



相思湖学术论丛

THE NAMES AND CLASSIFICATION OF
COMMON PLANTS IN ZHUANG



壮语常见植物 的命名与分类

Meng Yuanyao

蒙元耀 著

✧ 广西民族出版社
Guangxi Nationalities Publishing House

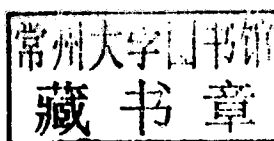


壮语常见植物的命名与分类

The Names and Classification of Common Plants in Zhuang

蒙元耀 著

Meng Yuanyao



广西民族出版社

Guangxi Nationalities Publishing House

图书在版编目 (CIP) 数据

壮语常见植物的命名与分类 / 蒙元耀著. — 南宁: 广西民族出版社, 2006. 10
ISBN 7-5363-5209-3

I. 壮… II. 蒙… III. 植物—壮语—名称—研究—英文 IV. ①Q949②H218

中国版本图书馆 CIP 数据核字 (2006) 第 119303 号

壮语常见植物的命名与分类

The Names and Classification of
Common Plants in Zhuang

蒙元耀 著

Meng Yuanyao

出版发行	广西民族出版社 (地址: 南宁市桂春路 3 号 邮政编码: 530028)
发行电话	(0771) 5523216 5523226 传 真: (0771) 5523246
E-mail	CR@gxmzbook.cn
责任编辑	覃祥明
封面设计	玉荣奖
插页设计	玉荣奖
版式设计	李晓平
责任校对	苏 海
责任印制	姜为民
印 刷	广西地质印刷厂
规 格	889×1194 1/16
印 张	22.5
字 数	500 千
彩色插页	8
版 次	2006 年 10 月第 1 版
印 次	2006 年 10 月第 1 次印刷

ISBN 7-5363-5209-3/Z · 589

定价: 100.00 元

如发现印装质量问题, 影响阅读, 请与印刷厂联系调换

本书得到广西民族大学出版基金资助，

特此致谢！

前 言

壮族是中国南方一个历史悠久的民族，主要连片聚居在广西的南宁市、柳州市、来宾市、河池市、百色市、崇左市以及这六市所辖的各个县份。此外广西其他地方也有散居的壮族。云南的文山壮族苗族自治州和广东的连山壮族瑶族自治县也有壮族分布。与广西接壤的贵州、湖南两省的边缘地带也有不少壮族分布。壮族人民居住的地方大致可以连成一片，其间也有汉、瑶、苗、彝、侗、水、仫佬、毛南、仡佬等民族相互杂居。

壮乡大地风光秀丽，气候宜人，名胜古迹为数不少。桂林阳朔一带的山水自不待言，早已扬名于世。南宁的青秀山、伊岭岩，武鸣、马山、上林三县交界的大明山仙境，柳州的鱼峰山、都乐岩，桂平的西山，隆安的龙虎山，宁明的花山，崇左的石林，大新的德天瀑布，龙胜的花坪和龙脊梯田，无一不是景色迷人的幽雅所在。

广西这块土地上有不少奇珍异宝。由于雨量充沛，阳光充足，壮乡的植物品种非常丰富。蕨类植物中的活化石——桫欏，茶族中的皇后——金花茶，植物中的珍宝——银杉，优质木材中的擎天树、蚬木、金丝李、格木，它们皆把根须深深地插在壮乡这片热土里。药材类的金银花、罗汉果、板蓝根、田七、桂皮等等，更是得天独厚。水果中的龙眼、荔枝、芒果、菠萝则被誉为南果上品。

除了植物资源，广西境内的语言文化资源也异常丰富。壮族各地的着装服饰，饮食娱乐，民居结构，婚嫁喜庆，节日祭祀，葬丧仪式，种种民俗文化内涵非常值得研究。

然而，壮族虽号称中国最大的少数民族，但国际知名度却不太高。要宣传壮族，宣传广西，我们还有大量的工作要做。本书之所以用英文来写作，目的就是向世人推介壮族，让外部世界的人了解壮族，认识广西。

蒙元耀

2006年9月

Abstract

Zhuang is a Tai language spoken in southern China. This book presents a systematic introduction to the form and structure of Zhuang plant names and the relations between Zhuang plant taxa. In the course of this work, I have confirmed the identity of over five hundred kinds of plants. On this basis I have proceeded to discuss many aspects of Zhuang culture and folklore, and analyse some of the special characteristics of Zhuang culture.

