

· 前 言 ·

贵州习水中亚热带常绿阔叶林国家级自然保护区(简称习水自然保护区)位于贵州省北部习水县境内,北与重庆的江津市和四川省的合江县交界,西与贵州省的赤水市、四川省的古蔺县接壤。地理位置为东经 $105^{\circ}50'$ ~ $106^{\circ}29'$,北纬 $28^{\circ}07'$ ~ $28^{\circ}34'$ 之间。总面积 4.87 万 hm^2 ,其中以亚热带原生性常绿阔叶林为主体的天然林 3.5 万 hm^2 。区内原生性常绿阔叶林保存完好,分布集中,是我国乃至全世界亚热带地区保持生态平衡较好的常绿阔叶林森林生态系统。

习水自然保护区建于 1992 年,1994 年被贵州省人民政府批准为省级自然保护区,1997 年被国务院批准为国家级自然保护区。1990 年贵州省林业厅曾组织省内有关学科的专家对保护区进行多学科的综合考察,促进了保护区的建设和发展。但此次考察涉及昆虫的内容不多,致使该保护区昆虫资源本底不清,仍然是我国昆虫区系研究的弱点和空白,影响了对该保护区昆虫资源的综合评价和利用。

为了深入了解习水自然保护区昆虫的种类组成、区系概貌、景观价值与经济意义,为保护区的规划、管理、生物资源的合理利用提供本底资料,也为我国昆虫学领域相关的研究提供依据,1999 年由贵州大学昆虫研究所和贵州习水国家级自然保护区管理局主持,并邀请国内有关大专院校、科研院所的同行专家、教授、科研人员,对保护区景观昆虫资源进行了全面、系统、深入、细致的调查研究。在 3 年的研究中,先后有中国科学院动物研究所、南开大学生物学系、中国农业大学昆虫学系、浙江大学植物保护系、浙江自然博物馆、河北大学生命科学院、西南农业大学植物保护系、中南林学院昆虫资源研究所、安顺市卫生防疫站、贵州茂兰国家级自然保护区管理局、贵州习水国家级自然保护区管理局、贵州大学昆虫研究所等单位的专家、学者和科技人员 59 人次赴保护区考察,采集昆虫(含部分蛛形纲)标本 3.5 余万号。在全国 18 个教学、科研、管理单位及 70 位专家、教授的努力下,鉴定出习水自然保护区昆虫 15 目 161 科 693 属 1 095 种。其中,以习水自然保护区昆虫标本为模式建立的新属 4 个,新种 70 个(2 个新属 13 个新种已先期发表,2 新种另文发表),还发现中国新记录种 14 个。参与鉴定的专家、教授在鉴定、分析、整理的基础上撰写了《习水景观昆虫》一书。该书是各位学者无私奉献的成果,是集体智慧的结晶,是科研协作的真实体现,它是现今习水自然保护区最完整的昆虫本底资

料。为丰富我国生物资源做出了新的贡献,为昆虫分类学、昆虫地理学等学科的深入研究提供了新信息,愿其能对保护区的巩固发展和物种多样性的保护及持续利用起到很好的促进作用,体现其学术价值和实践应用等方面的重要意义。

本项研究自始至终都得到了贵州大学各级领导的支持和鼓励。在野外工作中,贵州省林业厅野生动物保护处、贵州习水国家级自然保护区管理局、中共习水县委、习水县人民政府等单位部门都给予了大力支持和帮助,我们将铭记在心。参加考察和研究的专家、学者及科研人员不畏艰苦,忘我工作,通力协作,严谨治学的高尚素质和情操,是我们永远学习的榜样。

在《习水景观昆虫》的编写过程中,不少朋友、同行以及老一辈昆虫学家都给予了各方面的支持、帮助和鼓励。特别是张广学院士、庞雄飞院士以及郑哲民教授、郑乐怡教授、何俊华教授、刘友樵教授、虞佩玉研究员、杨星科研究员等,他们对本书的编辑工作提出了很多宝贵的意见,并亲自为本书撰稿。本书图版分别由买国庆、李俊、桑维均提供。在此表示衷心的感谢。

本书的顺利出版,得到了贵州习水国家级自然保护区管理局和贵州大学昆虫研究所的经费资助以及贵州科技出版社的鼎力支持,特表谢意。最后我们还要感谢中国科学院院士、中国昆虫学会理事长张广学研究员为本书作序。

本书能有助于促进习水自然保护区昆虫资源的保护和持续利用研究,能为相关学科专家对我国昆虫分类学、昆虫地理学和生物多样性的深入研究提供有价值的基础资料,则编、著者之愿足矣。由于时间仓促,书中错漏之处,望读者不吝赐教。

