Jurnal Sains Kesihatan Malaysia 22 (1) 2024: 117 – 123 DOI : http://dx.doi.org/10.17576/JSKM-2024-2201-12

Kertas Asli/Original Articles

The Benefit of Garlic from Islamic Perspective and Malay Practise

NURFITRI ZURANI, NUR AZIRA TUKIRAN*, AND ADRIANA YAZIK

ABSTRACT

Garlic is one of the herbs used as a flavor in food. But it is also known as traditional medicine among the Malay community. However, the scientific observation about the benefits of garlic, especially from the Islamic perspective has not been fully documented. Thus, in this research, we aim to unravel the remedies of garlic and its uniqueness from the Islamic perspective and explain the efficacy and uses of garlic in treating diseases practiced by the Malay community. The findings show that garlic as a traditional medicine has been used since time immemorial and has been proven to bring many good effects in curing diseases such as helping to lower body pressure, reduce the risk of cancer, eliminate bad breath and many more. The findings also show different beliefs, races, and cultures are among the factors in different ways of using garlic as a medicine. However, this study will focus more on Malay practitioners. In this research, descriptive analysis is used and involves many types of text such as Al-Qur'an, Hadith Nabawi, and selected Malay manuscripts on Malay traditional medicine to study the remedies of garlic and its practice among Malay practitioners. This study is important to increase the understanding and knowledge about the benefit of garlic in medicine as a cure rather than just using it as a flavor in food.

Keywords: Garlic, benefit, traditional medicine, Islamic perspective, Malay community.

ABSTRAK

Bawang putih merupakan salah satu herba yang digunakan sebagai perisa dalam makanan. Tetapi, ia juga dikenali sebagai ubat tradisional dalam kalangan masyarakat Melayu. Walau bagaimanapun, pemerhatian saintifik mengenai manfaat bawang putih, terutamanya dari perspektif Islam, belum sepenuhnya didokumentasikan. Oleh itu, dalam kajian ini, kami bertujuan untuk mengungkapkan rawatan bawang putih dan keunikan daripada perspektif Islam, serta menjelaskan keberkesanan dan kegunaan bawang putih dalam merawat penyakit yang diamalkan oleh masyarakat Melayu. Penemuan menunjukkan bahawa penggunaan bawang putih sebagai ubat tradisional telah digunakan sejak zaman berabad lamanya dan terbukti memberikan banyak kesan baik dalam menyembuhkan penyakit seperti membantu menurunkan tekanan darah, mengurangkan risiko kanser, menghilangkan nafas berbau, dan banyak lagi. Penemuan juga menunjukkan kepercayaan, bangsa, dan budaya yang berbeza adalah antara faktor-faktor dalam cara yang berbeza untuk menggunakan bawang putih sebagai ubat. Walau bagaimanapun, kajian ini memberi tumpuan lebih kepada praktisi Melayu. Dalam penyelidikan ini, analisis deskriptif digunakan dan melibatkan pelbagai jenis teks seperti Al-Qur'an, Hadis Nabawi, dan manuskrip Melayu terpilih mengenai ubat tradisional Melayu untuk mengkaji rawatan bawang putih dalam perubatan sebagai penyembuh bukan hanya digunakan sebagai perisa dalam matan digunakan sebagai perisa dalam matanan.

Kata kunci: Bawang putih, manfaat, ubat tradisional, perspektif Islam, masyarakat Melayu.

