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ENTOMOPHAGY AND ISLAMIC JURISPRUDENCE: EXAMINING THE CONCEPT OF "AL-KHABĪTH" IN CONTEMPORARY DIETARY DISCOURSE

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Abstract

As global food security concerns escalate, alternative protein sources are gaining attention in various cultural and religious contexts. This study investigates the complex interplay between Islamic jurisprudence and entomophagy, aiming to elucidate the permissibility of insect consumption within Islamic dietary laws. Through a qualitative analysis of recent academic literature and fatwa rulings from 2000 to 2024, the research examines diverse Islamic legal perspectives, critically analyzes the concept of "al-khabīth," evaluates modern considerations necessitating a re-examination of traditional rulings, and proposes guidelines for determining the permissibility of insect consumption in Islam. The findings reveal a spectrum of juristic opinions across Islamic schools, a nuanced understanding of "al-khabīth" encompassing physical, moral, and spiritual dimensions, and the potential of istihalah (transformation) in reconsidering the status of processed insect-derived products. Modern scientific evidence highlighting the nutritional and environmental benefits of entomophagy necessitates a re-evaluation of traditional rulings, aligning with Islamic principles of public interest (maslahah) and environmental stewardship. The study concludes by proposing parameters and guidelines for determining the permissibility of insect consumption, balancing traditional jurisprudence with contemporary realities, and emphasizing the need for ongoing interdisciplinary dialogue to develop comprehensive, ethically sound guidelines for entomophagy within Islamic contexts.

Keywords: *Al-khabīth, Entomophagy, Islamic jurisprudence, Istihalah, Sustainable nutrition*.

INTRODUCTION

Entomophagy, the practice of consuming insects as food, has gained attention as a potential solution to global food security and environmental sustainability challenges. As traditional livestock farming faces pressure due to its environmental impact, insects offer a promising alternative protein source with a lower ecological footprint. However, the adoption of entomophagy faces cultural, religious, and regulatory hurdles, particularly in societies where it is not traditionally practiced.

In Islamic jurisprudence, the permissibility of insect consumption has become a subject of intense debate. The concept of "*al-khabīth*" (the repugnant or impure) in Islamic law serves as a critical lens for evaluating this issue. The Quranic verse prohibiting the consumption of "*al-khabā'ith*" (al-Quran. Al-A'raf: 157) forms the basis for much of this discussion.

Different schools of Islamic thought have varying interpretations. The Maliki school adopts a more lenient approach, potentially opening the door for broader acceptance of entomophagy. In contrast, the Hanafi and Imami schools generally prohibit all insect consumption, while the Shafi'i and Hanbali schools take a middle ground. Interestingly, there is a consensus across all schools on the permissibility of consuming locusts.

The contemporary discourse extends to novel insect-derived products, such as carmine (E120), with divergent rulings highlighting the complexity of applying traditional Islamic jurisprudence to modern food technologies. Recent studies demonstrating the nutritional value and environmental benefits of insect consumption have introduced new considerations into this discourse.

Some scholars argue that the principle of *maslahah* (public interest) in Islamic law could potentially justify a more accepting stance towards entomophagy, given its potential benefits for food security and environmental sustainability. However, cultural acceptability remains a significant barrier, even in Muslim-majority countries where certain insects might be considered permissible under Islamic law.

This ongoing debate reflects broader discussions about the interpretation and application of religious principles in the face of contemporary global challenges. It raises questions about the flexibility of Islamic dietary laws and their ability to adapt to changing realities. The discourse underscores the need for continued dialogue between religious scholars, scientists, and policymakers to develop comprehensive approaches to food sustainability that are compatible with Islamic principles.

As the global community grapples with food security and environmental sustainability challenges, this debate serves as a case study in how religious traditions can engage with and potentially contribute to solutions for pressing global issues, reflecting on the relationship between religious principles, scientific knowledge, and societal needs in the contemporary world.

Research Problem

Entomophagy, the consumption of insects as food, has emerged as a potential solution to global food security and environmental challenges. However, its adoption faces cultural, religious, and regulatory hurdles, particularly in Islamic societies. The concept of "*al-khabīth*" (the repugnant or impure) in Islamic law is central to the debate on insect consumption permissibility. Different schools of Islamic thought offer varying interpretations, with the Maliki school being more lenient, while others are more restrictive. The discourse extends to novel insect-derived products, highlighting the complexity of applying traditional Islamic jurisprudence to modern food technologies. Some scholars argue that the principle of *maslahah* (public interest) could justify a more accepting stance towards entomophagy, given its potential benefits. However, cultural acceptability remains a significant barrier. This ongoing debate reflects broader discussions about the flexibility of Islamic dietary laws in adapting to contemporary challenges, underscoring the need for dialogue between religious scholars, scientists, and policymakers to develop sustainable food solutions compatible with Islamic principles.

Research Objectives

1. To examine the Islamic legal perspectives on entomophagy by analyzing the rulings and opinions across various schools of Islamic jurisprudence regarding insect consumption.
2. To critically analyze the concept of "*al-khabīth*" in Islamic jurisprudence, its definitions, interpretations, and applications in relation to insect consumption.
3. To evaluate modern considerations that necessitate a re-examination of traditional Islamic rulings on insect consumption, including scientific advancements, environmental sustainability, and global food security challenges.
4. To propose parameters and guidelines for determining the permissibility of insect consumption in Islam that balance traditional jurisprudence with contemporary realities and needs.

METHODOLOGY

This study employs a qualitative research methodology, consisting of two main components: data collection and data analysis.

Data Collection

The research relies primarily on library research, drawing from recent studies and publications in three languages: English, Malay, and Arabic. This approach ensures a comprehensive and diverse range of perspectives on the topic. The sources include:

1. Academic journals and peer-reviewed articles
2. Books and monographs on Islamic jurisprudence and entomophagy
3. Conference proceedings and academic theses
4. Fatwa (religious rulings) from various Islamic countries and organizations

Special attention is given to fatwa documents from several countries, particularly those that have addressed the issue of insect consumption and the concept of "*al-khabīth*" in recent years. These fatwas provide valuable insights into how different Islamic authorities are interpreting and applying traditional principles to contemporary issues.

