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Kafur and Champor in Islam, Malay, and Chinese History

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Abstract

Malay camphor (*Dryobalanops aromatica*) has played a significant role in the economy, Malay culture, and international trade since ancient times. It has been used in medicine, religious rituals, and diplomatic relations between major empires. Known as *al-Kafur* in the Quran and Hadith, it was also referred to as camphor by European traders. However, after the Industrial Revolution in the 19th century, Malay Camphor became increasingly marginalized when Chinese Camphor (*Cinnamomum camphora*, also known as *Xiangzhang* [樟树]) replaced it due to its lower cost. In 1903, the production of synthetic camphor, based on the chemical formula of Chinese Camphor ($C_{10}H_{16}O$), was patented as camphor, while the chemical formula of Malay Camphor ($C_{10}H_{18}O$) was designated as borneol, leading to confusion in scientific studies, Malay scholarship, and Islamic studies. This study examines the differences between Malay Camphor and Chinese Camphor and aims to determine which type is actually referenced in the Quran and Islamic history. A qualitative approach was employed, involving a literature review, analysis of Quranic and Hadith interpretations, and interviews with historians, botanists, and cultural practitioners in Barus. The findings

indicate that Malay Camphor has a more fragrant aroma, a cooling effect, refreshing, free from harm, non-toxicity, and high quality. It is also edible and can be used as a flavoring agent—aligning with the characteristics of *al-Kafur* in Islamic interpretation. However, trade monopolies and terminological errors have obscured its identity in modern history. This study confirms that *al-Kafur* in Islam refers to Malay Camphor and highlights the importance of correcting terminological errors to ensure that camphor is associated with *Dryobalanops aromatica* rather than *Xiangzhang*.

Keywords: Malay Camphor, Chinese Camphor, *Dryobalanops aromatica*, *Cinnamomum camphora*, Al-Kafur, Borneol, Camphor

Abstrak

Kapur Melayu (*Dryobalanops aromatica*) memainkan peranan penting dalam ekonomi, budaya Melayu, dan perdagangan antarabangsa sejak zaman dahulu. Ia digunakan dalam perubatan, ritual keagamaan, serta hubungan diplomatik antara empayar besar. Dikenali sebagai *al-Kafur* dalam al-Quran dan hadis, ia turut disebut sebagai camphor oleh pedagang Eropah. Namun, selepas Revolusi Industri abad ke-19, Kapur Melayu semakin terpinggir apabila Kapur China (*Cinnamomum camphora*, juga dikenali sebagai *Xiangzhang* [樟树]) menggantikannya kerana kos dan kualiti yang lebih rendah. Pada tahun 1903, penghasilan kapur barus sintetik berasaskan formula kimia kapur China ($C_{10}H_{16}O$) dipatenkan sebagai camphor, manakala formula kimia Kapur Melayu ($C_{10}H_{18}O$) dinamakan borneol, menyebabkan kekeliruan dalam bidang sains, kajian Melayu, dan pengajian Islam. Kajian ini meneliti perbezaan antara Kapur Melayu dan Kapur China serta menentukan kapur yang sebenarnya dirujuk dalam al-Quran dan sejarah Islam. Pendekatan kualitatif digunakan melalui kajian literatur, analisis al-Quran dan hadis, serta temu bual bersama sejarawan, ahli botani, dan penggiat budaya di Barus. Hasil kajian menunjukkan bahawa Kapur Melayu mempunyai aroma lebih harum, bersifat sejuk, menyegarkan, bebas dari mudarat, tidak beracun, berkualiti tinggi, serta boleh dimakan dan dijadikan perisa minuman—selari dengan sifat *al-Kafur* dalam tafsiran Islam. Walau bagaimanapun, monopoli perdagangan dan kesilapan terminologi telah mengaburkan identitinya dalam sejarah moden. Kajian ini mengesahkan bahawa *al-Kafur* dalam Islam merujuk kepada Kapur Melayu dan menekankan kepentingan pembetulan istilah agar camphor dikaitkan dengan *Dryobalanops aromatica*, bukan *Xiangzhang*.

Kata kunci: Kapur Melayu, Kapur China, *Dryobalanops aromatica, Cinnamomum camphora*, Al-Kafur, Borneol, Camphor

Introduction

The history and cultural significance of Malay Camphor deserve attention, but there is confusion regarding the species mentioned in historical texts. Is *Xiangzhang* (*Cinnamomum camphora*), introduced later and now globally recognized, truly the *kafur* referred to in the Quran and hadith?

This article examines the impact of this confusion and corrects the errors in previous studies, including the association of al-Kafur in the Quran with Chinese Camphor[1] and henna[2] , based on interpretations found in the Bible[3]. This error is replicated in online da'wah and tafsir articles[4], YouTube[5] content, internet searches such as Wikipedia*6* , English dictionaries[7] , and artificial intelligence (AI)[8]

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[1] Muhamad Widus Sempo, Nuruwahidah Fauzi, Robiatul Adawiyah Mohd, and Mohd@Amat, "Kearifan Tempatan Mengenai Kapur Barus (*Cinnamomum Camphora*) Menurut Perspektif Islam dan Budaya Masyarakat Melayu Abad ke-19M" / "Local Wisdom on Camphor (*Cinnamomum Camphora*) from the Perspective of Islam and 19th Century Malay Society," *Journal of Islamic Social Sciences and Humanities* 19, no. 1 (2019): 76–90, accessed July 23, 2024, https://doi.org/10.33102/abqari.vol19.6.

[2] Sarfaraz Khan Marwat, *Aromatic Plant Species Mentioned in the Holy Qur'an and Ahadith and Their Ethnomedical Importance*, 8(9), *Journal of Nutrition* (Pakistan: 2009), 1472–1479, accessed July 23, 2024, https://scialert.net/fulltext/?doi=pjn.2009.1472.1479, "*The substance camphor-Kafoor (said to be used in funeral rites) mentioned in the above and other Ahadith, is actually the name of Itar-e-Hinna (perfume of Lawsonia inermis) and correct pronunciation Kafoor is Qafoor* "(Marwat, et.al., 2009 quoting Farooqi, 1998).

[3] Mohammed Iqtedar Husain Farooqi, "Henna or Camphor in the Light," in *Plants of the Quran*, 9th ed. (Lucknow: Sidrah Publisher, 2011), accessed March 9, 2024, http://www.irfi.org/articles4/articles_5001_6000/henna_or_camphor_in_the_light_of.html, "*One must bear in mind that any change in the meaning or a different interpretation of some words, does not affect the message of the Holy Quran….Now the next pertinent question is, whether the Quranic word Kafur was actually derived from the Biblical word Kopher and Greek word Kufros or from the Indian word Kapur (orKarpura). In my own humble opinion the origin of Quranic Kafur is Kopher or Kufros signifying Hinna and not Indian Kapur, meaning Camphor….*"

[4] A. Faria Nuril Hajar Al Adiha, "Zanjabil and Kafur: Two Heavenly Drinks Mentioned in the Quran," *Tafsir Tematik*, June 1, 2021, re-accessed March 13, 2025, https://tafsiralquran.id/zanjabil-dan-Kafur-dua-minuman-surga-yang-disebutkan-dalam-al-quran/. "*He (al-Laith) refers to the camphor plant by the Latin name Cinnamomum camphora. This plant grows in India and China. Its trunk is large, white, and soft. The inside of the tree is known as camphor*." (quoting Ramli et.al, 2018)

[5] Wickison, *Camphor, Cinnamomum camphora, Plants of the Quran*, video, March 20, 2023, accessed January 8, 2025, https://www.youtube.com/watch?v=QuV2RQfpBec.

[6] *Camphor*, *Wikipedia*, accessed November 16, 2024, https://en.wikipedia.org/wiki/Camphor.

[7] *Camphor*, *Merriam-Webster.com Dictionary*, accessed July 15, 2024, https://www.merriam-webster.com/dictionary/camphor.

[8] *Tell me more about Camphor* – a ChatGPT 4.0 mini answer: *Camphor is a white, crystalline substance with a strong odor, derived from the wood of the camphor tree (Cinnamomum*

articles, primarily inherited from diverse sources after the 19th-century Industrial Revolution[9].

The scientific re-branding has caused significant confusion in the 20th and 21st centuries: what type of plant is referenced in historical texts and religious interpretations? English-language searches currently prioritize *Cinnamomum camphora*, neglecting Borneol, a vague name that does not clearly represent either a plant or camphor. This confusion hinders the role of Malay Camphor in world history and shifts the true understanding of camphor in the Qur'an and Hadith.

Arab-Islamic scholars, over disagreements on the meaning of al-Kafur, offered three interpretations: (1) a plant or its parts, (2) an adjective, or (3) a spring in paradise. Ramli et al. in addressing this issue, concluded that *Cinnamomum camphora* is the camphor tree, rather than the toxic *Nerium oleander*. However, as *Cinnamomum camphora* is scientifically proven to be a toxic plant, this conclusion contradicts the characteristics of al-Kafur in the Qur'an and Hadith. This presents a significant issue in the field of Islamic scholarship.

Problem Statement

An unintentional mistake in naming *Cinnamomum camphora* while searching for camphor instead of Borneol or *Dryobalanops aromatica* may indicate that scientific branding has channeled researchers' focus based on keywords, rather than the actual properties of Malay Camphor. Even if researchers are aware of this, explaining the issue remains challenging. This has significantly impacted research on *Dryobalanops aromatica*.

A bibliometric analysis by Md Ariffin et al.[10] conducted 100 years after the First Industrial Revolution, confirms that researchers are not

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camphora), which belongs to the laurel family (Lauraceae). It has a long history of use in various cultures for medicinal, religious, and practical purposes. The chemical formula of camphor is C10H16O, accessed November 16, 2024, https://chatgpt.com.

[9] Kennedy Duncan Robert, 'Camphor: An Industry Revolutionized', *Some Chemical Problems of Today* (New York – London: Harper and Brothers, 1911), 128–142, accessed July 11, 2024, https://todayinsci.com/D/Duncan_Robert/DuncanRobert-Camphor.htm.

[10] Md Ariffin, Mohd Farhan, Ahmad Khader, Mohd Yakub @Zulkifli Mohd Yusoff, Khalijah Awang, Rozana Othman, Monika @Munirah Abd Razzak, Raja Jamilah Raja Yusof, Nurulwahidah Fauzi, and Mohd Asmadi Yakob, "Kajian Bibliometrik Terhadap Bahan Penerbitan Berhubung Kapur Barus: Meneliti Potensi Penyelidikan Terbaru / Bibliometric Study of Publications on Camphor: Exploring the Potential for New Research," *Jurnal Intelek PJIM&A* 10, no. 1 (2015): 12–24, accessed July 22, 2021, https://ir.uitm.edu.my/id/eprint/35864/1/35864.pdf.

using Borneol as a keyword when searching for camphor. Despite recent efforts to increase publications, the research gap on *Dryobalanops aromatica* persists.

The analysis gathered 61 publications: 43 scientific studies, 15 historical publications, and 3 Islamic studies discussing 'camphor' in general without differentiating species.

However, upon review, three publications were excluded: one related to toxic quicklime[11] fertilizer (NFK), one article on *Dryobalanops rappa*, and one book chapter on *Dipterocarpus retusus* Blume. Ultimately, only 58 relevant publications remained: 40 scientific studies, 15 historical publications, and 3 Islamic studies.

The list of publication counts is as shown in the table below:

Table 1: Bibliometric Analysis of Publications Based on Dryobalanops aromatica (DA) Compared to Cinnamomum camphora (CC)

Publications	**Total**	**D.aromatica / Borneol**	**Kapur Barus/ Camphor (Unspecified)**	**C.camphora /Camphor**
Doctoral Dissertation	1	-	-	1
Conference Papers / Proceedings	-	-	-	-
Books	16	1 History, 2 Pharmacology	9	4
Chapters in Books	2	-	2	-
Journal Articles	39	1 Pharmacology, 2 Biochemistry	5	31
Total	58/58	6/58	16/58	36/58
Field	Total	D.aromatica / Borneol	Kapur Barus/ Camphor (Unspecified)	C.camphora /Camphor
History	15	1 book	7 books, 2 chapters , 3 articles	2
Islamic Studies	3	-	2 books , 1 articles	-
Science	40			
• Biotechnology	6	-	1 article	6
• Pharmacology	6	2 books, 1 article	-	3

[11] J. D. Gimlette, *Malay Poisons and Charm Cures*, 1st ed. (Kuala Lumpur: Silverfish Books, 2019).

Publications	Total	D.aromatica / Borneol	Kapur Barus/ Camphor (Unspecified)	C.camphora /Camphor
• Botany	8	-	-	8
• Biomedicine	8	-	-	8
• Biochemistry	12	2 article	-	10
Total	58/58	6/58	16/58	36/58

(Source: Md Ariffin et al.[12], reworked by Mohamad Herman Abdullah, unpublished manuscript) [13].

Table 1 shows a sign of discrepancy in research between the two species. Out of 58 publications on camphor, only six used the keyword *Dryobalanops aromatica*: one history book, two pharmacology books, and three journal articles—one in pharmacology and two in biochemistry. A total of 16 publications discussed camphor without specifying the species, while 36 publications focused on *Cinnamomum camphora*. The lack of research on Malay camphor compared to Chinese camphor was also highlighted by Md Ariffin et al., confirming a clear research gap.

Problem Statement 1:

The lack of research on *Dryobalanops aromatica* (Malay camphor) creates a significant gap in the scientific literature.

The following is a list of publications that have experienced confusion regarding the camphor species due to scientific naming convention.

Table 2: Number of Publications Confused by the Term Camphor

Publication	Author / Year	Field/ Country	Note of Confusion
Doctoral Dissertation	Ramli (2015)[14]	Islam (Malaysia)	Named Cinnamomum camphora as al-Kafur (photo of leaves and fruit)

[12] Md Ariffin et al., "Kajian Bibliometrik Terhadap Bahan Penerbitan," 12-24

[13] Mohamad Herman Abdullah, *Peranan Kapur Melayu (Dryobalanops Aromatica) dalam Peradaban Melayu di Era Pra dan Pasca Islam* (PhD thesis, Universiti Sultan Zainal Abidin, unpublished manuscript).