INTRODUCTION

Garlic or its scientific name "Allium Sativum" is a plant that belongs to the onion family of Alliaceae and the genus Allium has been widely used by humans for thousands of years (Duttaroy 2018; Sharif et al. 2018; Ogbuewu et al. 2019). This plant is believed to have originated in Central Asian countries such as China and Japan and later spread to all corners of the world, including Malaysia by traders from Arabia and China. Not to mention, in 2020, China was the largest producer of garlic in the world with more than 70% of world garlic production (Sambit 2020). Apart from being known as a seasoning and aromatherapy element in cooking, garlic is also used as a traditional medicine because it has many nutrients that can treat various diseases. This is because garlic possesses a variety of bioactive compounds such as organosulfur compounds, comprising of allicin, allixin, diallyl disulfide, diallyl trisulfide, S-allylcysteine, S-allyl-mercaptocysteine, allixin, 1-propenyl allyl thiosulfonate, (E, Z)- 4,5,9-trithiadodeca-1,6,11-triene 9-oxide, allyl methyl thiosulfonate and many more (Tran et al. 2020). Through the years, various researches have been done to explore and understand the wide array of benefits of this plant. For the record, in ancient China, this plant was used to help treat respiratory ailments and digestive issues, as well as to fight infections. Not only that, just like ancient in India, it has also been prescribed for fatigue, impotency, headaches, and insomnia. In some medical books, garlic also has been described as an excellent cure for plague and smallpox. By consuming garlic, it also helps to enhance the immune system and acts as a chemopreventive, antioxidant, and anti-microbial agent (Ali 2018). Garlic is also available commercially in the forms of pills, powder and oil that is used for some therapeutic purposes, including lowering blood pressure and improving lipid profile leading to improvement of cardiovascular (Mostafa El Gamal & Mostafa El Gazzar 2017). Although there are many studies on the nutrition and benefits of garlic that have been conducted before, this research paper brings different aspects from previous ones. This study dismantles the herbal properties of garlic as a cure for all kinds of diseases not just from the scientific study, but also through an Islamic perspective that is guided by Qur'an and Hadith. Muslims turn to Quran and Sunnah for guidance in all areas of life, including health and medical matters. Hence the power of the Quran reigns supreme in healing and curing, be it physical illnesses or the illness of the soul. Allah says in the Quran, "And We send down of the Qur'an that which is healing and mercy for the believers, but it only increases the wrongdoers

in loss", Al-Isra' 17:82. According to the analysis of the previous study, there are 19 types of plants mentioned in the Qur'an as a cure for diseases, including garlic (Sheikh & Dixit, 2015). However, those Qur'anic verses were not informed specifically about the diseases or the cure in terms of its meaning. Thus, it is important to revise the verses as to ensure the qur'anic verses were applied in the right way to maintain the purity of Qur'an.

According to the Malay community in Malaysia, garlic's credibility as a medicinal herb has been recognized long ago by the old folks. The folks have used this plant in almost all their traditional cuisines (Abdul Raji et al. 2017), as it is believed to help prevent heart problems, and cancer and to reduce high blood pressure (Banerjee & Maulik 2002). However, the benefits of using garlic as a traditional medicine were not initially declared by scientists or doctors, but it was known through the practice of earlier people. The old folks' generations who believe in the kinds of garlic healing powers have handed their knowledge down to succeeding generations. This study shows that different beliefs, races, and cultures are among the factors in different ways of using garlic as a medicine. The Malay practitioner used to chop or cook the garlic before using it as medicine (Mohamad Nasrin et al. 2016), while the Chinese prefer to eat raw garlic without cooking it because they believe it is better (Myneni et al. 2016). This paper shows the benefits and usability of garlic in treating and curing various diseases from Islamic and scientific perspectives, as well as being able to increase public awareness among society to appreciate the traditional medical knowledge that has been discovered by the old folks and the way they practice.

METHODOLOGY

In this research, a descriptive analysis methodology was employed to explore the remedies of garlic and its unique applications within the traditional medicine practices of the Malay community, with a specific focus on practitioners adhering to Islamic teachings. The study draws on various textual sources, including Al-Qur'an, Hadith Nabawi, and selected Malay manuscripts on traditional medicine. Primary data was extracted from these sources to discern the medicinal properties of garlic and its recommended applications within an Islamic framework. Additionally, secondary data was collected through a review of existing literature, emphasizing scientific studies related to garlic's health benefits, particularly in areas such as blood pressure regulation and cancer prevention.

