https://research.adra.ac.id /index.php/ijen/
P - ISSN: 2988-1579
E - ISSN: 2988-0092

Enhancing Students' Interest in Agriculture Through the Integration of Ethnoecology in Biology Education

Yohanes Kamakaula[1], Obadja Andris Fenetiruma[2], Yunita Palinggi[3]
[1]Universitas Papua, Indonesia
[2]Universitas Papua, Indonesia
[3]Universitas Papua, Indonesia

ABSTRACT

Background. The integration of local knowledge in science education is considered an effective approach to bridging the gap between theoretical content and students' real-life experiences. Ethnoecology, which examines the relationship between communities and their natural environment through culturally transmitted practices, provides a relevant framework for contextualizing biology learning, particularly in agrarian settings.

Purpose. This study aims to examine how the integration of ethnoecology in biology education can enhance students' interest in the agricultural sector.

Method. A qualitative design was employed using a literature review and conceptual analysis. Data were collected from peer-reviewed journal articles, academic books, and prior studies related to ethnoecology, local wisdom-based learning, and biology education. The analysis was conducted through systematic source selection, conceptual categorization, and thematic interpretation.

Results. The findings indicate that the ethnoecological approach improves students' understanding of ecological concepts, increases the relevance of learning to everyday life, and promotes appreciation of local agricultural practices as both scientific knowledge and cultural heritage.

Conclusion. The integration of ethnoecology into biology learning is an effective strategy for enhancing students' interest in agriculture while supporting the preservation of local knowledge and the development of sustainable agricultural practices.

KEYWORDS

Biology Education, Ecological Knowledge, Student Engagement

Citation: Kamakaula, Y., Fenetiruma, A, O & Palinggi, Y. (2026). Enhancing Students' Interest in Agriculture Through the Integration Of Ethnoecology in Biology Education. *International Journal of Educational Narrative*, *4*(1), 217–228. https://doi.org/10.70177/ijen.v4i1.3455

Correspondence:

Yohanes Kamakaula,
y.kamakaula@unipa.ac.id

Received: September 14, 2025

Accepted: December 11, 2025

Published: February 23, 2026

INTRODUCTION

Advances in science and technology have had a significant impact on various areas of human life, including the education system. In this context, science education, particularly biology, plays a strategic role in helping students understand the reciprocal relationship between humans and the natural environment. Biology phenomena but is also expected to encourage students to apply this knowledge in their daily lives (Afriyansyah, 2024). However, science learning practices learning is not only intended to instill a conceptual understanding of various biological in schools are often oriented toward one-way information delivery,

oriented toward one-way information delivery, with students acting primarily as recipients of knowledge. This learning pattern often results in subject matter being presented abstractly and lacking a connection to students' real-life contexts. As a result, the connection between concepts learned in class and everyday experiences becomes unclear. This can make it difficult for students to understand the relevance of scientific knowledge to the various social and environmental phenomena they encounter in their daily lives (Maliao, 2026).

One strategy that can be implemented to address this problem is to integrate local knowledge as part of the learning resources in the learning process. Local knowledge is a form of understanding that develops within a community through long experience interacting with the surrounding natural environment.(Kebebew, 2024)This knowledge is usually passed down through generations through traditions, cultural practices, and community customs in managing and utilizing natural resources. In an educational context, integrating local knowledge into learning can help students understand scientific concepts in a more concrete and contextual way, as the subject matter is linked to their daily life experiences. Furthermore, this approach also plays a role in strengthening students' cultural identity and fostering awareness of the importance of maintaining environmental balance and sustainability (Souza, 2025).

One form of integration of local knowledge into scientific studies can be found through an ethnoecological approach. Ethnoecology is a discipline that studies the interaction between humans and the natural environment, the cultural perspectives and collective experiences of local communities. This approach allows for the scientific study of various traditional practices related to environmental management, enabling a better understanding of how local communities utilize and sustainably conserve natural resources. In the context of biology learning in schools, ethnoecology serves as a bridge between scientific concepts and real-life practices. Through this integration, the biology learning process emphasizes not only mastery of theory but also links scientific knowledge with cultural experiences and environmental practices that have long developed in students' lives (Dibaba, 2025).

