

中国高等植物模式标本汇编

补编二

靳淑英 编

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国家科技基础条件平台建设项目

植物标本标准化整理、整合及共享平台建设子项目资助出版

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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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A CATALOGUE OF TYPE SPECIMENS
(CORMOPHYTA) IN THE HERBARIA
OF CHINA

The supplement II

Edited by Jin Shuying

Revised by Chen Yilin

Science Press
Beijing

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 or 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 Liguogave 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 Angiospermae. 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.

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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-1, 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: SD-MUPF); 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 (花叶蕞藓), 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

Acta Bot. Yunn. 22 (4): 390. pl. 1: 1-4. 2000. Guangxi (广西): Luocheng (罗城), Longan (龙岸), 1984. 9. 2. W. M. Chu et al. (朱维明等) 18358. (Typus: PYU)

Aspidiaceae 叉蕨科

- 12614 **Tectaria luchunensis** S. K. Wu (绿春叉蕨), in Acta Phytotax. Sin. 40 (6): 535. f. 1. 2002. Yunnan (云南): Luchun (绿春), Qimaba (骑马坝), 1995. 11. 4. S. K. Wu et al. (武素功等) 891. (Holotypus: KUN); Paratypus: Yunnan (云南): Luchun (绿春), Qimaba (骑马坝), 1995. 11. 1. S. K. Wu et al. (武素功) 868. (KUN); 2000. 10. S. K. Wu et al. (武素功等) 2001, 2002, 2003. (KUN)

Athyriaceae 蹄盖蕨科

- 12615 **Allantodia baishanzuensis** Ching et Chu (百山祖短肠蕨), in Acta Phytotax. Sin. 36 (4): 375. f. 1: 1-2. 1998. Zhejiang (浙江): Qingyuan (庆元), Baishanzu (百山祖). P. X. Qiu (裘佩熹) 3945. (Holotypus: PE)
- 12616 **A. calogrammoides** Ching ex W. M. Chu et Z. R. He (拟长国短肠蕨), in Acta Phytotax. Sin. 36 (4): 377. f. 1: 3-7. 1998. Yunnan (云南): Jingdong (景东), Wuliangshan (无量山), Gongping (公平), 1977. 9. 23. W. M. Chu (朱维明) 9393. (Holotypus: PYU; Isotypus: PE, PYU); Paratypus: Yunnan (云南): Jingdong (景东), Wuliangshan (无量山), Wenpu (温卜), 1966. 10. 1. B. Y. Qiu (邱炳云) 52469; 1979. 9. 19. W. M. Chu (朱维明) 9288.
- 12617 **A. dushanensis** Ching ex W. M. Chu et Z. R. He (独山短肠蕨), in Acta Phytotax. Sin. 36 (4): 379. f. 2: 1-2. 1998. Guizhou (贵州): Dushan (独山), 1949. 2. 13. X. Y. Hou (侯学煜) 1998. (Holotypus: PE); Paratypus: Guizhou (贵州): Pingtang (平塘), 1851. 1. 7. X. Y. Hou (侯学煜) 1851; Libo (荔波), Baiyan (白岩), J. Y. Han et L. L. Zeng (韩见宇, 曾莉莉) 90364; Guangxi (广西): Longzhou (龙州), Banbi (板闭), 1956. 4. 24. Y. K. Lee (李荫昆) 154.
- 12618 **A. hirtipes** (Christ) Ching f. nigropaleacea Ching (黑鳞轴短肠蕨), in Acta Phytotax. Sin. 36 (4): 379. 1998. Guizhou (贵州): Rongjiang (榕江), 1959. 8. 4. Kweichow Bot. Exped. (贵州队) 3206. (Holotypus: PE)
- 12619 **A. nigrosquamosa** Ching (乌鳞短肠蕨), in Acta Phytotax. Sin. 36 (4): 380. f. 2: 3. 1998. Yunnan (云南): Suijiang (绥江), 24 Ridges (24岗), 1973. 5. 18. W. M. Chu (朱维明) 4877. (Holotypus: PYU; Isotypus: PE)
- 12620 **Athyriopsis japonica** (Thunb.) Ching var. **variegata** W. M. Chu et Z. R. He (花叶假蹄盖蕨), in Acta Phytotax. Sin. 36 (4): 375. 1998. Yunnan (云南):