Though the Zhuang are the biggest minority in China, with a total population of 18 million, there have been many areas in Zhuang culture left under-researched, and further studies are needed. This book will contribute to a better understanding of Zhuang plants resources, Zhuang language and Zhuang culture, by providing an analysis of data that are presented here for the first time.

Acknowledgement

I would like to express my sincere appreciation to a large group of people for their advice, time, patience, support and friendship. First and foremost, I would like to thank my supervisor Professor David Holm. Without his advice and invaluable support, this book would never have been completed. I would like to thank my associate supervisor Dr. Luo Yongxian for his comments and suggestions. He gave me great help in the course of writing this book. I also wish to extend my gratitude to Sue Jollow, who read this book and helped me correct many errors of grammar.

I would also like to thank the institutions and people who helped me in diverse ways. The University of Melbourne gave me a chance to study and provided a scholarship. The Director of Melbourne Institute of Asian Languages and Societies and staff of the department supported me strongly, so that I could successfully finish my work. In particular, thanks are due to Mr. Du Liping, Zhou Shaoming, Gao Jia, and other teachers in the Institute for so much help in study and life.

I would also like to thank Mr. Lu Yixin, Wei Fa'nan, Su Yang, Huang Yongbiao and Li Zhenran. I received much benefit from these friends when I was collecting my data.

In addition, I must thank my friends in the Summer Institute of Linguistics, Stuart R. Milliken, Margaret E. Milliken, Daniel J. Edwards and Cecillia Brassett. The software for the International Phonetic Alphabet provided by them enabled me to type IPA on the computer. I greatly appreciate all their help.

There are so many people who have helped me, and I am not able to write down all their names here. I express my sincere acknowledgement to all the people who have offered their help to me.

Meng Yuanyao

CONTENTS

Chapter 1 Introduction	1
1.1 Aims and Scope of This Book	1
1.2 Theoretical Foundations	2
1.3 Early History, the Language and Its Speakers, and Geographic Setting	13
1.4 Zhuang Cultural Beliefs	19
1.5 Zhuang Botanical Studies: A Brief Overview	21
1.6 Fieldwork	27
1.7 Structure of the Book	31
Chapter 2 Zhuang Ethnobotanical Nomenclature:	
Preliminaries	32
2.1 The Names of Main Parts of Plants	32
2.2 Major Categories in Zhuang Ethnobotanical Classification	42
2.3 The Structure of Plant Names in Zhuang	52
2.4 The Emergence of Plant Nomenclatures in Zhuang	55
2.5 Ranks in Zhuang Botanical Taxonomy	62
2.6 Comparative Perspective	65
2.7 Summary	67
Chapter 3 Farming and Food	68
3.1 The Historical Background of Zhuang Agriculture	68
3.2 The Seasons of the Farming Year as Expressed in Song	73
3.3 Phenology and Farming	77
3.4 Cultivation Methods of the Zhuang People	83

3.5 The Zhuang People's Food	87
3.6 Cultural Values Represented by Food	91
3.7 Summary	94
Chapter 4 Grains and Other Crops in Zhuang Areas	96
4.1 Cereal Crops	96
4.2 Edible Root Tuber Plants	103
4.3 Woody Grains	107
4.4 Oil Plants	111
4.5 Fibre Plants	115
4.6 Summary	121
Chapter 5 Vegetables	123
5.1 Categorization of Vegetables	124
5.2 Medicinal and Other Uses of Vegetables	128
5.3 Cultural Relationship as Seen from Vegetables' Names	141
5.4 Summary	146
Chapter 6 Poisonous and Medicinal Plants	147
6.1. Poisonous Herbaceous Plants	148
6.2 Poisonous Vines	154
6.3 Poisonous Xylophytous Plants	157
6.4 The Zhuang People's Clever Use of Poison	167
6.5 Summary	168
Chapter 7 Special Plants	169
7.1 Rare Tree Species	169
7.2 Plants with Economic Value	176
7.3 Plants with Special Uses	182
7.4 Summary	191

