

中国北方草地植物 彩色图谱 (续编)

Atlas of
Rangeland Plants in Northern China
(Supplement)

谷安琳 王宗礼 主 编

Editors in Chief

Gu Anlin & Wang Zongli



中国农业科学技术出版社
China Agricultural Science and Technology Press

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《Atlas of Rangeland Plants in Northern China (Supplement)》

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前言

《中国北方草地植物彩色图谱》已经出版一年多了，得到许多同仁和读者的首肯与赏识。

由于在《中国北方草地植物彩色图谱》中的许诺，《中国北方草地植物彩色图谱(续编)》通过作者努力，又与大家见面了。本书共收录了中国北方草地较为常见和地区特有的野生植物350种(含亚种和变种)，隶属于56科201属。两本合计收录了68科346属850种(含亚种和变种)。

本书仍然沿用前书的版式与体裁风格。每种植物描述包括中文名、拉丁名，以及简要的形态特征、花期、地理分布、生境和用途；英文对照除英文名外其他为对应翻译。本书每种植物都有1~3张野外实地拍摄的照片。

中国草地孕育着藻类、真菌、苔藓、地衣、蕨类、裸子和被子植物约15 000种，仅北方草地常见的亦近2 000种。以上两本只拾缀不足千种，且更多地集中在北方中东部的草原与荒漠草地中，挂一漏万在所难免，西北与青藏草地植物图谱期待再次补编出版。感谢许多同仁提出按分类、按区域排序描述等建议，也待统一再版时加以考虑。

本书仍然得到了国家自然科技资源平台项目“牧草种质资源标准化整理、整合及共享试点”子项目和农业部牧草种质资源收集项目“雀麦属牧草种质资源考察与收集保护”课题的资助。植物学前辈，武素功先生、刘书润先生、陈山先生和王六英先生，以及地方草地科学工作者和美国合作专家继续给予了帮助与支持。谨向关怀、支持本书出版的所有个人和单位表示衷心感谢。

期待本书能再次得到大家的认可和青睐，也期待读者的批评指正。

编者
2010年11月

Preface

The "Atlas of Rangeland Plants in Northern China" has been in print for more than a year and we are grateful it has been well received by those in our profession and others with interest in the plants of our grasslands.

With our commitment expressed in the first volume to develop the atlas to the fullest feasible extent, we have compiled a second volume, "Atlas of Rangeland Plants in Northern China (Supplement)". It describes and illustrates an additional 350 wild plant (species, subspecies or varieties) in 201 genera and 56 families, including common and locally endemic species. Together, the two volumes include 850 plants (species, subspecies and varieties) in 346 genera and 68 families.

The format and style of the sequel are the same as the first. The description of each plant includes the Chinese name, scientific name, brief morphology, flowering time, geographic distribution, habitat and practical uses, with one to three color photos taken of the plant in the field. The English section has been translated from the Chinese, except for the English common names.

About 15 000 plant species naturally occur on the rangelands of China, including algae, epiphytes, bryophytes, lichens, ferns, gymnosperms, and angiosperms. Even common, widespread species in the northern rangelands number more than 2 000. The 850 plants of the two volume atlas are mostly distributed in the steppe and desert communities of the central-east areas of the region. Therefore, additional volumes have been proposed and are expected to represent the northern west extending through Qinghai and Tibet. We appreciate the advice and suggestions from experts on the organization of the atlas taxonomically and by regions, which we intend to put to good use in the upcoming editions.

As with the first volume, this volume has been financially sponsored by the national project for Forage Germplasm Resources, Standardization, Systematization, and Information Sharing, and also by the Ministry of Agriculture project Brome Germplasm, Investigation, Collection, and Protection. The atlas continues to involve many contributing experts: botanists of the elder generation, professors Wu Sugong, Liu Shurun, Chen Shan, and Wang Liuying, specialists from local and regional rangeland stations, and cooperating American scientists. We are grateful to all individuals and organizations supporting the development and publishing of this atlas.

