triterpenoids, coconut fruit can be employed in medicine and aesthetics (Agustina et al., 2022; Puteri et al., 2016). These compounds, particularly polyphenolics and flavonoids, can be an alternative source of natural antioxidants (Jauziyah et al., 2019).

Shallot (*Allium cepa* L.) is used to cure baby fever (Elsyana et al., 2019; Mahasuari et al., 2020; Medhyna & Putri, 2020). Shallot bulbs crushed and spread on the brow. Flavonoids, tannins, saponins, essential oils, kaempferol, flavon glycosides, fluroglucin, dihydroalin, cycloalin, methialin, quercetin, polyphenols, and sulfur are all found in shallot bulbs. Tannins are compounds that are supposed to aid in treating baby fever. Tannins contain antioxidant, antibacterial, and antifungal properties (Hasibuan & Edrianto, 2021).

Tamarind (*Tamarindus indica* L.) is a plant used to treat chickenpox (Risfianty & Indrawati, 2020; Slamet & Andarias, 2018). Tamarind leaves and tamarind leaves blended with pigeon pea leaves are boiled and then used for bathing. Secondary metabolites found in tamarind leaves include alkaloids, saponins, polyphenols, tannins, and flavonoids. Tamarind (*Tamarindus indica L.*) leaves contain antimicrobial properties (Doughari, 2006).

Turmeric (*Curcuma longa L.*) is used to treat wounds caused by sharp items as well as impact injuries caused by accidents

(Ihsan et al., 2019; Simanjuntak, 2015; Suprihatin, 2015). It is applied to wounds exposed to sharp objects by crushing the turmeric rhizome, heating it, and then putting it to the wound. To treat collision injuries caused by accidents, mix turmeric extract with honey and drink it every morning till it recovers. The phytochemical screening of turmeric rhizome ethanol extract revealed the presence of alkaloids, flavonoids, phenols, tannins, and terpenoids. The active chemicals in turmeric (*Curcuma longa L.*) rhizome can serve as antibacterials (Lia Fikayuniar et al., 2019).

Kirinyu (*Chromolaena odorata* L.) is used to treat sharp-object stab wounds. To apply it, grind the kirinyu leaves and stick them on the wound. Alkaloids, flavonoids, steroids, and saponins are secondary metabolites identified in kirinyu plants. Kirinyu leaves are used as an antiseptic, antimicrobial, cough medicine, and fever medicine to stop bleeding (Munte et al., 2016).

Garlic (*Allium sativum* L.) is used to treat boils (I. P. Dewi et al., 2020; Pakadang & Annisa, 2017). The garlic is crushed and then pasted on boiling water. Garlic bulbs contain alkaloids, flavonoids, and saponins as compounds. Alkaloids and flavonoids are antimicrobial compounds found in garlic bulbs (Komala et al., 2014).

CONCLUSIONS AND SUGGESTIONS

The Dawan (Amanatun) community uses 42 different species to treat 30 different diseases, which are divided into 13 disease categories: Blood Circulatory Disorder (BCD), Malaria (MAL), Respiratory Tract Disease (RTD), Antidote (ANT), Pregnancy and Birth Treatment (PBT), Muscles and Joint Disease (MJD), Wound Healing (WH), Sexually Transmitted Disease (STD), Oral Disease (OD), Skin Disease (SD), Headache and Fever (HF), and Digestive Tract Disease (DTD). Diseases that do not fall into the categories mentioned are included in the Others category (OT).

According to the computation of the species usage value (SUV), the Dawan (Amantun) community has a high level of trust in 13 of the 42 recognized medicinal plant species. Zingiber officinale Rosc. has the highest usage value (SUV of 0.97), whereas Milletia sericea (Vent.) has the lowest (SUV of 0.03). These calculations reveal that the higher the species usage value (SUV), the greater public trust. In contrast, the lower the species use value (SUV), the less public trust in employing the species as traditional medicine. Furthermore, a phytochemical test of the gewang plant species is required to determine the compounds present in the species, given that there has been no research on the phytochemical test of gewang leaves to date.

ACKNOWLEDGMENT

REFERENCES

Afifi, R. (2018). Uji Anti Bakteri Ekstrak Daun Jambu Biji (Psidium Guajava L) Terhadap Zona Hambat Bakteri Jerawatpropionibacterium Acnes Secara In Vitro. *Jurnal Kesehatan Bakti Tunas Husada: Jurnal Ilmu-Ilmu Keperawatan, Analis Kesehatan Dan Farmasi*, *17*(2), 321–330.