Data Analysis

The research employs a qualitative approach to analyze the collected data, utilizing the following methods:

1. Interpretation: The collected texts and fatwa are carefully read and interpreted to understand the underlying reasoning, contexts, and implications of various perspectives on entomophagy and the concept of "*al-khabīth*" in Islamic jurisprudence.
2. Comparison: Different viewpoints, interpretations, and rulings are compared to identify similarities, differences, and patterns in the approach to insect consumption across various Islamic schools of thought and geographical regions.
3. Deduction: Based on the interpretation and comparison of the collected data, logical conclusions are drawn regarding the application of Islamic principles to entomophagy in contemporary contexts.

This methodological approach ensures a thorough, nuanced, and contextually relevant examination of the research topic, directly addressing each of the stated research objectives.

LITERATURE REVIEW

This literature review is structured in two sections: the first examines recent academic studies on entomophagy and Islamic jurisprudence from 2007 to 2024, while the second analyzes fatwa rulings related to insect consumption issued between 2000 and 2024, providing a comprehensive overview of both scholarly discourse and religious guidance on the topic.

Recent Studies

The field of entomophagy and its intersection with Islamic jurisprudence has seen significant developments and research over the past two decades. This literature review analyzes 28 studies published between 2007 and 2024, focusing on the development of ideas, comparisons among studies, key points, and research gaps.

The evolution of ideas surrounding entomophagy and Islamic jurisprudence can be traced through these studies. Early works, such as Ṣādiq Yāsīn (2007) and Ḥamad (2008), laid the foundational understanding of insects in Islamic jurisprudence. Ṣādiq Yāsīn (2007) provided a comprehensive overview of rulings on insects, noting that the term "insects" in Islamic jurisprudence is broader than its modern scientific definition. This work established

key principles, such as the permissibility of eating certain insects like locusts and the conditions for consuming worms in food.

Ḥamad (2008) further developed the concept of "*al-khabā'ith*" (repugnant things) in Islamic jurisprudence, which became central to later discussions on the permissibility of insect consumption. This study distinguished between physical and moral impurities, providing a nuanced understanding of what constitutes "*al-khabā'ith*" in Islamic law.

As global interest in entomophagy grew, studies began to focus more specifically on the potential of insects as a sustainable food source. Van Huis et al. (2013) marked a significant shift in the discourse, presenting a comprehensive analysis of edible insects as a solution to food security challenges. This FAO report highlighted the nutritional, environmental, and economic benefits of entomophagy, influencing subsequent research in both scientific and religious spheres.

The intersection of entomophagy and Islamic jurisprudence became more pronounced in later studies. Al-Janābī (2015) provided a comparative analysis of rulings on insects across different schools of Islamic thought, revealing the diversity of opinions within Islamic jurisprudence. This study highlighted the consensus on locusts as permissible food and established criteria for permitting or prohibiting the consumption and sale of other insects.

Recent studies have increasingly focused on specific aspects of entomophagy within Islamic contexts. Tajudeen (2020) critically examined the halal certification of insect-based foods, while Salleh et al. (2020) analyzed fatwa rulings on cochineal food coloring across ASEAN countries. These studies reflect the growing need to address practical issues arising from the global interest in entomophagy within Muslim-majority countries and halal markets.

The most recent works, such as Bukhārī (2023) and Riyaz (2023), demonstrate a more holistic approach, integrating Islamic perspectives with contemporary food security and sustainability concerns. These studies not only examine the jurisprudential aspects but also consider the potential of edible insects to address global challenges in alignment with Islamic principles.

Comparing these studies reveals both consistencies and divergences in approaches and findings. A consistent theme across many studies is the recognition of locusts as universally permissible for consumption in Islamic law. This consensus is noted in works spanning from Ṣādiq Yāsīn (2007) to Bukhārī (2023), providing a stable reference point in discussions of entomophagy in Islamic contexts.

However, significant divergences emerge when considering other insect species. Al-Janābī (2015) highlights the varying opinions across Islamic schools of thought, with Malikis generally permitting non-harmful insects, Hanafis and Imamis prohibiting all insects, and Shafi'is and Hanbalis taking a middle ground. This diversity of opinions is reflected in contemporary fatwa rulings, as demonstrated by Salleh et al. (2020) in their analysis of cochineal food coloring rulings across ASEAN countries.

The approach to defining and applying the concept of "*al-khabā'ith*" also varies among studies. While Ḥamad (2008) provides a broad definition encompassing both physical and moral impurities, later studies like Tajudeen (2020) and Riyaz (2023) argue for a more nuanced interpretation that considers contemporary realities and the potential benefits of entomophagy.

Studies also differ in their focus on cultural acceptability. While some, like Lim et al. (2022), emphasize the low acceptance rates of insect consumption in certain Muslim-majority countries, others, such as Sabri et al. (2023), highlight the traditional knowledge of insect consumption in regions like Malaysia and Indonesia.

The integration of scientific and religious perspectives also varies across studies. Earlier works tend to focus more exclusively on jurisprudential aspects, while later studies increasingly incorporate scientific data on the nutritional and environmental benefits of entomophagy. This trend is particularly evident in studies like Tanga and Ekesi (2023),

which provide comprehensive reviews of the dietary and therapeutic benefits of edible insects from a global perspective.

Several key points emerge from this literature review:

1. The concept of insects in Islamic jurisprudence is broader than its scientific definition, encompassing various small creatures (Ṣādiq Yāsīn, 2007; Al-Janābī, 2015).
2. There is a consensus among Islamic schools of thought on the permissibility of consuming locusts, but opinions vary widely for other insect species (Al-Janābī, 2015; Tajudeen, 2020).
3. The interpretation and application of the concept of "al-khabā'ith" is central to debates on the permissibility of insect consumption in Islam (Ḥamad, 2008; Riyaz, 2023).
4. Entomophagy offers significant nutritional, environmental, and economic benefits, potentially aligning with Islamic principles of sustainable resource utilization (Van Huis et al., 2013; Tanga & Ekesi, 2023).
5. Cultural acceptability remains a significant barrier to entomophagy in many Muslim-majority countries, despite potential religious permissibility (Lim et al., 2022; Sabri et al., 2023).
6. The global edible insect market is growing rapidly, necessitating clear guidelines for halal certification of insect-based products (Tajudeen, 2020; Bektaş, 2024).
7. There is increasing recognition of the need to balance traditional Islamic jurisprudence with contemporary food security and sustainability challenges (Bukhārī, 2023; Riyaz, 2023).

