Gunung Djati Conference Series, Volume 5 (2021)
Conference on Chemistry and Hadith Studies
ISSN: 2774-6585
Website: https://conferences.uinsgd.ac.id/index.php/gdcs

Takhrij and Syarah Hadith of Chemistry: Halalness and The Benefits of Garlic

Siti Nur Aliyah[1], Cermi City Mulyanti[2], Nurhidayati Amaliah[3], Riska Puspita Sari[4], Irma Riyani[5]

[1,3,4]Department of Chemistry, Faculty of Science and Technology, UIN Sunan Gunung Djati Bandung
[2]Department of Hadith Science, Faculty of Usuluddin, UIN Sunan Gunung Djati Bandung
[5]Faculty of Usuluddin, UIN Sunan Gunung Djati Bandung

snaliyah23@gmail.com

Abstract

The purpose of this research is to discuss teha hadith of the Prophet about garlic. This research method is qualitative through the approach of takhrij and syarah hadith with chemical analysis. The result and discussion of this study is the health benefits of garlic according to a scientific perspective. The conclusion of this research is takhrij and syarah hadith of the Prophet about the permissibility of eating garlic which is also beneficial for health from a scientific perspective.

Keywords : Chemistry, Garlic, Hadith, Syarah, Takhrij

Introduction

Garlic is no stranger to Indonesian society. Each region in Indonesia calls garlic by a different name. Garlic is usually used as a food flavoring spice. The earliest use of garlic is thought to have come from Central Asia. This is based on the findings of a medical record that is about 5000 years ago (3000 BC) (Hernawan & Setyawan, 2003). Garlic (Allium sativum) is the name of the plant from the genus Allium as well as the name of the tuber produced. Garlic is classified as a multi-layered herb or clove plant. Garlic grows emotionally and stands upright to a height of 30-75 cm, has a pseudo-stem formed from leaf midribs (Untari, 2010). Garlic contains 65% water, 28% carbohydrates (mainly fructose), 2.3% organosulfur (mainly allinase and ajoene), 2% protein, 1.2% free amino acids (mainly arginine) (Lisiswanti & Haryanto, 2017). Referring to the explanation, Garlic has many ingredients that are beneficial to the health of the body. One of the well-known chemicals in garlic is the chemical Alisin (C6H10OS2). Allicin (C6H10OS2) is an organosulfur compound obtained from garlic and used as a defense mechanism against pests. When fresh garlic is chopped, the

ISSN: 2774-6585
Website: https://conferences.uinsgd.ac.id/index.php/gdcs

alliinase enzyme converts the alliin to alisin. The form of allicin is very unstable and changes very quickly to sulfur compounds such as diallyl disulfide (C6H10S2). This compound makes Allicin an antibacterial, anti-fungal and antiviral agent.

As for the hadith of the Prophet Muhammad. regarding garlic in the Muslim musnad Number 3827:

حَدَّثَنَا مُحَمَّدُ بْنُ الْمُثَنَّى وَابْنُ بَشَّارٍ وَاللَّفْظُ لِابْنِ الْمُثَنَّى قَالَا حَدَّثَنَا مُحَمَّدُ بْنُ جَعْفَرٍ حَدَّثَنَا شُعْبَةُ عَنْ سِمَاكِ بْنِ حَرْبٍ عَنْ جَابِرِ بْنِ سَمُرَةَ عَنْ أَبِي أَيُّوبَ الْأَنْصَارِيِّ قَالَ كَانَ رَسُولُ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ إِذَا أُتِيَ بِطَعَامٍ أَكَلَ مِنْهُ وَبَعَثَ بِفَضْلِهِ إِلَيَّ وَإِنَّهُ بَعَثَ إِلَيَّ يَوْمًا بِفَضْلَةٍ لَمْ يَأْكُلْ مِنْهَا لِأَنَّ فِيهَا ثُومًا فَسَأَلْتُهُ أَحَرَامٌ هُوَ قَالَ لَا وَلَكِنِّي أَكْرَهُهُ مِنْ أَجْلِ رِيحِهِ قَالَ فَإِنِّي أَكْرَهُ مَا كَرِهْتَ و حَدَّثَنَا مُحَمَّدُ بْنُ الْمُثَنَّى حَدَّثَنَا يَحْيَى بْنُ سَعِيدٍ عَنْ شُعْبَةَ فِي هَذَا الْإِسْنَادِ

Having told us Muhammad bin Al-Mutsanna and Ibn Basyar lafazh this belongs to Ibn Al-Mutsanna both said; Has told us Muhammad bin Ja'far, Has told us Syu'bah from Simak bin Harb from Jabir bin Samurah from Abu Ayyub Al-Ansari he said; The Messenger of Allah -peace and prayer of Allah be upon him- when someone gave him food, he ate it and gave some to me. One day he gave me food which he did not eat because it had garlic in it. Then I asked; 'Is garlic haram?' He replied: 'No! But I don't like it because of the smell. ' Abu Ayub said; 'Then I don't like what you don't like either.' And has told us Muhammad bin Al-Mutsanna, Has told us Yahya bin Sa'id from Syu'bah about this sanad (HR.Muslim).

