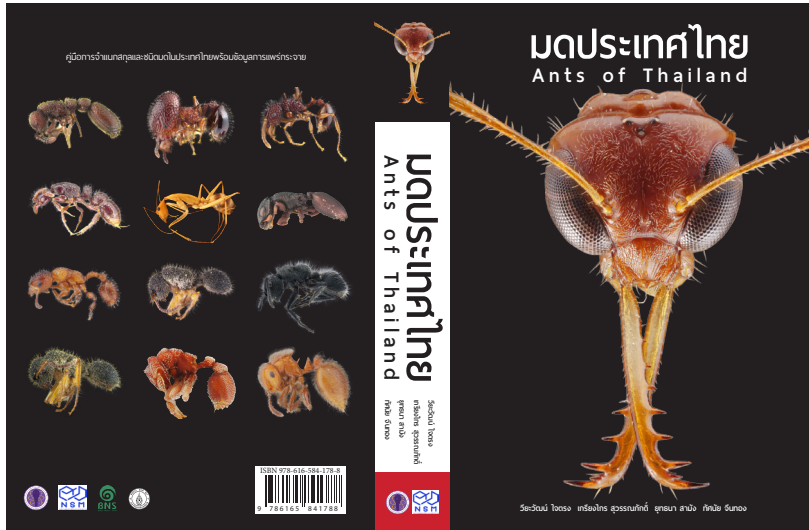


**Ants of Thailand** by Weeyawat Jaitrong, Kriangkrai Suwannaphak, Yuthana Samung and Tadsanai Jeenthong. 5k Panich Co Ltd., Bangkok, Thailand, 2024. Second Edition. 528 pp (in Thai). ISBN 978-616-584-178-8 (hardcover).



Thailand's unique geographic location, at the crossroads of the Indochina and Sundaic biogeographical regions, establishes it as a significant biodiversity hotspot, accommodating a wide range of ant species known for their rich diversity, high endemism and the threat of habitat loss. The intricate nature of ant species, characterized by their small size and vast diversity, presents formidable obstacles to entomologists, significantly impeding their endeavors in the meticulous tasks of species identification and classification.

In the realm of ecosystem functioning, ants serve as key players through their diverse interactions and behaviors. From seed dispersal to soil aeration, nutrient cycling, predation, pest control, pollination, and even acting as a food source for various animals, ants contribute significantly to maintaining the health and biodiversity of ecosystems. Recognizing the complexity and importance of ants, there is a growing need for a comprehensive reference book with detailed illustrations to aid researchers in navigating the intricacies of ant species and fostering a deeper understanding and appreciation of these fascinating insects.

An in-depth exploration of Thailand's diverse ant species, as facilitated by such a reference book, holds immense value for researchers, educators, and conservationists alike. In the face of ongoing challenges posed by habitat loss and environmental pressures, a thorough understanding of ant species is essential for developing effective conservation strategies and sustainable management practices. With this knowledge, stakeholders can work towards safeguarding Thailand's unique biodiversity for present and future generations, ensuring the preservation of its natural heritage for years to come.

The inaugural publication on the ants of Thailand, released in 2012 under the title *Identification Guide to the Ant Genera of Thailand*, represented a seminal work in the

field. Authored by Dr. Weeyawat Jaitrong, a notable Thai myrmecologist affiliated with the Office of Natural Science Research at the National Science Museum in Thailand, that book focused exclusively on the genus-level identification of ants. This landmark work not only showcased Dr. Jaitrong's profound knowledge and dedication to the field but also served as a significant milestone in advancing our understanding of Thailand's diverse ant fauna.

During the COVID-19 pandemic, Dr. Weeyawat Jaitrong spearheaded a collaborative initiative with a diverse team of specialists. This team included Yuthana Samung, senior researcher at the Department of Medical Entomology, Faculty of Tropical Medicine at Mahidol University, and Kriangkrai Suwannaphak, a renowned naturalist and the founder of Banpa Nature School, both known for their proficiency in insect photography. Additionally, Tadsanai Jeenthong, a naturalist with the Office of Natural Science Research at the National Science Museum, made significant contributions to their field sampling efforts.

*The Ants of Thailand*, a visually captivating guide first unveiled in October 2020 and recently updated in August 2024 for its second edition, has enraptured readers with its exquisite photography showcasing Thailand's diverse ant species, along with concise descriptions and more than 1,600 vibrant color illustrations. Although The book was written in Thai language, information included in the book including scientific names, photographs, and ditributional maps are apparently useful for both researchers and amateurs who are not using Thai language. This comprehensive resource serves as an indispensable tool for identifying and comprehending the distribution of more than 360 ant species belonging to 112 genera and ten subfamilies in Thailand. Positioned as a remarkable and unparalleled reference, this book provides invaluable insights into the fascinating and diverse realm of Thai ants, making it an essential companion for enthusiasts, researchers, and conservationists alike.

