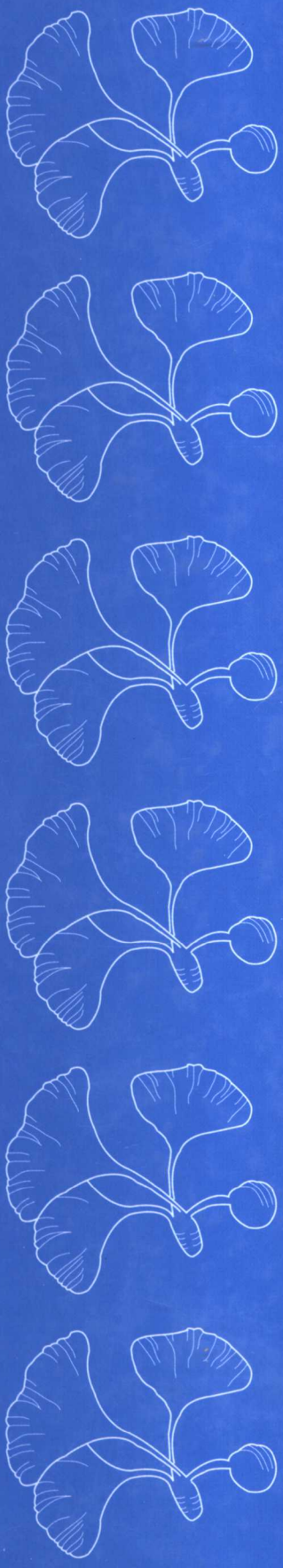

中国高等植物模式标本汇编

补编二

靳淑英 编
陈艺林 审校

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内 容 简 介

本书收录了1996～2005年发表的新分类群及有关的模式标本1491个，其中包括苔藓植物10科、19种，蕨类植物15科、195种，裸子植物2科、25种，以及被子植物111科、1250种，每个分类群均包括拉丁学名、中文名、原始文献、模式标本类别、采集人、采集号和模式标本保存单位名称及缩写代号。

本书适合国内外植物标本馆、植物分类学家，以及高等院校有关专业的研究生、教师和各产业部门科研技术人员使用参考。

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序

自2003年开始，我主持国家自然科技资源共享平台项目中的标本数字化项目，与同事们一起建设中国数字植物标本馆（Chinese Virtual Herbarium，CVH，www.cvh.org.cn）。工作中越来越感到模式标本的重要，自2005年开始启动模式标本数字化工作以来，靳淑英先生编写的《中国高等植物模式标本汇编》自然是重要的参考书，我对该书的价值又有了新的认识。本人一直对植物分类学抱有浓厚的兴趣，20年前师从东北林业大学周以良教授时曾经学过一点基本知识，对于模式标本的意义自然是理解的。模式标本是从事植物分类学研究的重要科学依据，对于开展专科专属研究或编写国家植物志和地区植物志，进行植物区系研究，开展植物资源合理开发利用以及生物多样性保护等都有重要的意义。

世界各国的植物分类学家和植物研究机构都非常重视收集有关植物新分类群及其模式标本保存，许多著名的标本馆已经收集编辑了各自国家或地区标本室珍藏的模式标本目录，提供给植物分类学家和有关研究部门参考使用。然而，在这方面我国起步较晚，为了迎头赶上，我所靳淑英先生结合她多年来从事标本管理工作的经验，在总结前人研究的基础上，对我国自1949～1986年发表的新分类群文献及其模式标本进行系统整理，并于1994年汇编出版了《中国高等植物模式标本汇编》一书。该书的出版不仅填补了我国在这方面的空白，同时也为我国植物分类学研究和全国及地方植物志编研提供了重要的参考。随后，她在1999年又相继收集了自1987年至1995年发表的新分类群及模式标本，出版了《汇编》补编。随着《中国植物志》的出版完成，为满足广大读者的要求，适应植物分类学发展的需要，作者又将近十年间发表的新分类群及有关模式标本收录编写成补编二。至此，这部《汇编》全部完成，历时13年之久。先后收录整理了1949～2005年我国植物新分类群及其模式标本总共14 237种。这部《汇编》的出版是编者数十年来从事标本室技术管理的成果，也是植物分类学的一部重要工具书。它不仅有利于我国植物分类学和植物区系的研究，而且为标本馆管理人员在模式标本的全面清理、建立模式标本数据库、开展国内外标本馆馆际间的信息交流、借阅提供必要的参考。看到靳淑英先生取得的成绩非常高兴，这不仅是她个人的成果，也是我们标本馆、植物研究所的成果，为此表示热烈祝贺。在全社会都在呼唤原始创新的今天，这样的经典分类学方面的学术成果仍然有它的重要意义。