Based on the explanation above, a research formula was prepared, namely the formulation of the problem, research questions, and research objectives (Darmalaksana, 2020a). The formulation of this problem is that there is a hadith of the Prophet SAW. about garlic. The research question is how the hadith of the Prophet about garlic.

Research methods

This research method is qualitative through literature and field studies (Darmalaksana, 2020b). While the approach applied is takhrij and syarah hadith (Soetari, 2015). The interpretation in this study used conventional chemical analysis methods or analytical (Darsati, 2007).

In general, there are two stages of research on hadith, namely takhrij and sharah.Takhrij is the process of removing hadith from the book of hadith to examine its validity, while syarah is an explanation of hadith texts with a certain analysis (Soetari, 2015). Chemistry is a science that studies the structure, properties, and changes in matter and the energy that accompanies changes in matter (Penelitian, 2009).

Gunung Djati Conference Series, Volume 5 (2021)
Conference on Chemistry and Hadith Studies
ISSN: 2774-6585
Website: https://conferences.uinsgd.ac.id/index.php/gdcs

Results and Discussion

At first, a search was carried out through the hadith application regarding the keyword "garlic" until the hadith was found in the Muslim Musnad book Number 3827, as previously disclosed.

Table 1. List of Rawi Sanad

No.	Rawi Sanad	Bird/Death		Country	Kuniyah	Ulama's Comments		Circles
		B	D			-	+	
1	Khalid bin Zaid bin Kulaib		50 H	Madinah	Abu Ayyub		Friend	friend
2	Jabir bin Samrah bin Janadah		74 H	Kufah	Abu 'Abdullah			Friend
3	Simak bin Harb bin Aus		123 H		Abu Al Mughirah	- There is something in the hadith -A lot wrong -Bad memorization	-Tsiqah -Shaduuq tsiqah	Tabi'in middle circle
4	Syu'bah bin Al Hajjaj bin Al Warad		160 H.	Bashrah	Abu Bistham		-Tsiqah tsabat -Tsiqah ma'mun -No one has a better hadith than him -Amirul mukminin fil hadis -Tsiqoh hafidz -Tsabat hujjah	Tabi'ut Tabi'in the elderly
5	Muhammad bin Ja'far		193 H.	Bashrah	Abu 'Abdullah		-Tsiqah - Mentioned in 'ats tsiqaat -Shaduuq	Tabi'ut Tabi'in middle circle
6	Muhammad bin Al Mutsannaa bin 'Ubaid		252 H.	Bashrah	Abu Musa		-Tsiqah -Shalihul hadis -Shaduuq - Mentione	Tabi'ul Atba' the elderly

ISSN: 2774-6585
Website: https://conferences.uinsgd.ac.id/index.php/gdcs

No.	Rawi Sanad	Bird/Death		Country	Kuniyah	Ulama's Comments		Circles
		B	D			-	+	
							d in 'ats tsiqaat -Tsiqah masyhur -Minal huffaad -Tsiqah Tsabat	
7	Imam Muslim	204 H	262 H	Naisabur			Imam fi al-hadis	Mudawin

Table 1 is a list of narrators and chain of hadiths being studied.Rawi is the narrator of hadith while sanad is the chain of narrators from friends to mudawin, namely scholars who record hadiths in the hadith book (Soetari, 1994). According to the science of hadith, the requirement for a valid hadith is that the narrator must be positive according to the comments of scholars.If there is a commentary from a scholar who gives a negative assessment to one of the narrators in the sanad lane, then the hadith is a dhaif hadith (Darmalaksana, 2020d). The sahih hadith are strong traditions while the dhaif traditions are weak traditions (Soetari, 1994). Requirements for authentic hadith must also be continued.If the chain of hadith is broken, then the hadith is included in the dhaif hadith. The proof of a continuous chain is the meeting between the teacher and the student.If there is no objective evidence, then the meeting between teacher and student can be seen from birth and death.If there is no data on births and deaths, it is predicted that the average age of scholars is around 70-90 years.The meeting of teachers and students can also be seen from the life journey of the narrator.If teachers and students are in the same place, it is predicted that teachers and students will meet (Darmalaksana, 2020d).

