

# 中国北方草地植物彩色图谱

## Atlas of Rangeland Plants in Northern China

谷安琳 王宗礼 主 编 Editors in Chief Gu Anlin & Wang Zongli



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## AU T

中国拥有392.76×10<sup>6</sup>hm<sup>2</sup>卓地,占全国陆地面积的41.7%,占世界率地总面积的12.5%,草地广泛分布于全国、南北纵跨31个纬度、东西横跨61个经度、海拔高差5 000多米;跨东南季风区、西北干旱区和青藏高原区3个气候大区,热带、亚热带、暖温带、中温带、寒温带5个气候热量带;车降水量相差近2 000mm。

如此巨大的环境差异和复杂的气候条件形成了复杂多样的草地资源、同样也孕育了多样性极为丰富的草地植物资源。

据国家第一次草地资源调查初步统计、中国草地中分布的植物达15 000 多种。在《中国草地饲用植物资源》(1994)一书中,收录的草地饲用植物资源达到6 704种 其他尚有药用、工业用等重要用途的经济植物也不下于种。

为了增进人们对我国草地植物种质资源的了解、并准确识别草地植物、编著者在多年草地资源调查研究的基础上、编辑了《中国北方草地植物彩色图谱》一书。书中收录了我国北方草地的植被主要植物组成、地区特有植物以及珍稀濒危植物共500种(含变种和亚种)、隶属于49科231属。书中对每种植物的形态特征、花期、地理分布、生境及大多数植物的用途等,用中、英文进行了简要描述,并附有1~3张野外实地拍摄的照片。期望本书对从事草地工作及相关领域的专业人员、以及对中国草地感兴趣的国内外非专业人员有所帮助

本书只是草地植物彩色图谱的第一部。由于草地植物较多,本书收录并不全面、希望广大读者和学者不吝赐散、待下一本《中国北方草地植物彩色图谱续编》出版时补充完善。

本书的出版得到国家自然科技资源平台项目"牧草植物种质资源标准化整理、整合及共享试点"子项目的资助。在编辑过程中得到了许多人的帮助与支持 植物学前辈、中国科学院昆明植物研究所武素功研究员、内蒙古师范大学陈山教授、内蒙古教育学院刘书润教授和内蒙古农业大学王六英教授不仅提供了十分有帮助的建议、还参与了野外考察工作。中国农业大学竞税研究册教授和研究生曹品、内蒙古大学研究生温刘君以及中国农业科学院草原研究所的多名科研人员参与了野外考察工作。新疆和青海各级草原工作业的同志为野外工作提供了后勤保障 美国自然资源保护局植物材料专家Jack Carlson. Mark Majerus 和 Larry Holzworth对书中的植物英文名进行了审核。在此、谨向关心、支持本书出版的所有单位和个人表示衷心的感谢。

## Preface

China contains 392.76 million hectares rangeland, which is 41.7% of the country's total land area and 12.5% of all rangeland in the world. The rangeland is distributed throughout the entire country, stretching 31 degrees latitude from north to south and 61 degrees longitude from east to west, with an elevation difference of 5 000 meters, across the monsoon region in the southeast, the arid region in the northwest, and the alpine region in the Qinghai-Tibet Plateau. The area contains tropical, subtropical, warm-temperate, temperate and cold-temperate zones; and an annual precipitation difference of 2 000 millimeters.

Under the substantially different environments and complex climate conditions, diverse rangeland resources have formed with an abundant and rich diversity of plant species. According to the statistical data from the first national investigation, China's rangelands support 15 000 plants species. The 1994 publication "Forage plant resources in the rangeland of China" lists 6 704 species. In addition, more than 1 000 species are economically important for medicinal, industrial, and other uses.

To facilitate a greater understanding of rangeland plant resources and ability to differentiate among species, the editors have compiled the book "Atlas of Rangeland Plants in Northern China", which is based on long-standing research and investigation in the field. The atlas describes and illustrates 500 wild plant species (including some subspecies and varieties) in 231 genera and 49 families. The plants include common components of the major plant communities across rangeland regions of Northern China, but certain endemic species, as well as rare and endangered species also are described. The description of each plant includes morphological characters, flowering time, geographical distribution, habitat and practical uses in both Chinese and English languages, with one to three color photos. The atlas is expected to be helpful to technical specialists studying and working on rangeland and other related scientific fields, as well as to those with a general non-technical interest in Chinese rangelands.

This is the first version of the "Atlas of Rangeland Plants in Northern China." With total rangeland species estimated in the many thousands, only a small number of species have been included. Comments and advice on how to improve the atlas is welcome and expected to guide modifications to subsequent versions.

The atlas was financially sponsored by the project Forage Germplasm Resources Standardization, Systematization, and Information Sharing. Compiling the atlas involved many contributing experts. Botanists of the elder generation, Professor Wu Sugong, Kunming Botany Institute of Chinese Academy of Sciences, Professor Chen Shan, Inner Mongolia Normal University, Professor Liu Shurun, Inner Mongolia Education University, and Professor Wang Liuying, Inner Mongolia Agricultural University offered very helpful suggestions, and assisted with field work as well. Professor Rong Yuping and graduate student Cao Zhe, China Agricultural University, graduate student Wen Liujun, Inner Mongolia University, and several scientists of Grassland Research Institute, Chinese Academy of Agricultural Sciences were involved in the field investigations. The regional and local Rangeland Stations of Xinjiang and Qinghai supported the field work. Jack Carlson, Mark Majerus, and Larry Holzworth, specialists with the Natural Resources Conservation Service of the United States Department of Agriculture, assisted with the review of the species common names. We are grateful to all institutes and persons who have supported the development and publishing of the atlas.

## 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誓和相关文献。有的植物有两个或多个英文名、本书仅选用其中最常用的名称; 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翻译为英文。
- 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.或花被片被遮掩,则以其花序中最明显的特征颜色排序。如、本书中收录的麻黄科、扬柳科、藜科和禾本科植物均放在了绿色部分中、灯心草科和莎草科植物放在了褐色部分中、有的藜科植物果期具有色彩艳丽的翅状附属物.为了便干查找、除了在绿色部分中有这些植物的描述内容外、根据其翅色也可以在不同的颜色部分中查到.
- 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. 本书在述及该种植物的分布地域时、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、有的背区可能跨不同的地理区域(见附录1)。
- 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,同科中的屬、种按拉丁名字母顺序掛列

## 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. When there is more than one known common name, only one is listed, often the name that is known to be more commonly used. 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, or has an included flower, they are arranged under the color which is of the character color of their inflorescences. As so, the species in families of Ephedra, Willow, Goosefoot and Grass included are found in the green section; and the species of Rush and Sedge in the brown section. Goosefoot family species with bright-colored wings when fruiting are found under more than one color section, sections of the color of the wings, as well as in green 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 1).
- 7. Index of Chinese names and index of Latin names are listed at the end of the atlas. Index of Latin and Chinese names in families which are arranged according to the Engler system also is listed, in alphabetical order by Latin names of genus, and species.



拍摄人: 张洪江 Photo by Zhang Hongjiang

## 蛇麻黄

### Ephedra distachya L.

麻黄科

Ephedraceae

【特征】矮湘木,高10~25cm;枝铺散状;枝末端呈螺旋状或"之"形弯曲;叶膜质鞘状;雌球花成熟时苞片肉质,红色至紫红色,边缘膜质;珠被管直或微弯。花期5~6月。

【分布】新疆; 中亚、西伯利亚、欧洲、地中海南部。

【生境】荒漠地区的沙地、戈壁滩、石质山坡。

Jointfir ephedra (Great shrubby)

Ephedra family

Dwarf shrub 10~25 cm tall; branches diffuse, spiraliform or zigzagged at terminal end; leaves membranous, sheath-like; ovulate cones with fleshy bracts at maturity, red to purplered, edges membranous: integument tube erect or slightly curved. Flowering May to June.

Distribution: Xinjiang; Central Asia, Siberia, Europe and S Mediterranean

Habitat: Sands, gobi and rocky slopes in desert areas

## 中麻黄

## Ephedra intermedia Schrenk ex Mey.

麻黄科

Ephedraceae

【特征】灌木,高20~40cm;多分枝,枝直立;主干枝灰色,粗糙,有细沟纹;叶膜质鞘状,2裂;雌球花成熟时苞片肉质,橘红色至红色;珠被管螺旋状多回弯曲。花期6月。

【分布】 东北至西北, 西藏; 中亚。

【生境】草原至荒漠区的沙地、戈壁滩、石质山坡。

【用途】 固沙;药用。

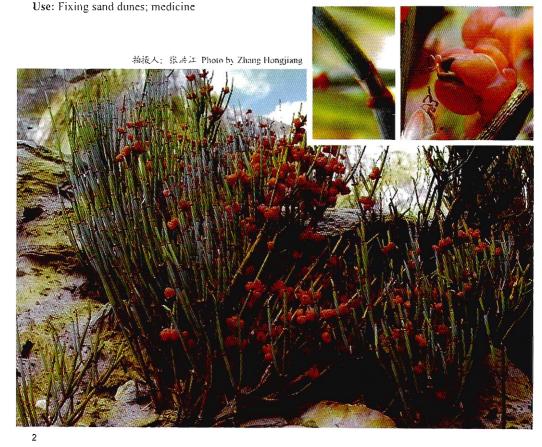
#### Intermediate ephedra

Ephedra family

Shrub 20~40 cm tall; numerous branches erect; main branches grey, scabrous, with thin grooves; leaves membranous, sheath-like with 2 lobes; ovulate cones with fleshy bracts at maturity, orange-red to red; integument tube spirally curved several times. Flowering June.

Distribution: NE to NW China and Tibet; Central Asia

Habitat: Sands, gobi and rocky slopes in steppe to descri zones





上图拍提人: 拾 涛 Photo by Shi Tao

## 膜果麻黄

#### Ephedra przewalskii Stapf

麻黄科

Ephedraceae

【特征】超旱生灌木,高20~240cm;多分枝,小枝末端常呈"之" 形弯曲或拳卷;叶膜质鞘状;雌球花苞片膜质,成熟时 增大;珠被管直或微弯。花期5~6月。

【分布】内蒙古、宁夏,西北;蒙古、巴基斯坦、亚速海-里海。

【生境】荒漠地区的沙地、砾石质地。

【用途】固沙; 药用。

#### Membrane fruited ephedra

Ephedra family

Super-xerophytic shrub variable  $20\sim240$  cm tall; branches many, usually zigzagged or circinate at terminal end; leaves membranous, sheath-like; ovulate cones with membranous bracts, enlarged at maturity; integument tube erect or slightly curved. Flowering May to June.

Distribution: Inner Mongolia, Ningxia and NW China; Mongolia, Pakistan, Sea of Azov-the Caspian Sea

Habitat: Sands and gravelly ground in desert areas

Use: Fixing sand dunes; medicine







### 黄麻草

## Ephedra sinica Stapf

麻黄科

Ephedraceae

【特征】草本状小半灌木,高20~40cm;小枝对生或轮生,直或微弯;叶膜质鞘状;雌球花单生,成熟时苞片肉质,红色。花期5~6月。

【分布】东北至西北及西南;蒙古、西伯利亚、中亚、 欧洲。

【生境】草原或半荒漠带的石质丘陵或固定沙丘。

【用途】药用;提炼麻黄素。

#### Chinese ephedra

Ephedra family

Herbaceous subshrub  $20 \sim 40$  cm tall; twigs opposite or whorled, erect or slightly curved; leaves membranous, sheath-like; ovulate cones solitary, bracts fleshy and red at maturity. Flowering May to June.

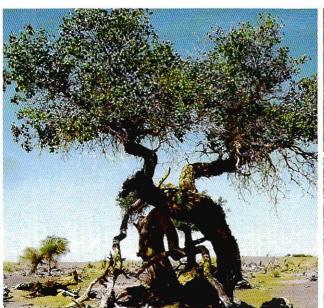
**Distribution:** NE to NW and SW China: Mongolia, Siberia, Central Asia, and Europe

Habitat: Rocky hills and fixed sand dunes in steppe and

semi-desert zones

Use: Medicine; extracting ephedrine









拍摄人: 赵 凡 Photo by Zhao Fan

## 胡杨

## Populus euphratica Oliv.

杨柳科

Salicaceae

[特征] 乔木, 高达30m; 树皮淡黄色, 小枝淡灰褐色; 叶形多变, 幼树叶条状披针形, 全缘或1~2齿裂, 成年树叶卵形至



肾形, 具不规则齿裂; 花盘膜质, 早落; 蒴果长椭圆状。花期5月。

【分布】内蒙古,西北;蒙古、中亚、巴基斯坦、阿富汗、伊朗、伊拉克、叙利亚、 埃及。

【生境】荒漠区河流沿岸及盐碱湖盆。

【用途】家具和建筑材料;燃料;药用。

#### Euphrates poplar

Willow family

Tree to 30 m tall: barks pale yellow, twigs greyish-brown; leaves varying shaped. linear-lanceolate and entire or 1~2-toothed from young trees, ovate to reniform from adults, with irregular tooth-lobes; disk membranous, caduceus; capsule long-ellipsoid. Flowering May.