The book is a masterpiece of artful craftsmanship and impeccable structure, featuring two sections that serve as captivating gateways into the fascinating world of ants. Its organization is intended to provide readers with a comprehensive understanding of these remarkable insects. Beginning with a thorough exploration into the fundamental biological and ecological characteristics of ants, the book delves into the fascinating intricacies of their eusocial nature, caste systems, colony dynamics, life cycles, nesting behaviors, dietary preferences, and diverse habitats. This foundational section sets the stage for a captivating journey into the realm of the Thai ant fauna, providing readers with a perceptive glimpse of the pivotal role these insects play within ecosystems. Additionally, it offers valuable insights into techniques for ant sampling, methods for the preservation and maintenance of ant specimens, a comprehensive classification system, keys to Thai ant subfamilies, and insights into current research endeavors.

As readers progress through the book, they encounter a woven narrative brimming with detailed information on the myriad of ant species indigenous to Thailand. Each species is presented in a meticulously detailed account, offering comprehensive details of their distinct traits, behaviors, and ecological roles. These profiles are carefully designed to captivate and engage the reader, instilling a sense of wonder at the complexity and diversity of ant life that thrives within the diverse landscapes of Thailand.

The second portion of the book is a treasure trove of species accounts that is as technically detailed as it is accessible, making it an indispensable reference for both educators and enthusiasts. The species are cataloged systematically by subfamily, with a broad range that

includes Amblyoponinae, Dolichoderinae, Dorylinae, Ectatomminae, Formicinae, Leptanilinae, Myrmecinae, Ponerinae, Proceratiinae, and Pseudomyrmecinae. Within these categories, the species are listed in alphabetical order by genus and species, creating a systematic structure that facilitates ease of use for swift referencing. The book provides thorough explanations and detailed diagnostic features for each subfamily, coupled with a comprehensive enumeration of ant genera found worldwide and specifically in Thailand. It also presents concise summaries for each genus, detailing the number of species known worldwide as well as those specific to Thailand.

The entries for each species are clear and concise examples, maintaining detail without compromising brevity. Each entry begins with the Thai and scientific names, and then provides a brief description that highlights key identification features, complemented by a distribution map, and delves into the specifics of habitat preferences and other vital ecological attributes. Accompanying these descriptions are carefully designed distribution maps that provide a visual representation of each species' geographical range.

What particularly distinguishes these accounts is the visual feast of illustrations that accompanies each one. At least three meticulously rendered images are provided for every species, offering views of the head in a detailed full-face perspective and the body from both profile and dorsal angles. These illustrations are remarkable for their clarity, reminiscent of the precision one would expect from the magnification of a stereoscope, and they serve as a visual guide that not only deepens the reader's understanding but also significantly streamlines the process of species identification.

Overall, the second section of the book is not just a segment of text but a journey through the microcosm of ants, offering a comprehensive and immersive experience that is as educational as it is visually stunning. It serves as both a guide and a tribute to the incredible diversity of the ant world, and is sure to be a cherished resource for anyone eager to delve into the fascinating realm of myrmecology.

To further enhance the reader's experience and facilitate seamless navigation through the wealth of information presented, the book concludes with a thoughtful inclusion of Thai name and scientific name indexes. These indexes serve as invaluable tools, allowing readers to easily locate specific species and cross-reference information.

This book emerges as a seminal work in the study of Thailand's ant species, representing an extensive repository of knowledge for enthusiasts and researchers alike. Nevertheless, it is imperative to acknowledge that while the book offers a thorough overview, it may not encapsulate all the most recent discoveries in the field. Thailand is a hub of ongoing entomological discovery, with frequent identification of new records and new species. Recent noteworthy findings include several genera from various subfamilies, such as *Chronoxenus* and *Philidris* in Dolichoderinae; *Lepisiota*, *Nylanderia*, *Paraparatrechina*, *Plagiolipsis*, and *Pseudolasius* in Formicinae; *Protanilla* in Leptanillinae; *Aphaenogaster*, *Lordomyrma*, and *Temnothorax* in Myrmecinae; *Euponera* and *Hypoponera* in Ponerinae, and *Discothyrea* in Proceratiinae. The excitement generated by these discoveries is tempered by the reality that many species within these genera remain unidentified, underscoring the imperative for continuous research and the refinement of taxonomic methodologies.

Despite these challenges, the book stands as an inspirational guide, providing a substantial foundation of knowledge and encouraging further exploration into the diverse and complex world of Thai ants. As a comprehensive introduction to Thailand's myrmecofauna, this work remains an invaluable reference which will ignite curiosity and stimulate further myrmecological study.

In summary, the book *Ants of Thailand* stands as a definitive resource on the taxonomy, description, distribution, and some ecological aspects of ants in Thailand. While primarily targeting a specialized audience, its accessible writing style and engaging content make it suitable for a broader readership. Whether you are a seasoned researcher, a student exploring the world of myrmecology, or simply a curious nature enthusiast, this book offers a wealth of information and insights into the captivating world of ants in Thailand. With its comprehensive coverage, accessible style, and profound insights, *Ants of Thailand* is poised to become an indispensable reference for anyone interested in the fascinating realm of ants and the ecosystems they inhabit.

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