# 大自然博物馆 YUNNAN NATURAL MUSEUM

奇姿



# 云南

# YUNNAN NATURAL MUSEUM

# 大自然博物馆

云南省科学技术协会 云南省生态经济学会 编 西 南 林 学 院



主编 武全安 徐志辉

云南大学出版社 YUNNAN UNIVERSITY PRESS

#### 《云南大自然博物馆·花卉奇姿》编辑委员会

顾	问	吴征镒	李铮友	陈宝昆	陈利		
主	任	雷吟天	刘惠民	李 宁			
副主	任	王淑珍	杨宇明	罗德坤	段安安		
委	员	施惟达	徐志辉	严文才	叶如欣	罗元明	
		郭慧光	王登全	李振华	陈力川	戴 抗	
		龙勇诚	武全安	刘思慧	韩联宪	由慧中	
		金桃花	陈书坤	武鸿翔	周 远	淤嘉祜	
策	划	徐志辉	施惟达	许太琴			
主	编	武全安	徐志辉				
副主	编	由慧中					
撰	文	武全安	由慧中	徐志辉			
翻	译	龙勇诚					
英文軍	定	Hilary Wheadon					
编	务	陈力川	金桃花	王 钰	丁群亚	周洪珍	
		李德明	张成基	尹焕琼	李小英	陈志诚	
摄	影	武全安					
补充摄	影	徐志辉	韩联宪	武 劲	武 刚		
		武 翔	徐建兴	周浙昆			

#### 云南大自然博物馆・花卉奇姿

云南大学出版社出版发行 昆明雅昌彩色设计制作中心制作 深圳雅昌彩色印刷有限公司印装

开本: 850 × 1194 1/12 印张: 8 1999 年 5 月第 1 版第 1 次印刷

印数: 0001 — 3000

书号: ISBN 7-81068-033-1/N·2 定价: 392.00元/套(98.00元/册)

#### Copy right @1999 Yunnan Natural Museum

All rights reserved. No part of this book or related videocassette may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information storage and retrieval system, without permission in writing from the Publisher.

Edited by:

Yunnan Association for Science and Technology

Yunnan Society for Ecological Economics

Kunming Institute of Botany, Chinese Academy of Sciences

Consultants: Wu Zhengyi, Li Zhengyou, Chen Baokun Presidents: Lei Yintian, Liu Huimin, Li Ning, Chen Li

Vice Presidents: Wang Shuzhen, Yang Yuming, Luo Dekun, Duan Anan

**Board Members:** Shi Weida, Xu Zhihui, Yan Wencai, Ye Ruxin, Luo Yuanming, Guo Huiguang, Wang Dengquan, Li Zhenhua, Chen Lichuan, Dai Kang, Long Yongcheng, Wu Quanan, Liu Sihui, Han Lianxian, You Huizhong, Jin Taohua, Chen Shukun, Wu HongXiang, Zhou Yuan, Yu Jiahu

Planning: Xu Zhihui, Shi Weida, Xu Taiqin Editor in Chief: Wu Quanan, Xu Zhihui

Sub-Editors: You Huizhong

Contributors: Wu Quanan, You Huizhong, Xu Zhihui

English Translator: Long Yongcheng Language Consultant: Hilary Wheadon

Editorial Members: Chen Lichuan, Jin Taohua, Wang Yu, Ding Qunya, Zhou Hongzhen, Li

Deming, Zhang Chengji, Yin Huanqiong, Li Xiaoying, Chen Zhicheng

Photographers: Wu Quanan, Xu Zhihui, Han Lianxian, Wu Jin, Wu Gang, Wu Xiang, Xu

Jianxin, Zhou Zhekun

#### Yunnan Natural Museum · Flowers

Published and Distributed by: Yunnan University Press, Kunming, P.R. of China

Produced with Computer by: Kunming Artron Color Design and Producing Center

Printed by: Shenzhen Artron Colour Printing co., LTD.