Distribution: Inner Mongolia and NW China; Mongolia, Central Asia, Pakistan, Afrikanistan, Iran Iran Suria and Faunt

Afghanistan, Iran, Iraq, Syria and Egypt

Habitat: Riverbanks and saline-alkaline lake basins in desert areas

Use: Buildings and furniture materials; fuel; medicine





## 黄柳

Salix gordejevii

Y. L. Chang et Skv.

杨柳科

Salicaceae

【特征】灌木,高1~2m; 树皮黄白色,幼枝 黄褐色,有光泽,无毛;叶狭条形, 边缘具细密腺齿;柔荑花序先叶开 放;子房疏被柔毛。花期4~5月。

【分布】内蒙古、辽宁。

【生境】森林草原至草原带的沙地、沙丘。

【用途】固沙; 饲用。

#### Yellow willow

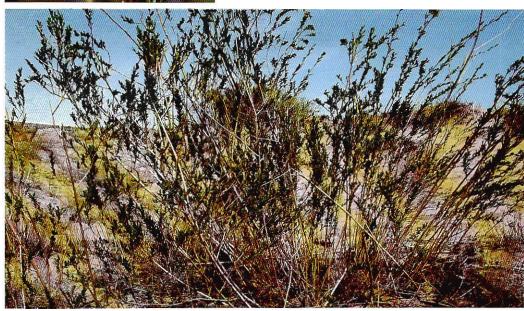
Willow family

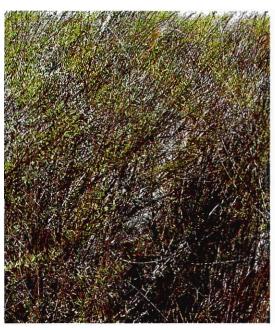
Shrub  $1\sim2$  m tall; barks yellow-white, young twigs yellow-brown, glossy and glabrous; leaves narrowly linear, with thin glandular teeth at margins: catkins emerging before leaves; ovary loosely pubescent. Flowering April to May.

**Distribution:** Inner Mongolia and Liaoning **Habitat:** Sands and dunes in forest-steppe to

steppe zone

Use: Fixing sand dunes; forage







## 小红柳

Salix microstachya Turcz. ex Trautv. var. bordensis (Nakai) C. F. Fang

杨柳科

Salicaceae

【特征】灌木,高1~2m; 树皮黄褐色,小枝红褐色,有 光泽; 叶条形至条状披针形,全缘或有不明显疏 齿,幼时密被绢毛; 柔荑花序与叶同时开放; 子 房无毛。花期5月。

【分布】东北,内蒙古、宁夏、甘肃。

【生境】沙丘间低地、河谷。

【用途】固沙;饲用。

#### Little red willow

Willow family

Shrub  $1\sim2$  m tall; barks yellow-brown, twigs red-brown, glossy; leaves linear to linear-lanceolate, entire or unclearly loose-toothed, densely sericeous when young; catkins emerging with leaves; ovary glabrous. Flowering May.

Distribution: NE China, Inner Mongolia, Ningxia and Gansu Habitat: Lowlands between sand dunes and river valleys

Use: Fixing sand dunes: forage



### 西伯利亚蓼

#### Polygonum sibiricum Laxm.

蓼科

Polygonaceae

【特征】多年生草本,高5~30cm; 茎斜升或直 立,有分枝;叶片近肉质,基部略呈戟 形,两面具腺点;圆锥花序顶生;花被 黄绿色,5深裂;瘦果卵形,具3棱。花期 6~7月。

【分布】东北至西北及西南;蒙古、西伯利亚。

【生境】草原和荒漠区的盐碱草甸。

【用途】饲川;药用。

#### Siberian knotweed

Buckwheat family

Perennial herb  $5 \sim 30$  cm tall; stems ascending or erect, branched; leaves subfreshy, slightly hastate at base, glandular both sides; panicles terminal; yellow-green perianth 5-parted; achene ovoid, 3-angular. Flowering June to July.

**Distribution:** NE to NW and SW China: Mongolia and Siberia **Habitat:** Saline-alkali meadows in steppe and desert areas

Use: Forage; medicine









## 巴天酸模

### Rumex patientia L.

蓼科

Polygonaceae

【特征】多年生草本,高1~1.5m;茎直立,具纵沟纹;叶边缘皱波状或全缘;圆锥花序大型,有分枝;多数花簇状轮生;花被片6,绿色带粉色,内轮花被片有1片具小瘤;瘦果卵状三棱形。花期6~7月。

【分布】东北至西北; 亚洲北方、欧洲。

【生境】河边、低湿地、路边。

【用途】饲用; 药用。

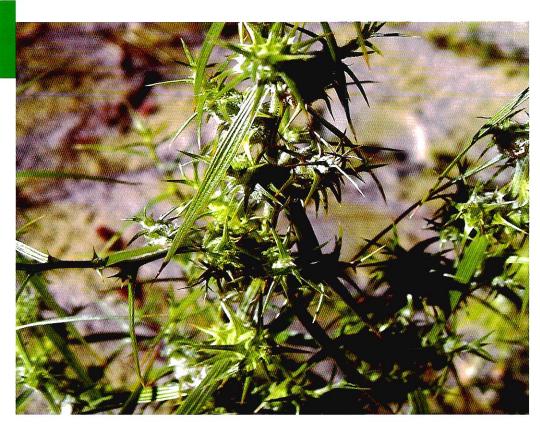
#### Patience dock

Buckwheat family

Perennial herb 1~1.5 m tall; stems erect, fluted; leaves crisped at margins or entire; large panicles branched; flowers cluster-whorled; tepals 6, pinkish-green, one of inner tepals nodulose; achene ovoid-triangulate. Flowering June to July.

**Distribution:** NE to NW China; N Asia and Europe **Habitat:** River banks, moist lowlands and roadsides

Use: Forage; medicine



## 沙蓬

## Agriophyllum squarrosum (L.) Moq.

#### 藜科

#### Chenopodiaceae

【特征】一年生草本,高15~40cm;茎分枝;叶披针形至条形,先端具刺尖,叶脉纵行;花1~3生于苞腋;花被片1~3,膜质;胞果具翅。花期7~8月。

【分布】东北至西北,西藏;蒙古、中亚、高加索。

【生境】流动和半固定沙丘、沙地。沙地先锋植物。

【用途】固沙; 种子可食。

#### Sand rice

Goosefoot family

Annual herb  $15\sim40$  cm tall; stems branched; leaves lanceolate to linear, spinose at apex, with longitudinal nerves; flowers  $1\sim3$  in a bract axil; tepals  $1\sim3$ , membranous; utricle winged. Flowering July to August.

Distribution: NE to NW China and Tibet; Mongolia, Central Asia and Caucasia

Habitat: Moving and semi-fixed dunes and sands. Pioncer in sands

Use: Fixing dunes; seed edible

#### 无叶假木贼

#### Anabasis aphylla L.

藜科

Chenopodiaceae

【特征】半灌木,高15~35(50)cm;木质茎分枝,直 立或斜升;叶极不明显,鳞片状;花1~3枚生 于叶腋;花被片5、外轮3枚果时生翅,内轮2枚 无翅或具小翅,翅膜质,淡黄色或粉红色。花 期8~9月。

【分布】新疆; 中亚、伊朗、欧洲。

【生境】砾石质或盐化荒漠。

【用途】农药原料。

#### Leafless anabasis

Goosefoot family

Subshrub  $15\sim35$  (50) cm tall; woody stems branched, erect or ascending; leaves very indistinct, scale-like; flowers  $1\sim3$  in an axil; tepals 5, outer 3 winged in fruit, inner 2 wingless or small-winged; wings membranous, pale yellow to pink. Flowering August to September.

Distribution: Xinjiang: Central Asia, Iran and Europe

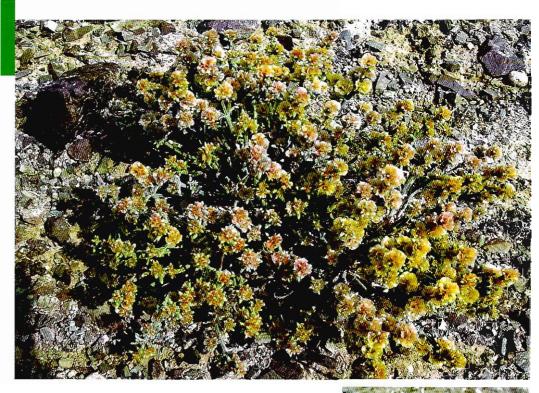
Habitat: Gravelly and saline desert

Use: Pesticide material

下图拍摄人: 张洪江 Photo by Zhang Hongjiang







## 短叶假木贼

Anabasis brevifolia C. A. Mey.

藜科

Chenopodiaceae

【特征】小半灌木,高5~15cm;茎分枝;叶半圆柱状, 肉质,向下呈弧状弯曲;花单生于叶腋,似簇生; 花被片5,果时具翅,翅膜质,无色至多种颜色。 花期7~8月。



【分布】内蒙古、甘肃、宁夏、新疆;蒙古、西伯利亚、中亚。

【生境】砾石质荒漠。

【用途】饲用,但幼枝对牲畜有毒。

#### Shortleaf anabasis

Goosefoot family

Dwarf subshrub 5~15 cm tall; stems branched; leaves subterete, fleshy, excurved downward; flowers solitary in an axil, somewhat clustered; 5 tepals winged in fruit; wings membranous, colorless to multi-colored. Flowering July to August.

**Distribution:** Inner Mongolia, Gansu, Ningxia and Xinjiang; Mongolia, Siberia and Central Asia

Habitat: Gravelly desert

Use: Forage, but young branches poisonous to animals

#### 零冰藜

## Bassia dasyphylla (Fisch. et Mey.) O. Kuntze

藜科

Chenopodiaceae

【特征】一年生草本,高3~30cm,全株被灰白色长柔毛;茎直立, 具灰绿色或粉红色条纹,多分枝;叶半圆柱状,肉质;花单 生或2枚簇生于叶腋;花被5裂,密被长柔毛,果时背部生钻 状附属物,呈五角星状。花期7~9月。

【分布】东北至西北,西藏;蒙古、中亚。

【生境】固定或半固定沙丘、沙地、砂砾质地。

【用途】固沙;饲用。

#### Hoary smotherweed

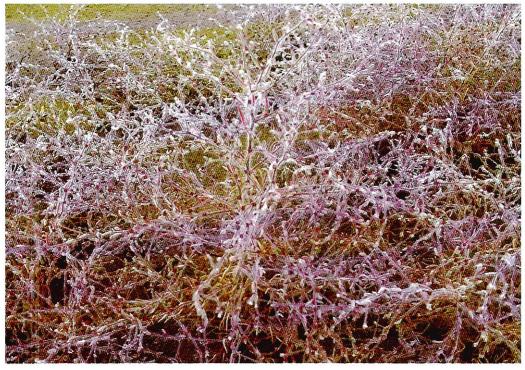
Goosefoot family

Annual herb  $3\sim30$  cm tall, whole plant grey-white villous; stems erect, grey-green or pink striate, much branched; leaves semi-terete, fleshy; flowers solitary or 2 tufted in a leaf axil; perianth 5-lobed, densely villous, back with subutale appendages, forming a five-pointed star in fruit. Flowering July to September.

**Distribution:** NE to NW China, and Tibet; Mongolia and Central Asia **Habitat:** Fixed and semi-fixed dunes; sands and gravelly ground

Use: Fixing dunes; forage







上图拍摄人:拾 涛 Photo by Shi Tao



## 角果藜

Ceratocarpus arenarius L.

あむ

Chenopodiaceae

【特征】一年生草本,高5~30cm,全株密被星状毛;茎直立,多分枝;叶互生,条状披针形至针刺状;雄花花被管棍棒状,顶端2裂;雌花具2苞片,合成管状,侧扁,顶端两角各具1针状附属物。花期4~6月。

【分布】新疆;蒙古、中亚、西伯利亚、伊朗、高加索、欧洲。

【生境】固定及半固定沙丘、沙地、砂砾质地。

【用途】固沙; 饲用。

#### Sandloving hornweed

Goosefoot family

Annual herb  $5\sim30$  cm tall, whole plant densely stelipilous; stems erect, much branched; leaves alternate, linear-lanceolate to acerose; floral tube of staminate flower clavate with 2-lobed apex; pistillate flowers with connate 2 bracts forming a tube, laterally compressed, 2 apexes each with 1 acerose appendage. Flowering April to June.

Distribution: Xinjiang; Mongolia, Central Asia, Siberia, Iran, Caucasia and Europe

Habitat: Fixed and semi-fixed dunes; sands and gravelly ground

Use: Fixing dunes; forage

#### 华北驼绒藜

## Ceratoides arborescens

#### (Losinsk.) Tsien et C. G. Ma

(Krascheninnikovia arborescens (Losinsk.) Czerep.)

藜科

#### Chenopodiaceae

【特征】半灌木,高1~2m,全株密被星状毛;茎直立;叶披针形或矩圆状披针形;雄花花被片4;雌花无花被,果时花管外具4束长毛。花期6~7月。

【分布】中国北方特有。

【生境】草原或荒漠草原区的沙地或砂砾质地。

【用途】饲用。

#### Arborescent winterfat

Goosefoot family

Subshrub  $1\sim2$  m tall, whole plant densely stelipilous; stems erect; leaves lanceolate to oblong-lanceolate; staminate flower with 4 tepals; pistillate flowers lacking a perianth, tube hirsute in 4 clusters outer side in fruit. Flowering June to July.

Distribution: Endemic to N China

Habitat: Sands and sandy-gravelly steppe to desert-steppe









#### 心叶驼绒藜

Ceratoides ewersmanniana

(Stschegl. ex Losinsk.) Botsch. et Ikonn.

(Krascheninnikovia ewersmanniana

(Stschegl. ex Losinsk.) Grubov)

藜科

Chenopodiaceae

【特征】半灌木,高50~150cm,全株密被星状毛;茎直立;叶卵形至矩圆状卵形,基部心形。雄花花被片4;雌花无花被,果时花管外具4束长毛。花期6~7月。

【分布】新疆; 中亚、蒙古。

【生境】砂砾质或沙质荒漠。

【用途】饲用。

#### Heartleaf winterfat

Goosefoot family

Subshrub 50~150 cm tall, whole plant densely stelipilous; stems erect; leaves ovate to oblong-ovate, cordate at base; staminate flower with 4 tepals; pistillate flowers lacking a perianth, tube hirsute in 4 clusters outer side in fruit. Flowering June to July.

Distribution: Xinjiang; Central Asia and Mongolia

Habitat: Gravelly and sandy desert

#### 驼绒藜

#### Ceratoides latens (J. F. Gmel.) Reveal et Holmgren

(Krascheninnikovia latens J. F. Gmel.)