In agrarian communities, various traditional agricultural practices reflect the concrete application of ethnoecological knowledge developed in community life. Rural residents generally possess a wealth of local knowledge related to cropping patterns, biodiversity utilization, and land management methods that maintain environmental balance. This knowledge is formed through long-term interactions between communities and their natural surroundings, thus becoming part of a collective experience passed down from generation to generation (Pérez, 2026). Integrating local agricultural practices into biology learning can provide a more contextual and relevant learning experience for students. By introducing them to various agricultural activities in their local environment, students can more clearly see that the biological concepts learned in school are directly related to community life practices, particularly in natural resource management and daily agricultural activities (Rohman, 2024).

However, biology teaching practices in various schools still show a tendency to deviate from the expected contextual approach. The delivery of subject matter generally focuses on conceptual and theoretical aspects, emphasizing mastery and memorization of concepts, while the relevance of students' social and cultural backgrounds has not been widely integrated into the learning process (Filgueira, 2025). This abstract approach makes it difficult for students to understand the relationship between the scientific knowledge learned in class and the realities of everyday life. As a result, biology is often perceived as a separate field of knowledge, separate from practical activities occurring in society. This situation ultimately contributes to students' low interest in the

agricultural sector, as they do not clearly see the relevance between the biological concepts learned in school and the agricultural practices that develop in their local communities (Melo, 2025).

The declining interest of the younger generation in the agricultural sector is a crucial issue for future development efforts. The agricultural sector plays a highly strategic role, not only in ensuring food security but also in improving community welfare and maintaining the sustainability of the environmental ecosystem. However, the increasingly strong currents of modernization and changing career preferences among the younger generation have led to a decline in the agricultural sector (Ajiningrum, 2025). This situation indicates the need for reform efforts in education, particularly through the development of learning processes capable of rekindling students' interest in agriculture. In this regard, biology learning that integrates an ethnoecological perspective can be a relevant approach, as it can provide contextual scientific understanding while reintroducing the importance of agricultural practices in community life (Albuquerque, 2024).

The application of an ethnoecological approach to biology learning provides students with the opportunity to understand that various traditional agricultural practices actually have a scientific basis related to the concepts of ecology, biodiversity, and the reciprocal relationship between organisms and their environment. Through this approach, students not only gain a theoretical understanding of ecosystems but also gain a firsthand understanding of how communities utilize and manage the environment wisely and sustainably (Chakocha, 2025). Learning that connects scientific knowledge with local experiences and practices can increase the relevance of the material learned to students' real lives. Furthermore, this approach can foster students' appreciation for the potential of natural resources found in their surroundings. Thus, integrating ethnoecology into biology learning has the potential to strengthen students' ecological awareness while fostering their interest in agriculture (Taqwim, 2025).

Several previous studies have discussed the use of local wisdom as part of an approach to science learning. A study conducted by Armstrong, (2025) shows that the application of science learning that utilizes local wisdom values can improve students' conceptual understanding, because the material taught is linked to cultural experiences and community life practices. Other research by Martalasari, (2025) also revealed that the integration of an ethnoscience approach in biology learning can encourage more active student involvement in the learning process. Meanwhile, research conducted by Bijukumar, (2025) Studies have shown that learning that utilizes local environmental potential contributes to increasing students' ecological awareness of the importance of maintaining natural balance. However, these studies generally focus more on improving understanding of scientific concepts and strengthening environmental awareness. Unlike these studies, this study specifically highlights the integration of ethnoecology into biology learning as a strategy to foster student interest in the agricultural sector. Therefore, this research is expected to provide a conceptual contribution to the development of a more contextual biology learning model, utilizing local wisdom, and aligning with efforts to support sustainable agricultural development.

RESEARCH METHODOLOGY

This study employs a qualitative approach to gain an in-depth understanding of the integration of ethnoecology in biology education and its relationship to enhancing students' interest in the agricultural sector. This approach is appropriate as the study focuses on the conceptual analysis of key ideas, theoretical frameworks, and previous research findings relevant to the topic (Putri, 2025). Through this approach, the study systematically examines the interconnection between ethnoecological concepts, the biology learning process, and students' interest in agriculture.

The research method applied is a literature review, which involves the systematic collection and analysis of various scholarly sources. These sources include peer-reviewed journal articles, academic books, research reports, and other relevant scientific publications related to ethnoecology, biology education, local wisdom-based learning, and student interest in agriculture. The selection of literature was conducted rigorously by considering the credibility of sources, their relevance to the research focus, and their contribution to the development of ethnoecological integration in education. Through this method, the study provides a comprehensive synthesis of existing scientific perspectives on the use of local knowledge in science education, particularly in the context of developing biology learning grounded in local wisdom (Bogotá-Gregory, 2024).