Chapter 8 Bamboo	193
8.1 Common Types of Bamboo in Zhuang Areas	193
8.2 Common Bamboo Artifacts	203
8.3 An Elaborated Bamboo Culture	218
8.4 Summary	223
Chapter 9 Conclusion	224
9.1 Review of Findings	224
9.2 Future Directions	231
References	233
Appendix 1 The Sounds of Mashan Zhuang	247
Appendix 2 Zhuang Songs	255
Appendix 3 The Story of the Snail Girl	303
Appendix 4 Table of Plant Names	315
Appendix 5 Figures	

Chapter 1

Introduction

1.1 Aims and Scope of This Book

This work is an ethnographic study of Zhuang botany. It focuses on the ethno-classification of Zhuang plants, with special attention paid to presenting and analysing data from Zhuang areas in China's Guangxi province. More specifically, it aims to investigate the naming practices and major categories in Zhuang ethnobotany, with the intention of contributing to a wider understanding of the traditional culture of the Zhuang people and their relationship with the natural world, as well as their early culture and the bio-diversity of this region.

In exploring the Zhuang system of categorisation of the plants in their environment, this work will examine, among others, the following questions:

- (1) How do the Zhuang name and categorise plants?
- (2) Why do they name and categorise plants the way they do?
- (3) What relation do these practices have to the ways in which the Zhuang manage and exploit the bio-diversity in their environment?
- (4) To what extent do these naming practices reflect an underlying folk taxonomy comparable with those that have been documented for other traditional societies?

Because of limits of time and space, a comprehensive treatment of Zhuang ethnobotany is beyond the scope of the present thesis. Instead, this project will focus on common local plants, with particular reference to those native to the Zhuang region. Emphasis will be laid on the names of these plants, their uses, their habitats and their cultural significance. It is hoped that my findings will unveil certain cultural traits of the Zhuang people, traits that bear on their early history and culture, and their relations with neighbouring ethnic groups and cultures. A further objective is to provide some empirical evidence that can be used to shed more light on aspects of the early linguistic and cultural history of East and Southeast Asia, though a systematic treatment of such

matters is beyond the scope of this thesis. A more general aim is to examine the viability of the assumptions underlying linguistic and anthropological theories regarding taxonomic ranking as the basis of biological classification.

1.2 Theoretical Foundations

The classification of plants and animals constitutes an important part of human experience. As Edward Lee Greene pointed out nearly a century ago: “It is impossible that men, even the most primeval and unlettered, manage their affairs with ... the plant world without classifying them”.¹ Being indispensable to human life, plants and animals have become the subject of investigation throughout history. The systematic study of biological diversity dates back to at least the time of Aristotle (384-322 BC), who carried out a large-scale classification of biological organisms, ranging from plants and animals to humans, arranging them in hierarchical categories. Aristotle’s intellectual inquiry was to inspire the works of such great thinkers as Theophrastus (371-288 BC), who made a substantial contribution to plant taxonomy. Theophrastus’ classification of plants still remains the guiding principle of the field in the Western tradition to this day.²

1.2.1 Subject, and scope of ethnobotany

Although quite well established as a subdiscipline in its own right, ethnobotany is a relatively young field, compared with anthropology and linguistics. Despite the appearance of the term ‘ethnobotany’ at the end of the 19th century, it did not gain formal acceptance until much later. The *Oxford English Dictionary*, for example, did not have an entry for this term until 1972. Nonetheless, the study of ethnobotany has been practiced by ethnologists under various other names, including applied botany, aboriginal botany, botanical ethnography, ethnographic archaeology, botany, plant lore and so on.³

Early works on ethnobotany were characterised by an economic orientation.⁴ Conklin’s ground-breaking doctoral dissertation: *The Relation of Hanunóo Culture to the Plant World* (1954), ushered in a new period of scientific and systematic

1 E.L. Greene, *Landmarks in Botanical History*, ed. F.N. Egerton, (Stanford: Stanford University Press, 1983 [1909]), p.115.