The quality of this hadith is hasan.Because from the side of the narrators there are comments from scholars who give negative assessments, namely Listen to bin Harb bin Aus "In the hadith there is something, a lot of mistakes, bad memorization." Meanwhile, from the side of the sanad, it is estimated that they are connected from friends to mudawin.Basically the science of hadith has other parameters in providing reinforcement to the hadith.Among other things, hadiths are called mut Worries in a very popular sense if the hadiths being researched are scattered in several hadith books (Soetari, 2015). The distribution of this hadith acts as martyr and mutabi.Shahid is another similar hadith while mutabi is another sanad (Darmalaksana, 2020d). The rest, as far as hadith is a virtue of Islamic practice, it can be a proof even though its status is weak (Darmalaksana et al., 2017).

ISSN: 2774-6585
Website: https://conferences.uinsgd.ac.id/index.php/gdcs

The scholars have provided syarah, namely an explanation of the content and intent of the hadith (Darmalaksana, 2020c). This hadith can also be explained according to the field of chemistry.The chemical content of Allium sativum L or garlic which has biological activity and is useful in medicine is an organosulfur compound.The content of these organosulfur compounds includes: (A) S-ak(en)-il-L-cysteine sulfoxide compounds (ACSOs), for example alliin and -glutamylcysteine, are the most abundant compounds in garlic.Alliin is responsible for the smell and taste of garlic, a sulfur-containing amino acid, and is used as a precursor to allicin.Alliin and other sulfoxide compounds, except cycloalliin, are immediately converted to thiosulfinate compounds, such as allicin, with the help of the enzyme alliinase when fresh garlic is chopped, chopped, or chewed directly.Alliin has potential as an antibacterial.

a. Volatile sulfur compounds such as allicin.Allicin is a compound that is less stable, with the influence of hot water, air oxygen, and an alkaline environment, it is easily decomposed into other sulfur compounds such as diallyl sulfide.
b. Fat-soluble sulfur compounds such as dially sulfide (DAS) and dially disulfide (DADS).
c. Non-volatile water-soluble sulfur compounds such as S-allyl cysteine (SAC), which are formed from the enzymatic reaction of –glutamylcysteine when garlic is extracted with water.SAC is widely available in various kinds of garlic preparations, which are compounds that have biological activity, so that the presence of SAC in garlic preparations is often used as a standard whether the garlic preparation is suitable for consumption or not.

Allium sativum L.efficacious as a drug for high blood pressure, relieves dizziness in the head, lowers cholesterol, and medicine for ulcers.In addition, it is also used as an expectorant (in chronic bronchitis), carminativa (in dyspepsia and meteorism).The active compound of garlic which is known to influence Ca2 + ion for contraction of heart muscle and vascular smooth muscle is the ajoene group (14-15)(Hernawan & Setyawan, 2003). High intracellular concentration of Ca2 + ions can cause vasoconstriction leading to hypertension. The active compound is thought to be able to inhibit the entry of Ca2+ ions into cells, so that the intracellular Ca2+ ion concentration decreases and hyperpolarization occurs, followed by muscle relaxation.Relaxation causes the space in the blood vessels to widen, so blood pressure drops. Dyallildisulfide or ajoene contained in the macerated garlic extract, has the highest antiviral activity compared to other compounds such as allisin, allyl methyl thiosulfinate and methyl allyl thiosulfinate.Ajoene can also inhibit the growth of Gram negative and positive bacteria and yeasts.Ajone has antibacterial activity that works with

ISSN: 2774-6585
Website: https://conferences.uinsgd.ac.id/index.php/gdcs

the same mechanism as allicin, but has a smaller potency than allicin.In the process of making extracts or cooking spices, the allinase enzyme becomes active and hydrolyzes alliin to produce intermediate compounds of sulfenic acid, pyruvate and NH3 ions (Moulia et al., 2018). AGE extract is able to inhibit carcinogenesis, from the early stages of DNA damage initiation to the late stages.Both in the glandular tissue of the breast, skin epithelium, large intestine, and stomach.Knowledge about the benefits of Allium sativum L. in medicine has existed since 1550 BC, when the Egyptians used garlic to treat various diseases.

