

THE BENEFITS OF MUSA PARADISIACA L. (SABA BANANA) AS A SUNNAH-BASED HEALTH IMPROVEMENT ALTERNATIVE

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ABSTRACT

One of the plants that can be used as the main ingredient of medicine is the banana plant. Basically, the saba banana plant is not only to fulfill daily needs, but can be used as an alternative sunnah-style treatment for physical and spiritual health. Every part of the banana can be used as a source of traditional medicine with easy processing to be practiced daily. Almost all parts of saba banana, starting from the fruit, skin, heart, stem, to the leaves, have different properties such as traditional medicine and industrial raw materials. That way, saba banana can be used as evidence of how blessed Allah SWT's creation has a variety of benefits for humans. Utilizing saba banana as a sunnah-based health improvement alternative is an environmentally friendly step. In addition, saba bananas are also easy to find and affordable and can be consumed every day and are also recommended by scholars as in HR. Tirmidzi.

Keywords: saba banana, herbal medicine, alternative health, Islamic perspective

ABSTRAK

Salah satu tanaman yang dapat dijadikan bahan utama pengobatan adalah tanaman pisang. Pada dasarnya tanaman pisang kepok tidak hanya untuk memenuhi kebutuhan sehari-hari, namun bisa dijadikan sebagai pengobatan alternatif ala sunnah untuk kesehatan jasmani dan rohani. Setiap bagian dari pisang dapat dijadikan sumber pengobatan yang bersifat tradisional dengan cara pengolahan yang mudah untuk dipraktikan sehari-hari. Hampir semua bagian pisang kepok, mulai dari buah, kulit, jantung, batang, hingga daunnya, memiliki khasiat yang berbeda-beda seperti sebagai bahan obat tradisional dan bahan baku industri. Dengan begitu, pisang kepok dapat dijadikan sebagai bukti betapa berkahnya ciptaan Allah SWT yang memiliki beragam manfaat bagi manusia. Memanfaatkan pisang kepok sebagai alternatif peningkatan kesehatan berbasis sunnah merupakan langkah yang ramah lingkungan. Selain itu, pisang kepok juga mudah di jumpai dan harganya terjangkau serta boleh di konsumsi setiap hari dan juga dianjurkan oleh ulama seperti dalam HR. Tirmidzi.

Kata kunci: pisang kepok, pengobatan herbal, alternatif kesehatan, perspektif Islam

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1. INTRODUCTION

In this modern era, issues related to health problems are rampant and discussed by many people from all over the world, both physical and spiritual health. Not a few who complain about their sick condition due to an unhealthy lifestyle. In this modern world, humans are facilitated by the use of digitalization, which comes from the development of science and technology. Everything needed can be realized quickly without requiring many steps. Modern society assumes that being healthy is a series of processes carried out to health workers to taking medicines to optimize body immunity.⁵

Data from the Ministry of Health, 2020 health financing of 23.9%-25% due to lifestyle patterns such as low fiber and high calorie eating patterns or models and limited movement patterns or models resulted in the emergence of various diseases referred to as non-communicable diseases (NCDs).⁷ To reduce the prevalence of these diseases, preventive efforts are needed such as maintaining a diet and moving diligently.

As for one example of food that can be applied to maintain healthy body immunity, namely by diligently consuming *Musa paradisiaca L. fruit* or often called saba banana. Banana is a fruit that has been mentioned in the holy book of Muslims, namely the Qur'an, precisely in QS Al-Waqiah in verse 29 which contains many benefits for physical and spiritual health.³

2. **RESULTS**

Indonesia is an archipelago with a tropical climate and various ornamental, aromatic plants to be used as medicine. Banana is one of the plant species that can be used as the main ingredient of alternative medicine. In general, rural communities utilize saba banana plants for their daily needs, such as the fruit for fried bananas and bird feed, the leaves for food wrappers and the stems are used as craft materials in making mats and prayer mats.

