



“十二五”国家重点图书出版规划项目

关佩聪 刘厚诚 罗冠英 主编

Chief Editor: Guan Peicong, Liu Houcheng,
and Luo Guanying

中国 野生蔬菜资源

WILD VEGETABLE RESOURCES
IN CHINA

广东省出版集团

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图书在版编目 (CIP) 数据

中国野生蔬菜资源 / 关佩聪, 刘厚诚, 罗冠英主编. —广州: 广东科技出版社, 2013.11

ISBN 978-7-5359-5827-3

I. ①中… II. ①关…②刘…③罗… III. ①野生植物—蔬菜—植物资源—中国 IV. ①S647

中国版本图书馆 CIP 数据核字 (2013) 第 210473 号

责任编辑: 罗孝政 尉义明

封面设计: 柳国雄

责任校对: 盘婉薇 冯思婧 谭 曦 罗美玲 杨峻松 陈 静 吴丽霞

责任印制: 罗华之

出版发行: 广东科技出版社

(广州市环市东路水荫路 11 号 邮政编码: 510075)

[http: //www.gdstp.com.cn](http://www.gdstp.com.cn)

E-mail: gdkjyxb@gdstp.com.cn (营销中心)

E-mail: gdkjzbb@gdstp.com.cn (总编办)

经 销: 广东新华发行集团股份有限公司

印 刷: 广州市岭美彩印有限公司

(广州市荔湾区花地大道南海南工商贸易区 A 幢 邮政编码: 510385)