GARLIC FROM ISLAMIC PERSPECTIVE

GARLIC IN AL-QUR'AN AL-KARIM

The word garlic is mentioned only once in the glorious Qur'an in surah Al-Baqarah verse 61:

'...And [recall] when you said, "O Moses, we can never endure one [kind of] food. So, call upon your Lord to bring forth for us from the earth its green herbs and its cucumbers and its garlic and its lentils and its onions." [Moses] said, "Would you exchange what is better for what is less? Go into [any] settlement and indeed, you will have what you have asked' (Qur'an, 2:61)

According to Zaufishan (2012), in this verse, God reprimanded the Children of Israel for asking to exchange one type of food for something considered inferior. The lesson was to enjoy and be creative with the healthy and natural produce we have. There are also disagreements about the word 'Fūm' (الفوم) among Tafsir scholars. The classical Qur'an scholar Ibn Abbas said that the Arabic word Fūm translated as garlic while Abu Malik and Hashim said it means "al-hinthaatu" (wheat). According to the qiraat of Ibn Mas'ud "wa fumiha" read with "wa thawmiha" (Ibn Kathir 2000).

GARLIC IN HADITH NABAWI

Garlic is mentioned by Rasulullah PBUH and his Companions in several hadiths. Among the popular hadith, there is the hadith regarding the prohibition of entering the mosque for people who eat garlic. Narrated Ibn `Umar:

During the holy battle of Khaibar, the Prophet Muhammad PBUH said: Whoever eats from this tree - that is garlic - then should not enter our mosque [Narrated by al-Bukhari (855) and Muslim (564)].

Many people misunderstand the purpose of the hadith above. Some have concluded that the Prophet Muhammad PBUH directly forbade his people to eat and use garlic. This response is incorrect and completely misleading. According to Zulkifli (nd), the purpose of the hadith was to avoid interference and provide comfort for the congregation to worship in the mosque. This is because garlic produces an unpleasant odor.

In another hadith, Jabir reported: The Messenger of Allah PBUH said: He who eats garlic or onion should remain away from us or our mosque and stay in his house. A kettle was brought to him which had (cooked) vegetables in it, He smelt (offensive) the odor in it. On asking he was informed of the vegetables (cooked in it). He said: Take it to such and such Companion. When he saw it, he also disliked eating it (upon this). Rasulullah PBUH said: You may eat it, for I converse who one with whom you do not converse (Angles). This hadith describes and proves that the Prophet Muhammad PBUH suggested consuming garlic because he gave back the food containing garlic to his companion instead of throwing it away. According to Lanny (2012) in her book, '*Terapi Bawang Putih untuk Kesehatan'*, Garlic was frequently used by the Arabs in the time of the Prophet Muhammad PBUH as an herb to cure various diseases, especially for children when summer and winter arrive.

BENEFIT OF GARLIC

From time primeval, garlic has been known for its many nutrients that can treat various diseases. Not only in the Malay community, but people around the world consume garlic every day. Despite of commonly utilized as seasoning, flavoring, culinary and herbal remedies, garlic is found to be able to treat and cure diseases because it has good bioactive substances such as essential oil which acts as an antibacterial and antiseptic because of its function can slow down the formation of bacterial cell membranes (Iyam 2003; Fakhar et al. 2019; Oboh et al. 2019). Moreover, garlic contains antioxidant, anti-inflammatory, and lipidlowering properties that help to in disease-preventing effects such as cancer, cardiovascular, blood pressure, diabetes and metabolic disorders (Ansary et al. 2020). Plus, allicin is an active substance that acts as an antibiotic and can eliminate germs. Scordinin is also able to increase stamina and body development.

EFFECTS OF GARLIC ON PREVENT THE CARDIOVASCULAR DISEASE

Cardiovascular disease occurs when the arteries that carry oxygenated blood and nutrients throughout the body are narrow due to the accumulation of fatty plaques (atherosclerosis) over a long period (Aniza 2019). When the arterial ducts are narrow and clogged, the blood that can reach the heart is reduced or completely blocked result in heart disease (Sukma et al. 2018). However, many scientific studies have been conducted before and proven that the compound contained in garlic can treat heart disease. According to Rahman (2006) as cited by Bayan et al. (2014), *in vitro* experiments, the garlic administration suppressed Low-Density Lipoprotein (LDL) oxidation and increased High-Density Lipoprotein (HDL), which function as protective mechanisms of the beneficial effects of garlic in cardiovascular disease. Not only that, dithiin and ajoene found in garlic oil can reduce the speed of blood clotting because they are known as an anticoagulant and can help reduce blood pressure. This also can directly reduce the risk of stroke and cardiovascular disease (Sukma et al. 2018). Generally, garlic functions in reducing serum lipids and blood pressure levels, inhibition of platelet aggregation, and increasing fibrinolytic antioxidant activity (Wang et al. 2013).