[14] Saipolbarin Ramli, Nazri Atoh, Zarima Mohd Zakaria, Hairullfazli Mohammad Som, Mohd Zaki Abd Rahman, "Analisis Leksikografi dan Semantik Perkataan al-Kafur dalam Al-Quran" [Lexicographic and Semantic Analysis of the Word al-Kafur in the Quran], *GEMA Online® Journal of Language Studies* 18, no. 2 (2018): 267, https://doi.org/10.17576/gema-2018-1802-18, accessed May 10, 2020.

Publication	Author / Year	Field/ Country	Note of Confusion
Doctoral Dissertation	Mohd Tamizi (2015)[15]	Islam (Malaysia)	Confusion in Scientific Terminology and Camphor Species
Chapter in book	Farooqi (2011)[16]	Islam (India)	Proposed New Interpretation of al-Kafur as Henna According to the Bible
Journal article	Ramli et al. (2018)[17]	Islam (Malaysia)	Named Cinnamomum camphora as al-Kafur
Journal article	Sempo et al. (2019)[18]	Islam (Malaysia)	Confusion in Scientific Terminology and Camphor Species
Journal article	Marwat (2009)[19]	Islam (Pakistan)	Support the change of spelling from al-Kafur to al-Qafoor
Online article	A Faria Nuril Hajar Al Adiha (2021)[20]	Islam (Indonesi)	Replication of of earlier mistakes regarding Cinamomum camphora as al-Kafur in the Quran
YouTube Video	Wickison (2024)[21]	Non-Muslim (New Zealand)	Named Cinamomum camphora as the plant in the Quran (painting of leaves and fruits)

(Source: Mohamad Herman Abdullah, unpublished manuscript)[22]

Table 2 highlights the confusion surrounding species identification, where several publications experienced errors in naming camphor species. In the doctoral dissertation by Ramli, the toxic *Cinnamomum camphora* was referred to as al-Kafur. Similarly, in Mohd Tamizi's doctoral dissertation, *Cinnamomum camphora* was initially identified as al-Kafur but later referred to *Dryobalanops camphora aromatica*, indicating uncertainty in species identification. Tamizi also

[15] S. Mohd Tamizi, *Tumbuhan Terpilih Menurut Perspektif Islam dan Sains Kesihatan* (PhD diss., Universiti Malaya, 2015), diakses 8 March 2025, http://studentsrepo.um.edu.my/5969/1/DISERTASI_SUMAIYAH_2015.pdf.

[16] Mohammed Iqtedar Husain Farooqi, "Henna or Camphor in the Light,"

[17] Saipolbarin Ramli et al., "Analisis Leksikografi dan Semantik," 281

[18] Muhamad Widus Sempo et al., "Kearifan Tempatan Mengenai…," 80.

[19] Sarfaraz Khan Marwat, "Aromatic Plant Species," 1472-1479.

[20] A. Faria Nuril Hajar Al Adiha, "Zanjabil dan Kafur."

[21] Wickison, *Camphor, Cinnamomum camphora*.

[22] Mohamad Herman Abdullah, *Peranan Kapur Melayu*.

criticized Farooqi's view linking al-Kafur to henna, arguing that the hadith clearly distinguishes between the two in the context of Islam.

Farooqi suggested that al-Kafur in the Qur'an referred to henna (*Lawsonia inermis*), based on the Bible, and argued that the Arabs were unfamiliar with al-Kafur when Surah al-Insan was revealed, mistakenly identifying it as salt. In a journal article, Ramli again referred to the toxic *Cinnamomum camphora* as al-Kafur, although his study suggested that al-Kafur in the Qur'an more accurately referred to non-toxic camphor.

Sempo assumed that *Cinnamomum camphora* was the camphor used by the Malay community for thousands of years, despite the fact that this species was only widely cultivated in Peninsular Malaysia in the 20th century. Marwat, on the other hand, supported Farooqi's 1998 view of changing the spelling of al-Kafur to al-Qafoor based on Bible interpretations, arguing that it did not alter the meaning of the Qur'an.

Al Adiha, in his article on da'wah, referred to previous studies linking al-Kafur in the Qur'an with *Cinnamomum camphora*. Similarly, a YouTube video by Wickison, preparing a book on plants in the Qur'an, risked using inaccurate sources due to errors by Islamic scholars in identifying plant species. If these mistakes are not corrected, they could have significant implications for understanding botanical species in the Qur'an, especially among non-Muslim audiences.

Problem Statement 2:

Confusion and misidentification of camphor species in scientific literature, particularly mistaking *Cinnamomum camphora* (Chinese Camphor) for al-Kafur, has created a research gap regarding *Dryobalanops aromatica* (Malay Camphor).

Methodology

This study employs a qualitative approach with a phenomenological[23] design to explore and identify the key differences between Malay Camphor (*Dryobalanops aromatica*) and Chinese Camphor (*Cinnamomum camphora*). The methodology is specifically designed to address the research problems of the significant research

[23] D. Annan, *A Guide to Research Writing* (ResearchGate, 2019), Accessed 23 January 2023,https://www.researchgate.net/publication/333395933_A_GUIDE_TO_RESEARCH_WRITING.

gap and confusion in species identification. The objectives of the study are as follows:

1. To distinguish between the two species by analyzing their etymology, habitat, properties, characteristics, and historical uses. This objective directly addresses *Problem Statement 1* by providing comprehensive information on *Dryobalanops aromatica* (Malay camphor), which is currently lacking in scientific literature.
2. To identify and document the properties and characteristics of al-Kafur as described in the Qur'an through lexicographical and bibliometric analysis. This includes comparing these descriptions with the natural properties of *Malay camphor* (*Dryobalanops aromatica*), clarifying any misinterpretations in religious texts, and addressing *Problem Statement 2*.
3. To draw conclusions from the comparative analysis and provide a clearer understanding of the species, thereby contributing to resolving both *Problem Statement 1 and 2* by filling research gaps and addressing existing confusion.

Data for this study were derived from a literature review and interviews with informants, contributing to an unpublished thesis. The primary data-gathering methods involved analyzing the unpublished manuscript and literature review. Interviews with experts in history, forestry, botany, camphor plantation owners in Malaysia, and cultural practitioners in Barus, Indonesia, provided additional support.

A key challenge was finding qualified experts, given that the species is endangered. As Abdullah Zakaria Ghazali[24] notes, historical research should rely on written sources, while oral and field sources serve to validate or challenge existing records.

[24] Mohamad Herman Abdullah, field study and interview with Abdullah Zakaria Ghazali (Historian, Department of History, University of Malaya, Kuala Lumpur, Malaysia), February 17, 2024.

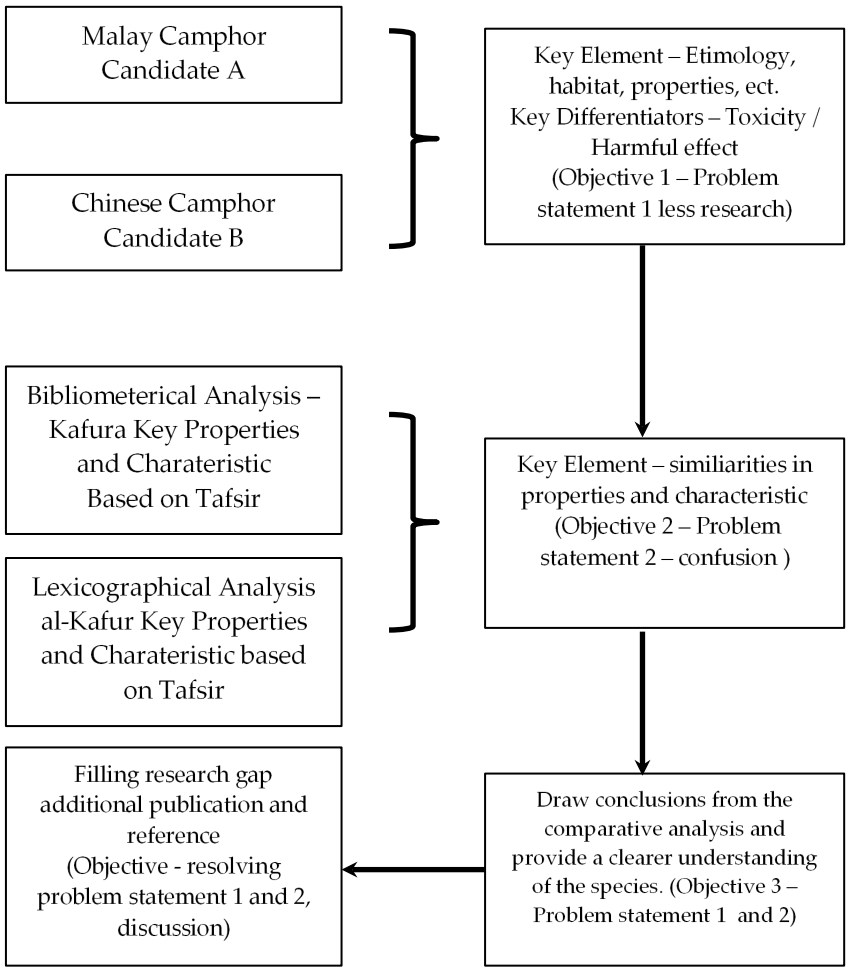

Figure 1 illustrates the research workflow and outlines the essential steps taken throughout this study, providing a clear overview of the journey followed to achieve the results presented in this article.

Result

1. Key Differences Between Malay Camphor and Chinese Camphor

This section identifies the key differences between the two species based on their origins, chemical properties, level of toxicity, and historical uses. The following are the main factors that differentiate Malay Camphor from Chinese Camphor.

1.1 Etymology of the Term "Camphor"

According to the *Kamus Dewan* Fourth Edition[25], "kapur" is an indigenous Malay word referring to the camphor tree (*Dryobalanops aromatica*) as well as the camphor wood used in furniture making. The *Merriam-Webster Dictionary*[26] confirms that the term "camphor" originated from the Malay language and was first used in the 14th century, pronounced as "kamfer" or "kam(p)-fer" rather than "cam. pur." Its etymology traces back to Malay (kapur), borrowed into Arabic (kafur), then to Medieval Latin (camphora), Anglo-French, and ultimately becoming "caumfre" in Middle English.

The term "kapur" can be associated with the 'camphor language' or "bahasa kapur," which, according to Miklucho-Maclay[27], is an ancient dialect spoken by indigenous people in the forests of Pahang and the Melanesian Islands. Lake et al. [28] state that most of the words in the camphor language originated from the nearly extinct Jakun Malay dialect.

Guillot (in Nurfaezal[29]) states that the majority of researchers agree that camphor originates from the Malay world, which is the main center for its tree. The camphor tree is native to the tropical rainforests of the Malay Archipelago or Sundaland, which, according to Oppenheimer,[30] served as a 'seedbed' and the 'cradle of civilization' for various ethnic groups and cultures.

Dr. Zafarina's[31] study shows that the Malay population has existed for 60,000 years, predating China and Taiwan by 10,000 years. This proves that the Malay people and language are older than the

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[25] Kamus Dewan Edisi Keempat. (2024). *Kapur*. Dicapai pada 10 July 2024 daripada https://prpm.dbp.gov.my/cari1?keyword=kapur.

[26] *Camphor*, Merriam-Webster.com Dictionary.

[27] M. de Miklucho-Maclay, "Dialects of the Melanesian Tribes of the Malay Peninsula," *Journal of the Straits Branch of the Royal Asiatic Society* 1 (1878): 38–44, accessed June 16, 2023, https://en.wikisource.org/wiki/Journal_of_the_Straits_Branch_of_the_Royal_Asiatic_Society/Volume_1/Dialects_of_the_Melanesian_Tribes_of_the_Malay_Peninsula.

[28] Harry W. Lake, Harry Joseph Kelsall, and Henry Nicholas Ridley, "The Camphor Tree and Camphor Language of Johore," *Journal of the Straits Branch of the Royal Asiatic Society* 26 (1894): 35–40, accessed June 16, 2023, http://www.jstor.org/stable/41560850.

[29] Nurfaezal Nurfaezal, "Barus and Camphor in the Early History of Islam in Nusantara," *Asia-Pacific Journal on Religion and Society* 5, no. 2 (2021): 60–74, accessed [1 January 2023, https://ejournal.uin-suska.ac.id/index.php/asiapacific/article/view/21574.

[30] Zaharah Sulaiman, Wan Hashim Wan Teh, and Nik Hassan Shuhaimi Nik Abdul Rahman, *Asal Usul Melayu, Induknya di Benua Sunda* (Perak Darul Ridzuan: Universiti Pendidikan Sultan Idris, 2016), 222

[31] Zaharah et al., *Asal Usul Melayu*, 221

Chinese language. Therefore, the term "kapur" is deeply rooted in the history of the Malay people, reflecting their heritage, knowledge, and long-standing usage within the Malay world.

1.2 Natural Habitat of Malay Camphor and Chinese Camphor

Figure 2 below shows the habitat of *Dryobalanops aromatica* in the Malay Archipelago, in contrast to Chinese Camphor from China, as well as Sembong (*Blumea balsamifera*), which is also referred to as camphor by the English and is widespread across Asia. According to to Siti Eryani Suterisno[32], the camphor tree is a resin-producing tree that generates oil and crystals from its trunk, whereas Sembong is not a camphor tree.

Kapur[33] *tree* or *pokok Kapur*[34] only grows in Peninsular Malaysia, Sumatra, and Borneo. It is classified as an endangered species by the International Union for Conservation of Nature (IUCN) in 2018 and is known by various names in English, including Malay Camphor and Indonesian Kapur. The IUCN had previously made an error by naming the species *Dryobalanops sumatrensis*, which resulted in a status change from Critically Endangered to Least Concern. However, this error was corrected through an errata[35, 36].