中国科学院植物研究所所长

2006.11.14

补编二前言

《中国高等植物模式标本汇编》于1994年出版后，深受植物学家、植物分类学家和标本馆管理人员的欢迎并得到广泛使用。许多读者来函要求继续出版《汇编》补编。

为了满足读者的要求，适应植物分类学的需要，作者在1999年曾将1987～1995年主要由我国植物分类学家发表的新分类群及其模式标本收录整理并出版了补编。近年来，随着《中国植物志》编研进展，发表的许多新分类群需要收录整理，以供参考使用。作者现将1996～2005年发表的新分类群及有关的模式标本1491个（含种下等级）编成补编二。新补编包括苔藓植物10科、19种，蕨类植物15科、195种，裸子植物2科、25种以及被子植物111科、1250种。它们的模式标本分别保存在172个标本馆中。

参加编写补编二的人员还有王忠涛、陈淑荣、杜玉芬、班勤及于胜祥等，在编写的过程中，得到中国科学院植物研究所所长马克平研究员的鼓励与支持，李安仁研究员指导以及北京机械工业学校刘涌的帮助，作者在此表示衷心感谢。

由于时间仓促，编者的水平有限，难免存在错误或遗漏，热情欢迎批评指正。

靳淑英
中国科学院植物研究所
2006年11月

PREFACE TO THE SECOND SUPPLEMENT

Since the first publication of *Catalogue of Type Specimens in the Herbaria of China* in 1994, it has been much welcomed and broadly used by botanists, taxonomists and herbarium management personnel. Many of them encouraged us and requested timely additions to the catalogue.

To satisfy the demand from users, and meet the need of plant taxonomy, the author published *Supplement to the Catalogue of Type Specimens in the Herbaria of China* in 1999 summarizing the type specimens of the new taxa published mostly by Chinese taxonomists from year 1987 to 1995. In recent years, along with the progress of *Flora of China*, many new taxa have been described, it is necessary to have a timely reference to reflect this change. The author now includes information on 1491 type specimens (including intraspecific classifications) that were published from 1996 to 2005 in this second supplement. The new additions include 19 species in 10 families of bryophytes, 195 species in 15 families of ferns, 25 species in 2 families of gymnosperms, and 1250 species in 111 families of angiosperms. The type specimens of the species are currently kept in 172 herbaria.

During the compilation of the supplement II, Wang Zhongtao, Chen Shurong, Du Yufen, Ban Qin and Yu Shengxiang also participated. Professor Ma Keping, the director of the Institute of Botany, Chinese Academy of Sciences, gave much encouragement and support to the work. I also thank cordially Professor Li Anren for useful guidance and Liu Yong of Beijing Mechanical Industry School for generous assistance.

Due to limited time and author's own limitation, errors may be unavoidable. I would appreciate notifications of any errors and omissions from the users.