2 *Ibid.*

3 Cléments (1998), L’ethnobiologie/Ethnobiology, *Anthropologica*, XI. 1: 7-35.

4 See J.W. Harshburger (1896), ‘Purposes of Ethnobotany’, *Botanical Gazette* 21:146-54; E.F. Castetter (1944), ‘The Domain of Ethnobiology’, *American Naturalist*, 78: 158-70; see R.I. Ford (1978) and Clements (1998) for useful surveys.

ethnobotanical research. This monograph, hailed by Berlin as “the first ethnologically and botanically sophisticated description of a full ethnobotanical system of classification for a non-literate society”,⁵ is concerned with cross-cultural regularities in folk taxonomy. It represents a cognitive inquiry into native peoples’ classifications of plants and their conceptual relationships with them. The methodology formulated by Conklin has had a profound impact on current ethnobiological research and on ethno-science as a whole.

Although the general subject matter of ethnobotany is now well established, it lacks a unifying theory. Thus the scope of exactly what ethnobotany encompasses is not without debate.⁶ *The New Shorter Oxford English Dictionary* defines ethnobotany as ‘the traditional knowledge and customs of a people relating to plants; the branch of knowledge that deals with these’ (p.857), while *Websters 3rd New International Dictionary* defines it as ‘the plant lore of a race’ (p.781). For Harshberger, who is credited with coining the term in 1895, ethnobotany concerned ‘the use of plants by aboriginal peoples’.⁷ Some scholars maintain that the subject of ethnobotany should include not only the recording of plant uses, but also traditional knowledge of plants and plant life, as reflected in custom and ritual.⁸ For others, ethnobotany is the study of the relationships between humans and plants.⁹

A broader and more general view is represented by Martin. According to Martin, ethnobotany includes all studies on plants that describe local people’s interaction with the natural environment.¹⁰ As such, ethnobotany is multi-disciplinary in nature. Anthropology, archaeology, botany, ethnology, herbal medicine, linguistics, and natural history have each in their own way contributed to the discipline, and methodologies, viewpoints, and data from each of these fields have enriched and enlivened it.

5 Brent Berlin (1992), *Ethnobiological Classification: Principles of Categorization of Plants and Animals in Traditional Societies* (Princeton: Princeton University Press), p. 4.

6 For a succinct historical account of ethnobotany, see Ford (1978), 29-49; a more comprehensive account is Clements (1998). Monographic treatments of the topic are found in Greene 1983 [1909]; S. Atran (1990), *Cognitive Foundations of Natural History* (London: Cambridge University Press); and C.M. Cotton (1995), *Ethnobotany: Principles and Applications* (London: John Wiley and Sons).

7 quoted in Cotton (1995), p.1.

8 Robbins *et al* 1916, *Ethno-botany of the Tewa Indians*, Bureau of American Ethnology Bulletin 55, Washington: Government Printing Office. Gilmour (1932), *The Ethnobotanical Laboratory at the University of Michigan*, Ann Arbor: University of Michigan Press.

9 V.H. Jones (1941), ‘The nature and scope of ethnobotany’, *Chronica Botanica*, 6(10): 219-21; Schultes (1941), *La Etnobotanica: Su Alcance y Sus Objetos*, *Caldasia*, 3: 7-12, Ford (1978).

10 G. Martin (1995), *Ethnobotany* (London: Chapman and Hall), p.3.

1.2.2 Approaches to ethnobotany: relativist, universalist, and experimentalist

Two trends of thought, relativism and universalism, have by and large dominated the field of linguistic anthropology. Relativism and universalism represent two extreme positions, the former focusing on variation between systems, while the latter focuses almost exclusively on the universal human and natural-world constraints underlying observable systems of biological classification. The relativists maintain that the ways in which human beings from different cultures classify living things are inherently different, that each individual culture is unique in its own way, and that differences in the naming and classification of living kinds results from culturally determined differences in perception of the natural world. Any attempt to make scientific comparisons between cultures will not be met with much success. The universalists, on the other hand, argue that beyond cultural variations, patterns of cross-cultural similarities can be observed from which theoretical generalisations can be drawn about human experience, perception and cognition.¹¹

In ethnobiological classification, scholars with these two opposing views differ markedly in their treatment of the objective existence or otherwise of species. The relativist orientation sees categories and systems as culturally constructed entities derived from human experience, entities which are unique, arbitrary, and idiosyncratic. In other words, taxonomies are mental representations of the world imposed by each individual society. From a universalist perspective, categories are objectively constructed; they are general, non-arbitrary, clear-cut and reflect the real and objective existence in nature of genera and species. Things are grouped together into classes because they share certain observable features that are not present in other classes.

