

## The Traditional Karonese Oil as Ancestral Heritage

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### ABSTRACT

Every indigenous people are familiar with traditional medicine and medical techniques in order to maintain life in an atmosphere of support for community medicine and medical techniques. Traditional knowledge, especially traditional medicine, is Karonese Oil which has important benefit. This study examines the openness of the ancestral heritage of traditional knowledge of Karonese Oil. In this study, it is hoped that a renewal of regulations on traditional knowledge is closely related to regulations on the protection of traditional medicine because of medicine and techniques that have not received adequate legal protection. Data collection is carried out descriptive qualitative research, descriptive is a problem formulation that guides research to explore or portray the social situation to be studied thoroughly, broadly and in depth to craftsmen or traditional Karo oil activists. The data were analyzed qualitatively by using a legal theory approach as a rationale. Indigenous peoples rule on the protection of traditional knowledge of ancestral heritage of traditional Karo tribe oil. The Karonese tribe has various kinds of knowledge of medicine and traditional medicine techniques, especially Karonese oil. Updating on traditional knowledge that are closely related to regulations on the protection of traditional medicine due to inadequate medicines and techniques. This is in the form of regulations concerning the draft law on the protection and use of intellectual property, traditional knowledge and traditional cultural expressions, which until now have not been ratified by the Government. **Keywords:** Traditional medicine, Ancestral heritage, Karonese oil, Legal protection



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### 1. Introduction

Indonesia is a country rich in artistic and cultural heritage. Indonesia's diverse cultural heritage is due to many factors, among others, because Indonesia's ethnic groups are very diverse and the high level of creativity of the Indonesian people in the field of arts and culture, resulting in material cultural heritage and intangible cultural heritage. Intangible cultural heritage is a variety of human works both movable and immovable including cultural heritage objects, while intangible cultural heritage is a cultural heritage that can be captured by the five senses in addition to the sense of touch and abstract cultural heritage / cannot be captured by the five senses for example are the concepts and science of culture. (Hamzah, 2004).

The intangible cultural heritage that the author examines is Karo oil, which is one of the intangible heritages owned by the Karo people. (Tarigan, Traditional Karo Medicine, 2017). The diversity of intangible cultures in Indonesia needs to be protected both at the national and international levels. The protection of intangible culture needs to be done to know the existing cultural wealth and its current condition and specially to prevent recognition from other parties. (Culture, 2009).

Indonesia is blessed with a fairly unique culture and customs that produce traditional customary works, one of which is the work of Traditional Knowledge (PT), one of which is how to make Karo oil, which is the identity and asset of the nation. There are 5 (five) Batak ethnicities, one of which is in North Sumatra, namely, the Karo Batak Customary Law Community. They prefer to be called 'Karo'. They exist in the Karo district, as well as its expansion areas such as Deli Serdang Regency, Langkat Regency, Binjai Municipality, Simalungun Regency and Medan Municipality. In other areas throughout North Sumatra and Indonesia in small numbers, they have spread throughout Indonesia. (Sari & Sitepu, 2021).

The characteristics or identity of the Karo people are distinctive from other ethnic groups in North Sumatra. The characteristics of the Karo people are very much influenced by the natural environment that surrounds them, as inland children in the jungle and agrarian mentality, or perhaps also due to the history of the conquest

of the Haru Kingdom where one of the splinters was the Karo Tribe who inhabited the highland areas, both in Tanah Karo, Medan, Deli Serdang, Langkat, Binjai, Simalungun, Dairi and Southeast Aceh (Tarigan, 2008 p, 15).

Karo oil is a traditional oil made by the Karo tribe that is traditionally mixed and has been very well known for its benefits and used for a long time among the people of North Sumatra. *Urut* or in Karo *alun* is a traditional method of treatment (massage) Especially for the Karo people, the method of treatment by means of massage has been known for generations, and is applied to cure various types of diseases (Tarigan, 2017, 1).

It is clear that *tabas-tabas* (spells) are a type of magical belief after the Karo people became Christians it is not allowed to *nabas* (chant). (Ginting, 1999, p. 95). The benefits of Karo Oil are treating aches, treating colds, reducing heat/fever, healing wounds, treating animal stings, treating itching, strengthening bones in babies, treating lumbago, treating rheumatism, treating sprains, treating body pain, and treating muscle cramps. Karo oil is an external medicine so its use is simply rubbed, applied or massaged. (Nasution, Suharyanto, & Dasopang, 2020).