- Kunming (昆明), Xishan (西山), 1978. 8. 15. W. M. Chu (朱维明) 8444. (Holotypus: PYU)
- 12621 **Athyrium clivicola** Tagawa var. **rotundum** Z. R. Wang (圆羽蹄盖蕨), in Fl. Reip. Pop. Sin. 3 (2): 217. Add. 508. 1999. Chongqing (重庆); Nanchuan (南川), Jinfo Mt. (金佛山), 1957. 7. 12. K. F. Lee (李国凤) 62637. (Holotypus: PE); Paratypus: Chongqing (重庆); Nanchuan (南川), Jinfo Mt. (金佛山), 1957. 7. 12. K. F. Lee (李国凤) 61917, 62586.
- 12622 **A. iseanum** Roseust. var. **chuanqianense** Z. R. Wang (川黔蹄盖蕨), in Fl. Reip. Pop. Sin. 3 (2): 266. pl. 61; 3-6. Add. 509. 1999. Sichuan (四川): Emei Mt. (峨眉山), Jiulaodong (九老洞), 1974. 9. 2-8. Z. R. Wang & J. M. Xu (王中仁, 许介眉) 19. (Holotypus: PE); Paratypus: Sichuan (四川): Emei Mt. (峨眉山), Jiulaodong (九老洞), 1974. 9. 2-8. Z. R. Wang & J. M. Xu (王中仁, 许介眉) 4, 23, 24; 1980. 9. 2. Z. R. Wang & Z. X. Zhang (王中仁, 张志宪) C92; 1982. 7. 15. Z. R. Wang & Q. Xia (王中仁, 夏群) C300; 1938. 7. 31. W. P. Fang (方文培) 7644; 1938. 7. 31. W. P. Fang (方文培) 12795; 1955. 7. 12. X. J. Zheng (郑学经) 30139; 1963. 8. 16-20. K. H. Shing & K. Y. Lang (邢公侠, 郎措永) 403, 611, 622; 1964. 8. 23. K. C. Kuan et al. (关克俭等) 1662; Leibo (雷波), 1959. 6. 14. C. T. Kuan (关中天) 6972; Ebian (峨边), 1959. 8. 23. C. T. Kuan (关中天) 7488; Daxiangling (大相岭), Nibashan (泥巴山), 1964. 8. 4. H. S. Kung (孔宪需) 3951, 3957; Guizhou (贵州): Yinjiang (印江), Fanjing Mt. (梵净山), 1941. 7. 30. X. Y. Hou (侯学煜) 935; 1963. 9. 10. C. P. Tsien et al. (简焯坡等) 31504.
- 12623 **A. roseum** Christ var. **fugongense** Z. R. Wang (福贡蹄盖蕨), in Fl. Reip. Pop. Sin. 3 (2): 233. Add. 508. 1999. Yunnan (云南): Fugong (福贡), Qinghai-Xizang Complex Exped. (青藏综考队) 82-7268. (Typus: PE)
- 12624 **A. wardii** (Hook.) Makino var. **glabratum** Y. T. Hsieh et Z. R. Wang (无毛华中蹄盖蕨), in Fl. Reip. Pop. Sin. 3 (2): 223. Add. 508. 1999. Jiangxi (江西): Lushan (庐山), Huanglongsi (黄龙寺), R. C. Ching (秦仁昌) 10127. (Holotypus: PE); Paratypus: Jiangxi (江西): Lushan (庐山), Huanglongsi (黄龙寺), 1977. 5. 9. K. C. Kuan (关克俭) 77076.
- 12625 **Cystopteris guizhouensis** X. Y. Wang et P. S. Wang (贵州冷蕨), in Acta Bot. Yunn. 19 (2): 141. f. 1. 1997. Guizhou (贵州): Hezhang (赫章), Jiucaiping (九菜坪), 1991. 9. 28. P. S. Wang (王培善) 91163. (Holotypus: HGAS)
- 12626 **Lunathyrium auriculatum** W. M. Chu et Z. R. Wang var. **zhongdianense** Z. R. Wang (中甸峨眉蕨), in Fl. Reip. Pop. Sin. 3 (2): 319. Add. 511. 1999. Yunnan (云南): Zhongdian (中甸), 1981. 6. 11. Qinghai-Xizang Complex Exped. (青藏队) 81-496. (Typus: PE)
- 12627 **L. emeiense** Z. R. Wang (棒孢峨眉蕨), in Fl. Reip. Pop. Sin. 3 (2): 308. Add. 510. 1999. Sichuan (四川): Emei shan (峨眉山), Xixiangchi (洗象池),

1979. 9. 15. Z. R. Wang (王中仁) 61. (Holotypus; PE); Paratypus; Sichuan (四川); Emei shan (峨眉山), Xixiangchi (洗象池), 1976. 10. 24. Z. R. Wang (王中仁) 129. (PE); 1980. 8. 30. Z. R. Wang (王中仁) 161. (PE); 1982. 7. 15. Z. R. Wang (王中仁) 295, 296. (PE)
- 12628 **L. pycnosorum** (Christ) Koidz. var. **longidens** Z. R. Wang (长齿峨眉蕨), in Fl. Reip. Pop. Sin. 3 (2): 301. pl. 69; 6. Add. 509. 1999. Heilongjiang (黑龙江); Shangzhi (尚志), Daguokui (Takuokui) Mt. (大锅盔山), 1951. 7. 16. Y. C. Zhu (朱有昌) 156. (Typus; PE)
- 12629 **L. sichuanense** Z. R. Wang var. **jinfoshanense** Z. R. Wang (金佛山峨眉蕨), in Fl. Reip. Pop. Sin. 3 (2): 324. Add. 511. 1999. Chongqing (重庆); Nanchuan (南川), Jinfo Mt. (金佛山), Fenghuang shi (凤凰寺), 1957. 7. 12. G. F. Lee (李国凤) 52652. (Holotypus; PE, Isotypus; KUN); Paratypus; Chongqing (重庆); Nanchuan (南川), Jinfo Mt. (金佛山), Fenghuangshi (凤凰寺), 1957. 7. 14. G. F. Lee (李国凤) 62779; 1977. 9. 26. W. M. Chu (朱维明) 7507; 1981. 6. 26. Z. Y. Liu (刘正宇) 1810; Hubei (湖北); Enshi (恩施), 1957. 9. 3. G. X. Fu et al. (傅国勋) 1511.
- 12630 **L. truncatum** Ching (截头峨眉蕨), in Fl. Reip. Pop. Sin. 3 (2): 314. Add. 510. 1999. Yunnan (云南); Without exact locality (无详细产地), H. T. Tsai (蔡希陶) 52697. (Typus; PE)
- 12631 **L. vegetius** (Kitagawa) Ching var. **miyunense** Ching et Z. R. Wang (密云峨眉蕨), in Fl. Reip. Pop. Sin. 3 (2): 304. Add. 509. 1999. Beijing (北京); Miyun (密云), Potou (坡头), Dadianzi (大甸子), Sandaogou (三道沟), 1978. 8. 7. Z. R. Wang (王中仁) C40. (Holotypus; PE); Paratypus; Beijing (北京); Miyun (密云), Potou (坡头), Dadianzi (大甸子), Sandaogou (三道沟), 1979. 8. 7. Z. R. Wang (王中仁) C39. (PE)
- 12632 **Monomelangium pullingeri** (Bak.) Tagawa var. **daweishanicolum** W. M. Chu et Z. R. He (大围山毛轴线盖蕨), in Acta Phytotax. Sin. 36 (4): 375. f. 1: 1-2. 1998. Yunnan (云南); Pingbian (屏边), Daweishan (大围山), 1997. 1. 5. W. M. Chu et al. (朱维明等) 29218. (Holotypus; PYU); Paratypus; Yunnan (云南); Pingbian (屏边), Daweishan (大围山), 1934. 3. 9. Y. Tsiang (蒋英) 13429; 1956. 6. 15. Sino-URSS Exped. (中苏队) 3511.