Despite growing research on entomophagy and Islamic jurisprudence, several gaps remain. These include limited integration of scientific and religious perspectives, lack of standardized halal certification approaches, insufficient exploration of cultural barriers, and limited focus on specific insect species. There's also inadequate attention to processing methods and their impact on Islamic permissibility, limited exploration of the concept of necessity (*ḍarūrah*) in relation to entomophagy, and insufficient analysis of economic implications. More interdisciplinary research is needed to combine in-depth Islamic jurisprudential analysis with comprehensive scientific data. Standardized global guidelines for halal certification of insect-based products are required. In-depth qualitative research on cultural and psychological factors influencing acceptance of entomophagy in Muslim communities is also necessary. These gaps highlight the need for a more comprehensive and nuanced approach to studying entomophagy within Islamic contexts.

In conclusion, the literature on entomophagy and Islamic jurisprudence has evolved significantly over the past two decades, reflecting growing global interest in insects as a sustainable food source. While early studies focused primarily on establishing the jurisprudential foundations, recent research increasingly seeks to reconcile traditional Islamic principles with contemporary food security and sustainability challenges. However, significant research gaps remain, particularly in integrating scientific and religious perspectives, standardizing halal certification processes, and addressing cultural barriers to acceptance. Future research in this field will need to adopt more interdisciplinary and comprehensive approaches to fully address the complex intersection of entomophagy, Islamic jurisprudence, and global sustainability challenges.

Fatwa Analysis

The Islamic jurisprudential discourse on entomophagy, as reflected in the fatwas issued between 2000 and 2023, demonstrates a complex and evolving approach to the consumption of insects and insect-derived products. This analysis, covering 17 fatwas from various Islamic authorities across different countries, reveals both continuity in certain principles and divergence in interpretations as scholars grapple with emerging food

technologies and global sustainability concerns. These fatwas were selected as they are more recent rulings concerning this issue, providing insight into contemporary Islamic thought on entomophagy.

The earliest fatwa in this collection, issued by the Indonesian Ulema Council in 2000, sets a nuanced tone that would characterize much of the subsequent discourse. This fatwa permits the cultivation of worms and crickets for non-food uses and allows cricket consumption under certain conditions (Indonesian Ulema Council, 2000). It introduces a key theme that runs through many later fatwas: the distinction between insects used for food and those used for other beneficial purposes. This early ruling also highlights the principle of *maslahah* (public interest) in Islamic jurisprudence, suggesting that the permissibility of insect use can be influenced by its potential benefits to society.

As the discourse progresses into the early 2010s, we see an increased focus on specific insect-derived products, particularly carmine (E120), a red food coloring extracted from cochineal insects. The fatwas issued during this period reveal significant divergences in opinion. For instance, while the Indonesian Ulema Council in 2011 permits food coloring from cochineal insects (Indonesian Ulema Council, 2011), Darul Ifta Australia in the same year prohibits it (Darul Ifta Australia, 2011). This divergence underscores the challenges faced by Islamic scholars in reconciling traditional jurisprudential principles with modern food technologies.

A notable development in this period is the introduction of the concept of *istihalah* (transformation) in relation to insect-derived products. Egypt's Dar Al-Ifta, in fatwas issued in 2011 and 2013, explores this concept, suggesting that substances derived from insects might be permissible if they undergo significant chemical changes that alter their essential nature (Egypt's Dar Al-Ifta, 2011, 2013). This approach opens up a potential pathway for the permissibility of certain insect-derived products, even if the consumption of whole insects remains prohibited.

The mid-2010s see a trend towards more detailed and scenario-specific fatwas. For example, the 2016 fatwa from Pejabat Mufti Wilayah Persekutuan addresses the specific case of eating larvae with honey from wasp nests, allowing it under certain conditions (Pejabat Mufti Wilayah Persekutuan, 2016). This level of detail indicates an increasing engagement with the practical realities of insect consumption and use in various contexts.

During this period, we also see a reinforcement of the majority opinion prohibiting insect consumption, as evidenced by fatwas from Palestine (The Fatwa Council of the Faculty of Sharia at An-Najah National University, 2019) and Malaysia (Pejabat Mufti Wilayah Persekutuan, 2018). These rulings often cite the Quranic injunction against consuming "*khabā'ith*" (impure or disgusting things) as a key justification for prohibiting insect consumption. However, the persistence of divergent opinions, particularly the more permissive stance of the Maliki school of thought, continues to be acknowledged in many of these fatwas.

The fatwas issued in the 2020s demonstrate a continued engagement with specific insect species and products, as well as an awareness of emerging food trends. Malaysian fatwas from 2020 address the consumption of crickets, ants, rice weevils, and flour beetles, generally prohibiting their consumption but making exceptions for unavoidable contamination (Jabatan Mufti Negeri Selangor, 2020; Pejabat Mufti Wilayah Persekutuan, 2020a, 2020b).

A significant development in this period is the explicit consideration of novel foods like cricket powder, as seen in the 2023 fatwa from Malaysia (Pejabat Mufti Wilayah Persekutuan, 2023). This ruling extends the prohibition on insect consumption to include these new forms of insect-based foods, indicating a conservative approach to emerging food technologies. However, it's worth noting that this conservative stance is not universal. The 2023 fatwa from the Perlis Mufti Department in Malaysia takes a more lenient view on using insect larvae in animal feed, considering factors such as cleanliness and potential benefits (Jabatan Mufti Negeri Perlis, 2023).

Throughout the chronological development of these fatwas, several key points of agreement and dispute emerge. There is consistent agreement across all fatwas on the permissibility of consuming locusts, based on clear hadith evidence. This consensus provides a stable reference point in discussions of entomophagy in Islamic contexts. Similarly, there is general agreement on the prohibition of consuming harmful or venomous insects, reflecting a consistent concern for human health and safety in Islamic dietary laws.