Agustina, D. A., Rahayuningsih, N., & Ruswanto, R. (2022). Aktivitas Antidiabetik Ekstrak Serabut Kelapa (Cocos Nucifera L.) Pada Tikus Galur Wistar. *Prosiding Seminar Nasional Diseminasi Penelitian*, *1*(1).

Budianta, T. D. W., Widyawati, P. S., & Haditanojo, V. (2019). Pengaruh Perbedaan Proporsi Tepung Daun Sirsak (Annona Muricata L.) Dan Teh Hitam Terhadap Aktivitas Antioksidan

Dalam Minuman. *Jurnal Teknologi Pangan Dan Gizi*, *18*(1), 33–43.

Dewi, A. U., & Wicaksono, I. A. (2020). Review Artikel: Tanaman Herbal Yang Memiliki Aktivitas Penyembuhan Luka. *Farmaka*, *18*(2), 213–221.

Dewi, I. P., Orde, I. M., & Verawaty, V. (2020). Efektivitas Gel Ekstrak Etanol Bawang Putih (Allium Sativum L.) Terhadap Bakteri Staphylococcus Aureus. *Jurnal Riset Kefarmasian Indonesia*, *2*(2), 105–112.

Doughari, J. H. (2006). *Antimicrobial Activity Of Tamarindus Indica Linn*. *5*(December), 597–603.

Elsifa, A., Arisandy, D. A., & Harmoko, H. (2019). Eksplorasi Tumbuhan Paku (Pteridophyta) Di Stl Ulu Terawas, Musi Rawas, Sumatera Selatan. *Biosfer: Jurnal Tadris Biologi*, *10*(1), 47–55.

Elsyana, V., Hidayat, M. A., & Tutik, T. (2019). Uji Toksisitas Dan Skrining Ekstrak Kulit Bawang Merah (Allium Cepa L.). *Jurnal Farmasi Malahayati*, *2*(1).

Faisal, H. N. (2021). Analisis Kemanfaatan Usaha Tani Kacang Tanah Sistem Tumpangsari. *Jurnal Agribis*, *7*(1), 7–15.

Fatimatuzzahra, A. P., Jumadi, J., Lestari, D. F., & Anggoro, B. S. (2020). *Biosfer: Jurnal Tadris Biologi*.

Fitriyah, A. T., Setiawan, H. S., Halik, A., Baharuddin, B., Utami, R. R., & Afriyanto, M. M. (2022). Pemanfaatan Ekstrak Daun Jambu Biji (Psidium Guajava Linn) Sebagai Bahan Tambahan Pada Permen Cokelat Tiramisu. *Jurnal Industri Hasil Perkebunan*, *17*(1), 1–12.

Haka, N. B., Anggoro, B. S., Hamid, A., Novitasari, A., Handoko, A., & Puspita, L. (2020). The Development Of Biology Module Based On Local Wisdom Of West Lampung: Study Of Ecosystem Material. *Journal Of Physics: Conference Series*, *1467*(1), 012013.

Handayani, F., Sundu, R., & Karapa, H. N. (2017). Uji Aktivitas Ekstrak Etanol Biji Pinang (Areca Catechu L.) Terhadap Penyembuhan Luka Bakar Pada Kulit Punggung Mencit Putih Jantan (Mus Musculus). *Jurnal Ilmiah Manuntung*, *2*(2), 154.

Hasibuan, A. S., & Edrianto, V. (2021). Sosialiasi Skrining Fitokimia Ekstrak Etanol Umbi Bawang Merah (Allium Cepa L.). *Jurnal Pengmas Kestra (Jpk)*, *1*(1), 80–84.

Hermawati, F. (2018). Analisa Pemanfaatan Dan Permasalahan Hutang Luar Negeri Indonesia Tahun 2013-2017. *OECONOMICUS Journal Of Economics*, *2*(2), 175–194.

Hidayat, R. S., & Napitupulu, R. M. (2015). *Kitab Tumbuhan Obat*. Agriflo (Penebar Swadaya Grup).

Hoffman, B., & Gallaher, T. (2007). Importance Indices In Ethnobotany. *Ethnobotany Research And Applications*, *5*(January), 201–218.