Jin Shuying
Institute of Botany of Chinese Academy of Sciences
2006. 11

前　言

模式标本是植物分类学家赖以从事植物系统分类研究必不可少的科学依据，也是开展专科专属研究，编写全国和地方植物志，进行植物区系调查研究，开发利用和保护植物资源的重要基本资料。因此，收集并掌握有关植物新分类群的文献及其模式标本保存的现状，无疑是每个植物分类学工作者的一项经常性的重要任务。世界各国的植物分类学家对此非常重视，并开展了许多工作。近年来，国外有些学者或科研机构已开始着手收集和整理他们所在国家或地区的部分标本室珍藏的模式标本，编辑出版了各类模式标本目录，提供植物分类学家和有关研究、教学部门参考使用。例如，日本学者 Hiroshi Hara、Kunio Iwatsuki 和 H. Ohashi（1981）等编著的《日本各标本室模式标本目录》*List of the Type Specimens in the Herbaria of Japan* 分别收录了日本标本馆收藏的蕨类植物及忍冬科、杨柳科和天南星科等模式标本目录；由美国哈佛大学 Allan J. Borstein（1987）编辑的《哈佛大学标本室模式标本目录胡椒科》*A Catalogue of Type Specimens in the Harvard University Herbaria (A/GH): Piperaceae* 也已问世，它对阿诺德树木园和阿萨雷格标本室珍藏的胡椒科模式标本 1098 号做了比较详尽的记载。我国尽管也有人撰文分别介绍国内外主要标本室概况和部分单位标本室的外文名称及缩写代号，然而关于我国高等植物新分类群文献及其模式标本迄今尚未做过全面地清理，缺乏比较完整的系统资料。

我国幅员辽阔，自然环境复杂，野生植物资源异常丰富，初步统计，仅高等植物就超过 3 万余种，分别隶属于 470 科、3700 余属，其种类数目仅次于巴西和马来西亚。数十年来我国老一辈植物学家和广大植物分类学工作者进行了广泛和深入的调查和采集，收集了大量珍贵的植物标本，积累了丰富的文献资料。在此基础上，开展了全国和地方植物志的编写以及专科、专属的系统分类研究，逐步查明了我国植物资源种类及其分布规律，同时也先后发现了数千个新分类群（包括新种和新变种），使我国植物种类数目和区系成分不断增加。据统计，自 1949～1986 年共 38 年间，我国先后发现高等植物新分类群达 9484 个，这些新分类群先后发表在国内 100 余种不同的书刊上。而它们所依据的模式标本则分别保存于国内外 230 多个科研、教学或产业部门的标本室（馆）中，这既不便于查找，也不利于彼此交流和使用。有些单位由于设备或条件不够完备或因管理不善，致使模式标本有的丢失或损坏和虫蚀，甚至有的已经毁于火灾。这种状况如果不引起足够重视，并及时制定或采取有效的措施，加强科学管理，这些珍贵的模式标本不仅在科研、生产上不可能发挥其应有作用，而且还有可能被毁于一旦，给国家科学事业造成不可弥补的损失。

我国著名植物分类学家钱崇澍、胡先骕、陈焕镛、秦仁昌、蒋英、方文培、俞德浚和吴征镒等教授都非常重视新分类群模式标本及文献收集与整理工作，并为此做出了巨大贡献。为了使此项基本资料工作得以继续进行下去，以适应和满足我国植物分类学研

究和全国及地方植物志编写的需要，进一步加强标本馆的现代化建设，不断提高科学管理水平，逐步实现标本室管理科学化、标准化、规范化和现代化，使它更有效地为科研、教学和生产部门服务，是十分必要的。近年来，编者结合标本室的管理工作，在总结前人工作的基础上，对我国自 1949～1986 年的新分类群文献及其模式标本进行了全面系统的整理，现将结果汇编成本目录，供国内外植物分类学家及有关科研、教学和生产部门参考。

历史悠久的中国科学院植物研究所标本馆，拥有高等植物标本 1 800 000 号，是目前我国最大的标本馆，也是亚洲最大的标本馆之一。它与世界 50 多个国家和地区的科学研究机构和大学的标本室建立了广泛的联系，并开展了馆际间的学术交流，在国内外均享有较高的声誉。这里不仅珍藏有大量珍贵的模式标本，而且拥有一座植物学书刊比较齐全的图书馆，为本项工作的顺利开展创造了有利条件。