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[32] Mohamad Herman Abdullah, field study and interview with Siti Eryani Suterisno (Biodiversity Botany Expert, Forest Research Institute Malaysia [FRIM], FRIM Herbarium, Kepong, Kuala Lumpur, Malaysia), October 3, 2024.

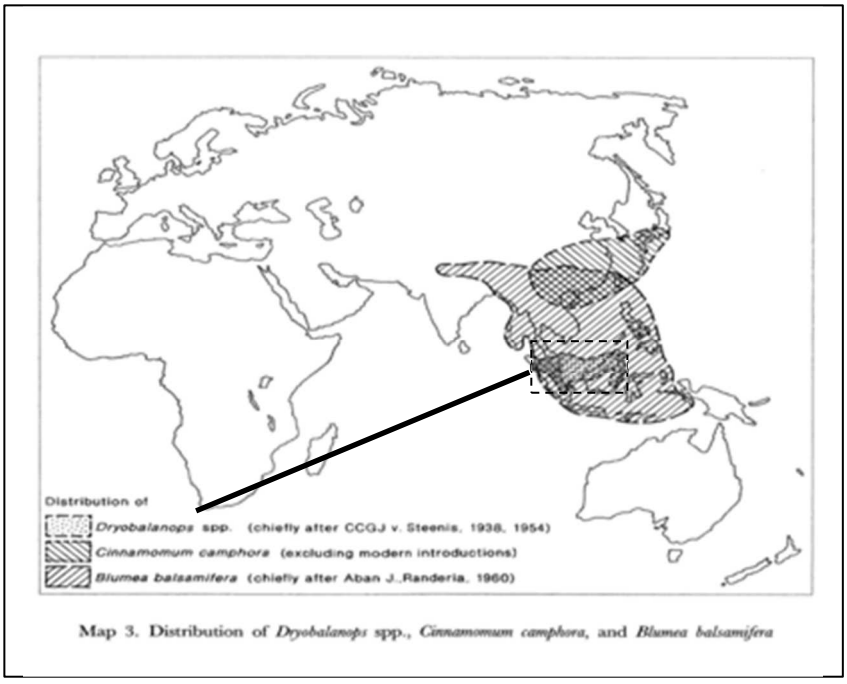
[33] C. S. Ser, *Malaysian Timbers – Kapur*, Malaysian Forest Service Trade Leaflet, no. 46 (Kuala Lumpur: The Malaysian Timber Industry Board, 1981).

[34] A. J. Vincent, *A Survey of the Kapur (Dryobalanops Aromatica Gaertn.f) Silvicultural Treatment Research Plots in Naturally and Artificially Regenerated Forest Malaya*, Research Pamphlet, no. 36 (Federation of Malaya: Forest Research Institute, 1961), 29-40.

[35] M. Barstow, & A. Randi, 'Dryobalanops aromatica', (errata version published by IUCN, 2020). Accessed 25 May 2023, https://www.iucnredlist.org. https://www.iucnredlist.org/species/61998024/173026192

[36] IUCN Red List, "Dryobalanops aromatica," The IUCN Red List of Threatened Species, 2017, https://www.iucnredlist.org/species/61998024/173026192#errata. "*The species Dryobalanops aromatica, commonly known as Borneo Camphorwood, is listed on the IUCN Red List of Threatened Species. Initially, it was assessed as Critically Endangered in 1998, but due to a taxonomic error, it was mistakenly renamed as Dryobalanops sumatrensis, causing the status to change to Least Concern. This error has been corrected in the errata, and the species name has been reinstated as D. aromatica. As a result, the original assessment as Critically Endangered has been restored in the species' history*."

Figure 2: Dryobalanops aromatica habitat in the Malay Archipelago



Map 3. Distribution of *Dryobalanops* spp., *Cinnamomum camphora*, and *Blumea balsamifera*

(Source:Donkin, 1999, p.52)

Belonging to the Meranti family (Dipterocarpaceae), camphor tree fruits and seeds are dispersed by the wind and can survive in the shade before growing larger. This tree can reach a height of 60 meters, making it one of the second tallest trees in Peninsular Malaysia[37]. It also has a large canopy with a unique 'sky layout – susun atur di langit[38] ' leaf arrangement that does not overlap.

[37] Isaac Henry Burkill, *A Dictionary of The Economic Products of the Malay Peninsula* (London: Millbank, Crown Agents For The Colonies, 1935), 862

[38] M.Y. Chew, "Pokok Kapur Susun Atur di Langit," 2012, accessed May 25, 2022, https://www.frim.gov.my/ms/warna-frim/pokok-kapur-susun-atur-di-langit/.

Figure 3: 'Sky Layout' Canopy, Tree Bark, and Malay Camphor Seedling

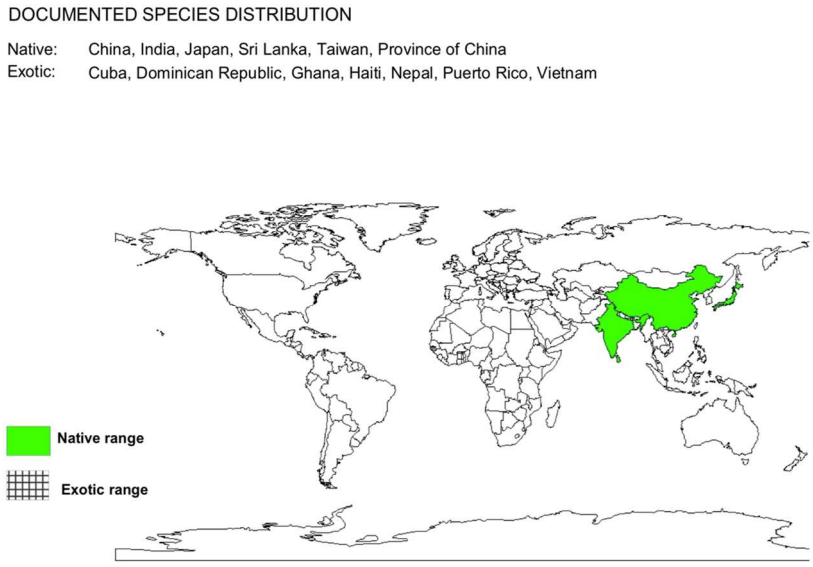
(Source: Mohamad Herman Abdullah, 2023, Sungai Buloh, Malaysia)

In addition, its peeling bark, which resembles rolled paper, is often used by the indigenous people of Peninsular Malaysia to weave baskets and as wall material for low-income households in Barus. The distribution of the camphor tree in Sumatra is concentrated in the interior of Barus and once formed a vast camphor forest along the border between Barus and the Singkil region of Aceh. This area has characteristics suitable for camphor forests, with elevations ranging from 100 to 400 meters above sea level[39].

[39] Daniel Perret and Heddy Surachman, "Barus Negeri Kamper Sejarah Dari Abad ke-12 Hingga Pertengahan Abad ke-17," *Siri Terjemahan Arkeologi*, no. 14 (Jakarta: KPG (Kepustakaan Populer Gramedia), Ecole Francaise D'Extreme-Orient, Pusat Arkeologi Nasional, 2015), 602-606.

Chinese Camphor belongs to the laurel family and is widely distributed south of the Yangtze River, including Hainan, Taiwan, Jiangxi, and Fujian. It was introduced to Japan in 1727[40]. *Cinnamomum camphora*, which was brought to Australia in the 19th century, is now considered an invasive species and is listed as a noxious weed, particularly in southeastern Queensland and northeastern New South Wales, including the Richmond-Tweed and Bellingen regions[41].

Figure 4: Distribution of Chinese Camphor or Xiangzhang in Asia



(Source: Orwa et al., 2009)

According to Maskudin, there is a tree that resembles camphor, but it is not the true camphor tree. The camphor tree is easily recognizable in the forest because it grows straight without without branching limbs and dense foliage. Therefore, naming the xiangzhang tree as the camphor tree is a misunderstanding due to a lack of

[40] Evarts Curtis, *Chinese Furniture Materials: Camphor (Xiangzhang)* 樟, C. L. Ma Collection: Traditional Furniture from the Greater Shanxi Region (Hong Kong: White Lotus Press, 1999), accessed July 14, 2024, https://www.chinese-furniture.com/c_furniture/m_camphor.html.

[41] Weeds of Australia. 2024. "Cinnamomum camphora (L.) Nees & Eberm." Accessed July 11, 2024, https://keyserver.lucidcentral.org/weeds/data/media/Html/cinnamomum_camphora.htm.

knowledge about its origins.[42]

Figure 5: Xiangzhang Tree or Chinese Camphor Tree

(Source: Duncan, 1911, p. 130)

1.3 Chemical Formula Differences Between Malay Camphor and Chinese Camphor

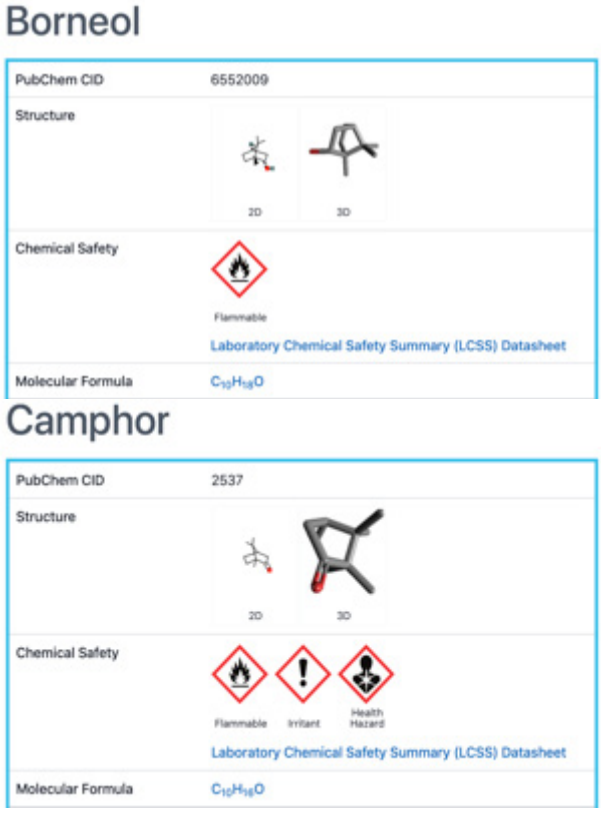
The chemical formulas indicate that these two species produce different products. Malay camphor is labeled as borneol ($C_{10}H_{18}O$), while Chinese camphor is labeled as camphor ($C_{10}H_{16}O$). According to Siti Eryani Suterisno[43], the difference in the number of atoms in the chemical molecules significantly impacts the quality, toxicity, and chemical properties of a substance. For example, the loss of one hydrogen atom from H_2O makes it hydroxide ion (OH^-), which is alkaline, while the addition of one hydrogen atom transforms it into hydronium ion (H_3O^+), which is acidic. Therefore, small changes in the number of atoms can completely alter the chemical and physical properties of a substance.

[42] Mohamad Herman Abdullah, "Cultural-Historical Activist of Barus and Camphor Oil Traders," *Field Study and Informant Interviews*, interview with Maskuddin Simantujak (Barus, Indonesia, 27 August 2024).

[43] Mohamad Herman Abdullah (2024) *Field Study and Informant Interviews*. Interview with Siti Eryani Suterisno, Botanist and Biodiversity Expert, Forest Research Institute Malaysia (FRIM), FRIM Herbarium, Kepong, Kuala Lumpur, Malaysia, 3. October 3, 2024.

The Britannica Science Dictionary[44] defines camphor ($C_{10}H_{16}O$), which originates from the *Cinnamomum camphora* plant found in China, Taiwan, and Japan, as a transparent organic compound with a with a distinctive odors (musty and penetrating) that has been used for centuries as a component in incense and as a medicine.

Figure 6: Difference in the Chemical Formula of Malay Camphor and Chinese Camphor.



(Souce: National Center for Biotechnology, 2025)

Figure 6 shows that the toxicity of Chinese Camphor can be identified through its chemical formula, which reflects its flammable, irritating, and hazardous properties to humans. Therefore, the synthesis of camphor from turpentine, based on the chemical formula of Chinese

[44] Editors of Encyclopaedia Britannica. 2024. "Camphor." Accessed July 15, 2024, https://www.britannica.com/science/camphor.

Camphor, also carries the same toxic properties. This demonstrates a significant difference between the two products.

Burkill[45] discussed the confusion in scientific labeling between *Dryobalanops aromatica* and *Cinnamomum camphora*. He explained that the oleo-resin from *Dryobalanops aromatica* differs from the oil of *Cinnamomum camphora* and emphasized that the use of the term borneol for *Dryobalanops aromatica* is misleading.

In contrast, the name Malay Camphor Oil is more accurate, as indicated by Lake[46] and used by Muhamad and Ahmad[47] in their article. This term is more appropriate for describing its historical origins in the Malay Archipelago, compared to borneol or "borneol camphor oil," which was promoted during the British colonial era in Borneo. Furthermore, the term borneol is less commonly used when compared to 'Barus camphor oil'.

1.4 Toxicity of Chinese Camphor Compared to Malay Camphor

The Malay Camphor tree is non-toxic and environmentally friendly, producing traditionally beneficial organic products. Its young shoots can be consumed raw, its fruit is used in cooking, and it can be mixed into beverages, as stated by Kamariyah[48]. Furthermore, it serves as a topical medicine with no side effects and is used in traditional Malay health remedies.[49]

Its unique characteristics, including the straight trunk and orderly canopy, reflect the harmonious nature and natural boundaries, making it a metaphor for Islamic education regarding the personality of a believer. According to Ramli[50], plants can aid in the understanding

[45] Burkill, *A Dictionary of The Economic Products of the Malay Peninsula*, 867. "…the oleo-resin [Dryobalanops aromatica] differs entirely from the camphor oil of Cinnamomum camphora, and it is rather a pity that it should have been named Borneo camphor oil, as the name is confusing"

[46] Harry W. Lake et al., "The Camphor Tree and Camphor Language," 35–40

[47] Rusni Muhammad and Thuraya Ahmad, "Malay Camphor in Arabic Text and Its Latest Trend of Research," *European Proceeding, Innovation and Transformation in Humanities for a Sustainable Tomorrow* 89 (2020): 720-729, accessed April 10, 2020, https://doi.org/10.15405/epsbs.2020.10.02.67.