金道超 李子忠

2003年4月于花溪

• Foreword •

The Xishui National Reserve of Ever—Green Arbor Forest (Xishui reserve in brief), located $105^{\circ}50' \sim 106^{\circ}29' \text{E}$, $28^{\circ}07' \sim 28^{\circ}34' \text{N}$, in the North of Guizhou province, covers a total area of 48700 ha, of which 35000 ha is possessed with primitive forest of ever—green arbor. It borders upon Jiangjing City of Chongqing and Hejing County of Sichuan Province in the north and Cishui County of Guizhou and Gulin County of Sichuan Province in the west. The reserve is a commendable ecosystem with such forest in subtropical region of the world.

Xishui reserve was established in 1992 by local government and became provincial reserve in 1994 and then the national in 1997. A comprehensive scientific investigation was made by experts of discipline under organization of Forestry Department of Guizhou in 1990. The dates of this earliest survey have been being the fundamental information for upgrading and developing of the reserve since then. However, it is a shortcoming for the reserve that groups of organisms including Insecta with ecological and economic importance are still remained unclear.

In 1999, Institute of Entomology, Guizhou University, launched a three—year research project on insect fauna under support of Administrative Department of the reserve. It aimed at better understanding of species composition, general fauna feature, scenery value and economic significance of insects in the reserve, offering more basic information for reasonably and scientifically managing and using of biological resources of the reserve, providing valuable data for entomology related discipline. Under invitation of both the Institute of Entomology and the Administrative Department, 59 entomologists participated in the project, who were from different institutes such as Institute of Zoology of Chinese Academy of Science, Biological Department of Nankai University, Department of Entomology of Agricultural University of China, Department of Plant Protection of Zhejiang University, Natural Museum of Zhejiang, Biological College of Hebei University, Department of Plant Protection of Southwestern Agricultural University, Institute of Entomology of Central South Forestry University, Anshun Sanitarian Institute of Epidemic Prevention, Administrative Department of Maoian National Re-

serve of Kast Forestry, etc.. More than 35000 specimens of insects and arachnides were collected. There are 1095 identified species belonging to 693 genera, 161 families, 15 orders, of which 4 genera and 70 species are new to science, that including 2 new genera with 13 species published in advance of the book and 2 now species described in separate publication, and 14 newly recorded species from China. The book, named *Insects From Xishui Landscape*, is the contribution by 68 scientists from 18 institutes and universities. In other words it is a mutual achievement of the participated scientists with their excellent works on the animal groups in which they specialized. All identified taxa are described and biogeographical, ecological and managing information are discussed and reviewed in respective section of the book. We believe that the book provides not only the most comprehensive information about the Insecta so far, but essential data for the reserve in scientific research and application of the biological resources.

The work was being supported and encouraged throughout by the Section of Wildlife Protection of Forestry Department of Guizhou, Administrative Department of Xishui National Reserve of Ever—Green Arbor Forest, Government of Xishui County and Guizhou University. The scientists and collaborator participated showed their spiritual moralities, such that hard working with selflessness, pursuing their studies with preciseness, concerted effort with enthusiasm, in either field investigation or laboratory examination and preparing of manuscript. With these moral qualities they behaved themselves great models from that we should learn forever.

We express appreciation to the colleagues and friends kindly offering help and encouragement in process of the research and compiling of *Insects from Xishui Landscape*. Great respects are paid to following entomologists, Prof. Zhang Guangxue (Academician of Academy Sinica, Chairman of Entomology Society Sinica), Prof. Pang Xiangfei (Academician of Academy Sinica), Prof. Zheng Zhemin, Prof. Zheng Leyi, Prof. He Junhua, Prof. Liu Youqiao, Prof. Yu Peiyu, Prof. Yang Xingke, etc., who contribute not only valuable advices in editing but also manuscripts, and Mr. Mai Guoqing, Mr. Li Jun, Mr. Sang Weijun for offering plates used in the book.

We are especially grateful to Administrative Department of Xishui National Nature Reserve and Institute of Entomology, Guizhou University for funding the work and Guizhou Science and Technology Publishing House for great efforts in

publishing the book. We express our thanks and respects to Prof. Zhang Guangxue (Academician of Academy Sinica) for their kindness of contributing preface for the book.

It is hopeful that the work will serve as an impetus to promote the study of protection and sustainable use of biological resources including insects of the reserve and in deepgoing studying of systematics, biogeography and biodiversity. We will be very pleased with any comment and remark from the readers.

Jin Daochao Li Zizhong

April, 2003

at Huaxi, Guiyang