In Indonesia, local wisdom is a philosophy and view of life that is manifested in various fields of life such as in socio-economic values, architecture, health, environmental planning, and so on. Local wisdom in health is manifested in the form of drugs and traditional medicine, such as the use of kencur to treat coughs and guava leaves to treat diarrhea. (Dokhi, et al., 2016).

Almost every house must have karo oil which is the family's mainstay medicine, especially when experiencing aches, malaise, wounds due to falls / cuts, itching due to allergies or insect bites and so on. (Sitepu, 2014).

An Indonesian badminton player, Antony Sinisuka Ginting, can be used as a testimonial of a beneficiary of Karo oil. "At first he didn't want to use it, because the oil smells. Evidently, Anthony was able to win two games at once over Kento Momota, a Japanese player who was the second seed at the 2018 Asian Games. Anthony managed to win 21-18, 21-18, and has the right to advance to the quarter-finals. (Laksaman, 2018). Several international, environmental and anthropology journals have reviewed the journal on Karo oil as a traditional medicine. The theories used as analytical tools are legal protection theory, effectiveness theory and development law theory. This paper focuses on 3 important points, among others: Protection of Karo Oil Traditional Medicine as Intangible Cultural Heritage, as Local Wisdom, and the Concept of Karo Oil Benefit Sharing between Protection and Utilization for the future progress of Karo.

## 2. Method

The research was conducted on the Karo community in the land of Karo and Deli Serdang as the expansion area of the Karo community, the Director General of Intellectual Property Rights of the Department of Law and Human Rights of the North Sumatra Regional Office, the Department of Labor and UMKM Cooperatives of Karo Regency) Karo traditional medicine craftsmen or activists, sellers of basic ingredients of traditional Karo medicine, some Karo traditional medicine users and some observers of Customary Law from among the community, for example, people who know the cultural history of Traditional Knowledge of medicine and techniques of Patent Process / Product of the Karo Community.

The type of literature used is reference literature that refers to secondary data materials for this normative legal research based on its binding force is divided into (a) primary legal materials (b) secondary legal materials (c) tertiary legal materials. Primary, secondary and tertiary legal materials are obtained through library studies. All data obtained through literature studies are then analyzed qualitatively, holistically and comprehensively. (Moleong, 2008).

Data collection is carried out descriptive qualitative research, descriptive is a problem formulation that guides research to explore or portray the social situation to be studied thoroughly, broadly and in depth to craftsmen or traditional Karo oil activists.

This research was conducted through the interview method:

- 1) Karo people in Tanah Karo, Deli Serdang;
- 2) Director General of Intellectual Property Rights, Ministry of Law and Human Rights, North Sumatra Regional Office;
- 3) Karo District Office of Manpower and MSME Cooperatives);
- 4) Karo traditional medicine craftsmen or activists;
- 5) A seller of basic ingredients for traditional Karo medicine,
- 6) Some traditional medicine users of Karo and
- 7) Some Customary Law Observers from the community, e.g. people who know the cultural history of Traditional Knowledge of medicine and Patent Process/Product techniques of the Karo Community. Data analysis in this research is carried out in a series of activities starting from data collection to conclusion drawing, namely qualitative analysis. Focus on the depth of analysis between concepts used or found in research. This dissertation research is prescriptive analysis. This research is prescriptive which offers

concepts for problem solving and not just descriptive (just to describe something as it is). The implementation of the research is limited to, "Traditional Karo oil as cultural heritage".

### 3. Result and Discussion

Karo oil is a traditional oil made by the Karo tribe which is traditionally mixed and has been very well known for its benefits and used for a long time among the people of North Sumatra. Types of Karo oil: kem-kem oil; Karo cap tiger oil; broken bone oil; kuta kepar oil; healthy oil; green coconut herbal Karo oil; centipede oil; karo cap lizard oil; karo oil from ginger Karo oles oil; siam oil. karo oil. How to make: spices, roots and coconut oil. All ingredients are soaked in water overnight, prepare a large container/wok, then all ingredients are put into the wok for about 5 hours. How to use: Apply to the affected area (Tarigan, 2017, 1-2).



Figure 1. Basic ingredients



Figure 2. Manufacturing process



Figure 3. Packaging



Figure 4. Beneficiaries of Karo oil

### 3.1. Protection of Traditional Knowledge Karo Oil as Intangible Cultural Heritage

Definitions or terminologies of traditional knowledge include "local knowledge", "indigenous knowledge", "traditional knowledge", "traditional ecological knowledge", "folklore", "cultural property", and others. All of these terms in principle focus on a concept of knowledge that has long been recognized in certain groups of society, while the difference lies in the orientation of the community being addressed (Saleh, 2010).