规 格: 889mm×1 194mm 1/16 印张 32.75 字数 1 000 千

版 次: 2013 年 11 月第 1 版

2013 年 11 月第 1 次印刷

定 价: 260.00 元

如发现因印装质量问题影响阅读, 请与承印厂联系调换。

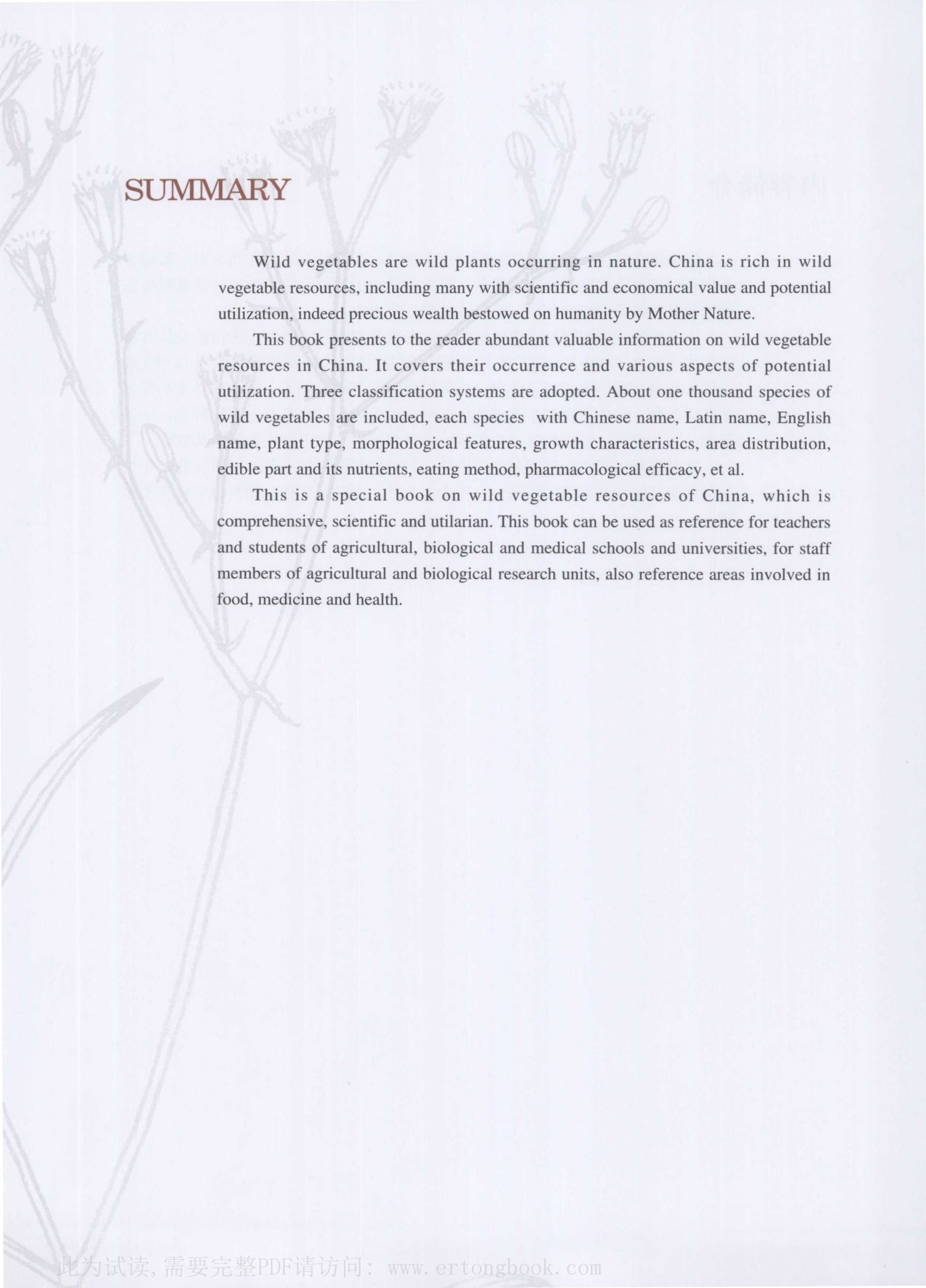
内容简介

野生蔬菜是生存于大自然的野生蔬食植物。我国野生蔬菜相当丰富，蕴藏着不少有经济价值和应用前景的资源，是大自然赐予人类的宝贵财富，研发野生蔬菜资源具有显著的科学效益、经济效益和社会效益。

本书阐述了我国野生蔬菜资源概况、野生蔬菜资源的各种宝贵特质及其对科技与生产的意义和作用，以及多方面潜在的利用价值；根据植物科属、生活型（或习性）和食用部位等进行了分类；详载了我国的草本、灌木、藤本和乔木等野生蔬菜近千种，包括每种野生蔬菜的中文名、拉丁学名、英文名、植物种类、形态特征、生长习性、分布地区、食用部位与营养成分、食用方法和药用功效等。

本书是我国野生蔬菜资源的综合性、科学性和应用性专著，可供农业、生物与医学中等院校和高等院校师生，农业、食品、医药保健和生物科技单位参考应用。





SUMMARY

Wild vegetables are wild plants occurring in nature. China is rich in wild vegetable resources, including many with scientific and economical value and potential utilization, indeed precious wealth bestowed on humanity by Mother Nature.

This book presents to the reader abundant valuable information on wild vegetable resources in China. It covers their occurrence and various aspects of potential utilization. Three classification systems are adopted. About one thousand species of wild vegetables are included, each species with Chinese name, Latin name, English name, plant type, morphological features, growth characteristics, area distribution, edible part and its nutrients, eating method, pharmacological efficacy, et al.

This is a special book on wild vegetable resources of China, which is comprehensive, scientific and utilitarian. This book can be used as reference for teachers and students of agricultural, biological and medical schools and universities, for staff members of agricultural and biological research units, also reference areas involved in food, medicine and health.