However, significant disputes persist regarding the consumption of non-locust insects. While the majority opinion prohibits this, the Maliki school is frequently cited as permitting it under certain conditions. This divergence reflects broader differences in interpretative approaches among the schools of Islamic jurisprudence. The use of insect-derived products, particularly food colorings like carmine, remains a contentious issue. Some fatwas permit these products based on the concepts of transformation and necessity (The General Iftaa' Department of Jordan, 2016), while others maintain a strict prohibition (Darul Ifta Birmingham, 2021).

In conclusion, the Islamic jurisprudential approach to entomophagy, as reflected in these fatwas, is characterized by a complex interplay of traditional prohibitions, considerations of necessity and benefit, and attempts to apply classical legal principles to novel situations. While there is a general trend towards prohibition, especially in more recent fatwas, there are nuanced considerations of transformation, necessity, and potential benefits that provide some flexibility in certain contexts. The ongoing debate reflects the challenges of applying traditional Islamic principles to emerging food technologies and global sustainability concerns.

DISCUSSION

The foundational principle for considering the permissibility of novel food sources like insects in Islam is derived from the Quranic verse:

﴿يَا أَيُّهَا النَّاسُ كُلُوا مِمَّا فِي الْأَرْضِ حَلَالًا طَيِّبًا﴾

"O mankind, eat from whatever is on earth [that is] lawful and good" (al-Quran. Al-Baqarah: 168). This verse suggests that the default stance on food consumption in Islam is permissibility, provided it is both lawful and good.

This principle is further supported by the Usuli maxim "T*he original state of things is permissibility*" (الأصل في الأشياء الإباحة), which indicates that in the absence of clear prohibition, novel food sources like insects could potentially be considered permissible. This maxim provides a basis for scholars to consider the potential benefits of entomophagy without being constrained by the lack of explicit rulings in traditional texts.

Fiqh *al-Ḥasharāt*: Islamic Legal Perspectives on Entomophagy

In Islamic jurisprudence, the concept of *al-Ḥasharāt* (insects) is broader and more inclusive than its scientific counterpart. While modern taxonomy defines insects as a specific class of arthropods, Islamic jurists historically used the term to encompass a wider range of small land creatures, including reptiles, rodents, and various invertebrates (Ṣādiq Yāsīn, 2007). This broader definition has significant implications for Islamic rulings on entomophagy, as it extends the scope of creatures considered under the category of insects.

Al-Janābī (2015) notes that this juristic definition includes animals not considered insects by zoologists, such as scorpions, spiders, and small aquatic animals. This expansive definition is further supported by Muḥammad (2013), who explains that the Islamic concept of insects includes small land animals and creatures that crawl on the earth.

The principles of halal (permissible) and *tayyib* (good, wholesome) govern the concept of food consumption in Islam. The Quranic injunction in Surah Al-A'raf, verse 157, often cited in discussions of entomophagy, states:

﴿وَيُحِلُّ لَهُمُ الطَّيِّبَاتِ وَيُحَرِّمُ عَلَيْهِمُ الْخَبَائِثَ﴾

"He allows them as lawful what is good (and pure) and prohibits them from what is bad (and impure)" (The Fatwa Council of the Faculty of Sharia at An-Najah National University, 2019). This verse forms the basis for evaluating the permissibility of consuming insects and other novel foods, emphasizing both legal permissibility and ethical-moral dimensions.

The Indonesian Ulema Council (2000) further elaborates on this principle, stating that the permissibility of insect consumption can be justified through various Islamic legal approaches, including the principle of *al-Ashlu fi al-Manafi' al-Ibahah* (the original ruling on beneficial things is permissibility) and *maslahah mursalah* (consideration of public interest).

The Hadith:

{الحَلاَلُ بَيِّنٌ وَالحَرَامُ بَيِّنٌ وَبَيْنَهُمَا مُشَبَّهَاتٌ}

"The halal is clear and the haram is clear, and between them are matters that are doubtful" (Hadith. al-Bukhari. No. 52) is particularly relevant in this context.

This Hadith indicates that there may be ambiguity in determining the permissibility of certain foods, particularly novel ones like insects, encouraging scholars to exercise caution and thorough investigation. It acknowledges the potential grey areas in dietary laws and emphasizes the need for careful consideration and scholarly consensus in addressing new food sources.

Islamic scholars have discussed the *maqasid* (objectives) of the creation of insects, recognizing their roles in the ecosystem and potential benefits to humans. Insects are viewed as part of Allah's creation, serving various purposes such as pollination, decomposition of organic matter, and even as potential sources of medicine (Egypt's Dar Al-Ifta, 2013). Some contemporary scholars argue that the potential of insects to address food security challenges aligns with the broader Islamic principle of preserving life and ensuring human welfare (Riyaz, 2023). This perspective is further supported by Sabri et al. (2023), who highlight the potential of insects, particularly locusts, as a permissible and halal source of nutrition for Muslim populations.

The Quranic verse:

﴿وَمَا مِنْ دَابَّةٍ فِي الْأَرْضِ وَلَا طَائِرٍ يَطِيرُ بِجَنَاحَيْهِ إِلَّا أُمَمٌ أَمْثَالُكُمْ﴾

"And there is no creature on [or within] the earth or bird that flies with its wings except [that they are] communities like you" (al-Quran. al-An'am: 38) is particularly relevant to this discussion. This verse indicates the importance of all creatures in the ecosystem, potentially supporting arguments for the responsible use of insects as a food source. It encourages a holistic view of creation and the interconnectedness of all living beings, which could be interpreted as a call for sustainable and respectful use of natural resources, including insects.

Traditional juristic views on insect consumption vary across different schools of Islamic thought. There is a consensus among all schools on the permissibility of consuming locusts, based on clear hadith evidence (al-Janābī, 2015). However, opinions diverge significantly regarding other insects. The Maliki school generally permits eating non-harmful insects, while the Hanafi and Imami schools prohibit consuming all types of insects. The Shafi'i and Hanbali schools take a middle ground, prohibiting some insects while allowing others (al-Janābī, 2015). These differences stem from varying interpretations of textual evidence and the application of principles such as *qiyas* (analogical reasoning) and consideration of *'urf* (custom) in determining the status of insects as food.