Cyatheaceae 桫欏科

- 12633 **Alsophila austroyunnanensis** S. G. Lu (滇南桫欏), in Acta Bot. Yunn. 20 (1): 45. f. 1. 1998. Yunnan (云南); Pingbian (屏边), Daweishan (大围山), 1995. 5. 14. S. G. Lu (陆树刚) 30025. (Typus; PYU); Paratypus; Yunnan (云南); Malipo (麻栗坡), Xiaxinqing (下新箐), 1994. 2. 25. S. G. Lu (陆树刚) 28564. (PYU)

Dryopteridaceae 鳞毛蕨科

- 12634 **Cyrtomium wulingense** S. F. Wu (武陵贯蕨), in Journ. Wuhan Bot. Res. 15 (3): 218. f. 1. 1996. Hunan (湖南): Sangzhi (桑植), Tianzishan (天子山), 1987. 8. 22. S. F. Wu (吴世福) S1680. (Typus: SHCT)
- 12635 **Polystichum altum** Ching (高大耳蕨), in Acta Phytotax. Sin. 36 (5): 465. f. 1: 6-8. 1998. Yunnan (云南): Suijiang (绥江), 1973. 5. 27. W. M. Chu (朱维明) 5008. (Holotypus: PYU, Isotypus: PE, PYU); Paratypus: Yunnan (云南): Suijiang (绥江), W. M. Chu (朱维明) 4875. (PYU); Sichuan (四川): Leibo (雷波), Q. C. Zhao et M. Y. He (赵清盛, 何明友) 121689. (SZ); Pingshan (屏山), Sichuan Econ. Exped. Yi (四川经宜队) 1003. (PE, KUN); Chongqing (重庆): Youyang (酉阳), Z. Y. Liu (刘正宇) 6995. (PYU)
- 12636 **P. articulate-pilosum** H. G. Zhou et H. Li (节毛耳蕨), in Guihai 16 (3): 205. f. 3. 1996. Guangxi (广西): Fengshan (凤山), Paoli Xiang (袍里乡), Yueli Cun (月里村), Yangzidong (羊子洞), 1990. 6. 12. Fang Ding et Zhong Xiaming (方鼎, 仲夏明) 30550. (Typus: GXMI)
- 12637 **P. assurgentipinnum** W. M. Chu et B. Y. Zhang (上斜刀羽耳蕨), in Fl. Reip. Pop. Sin. 5 (2): 134. pl. 41: 1-3. Add. 224. 2001. Chongqing (重庆): Qijiang (碭江), Lijiaba (李家坝), C. W. Zhou (周呈雄) 81-1289. (Holotypus: PYU; Isotypus: CQTC)
- 12638 **P. bigemmatum** Ching ex L. L. Xiang (双胞耳蕨), in Chenia (3-4): 133. pl. 1-4. 1997. Sichuan (四川): Miannin (冕宁), Yeqin (冶勤), Sanchahe (三岔河), S. K. Wu (武素功) 2075. (Typus: PE)
- 12639 **P. costularisorum** Ching ex W. M. Chu et Z. R. He (轴国耳蕨), in Fl. Reip. Pop. Sin. 5 (2): 16. Add. 224. 2001. Sichuan (四川): Sine loc. (无详细产地), W. P. Fang (方文培) 6266. (Typus: PE); Paratypus: Sichuan (四川): Luding (泸定), Hailuogou (海螺沟), 1980. 6. 11. Q. Q. Wang et Z. A. Liu (王清泉, 刘志安) 22262.
- 12640 **P. crassinervium** Ching et W. M. Chu et Z. R. He (粗脉耳蕨), in Fl. Reip. Pop. Sin. 5 (2): 121. pl. 35: 1-4. Add. 224. 2001. Guangxi (广西): Luocheng (罗城), 1928. 1. 2. R. C. Ching (秦仁昌) 5593. (Typus: PE); Paratypus: Guangxi (广西): Lingui (临桂), Xinming (新明), 1953. 1. 28. S. Q. Chen (陈少卿) 93307; Pingle (平乐), 1953. 11. 25. C. F. Liang (梁畴芬) 31142; Rong Xian (容县), Changan (长安), 1933. 10. 23. Albert N. Steward & H. C. Cheo 1173; Yangshuo (阳朔), Baisha (白沙), 1977. 7. 3. P. S. Chiu (裘佩熹) 4875; 1993. 8. 6. W. M. Chu et Z. R. He (朱维明, 和兆荣) 27190; Guangdong (广东): Ruyuan (乳源); Babao shan (八宝山), 1957. 11. 21. C. Wang (黄志) 44203; Hunan (湖南): Xinning (新宁), Ziyun shan

(紫云山), 1962. 11. 13. L. H. Liu (刘林翰) 15519.