Basically, saba banana is not used as a fulfillment of daily needs, but is used as an alternative sunnah-style treatment for physical and spiritual health. For example, the part of the fruit that contains starch and simplex and complex fibers has a function to reduce blood glucose, cholesterol, and constipation by direct consumption without processing.¹¹ Meanwhile, banana peels contain high antioxidant compounds that can ward off free radicals, processed with other ingredients such as oats and wheat blended together.¹² Banana heart contains phenol antioxidants that are good for increasing lipoprotein oxidation immunity for coronary heart healing.¹⁰ Furthermore, phenol antioxidants can also increase breast milk production with a composition of 30 kcal, 7 g carbohydrates, 170 vitamin A, 1 g protein, 0.05 mg vitamin B and 10 mg vitamin C. The stem can accelerate wound healing because it contains substances such as flavonoids, saponins, and tannins. Processing of banana stems can be done by blending then boiling with a cup of water plus ginger, salt, and yogurt.¹ Banana leaves contain tannins, potassium, and minerals that are important for lowering blood pressure, overcoming irritation, sore throat and boosting the immune system.¹⁸ Consuming banana leaves is processed by boiling. The root extract is able to inhibit the growth of *Candida albicans*. While the alkaloid



content found on the roots is an example of phytochemical substances that act as antibacterials.⁴

The saba banana plant contains many benefits as an alternative treatment for health. Every part of the banana can be used as a source of traditional medicine with easy processing to be practiced daily. In addition, saba bananas are also easy to find at affordable prices and can be consumed every day and Islam also recommends as found in HR.Tirmidzi. Narrated from Abu Hurairah RA, Rasulullah SAW said: "Eat bananas, for indeed they are the fruit of heaven." (HR Tirmidzi, no. 2062).

3. DISCUSSION

3.1 *Musa paradisiaca L.* (saba banana) in Islamic Perspective

The Arabic name for banana is *maus*. Linneus, who was a Roman figure, included bananas in the Musaceae family (Arabic origin) as a form of respect for Antonius Musa, the personal physician of the Roman emperor who recommended eating bananas. With this history, in Latin or scientific language bananas are called *Musa paradisiaca*. Some of the most popular banana varieties in Indonesia are saba banana, ambon, milk, ijo, raja, cavendish, and many more which are mostly consumed fresh without being processed because the content is still intact. In contrast to bananas that have been processed, the content in the banana can be lost or increased due to the mixture of other ingredients.¹⁵

Allah has said in QS Al-Waqiah verse 29 which mentions bananas as follows:

"and the banana tree with its fruit in rows,"

Due to its high nutritional content, this plant is widely used as an alternative medicine. As an antioxidant, banana fruit and peel contain a lot of carbohydrates, lignin, vitamins, peptins, minerals, carotenoids, volatiles and polyphenols. Polyphenols such as flavonoids, coumarins, stilbenes, tannins and phenolic acids serve to prevent oxidative disorders and other long-term diseases.³

From an Islamic perspective, saba banana can be considered a commodity that is beneficial to society. Utilization of the saba banana plant can be considered as one way to develop the agricultural industry and improve public health. Utilization of the saba banana plant can be done in a good and sustainable way, so that it can help people deal with existing problems.

3.2 Content of *Musa paradisiaca L.* (saba banana)

The most common content found in all types of bananas including saba banana is polyphenolic compounds or substances such as flavonoids, tannins, and alkaloids. Flavonoids function to ward off free radicals and in plants function to prevent damage to cells, alkaloids



function as antibacterials, and tannins function as anti-inflammatory and antidiarrheal, in banana plants characterized by sticky and bitter liquid.⁴ In addition, *Musa paradisiaca L.* (saba banana) also has a high nutritional content that can facilitate the body's metabolism, namely the content of volatile compounds, vitamins, minerals, carbohydrates, pectin, polyphenols, lignin, and carotenoids. Vitamins to carbohydrates contained in bananas have the following nutritional values.^{3,8}

Nutritional Content	Concentration
Calories	90 kkal
Carb	22,84 g
Sugar	12,23 g
Fiber	2,26 g
Fat	0,33 g
Protein	1,09 g
Ribovlafin (vit B2)	0,073 mg
Tiiamin (vit B1)	0,031 mg
Pantothenic Acid (vit B5)	0,334 mg
Niasin (vit B2)	0,665 mg
Vitamin C	0,26 mg
Vitamin A	3 μg
Vitamin (vit B6)	0,367 mg
Folate (vit B9)	20 µg
Magnesium	27 mg
Zinc	0,15 mg
Iron	5 mg
Calcium	8,7 mg
Phosphorus	22 mg
Potassium	358 mg