Ihsan, B. R. P., Maysaroh, I., & Nurhayati, I. P. (2019). Validasi Metode Ultra High Peformance Chromatography Double Mass Spectrophotometry (UHPLC-MS/MS) Untuk Analisis Kurkumin Pada Ekstrak Etanol Kunyit (Curcuma Longa) Dengan Berbagai Perbandingan Konsentrasi. *Pharmaceutical Journal Of Indonesia*, *4*(1), 29–34.

Indarto, I., Narulita, W., Anggoro, B. S., & Novitasari, A. (2019). Aktivitas Antibakteri Ekstrak Daun Binahong Terhadap Propionibacterium Acnes. *Biosfer: Jurnal Tadris Biologi*, *10*(1), 67–78.

Irmawan, I. (2017). Pemberdayaan Suku Kali Da'a. *Media Informasi Penelitian Kesejahteraan Sosial*, *41*(2), 187–198.

Irsyad, M. N., Jumari, J., & Murningsih, M. (2013). Studi Etnobotani Masyarakat Desa Sukolilo Kawasan Pegunungan Kendeng Pati Jawa Tengah. *Bioma : Berkala Ilmiah Biologi*, *15*(1), 27. Https://Doi.Org/10.14710/Bioma.15.1.27-34

Irwan, A, D. (2017). Uji Aktivitas Ekstrak Saponin Fraksi N-Butanol Dari Kulit Batang Kemiri (Aleurites Moluccana WILLD) Pada Larva Nyamuk Aedes Aegypti. *Sains Dan Terapan Kimia*, *1*, 93–101.

Iswandono, E., Muhammad Zuhud, E. A., Hikmat, A., & Kosmaryandi, N. (2015). The Ethnobotany Knowledge Of Manggarai Tribe And The Implication Utilization Of Forest Plants In The Mountains Of Ruteng. *Jurnal Ilmu Pertanian Indonesia*, *20*(3), 171–181.

Jauziyah, J. U., Purwanti, L., & Syafnir, L. (2019). Pengujian Potensi Antioksidan Ekstrak Sabut Dan Ampas Daging Buah Kelapa (Cocos Nucifera L.) Serta Perbandingannya Terhadap Virgin Coconut Oil Menggunakan Metode DPPH. *Prosiding Farmasi*, *5*(2), 162–169.

Jo, N. (2016). Studi Tanaman Khas Sumatera Utara Yang Berkhasiat Obat. *Jurnal Farmanesia*, *3*(1), 11–21.

Kemenkes. (2017). *Nomor HK.01.07/Menkes/187.2017. Tentang Formularium Ramuan Obat Tradisional Indonesia*.

Komala, O., Asmara, H. I., & Wiendarlina, I. Y. (2014). Uji Efektivitas Antibakteri Perasan Segar Dan Serbuk Umbi Bawang Putih (Allium Sativum L.) Terhadap Bakteri Salmonella Typhi. *Ekologia*, *14*(2), 34–39.

Kursia, S., Lebang, J. S., Taebe, B., Burhan, A., Rahim, W. O. R., & Nursamsiar. (2016). Uji Aktivitas Antibakteri Ekstrak Etilasetat Daun Sirih Hijau (Piper Betle L.) Terhadap Bakteri Staphylococcus Epidermidis. *Indonesian Journal Of Pharmaceutical Science And Technology*, *3*(2), 72–77.

Lia Fikayuniar, Neni Sri Gunarti, & Mellya Apriliani. (2019). Uji Aktivitas Antibakteri Ekstrak Etanol Rimpang Kunyit (Curcuma Longa L.) terhadap Staphylococcus Aureus dan Pseudomonas Aeruginosa. *Pharma Xplore : Jurnal Ilmiah Farmasi*, *4*(1), 278–287.

Loinenak, N. (2018). Inventarisasi Tanaman Berkhasiat Obat Di Desa Meusin Kecamatan Boking Kabupaten Timor Tengah Selatan Karya Tulis Ilmiah. *Skripsi Poltekes Kupang*, 6–34.

Maharani, I., Ulmillah, A., & Kuswanto, E. (2021). Pemberian Kombinasi Ekstrak Alang-Alang (Imperata Cylindrica) Dan Kirinyuh (Chromolaena Odorata) Pada Tanaman Gulma (Ageratum Conyzoides) Di Lahan Tanaman Kopi Desa Ciptawaras Kabupaten Lampung Barat. *Organisms: Journal Of Biosciences*, *1*(1), 1–11.