The World Intellectual Property Organization (hereinafter referred to as WIPO) in this case also provides a definition of traditional knowledge as: "Tradition based literary, artistic or scientific works, performances, inventions, scientific discoveries, designs, marks, names, and symbols, undisclosed information, and, all other traditionbased innovations and creations resulting from intellectual activity in the industrial, scientific, literary or artistic fields". (Sutedi, 2009, p. p.174).

Traditional Knowledge should be protected, First: because traditional knowledge plays an important role in the economic and social life of a country. Recognizing and enhancing the values contained in traditional knowledge will help strengthen identity and increase its utilization to achieve social and developmental goals. In short, traditional knowledge has the potential to create sustainable economic development in many countries. Secondly, developing countries and developed countries are implementing international agreements that affect how traditional knowledge relating to genetic resources is protected and disseminated, thereby protecting their national interests (WIPO, 2005). (WIPO, 2005).

The World Health Organization (WHO) defines traditional medicine as "the sum total of knowledge, skills and practices based on theories, beliefs and experiences derived from different cultures, whether or not explainable, that are used in health maintenance, as well as in the prevention, diagnosis, amelioration or treatment of physical and mental illnesses" (WHO, 2000). (WHO, 2000).

Indonesia has around 250 ethnicities/tribes, in North Sumatra province there are several tribes: Karo, Nias, Simalungun, Mandailing, Dairi, Toba, Malay, Pak Pak, Maya-Maya. Examples of other tribes that have ancestral heritage of traditional oils include: star oil from Dayak, nyeleng oil from Sasak, wasp stamp oil from Sulawesi.

This research discusses oil from Karo, as at the beginning of the discussion it has been explained about Karo oil, both from the ingredients, types, how to make, how to use it and its benefits. The Karo tribe has used plants in treating various types of diseases since time immemorial. The utilization of plants as medicine is still maintained by Karo people in the countryside and in the city. (Sasongko, Lindati, & Oren Basta, 2018).

According to Barus research, 2015 states that the making of karo massage oil is made with rituals with the aim that karo massage oil is able to cure diseases that are believed to originate from supernatural spirits or diseases sent by people through occult ways and request protection from ancestral spirits. (Barus, 2015).

The research results of Pandapotan et al, 2018 stated that the making of Karo Oil is one form of local wisdom that is very well known in Karo culture. The composition contained in Karo Oil is different. As in the Village of Lingga, one of the residents added to it the contents of monkey oil and snake oil for ndikar (grappling) activities. The spices consist of coconut oil, monkey oil, python oil, tiger/cat oil, sesame oil, green coconut oil, rattan root (ketang), sugar palm (enau), areca root, iron-tree root, yellow bamboo root (hurgen) tuba root, coconut root, parched nek miting (Pandapotan, 2018). (Pandapotan, 2018).

### 3.2. Protection of Traditional Knowledge of Karo Oil as Local Wisdom

Culture and Diversity in terms of its origin, Culture or Culture comes from the Sanskrit language, namely "budhayah" which is the plural form of "budhi" which means 'budi' or 'mind'. culture as the power of the mind in the form of creation, karsa and taste. While the mind is defined as things related to the human mind which

is the emanation of the mind and the power of all what is thought, felt, and contemplated which is then practiced in the form of a force that produces life. (Koentjaraningrat, Introduction to Anthropology, 1990).

Culture comes from the words "budi" and "daya", where the word "budi" comes from the Sanskrit buddhi" which can be interpreted as "mind", while "daya" can be interpreted as "power" So "culture" can be interpreted as the result of the power of human reason which then forms a value system in society Culture is a way of life that develops and is shared by a group of people and is passed down from generation to generation Culture is formed from many complex elements, including religious and belief systems, politics, customs, languages, tools, tools, buildings, and works of art. (Serfiyani, Hariyani, & Serfianto, 2018).