EFFECTS OF GARLIC ON REDUCE THE RISKS OF CANCER

Every cell in the human body is tightly regulated concerning its growth, interaction with other cells and even its life span. Cancer occurs when a type of cell has lost these normal control mechanisms and grows in a way that the body cannot regulate (Zulaiha 2012).

In this modern era, cancer is most likely treated using the modern treatment. Not many of us know that garlic can also help treat this disease in the long run (Jeanna 2015). This traditional method has been found by several researchers before. They found that consuming raw garlic every day can treat this disease. In 1990, the U.S. National Cancer Institute also concluded that garlic may be the most potent food having cancer preventive properties because has a variety of anti-tumor effects, including tumour cell growth inhibition and chemo preventive effects (Bayan et al. 2014). Moreover, garlic functions to target the kinasesignaling pathway to inhibit the proliferation and growth of cancer (Yagdi Efe et al. 2019). The major organosulfur compounds in crushed garlic, namely allicin, diallyl sulfide (DAS), diallyl disulfide (DADS), diallyl trisulfide (DATS), s-allyl-cysteine, and ajoene are all reported to be anticancer agents (Kaschula et al. 2010). These enzymes are believed to slow down the growth of cancer cells, protect DNA from activated carcinogens, scavenging of free radicals, and contribute to cell cancer destruction.

EFFECTS ON INFECTIOUS DISEASE

Infectious diseases such as colds and fevers are easily spread especially among children because they have a low metabolic rate. So, apart from relying on medicines from hospitals such as pills and capsules, we are also able to make herbal medicines from garlic at home. According to Michael (2009), modern herbalists recommend garlic for colds, coughs, fever, flu, bronchitis, and ringworms. This is because, the ingredients contained in garlic can act as an antibiotic, antibacterial, and antiviral.

This nutrient was proven when garlic was used as an antibacterial and successfully treated infected wounds and amoebic dysentery during World War 1. In addition, alliin and alliinase compounds that are mixed from crushed, chopped, or chewed garlic can produce allicin which in turn becomes a powerful antibiotic and can curb fever, cough, and cold. Other than that, research proving garlic as an antiviral have been conducted by British scientist by giving volunteers either a placebo or a commercial garlic supplement that is rich in allicin. The results turned out well, after 12 weeks the garlic group had significantly fewer colds, and the cold that they developed resolved quickly (Michael 2009).

THE PRACTISE OF GARLIC IN MALAY TRADITIONAL CULTURE

MALAY TRADITIONAL MEDICINE

Since immemorial times, use of garlic as medicine in traditional Malay society is well known. Due to the lack of medical facilities such as clinics and hospitals at that time, the old folks liked to use plants as medicine to treat all kinds of diseases. The location of their settlement close to natural resources makes it easier for them to get the plants. Thus, there are many tips, rules and teachings of traditional medical knowledge from their experiences that have been found written in the medical Malay manuscripts as a reference for future generations.

ISLAMIC INFLUENCE IN TRADITIONAL MALAY MEDICINE

Before the advent of Islam to Malaya, Malay medicine methods used shamans and practitioners who practiced incantations and spells in every treatment they did. After the advent of Islam brought by foreign traders to this land, there are significant changes happened to the community there. Among the evidence of the influence of Islam is that the Arabic language began to be used and gained attention among Muslims in this country. There is also an old Malay manuscript written in Jawi letters. An example can be seen in the manuscript of medicines written by Haji Mustafa Bin Haji Ismail Pontianak where the whole of his text is written using Jawi letters (Faisal @ Ahmad Faisal & Nurul Wahidah 2012). In terms of medicine, every treatment performed by a Malay practitioner has recited the holy verses of the Qur'an and Zikr that are practiced and taught by the Prophet Muhammad PBUH.