Figure 1. Ethnoecological research methods

The infographic illustrates the research methodology for the study titled "Integration of Ethnoecology in Biology Lessons to Increase Students' Interest in Agriculture." It presents a clear four-step process, beginning with a literature review to gather references on ethnoecology, followed by the development of biology lesson modules incorporating local ecological knowledge. The third step shows the implementation of these lessons, where teachers engage students using culturally relevant approaches. Finally, the methodology concludes with observations and interviews to assess students' interest in agriculture. Each step is visually represented with icons and arrows, highlighting the flow and systematic approach of the research.

The data employed in this study were derived from a wide range of scientific literature relevant to the research focus. Data collection was conducted through a systematic search of academic sources, including peer-reviewed journal articles, scholarly books, research reports, and other scientific publications addressing ethnoecology, biology education, local wisdom-based learning, and student interest in the agricultural sector. During this process, only literature directly aligned with the research objectives was selected. The selection criteria were based on several key considerations, including the credibility of the authors, the relevance of the content to the research theme, and the extent of their scholarly contribution to the development of ethnoecological integration in educational contexts. This rigorous selection process was intended to ensure that the data collected provide a comprehensive and in-depth understanding of diverse academic perspectives on the application of ethnoecology in biology education (Alrhmoun, 2025).

Following the data collection phase, the analysis was conducted through a series of systematic and structured procedures. The first stage involved source screening and selection to ensure that only high-quality and academically reliable literature was included in the analysis. The second stage consisted of conceptual categorization, in which key ideas, theoretical frameworks, and empirical findings related to ethnoecology, biology education, and student interest in agriculture were organized into coherent categories (Efendi, 2024). This step facilitated a clearer understanding of the interconnections among the core concepts examined in the study. The third stage involved thematic analysis, aimed at identifying patterns and relationships between the implementation of ethnoecological approaches in biology education and the enhancement of student interest in the agricultural sector. Through these analytical stages, the study seeks to construct a well-structured and theoretically grounded understanding of the potential of ethnoecological integration in promoting more contextualized biology learning (Uskelwar, 2024).

The findings of the analysis are presented in a descriptive-analytical form, highlighting the relationship between ethnoecological concepts and their application in biology learning within school settings. This analysis demonstrates that the incorporation of local knowledge into the learning process can strengthen the relevance of biological concepts to students' everyday experiences. Furthermore, the study underscores that the implementation of an ethnoecological approach contributes to more meaningful and contextually rich learning experiences (Sahar, 2026). By connecting scientific knowledge with real-life community practices, students are encouraged to recognize the practical relevance of biology in agricultural activities within their environment. Overall, the application of a literature-based qualitative method combined with conceptual analysis is expected to provide a deeper insight into the role of ethnoecology in fostering contextual biology education, promoting the use of local wisdom as a learning resource, and enhancing students' interest in the agricultural sector.

RESULT AND DISCUSSION

A literature review shows that applying an ethnoecological approach to biology learning significantly improves the quality of the learning process. This approach helps students understand biological concepts more contextually because the material learned is connected to real-life experiences within the community. In this regard, ethnoecology serves as a bridge between scientific knowledge and traditional practices that develop in the local environment. When concepts such as ecology, biodiversity, and the relationship between organisms and their environment are explained through examples of agricultural practices found in the community, students tend to more easily grasp the material presented. Furthermore, learning that links scientific concepts to the realities of everyday life can increase student participation and engagement in the learning process. Therefore, the integration of ethnoecology not only serves to enrich the content of the subject matter but also creates a more relevant and meaningful learning experience for students.

The study also indicates that applying an ethnoecological approach to biology learning can strengthen students' understanding of ecological concepts that were previously viewed as abstract. Concepts such as ecosystem balance, nutrient cycles, and the interaction between organisms and their environment can be more concretely understood when linked to established agricultural practices within the community. For example, crop rotation, the use of organic fertilizers, and traditional land management techniques are concrete examples of the application of ecological principles in everyday activities. By utilizing these examples as part of the learning process, students can directly observe how biological concepts are applied in agricultural practices. This not only strengthens students' conceptual understanding of ecological material but also fosters

awareness that science plays a vital role in maintaining environmental sustainability and supporting sustainable human life.