序

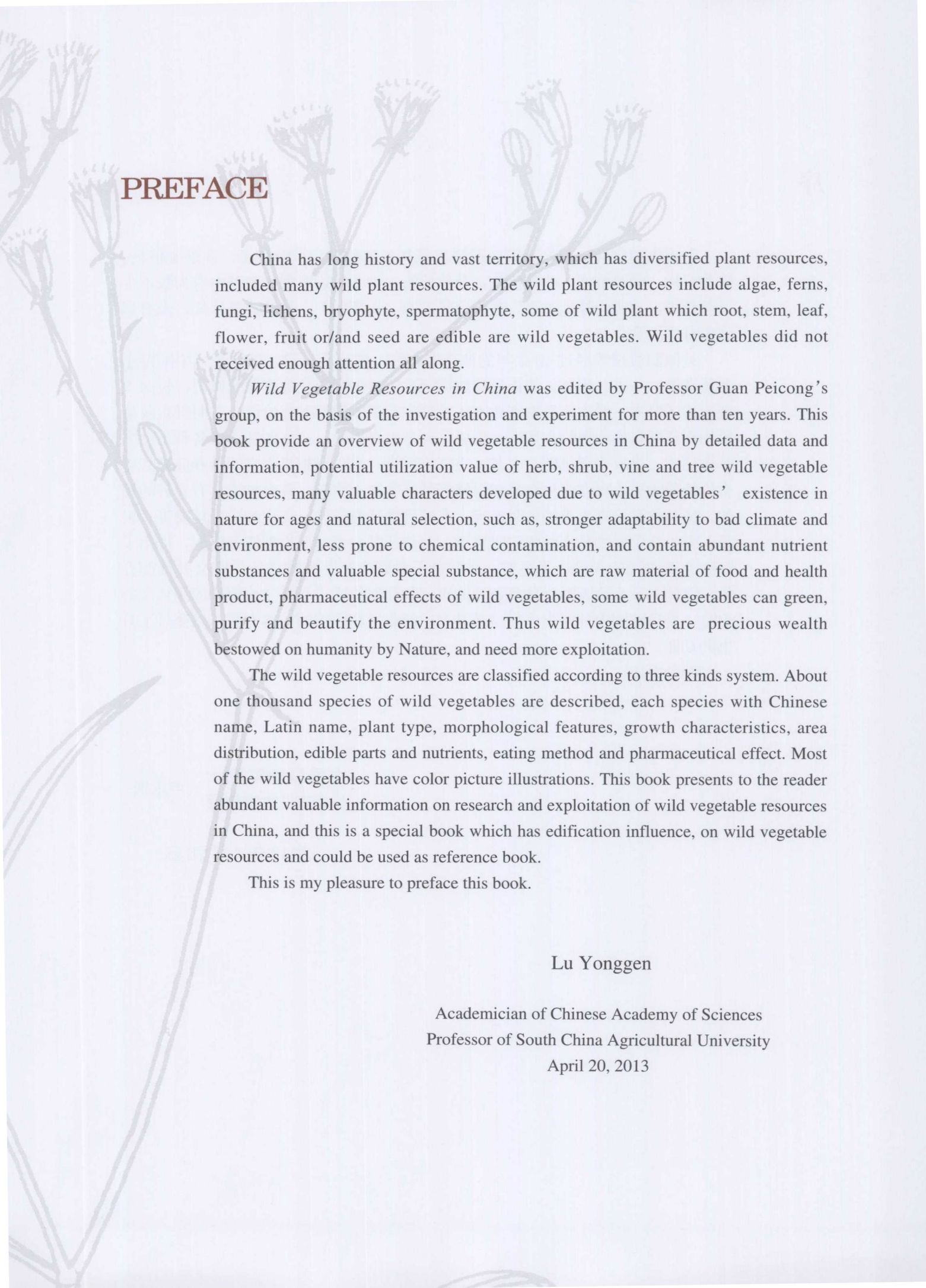
中国历史悠久，地域广阔，蕴藏着极其丰富的野生植物资源，在藻类植物、蕨类植物、菌类植物、地衣植物、苔藓植物、种子植物等野生类群中有为数不少可以食用，并成为野生蔬菜。对于这些资源，长期以来，普遍缺乏认知，没有得到应有的注意。