First Publication in may 1999 ISBN 7-81068-033-1/N · 2

Price:392.00 yuan/series (98.00yuan/volume)



## 目录 CONTENTS

- 冰清玉洁
- Alpine Glory

10



- 姹紫嫣红
- Colorful Spectrum



- 四季瓢香 Rich Fragrances

76







云南地处中国的西南边陲,位于北纬21°8′30″至29°15′8″,东经97°31′39″至106°11′47″之间,属于低纬度高海拔内陆地区。北与西藏、四川相连,东与贵州、广西接壤,南部和西部分别与越南、老挝、缅甸毗邻。面积约39万平方公里,居中国第八位。

特殊的自然地理和气候条件,使云南不仅成为古人类的起源地之一,而且成为世界上不多见的一座活生生的大自然博物馆。云南以"动物王国"、"植物王国"、"天然花园"、"有色金属王国"、"生物物种基因库"等美称享誉中外。这是一块博大而充满激情,深邃而富有魅力的神奇土地。她像一块璀璨夺目的绿宝石,吸引着千千万万热爱自然的人们。

云南花卉资源十分丰富,据有关资料的统计约有2500种之多,以致世人对云南有"天然花园"的美誉。云南的花卉资源早在100多年之前就大量流入欧、美,并培育出千姿百态、色彩斑斓的奇花异卉,装点着欧美的庭院、殿宇,无怪乎西欧有"没有云南的花卉,不成其花园"的谚语。世界著名的观赏花卉如杜鹃、报春、龙胆、马先蒿、百合、豹子花、绿绒蒿等等都是盛产云南的宝物,并为主产区或分布中心。兰花为世界名花,云南兰科植物就有684种,其中具有重要观赏价值的有200余种,广布于云南热带和亚热带地区,其中少量分布于高寒山区。漫游云南大地,你从热带雨林、季雨林,到亚热带常绿阔叶林直至西北部温带针叶林、草甸、流石滩均可以看到色彩纷呈,令人心旷神怡的奇花异卉。

《云南大自然博物馆》集科学性、知识性、艺术性与趣味性为一体, 意在把云南最有价值的自然之美奉献给广大读者, 让人们更加了解云南、认识云南。同时, 也希望人们更加热爱大自然, 自觉地保护生态环境, 与自然和谐相处。

# 前言

### Preface

Yunnan province is located in southwestern China between 97o31'39" ~ 106°11'47" E and 21°08'30" ~ 29°15'8" N. It is an inland province at a low latitude and high elevation. The province borders Tibet and Sichuan in the north, Guizhou and Guangxi in the east, Vietnam and Laos in the south and Myanmar in the west. Its total area is about 390,000 km², and it is the eighth largest province in the country in area.

Yunnan is one of the original homes of our forefathers. It is famous throughout the world as the kingdom of animals, plants and non-ferrous metals. In this beautiful and varied land, you can enjoy countless wonders of nature, rich biodiversity and many historic sites, all of which make you feel as if you were in a huge, living, natural history museum. The land is so entrancing that millions of people who love nature have been attracted to this wonderland.

Yunnan has an abundance of flowering plants. About 2500 flowering plant species, which contribute so much to the beauty of the environment have been found in Yunnan. That's why the province is also called "the Natural Garden". Since the last century, many of Yunnan's wild flower species have been introduced to Europe and the United States for cultivation. All the flowers, such as Rhododendron sp., Primula sp., Gentiana sp., Pedicularis sp., Lilium sp., Nomocharis sp. and Meconopsis sp., are native to the province. In Yunnan there are 684 orchid species, among which about 200 species are of great beauty and aesthetic value. Roaming around in all the places in the province, tropical rain forests, monsoon rain forests, subtropical evergreen broadleaved forests, conifer forests, alpine meadows and the debris on high mountains, you will always have the chance to see a wonderland of brightly colored flowers.

In order to help people appreciate and understand Yunnan, we published this album series, "Yunnan Natural Museum", hoping that more and more people will learn to love nature and care for the environment. While producing this album series, our aim was to make the books scientific, informative, interesting and beautiful to look at.



### 冰清玉洁

云南西北部横断山区的高山与亚高山自然环境非常优美,是世界名花柱鹃、报春、龙胆、马先蒿、绿绒蒿、豹子花的主产地或分布中心,为世界园林花卉业作出了特有的贡献、而被世人誉为"世界花园之母"。山地气候深受低纬度高海拔的影响,潮湿、寒冷,各山地植被垂直分布呈现出相似的成带规律,在海拔2600~4000米的地带温性与寒性的针叶林极为发育,依次出现云杉、落叶松、冷杉林带,并形成景观。在这些林带中多种柱鹃林或灌丛混杂其间,春夏杜鹃、马樱花盛开时,繁花似锦、极为壮观,而林间和高山草甸又是报春、马先蒿、绿绒蒿、龙胆等名贵花卉的生育地。此外菊科、蔷薇科、毛茛科、伞形科、蓼科、鸢尾科中的观赏花卉种类也极为丰富。每年春天经过冰雪的洗礼,入夏时红、黄、蓝、紫、白各色的花卉盛开,整个高山草甸变成花的海洋。而此时,遥望四周的群山,山巅依旧白雪皑皑;入秋后,百花凋谢,禾草结实,但小巧玲珑的龙胆则又处处绽放出一朵朵蓝色的火焰,更增添了高原秋色的神秘。