藜科

Chenopodiaceae

【特征】半灌木,高30~100cm,全株密被星状毛; 茎直立; 叶条形至矩圆形; 雄花花 被片4; 雌花无花被,果时花管外具4束长毛。花期6~7月。

【分布】内蒙古、宁夏,西北;欧亚大陆西班牙至西伯利亚。

【生境】砂砾质或沙质荒漠。

【用途】饲用。

#### Pamirian winterfat

Goosefoot family

Subshrub 30~100 cm tall, whole plant densely stelipilous; stems erect; leaves linear to oblong; staminate flower with 4 tepals; pistillate flowers lacking a perianth, tube hirsute in 4 clusters outer side in fruit. Flowering June to July.

Distribution: Inner Mongolia, Ningxia and NW China; regions

of Eurasia from Spain to Siberia Habitat: Gravelly and sandy desert







#### 盐节木

#### Halocnemum strobilaceum (Pall.) Bieb.

藜科

Chenopodiaceae

【特征】盐生半灌木,高20~50cm;多分枝,老枝平卧或上升;一年生小枝对生,直立,圆柱状,肉质;叶极小,鳞片状;穗状花序交互对生;苞片内3枚花;花被片宽卵形;种子密生小突起。花果期8~9月。

【分布】甘肃、新疆;蒙古、西伯利亚、中亚、阿富汗、土耳其、伊朗、高加索、欧 洲及北非。

【生境】荒漠中的低洼盐碱地。

#### Cone-leaf saltwort

Goosefoot family

Halophilous subshrub,  $20 \sim 50$  cm tall; branches numerous, old branches procumbent or ascending, young branchlets opposite, erect, terete, fleshy; leaves tiny, squamiform; spikes decussate; 3 flowers in a bract axil; tepals widely ovate; seeds with dense murications. Flowering and fruiting August to September.

Distribution: Gansu and Xinjiang: Mongolia, Siberia, Central Asia, Afghanistan, Turkey,

Iran, Caucasia, Europe and N Africa Habitat: Salt-alkali swales in desert

### 白茎盐生草

#### Halogeton arachnoideus Moq.

藜科

Chenopodiaceae

【特征】盐生草本,一年生,高10~40cm;茎直立,多分枝;枝互生,灰白色;叶圆柱状,肉质,顶端钝;花通常2~3枚簇生于叶腋;花被片膜质,果时背部生翅,翅膜质透明。花果期7~9月。

【分布】华北、西北;蒙古、中亚。

【生境】盐碱化荒漠、戈壁滩。

【用途】饲用。

#### Cobwebby halogeton

Goosefoot family

Use: Forage

Annual halophilous herb  $10\sim40$  cm tall; stems erect, freely branched; branches alternate, grey-white; leaves terete, fleshy, obtuse at apex;  $2\sim3$  flowers tufted in a leaf axil; tepals membranous, with hyaline-membranous wings on back in fruit. Flowering and fruiting July to September.

Distribution: N and NW China; Mongolia and Central Asia

Habitat: Saline-alkali desert and gobi











## 梭梭

#### 

Chenopodiaceae

【特征】超旱生小乔木、高1~6m;分枝对生,具节;叶对生,鳞片状,宽三角形,先端钝或尖;花单生于叶腋;花被片果时自背部生翅;翅膜质,透明,无色或略带粉色。花期6~8月。

【分布】内蒙古, 西北; 蒙古、中亚。

【生境】荒漠中的砾质、沙质和壤质及盐土生境。

【用途】饲用; 固沙; 薪炭。

#### Saxoul

Goosefoot family

Super-xerophytic small tree,  $1\sim6$  m tall; branches opposite, jointed; leaves opposite, squamiform, widely deltoid with obtuse or acute apex; flowers solitary in axils; tepals winged on back in fruit; wings hyaline-membranous, colorless or pinkish. Flowering June to August.

Distribution: Inner Mongolia and NW China; Mongolia and Central Asia

Habitat: Gravelly, sandy, loamy and saline sites in desert areas

Use: Forage; fixing sand dune; firewood

#### 白梭梭

#### Haloxylon persicum Bunge ex Boiss. et Buhse

藜科

Chenopodiaceae

【特征】超旱生小乔木,高1~7m;分枝对生,具节;叶对生,鳞片状,三角形,先端 具芒尖;花单生于叶腋;花被片果时自背部生翅;翅膜质,透明,无色或略 借粉色。花期5~7月。

【分布】新疆; 中亚、阿富汗、伊朗、叙利亚。

【生境】荒漠中的沙丘。

【用途】饲用; 固沙; 薪炭。

#### Persican saxoul

Goosefoot family

Super-xerophytic small tree,  $1 \sim 7$  m tall; branches opposite, jointed; leaves opposite, squamiform, deltoid with awn-pointed apex; flowers solitary in axils; tepals winged on back in fruit; wings hyaline-membranous, colorless or pinkish. Flowering May to July.

Distribution: Xinjiang; Central Asia, Afghanistan, Iran and Syria

**Habitat:** Sand dunes in desert areas **Use:** Forage; fixing sand dune; firewood







上图拍摄人; 拾 涛 Photo by Shi Tao

## 里海盐爪爪

## Kalidium caspicum (L.) Ung.-Sternb.

藜科

Chenopodiaceae

【特征】盐生半灌木,高15~40cm;茎多分枝,分枝互生;叶肉质,鞘状,抱茎,上、下二叶彼此连接;穗状花序圆柱状;苞片内3枚花。花期7~9月。

【分布】新疆;中亚、伊朗、高加索。

【生境】盐土荒漠。

【用途】饲用。

#### Caspian saltclaw

Goosefoot family

Halophilous subshrub, 15~40 cm tall; stems much branched; branches alternate; leaves fleshy, sheath-like and clasping, jointed each other; spikes terete; 3 flowers in a bract axil. Flowering July to September.

Distribution: Xinjiang; Central Asia, Iran and Caucasia

Habitat: Salt desert



### **尖叶盐爪爪**

## Kalidium cuspidatum (Ung.-Sternb.) Grub.

藜科

Chenopodiaceae

【特征】盐生半灌木,高10~30cm;茎由基部分枝;叶肉质,灰蓝色,卵状,先端锐尖, 基部半抱茎;穗状化序圆柱状或卵状;苞 片内3枚花。花期7~8月。

【分布】内蒙古、河北、宁夏,西北;蒙古。

【生境】荒漠或草原中的盐土生境。

【用途】饲用。

#### Pointed saltclaw

Goosefoot family

Halophilous subshrub,  $10 \sim 30$ cm tall; stems branched from base; leaves fleshy, grey-blue, ovoid with argute apex, subclasping at base: spikes terete or ovoid; 3 flowers in a bract axil. Flowering July to August.

**Distribution:** Inner Mongolia, Hebei, Ningxia and NW China; Mongolia

Habitat: Saline sites in desert and steppe areas









## 盐爪爪 Kalidium foliatum (Pall.) Moq.

藜科

Chenopodiaceae

【特征】盐生半灌木,高20~50cm;茎多分枝; 叶肉质,灰绿色,圆柱状,开展成直角或 下弯,顶端钝,基部下延,半抱茎;穗状 花序圆柱状或卵状;苞片内3枚花。花期 7~8月。

【分布】黑龙江、内蒙古、河北、宁夏, 西北; 蒙古、中亚、西伯利亚、欧洲。

【生境】荒漠或草原中的盐土生境。

【用途】饲用。

#### Saltclaw

Goosefoot family

Halophilous subshrub, 20~50 cm tall; stems freely branched; leaves fleshy, grey-green, terete, spreading to quadrate or decurved, with obtuse apex, base decurrent to subclasping; spikes terete or ovoid; 3 flowers in a bract axil. Flowering July to August.

**Distribution:** Heilongjiang, Inner Mongolia, Hebei, Ningxia and NW China; Mongolia, Central Asia, Siberia and Europe

Habitat: Saline sites in desert and steppe areas

#### 细枝盐爪爪

#### Kalidium gracile Fenzel

藜科

Chenopodiaceae

【特征】盐生半灌木,高10~30cm; 茎多分枝, 幼枝纤细; 叶肉质,黄绿色,瘤状,顶 端钝,基部狭窄,下延; 穗状花序圆柱 状,细弱; 苞片内1枚花。花期7~8月。

【分布】内蒙古、宁夏, 西北; 蒙古。

【生境】荒漠或草原中的盐土生境。

【用途】饲用。

#### Slenderbranch saltclaw

Goosefoot family

Halophilous subshrub, 10~30 cm tall; stems freely branched, young branches slender; leaves fleshy, yellow-green, wart-like, apex obtuse, base narrow and decurrent; spikes terete, slender; 1 flower in a bract axil. Flowering July to August.

Distribution: Inner Mongolia, Ningxia and NW

China; Mongolia

Habitat: Saline sites in desert and steppe areas









## 木地肤

Kochia prostrata (L.) Schrad.

藜科

Chenopodiaceae

【特征】小半灌木,高10~80cm,全株被柔毛;茎多 分枝;叶条形或狭条形;花单生或2~3枚簇 生;花被片5,果时自背部生膜质翅。花期 6~8月。

【分布】东北至西北, 西藏; 蒙古、中亚、欧洲。

【生境】砾质草原和半荒漠。

【用途】饲用。

#### Forage kochia

Goosefoot family

Shrublet  $10 \sim 80$  cm tall, whole plant pubescent; stems freely

branched; leaves linear to narrowly linear; flowers solitary or  $2\!\sim\!3$  tufted; tepals 5, with membranous wings on back in fruit. Flowering June to August.

Distribution: NE to NW China and Tibet; Mongolia, Central Asia and

Europe

Habitat: Gravelly steppe and semi-desert



#### 地肤

#### Kochia scoparia (L.) Schrad.

#### 藜科

Chenopodiaceae

【特征】一年生草本,高50~100cm;茎直立,分枝开展;叶披针形至条状披针形; 花单生或2枚生于叶腋;花被片5,果时背部具膜质短翅。花期6~9月。

【分布】全国各地; 欧亚及非洲。

【生境】路旁、村边、农田。

【用途】饲用; 药用; 种子可提炼食用或工业用油。

#### Burningbush

Goosefoot family

Annual herb  $50 \sim 100$  cm tall; stems erect, branches spreading; leaves lanceolate to linear-lanceolate; flowers solitary or 2 in an axil; tepals 5, with membranous wings on back in fruit. Flowering June to September.

Distribution: Throughout whole China; Eurasia and Africa Habitat: Roadsides, village sides and farming fields

Use: Forage; medicine: seeds for extracting edible and industrial oil







## 小蓬

## Nanophyton erinaceum (Pall.) Bunge

藜科

Chenopodiaceae

【分布】新疆;蒙古、中亚、西伯利亚。

【生境】砾质荒漠。

#### Little nanophyton

Goosefoot family

Cushion-like subshrub  $5\sim30$  cm tall; stems short and thick, twisted; old branches dense, grey-brown, young branches green; leaves small and dense, apex subulate, base enlarged to subclasping; flowers solitary in a bract axil; tepals 5, investing each other into a twisted-cone. Flowering July to August.

Distribution: Xinjiang; Mongolia, Central Asia and Siberia

Habitat: Gravelly desert

### 盐角草

## Salicornia europaea L.

藜科

Chenopodiaceae

- 【特征】一年生盐生草本,高10~40cm;茎直立,多分枝;枝对生,肉质,灰绿色或紫红色;叶鳞片状;穗状花序顶生,圆柱状;花3枚成一簇,生于肉质花序轴的凹陷内;花被合生,肉质。花期7~9月。
- 【分布】东北至西北及华东沿海;蒙古、朝鲜、日本、印度、中亚、欧洲、非洲、北 美洲。

【生境】盐渍低地。

【用途】碳酸钠原料。

#### Marshfire glasswort

Goosefoot family

Annual halophilous herb  $10\sim40$  cm tall; stems erect, much branched; branches opposite, fleshy, grey-green or purple-red; leaves squamiform; spikes terminal, terete; 3 flowers clustered in a depression of fleshy rachis: perianth connate, fleshy. Flowering July to September.

Distribution: NE to NW China and coastal areas of E China; Mongolia, Korea, Japan.

India, Central Asia, Europe, Africa and North America

Habitat: Saline lowlands

Use: Material for making sodium carbonate









# 蒿叶猪毛菜

# Salsola abrotanoides Bunge

藜科

Chenopodiaceae

【特征】超旱生半灌木,高15~40cm;老枝灰褐色,小枝黄绿色;叶圆柱状或半圆柱状,肉质,绿色至红色;花被片5.背部肉质,果时自背部生翅,翅膜质,粉色至红色,翅以上部分不形成圆锥体。花期7~8月。

【分布】内蒙古、宁夏, 西北; 蒙占。

【生境】荒漠中的砾质、石质和粘质碱化生境。

【用途】饲用。

#### Southernwood Russian thistle

Goosefoot family

Super-xerophytic subshrub,  $15\sim40$  cm tall; old branches greybrown; branchlets yellow-green; leaves terete or subterete, fleshy, green to red; tepals 5, fleshy back winged in fruit, wings membranous, pinkish to red, tepals not crowded into a cone above wings. Flowering July to August.