关佩聪教授等经过 10 余年的调查考察和一些研究试验，编撰了《中国野生蔬菜资源》一书，用具体的资料和数据阐述了我国野生蔬菜资源的概况，较深入地论述了草本、灌木、藤本和乔木 4 类野生蔬菜资源的潜在价值；阐明野生蔬菜植物在长期自然选择的作用下，形成了许多宝贵性状，诸如较能适应各种不良气候和环境，没有受到化肥、农药、空气等污染，又含有相当丰富的营养成分和可贵的特殊物质，可作各种食品和保健产品等的加工原料；许多种类具有显著的药效，能预防和治疗人类的各种疾病；有些种类还能绿化、美化和净化环境等。可见，野生蔬菜植物是天赋的宝贵资源，有待开发。该书还根据资源概况，提出了野生蔬菜资源的 3 种分类系统，并对近千种野生蔬菜植物进行了图文并茂的介绍。这些内容为我国野生蔬菜资源的研究和开发传递了有科学价值和应用意义的信息，是目前国内外同类著作中最具有启迪意义和影响的一本专著，且兼具工具书的功能。

特为之序。

中国科学院院士 卢永根
华南农业大学教授

2013 年 4 月 20 日



PREFACE

China has long history and vast territory, which has diversified plant resources, included many wild plant resources. The wild plant resources include algae, ferns, fungi, lichens, bryophyte, spermatophyte, some of wild plant which root, stem, leaf, flower, fruit or/and seed are edible are wild vegetables. Wild vegetables did not received enough attention all along.

Wild Vegetable Resources in China was edited by Professor Guan Peicong's group, on the basis of the investigation and experiment for more than ten years. This book provide an overview of wild vegetable resources in China by detailed data and information, potential utilization value of herb, shrub, vine and tree wild vegetable resources, many valuable characters developed due to wild vegetables' existence in nature for ages and natural selection, such as, stronger adaptability to bad climate and environment, less prone to chemical contamination, and contain abundant nutrient substances and valuable special substance, which are raw material of food and health product, pharmaceutical effects of wild vegetables, some wild vegetables can green, purify and beautify the environment. Thus wild vegetables are precious wealth bestowed on humanity by Nature, and need more exploitation.

The wild vegetable resources are classified according to three kinds system. About one thousand species of wild vegetables are described, each species with Chinese name, Latin name, plant type, morphological features, growth characteristics, area distribution, edible parts and nutrients, eating method and pharmaceutical effect. Most of the wild vegetables have color picture illustrations. This book presents to the reader abundant valuable information on research and exploitation of wild vegetable resources in China, and this is a special book which has edification influence, on wild vegetable resources and could be used as reference book.

This is my pleasure to preface this book.

Lu Yonggen

Academician of Chinese Academy of Sciences
Professor of South China Agricultural University
April 20, 2013

前言

中国历史悠久，地域广阔，气候复杂多样，大地生长着丰富的植物资源，其中包括丰富的野生植物资源。野生蔬菜资源是野生植物资源的一小部分，是指藻类、蕨类、菌类、草本、灌木、藤本和乔木等植物的根、茎、叶、花、果或种子可供蔬食的野生植物，这些都是大自然赐予人类的宝贵财富。

长期以来，我国的蔬菜科技工作者、生产者及有关部门在蔬菜方面作出了贡献，但对野生蔬菜没有太多注视。我们从事蔬菜教学和科学研究几十年，也只注意现有蔬菜问题。经过近十几年的调查探索，我们对野生蔬菜逐渐加深了了解。庆幸的是，自古以来前人在野生蔬菜方面进行了不断的探索，留下了许多记载，其中有不少宝贵遗产。近年，国内的杂志、报纸陆续发表了不少野生蔬菜的文章，出版了一些野生蔬菜书籍，少数地区一些科研单位 and 生产企业初步对野生蔬菜进行收集、试种和开发。所有这些都提供不少信息、有价值的资料和令人深思的启示。我国的野生蔬菜资源相当丰富，蕴藏了各种很宝贵和很有价值的资源，前人已经发现和利用了一些，如我国不少现有蔬菜都是过去人们利用野生植物，经过长期选择、不断驯化和精心培育而成的，有些野菜已在国内外产生影响。但还有很多有用资源尚待开发和继续发掘，因此，深入研发野生蔬菜资源，不但可以促进蔬菜科技和生产的发展，而且对食品、医药和保健等产业，对山区林区的经济发展都有深远影响。