- 12641 **P. daguanense** Ching ex L. L. Xiang var. **huashanicolum** W. M. Chu et Z. R. He (花山耳蕨), in Fl. Reip. Pop. Sin. 5 (2): 147. Add. 225. 2001. Yunnan (云南); Zhengxiong (镇雄), Huashan (花山), 1991. 8. 31. W. M. Chu & G. F. Zhang (朱维明, 张光飞) 24241. (Typus: PYU)
- 12642 **P. deltodon** (Bak.) Diels. var. **cultripinnum** W. M. Chu et Z. R. He (刀羽耳蕨), in Fl. Reip. Pop. Sin. 5 (2): 143. Add. 225. 2001. Yunnan (云南): Maguan (马关), Bazhai (八寨), 1978. 1. 24. W. M. Chu (朱维明) 8332. (Typus: PYU); Paratypus: Yunnan (云南): Pinbian (屏边), Dawei Shan (大围山), 1996. 10. 6. Y. Jiao (焦瑜) 96-56.; Gongshan (贡山), Qiunatong (秋那桶), 1935. 9. C. W. Wang (王启无) 66612; Dagan (大关), Tangjia Shan (唐家山), 1973. 6. 17. W. M. Chu (朱维明) 5167; Dagan (大关), Chushui (出水), 1973. 6. 25. W. M. Chu (朱维明) 5261; Dagan (大关), Huanglianhe (黄连河), 1973. 6. 16. W. M. Chu (朱维明) 5576; Dagan (大关), Chushui (出水), 1973. 6. 16. W. M. Chu (朱维明) 5167A; Suijiang (绥江), Zhong Cun (中村), Shanheba (山河坝), 1973. 6. 1. W. M. Chu (朱维明) 5044; Guizhou (贵州): Chishui (赤水), Jinshagou (金沙沟), 1984. 9. 10. P. S. Wang (王培善) 76839; 1984. 10. 22. P. S. Wang (王培善) 77830; Chongqing (重庆): Jinyunshan (缙云山), 1956. 6. F. J. Dai et S. Chou (戴番缙, 周铨) 534; Nantong (南桐), Yanghaping (羊哈坪), 1981. 7. 26. B. Y. Zhang et al. (张百誉等) 81-1163; Nanchuan (南川), Banhe (半河), 1982. 2. 7. Z. Y. Liu (刘正宇) 2590; Sichuan (四川): Emei (峨眉), 1931. 6. 24. T. H. Tu (杜大华) 224; Emei shan (峨眉山), Jiushijiudaogou (九十九道沟), 1977. 9. 4. W. M. Chu et M. Y. Liu (朱维明, 刘茂云) 7301; Emei shan (峨眉山), Longqiaogou (龙桥沟), 1993. 8. 23. W. M. Chu et Z. R. He (朱维明, 何兆荣) 28312; Daxiangling (大相岭), 1964. 8. 7. H. S. Kung (孔宪需等) 4006, 4013; Gulin (古蔺), Maomaogou (毛毛沟), 1985. 9. 6. H. S. Kung et al. (孔宪需等) 6934; Gulin (古蔺), Jiancaogou (笕槽沟), 1985. 9. 9. H. S. Kung et al. (孔宪需等), 6990; Hejiang (合江), Dazhong shan (大钟山), 1980. 7. 22. Biol. Depart. Southwest Teach. Col. (西南师范学院) 80145. (SWTC)
- 12643 **P. disjunctum** Ching ex W. M. Chu et Z. R. He (疏羽耳蕨), in Fl. Reip. Pop. Sin. 5 (2): 18. pl. 3: 6-19. A2001. Yunnan (云南): Jiangcheng (江城), 1976. 6. 24. W. M. Chu, J. L. Su et W. D. Li (朱维明, 孙吉良, 李卫东) 6745. (Typus: PYU); Paratypus: Yunnan (云南): Jiangcheng (江城), 1982. 12. 23. W. M. Chu, S. G. Lu et Z. Y. Liu (朱维明, 陆树刚, 刘正宇) 15805; Jinghong (景洪), Kunhan (昆罕), 1957. 4. 19. W. M. Chu et Y. M. Feng (朱维明, 冯永民) 5-10; Menghai (勐海), Nanqiao (南峽), 1936. 6. C. W. Wang (王启无) 75130; Xishaungbanna (西双版纳), Sino-USSR Yunnan

- Complexped. (中苏云南考察队) 5898, 7936, 1957; Lancang (澜沧), 1958. 12. 8. W. T. Wang (王文采) 10208; Lincang (临沧), Mayidui (蚂蚁队), Coll. ign. (无采集人) s. n. (无号); 1975. 6. 18. J. J. He (和积鉴) s. n. (无号); Jinping (金平), Kuconglaoling (苦聪老岭), Liangzhuzhai (良竹寨), 1976. 5. 31. W. M. Chu et J. L. Su et W. D. Li (朱维明, 孙吉良, 李卫东) 6479; Guangxi (广西); Lingyun (凌云), Qinglong shan (青龙山), 1925. 3. 27. Guangxi Univ. (广西大学) 165; Vietnam (越南); Shaba (沙巴), Hugui Lake (呼贵湖), 1964. 2. 9. Sino-Vietnam Exped. (中越队) 205.
- 12644 **P. elovatovenosum** Ching ex W. M. Chu (凸脉耳蕨), in Fl. Reip. Pop. Sin. 5 (2); 148. pl. 43; 6-7. Add. 227. 2001. Yunnan (云南); Lushui (泸水), in the way from Manbang to Shangjiang (曼蚌至上江), 1966. 4. 11. Exped. N. W. Yunnan, Kunming Inst. Bot. Acad. Sin. (昆明植物所西北考察队) 8111. (Holotypus: PYU; Isotypus: PE, KUN); Paratypus: Yunnan (云南); Zhongdian (中甸), Qiaotou (桥头), 1939. 10. 26. G. M. Feng (冯国楣) 3096; Luxi (潞西), Mengwang (勐旺), H. T. Tsai (蔡希陶) 56335; Xiangtang (象塘), H. T. Tsai (蔡希陶) 56431.
- 12645 **P. falcatilobum** Ching ex W. M. Chu et Z. R. He (长镰羽耳蕨), in Fl. Reip. Pop. Sin. 5 (2); 152. pl. 44; 3-4. Add. 227. 2001. Sichuan (四川); Leibo (雷波), Zhongshanping (中山坪), 1959. 6. 9. C. T. Kuan (管中天) 8353. (Typus: PE); Paratypus: Sichuan (四川); Gulin (古蔺), Huangjing (黄荆), 1985. 9. 9. H. S. Kung, W. Li & J. Li (孔宪需, 李伟, 李健) 6994, 6996; 1985. 9. 15. H. S. Kung, W. Li & J. Li (孔宪需, 李伟, 李健) 7134; Yunnan (云南); Suijiang (绥江), Ershisigang (二十四岗), 1973. 5. 29. W. M. Chu (朱维明) 49993; 1973. 6. 9. W. M. Chu (朱维明) 5551.
- 12646 **P. guangxiense** W. M. Chu et H. G. Shou (广西耳蕨), in Guihai 16 (3); 205. f. 2. 1996. Guangxi (广西); Napo (那坡), Longhua (弄化), 1990. 10. 20. Zhou Hougao (周厚高) 2657. (Typus: GXAC)
- 12647 **P. gymnocarpium** Ching ex W. M. Chu et Z. R. He (无盖耳蕨), in Fl. Reip. Pop. Sin. 5 (2); 146. pl. 35; 5-6. Add. 227. 2001. Fujian (福建); Pucheng (浦城), Zoology and Botany Institute, Fujian Academy of Science (福建省研究院植物研究所) 46. (Typus: PE); Paratypus: Zhejiang (浙江); Suichang (遂昌), Jiulong Mt. (九龙山), 1980. 6. 27. P. S. Chiu et G. H. Yao (裘佩慧, 姚关琥) 5686; 1980. 9. 20. C. F. Zhang (张朝芳) 6305; Wuyi (武义), 1970. 11. 2. C. F. Zhang (张朝芳) 262.
- 12648 **P. jiuladongense** W. M. Chu et Z. R. He (九老洞耳蕨), in Fl. Reip. Pop. Sin. 5 (2); 156. Add. 227. 2001. Sichuan (四川); Emei Mt. (峨眉山), Jiuladong (九老洞), 1993. 8. 23. W. M. Chu et Z. R. He (朱维明, 和兆荣) 28316. (Typus: PYU)
- 12649 **P. kangdingense** H. S. Kung et L. B. Zhang (康定耳蕨), in Acta Phytotax.