**Distribution:** Inner Mongolia, Ningxia and NW China; Mongolia

Habitat: Gravelly, stony and clayish-alkali sites in desert areas



### 木本猪毛菜

#### Salsola arbuscula Pall.

藜科

Chenopodiaceae

【特征】超旱生灌木,高40~100cm; 茎多分枝、老枝灰 褐色, 幼枝乳白色; 叶半圆柱状, 略呈U形, 肉质, 基部扩展而隆起; 花单生于苞腋; 花被 片5、果时自背部生翅,翅以上部分膜质,反折 呈莲座状。花期6~8月。

【分布】内蒙古、宁夏, 西北; 蒙古、中亚、伊朗。

【生境】覆沙戈壁及荒漠地带的干河床。

【用途】饲用。

#### Shrubby Russian thistle

Goosefoot family

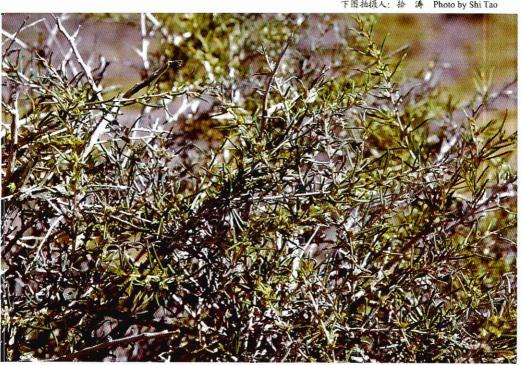
Super-xerophytic shrub,  $40 \sim 100$  cm tall; stems much branched, old branches greybrown, young branches creamy-white; leaves subterete, somewhat U-like, fleshy, enlarging and swelling at base; flowers solitary in bract axils; tepals 5, winged on back in fruit, membranous and reflexed to rosulate above wings. Flowering June to August.

Distribution: Inner Mongolia, Ningxia and NW China; Mongolia, Central Asia and Iran

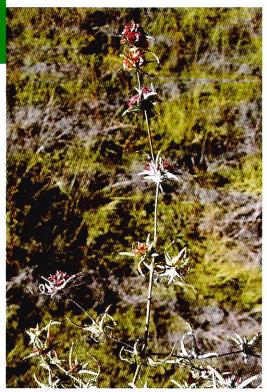
Habitat: Sandy gobi, and dry riverbeds in desert areas

Use: Forage

下图拍摄人: 拾 涛 Photo by Shi Tao









# 散枝猪毛菜

## Salsola brachiata Pall.

藜科

Chenopodiaceae

【特征】一年生草本,高10~30cm;茎自基部分枝,分枝对生;叶半圆柱状,近肉质,灰绿色,顶端具短尖;枝、叶和苞片均被毛;花簇生于腋;花被片果时自背部生翅,翅猎紫红色,翅以上部分聚集成细长的圆锥体。花期7~8月。

【分布】新疆;蒙古、中亚、欧洲。

【生境】砾石质荒漠。

【用途】饲用。

#### Scatterbranch Russian thistle

Goosefoot family

Annual herb  $10\sim30$  cm tall: stems branched from base; branches opposite; leaves subtreete, subfleshy, grey-green, short-pointed at apex: branches, leaves, and bracts hairy; flowers tufted in axils; tepals winged on back in fruit, wings purplish-red, tepals crowded into a long-thin cone above wings. Flowering July to August.

Distribution: Xinjiang; Mongolia, Central Asia and Europe

Habitat: Gravelly desert

### 准噶尔猪毛菜

### Salsola dshungarica Iljin

藜科

Chenopodiaceae

【特征】超旱生半灌木,高10~30cm,新鲜时有鱼腥味;基部多分枝,小枝乳白色,密被柔毛;叶半圆柱状,被柔毛;穗状花序组成圆锥状;花被片近肉质,果时自背部生翅;翅以上部分聚集成近圆锥体。花期7~9月。

【分布】新疆; 中亚。

【生境】盐荒漠或戈壁。

【用途】饲用。

#### Dzungarian Russian thistle

Goosefoot family

Super-xerophytic subshrub,  $10\sim30$  cm tall, fishlike-smelled when fresh; stems much branched from base, branchlets creamy-white, densely pubescent; leaves subterete, pubescent; spikes forming a panicle; tepals subfleshy, winged on back in fruit, crowded near to a cone above wings. Flowering July to September.

Distribution: Xinjiang; Central Asia

Habitat: Salt desert and gobi





# 浆果猪毛菜

Salsola foliosa (L.) Schrad.

藜科

Chenopodiaceae

【特征】一年生多汁草本,高15~80cm; 基部分枝,枝直 立或斜升,灰绿色; 叶近圆柱状,顶端钝圆且硝膨 大,肉质,灰绿色;花稠密,3~5枚簇生于全株的 叶腋;花被片近膜质,果时自背部生翅,翅膜质; 果球形,浆果状。花期7~8月。

【分布】新翮;蒙古、中亚、高加索、西伯利亚。

【生境】砾石质荒漠。

【用途】饲用

#### Leafy Russian thistle

Goosefoot family

Annual succulent herb  $15\sim80$  cm tall; branched from base; branches erect or ascending, grey-green; leaves subterete, blunt-rounded and slightly inflated at apex, fleshy, grey-green; flowers dense,  $3\sim5$  tufted in axils throughout plant; tepals submembranous, with membranous wings on back in fruit; fruits globose, berrylike. Flowering July to August.

Distribution: Xinjiang; Mongolia, Central Asia, Caucasia and Siberia

Habitat: Gravelly desert



## 短柱猪毛菜

#### Salsola lanata Pall.

藜科

Chenopodiaceae

【特征】一年生草本,高10~40cm;茎直立,分枝斜升,被茸毛,混生长毛;叶半圆柱状,肉质,灰绿色,密被茸毛,顶端钝圆,基部下延;花序穗状;花被片果时自背部生膜质翅,翅淡粉褐色至紫红色;翅以上部分向中央聚集成圆锥体。花期7~8月。

【分布】新疆; 中亚、伊朗、巴基斯坦。

【生境】盐土或砾石质荒漠。

【用途】饲用。

#### Woolly Russian thistle

Goosefoot family

Annual herb 10~40 cm tall; stems erect, branches ascending, lanuginous with long hairs; leaves subterete, fleshy, grey-green, densely lanuginous, apex obtuse, base decurrent; inflorescence a spike; tepals with membranous wings on back in fruit, wings pinkish-brown to purple-red; tepals crowded into a cone above wings. Flowering July to August.

Distribution: Xinjiang; Central Asia, Iran and Pakistan

Habitat: Salt and gravelly desert





## 松叶猪毛菜

## Salsola laricifolia Turcz. ex Litv.

藜科

Chenopodiaceae

【特征】超旱生灌木,高20~50cm; 茎多分枝,下部枝常刺状;叶半圆柱状,上面 有沟槽,肉质,黄绿色;花单生于苞腋;花被片果时自背部生翅,翅膜质, 紫红色至紫褐色;翅以上部分聚集成近圆锥体。花期6~8月。

【分布】内蒙占、宁夏、甘肃、新疆;蒙古、中亚。

【生境】荒漠区的石质山坡、残丘。

【用途】饲用。

#### Larchleaf Russian thistle

Goosefoot family

uper-xerophytic shrub, 20~50 cm tall; stems much branched, lower branches usually spine-like; leaves subterete with a groove above, fleshy, yellow-green; flowers solitary in bract axils; tepals winged on back in fruit, wings membranous, purple-red to purple-brown; tepals crowded near to a cone above wings. Flowering June to August.

Distribution: Inner Mongolia, Ningxia, Gansu and Xinjiang; Mongolia and Central Asia

Habitat: Rocky slopes and broken hills in desert areas







# 珍珠猪毛菜

## Salsola passerina Bunge

藜科

Chenopodiaceae

[特征]超旱生半灌木,高5~30cm,全株被毛; 茎多分枝;叶锥状或三角状,肉质;球状芽着生于叶脏和短枝上;花被片果时自背部生翅,翅干膜质,黄褐色或淡紫红色;翅以上部分聚集成圆锥体。花期6~8月。

【分布】内蒙古、宁夏、甘肃、青海;蒙古。

【生境】戈壁低地、砾质荒漠, 半荒漠带的 盐碱湖盆。

【用途】饲用;种子可提炼工业用油。

#### Pearl Russian thistle

Goosefoot family

Super-xerophytic sushrub, 5~30 cm tall; whole plant

hairy; stems much branched; leaves subulate or deltoid, fleshy; globose buds born in leaf axils and on short branches; tepals winged on back in fruit, wings scarious, yellow-brown to purplish-red; tepals crowded into a cone above wings. Flowering June to August.

Distribution: Inner Mongolia, Ningxia, Gansu and Qinghai; Mongolia

Habitat: Gobi lowlands, gravelly desert, and saline-alkali lake basins in semi-desert

Use: Forage: seeds for extracting industrial oil



### 刺沙蓬

#### Salsola ruthenica Iljin

藜科

Chenopodiaceae

【特征】一年生草本,高15~100cm;茎自基部分枝,具白色或紫红色条纹;叶半圆柱状或圆柱状,肉质,顶端具刺状尖,基部扩大,边缘膜质;总状花序;花被片果时自背部生翅,翅膜质或近革质,无色至紫红色,翅以上部分不形成圆锥体。花期7~9月。

【分布】东北至西北及山东、江苏;蒙古、中亚。

【生境】草原或荒漠沙地、砂砾质地。

【用途】饲用。

#### Prickly Russian thistle

Goosefoot family

Annual herb  $15 \sim 100$  cm tall; stems branched from base, white or purple-red streaked; leaves subterete or terete, fleshy, spine-pointed at apex. enlarged at base, membranous at margins; flowers in racemes; tepals winged on back in fruit, wings membranous or subcoriaceous, colorless to purple-red, tepals not crowded into a cone above wings. Flowering July to September.

Distribution: NE to NW China, Shandong and Jiangsu; Mongolia and Central Asia

Habitat: Sands and gravelly steppe and desert







## 粗枝猪毛菜

Salsola subcrassa M. Pop.

藜科

Chenopodiaceae

【特征】一年生草本,高15~40cm;茎直立或斜升,自基部分枝;叶半圆柱状,肉质,绿色或黄绿色,顶端钝圆,基部边缘近膜质,沿茎稍下延;花单生于叶腋;小苞片边缘膜质;花被片果时自背部生膜质翅,翅淡紫红色或红色,翅以上部分膜质,反折成星状。花期8月。

【分布】新疆; 中亚。

【生境】盐土荒漠和盐湖边。

【用途】饲用。

#### Thickbranched Russian thistle

Goosefoot family

Annual herb 15~40 cm tall; stems erect or ascending, branched from base; leaves subterete, fleshy, green or yellow-green, apex obtuse, base submembranous at margins, slightly decurrent along stems; flowers solitary in axils, bractlets membranous at margins; tepals with membranous wings on back in fruit, wings purplish-red or red; tepals membranous and reflexed to stellate above wings. Flowering August.

**Distribution:** Xinjiang; Central Asia **Habitat:** Salt desert and salt-lake edges

#### 囊果碱蓬

## Suaeda physophora Pall.

藜科

Chenopodiaceae

【特征】半灌木,高30~80cm; 茎多分枝; 叶半圆柱状,稍弧曲,肉质; 花序圆锥状; 花被近球形,花被片5,果时膨胀呈霰状。花期7~8月。

【分布】新疆; 西伯利亚、中亚、欧洲东部。

【生境】盐土荒漠。

【用途】饲用。

#### Saccatefruit seepweed

Goosefoot family

Subshrub  $30 \sim 80$  cm tall: stems much branched; leaves subterete, slightly arcuate, fleshy; inflorescence paniculate; perianth subglobose, tepals 5, inflated to gibbous in fruit. Flowering July to August.

Distribution: Xinjiang; Siberia, Central Asia and E Europe

Habitat: Salt desert







## 合头草

#### Sympegma regelii Bunge

藜科

Chenopodiaceae

【特征】超旱生半灌木,高10~70cm;茎直立,分枝,略 有乳突; 叶互生, 圆柱状, 肉质, 灰绿色; 花1~3 枚聚集成头状花序; 花被片5, 果时近顶端生膜质 翅; 翅粉红色至黄褐色。花期7~8月。

【分布】内蒙古、宁夏, 西北; 蒙古、中亚。

【生境】海拔1200~2100m的砾质或轻度盐化荒漠。

【用途】饲用。

#### Sympegma

Goosefoot family

Super-xerophytic subshrub, 10~70 cm tall; stems erect, branched, slightly papillate; leaves alternate, terete, fleshy, grey-green; flowers  $1 \sim 3$  clustered into a head; tepals 5, with membranous wings nearly top in fruit, wings pink to yellow-brown. Flowering July to August.

Distribution: Inner Mongolia, Ningxia and NW China; Mongolia and Central Asia

Habitat: Gravelly and light-saline desert at 1 200~2 100 m





拍摄人: 赵 凡 Photo by Zhao Fan

# 耧斗菜

# Aquilegia viridiflora Pall.

毛茛科

Ranunculaceae

【特征】多年生草本,高20~40cm;茎直立,被柔毛和腺毛;

基生叶多数,二回三出复叶,小叶3浅裂至中裂,裂片具2~3个圆齿;茎生叶少数;单歧聚伞花序,花黄绿色或褐绿色;萼片5;花瓣5,距细长;雄蕊多数,伸出花外。花期5~6月。

【分布】东北至西北;蒙古、俄罗斯(西伯利亚、远东)。

【生境】山坡灌丛和沟谷。

【用途】药用。

#### Green-flowered columbine

Buttercup family

Perennial herb  $20 \sim 40$  cm tall; stems erect, pubescent and piloglandulose; basal leaves numerous, biternate, leaflets 3-lobed to cleft, lobes with 2 or 3 rounded teeth; cauline leaves few; flowers in a monochasium, yellow-green or brown-green; sepals 5; petals 5, each with a slender spur; stamens numerous, exserted. Flowering May to June.

Distribution: NE to NW China; Mongolia and Russia (Siberia and Far East)

Habitat: Slope thickets and ravines

Use: Medicine

### 钝叶瓦松

# Orostachys malacophyllus (Pall.) Fisch.

景天科

Crassulaceae

【特征】二年生肉质草本,高10~30cm; 莲座叶和茎生叶绿色, 有紫色斑点; 总状花序圆柱状; 花紧密, 瓣片5, 白色或淡绿色; 花药黄色; 蓇葖果。花期8~9月。

【分布】东北、华北;蒙古、西伯利亚、朝鲜。

【生境】草原带的砾石质或沙砾质生境。

【用途】饲用; 药用。

#### Blunt-leaf orostachys

Stonecrop family

Biennial fleshy herb  $10\sim30$  cm tall; rosulate and cauline leaves green, with purple spots; flowers closely dense in terete racemes; petals 5, white or greenish; anthers yellow; fruit a follicle. Flowering August to September.