We trust the second volume of the atlas will be as well received as the first. As always we encourage reader comments and suggestions for continued improvement.

Editors
November, 2010

使用说明

1. 书中给出了每种植物的中文名、拉丁名和所属科名。名称主要依据《中国植物志》中文版，部分依据地方植物志，禾本科小麦族植物名称依据中国植物志禾本科英文版《Flora of China》Vol. 22。

2. 为了方便国外读者，书中给出了植物的英文名或拉、汉（或其他语言）名称的英译。对在英语国家已有英文名的植物，其英文名引自英文原著和相关文献。对没有英文名的植物，则根据其拉丁名、中文名或其他语言名称意译为英文。

3. 植物以花色排序，同种植物可能有不同的花色，以最常见的花色为主。有的植物没有明显的花冠或典型的花被片，则以其花序中最明显的特征颜色排序。本书中收录的木贼科、柏科、麻黄科、荨麻科、藜科、大戟科、车前科、水麦冬科和禾本科植物均放在了绿色部分中，莎草科植物放在了褐色部分中。

4. 同花色植物中，科以植物分类学恩格勒系统排序，属、种则按拉丁名字母顺序排列。

5. 本书在述及该植物的分布地域时，凡属我国境内，均置于分号之前，分号之后属境外。

6. 植物在国内的分布使用省和自治区名称描述，分布范围比较广时，用地理区域描述，如“华中”、“西北”。书中的地理区域不同于行政大区，有的省区可能跨不同的地理区域（附录）。

7. 书末附有植物中文名索引和拉丁名索引；同时还附有以恩格勒系统排序的分科索引，同科中的属、种按拉丁名字母顺序排列。

Guide to the use of this book

1. Each species in this book is listed by its Chinese name, Latin name and family name, which are mostly from the Chinese edition the Flora of China and partly from local floras. Names of species in Triticeae are according to English edition of the Flora of China, Vol. 22. Poaceae.
2. For the convenience of foreign readers, the species common name or the English translation of the Latin or Chinese (or other language) name is listed. For species with a common name in English-speaking countries, the name is from English-written floras or related references. Species without an English common name are given a translation of the Latin scientific name or the Chinese name (or another language's name).
3. Species are arranged by flower color. Some species contain populations with different flower colors, but they are arranged under the color which is of the most common presentation. For species lacking a showy corolla or typical perianth, they are arranged under the color which is of the character color of their inflorescences. As so, the species in families of Horsetail, Cypress, Ephedra, Nettle, Goosefoot, Spurge, Plantain, Arrowgrass and Grass included are found in the green section; and the species in family of Sedge in the brown section.
4. Within the same flower color group, families are arranged according to the Engler system of plant taxonomy; genera and species within each family are arranged in alphabetical order.
5. In the description of species distribution, regions (areas) within the territory of China are arranged before semicolon; other countries and regions (areas) outside the territory of China are arranged after semicolon.
6. Country, province and autonomous region names are used for conveying distributions of the plants; larger distribution ranges are defined by geographical regions, such as "C China" (Central China), "NW China" (Northwest China), which are different than administration regions. Some provinces and autonomous regions are in different geographical regions (Appendix).
7. Index of Chinese names and Index of Latin names are listed at the end of the atlas. Index of Latin and Chinese names arranged in families according to the Engler system also is listed, in alphabetical order by Latin names of genus, and species.

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问荆

Equisetum arvense L.

木贼科

Equisetaceae

【特征】多年生草本；茎直立，二型；孢子茎高5~40cm，无叶绿素，肉质，不分枝，孢子散后枯萎；营养茎高20~60cm，绿色，轮生分枝向上，总宽不超过10cm；孢子囊穗圆柱状，长1.5~4cm。

【分布】东北、华北、西北、华中、西南；北半球温带。

【生境】草甸、林地灌丛、湖边和溪旁湿润地。

【用途】药用。对牲畜有毒。

Field horsetail

Horsetail family

Perennial herb; stems erect, dimorphic; fertile stems 5~40 cm tall, achlorophyllous, fleshy, unbranched, withering after shedding spores; sterile stems 20~60 cm tall, green, branching in whorls, sharply ascending, less than 10 cm wide overall; cones cylindrical, 1.5~4 cm long.