- Sin. 36 (3); 254. f. 3. 1998. Sichuan (四川); Kangding (康定), 1981. 8. 28. H. S. Kung (孔宪需) 6189. (Typus: CDBI; Isotypus: PE); Paratypus: Sichuan (四川); Kangding (康定), 1981. 8. 28. H. S. Kung (孔宪需) 6122, 6124, 6166, 6167. (CDBI, PE); Lixian (理县), D. P. He (何荻平) 44839; Xiaojin (小金), S. S. Zhang et Y. X. Ren (张秀实, 任有铤) 6823; Jinchuan (金川), X. Li (李馨) 76937, 78209; Jiulong (九龙), L. B. Zhang (张丽兵) 2092; Muli (木里), Y. R. Yang et G. Yao (姚淦等) 468.
- 12650 **P. longispinosum** Ching (长刺耳蕨), in Acta Phytotax. Sin. 36 (6); 467. f. 1; 1. 1998. Sichuan (四川); Leibo (雷波), 1959. 6. 23. Z. T. Kuan (管中天) 7626. (Holotypus: PE); Paratypus: Sichuan (四川); Mt. Emei (峨眉山), W. M. Chu et al. (朱维明等) 7327. (PYU); Z. R. Wang et J. M. Xu (王中仁, 许介眉) 10. (PE); K. S. Shing et K. Y. Lang (邢公侠, 郎楷永) 643, 670, 722. (PE); W. P. Fang (方文培) 2738. (PE); Shimian (石棉), L. B. Zhang (张丽兵) 497, 498. (CDBI, PYU); Yunnan (云南); Daguang (大关), W. M. Chu (朱维明) 5263. (PYU, PE); Zhenxiong (镇雄) H. T. Tsai (蔡希陶) 52690. (SZ)
- 12651 **P. mollissimum** Ching var. **laciniatum** H. S. Kung et L. B. Zhang (条裂耳蕨), in Acta Phytotax. Sin. 36 (3); 259. 1998. Sichuan (四川); Barkan (马尔康), Dongba (东坝), 1957. 9. 16. X. Li (李馨) 71584A. (Typus: PE); Paratypus: Sichuan (四川); Barkan (马尔康), Dongba (东坝), X. Li (李馨) 71098, 71850; Kangding (康定), L. B. Zhang et S. S. Guo (张丽兵, 郭晓思) 2156, 2162, 2163, 2169, 2172, 2200, 2219, 2237; H. S. Kung (孔宪需) 6085; Jiulong (九龙), L. B. Zhang et X. S. Guo (张丽兵, 郭晓思) 2583.
- 12652 **P. muscicola** Ching ex W. M. Chu et Z. R. He (伴蕨耳蕨), in Fl. Reip. Pop. Sin. 5 (2); 140. pl. 45; 1-2. A2001. Sichuan (四川); Luding (泸定), Feiyueling (飞越岭), 1934. 11. 16. H. Smith 1344456. (Typus: ?); Paratypus: Hubei (湖北); Badong (巴东), Xiaoshennongjia (小神农架), 1958. 10. 6. M. Z. Qian (钱敏之) 1281.
- 12653 **P. nayongense** P. S. Wang et X. Y. Wang (纳雍耳蕨), in Acta Bot. Yunn. 19 (1); 41. f. 1. 1997. Guizhou (贵州); Nayong (纳雍), Huazuo Forest Center (化作林场), 1990. 8. 21. F. Wang (王锋) 90217. (Typus: HGAS; Isotypus: PYU)
- 12654 **P. oblongum** Ching ex W. M. Chu et Z. R. He (镇康耳蕨), in Fl. Reip. Pop. Sin. 5 (2); 132. 2001. Yunnan (云南); Zhenkang (镇康), 1936. 3. C. W. Wang (王启无) 72424. (Typus: PE)
- 12655 **P. pseudoacutidens** Ching ex W. M. Chu et Z. R. He (文笔峰耳蕨), in Acta Bot. Yunn. 22 (3); 257. f. 2; 3-4. 2000. Yunnan (云南); Lijiang (丽江), Wenbi Feng (文笔峰), 1991. 2. 27. J. J. He (和积签) 23847. 9. (Holotypus: PYU); Paratypus: Yunnan (云南); Lijiang (丽江), Wenbi Feng (文笔峰),