[48] Kamariyah, A.S., Temel Ozek, Bora Demirci, and K. Husnu Can Baser. 2012. "Chemical Composition of Leaf and Seed Oils of *Dryobalanops aromatica* Gaertn. (Dipterocarpaceae)." *ASEAN Journal on Science and Technology for Development* 29, no. 2 (2012): 105-114. Accessed June 16, 2023. https://ajstd.ubd.edu.bn/journal/vol29/iss2/4

[49] Ibnu Yusof. 1995. *Permata Yang Hilang*. Kota Bharu, Kelantan: Al-Kafilah Enterprise, 171.

[50] Saipolbarin Ramli. "Istilah Tumbuh-Tumbuhan Dalam Al-Quran Al-Karim:

of tawhid, as well as the noble traits based on the character of the Prophet Muhammad SAW and his Companions.

The Chinese Camphor tree is toxic and hazardous to human health, particularly to children. Balms and oils containing terpenoid compounds such as camphor, menthol, and eucalyptus oil have the potential to cause adverse effects, including the risk of death[51,52,53].

Guilbert et al.[54] stated that the toxic effects of *Cinnamomum camphora* on humans have been well-documented. In one case, a child experienced seizures after being administered an unlabeled solution, believed to be a remedy for bloating, which was later confirmed to contain camphor. This case highlights that exposure to camphor continues to pose a risk to children[55].

According to Weed of Australia[56], *Cinnamomum camphora* should not be consumed raw. Mature trees have large root systems that can obstruct drainage and crack concrete, while the fruit, leaves, and roots are toxic if ingested in certain amounts.

1.5 Commercial Value of Malay Camphor Compared to Chinese Camphor

The commercial rivalry[57]between Malay Camphor and Chinese Camphor has existed for centuries. Marco Polo, in the 13th century,

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Kajian Leksikografi dan Wacana Bahasa Arab" [Terminology of Plants in the Quran: A Lexicographic and Discourse Study of the Arabic Language]. Doctoral Dissertation, Faculty of Languages and Linguistics, University of Malaya, 2015, 193.

[51] D. P. Emery, & J. G. Corban, 'Camphor toxicity.' *Journal of paediatrics and child health*, *35*(1), 105–106. (Wiley Online Library: 1999) [Accessed 11 July 2024 https://doi.org/10.1046/j.1440-1754.1999.00347.x]

[52] A. N. Bazzano, C. Var, F. Grossman & R. A. Oberhelman (2017), 'Use of Camphor and Essential Oil Balms for Infants in Cambodia.' *Journal of tropical pediatrics*, *63*(1), 65–69. (Oxford Academy: 2016), [Accessed 11 July 2024 https://doi.org/10.1093/tropej/fmw013]

[53] C. K. Chan, Y. C. Chan, & F. L. Lau, 'Status epilepticus after topical application of a solution containing camphor.' *Emergency medicine journal: EMJ*, *26*(1), 76. (EMJ: 2009), [Accessed 11 July 2024 https://doi.org/10.1136/emj.2008.063198]

[54] J. Guilbert, C. Flamant, F. Hallalel, D. Doummar, A. Frata, and S. Renolleau, "Anti-flatulence Treatment and Status Epilepticus: A Case of Camphor Intoxication," *Emergency Medicine Journal* 24, no. 12 (2008): 859-60, accessed July 11, 2024, https://pubmed.ncbi.nlm.nih.gov/18029526/.

[55] Guilbert et al., "Anti-flatulence Treatment and Status Epilepticus," 859-60.

[56] *Weeds of Australia*, "Cinnamomum camphora," accessed July 11, 2024, https://keyserver.lucidcentral.org/weeds/data/media/Html/cinnamomum_camphora.htm.

[57] Mohammed Iqtedar Husain Farooqi, "Henna or Camphor in the Light,"Since the early times two types of plants have been the commercial sources of camphor. One is the Malaysian/Indonesian plant Dryobalanops aromatica and the other is the Chinese/Japanese plant Cinnamomun camphora"

noted that Malay Camphor was valued as highly as gold[58] and silver, priced several hundred times more than Chinese Camphor.

According to Breazeale[59], Malay camphor has a premium status and has been a luxury commodity imported into Ayutthaya for domestic use, later re-exported to the East or West depending on its origin. Camphor from Malaysia and Indonesia has been utilized not only for medicinal purposes but also in Chinese fireworks to produce bright light displays.

However, as stated by Burkill[60], the oversupply of Chinese Camphor tarnished its status. With the development of the synthetic camphor[61] industries in the early 20th century, the price of Malay Camphor declined but still remained several times higher than its competitor. In fact, its price is still expensive, particularly today, with its status as a rare[62] commodity that is difficult to obtain.

1.6 Mentions of Camphor in Ancient Records

In addition to 'kapur language – bahasa kapur' and 'kapur taboo – pantang kapur' recorded in ancient Malay heritage, camphor was written as 'kprwh'[63] in 4th-century Chinese records. In the 7th and 9th centuries, Chinese traders referred to it as 'ku-pu-p'o-lu,' while in Aceh it was known as 'ka-po ba-roih[64]' in contrast to the Chinese camphor, which is referred to as xiangzhang*65* in Mandarin. In this context, the 6th-century Chinese records are considered more reliable, as they typically documented place names based on phonetic[66] pronunciation.

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[58] W. J. van der Meulen, "Suvar◎advîpa and the Chrysê Chersonêsos," *Indonesia* 18 (1974): 1–40, https://doi.org/10.2307/3350691, accessed May 22, 2023.

[59] Kennon Breazeale, *From Japan to Arabia: Ayutthaya's Maritime Relations With Asia*. (Bangkok: Toyota Thailand Foundation: The Foundation for the Promotion of Social Sciences and Humanities, 1999)

[60] Burkill, *A Dictionary of The Economic Products of the Malay Peninsula*, 865.

[61] Robert Kennedy Duncan, "Camphor: An Industry Revolutionized," in *Some Chemical Problems of Today*, 128-142 (New York – London: Harper and Brothers, 1911), downloaded July 11, 2024, https://todayinsci.com/D/Duncan_Robert/DuncanRobert-Camphor.htm.

[62] Mohamad Herman Abdullah, interview with Maskuddin Simantujak, August 28, 2024.

[63] Nurfaezal, "Barus and Camphor in the Early History of Islam," 60–74. Re-Accessed March 12, 2025. https://ejournal.uin-suska.ac.id/index.php/asiapacific/article/view/21574.

[64] W. J. van der Meulen, "Suvar◎advîpa and the Chrysê Chersonêsos," 23.

[65] Evart Curtis, *Chinese Furniture Materials: Camphor*, accessed July 14, 2024, https://www.chinese-furniture.com/c_furniture/m_camphor.html.

[66] Nurfaezal, "Barus and Camphor in the Early History of Islam," 60–74, re-accessed March 12, 2025.

The name camphor is also recorded in the medical records of the Byzantine, Jewish, Greek, and Islamic worlds during the medieval period. In addition to being a key ingredient in pharmacology[67], camphor also played a role as a valuable gift, often preferred over cloth and gold in diplomatic relations among the great empires of the ancient world, including Byzantine and Islam.

1.7 Conclusion: Differences Between Malay Camphor and Chinese Camphor

Table 3 below outlines the key differences between Malay Camphor and Chinese Camphor based on a literature review. This comparison addresses the problem statement, bridges the research gap, and clarifies the confusion by highlighting the distinctions between the species. It aims to raise awareness in the academic field and serve as a reference for guiding future research, reducing misidentification, and encouraging more focused studies on *Dryobalanops aromatica*.

Table 3: Key Differences Between Malay Camphor and Chinese Camphor

Section	Malay Camphor	Chinese Camphor
Original Name (Etymology)	Kapur (Ancient Malay), Kafur (Arabic), Camphora (Medieval Latin), Caumfre (Anglo-French), Camphor (English)	xiangzhang◎
Habitat and Origin	Southeast Asia - Indonesia, Malaysia, Borneo	East Asia - China, Japan,Taiwan
Scientific Name	Dryobalanops aromatica	Cinnamomum camphora
Tree Characteristics	Dipterocarpaceae – resin timber	Lauraceae
Chemical Formula	Dextro-Borneol C_{10} H_{18} 0	Dextro-Camphor C_{10} H_{16} 0
Toxicity Level	Non-toxic, Flammable (pure oil), Edible	Toxic[68], Irritating, Not edible, Health hazard

[67] P. Bouras-Vallianatos, "Medieval Mediterranean Pharmacology," in *Drugs in the Medieval Mediterranean: Transmission and Circulation of Pharmacological Knowledge*, ed. P. Bouras-Vallianatos and D. Stathakopoulos (Cambridge: Cambridge University Press, 2023). Accessed 15 December 2024, https://www.ncbi.nlm.nih.gov/books/NBK606146/ doi:10.1017/9781009389792.001.

[68] Department of Primary Industry, *Camphor laurel (Cinnamomum camphora)*, accessed March 13, 2025, https://weeds.dpi.nsw.gov.au/Weeds/Details/28. "Camphor laurel is mildly toxic to humans, and mild symptoms may occur if large quantities are eaten. All parts of

Section	Malay Camphor	Chinese Camphor
Commercial Value	Luxurious, premium, rare	Affordable, Readily available
Mention of Camphor in Historical Records	• 'Kapur' - ancient tongue • used in Egypt in 2000 BC • in 4th-century Chinese records. • in 6th-century Greek sources. • In 7th century mentioned in the Quran and Hadith	• First known in the 13th c. • Exposure in the 15th -17th c. • Subject of Camphor War in 1868 • Organically monopolied in 19th c • Sintetically available in the 20st c.
Tree Status	Vulnerable and Decreasing (IUCN)[69]	Least Concern (IUCN)[70], Invasive (DPI)[71]
Uses in Malay and International Communities	Versatile with various benefits for both internal and external use, local and international."	Craftsmanship and furniture, its oil is limited to external use in modern medicine.

Table 3 shows that Malay Camphor and Chinese Camphor differ significantly in several key aspects, including origin, toxicity, uses, and conservation status.

Malay Camphor, native to Southeast Asia, is non-toxic, edible, and used for various medicinal and everyday purposes. It has been valued for over 2000 years but is now endangered due to deforestation[72]. Its flammability makes it useful both as a medicinal remedy and a natural fuel source.

In contrast, Chinese Camphor, originating from East Asia, is toxic and is primarily used in carpentry and for external purposes in modern

the plant are poisonous and can cause nausea, vomiting and respiratory distress. Allergic skin reactions can also occur."

69 IUCN Red List, "Dryobalanops aromatica," *The IUCN Red List of Threatened Species*, 2017, https://www.iucnredlist.org/species/33207/2822471.

70 IUCN Red List, "Cinnamomum camphora," *The IUCN Red List of Threatened Species*, 2021, https://www.iucnredlist.org/species/15441072/15441116.

71 Department of Primary Industry, *Camphor laurel (Cinnamomum camphora)*, accessed March 13, 2025, https://weeds.dpi.nsw.gov.au/Weeds/Details/28. "*Invasion of agricultural lands by camphor laurel can cause significant impacts on productivity and the costs of control can reduce the viability of some agricultural pursuits*."

[72] Rusni Muhammad and Thuraya Ahmad, "Malay Camphor in Arabic Text," 725.

medicine. It became widely known after the 13th century and played a central role in the Camphor War of 1868[73]. Despite its abundance, it poses ecological risks as it is invasive in regions like Australia. The IUCN lists it as "Least Concern."

In summary, Malay Camphor is more versatile and safer for consumption, whereas Chinese Camphor is limited due to its toxicity, although it is more readily available.

2. Properties of al-Kafur According to Quranic Interpretation

This section aims to clarify the confusion surrounding the identification of al-Kafur by analyzing its characteristics as described in the Qur'an, Surah al-Insan, Verse 5[7475]. Through bibliometric and lexicographical methods, the study will compare these interpretations with the natural properties of Malay Camphor, addressing the research gap and resolving the misidentification between *Cinnamomum camphora* and *Dryobalanops aromatica*.

Below is an interpretation of Kafura or al-Kafur in the Qur'an based on the bibliometric analysis of camphor studies by Md Ariffin et al. This study is organized into a table that separates the keywords containing the main properties of Kafura as mentioned in various tafsir (interpretations).

[73] Ronald C. Po, "The Camphor War of 1868: Anglo-Chinese Relations and Imperial Realignments within East Asia," *The English Historical Review* 135, no. 577 (December 2020): 1461–1487, https://doi.org/10.1093/ehr/ceaa313.

[74] Sheikh Abdullah Basmeih, *Tafsir Pimpinan Ar-Rahman to the Understanding of the Quran (30) Juz*, 22nd edition, translated and explained by Sheikh Abdullah Basmeih, reviewed and approved by Muhammad Noor bin Haji Ibrahim, with permission and under the supervision of the Department of Islamic Development Malaysia (JAKIM) (Kuala Lumpur: Darul Fikir, 2013)." *Sesungguhnya orang-orang yang berbakti (dengan taat dan kebajikan) akan meminum dari piala: sejenis minuman yang bercampur dengan "Kafur"*

[75] The Quran, 76:5, *Quran My*, "Indeed, the righteous will drink from a cup [of wine] whose mixture is of Kāfūr (cooling camphor):" accessed March 14, 2025, https://quran.my/76/5.

