

Preface

Volume 12 part 2 of the *Flora of Pan-Himalaya* is the sixth in series of the 50 volumes which are divided into about 80 books. It contains only one genus *Carex* L. of the family Cyperaceae, and includes 245 species in the genus, of which 100 species (41%) are endemic to the Pan-Himalayan region.

Carex is notoriously difficult in taxonomy. It is delimited here as the new category of Global *Carex* Group's viewpoint (Global *Carex* Group, 2015, 2016), and another related genus *Kobresia* is consequently merged into *Carex*. The species of *Carex* from the Pan-Himalayan region also form four recognized clades: core *Carex* clade, *Vignea* clade, caricoid clade (including *Psyllophora*, *Cymophyllus*, *Kobresia*, *Schoenoxiphium* and *Uncinia*) and *Siderostictae* clade (including *Carex* sect. *Siderostictae*, sect. *Hemiscaposae*, sect. *Hypolytroides* and sect. *Surculosae*). Chromosome numbers of the species from the Pan-Himalayan region are poorly known.

The nomenclatural novelties in this volume are one new name (*Carex yanchengii*), one new subspecies (*C. coriophora* subsp. *bimacula*), and seven new combinations. Fifty-nine names are reduced as new synonyms, and 54 lectotypes are newly designated.

During the work on this book, the authors made more than ten expeditions to the Pan-Himalayan region for field observations and collection of materials: Xiao-Feng JIN and Shui-Hu JIN made field trips to Eryuan, Heqing, Huaping, Jianchuan, Lijiang, Yongsheng and Shangri-la counties or cities of NW Yunnan, Dechang, Mianning, Panzhihua, Xichang and Yanyuan counties or cities of SW Sichuan, Nyingchi and Mainling counties of SE Xizang; Shu-Ren ZHANG to S Xizang, N Pakistan, Nepal and N Myanmar, and Baoxing, Kangding, Jiulong and Luding counties of Sichuan; Hiroshi IKEDA and Okihito YANO to the Jaljale Himal in E Nepal, around Mt. Manāslu in C Nepal, and Api Saipal area in W Nepal.

Prof. De-Yuan HONG, Mr. Michael G. GILBERT and Dr. Pedro JIMÉNEZ-MEJÍAS reviewed the book and improved the English. Prof. Xiang-Yun ZHU checked the nomenclature. Prof. Chao-Zong ZHENG, Prof. Bing-Yang DING and Prof. Zhi WEI checked the information of some type material deposited in Russia. Their contributions to the present book are significant.

The figures of this book were drawn by Ms. Ai-Li LI (six figures), Mr. Hong WANG (11 figures), and the authors Yi-Fei LU (two figures) and Xiao-Feng JIN (15 figures). Thirty-nine figures were modified from *Flora Reipublicae Popularis Sinicae* (Vol. 12), 15 figures from *Flora of China* (illustrations, Vol. 23), 14 figures from *Flora Xizangica* (Vol. 5), three figures from *Flora Plantarum Herbacearum Chinae Boreali-Orientalis* (Vol. 11), four figures from *Taxonomy of Carex* sect. *Rhomboidales* (Cyperaceae), one figure from *Acta Phytotaxonomica Sinica*, one figure from *Guihaia* and one figure from *Acta Botanica Yunnanica* respectively. Four figures from the journal *Phytotaxa* with permission from Dr. Zhi-Qiang ZHANG, one from *Novon* with permission from Dr. Allison BROCK and Dr. Victoria HOLLWELL, one from *Journal of Japanese Botany* with permission from the editorial committee, and one figure from *Nordic Journal of Botany* with permission from Dr. Tina D'Hertefeldt. The distribution maps were automatically produced based on cited vouchers presented by the authors. Mr. Min LI and Mr. Jing XUAN designed the automatic procedure. The index of the scientific names was produced and checked by Ms. Yi-Fei LU.