本书主要收集了我国草本、灌木、藤本和乔木 4 类种子植物的野生蔬菜资源，没有包括藻类、地衣、苔藓、蕨类和菌类的野生蔬菜，内容涵盖我国野生蔬菜资源概况，野生蔬菜资源的食用和利用价值，野生蔬菜资源的科属分类、拉丁学名、植物种类分类和食用部位分类，及近 1 000 种野生蔬菜的中文名、拉丁学名、英文名、植物种类、形态特征、生长习性、分布地区、食用部位与营养成分、食用方法和药用功效等。我们期待通过本书对我国的野生蔬菜资源做出综合性、科学性和应用性介绍。

在编写过程中，得到众多单位和个人的支持和协助，主要有广州市蔬菜办公室、广州市农牧业引种试验场、广州市农业科学研究院、广州市番禺区蔬菜科学研究所、增城市蔬菜科学研究所、贵州省贵阳市蔬菜办公室、云南省世界园艺博览会、辽宁省世界园艺博览会、沈阳市植物园以及南京市蔬菜局等，并得到了华南农业大学徐祥浩、李秉涛和刘福安等教授，美国得克萨斯州 (Texas State of USA) 圣安东尼奥 (San Antonio City) 植物园梅英俊研究员、加利福尼亚州 (California State) 政府黄长志博士帮助，广州市白云区蔬菜办公室梁铁汉高级工程师、美国加利福尼亚州州立大学东湾分校 (California State University East Bay Division) 梁昊硕士和贵州省贵阳市蔬菜办公室张汝霖高级工程师等协助野外调查、收集资料和摄影等，又得到李镇魁、孙光闻、徐晔春、唐光大、秦新生、李莎、黎青青等协助整理资料图片、鉴定物种、审定药用功效部分等。在此，我们表示衷心感谢。

我们学识有限，本书错漏在所难免，敬请指正和赐教，不胜感激。

关佩聪

2013 年 5 月 10 日

FOREWORD

China has long history, and vast territory with varied topography, which has led to the emergence diversified plant resources, included many wild plant resources, with wild vegetables comprising a small part. The wild vegetable resources include algae, ferns, fungi, herb, shrubs, vines and tree plants, of which their roots, stems, leaves, flowers, fruits or seeds are edible. Plant resources are valuable assets bestowed on humanity by Nature.

Since the founding of New China, the Chinese communist party and government have truly cared for the livelihood of the people, constantly always paying attention to the matter of vegetable foods, and at different times, promulgating relevant polices and investing huge funds, and, with scientists, vegetable growers and administrative personnel working hard together, vegetable production has achieved considerable development. However, wild vegetables did not received much attention all along.

In the past, we taught and researched common cultivated vegetables only, but the last twenty years, we have turned to investigate and study wild vegetables, endeavoring to learn more about them. Fortunately, long long ago, the ancients had done research on wild vegetables, leaving to us as heritage a veritable treasure-house of , valuable data. In recent years, we are seeing more and more articles about wild vegetables published in magazines and newspapers, and also more books about wild vegetables are available. Moreover, some localities and units have begun to investigate,

collect and plant wild vegetables for sale, indicating that people are getting more and more interested in wild vegetables, the new feedback information furnishing valuable data, which serve to enlighten us and provide food for careful pondering.

Information has shown that there exist in China abundant wild vegetable resources which conceal many valuable species, a few of which our ancestors discovered and utilized; these were carefully cultivated and selected over a long period to evolve into the common vegetables we see today. Some wild vegetables are being used in China and abroad, but there are still many useful ones awaiting discovery and exploitation. In depth study of wild vegetable resources



◇ 凹叶景天



◇ 大叶醉鱼草



◇ 红车轴草

would not only raise the level of vegetable science, technology and production, but also make significant impact on the food industry, pharmaceuticals and health care, as well as promote the economic development of mountainous regions and forest areas. That is exactly our motive and goal in publishing this book.

The contents of the book include introduction, the potential value of wild vegetable resources of China, considerations about exploitation of the wild vegetable resources, and four kinds of classification system. About one thousand species of wild vegetables belonging to four kinds of plants, namely, herb, shrubs, vines and trees are described, each species with Chinese name, Latin name, plant type, morphological features, growth characteristics, area distribution, edible parts and nutrients, eating method and pharmaceutical efficacy. This is a unique comprehensive, scientific and utilitarian book about the wild vegetable resources of China.