《中国高等植物模式标本汇编》是编者数十年来从事标本室技术管理工作的一项初步成果，也是植物分类学的一部重要的工具书。本书不仅全面系统地收录了国内外植物分类学家自 1949 年以来发表的我国高等植物新分类群，而且每个分类群均包括植物拉丁学名、中名、原始文献、模式标本类别、产地、采集人和采集号、保存单位名称、缩写代号。本书的出版不仅有利于我国植物分类学和植物区系的研究，而且对标本室科学管理人员也有裨益和帮助，同时为今后我国各标本室模式标本的全面清理和汇编《中国植物模式标本集》提供参考。

在编辑过程中，曾经得到了秦仁昌教授的热情鼓励和支持，中国科学院植物研究所领导陈艺林、李安仁和傅立国教授对此项工作给予具体指导；崔鸿宾教授将他收藏的书刊提供作者使用，再次表示衷心感谢；东北林业大学周以良教授及《植物研究》编辑部的同志曾帮助出版《中国高等植物文献及其模式标本汇编》（简称《汇编》），对此深表谢忱。此外，作者对一切关心和支持此项工作的单位和个人均致以深切谢意。

《汇编》于 1989 年在《植物研究》刊出后，立即引起国内外植物学界的广泛兴趣与重视，不少植物学家和有关单位多次来函建议尽快出版全书。

鉴于目前编者对我国台湾、香港和澳门的文献资料掌握不够完备，因此在本书中对上述地区发表的新分类群暂未列入，有待今后加以补充。关于 1986 年后发表的我国植物新分类群文献及其模式标本目录，将以补编的形式，陆续出版。

由于时间仓促，编者水平有限，书中遗漏或错误在所难免，敬请读者批评指正。

靳淑英
中国科学院植物研究所
1991 年 4 月

PREFACE

Type specimens form the indispensable scientific basis for the studies of taxonomy. They are the basic materials for monographical studies of families and genera, for writing up regional or country wide floras, for flora exploration and utilization, and for conservation of plant resources. Therefore, it is undoubtedly an important and constant job of every plant taxonomist to accumulate and familiarize himself with literatures on new taxa and information about their type specimens. Realizing the importance of this, plant taxonomists around the world have done great deal of work for facilitating this. In recent years, several scholars and scientific institutions have set about sorting out and collating the type specimens kept in some of the herbaria of their own country or region. Lists of catalogues of type specimens have been prepared and published. These include *List of the Type Specimens in the Herbaria of Japan* (1981, compiled by H. Hara, K. Iwatsuki and H. Ohashi), listing type specimens of ferns, Caprifoliaceae, Salicaceae and Araceae, and *A Catalogue of Type Specimens in the Harvard University Herbaria* (A/GH): *Piperaceae* (1987, compiled by A. J. Borstein), providing detailed information about 1098 type specimens kept in Arnold Arboretum and Grey Herbarium of the University. In China, introductory articles about important herbaria at home and abroad and about the English names and their abbreviations of herbaria of some institutions were seen. However, comprehensive collation and relatively complete information of literatures of new taxa and their type specimens are, until now, still wanting.

China has a large area, varied and complex environmental conditions and exceptional rich resources of wild plants. The number of species of higher plants, which belongs to over 3700 genera and 470 families, is estimated to exceed 30, 000, only next to Brazil and Malaysia in abundance. Over the decades, Chinese botanists of older generations and numerous plant taxonomists have made extensive explorations, have collected a great number of invaluable plant specimens, and have accumulated abundant literatures. On this basis, national and regional floras are being written and published, studies on the taxonomy and systematics of various genera and families are progressing. During the investigations of the composition of Chinese plant resources and their distributions, thousands of new taxa (including new species and new varieties) have been discovered, which have continuously been added to the number of known plant species and flora elements of this country. Within 38 years between 1949 and 1986, according to our statistics, 9484 new taxa of higher plants were found in China and were published in more than 100 various Chinese books and periodicals. The type specimens on which the names

of these new taxa are based are scattered in over 230 herbaria of different scientific, educational of industrial institutions. This causes inconvenience in checking the specimens, and does not facilitate exchange and use, some of the type specimens have regrettably been eaten by insects, damaged, lost or even destroyed by fire, due to inadequate facilities, improper keeping conditions and poor management in some of the institutions. Unless due attention is paid to this situation and immediate measures are formulated and taken to deal with the problems and to enforce scientific management, it is unlikely that these precious type specimens will play their roles to the full extent, and the great danger will remain that some of the specimens face the destiny of being ruined, resulting in irreparable loss to the cause of sciences in this country.