Conclusion

Garlic is usually used as a food spice, besides that garlic actually has many benefits for the health of the human body.Massudd: Garlic has the ability as an antimicrobial.The antimicrobial ability of garlic is due to the content of organosulfur compounds present in garlic.The main bioactive compounds of garlic are alliin, allisin, ajoene, allyl sulfide group, and allyl cysteine.Garlic side effects and toxicity were not found so, it is safe for consumption.This research is expected to provide benefits for readers so that they can use garlic to be cultivated and consumed as an economical natural medicine so that it can be reached by all people.This research has limitations in the implementation of takhrij and syarah hadith with chemical analysis so that further research is needed in the field of chemistry.This study recommends the development of shallots as an herbal medicine through research in the field of chemistry.

References

Darmalaksana, W. (2020a). Formula Penelitian Pengalaman Kelas Menulis. *Jurnal Kelas Menulis UIN Sunan Gunung Djati Bandung*.

Darmalaksana, W. (2020b). Metode Penelitian Kualitatif Studi Pustaka dan Studi Lapangan. *Pre-Print Digital Library UIN Sunan Gunung Djati Bandung*.

Darmalaksana, W. (2020c). Penelitian Metode Syarah Hadis Pendekatan Kontemporer: Sebuah Panduan Skripsi, Tesis, dan Disertasi. *Diroyah: Jurnal Studi Ilmu Hadis*, *5*.

Darmalaksana, W. (2020d). Prosiding Proses Bisnis Validitas Hadis untuk Perancangan Aplikasi Metode Tahrij. *Jurnal Ushuluddin UIN Sunan Gunung Djati Bandung*, *1*, 1–7.

Darmalaksana, W., Pahala, L., & Soetari, E. (2017). Kontroversi Hadis sebagai Sumber Hukum Islam. *Wawasan: Jurnal Ilmiah Agama Dan Sosial Budaya*, *2*(2), 245–258.

Darsati, S. (2007). *Ruang Lingkup Kimia Analitik*. 1–39.

ISSN: 2774-6585
Website: https://conferences.uinsgd.ac.id/index.php/gdcs

http://repository.ut.ac.id/id/eprint/4593

Hernawan, U. E. K. O., & Setyawan, A. D. W. I. (2003). *REVIEW : Senyawa Organosulfur Bawang Putih (Allium sativum L .) dan Aktivitas Biologinya*. *1*(2), 65–76. https://doi.org/10.13057/biofar/f010205

Lisiswanti, R., & Haryanto, F. P. (2017). Allicin Pada Bawang Putih (Allium sativum) Sebagai Terapi Alternatif Diabetes Melitus Tipe 2. *Jurnal Majority*, *6*(2), 33–38. http://juke.kedokteran.unila.ac.id/index.php/majority/article/view/1009

Moulia, M. N., Syarief, R., Iriani, E. S., Kusumaningrum, H. D., & Suyatma, N. E. (2018). Antimikroba Ekstrak Bawang Putih. *Jurnal Pangan*, *27*(1), 55–66.

Penelitian, A. L. B. (2009). *Andika Nopihargu, 2014 Implementasi Strategi Pembelajaran Intertekstual Pada Materi Reaksi Redoks Kelas X Universitas Pendidikan Indonesia | Repository.upi.edu | Perpustakaan.upi.edu*.

Soetari, E. (1994). *Ilmu Hadits*. Amal Bakti Press.

Soetari, E. (2015). *Syarah dan Kritik Hadis dengan Metode Tahrij: Teori dan Aplikasi* (2nd ed.). Yayasan Amal Bakti Gombong Layang.

Untari, I. (2010). Bawang Putih Sebagai Obat Paling Mujarab Bagi Kesehatan. *Gaster*, *7*(1), 547–554. https://www.jurnal.stikes-aisyiyah.ac.id/index.php/gaster/article/view/59

ISSN: 2774-6585
Website: https://conferences.uinsgd.ac.id/index.php/gdcs

Acknowledgement

Alhamdulillahirabbil'alamin all praise be to Allah SWT, who has given me immeasurable pleasure, so that with His grace and guidance I can complete this mini article project.

Don't forget to send my prayers and greetings to the Prophet Muhammad SAW, his family and friends. Hopefully we will get syafa'at at the end of yaumil. I would like to thank my parents who always support me in any situation. I also thank Dr. Wahyudin Darmalaksana, M.Ag. as a lecturer in the Ulumul Hadist course of Chemistry Study Program, Faculty of Science and Technology, Sunan Gunung Djati State Islamic University, Bandung, who has provided guidance to me with great patience in completing this mini article. Hopefully this article can be useful for readers out there.

Authors

Siti Nur Aliyah
UIN Sunan Gunung Djati Bandung, Indonesia