TRADITIONAL PRACTISE OF GARLIC BY MALAY PRACTITIONER

There are various methods used by the Malay practitioner in using garlic as a folk remedy. Usually, they will use raw garlic because it is believed to have more nutrients and is more effective. However, some also boil and roast the garlic before use. Some mix garlic and other herbal ingredients to get a better effect such as honey, turmeric, cumin, onion, and more.

For example, based on the Kitab Tib MS 174, which was the folks use garlic to treat bad breath. Who would have thought that garlic that has a bad smell can treat bad breath? Bad breath occurs when bacteria present on the teeth and debris on the tongue (Allesandro 2019). The method used is crushing the garlic and onion until fine. Then, mix it with honey. Practice eating it every morning before having breakfast. In addition, garlic also can treat infections in the ear. Garlic oil that is dripped directly into the ear is an effective traditional medicine ingredient (Siti Fatimah & Yusmilayati 2019). Not only that, based on the Doa, Azimat, Ubat-Ubatan Ketika Takbir Gempa MSS 4168, garlic was also used by the Malay old folks to treat sinus disease. The tip is to mix garlic, turmeric, and bonglai (Oroxylum Indicum) together, then mash until fine. After that, squeeze the lemon on the ingredients before applying it to the face (Malki 2019).

However, there is some confusion in using garlic. Some say that by cooked garlic will lower and eliminate the potential of garlic as medicine. But it turns out that this assumption is a misunderstanding and not true. According to Iyam (2003), allicin in garlic will not disappear. It just can't stand the heat. As well as the enzyme alliinase present in garlic, it will not be completely damaged even if it is cooked. It is also supported in hadith narrated by Mu'awiyah ibn Qurrah:

The Prophet Muhammad PBUH forbade these two plants (i.e. garlic and onions), and he said: He who eats them should not come near our mosque. If it is necessary to eat them, make them dead by cooking, that is, onions and garlic (Sunan Abu Dawud 3827).

CONCLUSION

To conclude, other than the use garlic as a seasoning and flavor in cooking, it is also found that garlic has many benefits as medicine and acts as an antibiotic, antiviral, and antibacterial. The existence of Malay traditional medicine manuscripts and scientific studies are strong evidence to confirm this subject. Furthermore, this study found that there is no objection from the Islamic perspective to using garlic. The Prophet Muhammad PBUH, in fact, allowed and encouraged by in use it as a medicine that can help treat disease. From this study, it is believed that garlic can also treat chronic diseases such as cardiovascular disease, and cancer. However, this study is only focused on the methods of how the Malay community used garlic as traditional medicine and does not entirely explain how they tested the effectiveness of garlic during their time. Thus, a detailed study of Malay old manuscripts is essential to reveal more secrets behind the virtues of this garlic.

ACKNOWLEDGMENT

The authors would like to thank the International Institute for Halal Research and Training (INHART), International Islamic University Malaysia (IIUM) for support of the conduct of this research.