During writing, we received strong support and help from many sectors, chief among them were the Guangzhou City Vegetable Office, Guangzhou City Agriculture and Livestock Test Farm, Guangzhou Academy of Agricultural Sciences, Panyu Vegetable Institute, Zengcheng Vegetable Institute, Guizhou Province Guiyang Vegetable Office, Yunnan Province International Horticulture Exposition, Liaoning Provincial International Horticulture Exposition, Shengyang Botanical Garden, Nanjing Vegetable Bureau, et al. Prof. Xu Xianghao, Li Bingtao and Liu Fuan, Dr. Li Zhenkui, Sun Guangwen and Xu Yechun in South China Agricultural University, Prof. Mei Yingjun in U.S. Texas State San Antonia Garden, Dr. Huang Changzhi in California State Government, Dr. Tang Guangda, Dr. Qin Xinsheng, Dr. Li Sha and Master Li Qingqing in Guangdong Science & Technology Press, et al. also rendered support and assistance, to all of them we express our sincere gratitude.

Guan Peicong

May 10, 2013

目录

绪论	001
一、野生植物资源是大自然赐给人类的宝贵财富	002
二、中国地大物博，植物资源丰富	003
三、中国野生蔬菜资源概况	004
四、中国野生蔬菜资源有待开发	005
英文摘要	006
第一章 中国野生蔬菜资源的潜在价值	007
一、野生蔬菜资源是商品蔬菜的庞大生力军	008
二、野生蔬菜资源是巨大的营养库	009
三、野生蔬菜资源有丰富的淀粉源	012
四、野生蔬菜资源蕴藏了可贵的挥发油和芳香物质	013
五、野生蔬菜资源是草药和医药的雄厚后备军	014
六、野生蔬菜资源是山区、林区的天赋资产	015
英文摘要	016
第二章 研发野生蔬菜资源的思考	017
一、中国野生蔬菜资源为何仍未开发	018
二、研发野生蔬菜资源的需要和可能	019
三、研发野生蔬菜资源的设想	020
英文摘要	021
第三章 野生蔬菜资源的分类	023
一、野生蔬菜资源的植物科属分类	024
二、野生蔬菜资源的生活型分类	073
三、野生蔬菜资源的食用部位分类	083
英文摘要	104
第四章 各种野生蔬菜	105
一、草本野生蔬菜	106
二、灌木野生蔬菜	364
三、藤本野生蔬菜	416

四、乔木野生蔬菜.....	442
英文摘要.....	482

参考文献.....	483
-----------	-----

附录.....	485
---------	-----

一、中文名索引.....	486
二、拉丁学名索引.....	494
三、英文名索引.....	505



CONTENTS

INTRODUCTION.....001

1. Wild vegetable resources are valuable assets bestowed on humanity by nature002
2. China has a vast territory with abundant resources, among which there exist a wealth of plant resources003
3. Overview of wild vegetable resources in China004
4. The wild vegetable resources of China are waiting for exploitation005
- Abstract of English006

CHAPTER ONE POTENTIAL VALUE OF THE WILD VEGETABLE RESOURCES OF CHINA.....007

1. The wild vegetable resources are a huge new force for market vegetables008
2. The wild vegetable resources are a vast nutrient store009
3. Wild vegetables are a rich source of starch012
4. Wild vegetables are a potential source of valuable volatile oil and fragrant substances013
5. Wild vegetables are abundant reserves for herbs and medicines014
6. Wild vegetable resources are the natural assets of mountainous regions and forest areas015
- Abstract of English016

CHAPTER TWO PROPOSED STRATEGY FOR EXPLOITATION OF WILD VEGETABLE RESOURCES.....017

1. Why has exploitation of wild vegetable resources occurred in China as yet018
2. The necessity and possibility for the exploitation of wild

vegetable resources	019
3. Strategy for exploitation of wild vegetable resources	020
Abstract of English	021

