TAPROBANICA, ISSN 1800–427X. Vol. 14, No. 02 (2025): pp. 293–295.

Published by Research Center for Climate Change & Faculty of Mathematics & Natural Sciences, Universitas Indonesia, Depok 16424, INDONESIA.

© distributed under Creative Commons CC-BY 4.0

http://www.taprobanica.org

https://doi.org/10.47605/tapro.v14i2.381

OPEN ACCESS

Book Review: Spesies Apakah Itu? [What Species Is That?]



Overview. Indonesia is known as a megadiverse country with an extraordinary richness of biological diversity. However, the public's understanding of what species are, how they are identified, and their primary importance for life and conservation remains limited. In this context, the book Spesies Apakah Itu? Menjawab Pertanyaan Pertama dari Penggemar Alam Sejati is a relevant and urgent work (Indrawan et al. 2024). The book "Spesies Apakah Itu? Menjawab Pertanyaan Pertama dari Penggemar Alam Sejati" was written by a team of scientists

and biodiversity observers, and edited by Mochamad Indrawan, Anargha Setiadi, Wellyzar Siamsuridzal, and Himmah Rustiami. This book combines scientific, participatory, and cultural approaches to explain the meaning of species and the importance of community involvement in conservation efforts. This book promotes three important approaches in science: (1) the basic approach of pure science, namely the traditional scientific approach in studying biodiversity; (2) involving scientific communities in their fields in collecting and analysing scientific data related to and (3) an biodiversity; approach accommodates local knowledge and wisdom, recognizing and utilizing the knowledge of local communities in understanding and preserving biodiversity. Through this approach, this book invites every person or reader to understand, become a discoverer, and contribute to the science of biodiversity and conservation in Indonesia.

This book covers several key topics: (a) basic explanation of what species are and how scientists classify them; (b) differences between species, genus, and other taxonomies; (c) the process of evolution and speciation (the formation of new species); (d) real-world examples of animal and plant species from around the world; and (e) illustrations and photographs for visual understanding. Therefore, this book is well-suited for beginner readers or anyone who wants to understand the concept of biodiversity from a scientific perspective. Furthermore, the book invites readers to understand the importance of taxonomic work in identifying and naming species and encourages public involvement through the approach of pure science, citizen science, and traditional knowledge. Thus, everyone can contribute to the discovery and conservation of species in Indonesia.

The main roles of the book. (1) Building foundational awareness: It provides the essential first step in biodiversity management by answering the fundamental question of what a species is and why identifying and naming them is the prerequisite for any conservation effort.

- (2) Promoting public participation: The book encourages a citizen science approach, bridging the gap between academic knowledge and public involvement in documenting and conserving local biodiversity.
- (3) Linking taxonomy to policy and action: It demonstrates the practical application of taxonomy, showing how species identification directly informs conservation strategies, environmental policies, and priority-setting (e.g., IUCN assessments).
- (4) Highlighting economic potential: The book connects the fundamental knowledge of species identification to sustainable economic opportunities, such as community-based ecotourism, illustrating how conservation can provide tangible livelihoods and incentives for local communities.

Conservation aspects. (1) Basic education for conservation: Effective conservation cannot take place if we do not know what we are protecting. This book helps the public and beginners understand: What is a species? Why is it important to recognize and name species? And what are the impacts if species become extinct before they are known? So, this book strengthens public awareness about the importance of species in ecosystems.

- (2) Encouraging community involvement: This book promotes an inclusive model of biodiversity management and conservation, such as involving ordinary citizens in species observations and recognizing the importance of local knowledge in identifying species. This knowledge can support community-based conservation, which is often more effective in the long term than conservation imposed by government authorities.
- (3) Reviving the role of taxonomy in biodiversity management and conservation: One of the challenges for management and conservation activities in Indonesia is the lack of taxonomists. This book highlights the urgency of taxonomic work that has so far been less visible and shows that naming species is part of an effort to save them. By naming a species, we acknowledge its existence and can fight for its protection legally or by policy.