Distribution: NE, N, NW, C and SW China; temperate zone in the Northern Hemisphere

Habitat: Meadows, woodland thickets, moist sites along lakeshores and stream banks

Use: Medicine. Poisonous to animals

林问荆 (林木贼)

Equisetum sylvaticum L.

木贼科

Equisetaceae

【特征】 多年生草本；茎直立，二型；孢子茎高20~30cm，初时无叶绿素，肉质，不分枝，后为绿色，有分枝，孢子散后仍存活；营养茎高30~70cm，绿色，轮生分枝向两侧伸展，总宽达30cm，侧枝再数次分枝；孢子囊穗圆柱状，长0.8~2.5cm。

【分布】 黑龙江、吉林、山东、内蒙古、新疆；日本、欧洲、北美洲。

【生境】 阴湿溪边、泥沼林地。

【用途】 药用。

Woodland horsetail

Horsetail family

Perennial herb; stems erect, dimorphic; fertile stems 20~30 cm tall, at first achlorophyllous, fleshy and unbranched, later green and branched, persisting after cone falling; sterile stems 30~70 cm tall, green, branching in whorls, laterally spreading to 30 cm wide overall, lateral branches further branching several times; cones cylindrical, 0.8~2.5 cm long.

Distribution: Heilongjiang, Jilin, Shandong, Inner Mongolia and Xinjiang; Japan, Europe, North America

Habitat: Shady wet stream banks and boggy woods

Use: Medicine





杜松

Juniperus rigida Sieb. et Zucc.

柏科

Cupressaceae

【特征】小乔木或灌木，高达11m；树冠塔形或圆柱形；叶质厚，挺直，条状刺形，3叶轮生，基部有关节，上面凹下，白粉带位于凹槽中，下面具脊，横断面呈“V”状；球花单生于叶腋；球果球形，被白粉。花期5月。

【分布】东北、华北；朝鲜、日本。

【生境】海拔1 400~2 200m的山坡、坡顶、岩缝。

【用途】家具、农具用材；庭院绿化；药用。

Needle juniper

Cypress family

Small tree or shrub to 11 m tall; crown pyramidal or columnar; leaves thick and stiff, linear-spinelike, in whorls of 3, jointed at base, excavated and with white-powdery groove above, ribbed beneath, transverse cut V-shaped; cone solitary in axils; strobilus globose, glaucous. Flowering May.

Distribution: NE and N China; Korea, Japan

Habitat: Mountain slopes, hilltops and rock crevices at 1 400~2 200 m

Use: Materials for furniture and farm tools; courtyard planting; medicine

侧柏

Platycladus orientalis (L.) Franco

柏科

Cupressaceae

【特征】乔木，高达20m；幼树树冠卵状尖塔形，老树树冠圆形；鳞叶；球果卵圆形，成熟前肉质，蓝绿色，被白粉，成熟后木质，开裂，红褐色。花期5月。

【分布】东北、华北、华东、华中、华南和西南大部分省区；朝鲜。

【生境】海拔250~3 300m的山地阳坡、岩缝。

【用途】建筑、家具、农具用材；庭院绿化；药用。

Oriental arborvitae

Cypress family

Tree to 20 m tall; crown ovoid-pyramidal when young, rounded when old; leaves scale-like; cones ovoid, fleshy and glaucous when immature, woody, dehiscent and reddish-brown when ripe. Flowering May.

