



## TAKHRIJ AND SYARAH CHEMICAL HADITH THE DANGERS OF CHEMICAL FERTILIZERS FOR SURVIVAL

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### Abstract

The purpose of this research is to discuss the hadith of the Prophet. about the harm associated with chemical fertilizers. This research method is qualitative through the takhrij and sharah hadith approaches. The results and discussion of this study is that there is a negative impact on chemical fertilizers for survival when used in the long term. The conclusion of this research is takhrij and syarah hadith of the Prophet. About mudharat, to minimize harm or things that bring harm with other solutions whose benefits are greater than the harm.

**Keywords:** Chemistry , Hadith,, Syarah, Takhrij.

### Introduction

Agriculture is the use of biological resources to produce food, materials for industrial processes, energy sources and environmental management. In the year of 2018 the percentage of informal sector workers agriculture reached 88.35% (BPS, 2018). Amount is comparable to land paddy raw around 7,463,948 hectares (Liputan6, 2020). Agriculture be supporting the largest economic growth in Indonesia, the majority of communities bekerja as farmers. Farmers become work very promising in the due right to health & condition of food that will don't stop. As the need for food increases, the farmers are increasingly required to produce goods quickly. This makes farmers use chemical fertilizers to accelerate the growth process, with content such as urea, Za, and KCl.



There is a hadith of the Prophet Muhammad SAW. with regard to harm in which the use of chemical fertilizers can cause harm No. 2331, the book of laws.

يَحْيَى بْنُ إِسْحَاقَ حَدَّثَنَا عُقْبَةُ بْنُ مُوسَى حَدَّثَنَا سُلَيْمَانَ بْنِ فُضَيْلٍ حَدَّثَنَا الْمُغَلَّسُ أَبُو النُّمَيْرِيِّ خَالِدِ بْنِ رَبِّهِ عَبْدِ حَدَّثَنَا  
ضِرَارَ وَلَا ضَضَ لَا أَنْ قَضَى وَسَلَّمَ عَلَيْهِ اللَّهُ صَلَّى اللَّهُ رَسُولَ أَنَّ الصَّامِتِ بْنِ عُبَادَةَ عَنْ الْوَلِيدِ بْنِ

Having told us Abdu Rabb ih bin Khalid An - Numairi Abu Al- Mughallis said, had told us Fudlail bin Sulaiman said, had told us Musa bin Uqbah said, had told us Ishaq bin Yahya bin Al- Walid from Ubadah bin Ash Shamith said, "Rasulullah ﷺ decided that it is forbidden to do harm and things that cause harm " (HR Imam Ibn Majah al-Daruquthni ).

Based on the explanation above, a research formula is prepared, namely the formulation of the problem, research questions, and research objectives (Darmalaksana, 2020a) . Formula this problem is to be found in the hadith of the Prophet. about harm. The research question is how the hadith of the Prophet related to mudharat and chemistry. The aim of this research is to discuss the hadith of the Prophet. about mudharat yang related to the chemical.

### Research methods

This research method is qualitative through literature and field studies (Darmalaksana, 2020b) . While the approaches applied are takhrij and sharah hadith (Soetari, Syarah and Hadith Criticism with the Tahrij Method: Theory and Application (Soetari, 2015). The interpretation in this study used an approach with chemical analysis (Darsati, 2007).

In general, there are two stages of research on hadith, namely takhrij and syarah. Takhrij is the process of removing hadiths from the hadith book for research on its keshahihanya, while syarah is the explanation of the hadith text with a certain analysis (Soetari, 2015). Chemical analysis itself, which is a series of analytical activities used to identify the presence of ions, elements, or other chemical compounds , both organic and inorganic in existing samples (Kimia, 2020).

### Results and Discussion

At first, a search was carried out through the hadith application regarding the key word "kemudharatan" until the hadith was found in the book Maktabatu al - Ma'arif Riyadh Number 2331, as stated earlier.

Table 1 List of Rawi Sanad

No.	Rawi Sanad	Birth / Death		Country	Kunyah	Ulama's Comments		Circles
		B	D			-	+	
1	Ubadah bin As Shamit bin Qais		34 H	Medina	Abu Al Wlid		Friend	Friend
2	Rawi Disconnected							Tabi'ut Tabi'in among the elderly
3	Ishaq bin Yahya bin Al-Walid		131 H	Medina		Majhul	Majhulul hal	Tabi'in ordinary people
4	Musa bin 'Uqabah bin Abi'Ayyasy		141 H	Medina	Abu Muhammad		-Tsiqah -Tsiqah -Tsiqah -Tsiqah -Tsiqah, faqih -Tsiqah mufti	Tabi'in (see no friends)
5	Fudloil bin Sulaiman		185 H	Basrah	Abu Solomon		- Shaduuq	Tabi'ut Tabi'in among the middle class
6	Abdu Rabbih bin Khalid bin 'Abdul Malik		242 H	Basrah	Abu Al Mughallis		-Mentioned in 'ats tsiqaat -Maqbul -Shaduuq	Tabi'ul Atba 'among the elderly
7	Abu Abdullah Muhammad bin Yazid bin Abdullah bin Majah Al-Quzwaini	209 H	273 H.	Al-Qazwini			Hadith expert	Mudawin

Table 1 is a list of the narrators and sanads being studied. Rawi was narrators of hadith while sanad is the chain of narrators from friend to mudawin scholars noted that hadiths in hadith (Soetari, 1994). According to the science of hadith, the requirement for a valid hadith is that the rawi must be positive according to the comments of the 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). Sahih hadith are strong traditions while dhaif traditions are weak traditions (Soetari, 1994). Requirements for authentic hadith must also be continued. If the hadith sanad is broken, then the hadith is a dhaif hadith. The proof of continuity is meeting between teacher and student. If there is no objective evidence, 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 narrator's life journey. If the teacher and student are in the same place, it is predicted that the teacher and student will meet (Darmalaksana W. , 2020d) .