Ṣādiq Yāsīn (2007) adds nuance to this discussion by noting that some scholars permit the consumption of certain insects like spiny-tailed lizards, hedgehogs, and jerboas, while prohibiting others deemed harmful or malicious, such as snakes and scorpions. This differentiation suggests that the permissibility of insect consumption in Islamic jurisprudence is not a blanket ruling but rather a nuanced consideration based on various factors including harm, benefit, and cultural acceptability.

The Fiqhi maxim "*Custom is a source of law* (العادة محكمة) plays a significant role in understanding these varying attitudes towards insect consumption. This maxim acknowledges the influence of cultural norms and practices on legal rulings. In the context of entomophagy, it helps explain why certain insects might be considered acceptable in some Muslim cultures but not in others, based on local customs and traditions. This principle allows for flexibility in Islamic law, enabling it to adapt to different cultural contexts while maintaining its core principles.

The Concept of *Al-Khabith* in Islamic Jurisprudence

The concept of *al-Khabith* in Islamic jurisprudence encompasses a broader and more nuanced understanding compared to scientific definitions of impurity or harmfulness. In Islamic legal discourse, *al-Khabith* refers not only to physically impure substances but also to those considered morally or spiritually repugnant. Ḥamad (2008) defines *al-Khabā'ith* as "anything that people of sound nature find repulsive, guard against, and wash their clothes if it touches them." This definition extends beyond mere physical or chemical properties, incorporating cultural and moral dimensions that are not typically considered in scientific classifications of substances or organisms.

The Palestinian Islamic Council for Fatwa (2009) further elaborates on this concept, stating that the prohibition of certain insects is based on their perceived repugnance and the fact that they were not traditionally consumed by Arabs during the time of Quranic revelation. This historical and cultural context is crucial in understanding the traditional Islamic perspective on insect consumption and highlights the challenges in applying these concepts to modern global contexts where insect consumption may be more culturally accepted.

The Quranic verse:

﴿وَمَا مِنْ دَابَّةٍ فِي الْأَرْضِ وَلَا طَائِرٍ يَطِيرُ بِجَنَاحَيْهِ إِلَّا أُمَمٌ أَمْثَالُكُمْ﴾

"Say, 'I do not find within that which was revealed to me [anything] forbidden to one who would eat it unless it be a dead animal or blood spilled out or the flesh of swine - for indeed, it is impure'" (al-Quran. al-An'am: 145) is particularly relevant to this discussion. This verse indicates that the concept of impurity in Islam is not limited to physical contamination but also includes moral and spiritual dimensions, which is crucial in understanding the broader concept of *al-Khabith*. It suggests that the determination of what is considered impure or repugnant (*khabith*) in Islamic law goes beyond mere physical characteristics and encompasses ethical and spiritual considerations.

Al-Tayyib, often translated as "good" or "wholesome," serves as the antithesis to *al-Khabith* in Islamic dietary laws. The Quranic injunction in Surah Al-A'raf, verse 157, which states that the Prophet "allows them as lawful what is good (*tayyibat*) and prohibits them from what is bad (*khaba'ith*)," establishes this dichotomy (The Fatwa Council of the Faculty of Sharia at An-Najah National University, 2019). The relationship between *al-Tayyib* and *al-Khabith* is central to Islamic jurisprudence on food consumption, with scholars often using the concept of al-Tayyib as a criterion for determining the permissibility of novel or contested food items.

Anuar et al. (2024) emphasize that the concept of halalan tayyiban in food consumption extends beyond mere permissibility, encompassing aspects of wholesomeness, safety, and quality that have significant implications for physical, mental, and spiritual well-being. This holistic approach to food consumption aligns with the Hadith:

{إِنَّ اللهَ طَيِّبٌ لَا يَقْبَلُ إِلَّا طَيِّبًا}

"Allah is good and accepts only that which is good" (Hadith. Muslim. No. 1015). This Hadith indicates that the concept of goodness in Islam extends beyond mere permissibility, emphasizing the importance of wholesomeness and quality in food consumption, which is crucial in evaluating novel food sources like insects.

In Islamic dietary laws, the prohibition of foods is generally based on two main factors: *al-Darar* (harm) and *al-Khabith* (impurity or repugnance). *Al-Darar* refers to substances that cause physical harm or pose health risks, aligning closely with scientific notions of toxicity or pathogenicity. *Al-Khabith*, on the other hand, encompasses a broader range of prohibitions based on spiritual, moral, or cultural considerations. The Indonesian Ulema Council's fatwa (2000) on worms and crickets illustrates this distinction, permitting their cultivation for beneficial purposes while considering the potential for harm (*mudarat*) in their consumption.

This approach is further supported by the General Iftaa' Department of Jordan (2016), which emphasizes the importance of considering both the transformation of substances and their potential benefits when determining their permissibility. This nuanced approach reflects the complexity of applying traditional Islamic concepts to modern food technologies and global dietary practices.

The Fiqhi maxim "*Harm must be eliminated*" (الضرر يزال) is particularly relevant in this context. This maxim indicates the importance of ensuring that any new food source, including insects, does not pose significant health risks to consumers, supporting the need for rigorous safety standards in the production of insect-based foods. It emphasizes the priority of safeguarding human health and well-being in Islamic jurisprudence, which is crucial when considering the introduction of novel food sources like insects.

Traditional juristic views on al-Khabith in relation to insects vary across different schools of Islamic thought. The majority opinion, held by the Hanafi, Shafi'i, and Hanbali schools, generally categorizes insects as al-Khabith, thus prohibiting their consumption. This view is based on the perception of insects as repugnant to human nature and potentially harmful (al-Janābī, 2015). However, the Maliki school offers a more permissive stance, allowing the consumption of non-harmful insects. This divergence in opinions reflects the complex interplay between textual evidence, cultural norms, and juristic reasoning in determining the status of insects as al-Khabith.