Table 3.1 Nutrient components of banana⁸

Another study conducted by Ruhdiana & Sandi (2023) to test and analyze the nutritional content per 100 grams in *Musa paradisiaca L.* showed that

Table 3.2 Nutritional content of yellow saba banana¹¹

Substance	%100 g yellow saba banana
Water	65,54
Ash	0,72
Fat	0,95
Protein	1,75
Carbs	31,04
Amount	100%
Antioxidant Activity	12,35
Coarse Fiber	1,14
Inulin	0,13



Thus, from several studies that have been conducted, the data show that the content contained in *Musa paradisiaca L. is* veinry diverse, ranging from complex nutrients that are not only a source of energy but there are polyphenolic compounds that can inhibit disorders in the body.

3.3 Benefits of Musa paradisiaca L. (saba banana)

a. Fruit of Musa paradisiaca L.

Several studies on bnn content found pharmacological effects as antioxidant, analgesic, antimicrobial, antialergic, diuretic, hypolipidemic, hypoglycemic to vasodilatory. In addition, banana, especially the saba banana (Musa paradisiaca L.) can relax muscles, accelerate wound healing, and fertilize hair.¹² Musa paradisiaca L. fruit serves to reduce blood glucose and cholesterol levels as well as a source because it contains complex and simplex carbohydrates. Based on research, if someone routinely consumes as much as 250 gr (1-2 bananas), glucose levels and glycemic effects will decrease because it contains insulin-like fiber and resistant starch. In addition, the fiber content can be used to overcome constipation.¹¹

b. Fruit Peel of *Musa paradisiaca L.*

Several studies have found the benefits of banana peels as a cosmetic preparation because it contains various chemical compounds that are believed to be useful as cosmetic ingredients.⁴ In general, banana peels are known to counteract free radicals that are responsible for the formation of malignant cancer cells because contains high compounds to inhibit 50% oxidation with a concentration of 693.15 mg/ml in antioxidants when compared to other types of bananas. The saba banana peel can be said to be the first army of anticancer through its mechanism with the apoptis pathway.¹² In addition, extra saba banana peel acts as an antibacterial activation with 96% ethanol content against the cause of acne (Prpionibacterium and Staphylococcus) with a concentration of 100,000ppm, diameter 12.8 mm; 12.4 mm; 10.3 mm.¹⁶



Figure 3.1 Saba banana peel²

c. Heart Petals of *Musa paradisiaca L*.

The heart of *Musa paradisiaca L*. (saba banana) contains phenolic compounds which are a class of antioxidant substances that act as free radical terminators and their bioactivity can inhibit lipoxygenase and bind metals that cause free radicals. According to several studies



based on literature, the heart of *Musa paradisiaca Linn* (saba banana) has good phenol antioxidant potential and is able to increase resistance to lipoprotein oxidation in the process of healing coronary heart disease with the results:¹⁰



Figure 3.2 Graph of measurement results¹⁰

Based on the EC50 calculation, it is known that the heart extract of *Musa paradisiaca L.* with a low EC50 value of 4.55 mg/ml indicates that the heart extract of *Musa paradisiaca L.* has high antioxidant activity. The heart of *Musa paradisiaca L.* contains many vitamins including 30kcal of energy, 1 gr of protein, 50mg of fat, 170 IU of vitamin A, 0.05mg of vitamin B1, and 10mg of vitamin C. This content is very important for breastfeeding mothers as it can facilitate breast milk production in the first 6 months. Several kinds of processed foods can be made from the heart of saba banana, so it can be said to be one of the important foods for breastfeeding mothers in maintaining health and nutrition for their babies.¹⁷

d. Fronds of Musa paradisiaca L.

According to research by Kusmartono et al (2021), several craftsmen in Yogyakarta recycle banana stems or fronds to be used as raw materials for making prayer mats in Sleman, DIY.⁹ Apart from being used as a prayer mat, these fronds can also be processed into snack chips and even as a feed ingredient because it contains biomass that is good for growth and increases energy sources.^{6,13}

Research conducted by Ananta (2020) states that banana tree stem extract contains saponins which have antiseptic activity, flavonoids for anti- inflammatory, and tannins as antioxidants and inflammation.¹ With the content of these substances can play a role in the process of accelerating wound healing.¹ In addition, banana stems can also be used for heart medicine as well as shampooing by being cut crosswise and hollowed out in the middle and covered with banana leaves to produce water that can be consumed.

e. Leaves of Musa paradisiaca L.