CHAPTER THREE

CLASSIFICATION OF WILD VEGETABLE

RESOURCES	023
-----------------	-----

1. Taxonomic classification of wild vegetables according to Families and Genera	024
2. Classification of wild vegetables according to plant type	073
3. Classification of edible parts of wild vegetables	083
Abstract of English	104

CHAPTER FOUR

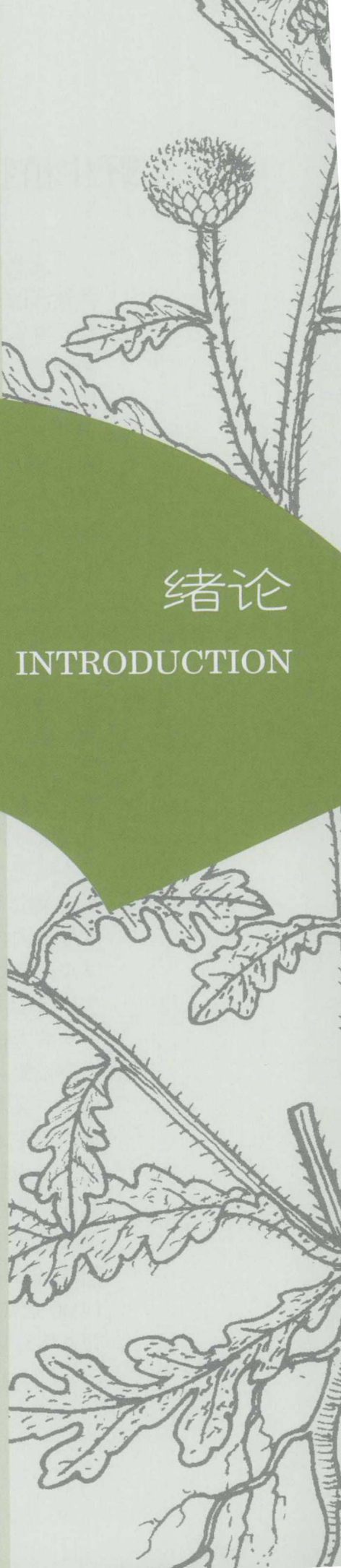
DIVERSE KINDS OF THE WILD VEGETABLES	105
--	-----

1. Herbaceous wild vegetables	106
2. Shrubbery wild vegetables	364
3. Vinelike wild vegetables	416
4. Arboreous wild vegetables	442
Abstract of English	482

REFERENCES	483
------------------	-----

APPENDIX	485
----------------	-----

1. Chinese name index of wild vegetables	486
2. Latin name index of wild vegetables	494
3. English name index of wild vegetables	505



绪论

INTRODUCTION

一、野生植物资源是大自然赐给人类的宝贵财富

人类的发展史表明，人类的原始生活都是依赖和利用野生动物和植物过活，并逐渐改善而成长起来的。就利用野生植物来说，我国早在 4 500 多年前盘古之初，神农氏就尝百草，利用野生植物过活。以后，人们的生活需要，寻觅和认识的野生植物越来越多，利用的范围也越来越广，因而与野生植物的关系越来越密切。据古籍记载，2 000 年前，我国利用的植物已有一两百种，而栽培植物只有十几二十种；至 1 500 年前，利用的植物达到数百种，栽培植物小于 100 种。在漫长的岁月里，春去冬来，年复一年的探索，反复的尝试，又通过不断的选择、淘汰和培植，不少的野生植物成为栽培植物，栽培植物的种类越来越多，一些栽培植物发展成多种类型，种植规模越来越大，积累的经验越多、越成熟，因而逐渐形成了农业。蔬菜是农业的一部分，蔬菜种类和栽培技术的发展过程也是类同的。我国的蔬菜栽培历史非常悠久。现在不少的栽培蔬菜都是来自野生植物。例如，源于我国的野生芥菜，原来的植株弱小，根系弱，叶少而细。经过长期选择和培育，陆续获得几个变种、多种类型和许多品种。人们从叶方面不断选育，获得各种叶形、长势各异、大小不同的叶用芥菜变种，进一步发展分为植株较小、叶片较细、生长期较长的类型，如大芥菜；还有株型大、叶片巨大、叶柄肥厚肉质，并形成叶球类型，如结球芥菜。人们从茎方面不断选育，就获得茎用芥菜变种及其各种类型，如茎肥大肉质、无明显突起物的笋子芥；瘤茎纺锤形或近圆形或扁圆球形或羊角形的茎瘤芥、肉质茎呈圆锥形或棍棒形的抱子芥。人们从根方面不断选育，就获得根用芥菜变种大头芥；还选出香辣较浓的芥辣芥菜。现在这些芥菜变种，各种类型和众多品种都在各产区广泛栽培，深受消费者喜爱，有些享誉国内外。这仅一例，实际上还有不少蔬菜种类也是这样发展的。另外，自古以来，我国还从国外引进一些蔬菜种类。至今，我国已有近百种栽培蔬菜，这在全球各国中是最丰富的。