1937. 4. 13. T. T. Yu (俞德浚) 8149. (PE)
- 12656 **P. robustum** Ching (粗壮耳蕨), in Acta Phytotax. Sin. 36 (5): 457. f. 1; 2-5. 1998. Yunnan (云南): Suijiang (绥江), Zhongcun (中村), Shaheba (沙河坝), 1973. 5. 18. W. M. Chu (朱维明) 4853. (Holotypus: PYU; Isotypus: PE, PYU)
- 12657 **P. rufopalesceum** Ching (红鳞耳蕨), in Acta Phytotax. Sin. 36 (3): 2446. f. 1. 1998. Yunnan (云南): Weixi (维西), Mt. Xuelong (雪龙山), 1940. 6. 17. K. M. Feng (冯国楣) 4725. (Typus: PE); Paratypus: Yunnan (云南): Weixi (维西), Mt. Xuelong (雪龙山), K. M. Feng (冯国楣) 6481. (PE); Gongsan (贡山), W. M. Chu et al. (朱维明等) 20217; Sichuan (四川): Shimian (石棉), L. B. Zhang (张丽兵) 424, 463, 553; Luding (泸定), K. Y. Lang et al. (郎楷永等) 379.
- 12658 **P. saxicola** Ching (石生耳蕨), in Acta Phytotax. Sin. 36 (3): 250. f. 2. 1998. Sichuan (四川): Mt. Emei (峨眉山), 1963. 8. 9. K. S. Shing et K. Y. Lang (邢公侠, 郎楷永) 027. (Typus: PE)
- 12659 **P. sinense** Christ var. **lobatum** H. S. Kung (裂叶耳蕨), in Acta Phytotax. Sin. 36 (3): 249. 1998. Sichuan (四川): Lixian (理县), Shanjiaoba (山脚坝), 1957. 6. 28. Z. Y. Zhang et H. F. Zhou (张泽荣, 周洪富) 2245. (Typus: SZ)
- 12660 **P. subfimbriatum** W. M. Chu et Z. R. He (拟流苏耳蕨), in Acta Phytotax. Sin. 36 (4): 382. f. 1. 1998. Yunnan (云南): Yiliang (彝良), Chaotianma (朝天马), Longguanshi (龙冠石), 1972. 9. 120. Exped. N. E. Yunnan (滇东北队) 825. (Typus: ?); Paratypus: Yunnan (云南): Zhenxiong (镇雄), Huashan (花山), 1972. 10. 1. Exped. N. E. Yunnan (滇东北队) 1179; 1991. 8. 31. W. M. Chu et C. F. Zhang (朱维明等) 24251, 24284.
- 12661 **P. taizhongense** H. S. Kung (台中耳蕨), in Acta Phytotax. Sin. 35 (5): 461. f. 1; 1-5. 1997. Taiwan (台湾): Taizhong (台中), Nanhudashan (南湖大山), 1991. 8. 12. S. J. Moore (牟善生) 12815. (Typus: PYU; Isotypus: S. J. Moore Herbarium); Paratypus: Taiwan (台湾): Taizhong (台中), Nanhudashan (南湖大山), S. J. Moore (牟善生) 12810. (? S. J. Moore Herbarium)
- 12662 **P. zayuense** W. M. Chu et Z. R. He (察隅耳蕨), in Fl. Reip. Pop. Sin. 5 (2): 157. pl. 45; 5-6. Add. 228. 2001. Xizang (西藏): Zayu (察隅), Ridong (日东), 1982. 9. 18. Qinghai-Xizang Exped. (青藏) 10501. (Typus: PE)

Gleicheniaceae 里白科

- 12663 **Diplopterygium irregulare** W. M. Chu et Z. R. He (参差里白), in Acta Bot. Yunn. 22 (3): 255. f. 1; 1-2. 2000. Yunnan (云南): Xichou (西畴), Fadou (法斗), 1982. 8. 10. W. M. Chu et al. (朱维明等) 13138. (Holotypus:

PYU); Paratypus: Yunnan (云南); Xichou (西畴), Fadou (法斗), 1978. 1. 15. W. M. Chu (朱维明) 8215. (PYU); 1965. 9. 17. J. J. He (和积签) s. n. (无号)

Huperziaceae 石杉科

12664 **Huperzia chishuiensis** X. Y. Wang et P. S. Wang (赤水石杉), in Bull. Bot. Res. 16 (4): 417. f. 1: 1-3. 1996. Guizhou (贵州): Chishui (赤水), Alsophila Preserve (杪椌自然保护区), 1996. 12. 21. S. Z. Fang (方嗣昭) 5218. (Typus: HGAS; Isotypus: PYU, HGT)

Hypodematiaceae 肿足蕨科

12665 **Hypodematium glabrum** Ching (无毛肿足蕨), in Fl. Reip. Pop. Sin. 4 (1): 9. Add. 320. 1999. Yunnan (云南): Yuanmo (元谋), Collector unknown (无采集人) s. n. (无号) (Typus: PE)

12666 **glandulosum** Ching (腺毛肿足蕨), in Fl. Reip. Pop. Sin. 4 (1): 14. pl. 2: 16-20. Add. 319. 1999. Guizhou (贵州): Zunyi (遵义), Jinding Mt. (金顶山), Xintugou (新土沟), Baowa Mt. (抱娃山), Chuan-Qian Exped. (川黔队) 1419. (Typus: PE); Paratypus: Hunan (湖南): Cili (慈利), Suoxiyu (索溪峪), Huanglongdong (黄龙洞), Collector unknown (无采集人) s. n. (无号)

12667 **H. microlepioides** Ching (滇边肿足蕨), in Fl. Reip. Pop. Sin. 4 (1): 5. Add. 318. 1999. Yunnan (云南): Longling (龙陵), Tengchong (腾冲), Collector unknown (无采集人) s. n. (无号) (Typus: PE)

12668 **H. taiwanensis** Ching (台湾肿足蕨), in Fl. Reip. Pop. Sin. 4 (1): 7. Add. 318. 1999. Taiwan (台湾): Tainan (台南), Gaoxiong (高雄), U. Fauries s. n. (无号) (Typus: PE)

Lycopodiaceae 石松科

12669 **Palhinhaea hainanensis** C. Y. Yang f. **glabra** H. S. Hung et L. B. Zhang (光枝海南垂槐石松), in Acta Phytotax. Sin. 38 (3): 272. 2000. Hongkong (香港): Without locality (无采集地), T. N. Liou (刘慎谔) 6714. (Typus: PE)

Nephrolepidaceae 肾蕨科

12670 **Arthropteris guinanensis** H. C. Zhou et Y. Y. Huang (桂南爬树蕨), in Guihai 16 (3): 203. f. 1. 1996. Guangxi (广西): Ningming (宁明), Longrui Reserve Area (陇瑞保护区), 1992. 5. 16. Zhou Hougao (周厚高) 2730. (Typus: GX-