REFERENCE

- Abdul Raji, M. N., Ab Karim, S., Che Ishak, F. A.& Arshad, M. M. 2017. Past and present practices of the Malay food heritage and culture in Malaysia. *Journal of Ethnic Foods* 4: 221-231.
- Ali, H. M. 2018. Mitigative role of garlic and vitamin E against cytotoxic, genotoxic, and apoptotic effects of lead acetate and mercury chloride on WI-38 cells. *Pharmacological Reports* 70 (4): 804–811.
- Allesandro, V. 2019. Bad breath: What causes it and what to do about it. Available at: https://www.health. harvard.edu/blog/bad-breath-what-causes-it-and what-todo -about-it-2019012115803 (Accessed: 26 Dec 2023).
- Aniza, Z. 2019. Arteri Sempit, Keras. My Metro: Malaysia. Available at: https://www.hmetro. com.my/sihat/2019/09/499137/arteri-sempit-keras (Accessed: 26 Dec 2023).
- Ansary, J., Forbes-Hernández, T. Y., Gil, E., Cianciosi, D., Zhang, J., Elexpuru-Zabaleta, M., Simal-Gandara, J., Giampieri, F. & Battino, M. 2020. Potential Health Benefit of Garlic Based on Human Intervention Studies: A Brief Overview. *Antioxidants* 9 (7): 1–35.
- Banerjee, S. K. & Maulik, A. K. 2002. Effect of garlic on cardiovascular disorders: a review. *Nutrition Journal* 1:4.
- Bayan, L., Koulivand, P. H. & Gorji, A. 2014. Garlic: A Review of Potential Therapeutic Effects. Avicenna Journal of Phytomedicine 4(1): 1-14.
- Duttaroy, A. K. 2018. Effects of Garlic, Onion, Ginger, and Turmeric on Platelet Function. In Duttaroy, A. K. (Eds.), Nutraceuticals and Human Blood Platelet Function, pp. 69–81. John Wiley & Sons, Ltd.

- Faisal @ Ahmad Faisal, A. H. & Nurul Wahidah, B. F. 2012. Malay Traditional Medicine: Kitab Tibb Pontianak. *Jurnal Al-Tamaddun* 7(1): 149-162.
- Fakhar, F., Biabani, A., Zarei, M. & Moghadam, A. N. 2019. Effects of Cultivar and Planting Spacing on Yield and Yield Components of Garlic (*Allium Sativum L.*). *Italian Journal of Agronomy* 14 (2): 108–13.
- Ibn Kathir, I. 2000. Tafsir Al-Qur'an Al- 'Azim. Beirut: Dar Ihya' al-Turathal-'Arabiyy.
- Iyam, S.S. & Tajudin, S. 2003. Khasiat & Manfaat Bawang Putih: Raja Antibiotic Alami. Jakarta: Agromedia Pustaka.
- Jeanna, S. 2015. Antibacterial Activity of Garlic (*Allium* sativum 1.). J Majority 4(2): 30-39.
- Kaschula, C. H., Hunter, R. & Parker, M. I. 2010. Garlic-derived anticancer agents: Structure and biological activity of ajoene. *International Union of Biochemistry and Molecular Biology, Inc.* 36(1): 78-85.
- Lanny, L. 2012. Terapi Bawang Putih untuk Kesehatan. Jakarta: PT Gramedia.
- Malki, A. N. 2019. Praktek Terapi Pengobatan Tradisional Melayu: Sebuah Sketsa Awal. *Temali: Jurnal Pembangunan Sosial* 2(1): 99-126.
- Michael, C. 2009. The New Healing Herbs (3rd Ed). United States: Rodale Inc.
- Mohamad Nasrin, N., Malki Ahmad, N., Muhammad Widus, S., Mualimin, Mochammad, S., Azmi Mohd, R., Tanty Shahrumi, A. R., Hilmi, L., Anuar, K., Mohd Dzulkhairi, M. R., Asmalita, S., Muslimah, I. & Khairun Nain Bin Nor, A. 2016. Malay Medicinal Practices and Prophetic Foods for Treating the Four Types of Illnesses Most Commonly Found in the Bottom Billion Population of the World: A Systematic Review of Malay Manuscripts Found in Malaysia. Advanced Science Letters 22(9): 2152-2155.
- Mostafa El Gamal, E. K. M. & Mostafa El Gazzar, U. B. 2017. Biochemical Therapeutic Benefits of Garlic on Atherosclerosis Induced by Soybean in Rats. *Biochemistry & Molecular Biology Journal* 3(3): 1–6.
- Myneni, A. A., Chang, S. C., Niu, R., Liu, L., Swanson, M. K., Li, J., Su, J., Giovino, G. A. Yu, S., Zhang, Z. F. & Mu, L. 2016. Raw garlic consumption and lung cancer in a Chinese population. *Cancer Epidemiol Biomarkers Prev.* 25(4): 624–633.
- Oboh, G., Ademiluyi, A. O., Agunloye, O. M., Ademosun, A. O. & Ogunsakin, B. G. 2019. Inhibitory Effect of Garlic, Purple Onion, and White Onion on Key Enzymes Linked with Type 2 Diabetes and Hypertension. *Journal of Dietary Supplements* 16 (1): 105–18.