The concept of 'Culture' needs to be approached through the form and content of culture. The cultural framework is the dimension of analyzing the concept of culture combined into a circle chart to show that culture is dynamic. According to (Koentjaraningrat, 1985) that this cultural framework is described as follows

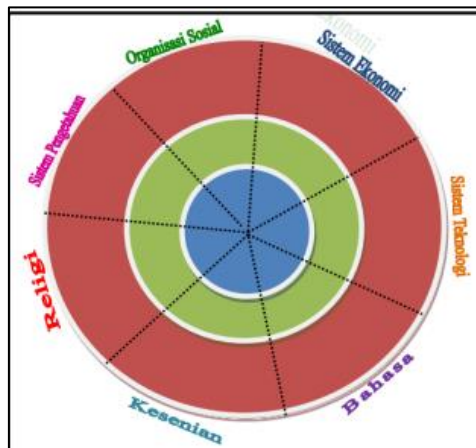


Figure Picture 5. Culture Framework  
Source: Koentjaraningrat (1985)

From Figure Picture 5, the innermost circle is the Cultural System, the second circle is the Social System while the outer circle is Physical Culture. Each circle can be divided into 7 universal cultural elements (based on Malinowski's concept), namely: i) Arts; ii) Religion; iii) Knowledge system; iv) Social organization; v) Economic system; vi) Technological system; vii) Language.

Culture means mind, intellect. In English, culture is called culture which originated from the Latin Colere which means to cultivate or work in the sense of cultivating land or farming. So culture is defined as things that are related to the mind or intellect. (Indonesia, 2008). Culture as all the work, creation and taste of society (Soemarjan & Soenardi, 1964). Culture as knowledge, beliefs, arts, morals, laws, customs, abilities and habits acquired by humans as members of society (Tylor, 1871). (Tylor, 1871).

Based on data from the 2010 Population Census, it is known that the Javanese are the largest ethnic group with a population of 95.2 million people or around 40.2 percent of the Indonesian population. In this research, Karo oil as intellectual property needs to be protected. Local wisdom contains local cultural wisdom. Directly or indirectly, culture influences the formation of local wisdom (Meliono, 2011). (Meliono, 2011).

The diversity of regional cultures is a social potential that can shape the character and cultural image of each region, and is an important part of the formation of the image and cultural identity of a region. (Dokhi, et al., 2016).

Local wisdom is a form of expression from tribes in Indonesia, where they carry out their activities and then behave in accordance with the idea of local wisdom. (Dokhi, et al., 2016).

The values of local wisdom are passed down from generation to generation through socialization and enculturation that are internalized in each individual in the community so that they have a personality that is in accordance with the norms (Gobyah, 2003). (Gobyah, 2003). In this research, Karo oil as local wisdom as intellectual property needs to be protected.

### 3.3. The concept of benefit sharing of Karo Oil between protection and utilization for the betterment of Karo in the future

1) History of the Access and Benefit Sharing System (ABS) Concept International arrangements related to the Access and Benefit Sharing System (ABS) have been realized with the signing of the Convention on

Biological Diversity (CBD) on June 5, 1992. Benefit sharing is in accordance with the three main objectives of the CBD, namely:

- a. Conservation of biological diversity 139.
- b. The sustainable use of biodiversity (the sustainable use of its components)
- c. The fair and equitable sharing of benefits arising from its utilization of biodiversity. (Human Rights Research and Development Agency, 2013).

CBD rules on access to genetic resources must be mutually agreed in Mutually Agreed Terms (MAT) and must have obtained Prior Informed Consent (PIC) from the country that owns the genetic resources. (Hafshoh, 2022)

2) The concept of Access and Benefit Sharing System (ABS) in the Nagoya Protocol The Nagoya Protocol is a further elaboration of the CBD and a means of implementing access and benefit sharing for countries that own biological resources. The Nagoya Protocol establishes access and benefit sharing on the utilization of biological resources based on the principle of fair and equitable. (Human Rights Research and Development Agency, 2013).

The concept of Access and Benefit Sharing System (ABS) is basically a way to gain access to genetic resources and how to share the benefits obtained from the utilization of genetic resources from the country using genetic resources to the country providing genetic resources, including involving the role of indigenous peoples. (Kurnianingrum, 2018).

According to (Hartati, 2012) said that ABS has three pillars, namely Access, Benefit Sharing and Compliance (ABC namely Access, Benefit Sharing and Compliance), which are expressly stated in the CBD.

1. Access, the Access Section is mentioned in Articles 6 and 7 of the Nagoya Protocol.
2. Benefit Sharing, Benefit sharing is mentioned in Article 5 of the Nagoya Protocol.
3. Compliance, Compliance is mentioned in Articles 15, 16 and 18 of the Nagoya Protocol

The ABS regulation aims to ensure the facilitation of access to the intended genetic resources, and the fair and balanced sharing of benefits for the utilization of genetic resources that have been used. Fair and balanced benefit sharing between utilizers and providers of traditional knowledge has also been mentioned previously in Law No. 13 of 2016 on Patent Rights (Indonesia, 2016).