Prominent Chinese plant taxonomists, such as Prof. Qian Chongshu, Prof. H. H. Hu (Hu Xiansu), Prof. W. Y. Chun (Chen Huanyong), Prof. R. C. Ching (Qin Renchang), Prof. Y. Tsiang (Jiang Ying), Prof. W. P. Fang (Fang Wenpei), Prof. T. T. Yu (Yu Dejun) and Prof. C. Y. Wu (Wu Zhengyi), invariably attached importance and made great contributions to the work of accumulating and collating type specimens and literatures of new taxa. It is necessary to continue this work of basic data, in response to the demand of taxonomic researches of China plants and the writing of national and regional floras of China, for the assistance the realization of modernization and with the aim of providing more effective services to scientific and educational institutions and production sectors. In the last few years, the present compiler, in association with her duty of administrating the herbarium, and on the basis of summing up the achievements of her forerunners, have made a complete and systematic scrutiny of the literature published in China between 1949 and 1986, in which new taxa were described with type specimens cited. The result is this catalogue, which we offer for reference to plant taxonomists and others concerned, both at home and abroad, in scientific, and educational institutions or in production sectors.

The Herbarium of the Institute of Botany, Chinese Academy of Sciences, with a long history and now holding 1, 800, 000 specimens of higher plants, is recognized as the largest herbarium in China, and one of the largest in Asia. Extensive contacts and academic exchanges are established between this herbarium and herbaria of scientific institutions and universities over 50 countries and regions. This herbarium, where I work in, enjoys a high reputation not only in housing large numbers of type specimens, but also in holding a comprehensive collection of botanical books and periodicals in its library. Thus, I am provided with a favourable condition to carry on smoothly the preparation of the present compilation.

A Catalogue of Type Specimens (Cormophyta) in the Herbaria of China, which is an important reference book of plant taxonomy, resulted from the accumulation during my many years administration work in the Herbarium. The book lists the new taxa of Chinese higher plants published since 1949 by Chinese and foreign botanists

including their latin names, Chinese common names, and information about place of publication, kind of type, place of collection, collector (s), collection number, and institution where the type specimen is deposited. The publication of this book will not only benefit taxonomic and floral studies of China and the mangement of herbaria, but also in future provide reference to a thorough sorting out of type specimens in herbaria of our country and to another compilation, *Type Specimens of Chinese plants*.

During the preparation of this book, Prof. Qin Renchang warmly encouraged and supported the efforts of the compiler, leaders of the Institute of Botany, Chinese Academy of Sciences, and the Herbarium and the Library of the Institute also provided full support; Prof. Chen Yilin, Prof. Li Anren and Prof. Fu Liguo gave practical guidance; Prof. Cui Hongbin kindly lent his own books and periodicals to the compiler; Prof. Zhou Yiliang and the editorial department of *Botanical Research* helped in the publication of the first edition of Part One of this compilation. To all these and other people and institutions that have shown solicitude and given helpful support, we acknowledge our deep and sincere gratitude.

Since the first edition of Part One appeared in *Botanical Research* in 1989, much attention has been received from the botanical circles both at home and abroad. Quite a few botanists and institutions wrote letters expressing wishes to see the catalogue soon published in full. This has now been materialized with the energetic support from the Science Press, to which I am most grateful.

Because publications from Taiwan, Hongkong and Macao are not fully accessible to us, this compilation has not included new taxa published in those areas, which, we hope, could be added later. New taxa published after 1986 and their type specimens would be catalogued and published as supplements in future.