Mahasuari, N. P. S., Trisna, N. K. C. A., Karyawati, N. K., & Pawarrangan, A. B. S. (2020). Uji Hedonik Produk Boreh Penurun Demam Dari Bawang Merah (Allium Cepa L.) Dan Kulit Batang Pule (Alstonia Scholaris L.). *Jurnal Ilmiah Medicamento*, *6*(2).

Malik, A., Marpaung, L., Simanjuntak, P., & Nasution, P. (2017). Aktivitas Sitotoksik Senyawa Golongan Fenolik Dari Ekstrak Daun Sirih (Piper Betle L.). *Fitofarmaka: Jurnal Ilmiah Farmasi*, *7*(2), 1–6.

Mangesa, R., & Aloatuan, F. (2019). Efektifitas Dan Kandungan Fraksi Aktif Metanol Daun Sirih Hijau (PIPER Betle L) Sebagai Antibakteri Salmonellatyphi. *Biosfer: Jurnal Tadris Biologi*, *10*(1), 57–65.

Maretta, G., Kuswanto, E., & Septikayani, N. I. (2019). Efektifitas Ekstrak Daun Patikan Kebo (Euphorbia Hirta L) Sebagai Ovisida Terhadap Nyamuk

Demam Berdarah Dengue (Aedes Aegypti). *Biosfer: Jurnal Tadris Biologi*, *10*(1), 1–9.

Margarethy, I., Yahya, Y., & Salim, M. (2019). Kearifan Lokal Dalam Pemanfaatan Tumbuhan Untuk Mengatasi Malaria Oleh Pengobat Tradisional Di Sumatera Selatan. *Jhecds: Journal Of Health Epidemiology And Communicable Diseases*, *5*(2), 40–48.

Medhyna, V., & Putri, R. U. (2020). Pengaruh Kompres Bawang Merah Terhadap Penurunan Suhu Tubuh Bayi Saat Demam Pasca Imunisasi Di Wilayah Kerja Polindes Pagar Ayu Musi Rawas. *Maternal Child Health Care*, *2*(2), 107–118.

Mofi, T., & Sabat, D. (2022). The Inventory Of Local Wisdom: Amanuban-Dawanese Medicinal Plant In Timor Tengah Selatan District. *Biosfer: Jurnal Pendidikan Biologi*, *15*(1), 110–122.

Munte, N., Sartini, & Lubis, R. (2016). Skrining Fitokimia Dan Antimikroba Ekstrak Daun Kirinyuh Terhadap Bakteri Staphylococcus Aureus Dan Escherichia Coli. *Jurnal Biologi Lingkungan, Industri Dan Kesehatan*, *2*(2), 132–140.

Nasution, I. P., Permana, R., & Sulistyowati, D. (2022). Model Sosialisasi Kearifan Lokal Masyarakat Baduy Dalam Pelestarian Hutan Kepada Generasi Muda Di Kampung Balimbing, Baduy Luar. *Paradigma: Jurnal Kajian Budaya*, *5*(1), 6.

Nuroho, R. A., & Ningsig, E. A. (2017). Produksi Tanaman Obat. In *Info Komoditi Tanaman Obat* (Pp. 9–20).

Pakadang, S. R., & Annisa, N. (2017). Uji Aktifitas Perasan Bawang Putih (Allium Sativum) Asal Kabupaten Gowa Terhadap Pertumbuhan Candida Albicans. *Jurnal Kesehatan Yamasi Makassar*, *1*(1).

Perdani, M. S., & Hasibuan, A. K. (2021). Analisis Informasi Tanaman Herbal Melalui Media Sosial Ditengah Masyarakat Pada Pandemi Covid-19: Sebuah Tinjauan Literatur. *Bencoolen Journal Of Pharmacy*, *1*(1), 11–25.

Pranoto, M. E. (2021). Pengaruh Pemberian Salep Fraksi Etil Asetat Daun Jambu Biji (Psidium Guajava) Terhadap Luka Bakar Pada Mencit Putih (Mus Musculus L.). *Jurnal Farmasi Tinctura*, *3*(1), 23–34.