In general, saba banana leaves are used as food wrappers. The active components contained in saba banana leaves are alkaloids, ethanol, flavonoids, carboodrates, saponins, tannins, and terpenes. Its secondary metabolites play a role in pharmacological activity.¹⁸ Research shows that ethanol extract of dried banana leaves has the potential to lower blood sugar levels.

f. Root of *Musa paradisiaca L.*

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The roots of the Musa paradisiaca L. plant are centered on the lower stump which is embedded in the soil in the form of fibers that overlap one another. In addition to the roots, the banana stem will also produce new shoots.¹⁴ Root extract from Musa paradisiaca L. Slows down the growth of Candida albicans fungus. The alkaloid content found in the roots is one of the phytochemical compounds that function as antibacterials. Meanwhile, the stem contains 66% carbohydrates, minerals, and proteins that are rich in nutrients. Banana stem can be processed into banana stem sticks so that it is easy to consume, besides that it is also used as an anti-inflammatory cream in cosmetic content.^{4,13,16}

4. CONCLUSION

Musa paradisiaca L. or commonly called saba banana is a type of banana that is easily found in Indonesia. *Musa* comes from the Arabic word maus. This type of banana is a type of fruit recommended by the personal physician of the Roman empire. Some of the ingredients found in saba banana are polyphenolic compounds or substances such as flavonoids, tannins, and alkaloids. Flavonoids act as antioxidants by preventing cell damage and fighting free radicals. Alkaloids function as antibacterials that can help fight infections in the body. Meanwhile, tannins, which are often found in the form of sticky and bitter liquids, act as anti-inflammatory and antidiarrheal agents. Almost all parts of saba banana, ranging from fruit, skin, heart, stem, leaves to roots have properties as traditional medicinal ingredients and industrial raw materials. Thus, saba banana can be used as evidence of how noble the creation of Allah SWT. which has a variety of benefits for human survival.

REFERENCES

- 1 Ananta, G. P. (2020). Potensi Batang Pisang (Musa Pardisiaca L.) Dalam Penyembuhan Luka Bakar. *Jurnal Ilmiah Kesehatan Sandi Husada*, *11*(1), 334-340. <u>https://doi.org/10.35816/jiskh.v11i1.283</u>
- 2 Anwar, H., Septiani, S., & Nurhayati, N. (2021). PEMANFAATAN KULIT PISANG KEPOK (Musa paradisiaca L.) SEBAGAI SUBTITUSI TEPUNG TERIGU DALAM PENGOLAHAN BISKUIT. *SELAPARANG Jurnal Pengabdian Masyarakat Berkemajuan*, 4(2), 315. https://doi.org/10.31764/jpmb.v4i2.4377
- 3 Faradisa, E., & Fakhruddin, A. (2021). Beberapa Tumbuhan Obat Di Dalam Al-Quran Ditinjau Dari Perspektif Sains. *Jurnal Pendidikan Dan Ilmu Sosial*, *3*(1), 1-19. <u>https://ejournal.stitpn.ac.id/index.php/nusantara</u>
- 4 Firda Ekayanti, N. L., Megawati, F., & Anita Dewi, N. L. K. A. (2023). PEMANFAATAN TANAMAN PISANG (Musa Paradisiaca L.) SEBAGAI SEDIAAN KOSMETIK. *Usadha*, *2*(2), 19-24. <u>https://doi.org/10.36733/usadha.v2i2.6217</u>

5 Hibban, M. F. (2022). Living Quran and Sunnah as the Foundation of a Holistic Healthy Lifestyle. *International Journal of Islamic and Complementary Medicine*, *3*(2), 49-56. https://doi.org/10.55116/ijicm.v3i2.40