Spirituality is the highest form of consciousness, and spiritual awareness is the highest form of consciousness (Melianti, Ivanna, & Perangin-angin, 2016).. The concept of Access and Benefit Sharing (ABS) has emerged as a way to bridge the injustice between the interests of individuals, groups or countries and local communities towards traditional knowledge.

Articles 22 and 23 of the PTEBT Bill, while explaining the resolution of disputes through the courts and out of court, do not include criminal provisions. Article 22 (PTEBT Bill). Benefit sharing offered in response to efforts to utilize Traditional Knowledge can be considered as an option that is considered appropriate. (Djulaeka, 2013).

The inventoried local plants and herbs are then examined in more depth for their benefits and functions in accordance with ethnobotanical studies, finding their processing and economic improvement potential. (Surya Darma, 2008). The indigenous peoples as the owners of the Karo people are disadvantaged if they do not get a share of the benefits (benefit sharing) from the utilization of traditional knowledge of Karo oil (Daulay, 2011). (Daulay, 2011). The concept of fair benefit sharing, although recognized as important, is still poorly implemented. (Indonesia, 2005).

The universal sharing of benefits-sharing that describes the entire positive potential of the genetic enterprise - and a specific benefit-sharing framework directed towards those who directly participate in research." It is further revealed that "universal benefit-sharing has been based on concerns for justice in an international genetic research sit participate in research." It is further revealed that "universal benefit-sharing has been based on concerns for justice in an international genetic research situation. (Simm, 2005).

#### 4. Conclusion

Traditional Karo Oil Medicine as Intangible Cultural Heritage Legal Protection Wealth needs to be protected, either protection or utilization. Local Wisdom, one of which is Karo Oil, is either a cultural heritage or a resource. In accordance with the state foundation of Pancasila which is fair, the concept of *benefit sharing* must be followed by the PPKIPT and EBT Bill which is important to be immediately formalized by the Government, so that the Karo people get prosperity.

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## References

- Barus, L. P. (2015). The Ritual of Making Karo Urut Oil in Jumapadang Village, Barusjahe District, Karo Regency. *Buddayah: Journal of Anthropology Education*, 176-179.
- Culture, B. P. (2009). *Practical Guidebook for Recording Indonesian Intangible Cultural Heritage*. Jakarta: Ministry of Culture and Tourism of the Republic of Indonesia and UNESCO Office.
- Daulay, Z. (2011). *Traditional Knowledge: Concept, Legal Basis, and Practice*. Jakarta: Raja Grafindo Persada.
- Djulaeka. (2013). The Concept of Benefit Sharing as an Effort to Protect and Utilize Traditional Knowledge in Indonesia. *Conference of the Indonesian IPR Teaching Association at Udayana University, Bali* (p. 11). Bali: Udayana University,.
- Dokhi, M., Siagian, T. H., Sukim, Wulansari, I. Y., Hadi, D. W., & Sambodo, N. (2016). *Analysis of local wisdom in terms of cultural diversity*. Jakarta: Center for Statistical Data, Education and Culture, Ministry of Education and Culture.
- Fajar, M., & Achmad, Y. (2010). *Dualism of legal research: normative & empirical*. Yogyakarta: Student Library.
- Ginting, E. (1999). *Karo Religion: Reading Karo Religion with New Eyes*. Kabanjahe: Abdi Karya.
- Gobyah, I. K. (2003). *Grounded in Wisdom*. Retrieved 4 19, 2023, from Balipost: <http://www.balipost.co.id>
- Hafsoh, F. A. (2022). *The Concept of Prior Informed Consent (Pic), Access And Benefit Sharing System (Abs) And Legal Protection Of Traditional Knowledge In Sui Generis Regulation*. Semarang: Faculty of Sharia and Law, State Islamic University (Uin) Walisongoun State Islamic University (Uin) Walisongo State Islamic University (Uin) Walisongo Semarang.
- Hamzah, M. G. (2004). The Role of Law in Efforts to Preserve Cultural Heritage. *Amannagappa Journal of Law*, 12.3.
- Hartati, D. (2012). *Legal Studies on Access and Profit Sharing in the Utilization of Marine and Fisheries Genetic Resources*. Jakarta: University of Indonesia.
- Human Rights Research and Development Agency, K. H. (2013). *Intellectual Property Protection of Traditional Knowledge & Traditional Cultural Expressions of Indigenous Peoples*. Jakarta: Alumni.
- Indonesia. (2016). *Law Number 13 Year 2016 on Patents*. Jakarta: Government of the Republic of Indonesia.
- Indonesia, K. B. (2008). *Indonesian Dictionary*,. Jakarta: Language Center, Ministry of National Education.
- Indonesia, L. P. (2005). *Developing Country Interests in Rights to Geographical Indications, Genetic Resources and Traditional Knowledge*. Jakarta: Institute for International Law Studies, Faculty of Law, University of Indonesia.
- Koentjaraningrat. (1985 ). *Culture, Mentality and Development*. Jakarta: Gramedia.
- Koentjaraningrat. (1990). *Introduction to the Science of Anthropology*. Jakarta: Rineka Cipta.
- Kurnianingrum, T. P. (2018). Legal Protection of Traditional Medicinal Knowledge. *Review: Bridging Theory and Community Issues in Policy Formulation*, 111-128.
- Laksaman, N. (2018, August 26). *Anthony Sinisuka Ginting and His Mother's Karo Sequential Oil*. Retrieved 4 19, 2023, from Kompas.Com: <https://olahraga.kompas.com/read/2018/08/26/06160008/anthony-sinisuka-ginting-dan-minyak-urut-karo-dari-sang-ibu>
- Melianti, Y., Ivanna, J., & Perangin-angin, R. B. (2016). Regulating Folklore Sui Generis in a Separate Law. *Legal Issues*, 75-84.
- Meliono, I. (2011). Understanding the Nusantara thought and local wisdom as an aspect of the Indonesian education. *Tawarikh*, 221-234.
- Moleong, L. J. (2008). *Fundamentals of Normative Legal Research*. Jakarta: Rajagrafindo Persada.
- Nasution, J., Suharyanto, A., & Dasopang, E. S. (2020). Study of Ethnobotany of Karo Oil. *Budapest International Research in Exact Sciences (BirEx) Journal 2.1*, 96-100.
- Pandapotan, S. (2018). Inventory of Ethnic Karo Local Wisdom in Ethnobotanical Utilization in Karo Regency. *EHSS: Journal of Education, Humanities and Social Sciences*, 40-47.
- Saleh, G. (2010). Legal protection efforts for traditional knowledge in developing countries, especially Indonesia. *Journal of Legal Supremacy*.