The quality of this hadith is dhaif. From the side of the narrators, there are no comments from scholars who gave negative ratings, except that Ishaq bin Yahya bin Al-Walid is called majhulul hal . In no side sanad seen breaking up between Ishaq bin Yahya bin A l-Walid and Ubadah bin As - Saamit bin Qais . This is broken because majhul is unknown, although it must be connected if the second generation of narrators is known, assuming they are around 90 years old . Basically the science of hadith has another parameter in providing reinforcement to hadith. Among other things, the hadith is called mutawir in a very popular sense if the hadith that is being researched is spread several hadith books (Soetari, 2015). The distribution of this hadith has the role of martyrdom and mutabi (Darmalaksana, 2020b). The rest, Hadith se much a virtue deeds Is lam , it can be a proposition although its status is weak (Darmalaksana, W, Pahala, L, & Soetari, E, 2017). This hadith narrated by Ibnu Majah not only, but also by Imam Ahmad and Imam Malik to be right martyred and mutabi. More than that, the text of the hadith (matan) is a suggestion of kindness, where it is forbidden to do harm or things that cause harm. The meaning of this hadith can be accepted by common sense that harm should be avoided. Thus, this tradition can be raised to the level of hasan hadith in the sense that it is acceptable to be a proposition or argument practice of Islam.

The scholars have given syarah, namely the explanation of the content and the meaning of the hadith (Darmalaksana, 2020c). This hadith is not directly related to chemical fertilizers, but the use of chemical fertilizers is something that can cause harm. This hadith can also be explained according to chemistry. Fertilizers are substances of synthetic or organic is added to the soil to increase the supply of essential nutrients for p rowth plants and vegetation land. Characteristics of chemical fertilizers among them element levels of nutrients are high, and there is the compound N, P<sub>2</sub>O<sub>5</sub>, dan K<sub>2</sub>O . The solubility shows that the fertilizer is not easily dissolved in water. The use of chemical fertilizers depends on the type of soil present. Usually there are three types of soil, namely acidic, alkaline and neutral . S ne of the sample to reaction with m acid soil enurunkan soil pH using



estimates of chemicals which when added to make the soil pH neutral, fertile and good for planting . Even though chemical fertilizers are made to provide benefits to humans, there are other effects that fish should be aware of . Excessive use of chemical fertilizers will cause adverse effects such as damaging soil fertility. In time a little , chemical fertilizers capable of accelerating'm desperate crops because the nutrient that can be absorbed directly by the soil, on the other hand in the period of time long will impact negatively as global warming. Chemical fertilizers containing Nitrogen Oxide compounds are one of the greenhouse gases, their continuous use will increase the number of greenhouse gases in the earth's atmosphere and cause the temperature on earth to become hotter over time and global warming (Rahma, 2014). Another example of negative impacts is chemical fertilizers which adversely affect the quality of the surrounding water, this can happen because when it rains, the remaining fertilizer that is not absorbed by the plant roots will be carried away by the rainwater flow to the nearest river or lake. The content in this fertilizer is used by aquatic plants to grow fast. If water plants grow quickly so that they cover the surface of the river, this can reduce the oxygen content in the surface area and there are many other negative impacts (Abdi, 2020) . Use that too often will make negative impacts appear more frequently, therefore to maintain the integrity of the earth and all the creatures in it , it is better to replace chemical fertilizers with organic fertilizers which are more environmentally friendly. Organik fertilizer also called fertilizer derived from living things can replace chemical fertilizer as a supplier of organic fertilizer nutrients despite relatively low but organic material can increase the efficiency of the use of chemical fertilizers. Organic fertilizers contain elements of carbon and nitrogen in varying amounts, and the balance of these elements is very important in maintaining or improving soil fertility. The balance of carbon and nitrogen in the soil must be maintained at all times because the balance of the two elements is the key to assessing soil fertility.

## Conclusion

Basically anything that brings benefits is allowed. Meanwhile, anything that can cause damage is prohibited . Then se custom with the hadith on which the faithful p mankind should not do harm (loss) or things that bring harm. The right choice is to avoid or minimize the use of chemical fertilizers which can damage the earth or cause harm . Fertilizers or ganik the solution best to minimize the



use of chemicals . Because organic fertilizers have more benefits than their harms. Organic fertilizers are the best and natural soil amendments than artificial or synthetic fertilizers . Organic fertilizers contain low macro nutrients N, P, K but contain sufficient amounts of micro nutrients which are necessary for plant growth. So the use of organic fertilizers is deemed sufficient to meet the needs of plants. Based on hadith takhrij, the quality of this hadith is hasan. This research is expected to have beneficial implications for environmental preservation in the field of chemistry. This research has limitations, namely simple takhrij and sharah hadith, so it requires more adequate follow-up research through chemistry. This research recommends the development of fertilizers that involve chemical compounds that are good for the soil, so that farmers can increase efficiency without destroying nature and everything in it, and can provide more benefits to many people.

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