Distribution: NE and N China; Mongolia. Siberia and Korea

Habitat: Gravelly and sandy ground in steppe areas

Use: Forage; medicine







# 楔叶茶蕉

Ribes diacanthum Pall.

虎耳草科

Saxifragaceae

【特征】灌木,高1~2m,枝节上有皮刺1对;叶掌状3裂,基部楔形;总状花序生于短枝上;花小,瓣片5,淡黄绿色;浆果近球形,熟时红色。花期5~6月。

【分布】内蒙古;蒙古、朝鲜、俄罗斯(西伯利亚、远东)。

【生境】沙地、沙丘、河岸和石质山坡。

【用途】观赏; 水土保持; 果实可食。

#### Siberian currant

Saxifrage family

Shrub 1~2 m tall; branches with 1 pairs nodal prickles; leaves palmately 3-lobed, cuneate at base; racemes terminating young branches; small flowers with 5 petals, yellowish- green; subglobose berry red at maturity. Flowering May to June.

Distribution: Inner Mongolia; Mongolia, Korea and

Russia (Siberia and Far East)

**Habitat:** Sands, dunes, river banks and rocky slopes **Use:** Ornamental; soil conservation; fruits edible

## 小叶茶蔍

## Ribes pulchellum Turcz.

虎耳草科

Saxifragaceae

【特征】灌木,高1~2m,当年枝密被短柔毛,节上有皮刺1对;叶掌状3深裂,基部近截形,两面被毛;花小,瓣片5,淡黄绿色或粉色;浆果近球形,熟时红色。花期5~6月。

【分布】东北至西北;蒙古、西伯利亚。

【生境】石质山坡和沟谷。

【用途】观赏; 水土保持; 果实可食。

#### Beautiful currant

Saxifrage family

Shrub  $1\sim2$  m tall; new branches densely pubescent, with 1 pairs nodal prickles; leaves palmately 3-parted, subtruncate at base, pubescent both sides; small flowers with 5 petals, yellowish-green or pink; subglobose berry red at maturity. Flowering May to June.

Distribution: NE to NW China; Mongolia and Siberia

Habitat: Rocky slopes and ravines

Use: Ornamental; soil conservation; fruits edible







拍摄人: 赵 凡 Photo by Zhao Fan

# 乳浆大戟

# Euphorbia esula L.

大戟科

Euphorbiaceae

【特征】多年生草本,高30~50cm,内含乳汁;茎直立,单一或上部分枝,光滑无毛;单川互生,条形至倒披针状条形;聚伞花序顶生,小杯状聚伞花序具多数雄花和1枚雌花;新月形腺体4,两端具短角,绿黄色至橙黄色。花期5~7月。

【分布】东北、华北,华东至西南;蒙古、俄罗斯、朝鲜、日本、欧洲和北美。

【生境】沙质草地、疏林、荒地、河谷、路旁。

【用途】有毒植物。根药用。

#### Leafy spurge

Spurge family

Perennial herb 30~50 cm tall, with milky juice; stems erect, single or branched above, glabrous; simple leaves alternate, linear to oblanceolate-linear; cymes terminal, cyathium with several staminate flowers and 1 pistillate flower; glands 4, lunate, with 2 horns, greenyellow to orange-yellow. Flowering May to July.

Distribution: NE, N, and E to SW China; Mongolia, Russia, Korea, Japan, Europe and North America

Habitat: Sandy grassland, open woodland, waste lands, river valleys and roadsides

Use: Poisonous plant. Roots for medicine

#### 花锚

#### Halenia corniculata (L.) Cornaz

龙胆科

Gentianaceae

【特征】一年生草本,高15~45cm;茎直立,有分枝;叶对生;聚伞花序;花冠形似船 锚,黄白色或淡绿色,4裂片,每一裂片基部具距。花期7~8月。

【分布】东北、华北;蒙古,俄罗斯(西伯利亚、远东)、欧洲。

【生境】林缘、低湿草甸。

【用途】药用。

#### Horned spurred gentian

Gentian family

Annual herb  $15 \sim 45$  cm tall; stems erect, branched; leaves opposite; flowers in cymes; corolla anchor-like, yellow-white or pale green, 4-lobed, each lobe spurred at base. Flowering July to August.

Distribution: NE and N China; Mongolia, Russia (Siberia and Far East), and Europe

Habitat: Forest edges, and moist lowland meadows

Use: Medicine







# 醉马草

## Achnatherum inebrians (Hance) Keng

禾本科

Gramineae

【特征】多年生草本,高60~120cm; 秆疏丛生,直立; 叶片扁平或边缘内卷; 圆锥花序紧密呈穗状,每节具6~7分枝; 小穗含1小花; 颖膜质, 脉上具小刺毛; 外稃芒长10~13mm,背部和基盘被柔毛。花期7~8月。

【分布】西北,内蒙古、宁夏、四川、西藏;蒙古。

【生境】山地草原,荒漠区盐化草甸、沟谷和坡麓。

【用途】有毒植物。药用。

#### Equine sleepgrass

Grass family

Perennial  $60\sim120$  cm tall; culms loosely cespitose, erect; leaf blades flat or involute at margins; panicle contracted to spicate, with  $6\sim7$  branches per node; spikelets with 1 floret; glumes membranous, hispidulous along veins; lemma with awn  $10\sim13$  mm long, back and callus pubescent. Flowering July to August.

**Distribution:** NW China, Inner Mongolia, Ningxia, Sichuan and Tibet; Mongolia **Habitat:** Montane-steppe, and saline meadows, ravines and hillsides in desert areas

Use: Medicine. Poisonous to animals

## 羽茅

# Achnatherum sibiricum (L.) Keng

禾本科

Gramineae

【特征】多年生草本, 高50~ 150cm; 秆疏丛生, 直 立;叶片边缘常内卷; 圆 锥花序稍疏松, 每节具 2~5分枝; 小穗含1小花; 颖膜质, 先端尖而透 明; 外稃芒长20~25mm, 背部和基盘密被柔毛。花 期6~8月。

【分布】东北、华北,新疆、青海; 蒙古、俄罗斯、中亚、阿 富汗、印度、尼泊尔、巴 基斯坦、高加索。

【生境】草原、草甸、林缘或灌丛。

【用途】饲用;造纸原料。





#### Siberian needlegrass

Grass family

Perennial  $50\sim150$  cm tall; culms loosely cespitose, erect; leaf blades usually involute at margins; panicle loose, with  $2\sim5$  branches per node; spikelet with 1 floret; glumes membranous, with hyaline and pointed apex; lemma with awn  $20\sim25$  mm long, back and callus densely pubescent. Flowering June to August. **Distribution:** NE and N China, Xinjiang and

Distribution: NE and N China, Xinjiang and Qinghai; Mongolia, Russia, Central Asia, Afghanistan, India, Nepal, Pakistan and Caucasia

Habitat: Steppe, meadows, forest edges and scrubland

Use: Forage; material for paper making



# 芨芨草

# Achnatherum splendens (Trin.) Nevski

禾本科

Gramineae

【特征】多年生草本,高80~200cm; 秆密丛生,直立或斜升,坚硬;叶片质硬,内卷或扁平; 圆锥花序开展,呈金字塔形,具2~6分枝;小穗含1小花;颖膜质;外稃芒长5~12mm,背部和基盘具柔毛。花期6~8月。

【 分布 】华北、西北, 西藏; 蒙古、中亚、西伯利亚、欧洲东南。

【生境】草原至荒漠带的盐化草甸。

【用途】饲用;造纸原料。

#### Feather needlegrass

Grass family

Perennial  $80\sim200$  cm tall; culms densely cespitose, erect or ascending, stiff; leaf blades rigid, involute or flat; panicle spreading, pyramidal, with  $2\sim6$  branches per node; spikelets with 1 floret; glumes membranous; lemma with awn  $5\sim12$  mm long, back and callus pubescent. Flowering June to August.

Distribution: N. NW China and Tibet: Mongolia, Central Asia, Siberia and SE Europe

Habitat: Saline meadows in steppe and desert areas

Use: Forage; material for paper making

#### 小獐茅

## Aeluropus pungens (M. Bieb.) K. Koch

禾本科

Gramineae

【特征】多年生草本,高5~30cm;具匍匐枝;秆直立或倾斜;叶舌具纤毛;叶片质硬,扁平或内卷,无毛;圆锥花序穗状,分枝单生,彼此疏离而不重叠;小穗含(2)4~8小花;颖与外稃卵形,边缘膜质;外稃先端尖,边缘具纤毛。花期5~7月。

【分布】甘肃、新疆;蒙古、西伯利亚、中亚、伊朗、印度、欧洲。

【生境】盐碱生境和沙地。

【用途】盐碱地改良。

#### Little aeluropus

Grass family

Perennial  $5\sim30$  cm tall; stoloniferous: culms erect or decumbent; ligule ciliate; leaf blades stiff, flat or involute, glabrous; panicle spikelike, branches single, spaced to each other; spikelets with (2)  $4\sim8$  florets; glumes and lemmas ovate, with membranous margins; lemmas with cuspidate apex and ciliate margins. Flowering May to July.

Distribution: Gansu and Xinjiang; Mongolia, Siberia, Central Asia, Iran, India and Europe

Habitat: Saline alkaline sites and sands Use: Improving saline-alkaline soils









#### 冰草

## Agropyron cristatum (L.) Gaertn. var. cristatum

禾本科

Gramineae

【特征】多年生草本,高15~80cm; 秆丛生,直立或基部膝曲;叶片内卷或扁平; 穗状花序矩圆状卵形或卵状披针形,紧密,宽8~15mm; 穗轴节间长约 1mm; 小穗呈篦齿状排列,含3~7小花; 颖和外稃舟形,被长柔毛;外稃具 2~4mm长的短芒。花期7~8月。

【分布】东北至西北;蒙古、俄罗斯、中亚、欧洲东部。

【生境】砾质或沙质草原。

【用途】饲用。

#### Crested wheatgrass

Grass family

Perennial  $15\sim80$  cm tall, culms cespitose, erect or geniculate at base; leaf blades involute or flat; spikes oblong-ovate or ovate-lanceolate, dense,  $8\sim15$  mm wide; rachis internodes 1 mm; spikelets pectinately arranged, with  $3\sim7$  florets; glumes and lemmas navicular, pilose; lemmas with awn  $2\sim4$  mm long. Flowering July to August.

Distribution: NE to NW China; Mongolia, Russia, Central Asia and E Europe

Habitat: Gravelly and sandy steppe

# 光穗冰草

# Agropyron cristatum var. pectiniforme (Roem. et Schult.) H. L. Yang

禾本科

Gramineae

【特征】与原变种的区别为: 颖与外稃背部无毛或疏被极短刺毛。

【分布】东北,内蒙古、河北、青海、新疆;蒙古、俄罗斯、欧洲东部。

【生境】草原带的干旱山坡。

#### Smooth crested wheatgrass

Grass family

**Difference to** Agropyron cristatum var. cristatum: Glumes and lemmas glabrous, rarely laxly spinescent hairy.

**Distribution:** NE China, Inner Mongolia, Hebei, Qinghai and Xinjiang; Mongolia, Russia and E Europe

Habitat: Dry slopes in steppe zone





# 多花冰草

# Agropyron cristatum var. pluriflorum H. L. Yang

**禾本科** 

Gramineae

【特征】与原变种的区别为: 花序长前宽,最宽处大于2cm,含9~12小花。

【分布】内蒙古锡林郭勒盟。

【生境】砾质或沙质草原。

#### Multi-floret crested wheatgrass

Grass family

Difference to Agropyron cristatum var. cristatum: Spikes longer and wider, over 2 cm at the widest part, spikelets with  $9 \sim 12$  florets.

**Distribution:** Inner Mongolia (Xilinguole) **Habitat:** Gravelly and sandy steppe





## 沙生冰草

# Agropyron desertorum (Fisch. ex Link) Schult

禾本科

Gramineae

【特征】多年生草本,高20~60cm; 秆丛生,直立或基部膝曲;叶片内卷; 穗状花序矩 圆状条形或条状圆柱形; 穗轴节间长1~3mm; 小穗呈覆瓦状排列,含5~7小花; 颖舟形,光滑无毛,或脊上疏被短柔毛,先端芒长约2mm; 外稃舟形,背部疏被短刺毛,先端芒长1.5~3mm。花期7~8月。

【分布】内蒙古、山西、甘肃、新疆;蒙古、俄罗斯。

【生境】草原至荒漠草原带的沙地或沙质生境。

【用途】饲用; 固沙。

#### Desert wheatgrass

Grass family

Perennial  $20\sim60$  cm tall; culms cespitose, erect or geniculate at base; leaf blades involute; spikes oblong-linear or linear-terete; rachis internodes  $1\sim3$  mm; spikelets imbricately arranged, with  $5\sim7$  florets; glumes navicular, glabrous or laxly pubescent along rib, awns 2 mm; lemmas navicular, with laxly spinescent-hairy back, awns  $1.5\sim3$  mm long. Flowering July to August.

Distribution: Inner Mongolia, Shanxi, Gansu and Xinjiang; Mongolia and Russia

**Habitat:** Sands and sandy sites in steppe to desert-steppe areas

Use: Forage; fixing sand dunes

#### 根茎冰草

#### Agropyron michnoi Roshev.

禾本科

Gramineae

【特征】多年生草本,高20~80cm;具根茎;秆单生,直立或基部膝曲;叶片扁平或内卷;穗状花序矩圆形或矩圆状披针形;穗轴节间长约1mm;小憩近于篦齿状排列,含5~9小花;颖和外稃均为舟形,被长毛,先端具长2~3mm的芒尖或短芒。花期7~8月。

【分布】内蒙古;蒙古、俄罗斯。

【生境】草原带的沙地和沙质地。

【用途】饲用;固沙。

#### Rhizomatous crested wheatgrass

Grass family

Perennial  $20\sim80$  cm (all; rhizomatous; culms single, erect or geniculate at base; leaf blades flat or involute: spikes oblong or oblong-lanceolate; rachis internodes 1 mm long; spikelets nearly pectinate-arranged, with  $5\sim9$  florets; glumes and lemmas navicular, pilose, apex aristulate or short-awned in  $2\sim3$  mm long. Flowering July to August.