In addition to contributing to improved conceptual understanding, the application of ethnoecology in biology learning also positively impacts the relevance of the learning process. When subject matter is connected to local experiences and realities familiar to students, the learning process becomes more meaningful and understandable. In agrarian communities, various traditional agricultural practices can be utilized as potential learning resources to explain various concepts in biology. Through learning that examines how communities manage land, utilize local plant diversity, and maintain ecosystem balance, students not only gain scientific understanding but also recognize the cultural values inherent in these practices. Thus, an ethnoecology-based learning approach can strengthen the link between scientific knowledge and the local wisdom that develops in community life.

Based on a review of various scientific literature, several forms of ethnoecology application in biology learning have been identified that have the potential to increase student interest in the agricultural sector. These forms of integration include the use of local agricultural practices as illustrations in delivering material, the use of the surrounding environment as a medium and learning resource, and the introduction of cultural values related to sustainable natural resource management. The application of this approach enables students to understand that agricultural activities are closely related to the biological concepts learned in school. Through this connection, students can see that biology is not only theoretical but also has direct relevance to the practices of community life. To present a more structured overview of the findings of this study, the results of the subsequent analysis are summarized in the following table.

Table 1. Structured overview of the findings of this study, the results of the subsequent analysis are summarized

Learning Aspects	Ethnoecological Integration	Impact on Students
Understanding the Concept of Ecology	Linking material to local agricultural practices such as crop rotation and organic fertilizers	Understanding of biological concepts becomes more concrete
Relevance of Learning	Using the surrounding environment as a learning resource	The lesson material feels closer to students' lives
Appreciation of Local Culture	Introducing traditional agricultural knowledge of the community	Increasing appreciation for local wisdom
Interest in Agriculture	Demonstrate the relationship between biological science and agricultural practice.	Increase students' interest in the agricultural sector

These findings indicate that the application of ethnoecology in biology learning plays a significant role in increasing students' interest in the agricultural sector. When students understand that the various biological concepts studied in class are directly related to agricultural practices in their environment, they will grow a sense of agriculture as a field with a strategic role and a strong scientific foundation. This understanding can encourage students to view the agricultural sector not merely as a traditional occupation passed down from generation to generation, but also as a field closely related to the development of science and technology. Therefore, biology learning that integrates an ethnoecological approach can serve as an effective educational medium to reintroduce the potential and importance of the agricultural sector to the younger generation.

Furthermore, the application of an ethnoecological approach in learning also contributes to increasing students' appreciation for the local knowledge that develops within the community.

Knowledge regarding farming methods, agricultural land management, and the utilization of biodiversity is part of the cultural heritage that also holds important scientific value. Through a learning process that integrates an ethnoecological perspective, students can understand that traditional practices carried out by communities not only have cultural significance but also contain ecological principles that align with concepts in modern biology. Thus, biology learning serves not only as a means of conveying scientific knowledge but also as a vehicle for introducing and maintaining the sustainability of local wisdom that has developed within the community.

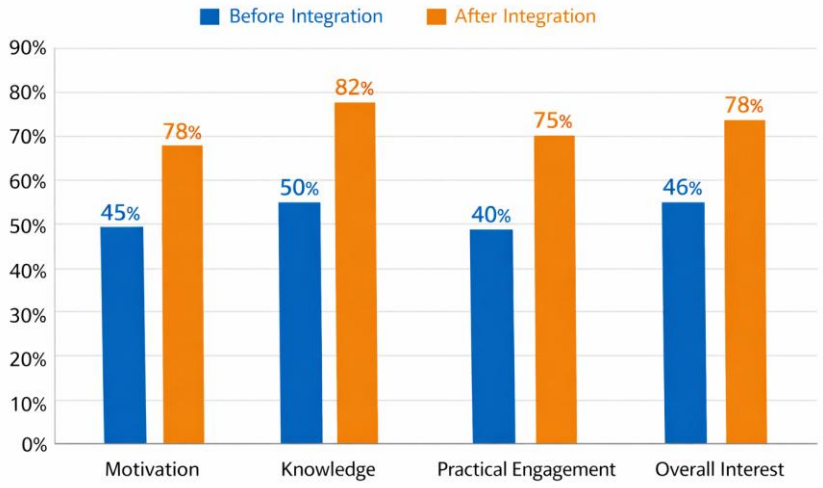

Figure 1. Students' Interest in Agriculture Before and After Ethnoecology Integration