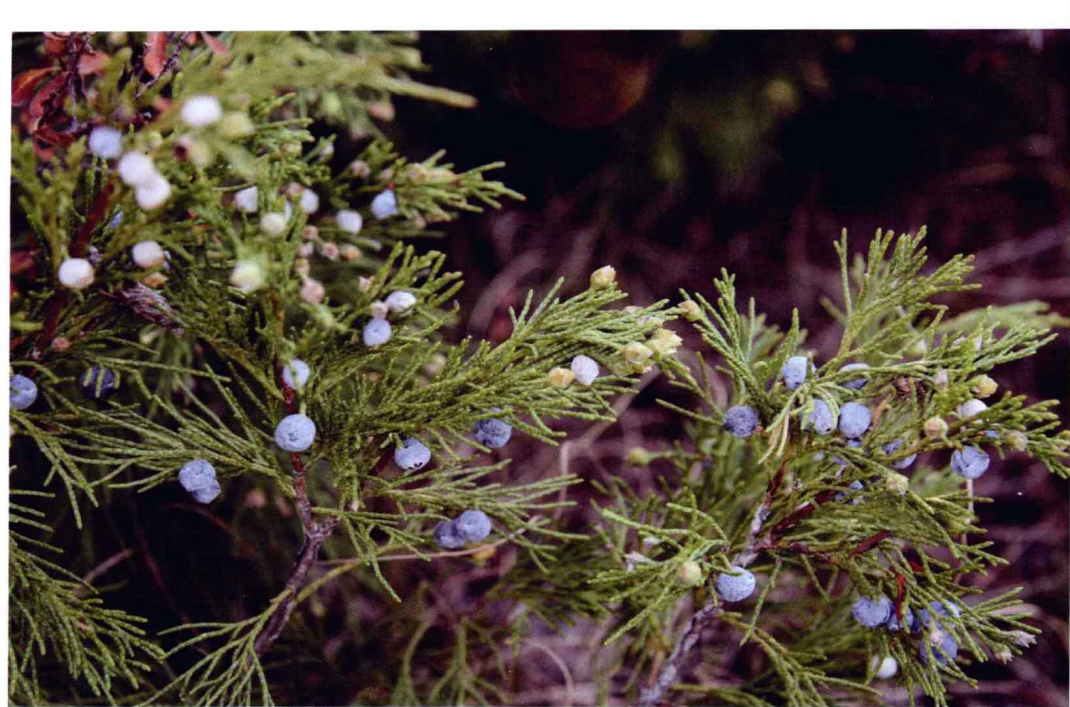
Distribution: Most regions in NE, N, E, C, S and SW China; Korea

Habitat: Mountain sunny slopes and rock crevices at 250~3 300 m

Use: Materials for buildings, furniture and farm tools; courtyard planting; medicine

拍摄人：赵利清 Photos by Zhao Liqing





拍摄人: 拾涛 Photo by Shi Tao

新疆方枝柏

Sabina pseudosabina

(Fisch. et C. A. Mey.) W. C. Cheng et W. T. Wang.

(*Juniperus pseudosabina* Fisch. et C.A. Mey)

柏科

Cupressaceae

【特征】灌木，高达3~4m；枝平铺或斜升，小枝直或弧曲，方圆形或四棱形；具鳞叶和刺叶；球果卵圆形，成熟时褐黑色或蓝黑色，多少有白粉，种子1粒。花期5~6月。

【分布】新疆；蒙古、西伯利亚、中亚。

【生境】海拔1 500~3 000m的林缘、灌丛、石质山坡。

【用途】水土保持；庭院绿化。

Xinjiang juniper

Cypress family

Shrub to 3~4 m tall; branches procumbent or ascending, branchlets straight or arcuate, quadrate-rounded or quadrangular; leaves both scale-like and needle-like; cones ovoid, brown-black or blue-black when ripe, somewhat glaucous, with 1 seed. Flowering May to June.