Distribution: Inner Mongolia; Mongolia and Russia

Habitat: Sands and sandy sites in steppe zone

Use: Forage; fixing sand dunes









## 沙芦草

# Agropyron mongolicum Keng

禾本科

Gramineae

【特征】多年生草本、高20~60cm; 秆疏丛生,直立或基部膝曲; 叶片内卷; 穗状花序条形; 穗轴节间长3~10mm; 小穗排列疏松,斜升,含2~8小花; 颖两侧不对称,无毛; 外稃无毛或被微毛,边缘膜质,先端芒尖长约1mm。花期7~8月。

【分布】内蒙古、山西、陕西、甘肃、新疆。

【生境】草原至荒漠草原带的沙地或沙质生境。

【用途】饲用; 固沙。

## Mongolian wheatgrass

Grass family

Perennial  $20\sim60$  cm tall; culms loosely cespitose, erect or geniculate at base: leaf blades involute: spikes linear; rachis internodes  $3\sim10$  mm long; spikelets loosely arranged, ascending, with  $2\sim8$  florets; glumes inequilateral, glabrous; lemmas glabrous or loose puberulent, margins membranous, apex aristulate in 1 mm long. Flowering July to August.

Distribution: Inner Mongolia, Shanxi, Shaanxi, Gansu and Xinjiang

Habitat: Sands and sandy sites in steppe to desert-steppe zones

Use: Forage; fixing sand dunes

### 西伯利亚冰草

# Agropyron sibiricum (Willd.) Beauv.

禾本科

Gramineae

【特征】多年生草本,高30~80cm; 秆疏丛生,直立或基部膝曲; 叶片扁平,或干燥时折叠; 穗状花序糸形,微弯; 穗轴节间长4~7mm; 小穗斜升,含9~11小花; 颖卵状披针形,两侧不对称,无毛,具短尖头; 外稃无毛或微糙涩,顶端具小尖头。花期7~8月。

【分布】内蒙古锡林郭勒盟; 俄罗斯。

【生境】草原带的沙地。

【用途】饲用;固沙。

#### Siberian wheatgrass

Grass family

Perennial  $30\sim80$  cm tall; culms loosely cespitose, erect or geniculate at base; leaf blades flat, or folded when dry; spikes linear, slightly curved; rachis internodes  $4\sim7$  mm long; spikelets ascending, with  $9\sim11$  florets; glumes ovate-lanceolate, inequilateral, glabrous, with pointed apex; lemmas glabrous or slightly scabrous with tiny mucro at apex. Flowering July to August.

Distribution: Inner Mongolia (Xilinguole); Russia

Habitat: Sands in steppe zone Use: Forage; fixing sand dunes



#### 菵草

#### Beckmannia syzigachne (Steud.) Fernald

禾本科

Gramineae

【分布】全国各地;北半球热带和温带地区。

【生境】低湿草甸、水边。

【用途】饲用。

#### American sloughgrass

Grass family

Annual 40~70 cm tall; culms slightly geniculate at base; leaf blades flat; panicle narrow; spikelets laterally compressed, with 1 floret, rarely 2; glumes laterally compressed, with thick back and submembranous margins; lemma thin, with aristulate apex. Flowering June to August.

**Distribution:** Throughout whole China; tropical and temperate regions

in Northern Hemisphere

Habitat: Meadows in moist lowlands,

and washes Use: Forage







# 无芒雀麦

#### Bromus inermis Leyss.

禾本科

Gramineae

【特征】多年生草本,高40~100cm;具根茎;秆直立;叶片扁平;圆锥花序开展,每节具3~5分枝;小憩含4~10小花;颖披针形,边缘膜质;外稃宽披针形, 无芒或具1~2mm的短芒。花期7~8月。

【分布】东北至西北;欧亚大陆温带地区。

【生境】草甸、林缘、田边。

【用途】饲用,世界温带地区广泛栽培。

#### Smooth brome

Grass family

Perennial  $40\sim100$  cm tall; rhizomatous; culms erect; leaf blades flat; panicle spreading, with  $3\sim5$  branches per node; spikelets with  $4\sim10$  florets; glumes lanceolate, with membranous margins; lemmas widely lanceolate, awnless or short awned in  $1\sim2$  mm long. Flowing July to August.

Distribution: NE to NW China; temperate regions in Eurasia

Habitat: Meadows, forest edges and field sides

Use: Forage, widely cultivated in temperate regions of the world



右图拍摄人: 拾 涛 Photo by Shi Tao



# 雀麦

# Bromus japonicus Thunb.

禾本科

Gramineae

【特征】一年生草本,高20~60cm; 秆直立,基部膝曲;叶片扁平,被柔毛; 圆锥花序开展,弯垂,每节具2~6分枝;小憩含5~15小花; 颖宽披针形,边缘膜质; 外稃宽卵状披针形,边缘膜质,顶端具2小齿裂,芒长5~10mm,从齿间伸出。花期6~7月。

【分布】东北,黄河及长江流域;蒙古、俄罗斯、朝鲜、日本。

【生境】草甸、田边、路旁。

【用途】饲用。

#### Japanese brome

Grass family

Annual 20 $\sim$ 60 cm tall; culms erect, geniculate at base; leaf blades flat, pubescent; panicle spreading, nodding, with 2 $\sim$ 6 branches per node; spikelets with 5 $\sim$ 15 florets; glumes widely lanceolate with membranous margins; lemmas widely ovate-lanceolate with membranous margins and minutely 2-toothed apex, awn 5 $\sim$ 10 mm long, exserted between teeth. Flowering June to July.

Distribution: NE China, regions along Yellow River and Changjiang River; Mongolia, Russia, Korea and Japan

Habitat: Meadows, field sides and roadsides

## 无芒隐子草

#### Cleistogenes songorica (Roshev.) Ohwi

禾本科

Gramineae

【特征】多年生草本,高15~50cm; 秆丛生,直立或斜升; 叶片扁平或稍内卷; 圆锥花序开展; 小穗含3~6小花; 颖卵状披针形,近膜质; 外稃卵状披针形,边缘膜质。花期7~8月。

【分布】内蒙古、陕西、宁夏、甘肃、新疆;蒙古、西伯利亚、中亚。

【生境】砾质或沙壤质荒漠草原和荒漠。荒漠草原建群种。

【用途】饲用。

#### Awnless cleistogenes

Grass family

Perennial  $15\sim50$  cm tall; culms cespitose, erect or ascending; leaf blades flat or slightly involute; panicle open; spikelets with  $3\sim6$  florets; glumes ovate-lanceolate, submembranous; lemmas ovate-lanceolate, with membranous edges. Flowering July to August.

Distribution: Inner Mongolia, Shaanxi, Ningxia, Gansu and Xinjiang; Mongolia, Siberia and Central Asia

Habitat: Gravelly and sandy-loamy desert-steppe to desert. A dominant species in desert-





### Cleistogenes squarrosa (Trin.) Keng

禾本科

Gramineae

【特征】多年生草本,高15~50cm; 秆密丛生,直立或铺散; 叶片扁平或内卷; 圆锥 花序狭窄; 小穗含2~3小花; 颖披针形, 边缘膜质; 外稃披针形, 芒短于或 等于释体。花期7~8月。

【分布】东北、华北,甘肃、新疆;蒙古、俄罗斯、哈萨克斯坦、欧洲。

【生境】砾质、沙质或沙壤质草原。温带草原亚优势种。

【用途】饲用。

#### Rough cleistogenes

Grass family

Perennial 15~50 cm tall; culms densely cespitose, erect or diffuse; leaf blades flat or involute; panicle narrow; spikelets with 2~3 florets; glumes lanceolate, with membranous margins; lemmas lanceolate, awns shorter than or equaling lemmas. Flowering July to August.

Distribution: NE and N China, Gansu and Xinjiang; Mongolia, Russia, Kazakhstan and Europe.

Habitat: Gravelly, sandy and sandy-loamy steppe. A sub-dominant species in temperate steppe

### 短颖披碱草

## Elymus burchan-buddae (Nevski) Tzvelev

(垂穗鹅观草 Roegneria nutans (Keng) Keng et S. L. Chen)

禾本科

Gramineae

【特征】多年生草本,高25~60cm; 秆疏丛,直立或基部膝曲;叶片内卷; 穗状花序下垂,穗轴每节具小穗1枚; 小憩含3~4小花; 颖披针形,先端尖; 外释披针形,被微毛,芒长7~30mm,反曲。花期6~7月。

【分布】西北、西南。

【生境】海拔3 000~5 500m的山坡、河谷草甸。

【用途】饲用。

#### Shortglume wildrye

Grass family

Perennial 25 $\sim$ 60 cm tall: culms loosely cespitose, erect or geniculate at base; leaf blades involute; spikes nodding, with 1 spikelet per node; spikelets with 3 $\sim$ 4 florets; glumes lanceolate, apex pointed; lemmas lanceolate, hirsutulous, awn 7 $\sim$ 30 mm long, extrorse. Flowering June to July.

Distribution: NW and SW China

Habitat: Slopes and river valley meadows at 3  $000 \sim 5500$  m

Use: Forage

拍摄人: 拾 涛 Photo by Shi Tao







## 披碱草

## Elymus dahuricus Turcz. ex Griseb.

禾本科

Gramineae

【特征】多年生草本,高60~140cm; 杆疏丛生,直立或基部膝曲; 叶片扁平,干后内卷; 穗状花序直立,紧密,穗轴每节具2小穗; 小穗含3~5小花; 颖披针形,粗糙,稀被短毛,芒长约5mm; 外稃披针形,密被短小糙毛,芒长10~20mm。花期7~8月。

【分布】东北至西北,四川;蒙古、俄罗斯、朝鲜、日本。

【生境】林间空地、低湿草甸、河边、路旁。

【用途】饲用。

#### Dahurian wildrye

Grass family

Perennial  $60\sim140$  cm tall; culms loosely cespitose, erect or geniculate at base; leaf blades flat, involute when dry; spikes erect, dense, with 2 spikelets per node; spikelets with 3~5 florets; glumes lanceolate, scabrous, rarely hirsutulous, awn 5 mm long; lemmas lanceolate, densely hirsutulous, awn  $10\sim20$  mm long. Flowering July to August.

**Distribution:** NE to NW China and Sichuan; Mongolia, Russia. Korea and Japan **Habitat:** Forest openings, moist lowland meadows, riverbanks and roadsides

#### 吉林披碱草

## Elymus nakaii (Kitag.) S. L. Chen

(吉林鹅观草 Roegneria nakaii Kitag.)

禾本科

Gramineae

【特征】多年生草本,高60~100cm; 秆疏丛生,直立或基部滕曲; 叶片扁平,上面 疏被柔毛; 穗状花序直立, 穗轴每节具小穗1枚; 小穗含5~6小花; 颖披针 形,先端渐尖或具小尖头; 外稃披针形,被微小硬毛,芒长11~40mm; 基盘 两侧具短硬毛。花期6~7月。

【分布】东北、华北。

【生境】山地林缘草甸或河谷草甸。

【用途】饲用。

#### Nakai wildrye

Grass family

Perennial  $60 \sim 100$  cm tall; culms loosely cespitose, erect or geniculate at base; leaf blades flat, loosely pubescent above; spikes erect, with 1 spikelet per node; spikelets with  $5 \sim 6$  florets; glumes lanceolate, apex acuminate or mucronulate; lemmas lanceolate, hirsutulous, awn  $11 \sim 40$  mm long; callus laterally hispidulous. Flowering June to July.

Distribution: NE and N China

Habitat: Meadows along mountain forest edges and in river valleys







## 垂穗披碱草

## Elymus nutans Griseb.

禾本科

Gramineae

【特征】多年生草本,高50~70cm; 秆疏丛生,直立或基部膝曲; 叶片扁平或内卷; 穗状花序下垂, 穗轴每节具小穗2枚; 小穗略偏于穗轴一侧,含3~4小花; 颗矩圆形, 脉粗糙, 先端渐尖或具短芒; 外稃矩圆状披针形,被微毛,芒长10~20mm,反曲。花期6~8月。

【分布】华北、西北,四川、西藏;蒙古、西伯利亚、中亚、喜玛拉雅。

【生境】山地草甸、河谷草甸、海拔1 200~4 500m。

【用途】饲用。

#### Nodding wildrye

Grass family

Perennial  $50\sim70$  cm tall; culms loosely cespitose, erect or geniculate at base; leaf blades flat or involute; spikes nodding, with 2 spikelets per node; spikelets slightly secund, with  $3\sim4$  florets; glumes oblong, veins scabrous, apex acuminate or short-awned; lemmas oblong-lanceolate, puberulent, awn  $10\sim20$  mm long, extrorse. Flowering June to August.

**Distribution:** N and NW China, Sichuan and Tibet; Mongolia, Siberia, Central Asia and Himalayas

Habitat: Montane-meadow and river valley meadows at 1 200~4 500 m

## 老芒麦

### Elymus sibiricus L.

禾本科

Gramineae

【特征】多年生草本,高50~70cm;秆疏丛生,直立或基部膝曲;叶片扁平;穗状花序疏松,下垂;穗轴每节具小穗2枚;小憩含3~5小花;颖披针形,脉粗糙,先端尖或具短芒;外稃披针形,粗糙或被微毛,先端芒长8~18mm,反曲。花期6~8月。

【分布】东北至西北,四川、西藏;蒙古、俄罗斯、朝鲜、日本。

【生境】草甸、林缘、沟谷、河边、路边,海拔1200~3500m。

【用途】饲用。

#### Siberian wildrye

Grass family

Perennial  $50\sim70$  cm tall; culms loosely cespitose, erect or geniculate at base; leaf blades flat; spikes loose and nodding, with 2 spikelets per node; spikelets with  $3\sim5$  florets; glumes lanceolate, veins scabrous apex acuminate or short-awned; lemmas lanceolate, scabrous or puberulent, awn  $8\sim18$  mm long, extrorse. Flowering June to August.