Figure 2. Student interest in agriculture change

The bar chart demonstrates the effect of integrating ethnoecology into biology lessons on students' interest in agriculture. It shows a significant increase across all measured dimensions Motivation, Knowledge, Practical Engagement, and Overall Interest after the integration. Initially, students' interest levels ranged from 40% to 50%, indicating moderate engagement. Following the implementation of ethnoecology-based teaching, these levels rose substantially, reaching between 75% and 82%. This improvement highlights that incorporating ethnobiological knowledge and local ecological practices into biology lessons can effectively enhance students' enthusiasm, understanding, and active participation in agricultural topics.

Furthermore, the application of an ethnoecological approach in biology learning also has the potential to strengthen students' ecological awareness. By understanding the relationship between human activities and environmental balance, as explained through local agricultural practices, students can recognize the importance of sustainably preserving natural resources. This understanding is highly relevant in addressing increasingly complex environmental issues, such as land degradation, reduced biodiversity, and the impacts of global climate change. Therefore, the integration of ethnoecology in biology learning not only plays a role in enhancing students' conceptual understanding but also plays a significant role in fostering attitudes and concern for the environment.

In general, the findings of this study indicate that an ethnoecological approach offers significant potential for improving the quality of biology learning in schools. Integrating local knowledge into learning materials can help students understand ecological concepts more deeply and make the material more relevant to their daily experiences. Furthermore, this approach plays a role in fostering students' appreciation for the potential of local agriculture, which not only has

practical value but also contains elements of scientific knowledge and is part of the community's cultural heritage. Therefore, implementing biology learning that integrates ethnoecology can be an effective learning strategy to increase students' interest in the agricultural sector, while supporting efforts to preserve local wisdom and develop sustainable agricultural practices.

DISCUSSION

The findings of this study demonstrate that the integration of ethnoecology into biology learning significantly enhances both the quality of the learning process and students' interest in the agricultural sector. This approach enables students to develop a more contextual understanding of biological concepts by linking classroom content with community-based practices in environmental management and agriculture (Tutorskiy, 2024). Consequently, learning is no longer limited to theoretical mastery but is enriched through concrete and meaningful experiences. Students are better able to recognize the relationship between scientific knowledge acquired in school and the phenomena encountered in their daily lives (Nébié, 2024). Furthermore, the ethnoecological approach highlights that traditional agricultural practices are grounded in scientific principles, particularly those related to ecological sustainability and natural resource management (Fatmawati, 2024).

The Role of Ethnoecological Integration in Deepening Ecological Understanding

The application of ethnoecology contributes substantially to strengthening students' comprehension of ecological concepts. In conventional biology instruction, topics such as ecosystem balance, species interactions, and nutrient cycles are often presented abstractly, limiting students' ability to relate these concepts to real-world contexts (Pasos, 2025). However, by integrating local agricultural practices such as crop rotation, the use of organic fertilizers, and environmentally conscious land management students can directly observe the practical implementation of ecological principles. This contextualization not only enhances theoretical understanding but also fosters the ability to apply knowledge in real-life situations (Fatmawati, 2024).

Moreover, the ethnoecological approach facilitates a more holistic understanding of the relationship between humans and the natural environment. Traditional communities possess extensive local knowledge related to soil fertility, water management, and biodiversity conservation, developed through long-term interaction with their environment (Albuquerque, 2024b). Integrating this knowledge into biology education allows students to recognize that local practices embody scientifically valid ecological principles. As a result, students gain a deeper appreciation of the interconnectedness between scientific knowledge and everyday practices (Sudikan, 2024).

Enhancing Learning Relevance and Student Interest in Agriculture

In addition to improving conceptual understanding, the integration of ethnoecology enhances the relevance of biology learning to students' lived experiences. Learning that incorporates local contexts and practices fosters greater engagement, as students perceive the subject matter as more relatable and meaningful (Toledo, 2024). When ecological concepts are explained through familiar agricultural practices, students can better understand the practical significance of biology in interpreting real-world phenomena (Baránková, 2025).

This approach also has a positive impact on students' interest in the agricultural sector. By recognizing the scientific foundations of agricultural activities, students are more likely to perceive agriculture as a field with intellectual depth and future potential (Majumder, 2024). Furthermore, the integration of ethnoecology encourages students to value local agricultural practices not only as

economic activities but also as forms of scientific knowledge and cultural heritage that should be preserved (Zhyla, 2025). This dual perspective fosters both academic understanding and cultural appreciation.