Notification of any errors or omissions that may exist would be greatly appreciated.

Jin Shuying
Institute of Botany, Academia Sinica
April, 1991

使 用 说 明

1. 本书收录自 1996～2005 年国内外植物分类学家发表的中国高等植物新分类群（种和变种）及其模式标本 1491 个，计有苔藓植物 10 科、19 种，蕨类植物 15 科、195 个，裸子植物 2 科、25 个和被子植物 111 科、1250 个。它们的模式标本分别存放在国内外 172 个单位标本室中。

2. 目录中所列的新分类群分别按苔藓植物、蕨类植物、裸子植物和被子植物归类。蕨类植物按秦仁昌的分类系统，裸子植物按郑万钧的分类系统，被子植物按恩格勒（1936）的分类系统。其中科、属、种名均按拉丁字母顺序排列。

3. 每个分类群均包括拉丁学名、中名、原始文献、模式产地、采集人和采集号、采集日期、模式类别及其保存单位缩写。缺项者从略。

4. 凡有两个或两个以上采集人采的标本均以×××等表示。

5. 模式产地一般只列省、县（或山等）。产地及采集人名均有中文对照。

6. 书中所列的模式标本保存单位标本室外文名称缩写，除沿用国际上惯用的各单位用的缩写代号外，其余均为编者新拟，它们仅限于并适用于本书使用查找。

7. 凡模式标本后面未指明标本保存单位者，均因新分类群的原始文献中未标出。

8. 为便于检索查找，书后附有植物科的中名及拉丁名索引。

GUIDE TO THE USE OF THE CATALOGUE

1. This compilation is a catalogue of 1491 new taxa (species and varieties) of Chinese higher plants published by Chinese and foreign taxonomists between 1996 and 2005, with their type specimens. Of these taxa, 19 belong to 10 families of Bryophyta, 195 belong to 15 families of Pteridophyta, 25 belong to 2 families of Gymnospermae, 1250 belong to 111 families of Angisospermae. Their type specimens are kept in 172 herbaria both at home and abroad.

2. In the catalogue, new taxa are grouped under Bryophyta, Pteridophyta, Gymnospermae and Angiospermae. In each group, all the names of species, genera and families are arranged in alphabetical order. The classification of Pteridophyta follows Qin Renchang's (R. C. Ching's) system; that of Gymnospermae follows Zheng Wanjun's (W. C. Cheng's) system; that of Angiospermae follows A. Engler's (1936) system.

3. For each taxon listed, the following information is provided: Latin name, Chinese common name, place of publication, place of collection of the type, date of collection, collector (s), collection number, kind of type, and abbreviation of the name of the herbarium or institution where the type specimen is deposited. Some type materials cited by author but without precise locality or the collector uncertain and without collection number are omitted.

4. The specimen collected by two or more collectors are indicated as×××et al.

5. For places of collection, usually only provinces and counties (or mountains etc.) are indicated. Names of places of collection and of collectors are also provided in Chinese.

6. The abbreviations for herbaria and institutions, except those commonly used internationally and those adopted by the institutions themselves, are newly proposed by the compiler, and are used in this book only.

7. Sometimes the keeping herbarium or institution of the type specimen of a new taxon was not recorded in the original publication. In these instances, no herbarium or institution is indicated in the present catalogue for the taxa concerned.

8. An index of Chinese common names and Latin names of the families is provided.

目　　录

CONTENTS

模式标本目录

THE CATALOGUE OF TYPE SPECIMENS

BRYOPHYTA 苔藓植物门

Anomodontaceae 牛舌藓科

12594 **Anomodon perlingulatus** Broth. ex Wu et Jia (带叶牛舌藓), in Acta Phytotax. Sin. 38 (3): 260. f. 2. 2000. Shaanxi (陕西): Without locality (无采集地点), 1899. 6. 11. P. Giraldi 1272. (Holotypus: H)