**Distribution:** NE to NW China, Sichuan and Tibet; Mongolia, Russia, Korea and Japan **Habitat:** Meadows, forest edges, ravines, riverbanks and roadsides at 1 200~3 500 m









### 肃草

## Elymus strictus (Keng) S. L. Chen

(Roegneria stricta Keng)

禾本科

Gramineae

【特征】多年生草本,高15~60cm;秆疏丛生,直立或基部膝曲;叶片质硬,内卷; 穗状花序直立;穗轴每节具小穗1枚;小穗含3~5小花;颖矩圆状披针形;外释披针形,无毛或被微毛,芒长7~18mm,多少反曲。花期7~8月。

【分布】内蒙古、山西、宁夏、甘肃、青海、四川、西藏。

【生境】山坡、丘陵、沟谷。

【用途】饲用。

#### Upright wildrye

Grass family

Perennial  $15\sim60$  cm tall; culms loosely cespitose, erect or geniculate at base; leaf blades stiff, involute; spikes erect, with 1 spikelet per node; spikelets with  $3\sim5$  florets; glumes oblong-lanceolate; lemmas lanceolate, glabrous or puberulent, awn  $7\sim18$  mm long, somewhat extrorse. Flowering July to August.

Distribution: Inner Mongolia, Shanxi, Ningxia, Gansu, Qinghai, Sichuan and Tibet

Habitat: Slopes, hills and ravines

### 偃麦草

### Elytrigia repens (L.) Desv. ex Nevski

禾本科

Gramineae

【特征】多年生草本,高40~80cm; 具根茎; 秆直立或基部膝曲; 叶片扁平; 穗状花序直立,每节小穗单生,穗轴节间长6~15mm; 小穗含3~10小花; 颖披针形,边缘宽膜质,先端具短尖头或短芒; 外稃长椭圆形或披针形,先端具短尖头或短芒。花期6~8月。

【分布】东北、西北,西藏、四川; 欧亚大陆温带地区。

【生境】林缘、草甸、田边、路旁。

【用途】饲用;水土保持。

#### Quackgrass

Grass family

Perennial  $40\sim80$  cm tall; rhizomatous; culms erect or geniculate at base; leaf blades flat; spikes erect, with 1 spikelet per node, rachis internodes  $6\sim15$  mm long; spikelets with  $3\sim10$  florets; glumes lanceolate, widely membranous at edges, pointed or short-awned at apex; lemmas long-elliptic or lanceolate, pointed or short-awned at apex. Flowering June to August.

Distribution: NE and NW China, Tibet and Sichuan; temperate regions in Eurasia

Habitat: Forest edges. meadows, field sides and roadsides

Use: Forage; soil conservation









# 冠芒草

## Enneapogon borealis (Griseb.) Honda

禾本科

Gramineae

【特征】一年生草本,高5~25cm; 秆密丛生,基部滕曲;叶片内卷; 圆锥花序紧缩,圆柱状,铅灰色;小穗含2~3小花; 颖披针形,边缘膜质;外稃被柔毛,顶端具9条羽状芒,芒长2~4mm。花期7~8月。

【分布】东北至西北;蒙古、中亚、西伯利亚、印度、非洲。

【生境】荒漠或草原带的沙质、砾质、石质生境。

【用途】饲用。

#### Northern pappusgrass

Grass family

Annual  $5\sim25$  cm tall; culms densely cespitose, geniculate at base; leaf blades involute; panicle contracted, terete, leaden-grey; spikelets with  $2\sim3$  florets; glumes lanceolate, membranous at margins; lemmas pubescent, with 9 pinnate awns at apex, awns  $2\sim4$  mm long. Flowering July to August.

Distribution: NE to NW China: Mongolia, Central Asia, Siberia, India and Africa

Habitat: Sandy, gravelly and stony sites in desert and steppe zones

## 布顿大麦草

### Hordeum bogdanii Wilensky

**无**本科

Gramineae

【特征】多年生草本,高40~80cm;具根茎;秆疏丛生,直立或基部膝曲;叶片扁平;穗状花序直立或微弯,穗轴每节具1三联小穗;小穗含1小花;颖针状;外释披针形,芒长5~7mm。花期6~7月。

【分布】甘肃、青海、新疆;蒙古、中亚、西伯利亚。

【生境】平原绿洲中的盐碱洼地。

【用途】饲用; 盐碱地改良。

#### Bogdan wild barley

Grass family

Perennial  $40\sim80$  cm tall; rhizomatous; culms loosely cespitose, erect or geniculate at base; leaf blades flat; spikes erect or slightly nodding, with spikelet in groups of 3 per node; spikelets with 1 floret; glumes acerose; lemmas lanceolate, awn  $5\sim7$  mm long. Flowering June to July.

Distribution: Gansu, Qinghai and Xinjiang; Mongolia, Central Asia and Siberia

**Habitat:** Saline-alkaline swales in plain oasis Use: Forage; improving saline-alkaline soils









## 短芒大麦草

## Hordeum brevisubulatum (Trin.) Link

禾本科

Gramineae

【特征】多年生草本,高25~90cm;具根茎;秆疏丛生,直立或基部膝曲;叶片扁平;穗状花序直立或微弯,穗轴每节具1三联小穗;小穗含1小花;颖针状;外释披针形,无毛,芒长1~2mm。花期6~7月。

【分布】东北、华北,新疆;蒙古、俄罗斯、中亚。

【生境】海拔500~4 500m的低湿、盐化草甸。

【用途】饲用; 盐碱地改良。

#### Shortawn barley

Grass family

Perennials  $25\sim90$  cm tall: rhizomatous; culms loosely cespitose, erect or geniculate at base; leaf blades flat; spikes erect or slightly nodding, with spikelet in groups of 3 per node; spikelets with 1 floret; glumes acerose; lemmas lanceolate, glabrous, awn  $1\sim2$  mm long. Flowering June to July.

Distribution: NE and N China, Xinjiang; Mongolia, Russia and Central Asia

Habitat: Moist lowland and saline meadows at 500~4 500 m

Use: Forage; improving saline-alkaline soils

### 糙毛以礼草

## Kengyilia hirsuta (Keng) J. L. Yang et al.

(糙毛鹅观草 Roegneria hirsuta Keng)

禾本科

Gramineae

【特征】多年生草本,高20~70cm; 秆丛生,直立或基部膝曲,紧接花序下被柔毛;叶片质硬,扁平或边缘内卷; 穗状花序直立,穗轴每节具小穗 | 枚,覆瓦状排列; 小穗含3~7小花;颖卵状矩圆形,光滑或粗糙;外稃被黄褐色长硬毛, 芒长2~6mm; 花药铅绿色。花期7~8月。

【分布】甘肃、青海。

【生境】海拔2 300~4 500m的山坡草地、低湿草甸。

【用途】饲用。

#### Hairy wildrye

Grass family

Perennial  $20 \sim 70$  cm tall; culms cespitose, erect or geniculate at base, pubescent below spike; leaf blades stiff, flat or involute at margins; spikes erect, with 1 spikelet per node; spikelets imbricate-arranged, with  $3 \sim 7$  florets; glumes ovate-oblong, glabrous or scabrous; lemmas yellow-brown hirsute, awn  $2 \sim 6$  mm long; anthers leaden-green. Flowering July to August.

Distribution: Gansu and Qinghai

Habitat: Sloping grassland and moist lowland meadows at 2 300~4 500 m

Use: Forage

拍摄人: 拾 涛 Photo by Shi Tao





### 梭罗以礼草

## Kengyilia thoroldiana (Oliv.) J. L. Yang et al.

(梭罗草 Roegneria thoroldiana (Oliv.) Keng)

禾本科

Gramineae

【特征】多年生草本,高10~30cm; 秆丛生,基部膝曲;叶片内卷; 穗状花序卵状或 椭圆状; 穗轴每节具小穗1枚; 小穗含4~6小花; 颖及外稃密被柔毛; 外稃 芒长1~7mm; 花药黑色。花期8~9月。

【分布】甘肃、青海、西藏。

【生境】海拔4500~5100m的亚高山或高山草地、碎石坡。

【用途】饲用。

#### Thorold wildrye

Grass family

Perennial  $10\sim30$  cm tall; culms tufted, geniculate at base; leaf blades involute; spikes ovate or elliptic, with 1 spikelet per node; spikelets with  $4\sim6$  florets; glumes and lemmas densely pubescent; lemma with awn  $1\sim7$  mm long; anthers black. Flowering August to September.

Distribution: Gansu, Qinghai and Tibet

Habitat: Grassland and clastic rock slopes in subalpine to alpine belts at 4 500 ∼5 100 m

### 菭草

#### Koeleria macrantha (Ledeb.) Schult.

(Koeleria cristata (L.) Pers.)

禾本科

Gramineae

【特征】多年生草本,高20~50cm; 秆密丛生,直立,花序以下密生柔毛; 叶片内卷或扁平; 圆锥花序紧缩呈穗状; 小穗含2~5小花; 颖边缘膜质,有光泽; 外稃披针形,边缘宽膜质,先端无芒,稀具小尖头。花期6~7月。

【分布】除华东以外,全国大部分地区;北半球温带地区。

【生境】草原。

【用途】饲用。

#### Prairie junegrass

Grass family

Perennial  $20\sim50$  cm tall; culms densely cespitose, erect, densely pubescent below inflorescence; leaf blades involute or flat; panicle contracted to spicate; spikelets with  $2\sim5$  florets; glumes membranous at margins, lustrous; lemmas lanceolate, with wide-membranous margins, apex awnless or rarely pointed. Flowering June to July.

Distribution: Most regions except E China; temperate regions in the Northern Hemisphere

Habitat: Steppe Use: Forage









## 窄颖赖草

### Leymus angustus (Trin.) Pilger

禾本科

Gramineae

【特征】多年生草本,高60~100cm; 具根茎; 秆单生或丛生,直立; 叶片质硬,内 卷; 穗状花序直立,穗轴每节具小穗2~3枚,小穗含2~3小花; 颖条状披 针形;外稃披针形,密被柔毛,先端渐尖或具短芒。花期6~7月。

【分布】甘肃、青海、新疆;蒙古、中亚、西伯利亚、欧洲。

【生境】草原或荒漠草原带的山坡、沟谷、低地。

【用途】饲用。

#### Altai wildrye

Grass family

Perennial  $60\sim100$  cm tall; rhizomatous; culms single or tufted, erect; leaf blades rigid, involute; spikes erect, with  $2\sim3$  spikelets per node; spikelets with  $2\sim3$  florets; glumes linear-lanceolate; lemmas lanceolate, densely pubescent, apex acuminate or short-awned. Flowering June to July.

Distribution: Gansu, Qinghai and Xinjiang; Mongolia, Central Asia, Siberia and Europe

Habitat: Slopes, ravines and lowlands in steppe to desert-steppe areas

### 羊草

#### Leymus chinensis (Trin.) Tzvel.

禾本科

Gramineae

【特征】多年生草本,高40~90cm;具根茎;秆单生或疏丛生,直立;叶片质硬, 扁平或内卷,灰绿色或绿色;穗状花序直立,穗轴每节小穗1~2枚;小穗含 4~10小花;颖锥形,质硬,边缘具微细纤毛;外释披针形,无毛,边缘狭膜 质,先端渐尖或具短尖头。花期6~8月。

【分布】东北至西北;蒙古、朝鲜、俄罗斯、中亚。

【生境】草原带的平原、丘陵、山地,以及盐渍低地、覆沙地、沟谷、田间、路旁。 温带草原建群种。

【用途】饲用。

#### Chinese wildrye

Grass family

Perennial  $40\sim90$  cm tall; rhizomatous; culms single or laxly tufted, erect; leaf blades rigid, flat or involute, grey-green or green; spikes erect with spikelets  $1\sim2$  per node; spikelets with  $4\sim10$  florets; glumes awl-shaped, rigid, with ciliolate margins; lemmas lanceolate, glabrous, edges narrowly membranous, apex acuminate or mucronulate. Flowering June to August.

Distribution: NE to NW China; Mongolia, Korea, Russia and Central Asia

Habitat: Plains, hills and mountains in steppe zone; as well as saline lowlands, sandy grounds.

ravines, fields and roadsides. A dominant species in temperate-steppe











# 宽穗赖草

Leymus ovatus (Trin.) Tzvel.

禾本科

Gramineae

【特征】多年生草本,高30~60cm;具根茎;秆单生,直立;叶片扁平或内卷;穗状花序直立,椭圆形,穗轴每节具小憩4枚,小憩含5~9小花;颖条状披针形,先端芒状;外稃披针形,上部疏被短刺毛,边缘具纤毛,先端渐尖或具短芒。花期6~7月。

【分布】新疆、青海、内蒙古;蒙古、中亚、西伯利亚。

【生境】海拔1 200~4 200m的草原或河谷草甸。

【用途】饲用。

#### Thickspike wildrye

Grass family

Perennial  $30\sim60$  cm tall; rhizomatous; culms single, erect; leaf blades flat or involute; spikes erect, elliptic, with spikelets 4 per node; spikelets with  $5\sim9$  florets; glumes linear-lanceolate, apex aristiform; lemmas lanceolate, loosely hirsutulous above, ciliate at margins, acuminate or short-awned at apex. Flowering June to July.