Overall, the implementation of an ethnoecological approach in biology education promotes a more contextual, relevant, and meaningful learning experience (Pacheco-Flores, 2024). The findings indicate that this approach not only deepens students' understanding of ecological concepts but also strengthens the connection between academic content and everyday realities (Rumayomi, 2025). Additionally, it cultivates students' awareness of the importance of local agriculture as both a knowledge system and a vital component of community life. Therefore, ethnoecology-based biology learning can be regarded as an effective pedagogical strategy for enhancing student interest in agriculture, while simultaneously supporting the preservation of local wisdom and the advancement of sustainable agricultural practices. In summary, the primary strength of this discussion lies in its ability to systematically connect empirical findings with relevant literature, thereby reinforcing the validity of the arguments presented. It successfully highlights two key contributions of the study: the enhancement of students' ecological understanding and the increased interest in the agricultural sector. Furthermore, the thematic organization of the discussion improves analytical clarity and enables readers to follow the logical progression of ideas more effectively (Khoja, 2024).

CONCLUSION

Based on the results of the study, it can be concluded that the application of ethnoecology in biology learning has great potential to improve the quality of the learning process while deepening students' understanding of various ecological concepts. This approach provides students with the opportunity to learn biological concepts not only through theoretical explanations but also through concrete examples found in community life practices, particularly those related to local agricultural activities. Through the connection between scientific concepts and traditional practices, students can realize that biology is closely related to environmental management efforts and the sustainable use of natural resources. Therefore, biology learning that integrates an ethnoecological approach can provide a more contextual, relevant, and meaningful learning experience for students.

In addition to strengthening understanding of various concepts, the application of ethnoecology in learning also contributes to increasing the connection between the subject matter and the realities of students' daily lives. When learning content is linked to local experiences within the social environment, students tend to more easily grasp the practical value of the knowledge they acquire in school. This approach also helps students realize that agricultural practices developed in the community not only have economic and cultural value but also contain scientific principles closely related to ecological studies. Therefore, biology learning that utilizes an ethnoecological approach has the potential to foster student awareness of the importance of maintaining environmental balance while simultaneously appreciating local knowledge as part of a cultural heritage that needs to be maintained and preserved.

In general, the application of ethnoecology in biology learning can be seen as an effective pedagogical strategy to increase students' interest in the agricultural sector while supporting efforts to preserve local knowledge and develop sustainable agricultural practices. Through a learning process that connects scientific concepts with community practices, students not only gain a more comprehensive academic understanding but are also encouraged to develop an appreciation for the potential of natural resources in their surroundings. Therefore, the application of an ethnoecological approach in biology education is expected to contribute to shaping a younger generation with a

strong ecological awareness, respect for local wisdom, and an interest in participating in the future development of the agricultural sector.

DECLARATION OF AI AND AI ASSISTED TECHNOLOGIES IN THE WRITING PROCESS

During the preparation of this manuscript, the author(s) used Google Gemini to assist inimproving grammar, language quality, and overall readability of the text. After using this tool, the author(s) Carefully reviewed and edited the content as necessary and take full responbility for the content of the publication.

AUTHORS' CONTRIBUTION

Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.
Author 2: Conceptualization; Data curation; In-vestigation.
Author 3: Data curation; Investigation.

DECLARATION OF COMPETING INTEREST

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

REFERENCES

Afriyansyah, B. (2024). Bibliometric analysis: Novelty research on sustainable national park management from an ethnobiological perspective. Iop Conference Series Earth and Environmental Science, 1419(1). https://doi.org/10.1088/1755-1315/1419/1/012035

Ajiningrum, PS (2025). Ethnobotanical knowledge of diversity and utilization of plants among Dayak Lundayeh in Malinau, North Kalimantan, Indonesia. Ethnobotany Research and Applications, 31(Query date: 2026-03-07 14:37:11). https://doi.org/10.32859/era.31.60.1-26

Albuquerque, U.P. (2024a). Ethnobiology and Ethnoecology. Encyclopedia of Biodiversity Third Edition Volume 1 7, (Query date: 2026-03-07 14:37:11). https://doi.org/10.1016/B978-0-12-822562-2.00370-4