12595 **Solorjovii lazarenko** var. **henanensis** B. C. Tan, D. Boufford et T. S. Ying (苏氏牛舌藓河南变种), in Acta Phytotax. Sin. 18 (1): 69. 1996. Henan (河南): Neixiang (内乡), D. Boufford et al. 26458-B. (Holotypus: PE; Isotypus: FH, H)

Bryaceae 真藓科

12596 **Orthodontium bilimbatum** X. J. Li et D. C. Zhang (具边直齿藓), in Acta Bot. Yunn. 18 (4): 416. f. 1: a-l, f. 2: m-r. 1996. Yunnan (云南): Meilixueshan (梅里雪山), Deqin (德钦), 1994. 9. 29. D. C. Zhang (张大成) 333. (Holotypus: HKAS); Paratypus: Yunnan (云南): Tianchi (天池), Zhongdian (中甸), 1994. 9. 20. D. C. Zhang (张大成) 138. (HKAS)

12597 **Pohlia hyaloperistoma** Zhang Li & Higuchi (明齿丝瓜藓), in Acta Phytotax. Sin. 40 (2): 176. f. 1-2. 2002. Yunnan (云南): Deqin (德钦), Baimaxueshan (白马雪山), 1994. 10. 4. D. C. Zhang (张大成) 489. (Holotypus: HKAS); Paratypus: Yunnan (云南): Deqin (德钦), Baimaxueshan (白马雪山), 1981. 7. 14. X. J. Li (黎兴江) 81-2036. (HKAS); 1994. 10. 3. Higuchi 25961. (TNS); Zhongdian (中甸), Bitahai Lake, 1994. 9. 21. D. C. Zhang (张大成) 168. (HKAS, TNS)

12598 **P. macrocarpa** Zhang Li & Higuchi (疏叶丝瓜藓), in Acta Phytotax. Sin. 40 (2): 181. f. 3-4. 2002. Xizang (西藏): Medog (墨脱), Hanmi to Nage (汉密至那格), 1974. 8. 19. S. K. Chen (陈书坤) 28a. (Holotypus: HKAS; Isotypus: TNS); Paratypus: Xizang (西藏): Medog (墨脱), Hami to Nage, 1974. 8. 19. S. K. Chen (陈书坤) 71. (HKAS, TNS); 1974. 8. 31. S. K. Wu (武素功) 5201a. (HKAS)

Entodontaceae 绢藓科

12599 **Entodon compressus** C. Muell. **var. parvisporus** X. S. Wen et Z. T. Zhao (密叶绢藓小孢变种), in Bull. Bot. Res. 17 (4): 359. f. 1. 1997. Shandong (山东): Lushan (鲁山), 1995. 10. 20. X. S. Wen (温学森) 95110. (Holotypus: SDMUPF); Paratypus: Shandong (山东): Xiying (西营), Tizi Hill (梯子山), Jinan (济南), 1996. 10. X. S. Wen (温学森) 96029. (SDMUPF)

12600 **E. verruculosus** X. S. Wen (细疣点绢藓), in Acta Bot. Yunn. 20 (1): 47. f. 1. 1998. Shandong (山东): Lushan (鲁山), 1995. 10. 12. X. S. Wen (温学森) 9452. (Holotypus: SDMUPF)

Glyphomitriaceae 高领藓科

12601 **Glyohomitrium lortifolium** Y. Jia et M. Z. Wang & Y. Liu (卷尖高领藓), in Acta Phytotax. Sin. 43 (3): 278. f. 1. 2005. Chongqing (重庆): Nanchuan (南川), Jinfoshan (金佛山), 1942. 8. 16. H. J. Chu (朱浩然) 49. (Holotypus: PE)

Meteoriaceae 蔓藓科

12602 **Aerobryopsis aristifolia** X. J. Li, S. H. Wu et D. C. Zhang (芒叶灰气藓), in Acta Bot. Yunn. 25 (2): 192. f. 1: 1-13. 2003. Yunnan (云南): Xishuangbanna (西双版纳), Menglun (勐伦), 1989. 8. 23. Li Zhang (张力) 25641. (Holotypus: HKAS)