2.1 Properties and Characteristics of Kafura Based on Bibliometric Analysis

Table 4: Properties and Characteristics of Kafura (al-Kafur) in Surah al-Insan, Verse 5 in Bibliometric Analysis

Tafsir Book	Interpretation	Properties and Characteristics
Tafsir al-Misbah by Quraysh Shihab (2000, in Md Ariffin et al., 2015).	Kafura is a tree found abundantly in China and Southeast Asia.	Tree, China, Southeast Asia
Tafsir al-Tabari (1954, in Md Ariffin et al., 2015).	Kafura is described as a mixture of the drinks of the righteous in paradise, symbolizing sweetness, fragrance, and coolness, similar to camphor.	Blend, Drink, Inhabitants of Paradise, Goodness, Pleasant, Fragrant, Cool.
Tafsir al-Kashshaf by Al-Zamakhshari (in Md Ariffin et al., 2015).	Kafur, with the interpretation of "kafur water," refers to the spring of paradise that is white, fragrant, and cool, like camphor.	Spring water of paradise, White, Fragrant, Cool.
Tafsir al-Jawahir fi Tafsir al-Quran al-Karim (1931, in Md Ariffin et al., 2015).	Kafur is described with qualities of being cool, delicious, good, and fragrant.	Water, Cool, Pleasant, Good, Fragrant .
Tafsir al-Munir oleh Wahbah al-Zuhayli (1991, in Md Ariffin et al., 2015).	Kafura refers to a mixture of wine with camphor, which is cool, white, and has a pleasant aroma.	Mixture, Cool, White, Pleasant, Aroma.
A Thematic Commentary on the Quran oleh Sheykh Muhammad al-Ghazali (1917, in Md Ariffin et al., 2015).	*Kafura* sebagai "*camphor*" atau dikenal Kafura, also referred to as "camphor" or "kapur barus," is a substance known for its cool, fragrant, and aromatic properties.	Camphor, Malay Camphor.
Tafsir al-Azhar by Hamka (1983).	Kafura refers to kapur or kamfer, a white and fragrant substance derived from forest trees, originally from Sumatra, Southeast Asia.	Kamfer, White, Fragrant (Aromatic), Forest Tree, Sumatra, Southeast Asia.

(Source: Md Ariffin et al., 2015 [76]reworked by Mohamad Herman Abdullah, unpublished manuscript)

[76] Md Ariffin et al., "Kajian Bibliometrik Terhadap Bahan Penerbitan,"

Table 4 shows that Kafura (al-Kafur) is consistently described with qualities that highlight its aromatic and refreshing nature, along with its symbolic connection to purity and goodness. The key characteristics of Kafura according to Md Ariffin et al., in the bibliometric analysis include:

1. **Fragrant:** Kafura is noted for its pleasant, aromatic fragrance, symbolizing its purity.
2. **Cool:** Kafura is associated with coolness, symbolizing its refreshing qualities, especially in the context of paradise.
3. **Delicious:** The taste of Kafura is described as sweet and enjoyable, emphasizing its appeal.
4. **Refreshing:** Kafura's refreshing qualities are emphasized, making it a symbol of rejuvenation and vitality.
5. **Free from Harm**: Kafura is portrayed as free from any harmful effects, representing purity and safety.

These qualities establish Kafura as a symbol of purity, goodness, and refreshment, reinforcing its cultural and religious significance.

The following is an interpretation of al-Kafur in the Quran based on a lexicographic analysis study by Ramil et al. This study is presented in a table format to segregate the keywords that encompass the main characteristics of al-Kafur as mentioned in the various interpretations that were analyzed.

2.2 Properties and Characteristics of al-Kafur Based on Lexicographical Analysis

Table 5: Properties and Characteristics of al-Kafur (Kafura) in Surah al-Insan, Verse 5 According to the Lexicographical Analysis

Tafsir Book	Interpretation,	Properties and Characteristic
Tafsir al-Azhariy (1976, in Ramli et al., 2018).	Al-Kafur is a spring in paradise mixed with al-Kafur to make it fragrant and refreshing. Abu Ishaq stated that this verse describes the taste of the water in paradise, which is flavored with al-Kafur. The inhabitants of paradise will not experience harm, will not need to bathe, and will not require perfumes, as they are created in a state of cleanliness, purity, freshness, and fragrance forever by Allah S.W.T.	Fragrant, Clean, Pure, Fresh, Delicious, Spring, Water, Free from Harm
Tafsir Al-Tabariy (2001, in Ramli et al., 2018)	Al-Kafur has a fragrant smell, symbolizing the qualities and special features of the water in paradise, which smells just like al-Kafur. In a figurative sense, the water is flavored with al-Kafur, giving it a delicious and refreshing taste. Al-Sa'adiy (2002) explains that the inhabitants of paradise drink beverages that are delicious and mixed with al-Kafur to cool them down and relieve any intoxication. The uniqueness of al-Kafur in paradise is that it is free from the harmful effects that al-Kafur has in the world, as Allah S.W.T. removes all the negative aspects from it.	Fragrant, Clean, Pure, Fresh, Cool, Delicious, Pleasant, Water, Free from Harm.
Ibn Juzaiy (1995, in Ramli et al., 2018)	In this verse, al-Kafur is used as a metaphor for the fragrant and delicious nature of the water in paradise. It is intended to describe the deliciousness of the wine in paradise mixed with al-Kafur. Similar to how delicious food is praised with the term "musk," which does not refer to actual musk but rather metaphorically represents its delightful qualities, al-Kafur is used here to signify the aromatic and pleasurable taste of the water in paradise.	Fragrant, Delicious, Water, Musk.
Abu Hayyan (1993, in Ramli et al., 2018) narrated from Qatadat.	This verse means that the drink in paradise is mixed with al-Kafur and sealed with musk, as explained in Surah al-Mutaffifin, verses 25 to 26. These verses describe the condition of the inhabitants of paradise, where their drink is given with a mixture of fragrant al-Kafur and musk, symbolizing the specialness and delight they enjoy.	Fragrant, Water, Delicious, Musk.
Ibn 'Asyur (1984, dalam Ramli et al., 2018), al-Mu'alaqat Amru' al-Qais (2001, dalam Ramli et al., 2018)	There is an opinion that suggests the use of words in this verse refers to a literal action, not a metaphor. In this context, mixing alcohol with al-Kafur was a common practice among the Arab community, particularly among the aristocracy. The purpose of mixing al-Kafur with alcohol was to fragrance, cool, and enhance the flavor of the drink.	Nobility, Fragrant, Cool Delicious, Drink

Tafsir Book	Interpretation,	Properties and Characteristic
Ibn Kathir (1999, dalam Ramli et al., 2018).	The well-known characteristics of al-Kafur are its pleasant fragrance and cooling properties, which is why it is mixed into the drinks of the inhabitants of Paradise as one of the delights they enjoy. Some opinions suggest that al-Kafur refers to the name of a spring in Paradise. Additionally, there are also views that indicate the drink itself is fragrant like the scent of al-Kafur.	Fragrant, Cool, Drink, Delight, Spring water

(Source: Ramli et al., 2018[77] reworked by Mohamad Herman Abdullah, unpublished manuscript)[78]

Table 5 shows that the interpretations of al-Kafur (Kafura) in the Qur'an highlight several key qualities that emphasize its symbolic and spiritual significance in paradise. The qualities of al-Kafur, according to Ramli et al., as described in the Qur'an, include:

1. Fragrant: Al-Kafur is characterized by a pleasant, aromatic fragrance, symbolizing cleanliness, purity, and freshness.
2. Cool: Al-Kafur is associated with cooling properties, reflecting the refreshing and soothing nature of the water in paradise.
3. Delicious: Al-Kafur is described as having a sweet and enjoyable taste, emphasizing the delightful and pleasurable qualities of the paradise drink.
4. Refreshing: The drink mixed with al-Kafur is refreshing, bringing rejuvenation and vitality to the inhabitants of paradise.
5. Free from Harm: Al-Kafur in paradise is free from harmful effects, representing purity, safety, and divine perfection.

These qualities of al-Kafur reinforce its symbolic role as a representation of purity, refreshment, and eternal delight in paradise.

2.3 Properties and Characteristics of Malay Camphor

Table 6 below lists the properties and characteristics of Malay Camphor, based on a literature review, field studies, and interviews with informants, which will be matched with the properties and characteristics of al-Kafur (Kafura) as outlined in Table 4 and Table 5.

[77] Saipolbarin Ramli et al., "Analisis Leksikografi dan Semantik,"
[78] Mohamad Herman Abdullah, *Peranan Kapur Melayu*.

Table 6: Properties and Characteristics of Malay Camphor

Section	Properties / Characteristics	Area of Use
Roots / Stump	Non-Toxic, Fragrant, Hard, Sturdy and Strong	None (Yet to be fully explored – stumps still produce oil even after being felled for a long time).
Stem	Non- Toxic, Fragrant, Resinous, Oily, Crystalline, Hard, Straight, Unbranched, Large, Tall	Traditional, home woodworking - protection, bridges - road infrastructure, furniture for homes, taming wild animals, commercial.
Bark	Non- Toxic, Hard, Split, Not Easily Decayed, Fragrant	Traditional, woodworking, housecraft, household tools (basket weaving), commercial.
Leaves	Non-Toxic, Fragrant, Oily	Traditional medicine. The leaves also release oil that can be used as medicine, but it is not sufficient for commercial purposes.
Resin / Gum	Non- Toxic, Fragrant, Viscous, Sticky	Traditional, embalming, varnish (polish and wood preservative), adhesive or waterproof ship glue (premium type), fragrance, incense, blood wound cover, and medicine.
Oil	Non-Toxic, Cool, Fragrant, Light, Liquid, Refreshing, Fuel, Clean, Pure	Traditional, fuel, oil lamp, medicinal, fragrance, antidote for rust wounds, fragrance of the Sunnah of the Prophet SAW, commercial.
Crystals	Non-Toxic, Fragrant, Block, Camphor Crystal	Traditional, commercial, medicinal, antidote, fragrance, refresher, incense, flavoring for food and drinks, religious rituals, Sunnah of the Prophet SAW.
Fruit and Flowers	Not Toxic, Fragrant, Elastic – potato like	Traditional food – not a staple, medicine, forest ecosystem
Camphor Forest	Ecological Patron of Forests and Wildlife, Unique Forest Group Aura	Forest ecosystem
Camphor Spirit / Inner Camphor	Secrets and Rituals in Ancient Beliefs Related to Mystical Power, Later Purified as a Metaphor symbolic of the quest for a pure, enlightened inner soul.	Ancient belief systems and superstitions were used by camphor chiefs and camphor hunters to maintain control and preserve the exclusivity of the local camphor trade – job security. These beliefs were also part of shamanism, traditional medicine and mysticism.

Section	Properties / Characteristics	Area of Use
Camphor Language and Taboo	Language and Practices Related to One Ethnic Group that Has Inhabited the Malay World for Tens of Thousands of Years (According to mtDNA Studies)	Ancient belief system used by chief of camphor and camphor hunters, ancient language, communication, rituals - to maintain control and preserve the exclusivity of the local camphor trade and job security.
Camphor Brand, Metaphor of al-Kafur (Camphor)	Mentioned in the Quran and Hadiths. Found in Ancient Historical Records, a Name that Remains Fragrant Across Time.	History, religion, ethnicity and language, forestry experts and botanists, producers and cultivators of camphor.

(Source: Mohamad Herman Abdullah, unpublished manuscript)[79]

Table 6 shows that the properties of Malay Camphor align with the key qualities of fragrant, cool, delicious, refreshing, and free from harm.

1. **Fragrant**: Malay Camphor is known for its aromatic qualities, present in various parts of the tree, which are used in medicine, rituals, and culture.
2. **Cool**: The camphor oil and resin offer cooling properties, used for soothing and medicinal purposes.
3. **Delicious**: The fruit and flowers of Malay Camphor are used in food and medicine, enriching the taste of recipes.
4. **Refreshing**: The resin, oil, and crystals provide rejuvenation and vitality, commonly used in traditional remedies.
5. **Free from Harm**: Malay Camphor is non-toxic, making it safe for various uses, including medicinal and culinary applications.

In summary, Malay Camphor's qualities reinforce its cultural and practical significance, symbolizing purity, vitality, and rejuvenation.

[79] Mohamad Herman Abdullah, *Peranan Kapur Melayu (Dryobalanops Aromatica) dalam Peradaban Melayu di Era Pra dan Pasca Islam / The Role of Malay Camphor (Dryobalanops Aromatica) in Malay Civilization in the Pre- and Post-Islamic Era* (PhD thesis, Universiti Sultan Zainal Abidin, unpublished manuscript)

3. Findings and Conclusions of the Study

Table 7: Comparison of the Characteristics of al-Kafur / Kafura in the Context of Plants with the Natural Properties of Malay Camphor

al-Kafur / Kafura	Malay Camphor / Kamfer
Fragrant Al-Kafur has a fragrant scent. In the context of paradise, al-Kafur represents a drink with a pleasant fragrance, while Kafura is also known for its fragrant qualities, symbolizing beauty and freshness. Al-Kafur is also a type of plant with a fragrant scent.	Fragrant Overall, the camphor tree is known for its fragrant properties. The fragrance of camphor was also used by the Prophet Muhammad (SAW) as a perfume and in the ritual bath for the deceased, and it is considered one of the finest raw materials for perfume[80].
Refreshing Al-Kafur in paradise is described as refreshing water, while Kafura also has qualities that provide freshness, such as a cooling sensation that brings tranquility.	Refreshing Malay camphor also provides a refreshing sensation, especially through the scent of its oil, which is used in traditional medicine and as a fragrance oil[81].
Cool Al-Kafur is described as a cool water in paradise, providing a cooling effect to the inhabitants of paradise.	Cool The Malay camphor oil that radiates from its trunk when pierced provides a natural cooling effect when used.
Delicious Al-Kafur and Kafura both provide a delightful and exquisite taste. Al-Kafur is a delicious drink in paradise, while Kafura, with its properties that enhance freshness and flavor, offers unparalleled enjoyment. Al-Kafur was used by the Arab nobility to enhance the flavor of their drinks.	Delicious Camphor oil can be consumed as a remedy for non-critical stomach aches. Camphor is used as an ingredient in sweet meat dishes, but it can also be used in recipes[82], especially in the palaces of the caliphs[83]. The qualities of delight and enjoyment in this context can be translated into the symbolism of tranquility through the overall nature of Malay kamfer.