Albuquerque, U.P. (2024b). Integrating depth and rigor in ethnobiological and ethnomedical research. Journal of Ethnobiology and Ethnomedicine, 20(1). https://doi.org/10.1186/s13002-023-00643-y

Alrhmoun, M. (2025). Ethnoecology of desert truffle hunting: A cross-cultural comparative study on practices and perceptions in the Mediterranean and the Near East. Journal of Arid Environments, 229(Query date: 2026-03-07 14:37:11). https://doi.org/10.1016/j.jaridenv.2025.105367

Armstrong, C. G. (2025). Ethnoecological perspectives on environmental stewardship: Tenets and basis of reciprocity in Gitxsan and nłeʔkepmx (Nlaka'pamux) Territories. People and Nature, 7(5), 934–946. https://doi.org/10.1002/pan3.10641

Baránková, Z. (2025). Exploring Landscapes Through Folk Perception (Case Study – Slovakia). Human Ecology, 53(3), 597–616. https://doi.org/10.1007/s10745-025-00614-9

Bijukumar, V. (2025). Ethnoecology and Everyday Life in Northeast India: Lineages, Manifestations and Transformations. Politics of the Anthropocene and Climate Crisis in India Seeking Socio Ecological Transformations, (Query date: 2026-03-07 14:37:11), 197–213. https://doi.org/10.4324/9781032689579-16

Bogotá-Gregory, J.D. (2024). Ethnoecology and use of fishes by the Cubeo people from the Cuduyarí River, Colombian Amazonia. Journal of Ethnobiology and Ethnomedicine, 20(1). https://doi.org/10.1186/s13002-024-00737-1

Chakocha, A.F.N. (2025). Ethnoecological Knowledge and Management Strategies for Canarium schweinfurthii (Burseraceae) in Forest and Savanna Zones of Cameroon. Economic Botany, 79(2), 192–210. https://doi.org/10.1007/s12231-025-09633-5

Dibaba, A.T. (2025). Ecopoetic and Ecolinguistic Approaches to 'Broken Places': Orature of Displacement Around the Ethiopian Capital. Oral Literary Worlds Location Transmission and Circulation, (Query date: 2026-03-07 14:37:11), 83–112. https://doi.org/10.11647/OBP.0405.02

Efendi, D. (2024). Ethnoecology of home garden landscapes on Seliu Island, Belitung District, Indonesia. Biodiversitas, 25(3), 1304–1319. https://doi.org/10.13057/biodiv/d250347

Fatmawati, N. (2024). Ethnoecology: The Community Adaptation Patterns of Forest Management in Grobogan, Central Java. Wallacea Journal of Forestry Research, 13(2), 13–23. https://doi.org/10.24259/jpkwallacea.v13i2.32146

Filgueira, CHM d. S. (2025). Employing Local Ecological Knowledge to reveal interactions between artisanal fishers and Guiana Dolphins (Sotalia guianensis) along the Maranhão coast, northern Brazil. Ethnobiology and Conservation, 14(Query date: 2026-03-07 14:37:11), 1–16. https://doi.org/10.15451/ec2025-06-14.19-1-16

Kebebew, Z. (2024). Diversity, preference, and conservation priority of woody plant species in coffee agroforestry system in southwest Ethiopia. Frontiers in Forests and Global Change, 7(Query date: 2026-03-07 14:37:11). https://doi.org/10.3389/ffgc.2024.1269141

Khoja, A. A. (2024). Himalayan Apiaceae-A comprehensive ecological and ethnobotanical evaluation. Ethnobotany Research and Applications, 27(Query date: 2026-03-07 14:37:11). https://doi.org/10.32859/era.27.42.1-18

Majumder, S. (2024). Himalayan fermented beverages and their therapeutic properties with scientific validations: A comprehensive review. Journal of Ethnic Foods, 11(1). https://doi.org/10.1186/s42779-024-00260-4

Maliao, R. J. (2026). Conditional visibility: Intersectional inequities marginalize local scholarship in conservation science. Environmental Science and Policy, 176(Query date: 2026-03-07 14:37:11). https://doi.org/10.1016/j.envsci.2026.104328

Martalasari. (2025). Ethnoecological Potential of the Pomuan Indigenous Customary Law as a Biology Learning Resource. E3s Web of Conferences, 678(Query date: 2026-03-07 14:37:11). https://doi.org/10.1051/e3sconf/202567803003