前人在探索食用野生植物的同时，也尝试用一些野生植物医治疾病，观察其医疗效果。通过不断尝试，有更多发现，积累了应用经验。有些野生植物既可以食用，又可以防治疾病，就成为既是野菜又是药草。这方面前人进行了大量的探索，留下丰富的实际知识和经验，成为宝贵的遗产，奠定了我国中草药发展的基础。这里应当特别指出李时珍的历史性贡献。李时珍是我国明代伟大的医药学家，在他几十年生涯中，历尽艰辛，不断探索，勇于实践，善于思考，一生撰写了大量著作，尤以《本草纲目》为著名，《本草纲目》集明代之前中药学之大成，记载药物 1 890 余种，其中李时珍首次载入 370 余种，药方 10 000 多个，插图 1 000 余幅，共 190 余万字，是一部杰出的药物学巨著，驰名国内外，对药物学的发展有极其深远的影响。

二、中国地大物博，植物资源丰富



◇ 白苞蒿

我国历史悠久、地域广阔、物种复杂多样，位于欧亚大陆的东部、太平洋的西部，陆地面积 960 万 km^2 ，海洋面积 300 万 km^2 。我国领土最北端是黑龙江省漠河以北的黑龙江主航道中心线；最南端是南沙群岛的曾母暗沙，南北跨越 50 个纬度，相距 5 500km；最东端是黑龙江和乌苏里江主航道中心线汇合处；最西端在新疆维吾尔自治区西部的帕米尔高原上，东西跨越 60 多个经度，相距 5 000km。我国地势西高东低。青藏高原海拔多在 3 000~5 000m；内蒙古高原、黄土高原、云贵高原及其间的塔里木盆地、准噶尔盆地、四川盆地等海拔 1 000~2 000m；大兴安岭、太行山、巫山、雪峰山之东的三大平原（东北平原、华北平原和长江中下游平原）以及江南、东南低山丘陵，海拔 200m 和 500m 以下。这说明我国有高耸的山脉、辽阔的高原与草原和平原、弯弯长长的江河与湖泊、浩浩荡荡的海洋、美丽的海岛与群岛。气候带类型有温带、热带和亚热带。我国地大物博，植物资源丰富多样。据统计，高等植物就有 3 万多种，占世界植物种类的 1/10 左右，其中包括野生植物资源。我国的野生植物资源种类繁多，野生蔬菜仅占野生植物的一小部分。人们想知道，中国的野生蔬菜资源有多少种类？答案是至今仍没有一个确切的数目。一方面由于我国的野生蔬菜资源还没有进行过全面的调查，野生蔬菜资源的家底还不清楚；另一方面各地对野菜的认识和利用习惯存在差别。例如枸杞是我国的名贵植物，宁夏等地的枸杞是当地的传统草药植物，盛产枸杞子，有不少资源，生产规模相当大，经济效益好。在华南地区的广东和广西等地，枸杞只是一种普通的绿叶蔬菜；在长江流域各地，枸杞只作野菜，很少食用，多以枸杞子作草药。又如荠菜，在长江流域各地，特别在上海、