Against the background of the relativist and universalist approaches, C.H. Brown takes a heuristic, experimentalist position, stressing the role of physical and social experience in classification.¹² Within this approach, categories are perceived as the combination of three parameters, *artifactual* (AR), *gestalt motivation* (GM), and *prototype extension* (PE). By 'artifactual' is meant whether linguistic categories are of human creation or not. 'Gestalt motivation' refers to the different properties that form the conceptual basis of a configuration, for example, the features that are characteristic of a dog – having a typical snout, barking, loyalty to people – features that are pertinent

11 See William A. Foley (1997), *Anthropological Linguistics: An Introduction* (Oxford: Blackwell Publishers), esp. p.106 ff.

12 C.H. Brown (1990), A Survey of Category Types in Natural Language, in *Meanings and Prototypes: Studies in Linguistic Categorization*, edited by S.L. Tsohatzidis, 17-47. London: Routledge.

to the entity in nature (dog) that stands out as a totality (dogness). Finally, 'prototype extension' applies to categories that involve a core and extend their membership boundary to less prototypical entities.

Brown discovered that with the exception of functional categories (e.g. 'pet' and 'fruit', see §1.2.7 below for further discussion), animals and plants fall into three types, all of which share the feature -AR. The first type is made up of entities with the feature +GM and -PE (e.g. 'mallard' and 'potato'). These share a number of common morphological characteristics whose homogeneity and relative lack of interest to humans, has rendered prototype extension unnecessary. The second type includes plants and animals that possess both gestalt motivation (+GM) and prototype extension (+PE), which are typically represented by cross-cutting boundaries in membership affiliation. For example, in some languages, the name of a species also names the genus, while in other languages, the name of a genus may also refer to the entire life form.¹³ The third type discussed by Brown has the feature -GM and +PE. According to Brown, this group consists of a few heterogeneous organisms, such as 'wug' (a blending of 'worm' + 'bug') and 'mammal', which are 'residual' categories. Prototype extension is also operating in such residual categories, as Brown has observed, certain languages have extended the name of a particular insect to mean 'wug'; while the designation for 'meat' and 'game animal' has developed into 'mammal'.¹⁴

1.2.3 General principles of ethnobiological classification and nomenclature

In their classic paper on the basic categories and super-categories of ethnobiology, Berlin, Breedlove and Raven (1973) put forward several hypotheses concerning various aspects of folk biological classification and nomenclature. Based on their empirical findings from a study of plants and animals in traditional societies, and building on earlier works of Greene and Bartlette, Berlin and his colleagues formulated a number of principles of ethnobiological classification. Some of the most significant points can be summarized as follows:

- (1) In all languages, it is possible to identify groups of organisms or taxa which are recognised linguistically;
- (2) Biological taxa are grouped into a number of ethnobiological categories comparable to Western taxonomic ranks;

¹³ Brown (1990), pp.27-30.

¹⁴ Brown (1990), p.36.

(3) Five levels of taxa can be recognised: *unique beginner (kingdom)*, e.g. plant, animal, *life form*, e.g. tree, fish, *generic*, e.g. corn, carp, *specific*, e.g. ancient corn, silver carp, and *varietal*, e.g. yellow ancient corn, large silver carp; according to their order of descending inclusiveness.

Principle 1 asserts the universalist position that Berlin and his associates hold with regard to ethnobiological classification. For them, linguistic classification of plants and animals is by and large universal. There is an innate cognitive and perceptual ability for humans to categorise living things in their environment, an ability that all human beings possess.

Principle 2 recognises a close link between ethnobiological categories and modern scientific taxonomy. It emphasises that the biological knowledge of non-literate societies is by no means less advanced than modern science. The authors hold that categories of ethnobiological classification mirror Western scientific taxonomy to a great extent. Folk taxonomy thus provides an empirical foundation for modern scientific classification.