Prasetyo, B., Ma'arif, A. S., Pratiwi, D. W., Udaibah, W., & Abidin, Z. (2021). Skrining Fitokimia Dan Analisis Gc-Ms Dari Ekstrak Batang Punica Granatum (Studi Ayat Mengenai Delima Dan Qs. Ali Imran [3]: 191). *Prosiding Konferensi Integrasi Interkoneksi Islam Dan Sains*, *3*, 127–137.

Purwita, A. A., Indah, N. K., & Trimulyono, G. (2013). Penggunaan Ekstrak Daun Sugar apple (Annona Squamosa) Ssebagai Pengendali Jamur Fusarium Oxysporum Secara In Vitro. *Lenterabio: Berkala Ilmiah Biologi*, *2*(2), 179–183.

Puteri, I. T., Jayuska, A., & Alimuddin, A. H. (2016). Aktivitas Antirayap Daun Gaharu (Aquilaria Malaccensis Lam.) Terhadap Rayap Tanah Coptotermes Sp. *Jurnal Kimia Khatulistiwa*, *5*(2).

Rachman, M. (2012). Konservasi Nilai Dan Warisan Budaya. *Indonesian Journal Of Conservation*, *1*(1).

Risfianty, D. K., & Indrawati, I. (2020). Perbedaan Kadar Tanin Pada Infusa Daun Asam Jawa (Tamarindus Indica L.) Dengan Metoda Spektrofotometer UV-VIS. *Lombok Journal Of Science*, *2*(3), 1–7.

Rohana, A. R., Fahmi, A. A., Fazreen, Z. N., Syazni, A. N., Zubaidah, S. S., Rosniza, R., Marzalina, M., Lim, H. F., Shahidan, M. M., & Azah, M. N. (N.D.). Kajian Rantaian Nilai Industri Herba Terpilih Di Semenanjung

Malaysia. *Prosiding Persidangan Industri Herba*, 44.

Rosmanita, I., & Saharuddin, S. (2017). Hubungan Tingkat Pengetahuan Lokal Masyarakat Desa Ciherang Dengan Tingkat Pengelolaan Tanaman Obat Keluarga. *Jurnal Sains Komunikasi Dan Pengembangan Masyarakat [JSKPM]*, *1*(3), 359–378.

Rupilu, B., & Watuguly, T. (2018). Studi Pemanfaatan Tumbuhan Obat Tradisional Oleh Masyarakat Suku Oirata Pulau Kisar Kecamatan Pulau-Pulau Terselatan Kabupaten Maluku Barat Daya. *BIOPENDIX: Jurnal Biologi, Pendidikan Dan Terapan*, *5*(1), 53–64.

Salim, M. (2016). Adat Sebagai Budaya Kearifan Lokal Untuk Memperkuat Eksistensi Adat Ke Depa. *Al Daulah: Jurnal Hukum Pidana Dan Ketatanegaraan*, *5*(2), 244–255.

SARI, D., & NASUHA, A. (2021). Kandungan Zat Gizi, Fitokimia, Dan Aktivitas Farmakologis Pada Jahe (Zingiber Officinale Rosc.): Review. *Tropical Bioscience: Journal Of Biological Science*, *1*(2), 11–18.

Sembiring, M., Sipayung, R., & Sitepu, F. E. (2014). Pertumbuhan Dan Produksi Kacang Tanah Dengan Pemberian Kompos Tandan Kosong Kelapa Sawit Pada Frekuensi Pembumbunan Yang Berbeda. *Jurnal Agroekoteknologi Universitas Sumatera Utara*, *2*(2), 98329.

Sheng-Ji, P. (2001). Ethnobotanical Approaches Of Traditional Medicine Studies: Some Experiences From Asia. *Pharmaceutical Biology*, *39*(Sup1), 74–79.

Simanjuntak, P. (2015). Studi Kimia Dan Farmakologi Tanaman Kunyit (Curcuma Longa L) Sebagai Tumbuhan Obat Serbaguna. *AGRIUM: Jurnal Ilmu Pertanian*, *17*(2).

Slamet, A., & Andarias, S. H. (2018). Studi Etnobotani Dan Identifikasi Tumbuhan Berkhasiat Obatmasyarakat Sub Etnis Wolio Kota Baubau Sulawesi Tenggara. *Proceeding Biology Education Conference: Biology, Science, Enviromental, And Learning*, *15*(1), 721–732.