- Ogbuewu, I. P., Okoro, V. M., Mbajiorgu, E. F. & Mbajiorgu, C. A. 2019. Beneficial Effects of Garlic in Livestock and Poultry Nutrition: A Review. *Agricultural Research* 8 (4): 411–26.
- Sambit, K. 2020. Garlic Market 2020: Share Value Analysis of Top Key Players, Global S i z e , Consumption Analysis, Trends Forecast to 2024. Bulletin Line, 2020. Available at: https://bulletinline. com/2020/09/06/garlic-market-2020-sharevalue-analysis oftop-key-players-global-sizeconsumption-analysis-trends-forecast-to-2024 industryresearch-co/ (Accessed: 11 October 2020).
- Sharif, M. K., Ejaz, R. & Pasha, I. 2018. Chapter 11 Nutritional and Therapeutic Potential of Spices. In Grumezescu, A. M. & Holban, A. M. (Eds.), Therapeutic, Probiotic, and Unconventional Foods. (pp. 181-199). Elsevier Inc.
- Sheikh, D. K. & Dixit, A. K. 2015. Plants in the holy Quran: A look. World Journal of Pharmacy and Pharmaceutical Sciences 4(8): 715-738.
- Siti Fatimah, A.A. & Yusmilayati, Y. 2019. Herbal Remedies in the Malay Tibb. *Akademika 89 (Isu Khas/Special Issue)*: 151-162.
- Sukma, D. R., Berawi, K. N. & Wahyudo, R. 2018. Pengaruh Pemberian Bawang Putih (*Allium Sativum*) terhadap Penyakit Dislipidemia. *Medula* 8(1): 49-53.
- Tran, G-B., Pham, T-V. and Trinh, N-N. 2020. Black Garlic and Its Therapeutic Benefits. IntechOpen. doi: 10.5772/intechopen.85042
- Wang, J., Xiong, X. & Feng, B. 2013. Effect of Crataegus Usage in Cardiovascular Disease Prevention: An Evidence-Based Approach. Evidence Based Complementary and Alternative Medicine 2013:149363.
- Yagdi Efe, E., Dicato, M. and Diederich, M. 2019. Modulation of Hydrogen Sulfide Gasotransmitter Limits the Proven Benefits of Garlic. *Phytochemistry Reviews* 18 (4): 1167–1180.
- Zaufishan. 2012. Islam and Garlic (Thūm). Available at: https: //www.greenprophet.com/2012/11/plantsquran-garlic/ (Accessed: 21 Dec 2023).
- Zulaiha, M. 2012. Cancer. Ministry of Health: Malaysia. Available at: http:// www.myhealth. gov.my/en/cancer/ (Accessed: 22 Dec 2023).
- Zulkifli, M. A. B. (nd). Covid-19 Fiqh: Q & A Revised Edition. Minister's Office in The Prime Minister's Department (Religious Affairs).

Nurfitri Zurani

Department of Fiqh and Usul Fiqh, Abdul Hamid Abu Sulayman Kulliyyah of Islamic Revealed Knowledge and Human Sciences (AHAS KIRKHS), International Islamic University Malaysia (IIUM), Jalan Gombak, 53100, Selangor, Malaysia. Nur Azira Tukiran International Institute for Halal Research and Training (INHART), Level 3, KICT Building, International Islamic University Malaysia (IIUM), Jalan Gombak, 53100, Selangor, Malaysia.

Adriana Yazik Faculty of Bioresources and Food Industry, Universiti Sultan Zainal Abidin (UniSZA), Besut Campus, 22200 Besut, Terengganu, Malaysia.

Corresponding author: Nur Azira Tukiran Email address: aziratukiran@iium.edu.my