Ophioglossaceae 箭蕨科

- 12671 **Ophioglossum yongrenense** Ching ex Z. R. He et W. M. Chu (永仁瓶尔小草), in *Acta Bot. Yunn.* 23 (1): 43. f. 1. 2001. Yunnan (云南): Yongren (永仁), Fangshan (方山), Pangxieqing (螃蟹箐), 1965. 7. 22. W. M. Chu et J. L. Wu (朱维明, 吴金亮) 1656. (Typus: PYU)

Polypodiaceae 水龙骨科

- 12672 **Arthromeris elegans** Ching f. **pianmaensis** S. G. Lu (片马节肢蕨), in *Acta Bot. Yunn.* 20 (4): 406. 1998. Yunnan (云南): Lushui (泸水), Pianma (片马), 1980. 9. 19. W. M. Chu et al. (朱维明等) 11372. (Holotypus: PYU); Paratypus: Yunnan (云南): Lushui (泸水), Pianma (片马), 1980. 9. 17. W. M. Chu et al. (朱维明等) 11578. (PYU); 1978. 8. 2. W. M. Chu et al. (朱维明等) 3728. (PYU)
- 12673 **Lepisorus cespitosus** Y. X. Lin (丛生瓦韦), in *Fl. Reip. Pop. Sin.* 6 (2): 77. pl. 15: 5-6. Add. 347. 2000. Xizang (西藏): Motuo (墨脱), 1983. 4. 27. Li Bosheng et al. (李渤生等) 04336. (Typus: PE)
- 12674 **L. iridescens** Ching et Y. X. Lin (彩虹瓦韦), in *Fl. Reip. Pop. Sin.* 6 (2): 82. pl. 16: 3-4. Add. 348. 2000. Yunnan (云南): Shuangbai (双柏), 1965. 11. 11. W. M. Chu et al. (朱维明等) 04575. (Typus: PE)
- 12675 **L. luchunensis** Y. X. Lin (绿春瓦韦), in *Fl. Reip. Pop. Sin.* 6 (2): 50. pl. 8: 3-5. Add. 346. 2000. Yunnan (云南): Luchun (绿春), 1974. 5. 11. Luchun Exped. (绿春队) 704. (Typus: PE)
- 12676 **L. paleparaphus** Y. X. Lin (淡丝瓦韦), in *Fl. Reip. Pop. Sin.* 6 (2): 75. pl. 15: 1-2. Add. 347. 2000. Yunnan (云南): Yangbi (漾濞), Mengzi (蒙自), 1940. 10. 28. R. C. Ching (秦仁昌) 25518. (Typus: PE); Paratypus: Sichuan (四川): Miyi (米易), 1959. 8. 14. Zhu Shuifa (朱水法) 20056; Xizang (西藏): Bomi (波密), 1983. 8. 19. Li Bosheng et al. (李渤生等) 6740; Zhangmu (樟木), 1981. 9. 4. Ni Zhicheng et al. (倪志诚等) 1962.
- 12677 **L. subsessilis** Ching et Y. X. Lin (短柄瓦韦), in *Fl. Reip. Pop. Sin.* 6 (2): 77. pl. 15: 3-4. Add. 347. 2000. Xizang (西藏): Motuo (墨脱), 1982. 10. 7. Li Bosheng et al. (李渤生等) 011458. (Typus: PE)
- 12678 **L. tricholepis** Shing et Y. X. Lin (软毛瓦韦), in *Fl. Reip. Pop. Sin.* 6 (2): 70. pl. 13: 1-4. Add. 346. 2000. Xizang (西藏): Motuo (墨脱), 1982. 10. 7. Li Bosheng et al. (李渤生等) 01145B. (Typus: PE)
- 12679 **Microsorium membranaceum** (Don) Ching var. **cacinatum** W. M. Chu et Z. R.