### **Alpine Glory**

The Hengduan Mountain Range in northwestern Yunnan is the main distribution area for many world famous flowers, such as Rhododendron sp., Primula sp., Gentiana sp., Pedicularis sp., Meconopsis sp., Nomocharis sp., etc. In this place, you can see different vegetation belts on the mountains due to the vertical changes in climate. At elevations between 2600 and 4000 m, you can see spruce forest belts, larch forest belts and fir forest belts in turn. In all these forests, you can see Rhododendron flowers. All the flowers in the high mountains are baptized by snow and ice every year. In spring, the forests come alive with color because this is when the Rhododendron comes into full bloom. Here in late spring and early summer, you can also experience the wonder of standing in a sea of reds, yellows, oranges, blues, purples, and whites of the flowering herbs in the alpine meadows, Primula sp., Pedicularis sp., Meconopsis sp., and so many others. At the same time, the mountain peaks around are still covered with snow. They reach high up into the blue of the sky. The streams and lakes on the mountains are pure and clear. In Autumn, the golden meadows are still decorated with exquisite blue flowers (Gentiana sp.). Northwestern Yunnan is famous because here is the original home of many of the most famous garden flowers. They were taken from here and cultivated all over the world..





005



006

#### 002 龙女花

落叶乔木,高2~8 米。花期4~6月,果期9~10月。生海拔2000~3300米的沟谷疏林或灌丛中。花大而美丽,供庭院种植观赏。

#### 003 白花球蕊五味子

落叶木质藤本。花期5~6月,果期8~9月。产云南西北部及双柏。生海拔2700~3300米的常绿阔叶林或高山针叶林中。花、果均很美丽,可作棚架观赏植物。

#### 004 宽叶展毛银莲花

多年生草本,植株高25~68厘米。花期6~7月。生海拔3200~4100米的山地草坡或疏林下。供花坛、假山四周、墙脚空地种植或盆栽。

#### 005 直距耧斗菜

多年生草本, 茎高 40~80 厘米。花期 6~8 月, 果期 7~9 月。生海拔 2500~3500 米的山地杂木林下。花色美观, 花形奇特, 供花坛配置、草地丛植观赏。

#### 006 川甘铁线莲

木质藤本,茎长达3米。花期6~7月,果期8~9月。生海拔2700~4300米的溪边、山沟及灌丛中。西藏、四川有分布。花形、花色美观,供棚架和其它需要攀援植物造景应用,具较好的观赏价值。

#### 002 Magnolia wilsonii

A deciduous tree between 2 and 8 m tall. Its flowering season is April and June and fruiting season September and October. The flower grows in sparse forests and shrubs in valleys at elevations of 2000-3300 m. The flower is big and beautiful and it is often planted in courtyards.

#### 003 Schisandra sphaerandra f. pallida

This is a woody climber. Its flowering season is May and June and fruiting season August and Semptember. It grows in evergreen broadleaved forests and alpine conifer forests. Both its flower and fruit are very beautiful to look at and can be used as ornamental plants climbing up walls and buildings.

#### 004 Anemone demissa var. major

A perennial herbaceous plant, 25-68 cm tall. It flowers in June and July. The plant grows on grassy slopes and in sparse forests at elevations of 3200-4100 m. It can be planted in pots, parterres, around rockeries and in borders. The flowers can easily be grown from seed.

#### 005 Aquilegia rockii

A herbaceous hardy perennial, 40-80 cm tall. It flowers in June and August and fruits from July to September. The flower grows in broadleaved forests at elevations of 2500-3500 m. The flower is beautiful with many different shapes and colors. It is easy to grow in parterres and flower beds.

#### 006 Clematis akebioides

A woody climber which can grow to around 3m in length. Its flowering season is June and July and the fruiting season in August and September. The flower climbs around shrubs and beside streams in valleys at elevations of 2700-4300 m. The flower is striking, and will thrive on trellises and grow up walls and poles .