[80] Donkin, Robert Arthur. Dragon's Brain Perfume: An Historical Geography *of Camphor*. Leiden: Brill, 1999.

[81] Mohamad Herman Abdullah, interview with Maskuddin Simantujak, August 28, 2024.

[82] Nasrallah, Nawal. 2007. *Annals of the Caliphs' Kitchens: Ibn Sayyâr al-Warrâq's Tenth Century Baghdadi Cookbook*. Islamic History and Civilization. Leiden, The Netherlands: Brill (34 instances of the mention of camphor in cooking)

[83] Titley, Norah M. 2004. *The Ni'matnama Manuscript of the Sultans of Mandu: The Sultan's Book of Delights.* Routledge Studies in South Asia. London, UK: Routledge. (71 instances of the mention of camphor in cooking)

al-Kafur / Kafura	Malay Camphor / Kamfer
Clean and Pure Al-Kafur represents purity and cleanliness, free from all impurities. Similarly, Kafura symbolizes purity, cleanliness, and freedom from harm, in line with its depiction in the context of paradise as pure and refreshing water.	Clean and Pure The white camphor crystals within its trunk symbolize purity and cleanliness. In line with the characteristics of al-Kafur, which is free from evil and harm but has the ability to absorb foul odors, it has been widely used in traditional medicine and religious rituals, as practiced by the nobility of the Batak and Malay cultures in ancient times.

(Source: Mohamad Herman Abdullah, unpublished manuscript) [84]

Objective 3, which is to draw conclusions based on the comparison results and provide a clearer understanding of the species, has been successfully addressed through the matching and comparison of the key characteristics of al-Kafur/Kafura and Malay Camphor/Kamfer in the tables above. This comparison has contributed to bridging the research gap and resolving the confusion between the species, directly addressing problem statements 1 and 2.

The key characteristics shared between al-Kafur/Kafura and Malay Camphor include:

1. **Fragrant**: Both al-Kafur and Malay Camphor are known for their pleasant fragrance, which symbolizes beauty and freshness. The fragrance of camphor was historically used by Prophet Muhammad (SAW), highlighting its significance in both cultural, religious and spiritual contexts.
2. **Refreshing**: Al-Kafur is described as refreshing water in paradise, and similarly, Malay Camphor provides a refreshing sensation, particularly through its fragrant oil used in traditional medicine and as a fragrance oil.
3. **Cool**: Al-Kafur in paradise is associated with a cooling effect, and Malay Camphor oil also emits a cooling sensation when used, particularly when the trunk is pierced.
4. **Delicious**: Al-Kafur is associated with a delightful and exquisite taste in paradise, and Malay Camphor has similar qualities, being used in sweet dishes, enriching recipes and medicinal remedies, symbolizing enjoyment and tranquility.
5. **Clean and Pure**: Al-Kafur represents purity and cleanliness, and

[84] Mohamad Herman Abdullah, *Peranan Kapur Melayu*

Malay Camphor shares these characteristics. The white camphor crystals within its trunk symbolize purity, cleanliness, and the ability to absorb foul odors, which aligns with the symbolism of al-Kafur in religious and cultural practices.

In conclusion, the comparison of these shared qualities has enhanced the understanding of Malay Camphor and its connection to al-Kafur, providing clarity in species identification and reinforcing its historical, cultural, and symbolic significance. This work addresses both the research gap and confusion, paving the way for more focused studies on *Dryobalanops aromatica* and its accurate representation in academic and cultural contexts.

Note: As emphasized by Ramli et al. [85] in the case of oleander, this study excludes *Cinnamomum camphora* from the comparison list due to its toxic properties.

Discussion

The discussion of Malay Camphor (*Dryobalanops aromatica*) is essential for understanding the history and culture of Southeast Asia, where it has long been valued in traditional medicine, religious rituals, and global trade. However, confusion has arisen regarding the species referenced in the Quran and Hadith, as Chinese Camphor (*Cinnamomum camphora* – Xiangzhang) has often been mistakenly associated with these texts. This misidentification stems from incorrect scientific naming during the 19th-century trade, which obscured the true identity of Malay Camphor.

A pivotal moment occurred in 1903 when Finnish scientist Gustaf Komppa successfully synthesized camphor using the chemical formula $C_{10}H_{16}O$, based on Chinese Camphor[86]. The name "camphor" had previously been used during the Camphor War and the Camphor Regulation of 1868[87] between Britain and China to prevent China from monopolizing the trade. Komppa's breakthrough brought significant

[85] Saipolbarin Ramli et al., "Analisis Leksikografi dan Semantik," 280, trans. Mohamad Herman Abdullah, "*Referring to the scientific properties of these two trees, the camphor tree belongs to the palm species and is non-toxic, while the oleander tree is from the shrub species and is toxic. The scientific properties of both these plants influence their uses... Looking at the habitat and uses of the camphor tree, its characteristics align more closely with the meaning of al-Kafur as described in the Qur'an, compared to the oleander tree.*"

[86] Duncan, "Camphor: An Industry Revolutionized," 128-142.

[87] Po, "The Camphor War of 1868," 1461, https://doi.org/10.1093/ehr/ceaa313

changes to the chemical industry and quickly attracted global attention. Upon the successful synthesis, it generated significant interest from a new group of researchers—industrial chemists. Patent offices around the world were swiftly flooded with applications for commercial processes to synthesize camphor. Companies were quickly established to capitalize on and exploit these methods, leading to the creation of factories.

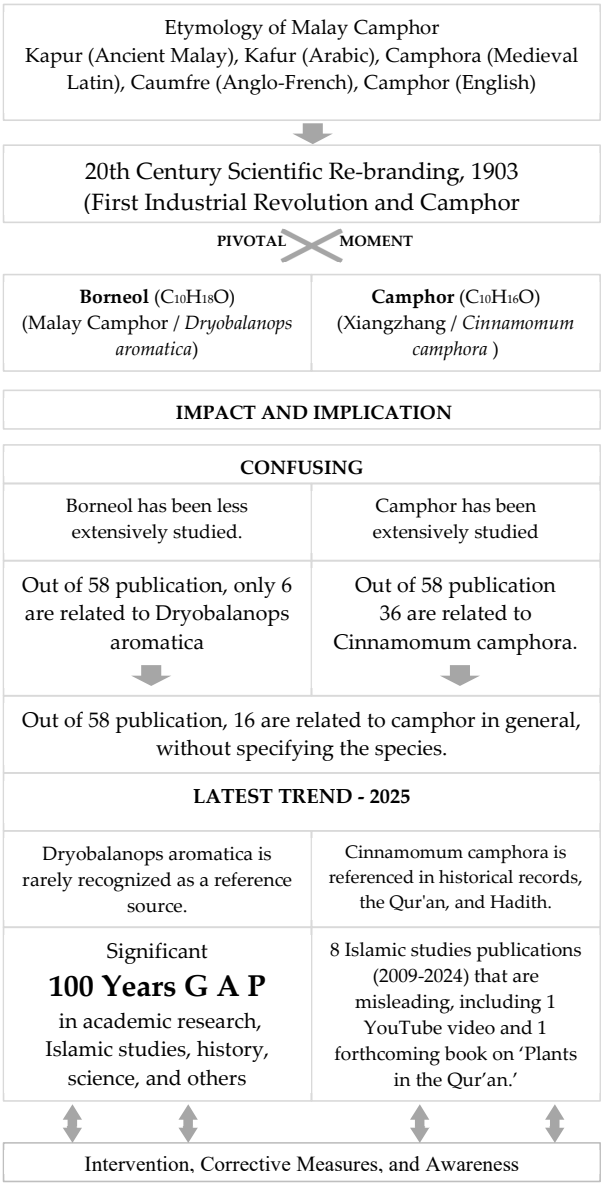
Within just two years of the initial academic synthesis, synthetic camphor, indistinguishable in quality from the natural product, began to flood the global markets, challenging traditional sources. This new development challenged Japan's monopoly, which had driven up camphor prices after the Russo-Japanese War in 1905 due to the country's heavy debt burden, and helped stabilize the price[88]. This 'camphor revolution' also highlighted the undeniable fact that no group of people can reasonably expect to permanently monopolize the sale or production of a natural product for export.

The rapid upheaval of the camphor revolution and shifting global trade dynamics caused confusion in both scientific and Islamic studies. As a result, Malay Camphor came to be known as borneol ($C_{10}H_{18}O$), distancing it from its historical origins. Consequently, research on this species declined over time.

Figure 7 below illustrates the impact of rebranding 'Kapur' to borneol and 'Xiangzhang' to camphor: implications for science, Islamic studies, and culture. This scientific rebranding has led to Malay Camphor being significantly under-researched, lagging behind studies on other species, such as Chinese Camphor.

[88] Duncan, "Camphor: An Industry Revolutionized," 128-142.

Figure 7: Impact of Re-branding 'Kapur' to Borneol and 'Xiangzhang' to Camphor: Implications for Science, Islamic Studies, and Culture.



(Source: Mohamad Herman Abdullah, unpublished manuscript)

To address the under-researching of Malay Camphor and its misidentification in historical and scientific contexts, as illustrated in Figure 6, proactive steps are crucial. The impact and implications of rebranding 'Kapur' to borneol and 'Xiangzhang' to camphor have resulted in significant '100 years' gaps or more in research and understanding of this important species.

This article has addressed these issues by comparing the shared qualities of Malay Camphor and its connection to al-Kafur, providing clarity in species identification and reinforcing its historical, cultural, and symbolic significance. It is hoped that this work has bridged the research gap and resolved much of the confusion, paving the way for more focused studies on Dryobalanops aromatica and its accurate representation in both academic and cultural contexts.

To further advance these efforts, the following suggestions should be considered to ensure effective intervention:

The Addition of Publications and Studies on Malay Camphor

One important step that needs to be taken is the addition of more comprehensive publications and recent studies specifically focusing on "Malay Camphor." These publications should cover various aspects, including historical research, etymology, and scientific studies on this species. Historical research is crucial for understanding the position of Malay Camphor in Southeast Asian cultural and economic traditions. Additionally, etymological studies will clarify the connection between the term al-Kafur mentioned in Islamic texts and Malay Camphor, while also addressing the confusion caused by the incorrect scientific naming.

To restore the recognition of Malay Camphor, it is essential to increase research efforts and academic publications focused on its significance. Historical studies should emphasize its role in Southeast Asian trade and traditions, correcting the narrative that has long favored Chinese Camphor. Etymological studies should clarify the connection between al-Kafur and Malay Camphor, addressing the classification errors that have contributed to this confusion. Scientific research should delve deeper into the species, examining its unique chemical properties, medicinal benefits, and potential applications. Expanding the body of literature on Malay Camphor will help correct past misidentifications and bring clarity to its historical and religious significance.

Publications and References Based on the Keyword "Malay Camphor"

To enhance the research focus on Malay Camphor, it is crucial to ensure that appropriate keywords, such as "Kapur Melayu" or "Malay Camphor," are consistently used in academic publications and references. Proper usage of these keywords will increase the visibility of the research and prevent it from being overlooked or misinterpreted, particularly in relation to linking al-Kafur in the Qur'an and Hadith to a toxic and invasive species. By reinforcing the use of these keywords, we can reduce confusion between Malay Camphor and other species, such as Chinese Camphor, which is more commonly identified in academic literature.

Additionally, the exclusivity of camphor should be reinstated to its rightful source—the "Malay Camphor" from the Malay world. Simultaneously, "Xiangzhang" should be restored as the proper designation for *Cinnamomum camphora*, replacing the misleading term "Chinese Camphor." The IUCN should also issue an erratum to correct the classification of Borneo Camphorwood as "Camphor Tree" and update the nomenclature of *Cinnamomum camphora* to reflect its historical name, "Xiangzhang." This correction should be applied consistently in academic discussions.

Ensuring consistency in nomenclature is crucial. "Kapur" should be acknowledged as Camphor, aligning with the correct camphor chemical formula (borneol). Meanwhile, the existing camphor formula should be revised and renamed "Xiangzhangnol" to reflect its original designation. These adjustments will eliminate discrepancies and ensure reliable references in future research.

Collaboration Between Malaysia and Indonesia

The best approach to restoring the rightful position and recognition of Malay Camphor is through collaboration between Malaysia and Indonesia. Both countries are major producers of Malay Camphor and possess abundant natural resources for producing this material. Collaboration between these two countries is crucial as it can accelerate joint research efforts and lead to more relevant and widespread academic publications. Additionally, this collaboration can open up opportunities for marketing Malay Camphor in international markets, helping to increase its global recognition.

Development of Joint Research Infrastructure

In addition to collaboration between Malaysia and Indonesia, the development of joint research infrastructure is crucial to ensure systematic and efficient research on Malay Camphor. This could involve establishing dedicated research centers in both countries focused on Malay Camphor, where scientific studies, experiments, and research related to this species would be conducted. These centers would also foster collaboration between universities, scientists, and industry players, driving innovation and supporting product development.

Education and Public Awareness

Public awareness about Malay Camphor, both as a cultural heritage and a scientific resource, must be strengthened. This can be achieved through digital platforms and social media campaigns to spread knowledge, hosting international seminars to engage the academic community, and ensuring accurate botanical identification in theme parks and botanical gardens, where signage should correctly reflect the right tree species.[89] Collaboration between the public, academics, and authorities is essential to preserve and appreciate Malay Camphor. Additionally, incorporating Malay Camphor education into school and university curricula will ensure that younger generations understand its significance in Malay history and culture. Promoting global recognition through targeted awareness campaigns will help raise the profile of this important species. Increased public awareness will also encourage further research, enriching scientific understanding of Malay Camphor.

Teaching Malay Camphor in the context of SDG 15: Life on Land

In line with SDG 15[90], which focuses on the protection, restoration, and sustainable use of terrestrial ecosystems, the role of Malay Camphor in Malaysia's ecosystem can be highlighted. Known for its unique position in the ecosystem, Malay Camphor is often described by informants as having its own "community" and forest - 'hutan kapur' with an aura[91] that only certain species, such as the

[89] KLCC. 2021. "Info Kapur." *Kajian Lapangan*. Taman Menara Berkembar KLCC, Kuala Lumpur.