- He (龙骨星蕨), in *Acta Bot. Yunn.* 22 (3): 257. f. 1; 4. 2000. Yunnan (云南): Xichou (西畴), Fadou (法斗), Dongzongcao (董棕槽), 1981. 8. 12. W. M. Chu et al. (朱维明) 13213. (Holotypus: PYU); Paratypus: Yunnan (云南): Xichou (西畴), Fadou (法斗), Gangou (干沟), 1978. 1. 16. W. M. Chu (朱维明) 8224. (PYU); Xichou (西畴), Fadou (法斗), Dongzongcao (董棕槽), 1981. 8. 11. W. M. Chu et al. (朱维明等) 13154. (PYU); Maguan (马关), Mianchang (蔑厂), Shaba (沙坝), 1987. 3. 22. W. M. Chu et al. (朱维明等) 21866A. (PYU); 1997. 6. 1. W. M. Chu et al. (朱维明等) 29243. (PYU); Maguan (马关), Gulingqing (古林箐), 1981. 8. 6. W. M. Chu et al. (朱维明等) 13024. (PYU); 1997. 1. 7. W. M. Chu et al. (朱维明等) 29269. (PYU); Maguan (马关), Pogang (坡岗), 1989. 10. 31. W. M. Chu et al. (朱维明等) 23484. (PYU); Wenshan (文山), Xihua Park (西华公园), 1987. 3. 12. W. M. Chu et al. (朱维明等) 22160. (PYU); Malipo (麻栗坡), Laojun Mt. (老君山), 1993. 8. 1. S. G. Lu (陆树刚) 27684. (PYU)
- 12680 **M. reticulatum** Ching ex L. Shi (网脉星蕨), in *Acta Phytotax. Sin.* 37 (1): 100. f. 1; 1-2. 1999. Yunnan (云南): Xichou (西畴), Fadou (法斗), 1998. 4. 10. X. C. Zhang, L. Shi & Z. Chen (张宪春、石雷等) 1147. (Holotypus: PE); Paratypus: Yunnan (云南): Malipo (麻栗坡), S. G. Lu (陆树刚) 28425. (PYU); Pingbian (屏边), W. M. Chu (朱维明) 3512. (PYU); K. M. Feng (冯国楣) 5076. (KUN); Sino-Russia Yunnan Exped. (中苏云南考察队) 3545. (PE, KUN); 3538A. (PE); Xichou (西畴), X. C. Zhang, L. Shi & Z. Chen (张宪春、石雷等) 1147. (PE); Sine coll. (无号) 143. (PYU); S. Z. Wang 393. (KUN)
- 12681 **Phymatopteris daweishanensis** S. G. Lu (大围山假瘤蕨), in *Fl. Reip. Pop. Sin.* 6 (2): 184. pl. 37; 1-2. Add. 348. 1999. Yunnan (云南): Pingbian (屏边), Dawei Mt. (大围山), 1994. 10. 24. S. G. Lu (陆树刚) 28885. (Typus: PYU)
- 12682 **P. incisocrenata** Ching ex W. M. Chu et S. G. Lu (圆齿假瘤蕨), in *Fl. Reip. Pop. Sin.* 6 (2): 192. pl. 39; 1-3. Add. 348. 1999. Yunnan (云南): Yuanyang (元阳), 1978. 11. 6. W. M. Chu et al. (朱维明等) 8560. (Holotypus: PYU); Paratypus: Yunnan (云南): Jingdong (景东), Wuliang Mt. (无量山), 1979. 9. 15. W. M. Chu et al. (朱维明等) 9195. (PYU); 1979. 9. 21. W. M. Chu et al. (朱维明等) 9318. (PYU); Lushui (泸水), Pianma (片马), 1980. 9. 23. W. M. Chu et al. (朱维明等) 11435. (PYU); Dayao (大姚), N. W. Yunnan Jingshaji Exped. (滇西北金沙江队) 63-6735. (PYU); Eryuan (洱源), 1988. 8. 20. W. M. Chu et al. (朱维明等) 23012. (PYU)
- 12683 **Polypodiodes falcipinnula** S. K. Wu et J. Murata (镰羽水龙骨), in *Acta Phytotax. Sin.* 39 (1): 70. f. 1. 2001. Yunnan (云南): Luchun (绿春), 1995. 11. 1. Sino-Japan Exped. (中日队) 852. (Holotypus: KUN)

- 12684 **P. pseudolachnopus** S. G. Lu (假毛柄水龙骨), in *Acta Phytotax. Sin.* 37 (3): 294. f. 1; 1-3. 1999. Yunnan (云南): Jingdong (景东), Mt. Wuliang (无量山), 1979. 9. 19. W. M. Chu (朱维明) 9286. (Holotypus: PYU); Paratypus: Yunnan (云南): Jingdong (景东), Mt. Wuliang (无量山), 1979. 9. 14. W. M. Chu (朱维明) 9164. (PYU); 1979. 9. 14. W. M. Chu (朱维明) 9131. (PYU); Lufeng (禄丰), Mt. Diaolin (雕林山), 1985. 9. 28. J. J. He (和积筌) 18791; Luquan (禄劝), 1965. 6. 17. W. M. Chu (朱维明) 429. (PYU); 1982. 10. 31. W. M. Chu (朱维明) 2667. (PYU); Yangbi (漾濞), Mt. Daxue (大雪山), 1982. 11. 8. W. M. Chu (朱维明) 14941. (PYU); Yangbi (漾濞), 1980. 6. 5. W. M. Chu (朱维明) 9535. (PYU)
- 12685 **Pyrrhosia dimorpha** X. H. Guo et S. B. Zhou (黄山石韦), in *Bull. Bot. Res.* 25 (4): 389. f. 1. 2005. Anhui (安徽): Huangshan (黄山), Jiulongpu (九龙瀑), 2004. 7. 8. Zhou Shou-Biao et al. (周守标) 0407023. (Typus: ANUB); Paratypus: Anhui (安徽): Huangshan (黄山), Jiulongpu (九龙瀑), 2003. 9. 3. Zhou Shou-Biao (周守标) 03092016. (ANUB)

Pteridaceae 凤尾蕨科

- 12686 **Pteris caiyangheensis** L. L. Dens (莱阳河凤尾蕨), in *Bull. Bot. Res.* 16 (4): 423. 1996. Yunnan (云南): Simao (思茅), Caiyanghe Nature Preserve (莱阳河自然保护区), 1991. 10. 15. Guokuosheng et Du, Fan (郭国盛, 杜凡) 15101. (Typus: SWFC)
- 12687 **P. daguanense** Ching ex L. L. Xiang var. *huashanicolum* W. M. Chu et Z. R. He (花山耳蕨), in *Acta Bot. Yunn.* 22 (3): 257. f. 2: 1-2. 2000. Yunnan (云南): Zhenxiong (镇雄), Huashan (花山), 1991. 8. 31. W. M. Chu et G. F. Zhang (朱维明, 张光飞) 24241. (Typus: PYU)
- 12688 **P. multifida** Poir. form **serrulata** Miao (齿翅井栏边草), in *Acta Sci. Nat. Univ. Sunyatsenia* 36 (4): 45. 1997. Guangdong (广东): Ruyuan (乳源), Wuzhi Mt. (五指山), 1995. 10. 30. Miao Ruhuai (缪汝槐) 40532. (Typus: SYS)
- 12689 **P. nanlingensis** Miao (南岭凤尾蕨), in *Acta Sci. Nat. Univ. Sunyatsenia* 36 (4): 14. f. 1. 1997. Guangdong (广东): Ruyuan (乳源), Wuzhi Mt. (五指山), 1995. 10. 30. Miao Ruhuai (缪汝槐) 40535. (Typus: SYS)
- 12690 **P. xichouensis** W. M. Chu et Z. R. He (西畴凤尾蕨), in *Acta Bot. Yunn.* 22 (3): 257. f. 1: 1-3. 2000. Yunnan (云南): Xichou (西畴), 1981. 8. 11. W. M. Chu (朱维明) 13144. (Typus: PYU); Paratypus: Yunnan (云南): Bailin (柏林), Tianwei (田尾), 1987. 3. 18. W. M. Chu et al. (朱维明等) 21814. (PYU)