- (4) Linking conservation to sustainable livelihoods: The book illustrates how species identification is the first step toward creating sustainable economic incentives for conservation, such as community-based ecotourism and the bioeconomy. It shows that protecting species is not just an ecological imperative but can also be a foundation for community well-being.
- (5) Providing a basis for sustainable economics: By enabling readers to identify species, the book opens the door to understanding their potential economic value in a sustainable context, such as ecotourism and natural product development, thereby aligning economic interests with conservation goals.

Constructive criticism for the book. This book, "Spesies Apakah Itu? Menjawab Pertanyaan Pertama dari Penggemar Alam Sejati", has many advantages and benefits; however, we would like to provide constructive criticism for future improvement:

- (1) Depth of material for academic readers: This book is excellent as an introduction for the general public, but for readers from academic circles or advanced students, the discussion of taxonomic methodology and complex issues such as species delimitation or molecular approaches is lacking. The addition of technical chapters or appendices would be valuable.
- (2) Limitations of local case studies: Although focused on Indonesia, the book would benefit from more exploration of field stories and endemic species from various regions, such as Sumatra, Papua, Wallacea, Kalimantan, the Lesser Sunda Islands, and others. This would enrich the narrative and build a stronger emotional connection between readers and the archipelago's biodiversity.
- (3) Scientific visualization is underoptimized: Topics such as classification, phylogeny, and evolution would be easier to understand if accompanied by infographics, diagrams, and distribution maps. The addition of these visual elements would be very helpful for visual learners and younger audiences, who are crucial targets for conservation education.
- (4) Practical guide for the public is incomplete: While encouraging public involvement, the book does not provide practical technical guidance, such as how to observe, record, and report species, or how to join local scientific communities. An addition, such as a field toolkit, would be very useful.

(5) Limited physical distribution: Physical access to the book outside of major cities is still quite difficult. Enhancing distribution through collaboration with national parks, local conservation communities, and schools would effectively promote the message of the book.

Furthermore, if this book is to be expanded or developed into a series, it could add: (a) Regional editions (e.g., What Species Is That? Papua Edition); (b) Practical field guides for citizen science; and (c) Interactive digital supplementary materials or companion websites. These additions would significantly enhance the book's practicality and accessibility, especially considering Indonesia's shortage of taxonomists.

Conclusion. (1) This book is an important, informative, and inclusive introduction to understanding the concept of species and its role in biodiversity conservation, especially in Indonesia.

- (2) In general, the book successfully meets the basic needs of a wide audience, from students to conservationists, by explaining what a "species" is in scientific terms, while remaining down-to-earth. The material is presented in a style that is not overly technical; it breaks down the barriers between formal science and local knowledge while making readers more aware of the urgency of biodiversity conservation in Indonesia.
- (3) The book's key strengths include (a) an inclusive educational approach that can bridge academic science and local wisdom; (b) packaging scientific concepts that are simple and easy to understand for novice readers but remain rich in substance; and (c) emphasizing the importance of the role of individuals and local communities in preserving species and ecosystems.

(4) This book is not only ecologically relevant but also touches on the social and philosophical aspects of the relationship between humans and nature. In the midst of a global environmental crisis, this book is an important call to rethink how we identify, understand, and care for life on earth.

Acknowledgements. We thank Prof. Stephen B Heard (University of New Brunswick, Canada), Erik Meijaard (Borneo Futures, Brunei), and Ron Lilley for reviewing the manuscript.

Literature Cited

Indrawan, M., A. Setiadi, W. Sjamsuridzal et al. (ed.). (2024). Spesies Apakah Itu? Menjawab Pertanyaan Pertama dari Penggemar Alam Sejati. Yayasan Pustaka Obor, Jakarta.

Submitted: 22 Jan 2025, Accepted: 22 Oct 2025 Subject Editor: Ron Lilley

Y. Purwanto¹, E. Munawaroh¹ & W. Sujarwo¹*

¹ Research Center for Ecology, National Research & Innovation Agency (BRIN), Indonesia *E-mail: wawan.sujarwo@brin.go.id