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- 6 Igo, N. L., Lukas, A. Y. H., & Jasmanindar, Y. (2020). PENGGUNAAN BATANG PISANG KEPOK (Musa paradisiaca formmatypica) DENGAN DOSIS BERBEDA DALAM MENUMBUHKAN PAKAN ALAMI. *Jurnal Akuakultur Rawa Indonesia*, *8*(2), 129–140. <u>https://doi.org/10.36706/jari.v8i2.11708</u>
- 7 Kemenkes. (2020). Website Direktorat Jenderal Kesehatan Masyarakat. In *24 April* (p. 1).
- 8 Kurnianto, B. T., Lestari, M. D., & Dewi, E. (2023). METODE PEMASARAN PISANG RAJA (Musa paradisiaca L) MENJADI OLAHAN NUGET MELALUI MEDIA ONLINE. *Komitmen: Jurnal Ilmiah Manajemen*, 4(1), 30-36. <u>https://doi.org/10.15575/jim.v4i1.23512</u>
- 9 Kusmartono, B., Yuniwati, M., & Adzkiyaa, Z. (2021). Pemanfaatan Serat Pohon Pisang Kepok (Musa paradisiacal L) Sebagai Bahan Baku Pembuatan Hardboard. *Jurnal Teknologi*, 14(1), 91–98. <u>https://doi.org/10.34151/jurtek.v14i1.2074</u>
- 10 Rollando, R. (2018). PENELUSURAN POTENSI AKTIFITAS ANTIOKSIDAN JANTUNG PISANG KEPOK (Musa paradisiaca L.). *JIFFK : Jurnal Ilmu Farmasi Dan Farmasi Klinik*, *15*(01), 37. <u>https://doi.org/10.31942/jiffk.v15i01.2171</u>
- 11 Ruhdiana, T., & Sandi, S. P. H. (2023). KANDUNGAN GIZI PISANG KEPOK (Musa paradisiaca Linn) KERIPIK PISANG TERHADAP GLUKOSA DARAH. *Abdima : Jurnal Pengabdian Mahasiswa*, 2(1), 3503-3508.
- 12 Sampoerna, M., & Pandapotan Nasution, M. (2022). Uji Sitotoksisitas Ekstrak Etanol Kulit Buah Pisang Kepok (Musa Paradisiaca L.) Dengan Metode Brine Shrimp Lethality Test (BSLT). *Journal of Health and Medical Science*, 1(3), 203-218. <u>https://pusdikrapublishing.com/index.php/jkes/home</u>
- 13 Sari Lubis, N., Safitri, E. Y., Handayani Siregar, & Mira Wahyuni. (2023). PEMANFAATAN PELEPAH DAN BONGGOL PISANG (Musa sp.) MENJADI CEMILAN UNTUK PENINGKATAN GIZI MASYARAKAT DESA AMAN DAMAI. *Jurnal Keuangan Umum Dan Akuntansi Terapan*, *5*, 1-4.
- Sinta, D., & Hasibuan, R. (2023). PEMANFAATAN PELEPAH DAN BONGGOL PISANG (Musa sp.) MENJADI CEMILAN UNTUK PENINGKATAN GIZI MASYARAKAT DESA AMAN DAMAI. Jurnal Keuangan Umum Dan Akuntansi Terapan, 11(1), 86. https://doi.org/10.33394/bioscientist.v11i1.7115
- 15 Suwardi & Srilestari, R. (2020). Budi Daya Pisang Abaka.
- 16 Wenas, D. M. (2019). Kajian Ulasan Aktivitas Farmakologi dari Limbah Pisang Ambon dan Pisang Kepok. *Sainstech Farma*, *10*(1), 30-36. <u>https://ejournal.istn.ac.id/index.php/saintechfarma/article/view/801</u>
- 17 Wulan, S., & Br. Girsang, D. M. (2020). Pengaruh Jantung Pisang (Musa Paradisiaca L.) terhadap Produksi ASI. *Jurnal Riset Hesti Medan Akper Kesdam I/BB Medan*, 5(2), 83. <u>https://doi.org/10.34008/jurhesti.v5i2.194</u>



 Zahara, F., Yuniharni, D., & Arziqni, I. (2023). Optimasi Ekstraksi Flavonoid Dari Daun Pisang Kepok (Musa Paradisiaca L) Menggunakan Microwave-Assisted Extraction (Mae). *Jurnal Teknologi Kimia Unimal*, 12(2), 190. <u>https://doi.org/10.29103/jtku.v12i2.13010</u>