Principle 3 establishes the categories and super-categories for folk taxonomy. The branching relationship of these categories indicates their hierarchical order in terms of their psychological saliency and cultural significance. These relationships are summarised as Figure 1:

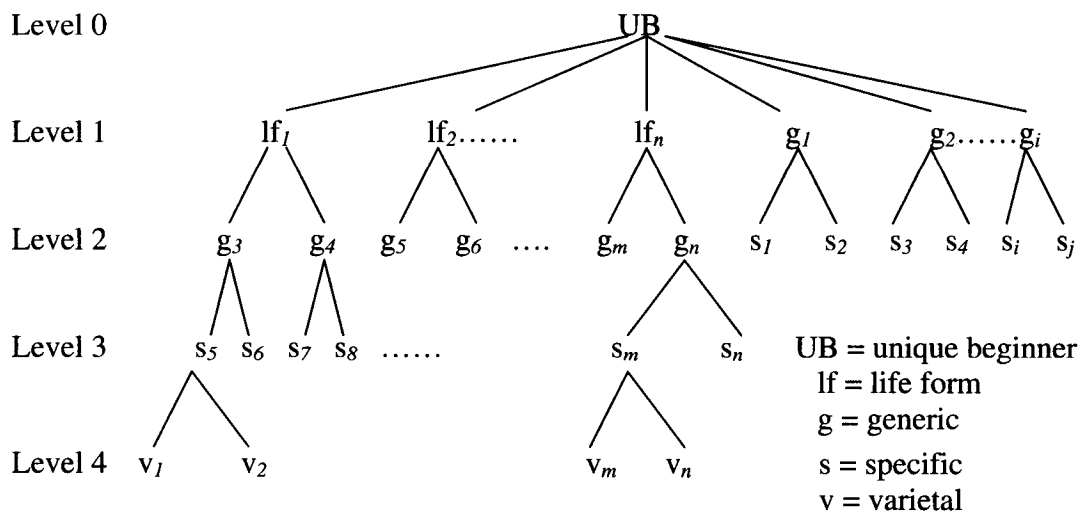


Figure 1. Ethnobiological ranks and taxonomic levels (after Berlin *et al.* 1973: 215)

Berlin and his colleagues have attached great importance to the formal linguistic structure of plant and animal names. They claim to have discovered a close correlation between linguistic forms and cognitive basis in nomenclature. For them,¹⁵

Nomenclature is often a near perfect guide to folk taxonomic structure. ... [If] nomenclature fails to mirror accurately the taxonomic status of a particular biological class, it can usually be shown that the class in question is undergoing semantic change.

The degree of congruence between nomenclature and taxonomy is a question to be kept under review, however, and should not be regarded as an operating assumption.

Among different cultures, patterns of similarities can be observed which reflect the universal psychological basis of human categorisation. The most famous demonstration of innate, universal constraints on human perception is the work by Berlin and his colleagues on colour terms and their evolution.¹⁶ In a recent (1992) study, Berlin reaffirms his position:¹⁷

... in the categorisation of plants and animals by peoples living in traditional societies, there exists a specifiable and partially predictable set of plant and animal taxa that represent the smallest fundamental biological discontinuities easily recognised by any particular habitat. This large but finite set of taxa is special in each system in that its members stand out as beacons on the landscape of biological reality, figuratively crying out to be named. These groupings are the generic taxa of all such systems of ethno-biological classification, and their names are precisely the names of common speech.

1.2.4 Ethnobiological nomenclature

In their classic paper on the basic categories and super-categories of ethnobiology, Berlin, Breedlove and Raven (1973) proposed a number of generalisations regarding ethnobiological nomenclature. They noted that a distinction should be made between two basic types of labels used in folk biological naming: (1) **monomial terms** and (2) **binomial terms**. A **monomial** label, as the term suggests, consists of only one constituent, such as *tree, flower, vine, grass, bird, fish, and horse*. These terms are often associated with life forms and most generics. On the other hand, a **binomial** label is bi- or poly-lexemic, that is, it consists of two or more constituent elements each of which

15 Berlin, Breedlove, and Raven (1973), 'General Principles of Classification and Nomenclature in Folk Biology', *American Anthropologist* 75: 216-217.

16 B. Berlin and P. Kay (1969), *Basic Color Terms* (Berkeley: University of California Press). See discussion of this work and its influence in Foley, pp.150-65.

17 B. Berlin (1992), p.53.