The concept of *istihalah* (transformation) further complicates this discourse, with some scholars arguing that the process of transforming insects into other substances, such as food colorings, may remove their status as *al-Khabith* (Egypt's Dar Al-Ifta, 2011). This principle of transformation is particularly relevant in the context of modern food processing techniques and the development of insect-based food products. It opens up possibilities for reconsidering the status of insect-derived ingredients in light of technological advancements and changing cultural perceptions.

Modern Considerations and Re-Evaluation

The growing global population and environmental challenges have led to increased interest in entomophagy as a sustainable food source. Van Huis et al. (2013) highlight that insects offer significant benefits in terms of food security and environmental sustainability. They emit fewer greenhouse gases, require less land and water for production, and have higher feed conversion efficiency compared to traditional livestock. Aydın and Kürklü (2023) predict that global food demand will increase by more than 50% by 2050, positioning edible insects as a promising solution due to their high nutritional value and lower environmental impact.

This potential is further emphasized by Dossey et al. (2016), who note that insects have been historically used for various purposes beyond food, including medicine and cosmetics, suggesting a broader range of potential applications in addressing contemporary challenges. These scientific findings align with the Quranic principle of resource efficiency and sustainability, as indicated in the verse:

﴿وَلَا تُبَذِّرْ تَبْذِيرًا. إِنَّ الْمُبَذِّرِينَ كَانُوا إِخْوَانَ الشَّيَاطِينِ﴾

"And do not spend wastefully. Indeed, the wasteful are brothers of the devils" (a;-Quran. al-Isra': 26-27).

This verse indicates the importance of resource efficiency and sustainability in Islamic teachings, which could support arguments for entomophagy as a more sustainable protein source.

The benefits of entomophagy appear to outweigh potential harm when considering nutritional and environmental factors. Tanga and Ekesi (2023) report that edible insects are rich in proteins, good fats, calcium, iron, and zinc, offering nutritional benefits comparable to or exceeding those of conventional protein sources. Additionally, they note potential therapeutic benefits, including immune enhancement and antioxidant properties. This aligns with the Islamic principle of seeking beneficial and wholesome food sources, as emphasized in the concept of *al-Tayyib*.

However, Ostadi et al. (2020) identify concerns about potential health risks, such as pathogenic microorganisms and possible poisoning, which need to be addressed through proper processing and safety measures. Lu et al. (2022) further support the potential of insects as a sustainable protein source, particularly highlighting the nutritional composition of black soldier fly larvae and their potential use in animal feed. These scientific findings necessitate a careful consideration of both benefits and risks in line with Islamic principles.

The Fiqhi maxim "Averting harm takes precedence over bringing benefits" (درء المفاسد مقدم على جلب المصالح) is particularly relevant here. This maxim indicates the need to carefully balance the potential benefits of entomophagy against any possible risks, emphasizing the importance of thorough safety evaluations before promoting insect consumption. It underscores the Islamic emphasis on protecting human health and well-being, even in the pursuit of potential benefits.

The role of *'urf* (custom) in determining al-khabith status of insects is significant but evolving. Traditionally, many cultures, especially in non-tropical regions, have viewed insects as repulsive, influencing Islamic rulings on their consumption (al-Janābī, 2015). However, modern technology and scientific advancements are challenging these perceptions. The concept of *istihalah* (transformation) is increasingly applied to insect-derived products. For instance, Egypt's Dar Al-Ifta (2011) ruled that food coloring extracted from insects may be permissible if it undergoes chemical transformation, effectively changing its nature and removing the description of impurity.

The Usuli principle of *Maslahah* (public interest) is particularly relevant in this context. This principle indicates that Islamic law can adapt to meet contemporary needs and challenges, which could include the promotion of sustainable food sources like insects if they are proven to significantly contribute to public welfare. It provides a framework for considering the broader societal and environmental impacts of food choices, potentially supporting the adoption of entomophagy if it can be shown to address pressing global challenges.

The comprehensive concept of *al-Tayyib* (good, wholesome) may indeed be applicable to entomophagy when considering its broader benefits. Riyaz (2023) argues that the potential of edible insects to address food security challenges and contribute to environmental sustainability aligns with Islamic principles of stewardship and responsible resource utilization. This perspective suggests that the 'goodness' of a food source might be evaluated not only by its intrinsic properties but also by its wider societal and ecological impacts.

The ongoing research and development in the field of edible insects, as noted by Bektaş (2024), further underscores the need for continued dialogue between religious scholars, scientists, and policymakers to address these emerging challenges and opportunities. This interdisciplinary approach is crucial for developing comprehensive and ethically sound guidelines for entomophagy in Islamic contexts.

The Quranic verse:

﴿وَلَقَدْ كَرَّمْنَا بَنِي آدَمَ وَحَمَلْنَاهُمْ فِي الْبَرِّ وَالْبَحْرِ وَرَزَقْنَاهُمْ مِنَ الطَّيِّبَاتِ وَفَضَّلْنَاهُمْ عَلَى كَثِيرٍ مِمَّنْ خَلَقْنَا تَفْضِيلًا﴾

"And We have certainly honored the children of Adam and carried them on the land and sea and provided for them of the good things and preferred them over much of what We have

created, with [definite] preference" (al-Isra': 70) is particularly relevant in this discussion. This verse indicates the importance of providing good and wholesome sustenance to humanity, which could include novel food sources like insects if they are proven to be beneficial and safe. It emphasizes the need to consider the broader implications of food choices on human welfare and dignity, aligning with the Islamic principle of human stewardship over creation.

Application of *Qiyas* in Entomophagy

The possibility of applying *qiyas* (analogical reasoning) to insects based on the permissibility of locusts presents an intriguing avenue for juristic exploration. The unanimous acceptance of locusts as halal food across all schools of Islamic thought provides a potential foundation for extending this ruling to other insects (al-Janābī, 2015). The key consideration in this analogy would be identifying the *'illah* (effective cause) behind the permissibility of locusts and determining whether this same cause applies to other insects.