Sugiyono. (2012). *Metode Penelitian Kuantitatif Kualitatif Dan R&B*. Alfabeta.

Supriani, S., Harira, L. W., & Fadlilah, N. M. (2021). Pemanfaatan Obat Tradisional Untuk Pemeliharaan Kesehatan, Pencegahan Penyakit, Dan Perawatan Kesehatan Di Era Pandemi Covid-19 Dengan Ramuan Bersumber Dari Kemenkes Republik Indonesia. *Prosiding Seminar Nasional Pengabdian Kepada Masyarakat: Peduli Masyarakat*, *1*(1), 23–26.

Suprihatin, S. (2015). Upaya Guru Dalam Meningkatkan Motivasi Belajar Siswa. *Jurnal Pendidikan Ekonomi UM Metro*, *3*(1), 73–82.

Susilawati, S., & Hikmatulloh, H. (2021). Bisnis Ukm Jamu Raden Sri Rastra Di Masa Pandemi Covid-19. *Swabumi*, *9*(1), 57–63.

Syaifullah, M. D. (2015). Siklon Tropis, Karasteristik Dan Pengaruhnya Di Wilayah Indonesia Pada Tahun 2012. *Jurnal Sains & Teknologi Modifikasi Cuaca*, *16*(2), 61 Â€"71-61 Â€"71.

Tansil, A. Y., Nangoy, E., Posangi, J., & Bara, R. A. (2016). Uji Daya Hambat Ekstrak Etanol Daun Sugar apple (Annona Squamosa) Terhadap Pertumbuhan Bakteri Escherichia Coli Dan Staphylococcus Aureus. *E-Biomedik*, *4*(2).

Tefu, Meti & Sabat, D. (2021). *Tanaman Obat Tradisional*. Deepublish.

Tresnawati, C., Aryanti, F., & Suhaerah, L. (2022). Flipped Learning Dalam Meningkatkan Berpikir Kritis

Mahasiswa Pada Materi Fotosintesis Dimasa Pandemik Covid-19. *Biosfer: Jurnal Biologi Dan Pendidikan Biologi*, *7*(1), 41–49.

Ujan, K. K., Sudira, I. W., & Merdana, I. M. (2019). Terapi Ekstrak Daun Jambu Biji (Psidium Guajava L.) Terhadap Penyembuhan Diare Pada Sapi Bali. *Indonesia Medicus Veterinus*, *8*(Vol 8 (4) 2019), 474–484.

Wae, V. P. S. M., Gago, J., & Ngapa, Y. D. (2022). Etnobotani Masyarakat Suku Lio: Studi Kasus Di Desa Waturaka Kawasan Taman Nasional Kelimutu Kabupaten Ende Nusa Tenggara Timur. *Biosfer: Jurnal Biologi Dan Pendidikan Biologi*, *7*(1), 58–66.

Wasilah, Q. A., Rukmana, R., & Embrikawentar, Z. C. (2018). Pengelolaan Ekstrak Daun Sugar apple Sebagai Solusi Ektoparasit Pada Agapornis Fischeri. *Sains Dan Matematika*, *6*(2), 38–42.

Yunus, F. M., Sabuna, A. C., & Nge, S. T. M. (2019). Uji Aktivitas Antibakteri Ekstrak Kulit Buah Delima Merah (Punica Granatum L.) Terhadap Pertumbuhan (Vibrio Cholera). *Indigenous Biologi : Jurnal Pendidikan Dan Sains Biologi*, *1*(3), 10–16.

Zuhud, E. A. (2009). Potensi Hutan Tropika Indonesia Sebagai Penyangga Bahan Obat Alam Untuk Kesehatan Bangsa. *Jurnal Bahan Alam Indonesia*, *6*(6), 227–232.

Zuhud, E. A. M. (2019). Potensi Hutan Tropika Indonesia Sebagai Penyangga Bahan Obat Alam Untuk Kesehatan Bangsa. *Jurnal Bahan Alam Indonesia*, *6*(6), 45–50.

Zuhud, EAM., Siswoyo., Soekmadi, R., Sandra, E., Adhiyanto, E. (2004). *Penyusunan Rancangan Dan Pengembangan Sumberdaya Alam Hayati Berupa Tumbuhan Di Kabupaten Sintang. Kerjasama Fakultas Kehutanan IPB Dengan Bappeda Kabupaten Sintang. Bogor.*