Distribution: Xinjiang; Mongolia, Siberia, Central Asia

Habitat: Forest margins, thickets and rocky slopes at 1 500~3 000 m

Use: Soil conservation; courtyard planting

叉子圓柏

Sabina vulgaris Antoine

(沙地柏 *Juniperus sabina* L.)

柏科

Cupressaceae

【特征】匍匐灌木，高不足1m，稀小乔木；枝密，斜上伸展；具鳞叶和刺叶；球果倒三角状球形或叉状球形，成熟前蓝绿色，被白粉，成熟后褐色、紫蓝色或黑色，多少有白粉。花期5月。

【分布】西北，内蒙古西部；蒙古、俄罗斯（西伯利亚、远东）、中亚、南欧。

【生境】海拔1 100~2 800m的多石山坡、针叶林或混交林、沙丘。

【用途】固沙和水土保持；药用。

Savin

Cypress family

Procumbent shrub, less than 1 m tall, rare small tree; branchlets dense, ascending; leaves both scale-like and needle-like; cones obdeltoid-globose or forked-globose, glaucous when immature, brown, purple-blue or black and somewhat glaucous when ripe. Flowering May.

Distribution: NW China, W Inner Mongolia; Mongolia, Russia (Siberia and Far East), Central Asia, S Europe

Habitat: Stony slopes, coniferous and mixed forests, and dunes at 1 100~2 800 m

Use: Fixing dunes and soil conservation; medicine

拍摄人：赵利清 Photos by Zhao Liqing





拍摄人: 赵利清 Photos by Zhao Liqing

木贼麻黄

Ephedra equisetina Bunge

麻黄科

Ephedraceae

【特征】灌木，高1~1.5m；木质茎直立；小枝稠密，蓝绿色或灰绿色，具细槽纹；叶膜质鞘状，2浅裂，基部增厚呈红色；雌球花通常2枚对生节上，成熟时苞片肉质，红色；珠被管稍弯曲；种子通常1粒。花期6~7月。

【分布】华北、西北；蒙古、西伯利亚、中亚、高加索。

【生境】干旱区的山脊、山顶、岩壁。

【用途】药用。

Mongolian ephedra (Bluestem joint fir)

Ephedra family

Shrub 1~1.5 m tall; woody stems erect; branchlets dense, glaucous, finely sulcate; leaves membranous, sheath-like, 2-lobed, basally thickened and reddish; ovulate cones usually 2 per node, bracts fleshy and red at maturity; integument tube slightly curved; seed usually 1 per cone. Flowering June to July.

Distribution: N and NW China; Mongolia, Siberia, Central Asia, Caucasia

Habitat: Hill ridges, hilltops and cliffs in arid areas

Use: Medicine

单子麻黄

Ephedra monosperma C. A. Mey

麻黄科

Ephedraceae

【特征】草本状矮小灌木，高3~15cm；木质茎短小，多分枝；当年小枝绿色，开展，常弯曲，具浅沟纹；叶膜质鞘状，2裂，裂片略增厚；雌球花单生或对生节上，成熟时苞片肉质，红色；珠被管长而弯曲；种子1粒。花期6月。

【分布】华北、西北，黑龙江、四川、西藏；蒙古、俄罗斯（西伯利亚、远东）。

【生境】石质山坡、干燥沙地。

【用途】药用。

One-seed ephedra

Ephedra family

Dwarf and herbaceous shrub, 3~15 cm tall; woody stems short, much branched; new branchlets green, spreading, usually curved, with shallow grooves; leaves membranous, sheath-like, 2-lobed, lobes slightly thickened; ovulate cones 1 or 2 per node, bracts fleshy and red at maturity; integument tube long and curved; seed 1 per cone. Flowering June.

Distribution: N and NW China, Heilongjiang, Sichuan and Tibet; Mongolia, Russia (Siberia and Far East)

Habitat: Rocky slopes and dry sands

Use: Medicine

拍摄人：赵利清 Photo by Zhao Liqing