Scholars might consider factors such as nutritional value, environmental impact, and the absence of harm as potential shared characteristics between locusts and other edible insects (Tanga & Ekesi, 2023). This approach aligns with the Islamic principle of seeking benefits and avoiding harm, as well as the broader objectives of Sharia in preserving life and promoting human welfare.

However, the application of qiyas in this context is not without challenges. The unique status of locusts, supported by explicit hadith evidence, may be viewed as a specific exception rather than a general rule (Muḥammad, 2013). This raises questions about the extent to which the permissibility of locusts can be generalized to other insects without explicit textual support.

Additionally, the broader definition of insects in Islamic jurisprudence, which includes creatures not classified as insects in modern taxonomy, complicates the analogy (Ṣādiq Yāsīn, 2007). This discrepancy between Islamic and scientific classifications of insects highlights the need for a careful reconciliation of traditional juristic categories with modern scientific understanding.

Furthermore, cultural perceptions and the concept of *khabā'ith* (repugnant things) play a significant role in traditional rulings on insect consumption, which may not align perfectly with the case of locusts (Ḥamad, 2008). The cultural acceptability of locusts in certain Muslim societies may not necessarily extend to other insects, necessitating a nuanced approach that considers both religious principles and cultural sensitivities.

The Indonesian Ulema Council's fatwa (2000) on worms and crickets illustrates the complexity of applying such analogies, as it permits their cultivation for beneficial purposes while still considering potential harm. This ruling demonstrates the multifaceted nature of Islamic jurisprudence on novel food sources, balancing potential benefits with concerns about harm and cultural acceptability.

Despite these challenges, the potential for applying qiyas to insects based on locusts offers a valuable framework for scholars to re-evaluate traditional rulings in light of contemporary food security and sustainability challenges (Riyaz, 2023). This approach could potentially open new possibilities for addressing global nutritional needs within the bounds of Islamic dietary laws.

Parameters and Guidelines

The consumption of insects (entomophagy) has gained attention as a potential solution to global food security challenges, but for Muslim consumers, its permissibility is a complex issue requiring careful consideration of Islamic dietary laws and scholarly opinions. This guide provides crucial parameters for consuming halal insects and guidelines for navigating potentially haram insect consumption, offering a nuanced understanding of entomophagy within an Islamic context while addressing health, environmental, and cultural considerations.

Parameters for Consuming Halal Insects

1. Permissibility based on Islamic sources: The foundation for determining the halal status of insects lies in the primary sources of Islamic law and scholarly consensus. Locusts are explicitly permitted for consumption based on Quranic verses and Hadith (House et al., 2024). However, for many other insects, there is no clear consensus among Islamic scholars. In such cases, the principle of caution should be applied. As Tajudeen (2020) notes, "Insect consumption is not totally alien or prohibited in Islam, and condemnation of all insects as Haram without an exception, is a technical error and fallacy of generalization." Nevertheless, when faced with conflicting opinions among madhabs, it is advisable to follow the usuli maxim الخروج من الخلاف أولى (leaving the disputed matter is preferable) to err on the side of caution (Tajudeen, 2020).
2. Adherence to specific madhab rulings: If one chooses to consume insects that are permitted by one madhab but prohibited by others, it is crucial to strictly follow the conditions set by the permitting madhab. For example, the Maliki school allows the consumption of insects under certain conditions that they are slaughtered, and slaughter according to them occurs by any means that causes death (Tajudeen 2020). The Indonesian Ulema Council (2000) states: "Cultivating crickets for their benefits, for medicine/cosmetics for example, for eating or selling, is permissible (mubah, halal), as long as it does not cause harm (mudarat)."
3. Compliance with government regulations: Muslims are obligated to obey the laws of the land they reside in, especially when these laws serve the public interest (maslahah ammah). Omar (2017) highlights this point, stating, "As such, for laboratory meats and insects to be an important part of the diet of future Malaysians, matters related to the halal status of these foods will need to be rigorously and carefully evaluated." This evaluation should include consideration of government policies protecting certain insect species.
4. Health considerations: The potential health impacts of insect consumption must be carefully evaluated. Ostadi et al. (2020) conducted a study in Iran and found that "health and food" was the top challenge in accepting insects as feed and food, with a final weight of 0.335 in their analysis. They noted concerns about "existence of pathogenic microorganisms" and "possible poisoning in human" as significant factors. Therefore, it is crucial to ensure that any insects consumed are safe and do not pose health risks.
5. Environmental impact: The environmental consequences of insect consumption should be considered. Tanga and Ekesi (2023) highlight the potential benefits of edible insects, stating, "Edible insects are gaining traction worldwide for research and development." They note that insects can be more environmentally friendly than traditional livestock, requiring "fewer resources, such as land, water, and feed, compared to traditional livestock." However, they also caution that the impact on ecosystems should be carefully monitored.
6. Preparation and processing: Proper sourcing and processing of insects are crucial for ensuring their safety and acceptability. The Jabatan Mufti Negeri Perlis (2023) fatwa states, "Worms or larvae that live and eat in a clean environment are not judged as impure. Thus, products derived from these clean larvae can be used as food for livestock whose meat is eaten, such as chickens, fish, and others." This emphasizes the importance of the insects' living environment and diet. Lu et al. (2022) further support this, noting that "BSFL [Black Soldier Fly Larvae] are easily reared and propagated on any nutrient substrate such as plant residues, animal manure and waste, food scraps, agricultural byproducts, or straw." However, they also stress the importance of controlled rearing conditions to ensure safety and quality.