12603 **A. yunnanensis** X. J. Li et D. C. Zhang (云南灰气藓), in Acta Bot. Yunn. 25 (2): 194. f. 2: 1-9. 2003. Yunnan (云南): Wenshan (文山), Xichou (西畴), Cao Guo Mts of Fadou, 1976. 9. 25. Q. A. Wu (武全安) 42036. (Holotypus: HKAS)

Orthotrichaceae 木灵藓科

12604 **Macromitrium cancellatum** Y. X. Xiong (花叶蔓藓), in Acta Bot. Yunn. 22 (4): 405. f. 1. 2000. Guizhou (贵州): Guiyang (贵阳), Yuanxin Xiong (熊源新), 1996. 7. 26. SY 96011. (Holotypus: GACP)

Herbertaceae 剪叶苔科

12605 **Herbertus subrotundatus** Fu et Yi (亚圆叶剪叶苔), in Acta Phytotax. Sin. 39

(1): 89. f. 1. 2001. Xizang (西藏): Ridong (日东), Bulaolong (布劳龙), 1982. 9. 8. M. Zang (臧穆) 5075. (Holotypus: HKAS; Isotypus: IFSBH)

Jungermanniaceae 叶苔科

12606 **Horikawaella rotundifolia** Gao et Yi (圆叶疣叶苔), in Acta Phytotax. Sin. 36 (3): 284. f. 7. 1998. Yunnan (云南): Gongshan (贡山), 1982. 7. 24. M. Zang (臧穆) 611. (Typus: IFP; Isotypus: KUN)

12607 **Notoscyphus collenchymatosus** Gao, Jia et Cao (厚角假蒴苞苔), in Bull. Bot. Res. 19 (4): 366. f. 2. 1999. Hunan (湖南): Yizhang (宜章), Mangshan (莽山), 1974. 9. 5. C. Gao et G. C. Zhang (高谦和张光初) 827. (Holotypus: IFSBH)

12608 **N. parvus** Gao, Jia et Cao (小假蒴苞苔), in Bull. Bot. Res. 19 (4): 362. f. 1. 1999. Hainan (海南): Bawangling (霸王岭), 1974. 10. 23. C. Gao (高谦) 3315. (Holotypus: IFSBH)

Lepidoziaceae 指叶苔科

12609 **Kurzia hainanensis** Li et Zhankui Bai (海南细指苔), in Bull. Bot. Res. 19 (4): 368. f. 1: 1-9. 1999. Hainan (海南): Xinanjiang (新安江), 1977. 11. 24. Dengke Li (李登科) 4975. (Holotypus: SHM)

Scapaniaceae 合叶苔科

12610 **Scapania ferrugineaoides** T. Cao, Gao et J. Sun (拟褐色合叶公苔), in Guihai 24 (10): 23. pl. 1: 1-11. 2004. Sichuan (四川): Erlang Mts. (二郎山), 1980. 7. 22. Gao Chien, Cao Tong etc. (高谦, 曹同等) 18512. (Typus: IFSBH)

12611 **S. gaochii** X. Fu ex T. Cao (高氏合叶苔), in Acta Bot. Yunn. 25 (5): 541. f. 1. 2003. Yunnan (云南): Bijiang (碧江), Gaoligongshan (高黎贡山), Zang Mu (臧穆) 5462. (Typus: HKAS; Isotypus: IFSBH)

12612 **S. macroparaphyllia** T. Cao, C. Gao & J. Sun (片马合叶苔), in Acta Phytotax. Sin. 42 (2): 180. f. 1. 2004. Xizang (西藏): Vicinity of Shejila Radar Station (舍洁拉雷达站附近), 1975. 8. 4. S. K. Chen (陈书坤) 423a. (Holotypus: KUN; Isotypus: IFSBH)

PTERIDOPHYTA 蕨类植物门

Angiopteridaceae 莲座蕨科

12613 **Angiopteris paucinervis** W. M. Chu et Z. R. He ex Z. R. He (广西莲座蕨), in