[90] United Nations, n.d., *Goal 15: Life on Land*, Sustainable Development Goals, viewed 2 February 2025, https://sdgs.un.org/goals/goal15.

[91] Mohamad Herman Abdullah, interview with Zahirudin Pasaribu, April 15–16, 2016.

rengas9293, 'can join'. This unique relationship underscores the tree's importance, not only in the environment but also in the culture and traditions of Malaysia.

The ecological significance of Malay Camphor also aligns with Malaysia's commitment to SDG 15. In 2017, Malay Camphor was even nominated as one of the candidates for Malaysia's national tree, alongside Merbau and Cengal. This reflects its deep-rooted significance in the nation's heritage. The ongoing "100 Million Trees Campaign," launched under the Ministry of Energy and Natural Resources (now known as the Ministry of Natural Resources, Environment, and Climate Change - NRECC)[94], is another crucial initiative that highlights the importance of tree planting and sustainable management. This campaign, which started in 2021, aims to involve the entire population of Malaysia in planting 100 million trees over five years, promoting ecological restoration and public engagement in environmental conservation.

Improvements in research and publications regarding Malay Camphor are crucial to ensuring that this species receives the appropriate attention in academic and scientific circles. By increasing publications, introducing accurate keywords, and fostering cooperation between Malaysia and Indonesia, research efforts can be strengthened, and Malay Camphor can be restored to its rightful place in the history and culture of the Malay world. Additionally, the development of joint research infrastructure and the promotion of public awareness will accelerate efforts to recover knowledge and preserve this important cultural heritage.

Conclusion

In conclusion, this study reaffirms the historical, cultural, and medicinal significance of Malay Camphor (*Dryobalanops aromatica*), underscoring its pivotal role in the economy, Malay culture, and international trade. By examining the distinctions between Malay Camphor and Chinese Camphor (*Cinnamomum camphora*), the research clarifies the true identity of al-Kafur as referenced in the Quran and

[92] Mohamad Herman Abdullah, interview with Jalungun Laban, August 27, 2024.
[93] Mohamad Herman Abdullah, interview with Siti Eryani Suterisno, October 3, 2024.
[94] Kempen Penanaman 100 Juta Pokok 2021-2025. 2023. *Planting Campaign 100 Million Trees 2021-2025: Achievements as of July 11, 2024*. Accessed July 11, 2024. https://www.100jutapokok.gov.my/statistic.php?menu=85.

Hadith, addressing long-standing confusion caused by terminological errors and trade monopolies. The findings highlight the superior qualities of Malay Camphor, such as its non-toxicity, refreshing aroma, and culinary uses, which align with the Islamic interpretation of al-Kafur. This work emphasizes the need to correct historical misunderstandings, ensuring that camphor is accurately associated with *Dryobalanops aromatica* and setting the stage for future research on its cultural, botanical, and economic significance.

Advancements in research and publications concerning Malay Camphor are crucial to ensure this species gains the recognition it deserves in academic and scientific communities. Increased publications, the use of accurate keywords, and strengthened collaboration between Malaysia and Indonesia will enhance research efforts and restore Malay Camphor to its rightful place in the history and culture of the Malay world. Furthermore, the establishment of joint research infrastructure and the promotion of public awareness will help recover lost knowledge and preserve this vital cultural heritage.

Errors in scientific naming are not merely academic issues but have profound implications, particularly for the accuracy of Islamic interpretations and religious practices. The misidentification of Malay Camphor has led to confusion with other species, potentially influencing teachings on permissible substances. If this confusion persists without correction, we risk replacing historical truths with facts shaped, manipulated, and exploited by modern trade and scientific interests. It is time to restore the truth about *Malay Camphor*, ensuring that all individuals can accurately differentiate between *Malay Camphor* (*Dryobalanops aromatica*) and *Chinese Camphor* (*Cinnamomum camphora*) and make informed decisions based on this knowledge.

Refereces

Abdullah, M.H., *Peranan Kapur Melayu (Dryobalanops Aromatica) dalam Peradaban Melayu di Era Pra dan Pasca Islam / The Role of Malay Camphor (Dryobalanops Aromatica) in Malay Civilization in the Pre- and Post-Islamic Era*, PhD thesis, Universiti Sultan Zainal Abidin, unpublished.

Abdullah, M. H. (2016) *Field Study and Informant Interviews*. Interview with Zahirudin Pasaribu, volunteer caretaker of the Mahligai Tomb (30 years of experience), Barus, North Sumatra, Indonesia,

15-16 April.

Abdullah, M. H. (2023) *Field Study and Informant Interviews*. Interview with Gana Raj Katharayan, Assistant Director of the Silviculture and Forest Protection Section, Selangor Forestry Department, Malaysia, 28 June.

Abdullah, M. H. (2023) *Field Study and Informant Interviews*. Interview with Asif Markom, Ranger, Selangor Forestry Department, Malaysia, 28 June.

Abdullah, M. H. (2024) *Field Study and Informant Interviews*. Interview with Abdullah Zakaria Ghazali, Historian, Department of History, University of Malaya, Kuala Lumpur, Malaysia, 17 February.

Abdullah, M. H. (2024) *Field Study and Informant Interviews*. Interview with Jalungun Laban, owner and operator of Warisan Camphor Plantation, Barus, North Sumatra, Indonesia, 27 August.

Abdullah, M. H. (2024) *Field Study and Informant Interviews*. Interview with Maskuddin Simantujak, cultural-historical activist of Barus and camphor oil trader, Barus, North Sumatra, Indonesia, 28 August.

Abdullah, M. H. (2024) *Field Study and Informant Interviews*. Interview with Fauzi Hasibuan, history and culture enthusiast of Barus, Tapanuli, Barus, North Sumatra, Indonesia, 26-30 August.

Abdullah, M. H. (2024) *Field Study and Informant Interviews*. Interview with Ilham Pasaribu, history and culture enthusiast of Barus, Tapanuli, Barus, North Sumatra, Indonesia, 26-30 August.

Abdullah, M. H. (2024) *Field Study and Informant Interviews*. Interview with Siti Eryani Suterisno, Botanist and Biodiversity Expert, Forest Research Institute Malaysia (FRIM), FRIM Herbarium, Kepong, Kuala Lumpur, Malaysia, 3 October.

Al Adiha, Faria Nuril Hajar. 1 June 2021. Zanjabil dan Kafur: Dua Minuman Surga yang Disebutkan dalam Al-Quran. Tafsir Tematik, [Accessed 1 June 2021 https://tafsiralquran.id/zanjabil-dan-Kafur-dua-minuman-surga-yang-disebutkan-dalam-al-quran/]

Annan, D., 2019. *A guide to research writing*. ResearchGate. [online] Available at: https://www.researchgate.net/publication/333395933_A_GUIDE_TO_RESEARCH_WRITING [Accessed 23 January 2023].

Barstow. M., & Randi, A. 2020. Dryobalanops aromatica (errata version published in 2020). [Accessed 25 May 2023, https://www.iucnredlist.org. https://www.iucnredlist.org/species/61998024/173026192\

Basmeih, S., 2013. *Tafsir Pimpinan Ar-Rahman kepada Pengertian Al-Quran (30) Juz*, 22nd ed. Translated and explained by Sheikh Abdullah Basmeih, reviewed and approved by Muhammad Noor bin Haji Ibrahim, with permission and under the supervision of Jabatan Kemajuan Islam Malaysia (JAKIM). Kuala Lumpur: Darul Fikir.

Bazzano, A. N., Var, C., Grossman, F., & Oberhelman, R. A. 2017. "Use of Camphor and Essential Oil Balms for Infants in Cambodia." *Journal of tropical pediatrics*, *63*(1), 65–69. [Accessed 11 July 2024 https://doi.org/10.1093/tropej/fmw013]

Bouras-Vallianatos, P., 2023. *Medieval Mediterranean pharmacology*. In: P. Bouras-Vallianatos & D. Stathakopoulos, eds. *Drugs in the Medieval Mediterranean: Transmission and Circulation of Pharmacological Knowledge*. Cambridge: Cambridge University Press. Available at: https://www.ncbi.nlm.nih.gov/books/NBK606146/doi:10.1017/9781009389792.001 [Accessed 7 March 2025].

Breazeale, Kennon. 1999. *From Japan to Arabia: Ayutthaya's Maritime Relations With Asia.* Bangkok: Toyota Thailand Foundation: The Foundation for the Promotion of Social Sciences and Humanities

Britannica, T. Editors of Encyclopaedia. 29 February 2024. "Camphor". [Accessed, 15 July 2024, https://www.britannica.com/science/camphor]

Burkill, Isaac Henry (1935), *A Dictionary of The Economic Products of the Malay Peninsula. Crown Agents For The Colonies*, London: Millbank, hlm. 867

Camphor. *Wikipedia*. Accessed November 16, 2024. https://en.wikipedia.org/wiki/Camphor.

Camphor. *Merriam-Webster.com Dictionary*. Accessed July 15, 2024. https://www.merriam-webster.com/dictionary/camphor.

Camphor. Merriam-Webster.com Dictionary, Merriam-Webster. [Accessed 15 July 2024, https://www.merriam-webster.com/dictionary/camphor. "*Middle English caumfre, from Anglo-French, from Medieval Latin camphora, from Arabic kāfūr, from Malay kapur* "

Chan, C. K., Chan, Y. C., & Lau, F. L. 2009."Status epilepticus after

topical application of a solution containing camphor." *Emergency medicine journal : EMJ*, *26*(1), 76. [Accessed 11 July 2024 https://doi.org/10.1136/emj.2008.063198]

ChatGPT, 2024. *Tell me more about Camphor*. Available at: https://chatgpt.com/ [Accessed 16 Nov. 2024].

Chew, M.Y. 2012. 'Pokok Kapur Susun Atur di Langit.' [Accessed 22 May 2022 https://www.frim.gov.my/ms/warna-frim/pokok-kapur-susun-atur-di-langit/)\

Curtis, Evarts. 1999. *Chinese Furniture Materials: Camphor (Xiangzhang)* 樟, *C. L. Ma Collection: Traditional Furniture from the Greater Shanxi Region*, Hong Kong: White Lotus Press, Accessed 14 July 2024, https://www.chinese-furniture.com/c_furniture/m_camphor.html

Daulay, J.Facharudin. 2005. "Bandar Barus Dalam Catatan Sejarah" dalam *Buletin HISTORISME Edisi Khusus*, Fakultas Sastra USU, Media Kreativitas Insan Sejarah, No. 21, pp. 28-36

de Miklucho-Maclay, M. (1878), "Dialects of the Melanesian Tribes of the Malay Peninsula" dalam *Journal of the Straits Branch of the Royal Asiatic Society*, 1 (1878), pp. 38–44, [Accessed, 16 June 2023, https://en.wikisource.org/wiki/Journal_of_the_Straits_Branch_of_the_Royal_Asiatic_Society/Volume_1/Dialects_of_the_Melanesian_Tribes_of_the_Malay_Peninsula

Department of Primary Industry, *Camphor laurel (Cinnamomum camphora)*, accessed March 13, 2025, https://weeds.dpi.nsw.gov.au/Weeds/Details/28.

Donkin, Robert Arthur. 1999. *Dragon's Brain Perfume: An Historical Geography of Camphor*, Leiden: Brill, hlm. 52

Emery, Chad. (2022), "The 33 Most Spoken Languages in the World (2021)." *Langoly - The Ultimate Language Resource.* [Accessed 10 February 2022, https://www.langoly.com/most-spoken-languages/]

Emery, D. P., & Corban, J. G. (1999), "Camphor toxicity." *Journal of paediatrics and child health*, *35*(1), 105–106. [Accessed 11 July 2024 https://doi.org/10.1046/j.1440-1754.1999.00347.x]

Encyclopaedia Britannica, Inc., 2025. Malaya and Northern Borneo under British Control. *Encyclopaedia Britannica*. [online] Available at: https://www.britannica.com/place/Malaysia/Malaya-and-northern-Borneo-under-British-control [Accessed 5 February

2025].

Farooqi, Mohammed Iqtedar Husain. 2011. "Henna or Camphor in the Light." *Plants Of The Quran, 9th edition*, Lucknow: Sidrah Publisher. [Accessed 9 March 2024, http://www.irfi.org/articles4/articles_5001_6000/henna_or_camphor_in_the_light_of.html]

Gan, K.S., Choo, T., & Lim, C.S. 1999. "Timber Notes – Medium Hardwoods I (Kapur, Kasai, Kelat, Keledang, Kempas)." *Timber Technology Buletin.* No 11, 1999, Timber Technology Centre (TTC), FRIM, Kepong, Kuala Lumpur. [Accessed 21 July 2024, https://info.frim.gov.my/infocenter/booksonline/ttb/TTBNO11.PDF]

Gimlette, John D., Re-edited Edition, 2019. *Malay Poisons and Charm Cures (1st ed.),* Kuala Lumpur: Silverfish Books

Guillot, Claude. 2002. *Lobu Tua Sejarah Awal Barus (Pendahuluan)*, (terj. Daniel Perret), Jakarta: Yayasan Obor Indonesia.