Melo, PW d. (2025). Environmental risk perception and adaptive strategies in a neotropical fishing population: Socioeconomic aspects and community participation. Marine Policy, 175(Query date: 2026-03-07 14:37:11). https://doi.org/10.1016/j.marpol.2025.106623

Nébié, EKI (2024). Participatory Mapping of Ethnoecological Perspectives on Land Degradation Neutrality in Southern Burkina Faso. Sustainability Switzerland, 16(19). https://doi.org/10.3390/su16198524

Pacheco-Flores, A. (2024). Multiple Uses of Wild Edible Trees by a Nahua-Origin Community in Western Mexico. Plants, 13(23). https://doi.org/10.3390/plants13233334

Pasos, EDM (2025). Meliponiculture in Northwestern Yucatán: History, Challenges, and Knowledge Transmission. Estudios De Cultura Maya, 65(Query date: 2026-03-07 14:37:11), 190–217. https://doi.org/10.19130/iifl.ecm.2025.1/0Q27R1V056

Perez, D. (2026). Effect of seed circulation systems on the spread and diversity of Xanthomonas phaseoli pv. Manihotis infecting cassava crops of the Colombian Caribbean. Plants People Planet, 8(1), 353–364. https://doi.org/10.1002/ppp3.70086

Putri, IASLP (2025). Ethnoecology inheritance among the younger generation in villages around the Maros Pangkep karst. Iop Conference Series Earth and Environmental Science, 1553(1). https://doi.org/10.1088/1755-1315/1553/1/012040

Rohman, MH (2024). Effectiveness of Ethnoecological-STEM Project-Based Learning Model to Improve Critical Thinking Skills, Creativity, and Science Concept Mastery. International Journal of Cognitive Research in Science Engineering and Education, 12(3), 521–534. https://doi.org/10.23947/2334-8496-2024-12-3-521-534

Rumayomi, NAA (2025). Forest Conservation by Conserving Socio-cultural Aspects: A Lesson from the Sougb Tribe in Teluk Bintuni, West Papua Province. Journal of Tropical Forest Management, 31(3), 288–299. https://doi.org/10.7226/jtfm.31.3.288

Sahar, H. (2026). Ethnoecology of the Wakhi community in Broghil Valley, Chitral, Pakistan. Genetic Resources and Crop Evolution, 73(2). https://doi.org/10.1007/s10722-026-02743-6

Souza, PIV de. (2025). Ecology of Byrsonima cydoniifolia A. Juss. (Malpighiaceae) monodominant stands under the influence of flood, fire, and cattle. Trees Forests and People, 22(Query date: 2026-03-07 14:37:11). https://doi.org/10.1016/j.tfp.2025.101036

Sudikan, SY (2024). Evolution of Whaling Practices among Lamalera Fishermen in Indonesia. Human Evolution, 39(1), 101–113. https://doi.org/10.14673/HE2024121134

Taqwim, MHA (2025). Ethnoecological perspectives on biodiversity conservation in volcanic landscapes of Mount Merapi National Park, Central Java, Indonesia. Asian Journal of Ethnobiology, 8(1), 104–115. https://doi.org/10.13057/asianjethnobiol/y080109

Toledo, V. M. (2024). Indigenous Peoples and Biodiversity. Encyclopedia of Biodiversity Third Edition Volume 1 7, (Query date: 2026-03-07 14:37:11). https://doi.org/10.1016/B978-0-12-822562-2.00269-3

Tutorskiy, A. V. (2024). Parallels between the Development of the Culture-Area Concept and "Economic and Technical Areas" in the 1920s–1930s. Etnograficeskoe Obozrenie, 2024(2), 25–45. https://doi.org/10.31857/S0869541524020025

Uskelwar, L. S. (2024). Ethnoecology of Indian sand whiting, Sillago sihama (Forsskal, 1775) from South Konkan coast (Arabian Sea: Northwest coast) of India. Journal of the Marine Biological Association of India, 66(1), 77–83. https://doi.org/10.6024/jmbai.2024.66.1.2454-12

Zhyla, S. (2025). FERAL CATTLE IN THE CHORNOBYL BIOSPHERE RESERVE: A COMBINATION OF SCIENCE AND POLICE ETHNOECOLOGY. Theriologia Ukrainica, 29(Query date: 2026-03-07 14:37:11), 153–164. https://doi.org/10.53452/TU2913