- Sari, E., & Sitepu, R. (2021). Legal Protection of Oukup Karo Treatment as a Form of Communal Intellectual Property Rights. *Proceedings of the International Conference on Culture Heritage, Education, Sustainable Tourism, and Innovation Technologies - CESIT* (pp. 57-63). Medan: SciTePress.
- Sasongko, W., Lindati, D., & Oren Basta, A. (2018). Legal Protection of Karomel Traditional Medicines through the Traditional Knowledge Regime. *Pactum Law Journal*, 550-564.
- Serfiyani, C. Y., Hariyani, I., & Serfianto, R. (2018). *Smart Book of IPR and Cultural Heritage*. Yogyakarta: UGM Press.
- Simm, K. (2005). Benefit-sharing: an inquiry regarding the meaning and limits of the concept in human genetic research. *Genomics, Society and Policy Journal*.
- Sitepu, W. (2014, February 21). *Minak Pengalun Traditional Oil Potion from Tanah Karo*. Retrieved 4 19, 2023, from Kompasiana: <https://www.kompasiana.com/minyakkaro>
- Soemarjan, & Soenardi, S. (1964). *A Flower of Sociology*. Jakarta: FEUI.
- Surya Darma, I. (2008). *Lecture Dictate: Ethnobotany*. Yogyakarta: State University of Yogyakarta.
- Sutedi, A. (2009). *Intellectual Property Rights*. Jakarta: Sinar Grafika.
- Tarigan, S. (2008). *The dynamics of the Karo people, culture and modernization*. Medan: BABKI (Balai Adat Budaya Karo Indonesia).
- Tarigan, S. (2017). *Traditional Karo Medicine*. Medan: BABKI (Balai Adat Budaya Karo Indonesia).
- Tylor, E. B. (1871). *Primitive Culture: Researches Into the Development of Mythology, Philosophy, Religion, Art, and Custom*. New York: Brentano's.
- WHO. (2000). *Definitions Mediciens area traditional*. Retrieved 4 19, 2023, from <http://www.who.int/medicines/areas/traditional/definitions/en/>.
- WIPO. (2005). *Intellectual property and traditional knowledge*. Geneva: WIPO Publication.