Guillot. Claude., & Kalus, Ludvik. 2007. "Batu Nisan Hamzah Fansuri". *Jurnal Terjemahan Alam & Tamadun Melayu 1* (2009) , hlm 27-49, *Departemen Kebudayaan dan Pariwisata dan Ecole francaise d'Extreme-Orient Forum*, Jakarta - Paris. (ter. Parasman, Rita),[Accessed 17 July 2022, http://journalarticle.ukm.my/1517/]

Guilbert, J., Flamant, C., Hallalel, F., Doummar, D., Frata, A., & Renolleau, S. 2008."Anti-flatulence treatment and status epilepticus: A case of camphor intoxication". *Emergency Medicine Journal*, 24(12):859-60, [Accessed 11 July 2024, https://pubmed.ncbi.nlm.nih.gov/18029526/]

Hamidy, Zainuddin H., Fachruddin, H.S., Thaha, Nasharuddin H., Arifin, Johar., & Zainuddin, Abdul Rahman. 1990. *Terjemah Hadis Shahih Bukhari Jilid I, II, III & IV*, Klang: Klang Book Centre, No. 657, "…*Terakhir campurlah dengan Kafur (semacam tumbuh-tumbuhan yang harum juga)"*

Hashim, Mazlan. 2024. *Tumbuh-tumbuhan Ubatan di Negeri Pahang*. Pahang: Perbadanan Perpustakaan Awam Pahang, hlm. 28

Hurt, Avery. 10 April 2021. "Eight Ancient Languages Still Spoken Today." *Discover Magazine*. [Accessed https://www.discovermagazine.com/planet-earth/eight-ancient-languages-still-spoken-today]

IUCN Red List, 'Cinnamomum camphora', *The IUCN Red List of Threatened Species*, 2021, https://www.iucnredlist.org/species/15441072/15441116.

IUCN - The International Union for Conservation of Nature. 2018. The IUCN Red List of Threatened Species,Version 2018-1. [Accessed 2018 : www.iucnredlist.org]

IUCN - The International Union for Conservation of Nature. 2020. The IUCN Red List of Threatened Species, Version 2020-2. [Accessed: www.iucnredlist.org]

IUCN Red List, 'Dryobalanops aromatica', *The IUCN Red List of Threatened Species*, 2017, https://www.iucnredlist.org/species/61998024/173026192.

JPSM (2023), [Accessed 10 June 2023, https://www.forestry.gov.my/images/info-perhutanan/damar/kapur_bm.pdf]

Kamariyah, A.S., Ozek, Temel., Demirci, Bora., Baser, K.Husnu Can. 2012. "Chemical Composition of Leaf and Seed Oils of Dryobalanops aromatica Gaertn. (Dipterocarpaceae)," *ASEAN Journal on Science and Technology for Development*: Vol. 29: No. 2, Article 4, 105-114, hlm. [Accessed 16 June 2023, https://ajstd.ubd.edu.bn/journal/vol29/iss2/4]

Kamus Dewan Edisi Keempat (2024), "Kapur"[Accessed 10 July 2024, https://prpm.dbp.gov.my/cari1?keyword=kapur]

Kartodirjo, S., 1993. *Pengantar Sejarah Indonesia Baru: 1500-1900 Dari Emporium Sampai Imperium*. Vol. 1. Jakarta: PT Gramedia Pustaka Utama.

Kempen Penanaman 100 Juta Pokok 2021-2025, 2023. *Planting Campaign 100 Million Trees 2021-2025: Achievements as of July 11, 2024*. [online] Available at: https://www.100jutapokok.gov.my/statistic.php?menu=85 [Accessed 11 July 2024].

KLCC. 2021. "Info Kapur". *Kajian lapangan*. Taman Menara Berkembar KLCC, Kuala Lumpur.

Lake, Harry W., Kelsall, Harry Joseph., & Ridley, Henry Nicholas. 1894. "The Camphor Tree and Camphor Language of Johore." *Journal of the Straits Branch of the Royal Asiatic Society*, 26, hlm. 35–40. [Accessed 16 June 2023, http://www.jstor.org/stable/41560850

Marwat, Sarfaraz Khan. 2009. *Aromatic Plant Species Mentioned in the Holy Qur'an and Ahadith and Their Ethnomedical Importance*, Pakistan Journal of Nutrition, 8 (9), pp. 1472-1479, [Accessed 23 July 2024, https://scialert.net/fulltext/?doi=pjn.2009.1472.1479]

Maulipaksi, Desliana. 25 March 2017. "Presiden Jokowi dan Mendikbud Resmikan Tugu Titik Nol Peradaban Islam

Nusantara." *Kementerian Pendidikan dan Kebudayaan Indonesia*, [Accessed 11 July 2024, https://www.kemdikbud.go.id/main/blog/2017/03/presiden-jokowi-dan-mendikbud-resmikan-tugu-titik-nol-peradaban-islam-nusantara]

Md Ariffin, Mohd Farhan., Ahmad, Khader., Mohd Yusoff, Mohd Yakub@Zulkifli, Awang, Khalijah., Othman, Rozana., Abd Razzak, Monika@Munirah., Raja Yusof, Raja Ja,milah., Fauzi, Nurulwahidah, & Yakob, Mohd Asmadi. 2015. "Kajian Bibliometrik Terhadap Bahan Penerbitan Berhubung Kapur Barus: Meneliti Potensi Penyelidikan Terbaru." *Jurnal Intelek PJIM&A*, UiTM Perlis., 10(1), hlm. 12-24, [Accessed 22 July 2021, https://ir.uitm.edu.my/id/eprint/35864/1/35864.pdf]

Merriam-Webster (n.d.) *Camphor*. Available at: https://www.merriam-webster.com/dictionary/camphor (Accessed: 10 July 2024).

Mohd Tamizi, S. (2015) *Tumbuhan terpilih menurut perspektif Islam dan sains kesihatan*. Doctoral dissertation. Universiti Malaya. Available at: http://studentsrepo.um.edu.my/5969/1/DISERTASI_SUMAIYAH_2015.pdf (Accessed: 8 March 2025).

Muchsin, Misri A. 2017. "Barus Dalam Sejarah: Kawasan Percaturan Politik, Agama dan Ekonomi Dunia." *ABABIYA*, 19(1), 1-12, hlm. 4, [Accessed 10 April 2020 https://doi.org/10.22373/adabiya.v19i1.7481c]

Mufti Wilayah Persekutuan, 2017. 'Al-Kafi #549: Hukum Membakar Kemenyan.' [online] 22 February. Available at: https://www.muftiwp.gov.my/ms/artikel/al-kafi-li-al-fatawi/996-al-kafi-549-hukum-membakar-kemenyan [Accessed 4 Mar. 2025].

Mufti Wilayah Persekutuan, 2019. 'Al-Kafi #1050: Tatacara Pemandian Jenazah yang Betul.' [online] 15 January. Available at: https://www.muftiwp.gov.my/ms/artikel/al-kafi-li-al-fatawi/3027-al-kafi-1050-tatacara-pemandian-jenazah-yang-betul [Accessed 4 Mar. 2025].

Muhammad, Rusni., & Ahmad, Thuraya. 2020. "Malay Camphor in Arabic Text and Its Latest Trend of Research." *European Proceeding, Innovation and Transformation in Humanities for a Sustainable Tomorrow*, 89, 720-729. Accessed 10 April 2020 https://doi.org/10.15405/epsbs.2020.10.02.67

Nasrallah, N., 2007. *Annals of the Caliphs' Kitchens: Ibn Sayyâr al-Warrâq's Tenth Century Baghdadi Cookbook.* Islamic History and Civilization. Leiden, The Netherlands: Brill.

National Center for Biotechnology Information (2025). *PubChem Compound Summary for D-Borneol.* Retrieved March 9, 2025, from https://pubchem.ncbi.nlm.nih.gov/compound/D-BORNEOL.

National Center for Biotechnology Information (2025). *PubChem Compound Summary for CID 2537, Camphor.* Retrieved March 9, 2025, from https://pubchem.ncbi.nlm.nih.gov/compound/Camphor.

Nurfaezal, Nurfaezal. 2021. "Barus And Camphor In The Early History Of Islam In Nusantara." *Asia-Pacific Journal on Religion and Society*, 5(2), 60-74. [Accessed https://ejournal.uin-suska.ac.id/index.php/asiapacific/article/view/21574 21574-63532-2-PB.pdf

Orwa et al. 2009. "Cinnamomum camphora- Xiangzhang". *Agroforestry Database 4.0.* hlm. 1-5, [Accessed 15 July 2024,https://apps.worldagroforestry.org/treedb2/AFTPDFS/Cinnamomum_camphora.PDF]

Perret, Daniel., Surachman, Heddy. 2015. "Barus Negeri Kamper Sejarah Dari Abad ke-12 Hingga Pertengahan Abad ke-17", *Siri Terjemahan Arkeologi,* No 14, Jakarta: KPG (Kepustakaan Populer Gramedia), Ecole Francaise D'Extreme-Orient, Pusat Arkeologi Nasional. hlm. 602-606.

Pusat Rujukan Persuratan Melayu Dewan Bahasa dan Pustaka (2024). [Accessed, 10 July 2024, https://prpm.dbp.gov.my/cari1?keyword=kapur]

Po, Ronald C. 2020. "The Camphor War of 1868: Anglo-Chinese Relations and Imperial Realignments within East Asia." *The English Historical Review*, Volume 135, Issue 577, December 2020, Pages 1461–1487, [Accessed 4 April 2024 https://doi.org/10.1093/ehr/ceaa313]

Racz, Jozsef., & Ibrahim, Zakaria. 1989. *Role of Plantation in Gene Conservation With Special Reference to Dryobalanops Aromatica Gaertn. F (Kapur),* Kuala Lumpur: Forest Research Institute of Malaysia (FRIM), hlm. 11-12

Ramli, Saipolbarin., Atoh, Nazri., Mohd Zakaria, Zarima., Mohammad Som, Hairullfazli., Abd Rahman, Mohd Zaki. (2018), "Analisis Leksikografi dan Semantik Perkataan al-Kafur dalam Al-Quran." *GEMA Online® Journal of Language Studies,* 267, 18(2). https://doi.org/http://doi.org/10.17576/gema-2018-1802-18 [Accessed 10 May 2020, http://journalarticle.ukm.my/13784/1/25412-76358-1-PB.pdf]

Ramli, Saipolbarin, 'Istilah Tumbuh-Tumbuhan Dalam Al-Quran Al-Karim: Kajian Leksikografi dan Wacana Bahasa Arab'. *Dissertasi Doktoral*, (Fakulti Bahasa dan Linguistik Universiti Malaya, 2015].

Razak, H.A., & Rais, Lathief H. 1980. *Terjemahan Hadis Shahih Muslim*. Kuala Lumpur, Pustaka Al-Husna, No.556, "*…dengan air bercampur Sidir; dan penghabisannya dicampur dengan Kapur."*

Robert, Kennedy Duncan. 1911. "Camphor: An Industry Revolutionized", *Some Chemical Problems of Today*, New York – London: Harper and Brothers, ms. 128-142. Muat turun pada 11 July 2024. [Accessed, https://todayinsci.com/D/Duncan_Robert/DuncanRobert-Camphor.htm]

Sempo, Muhamad Widus, Fauzi, Nuruwahidah., Mohd, Robiatul Adawiyah, & Mohd@Amat. 2019. "Kearifan Tempatan Mengenai Kapur Barus (Cinnamomum Camphora) Menurut Perspektif Islam Dan Budaya Masyarakat Melayu Abad Ke 19M." *Journal of Islamic Social Sciences and Humanities*, Universiti Sains Islam Malaysia, 19(1), 76-90. https://doi.org/10.33102/abqari.vol19.6 [Accessed 23 July 2024]

Ser, C.S. 1981. "Malaysian Timbers - Kapur." *Malaysian Forest Service Trade Leaflet*, (46), Kuala Lumpur: The Malaysian Timber Industry Board, hlm. 1

Skeat, William Walter. 1900. *Malay Magic: Being and Introduction to the Folklore and Popular Religion of the Malay Peninsula(1st ed).* Jeroen Hellingman dan Online Distributed: 2015) 105. [Accessed 15 July 2024,

https://www.gutenberg.org/files/47873/47873-h/47873-h.htm]

Sulaiman, Zaharah., Wan Teh, Wan Hashim., & Nik Abdul Rahman, Nik Hassan Shuhaimi. 2016. *Asal Usul Melayu, Induknya di Benua Sunda*, Perak Darul Ridzuan: Universiti Pendidikan Sultan Idris.

The Quran, 76:5, *Quran My*, "Indeed, the righteous will drink from a cup [of wine] whose mixture is of Kāfūr (cooling camphor):" accessed March 14, 2025, https://quran.my/76/5.

Titley, N.M., 2004. *The Ni'matnama Manuscript of the Sultans of Mandu: The Sultan's Book of Delights.* Routledge Studies in South Asia. London, UK: Routledge.

United Nations, n.d., *Goal 15: Life on Land*, Sustainable Development Goals, viewed 2 February 2025, https://sdgs.un.org/goals/goal15.

van der Meulen, W.J. 1974. Suvar◎advîpa and the Chrysê Cher-

sonêsos. *Indonesia*, *18*, 1–40. https://doi.org/10.2307/3350691, hlm. 23. [Accessed 22 May 2023, https://web.archive.org/web/20180723082243/https://ecommons.cornell.edu/bitstream/handle/1813/53585/INDO_18_0_1107131341_1_40.pdf;jsessionid=A25B29556851A9C27C10FC05CF79F406?sequence=1]

Vincent, A.J. 1961. "A Survey of the Kapur (Dryobalanops aromatica Gaertn.f) Silvicultural Treatment Research Plots in Naturally and Artificially Regenerated Forest Malaya." (36), *Research Pamphlet*, Federation of Malaya: Forest Research Institute, hlm. 29

Wickison. 2023. *Camphor, Cinnamomum camphora, Plants of the Quran*. [video] 20 March. Available at: https://www.youtube.com/watch?v=QuV2RQfpBec [Accessed 8 January 2025].

Weeds of Australia. 2024. Cinnamomum camphora (L.) Nees & Eberm. Accessed 11 July 2024, https://keyserver.lucidcentral.org/weeds/data/media/Html/cinnamomum_camphora.htm.

Wolters, O.W. 1967. *Early Indonesian Commerce: a Study of the Origins of Sriwijaya*, Ithaca, New York: Cornell University Press, 1967, hlm. 184-186

Wostheinrich, Adreas. 1993. "Some Physical Properties of Plantation-Grown Kapur and Meranti Tembaga." *Malaysia-German Forestry Research Project*, FRIM, no. 137, hlm. 5

Yusof, Ibnu. 1995. *Permata Yang Hilang*, Kota Bharu, Kelantan: Al-Kafilah Enterprise, hlm. 171