



ETHNOBOTANY OF THE DARA-ANG IN PANG DAENG VILLAGE, CHIANG MAI PROVINCE



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ABSTRACT

The Dara-ang (Palaung) is an ethnic group residing in northern Thailand, particularly in Chiang Mai and Chiang Rai Provinces. Their lifestyle still rely on natural resources, especially the plant utilization. However, social and environmental changes may threaten the transmission of this traditional knowledge. This study aims to explore and document the ethnobotanical knowledge of the Dara-ang (Palaung) in Pang Daeng Village, Chiang Dao District, Chiang Mai Province. Data collection was conducted during October 2024 to January 2025 through field surveys and interviews with key informants. The results found that 121 plant species from 49 families are utilized by the Dara-ang. The most number was Food plants (73 species or 57%), followed by medicinal plants (24 species or 19%). These results highlight the essential role of plants in the daily lives of the Dara-ang. The insights gained can serve as a foundation for future research on the application of plants in sustainable management of natural resources.

INTRODUCTION

Ethnobotany explores the relationship between people and plants, focusing on traditional knowledge, cultural practices, and the sustainable use of plant resources (Cotton, 1996). The Dara-ang also known as Palaung are an ethnic minority in northern Thailand (Anderson, 1990). Their lifestyle still rely on natural resources, especially the plant utilization.

This study aims to document and analyze the traditional plant knowledge of the Dara-Ang in Pang Daeng Village, highlighting their dependence on local biodiversity for both cultural and practical purposes. By investigating the plant species used in various aspects of life, this research contributes to understanding the integral role of plants in the livelihoods of the Dara-Ang people and provides a foundation for further studies on plant utilization and sustainable natural resource management.

RESULTS

A total of 121 plant species from 49 families, with Fabaceae being the most frequently found family, were identified in this study, showcasing the rich ethnobotanical knowledge of the Dara-ang people in Pang Daeng Village. These plants were categorized into five main usage groups, and their different parts could be further classified into six utilization categories.

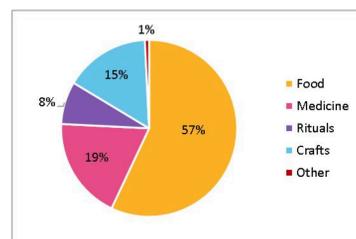


Figure 1 : Proportion of plant use categories

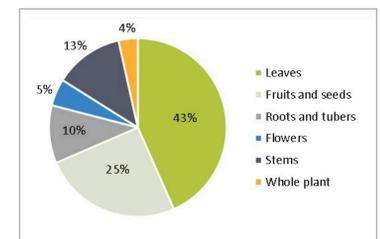


Figure 2 : Proportion of plant parts used

Some important ethnobotany plants

Table 1: Some important ethnobotanical plants

No.	Local name	Scientific name	Family	Use categories	Uses
1.	Dor siam	<i>Brassica juncea</i> (L.) Czern.	Brassicaceae	Food	Mustard greens can be preserved in three ways: sun-drying, fermenting in water with salt, and fermenting followed by sun-drying.
2.	Ya men	<i>Ageratum conyzoides</i> L.	Asteraceae	Medicine	Wrap the root and the eggshell of a hatched egg in a black cloth, boil it, and drink the decoction to relieve stomach pain and diarrhea.
3.	Dok ka long	<i>Bidens pilosa</i> L.	Asteraceae	Medicine	Boil the leaves with water and drink to relieve acid reflux.
4.	Reo	<i>Calamus</i> spp.	Arecaceae	Craft	The Dara-ang people use rattan make a traditional belt called "nok."
5.	Hai ma ke tok	<i>Pterocarpus macrocarpus</i> Kurz.	Fabaceae	Craft	Boiling the tree bark produces a brown dye.
6.	Prang dok duu	<i>Tetragium harmandii</i> Planch.	Vitaceae	Craft & Food	Leaves can be eaten fresh or blanched and dipped in chili paste. They can also be boiled to produce a natural red dye.
7.	Na mai	<i>Saccharum officinarum</i>	Poaceae	Ritual	During a housewarming ceremony, it is tied to the four corners of the house for good luck and prosperity.
8.	Yuan ma han	<i>Acacia concinna</i> (Willd.) DC.	Fabaceae	Ritual	Boil pod in water, then sprinkle the water over the body or wash the face to cleanse negative energy.

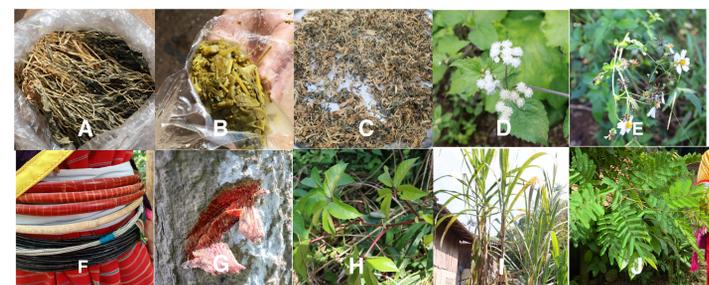


Figure 3 : Some important ethnobotanical plants (A) *Brassica juncea* (L.) Czern., sun-dried; (B) *Brassica juncea* (L.) Czern., fermented in water; (C) *Brassica juncea* (L.) Czern., fermented followed by sun-drying; (D) *Ageratum conyzoides* L.; (E) *Bidens pilosa* L.; (F) *Calamus* spp., a belt called "nok." (G) *Pterocarpus macrocarpus* Kurz; (H) *Tetragium harmandii* Planch.; (I) *Saccharum officinarum*; (J) *Acacia concinna* (Willd.) DC.

MATERIALS AND METHODS

Equipment Preparation



Prepare bags, pruning shears, labels, pencil, notebook, voice recorder, and camera.

Field Data Collection



Interview and collect plant samples monthly.

Plant Sample Preservation



Dry samples for long-term storage.

Identification and Analysis



Use a stereo microscope and identify species.

ACKNOWLEDGEMENTS

I sincerely thank Associate Professor Dr. Angkhana Inta for her invaluable guidance and support throughout this study. I also acknowledge the Faculty of Science, Chiang Mai University, for their support, as well as all contributors who assisted in this research.

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CONCLUSIONS

This study highlights the essential role of ethnobotanical knowledge in the daily lives of the Dara-ang. Traditional plant use is deeply integrated into food security, medicine, and cultural practices. Conservation efforts and further research are needed to protect this indigenous knowledge for future generations.