### 007 金毛铁线莲

木质藤本或呈灌木状,茎长1~3 米。花期4~7月,果期7~11月。生海拔1000~3200米的山坡、山谷的灌丛中。全株入药,清热利尿、消炎止痛。花供观赏,是垂直美化的绝好植物。

#### 008 西南铁线莲

木质藤本、茎长达3米。花期6~7月、果期8~9月。 生海拔2700~4300米的溪边、山沟及灌丛中。可供气 候寒冷地区作垂直绿化之用。

#### 007 Clematis chrysocoma

A woody climber or shrub with a stem which will grow to 1  $^{\sim}$  3 m in length. Its flowering season is between April and July and fruiting season between July and November. The flower grows in shrubs on slopes or in valleys at elevations of 1000  $^{\sim}$  3200 m. The whole plant can be used as a traditional Chinese medicine for clearing heat, assisting urinary problems, diminishing inflammation and relieving pain.

#### 008 Clematis pseudopogonandrs

A woody climber which grows to 3 m in length. Its flowering season is June and July and fruiting season in August and Sempember. It grows in shrubs by streams or in valleys at elevations of 2700 ~ 4300 m. This plant can be grown in cold areas.



800



#### 009 紫牡丹

落叶灌木、高 0.6~1.5米。花期 5~6 月,果期 9~10 月。生海拔 2700~3700 米的石灰岩山地疏林中或石砾坡地。根入药、活血、利尿、是有名的"赤丹皮"。花大、紫红色、极为美观、是庭院美化的极好种类、更是牡丹育种的重要基因。种子或分株繁殖。

#### 010 黄牡丹

落叶亚灌木,高 0.6~1.5 米。花期 4~5 月,果期 8~9 月。生海拔 1900~3500 米的石灰岩 山地硫林或荒坡。黄牡丹是名贵的观赏花卉,亦是重要的育种材料。种子或分株繁殖。

#### 009 Paeonia delavayi

A deciduous shrub between 0.6 and 1.5 m tall. Its flowering season is in May and June and fruiting season in September and October. It grows in karst sparse forests or on gravel slopes at elevations of 2700 – 3700 m. It has a very large, deep purple flower and can be planted in courtyards. This plant is also important in that it contains genes which are essential for peony breeding. Its roots are said to have medicinal effects for activating blood and assisting urinary problems.

#### 010 Paeonia lutea

A deciduous shrub from 0.6 to 1.5 m tall. Its flowering season is in April and May and fruiting season in August and Semptember. It grows in karst sparse forests at elevations of 1900-3500 m. It is of great value both aesthetically and in peony breeding. It can be grown from seed or using a cutting from the plant itself.



010









#### 011 偏翅唐松草

多年生草本,茎高60~200厘米。花期6~9月。生海 拔1900~3600米的山地林边或灌丛中。花美丽,供庭 院观赏、岩石园种植。种子或分株繁殖。

#### 012 金花小檗

半常绿灌木,高0.5~2米。花期7~9月,果期翌年1~2月。生海拔2000~4200米的山坡、路边灌丛。株形美观,入秋叶、果均为红色、是极好的观叶、观果植物。

#### 013 岩白菜

多年生草本,高20~35厘米。花期5~6月、果期8~10月。生海拔3000~4000米的杂木林内荫湿处、岩石草坡。可种植于庭院荫湿处、供观赏。

#### 014 耳叶凤仙

一年生草本,高30~50厘米。花期8~9月,果期10~11月。生海拔2800~3600米的林下、山麓溪边或荫湿处。花大,花色美观、供庭院荫湿地种植。





015 鬼灯檠

多年生草本,高30~80厘米。花期5~6月,果期8~ 10月。生海拔1800~3000米的山地荫处。

#### 016 红毛虎耳草

多年生草本,高20~30厘米。花期5~6月。生海拔2100~3500米的山地林下或荫湿处岩石上。花奇异,叶美观,供石山荫处种植或盆栽观赏。

#### 017 鬼臼

多年生草本、茎高 25~40 厘米。花期 5 月,果期 8~9 月。生海拔 3200~4520 米的山坡疏林下或灌丛间。根入药、花、果大而美观,供庭园花坛、墙垣丛栽观赏。

#### 018 滇蝇子草

多年生草本,高30~50厘米。花果期6~9月。生海拔2200~3900米的林下、灌丛间、草坡或路旁,花美观,供花坛配植,石山、假山布景。

#### 019 柳兰

多年生粗壮草本,高约1米。花期5~9月,果期8~12月。生海拔1950~3970米的山谷沼泽地或林间空地。花大色彩艳丽,是很好的庭园观赏花卉。

#### 020 水柏枝

落叶灌木,高1~3米。花期5~6月,果期6~10月。 生海拔2000~4000米的山脚沟边、乱石中。供温带地 区石山、假山造景观赏或水池边种植。