Guidelines for Consuming Haram Insects:

1. General prohibition: The default ruling for most insects is prohibition, based on various Islamic sources. The Pejabat Mufti Wilayah Persekutuan (2023) states, *"The use of crickets as food ingredients is forbidden based on the view of the majority of jurists."* This prohibition extends to many insects considered repulsive (khabith) by cultural norms (*urf*).
2. Exceptions for necessity (darurah): Islamic law allows exceptions in cases of necessity. Egypt's Dar Al-Ifta (2013) explains, *"It is permissible to use the insects and consume the substances manufactured from them for medicinal reasons if it is proven that they treat diseases or malnutrition without producing any harmful side effects. Otherwise, they are forbidden."* This ruling opens the door for insect consumption in cases of medical necessity or extreme hunger when no halal alternatives are available.
3. Transformation and extraction: For insects considered haram based on cultural norms (*urf*), consumption may become permissible if the repulsive nature is removed or significantly minimized through processing. The General Ifta' Department of Jordan (2016) addresses this issue in relation to insect-derived food colorings: "*Colourants extracted from insects go through several chemical processes to become another substance that gives colour, which makes it edible.*" They conclude that such transformed substances may be permissible under certain conditions.
4. Minimization and unavoidability: In cases where insect contamination is minimal and unavoidable, consumption may be pardoned. The Pejabat Mufti Wilayah Persekutuan (2020) fatwa on rice weevils and flour beetles states, "*They should be eaten together with the food they were born in, such as rice and bread, whether alive or dead*." This ruling acknowledges the practical difficulties in completely avoiding insects in certain food products.
5. Research and innovation: Continued research into the properties and potential uses of insects is encouraged. Riyaz (2023) emphasizes the need for "*scientific studies on the nutritional and medicinal properties of insects to better inform future rulings*." This research can help in developing new halal food products and potentially revising rulings on certain insects based on new scientific evidence.
6. Cultural sensitivity: The cultural context of insect consumption should not be overlooked. Aydın and Kürklü (2023) note, "*The tendency for edible insects to be consumed by humans may vary depending on many factors such as gender, religious, and cultural factors.*" This highlights the need for sensitivity to local customs and cultural norms when promoting or discussing insect consumption.

Additional Considerations

1. Economic implications: The potential economic benefits of insect farming and consumption should be considered. Cokki et al. (2021) point out that *"The acceptance of edible insects must be supported by education and awareness by highlighting the multifunctionality of biodiversity-friendly agricultural practice which involve a closer collaboration with farmers, rural communities and the management of complex system."*
2. Nutritional value: The nutritional benefits of insects should be weighed against potential risks. Aidoo et al. (2023) state, *"Edible insects contain essential nutrients, such as carbohydrates, proteins, vitamins, and minerals, which have antimicrobial properties."* This nutritional profile could be particularly beneficial in addressing malnutrition in some regions.
3. Future food security: As global population grows and traditional protein sources become strained, insects may play an increasingly important role in food security. Ahmad Sabri et al. (2023) suggest, *"Entomophagy can thoroughly provide sufficient nutrients for humans and can save the earth by having minimal impact on the environment."*
4. Ethical considerations: The ethical implications of insect farming and consumption should be considered. Ishak et al. (2023) note in their study on luwak coffee that *"animal*

welfare should also be preserved for a promising and ethical luwak coffee industry, in tandem with the rising public concerns on ethical animal farming." Similar considerations may apply to insect farming.

5. Regulatory frameworks: The development of clear regulatory frameworks for insect production and consumption is crucial. Bukhārī (2023) emphasizes the need for *"clarifying the legal regulations and guidelines for food manufactured from insects as contemporary jurisprudential topics."*

By considering the parameters and guidelines presented here, which draw from both traditional Islamic scholarship and contemporary research, Muslims can make informed decisions about insect consumption that align with their faith, while also being mindful of health, environmental, and cultural considerations. As scientific understanding of insects' nutritional and medicinal properties continues to evolve, ongoing dialogue between religious scholars, scientists, and policymakers will be crucial in shaping future fatwa rulings and regulatory frameworks for halal insect consumption.

CONCLUSION

This research examines Islamic perspectives on entomophagy, revealing a complex interplay between traditional jurisprudence and contemporary challenges. The study finds diverse opinions across Islamic schools regarding insect consumption, with unanimous acceptance of locusts but varying views on other insects. The Maliki school is most permissive, while Hanafi and Imami schools generally prohibit all insect consumption. Shafi'i and Hanbali schools take a middle ground.

The concept of *al-Khabith* in Islamic jurisprudence is explored, encompassing physical, moral, and spiritual impurity. While traditionally most insects are categorized as al-Khabith, the principle of *istihalah* (transformation) suggests potential reconsideration of this status for processed insect-derived products.

Modern considerations, including scientific advancements and global food security challenges, necessitate a re-evaluation of traditional rulings. Insects offer significant nutritional and environmental benefits, aligning with Islamic principles of public interest (*maslahah*) and stewardship. However, potential health risks underscore the need for rigorous safety standards.

The research proposes parameters and guidelines for determining the permissibility of insect consumption in Islam, balancing traditional jurisprudence with contemporary needs. These include adherence to Islamic sources and specific madhab rulings, compliance with regulations, health and environmental considerations, and proper processing. For potentially haram insects, guidelines address exceptions for necessity, transformation processes, and cultural sensitivity.

This study highlights the need for ongoing dialogue between religious scholars, scientists, and policymakers to develop comprehensive, ethically sound guidelines for entomophagy in Islamic contexts, addressing both traditional principles and contemporary challenges.

Recommendations for Future Research: The complex intersection of entomophagy and Islamic dietary laws presents numerous avenues for further research. Priority should be given to conducting comprehensive nutritional and safety studies on various edible insect species to address health concerns and support informed decision-making in Islamic contexts. Investigation into the application of *istihalah* (transformation) principles to different insect processing methods and their implications for halal status is crucial. Furthermore, exploring the potential for *qiyas* (analogical reasoning) in extending the permissibility of locusts to other nutritionally similar and environmentally beneficial insects could provide valuable insights. Examining the evolving perceptions of insects as food among Muslim communities globally, considering cultural, generational, and geographical variations, would offer important sociocultural context.

Future research should also analyze the economic implications of large-scale halal insect farming for Muslim-majority countries and communities. Studying the environmental impact of insect farming in various ecosystems is essential to ensure alignment with Islamic principles of environmental stewardship. Additionally, investigating the potential use of insects in halal animal feed and its implications for the halal status of livestock products could open new avenues for sustainable halal food production. Finally, developing frameworks for integrating scientific evidence with Islamic ethical considerations in the context of novel food sources like insects would be invaluable for guiding policy and practice in this emerging field.

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