Distribution: Xinjiang, Qinghai and Inner Mongolia; Mongolia, Central Asia and Siberia

Habitat: Steppe and river valley meadows at 1 200~4 200 m

## 毛穂赖草

#### Leymus paboanus (Claus) Pilger

禾本科

Gramineae

【特征】多年生草本,高40~90cm; 具根茎; 秆单生,直立; 叶片扁平或内卷; 穗状花序直立,穗轴每节具小憩2~3枚,小憩含3~5小花; 颖近锥形,微被小刺毛; 外稃披针形,密被梁毛,先端渐尖或具小尖头。花期6~7月。

【分布】新疆、青海、甘肃;蒙古、中亚、西伯利亚、欧洲。

【生境】荒漠区盐化草甸。

【用途】饲用; 盐碱地改良。

#### Pubescent wildrye

Grass family

Perennial  $40\sim90$  cm tall; rhizomatous; culms single, erect; leaf blades flat or involute; spikes erect, with  $2\sim3$  spikelets per node; spikelets with  $3\sim5$  florets; glumes subulate, hirsutulous; lemmas lanceolate, densely pubescent, apex acuminate or mucronulate. Flowering June to July.

Distribution: Xinjiang, Qinghai and Gansu; Mongolia, Central Asia, Siberia and Europe

**Habitat:** Saline meadows in desert areas **Use:** Forage, improving saline-alkaline soils









## 大赖草

## Leymus racemosus (Lam.) Tzvel.

禾本科

Gramineae

【特征】多年生草本,高50~100cm;具根茎;秆粗壮,直立;叶片质硬,扁平或内卷;穗状花序直立,长达30cm,穗轴每节具小穗4~7枚,小穗含3~6小花;颖条状披针形,平滑;外稃披针形,被细毛。花期6~7月。

【分布】新疆通古特沙地;蒙古、哈萨克斯坦。

【生境】荒漠区沙地或沙丘。

【用途】固沙; 饲用。

#### Mammoth wildrye

Grass family

Perennial  $50\sim100$  cm tall; rhizomatous; culms stout, erect; leaf blades rigid, flat or involute; spikes erect, to 30 cm long, with  $4\sim7$  spikelets per node; spikelets with  $3\sim6$  florets; glumes linear-lanceolate, smooth; lemmas lanceolate, thin-hairy. Flowering June to July.

Distribution: Tonggute Sands in Xinjiang; Mongolia and Kazakhstan

Habitat: Sands and dunes in desert areas

Use: Fixing sand dunes: forage

### 赖草

#### Leymus secalinus (Georgi) Tzvel.

禾本科

Gramineae

【特征】多年生草本,高40~100cm;具根茎;秆单生或丛生,直立;叶片扁平或内 卷;穗状花序直立,穗轴被柔毛,每节具小穗2~4枚;小穗含4~10小花;颖 条状披针形,先端芒状;外稃披针形,被柔毛或上部无毛,边缘膜质,先端 渐尖或具短芒。花期6~8月。

【分布】东北至西北,西藏;蒙古、中亚、朝鲜、日本、西伯利亚。

【生境】草原至荒漠带的盐化草甸、覆沙地、沟谷、田间、路旁。海拔800~4 200 m。

【用途】饲用。

#### Wild rye

Grass family

Perennial  $40\sim100$  cm tall: rhizomatous; culms single or tufted, erect; leaf blades flat or involute; spikes erect, rachis pubescent, with  $2\sim4$  spikelets per node; spikelets with  $4\sim10$  florets; glumes linear-lanceolate, apex aristiform; lemmas lanceolate, pubescent or glabrous above, margins membranous, apex acuminate or short-awned. Flowering June to August.

Distribution: NE to NW China. Tibet: Mongolia, Central Asia. Korea, Japan and Siberia

Habitat: Saline meadows, sandy grounds, ravines, fields and roadsides in steppe to deserts areas at 800~4 200 m









## 白草

### Pennisetum flaccidum Griseb.

禾本科

Gramineae

【特征】多年生草本,高20~90cm; 具根茎; 秆丛生,直立; 叶片扁平; 圆锥花序紧密呈圆柱形,直或稍弯; 小穗单生或2~3枚簇生,其下有刚毛,刚毛灰绿色或紫色,长8~15mm。花期7~8月。

【分布】东北至西北及西南;蒙古、中亚、喜玛拉雅。

【生境】草原和荒漠地区的沙丘、沙地。

【用途】饲用; 药用。

Flaccid grass (Himalayan fountain grass)

Grass family

Perennial  $20\sim90$  cm tall; rhizomatous: culms tufted, erect; leaf blades flat; panicles dense to terete, erect or slightly curved; spikelets single or  $2\sim3$  tufted, with many grey-green or purple bristles in  $8\sim15$  mm long at base. Flowering July to August.

Distribution: NE to NW, and SW China; Mongolia, Central Asia and Himalayas

Habitat: Dunes and sands in steppe and desert areas

Use: Forage; medicine

## 假梯牧草

## Phleum phleoides (L.) H. Karst.

禾本科

Gramineae

【特征】多年生草本,高30~80cm; 具短根茎; 秆疏丛生,直立; 叶片扁平或内卷; 圆锥花序紧密呈圆柱状; 小穗含1小花; 颖边缘膜质,脊上粗糙,先端具约1mm的短芒; 外稃先端具芒尖,脊上被微毛。花期7~8月。

【分布】内蒙古、新疆; 欧亚寒温带地区。

【生境】草地、灌丛、林缘。

【用途】饲用。

#### Boehmer's cat's-tail

Grass family

Perennial  $30 \sim 80$  cm tall; shortly rhizomatous; culms loosely cespitose, erect; leaf blades flat or involute; panicles dense to terete; spikelets with 1 floret; glumes membranous at margins, scabrous along keel, with awn 1 mm at apex; lemmas aristulate at apex, puberulent along keel. Flowering July to August.

Distribution: Inner Mongolia and Xinjiang; cold-temperate regions in Eurasia

Habitat: Grassland, scrubland and forest edges









## 渐狭早熟禾

#### Poa attenuata Trin.

禾本科

Gramineae

【特征】多年生草本,高10~60cm; 秆密丛生,直立或斜升,近花序处稍粗糙;叶片扁下、内卷或对折; 圆锥花序紧缩,分枝单生或孪生; 小穗含2~4小花; 颖狭披针形; 外稃矩圆状披针形,脊下部1/2与边脉下部1/4被柔毛;基盘被绵毛。花期5~6月。

【分布】东北、华北,新疆、青海、西藏;蒙古、西伯利亚、中亚、巴基斯坦、印度。

【生境】海拔800~5 500m的草原或草甸。

【用途】饲用。

#### Delicate bluegrass

Grass family

Perennial  $10\sim60$  cm tall; culms densely cespitose, erect or ascending, slightly scabrous below inflorescence; leaf blades flat, involute or folded; panicles contracted, with single or paired branches; spikelets with  $2\sim4$  florets; glumes narrowly lanceolate; lemmas oblong-lanceolate, pubescent in lower 1/2 of keel and 1/4 of marginal veins; callus lanate. Flowering May to June.

Distribution: NE and N China, Xinjiang, Qinghai and Tibet; Mongolia, Siberia, Central Asia, Pakistan and India

**Habitat:** Steppe and meadows at 800 ~ 5 500 m

## 荒漠胎生早熟禾

#### Poa bactriana Roshev.

禾本科

Gramineae

【特征】多年生草本,高30~50cm; 秆丛生,直立; 叶片扁平或对折,粗糙,或被少量柔毛; 圆锥花序每节分枝2~4; 小穗含2~6小花; 小花通常变为胎生小鳞茎; 颖与外稃披针形,中脉先端有时被短刺毛; 基盘无毛。花期4~5月。

【分布】新翮; 巴基斯坦、阿富汗、中亚、土耳其。

【生境】荒漠草原带的山坡、沟谷、绿洲;海拔350~2 700m。

【用途】饲用。

#### Desert bluegrass

Grass family

Perennial  $30\sim50$  cm tall; culms tufted, erect; leaf blades flat or folded, scabrous or few pubescent; panicles with  $2\sim4$  branches per node; spikelets with  $2\sim6$  florets; florets usually becoming viviparous bulbs; glumes and lemmas lanceolate, sometimes hispidulous at apex of midvein; callus glabrous. Flowering April to May.

Distribution: Xinjiang; Pakistan, Afghanistan, Central Asia and Turkey

Habitat: Mountain slopes, ravines and oasis in descrt-steppe areas at 350~2 700 m











照片提供人: 孙建华 Photo courtesy of Sun Jianhua

## 草地早熟禾

### Poa pratensis L.

禾本科

Gramineae

【特征】多年生草本,高30~80cm; 具长根茎; 秆直立,光滑; 叶片扁平或稍内卷; 圆锥花序开展,先端稍下垂,每节分枝3~5; 小憩含2~5小花; 颖卵状披针形; 外稃披针形,脊及边脉被柔毛; 基盘密被绵毛。花期6~7月。

【分布】东北,黄河流域,四川、江西;北半球温带广布。

【生境】草甸、林缘或林下。

【用途】饲用; 坪用。世界温带地区广泛栽培。

#### Kentucky bluegrass

Grass family

Perennial  $30\sim80$  cm tall; long-rhizomatous; culms erect, smooth; leaf blades flat or slightly involute; panicles open, slightly drooping at apex, with  $3\sim5$  branches per node; spikelets with  $2\sim5$  florets; glumes ovate-lanceolate; lemmas lanceolate, pubescent on keel and marginal veins; callus densely lanate. Flowering June to July.

Distribution: NE China, regions along Yellow River, and Sichuan, Jiangxi; widely spreading in northern temperate zone

Habitat: Meadows, forest edges and forests

Use: Forage; lawn. Widely cultivated in temperate regions of the world

### 散穗早熟禾

## Poa subfastigiata Trin.

禾本科

Gramineae

【特征】多年生草本,高30~60cm;具根茎;秆直立,粗壮;叶片扁平;圆锥花序大而疏展,金字塔形,主穗轴每节分枝2~3,分枝再行分枝;小穗含3~5小花;颖及外稃宽披针形。花期6~7月。

【分布】东北,内蒙古;蒙古、俄罗斯(西伯利亚及远东)。

【生境】低湿草甸或河漫滩草甸。

【用途】饲用。

#### Meadow bluegrass

Grass family

Perennial  $30\sim60$  cm tall; rhizomatous; culms erect, stout; leaf blades flat; panicles large, loose and spreading to pyramidal, with  $2\sim3$  branches per rachis node, branches further branched: spikelets with  $3\sim5$  florets; glumes and lemmas broadly lanceolate. Flowering June to July.

Distribution: NE China and Inner Mongolia; Mongolia and Russia (Siberia and Far East)

Habitat: Meadows in moist lowlands and flood lands





### 沙鞭

#### Psammochloa villosa (Trin.) Bor.

#### 禾本科

Gramineae

【特征】多年生草本,高70~150cm;具横走根茎;秆直立,光滑;叶片质地较坚韧,扁平或边缘内卷;圆锥花序直立,分枝斜升;小憩含1小花;颖疏生微毛;外稃密生柔毛,先端具芒。花期5~8月。

【分布】内蒙古、宁夏、甘肃、青海;蒙古。

【生境】草原至荒漠带的流动或半固定沙丘。沙地先锋植物。

【用途】饲用; 固沙; 造纸原料。

#### Mongolian sandwhip grass

Grass family

Perennial  $70\sim150 \mathrm{cm}$  tall; rhizomes transverse-spreading; culms erect, smooth; leaf blades stiff, flat or involute at margins; panicles erect, with ascending branches; spikelets with 1 floret; glumes loosely hirsutulous; lemmas densely pubescent, awned at apex. Flowering May to August.

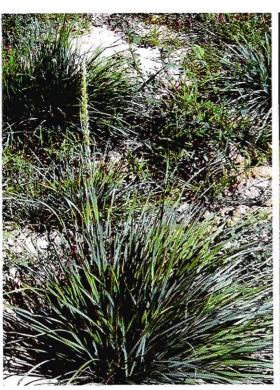
Distribution: Inner Mongolia, Ningxia, Gansu and Qinghai; Mongolia

Habitat: Moving and semi-fixed dunes in steppe to desert zones. Pioneer in sands

Use: Forage; fixing sand dunes; material for paper making









# 新麦草

## Psathyrostachys juncea (Fisch.) Nevski

禾本科

Gramineae

【特征】多年生草本,高40~80cm; 秆密丛,直立; 叶片扁平或边缘内卷; 穗状化序直立, 穗轴每节具小穗2~3枚; 小穗含2~3小花; 颖锥形,被硬毛; 外稃披针形,被硬毛或纤毛,先端渐尖或具2~3mm长的短芒。花期5~8月。

【分布】新疆;蒙古、中亚、西伯利亚、欧洲。

【生境】山地草原。

【用途】饲用。

#### Russian wildrye

Grass family

Perennial  $40\sim80$  cm tall: culms densely cespitose, erect; leaf blades flat or involute at margins; spikes erect, with  $2\sim3$  spikelets per node; spikelets with  $2\sim3$  florets; glumes subulate, hirsute; lemmas lanceolate, hirsute or ciliate, apex acuminate or with an awn  $2\sim3$  mm long. Flowering May to August.

Distribution: Xinjiang; Mongolia, Central Asia, Siberia and Europe

Habitat: Montane-steppe

## 大油芒

## Spodiopogon sibiricus Trin.

禾本科

Gramineae

【特征】多年生草本,高60~150cm;具根茎;秆疏丛生,直立;叶片扁平;圆锥花序狭窄;小穗孪生,含2小花;颖被长柔毛;外稃透明膜质,先端深2裂,芒从齿间伸出。花期7~8月。

【分布】东北至西北及华东;蒙古、俄罗斯、朝鲜、日本。

【生境】山地灌丛、草甸。

【用途】饲用。

#### Frostgrass

Grass family

Perennial 60~150 cm tall; rhizomatous; culms laxly tufted, erect; leaf blades flat; panicle narrow; spikelets paired, with 2 florets; glumes villous; lemmas hyaline-membranous, with bifid apex, awn exserted between teeth. Flowering July to August.

Distribution: NE to NW and E China; Mongolia, Russia, Korea and Japan

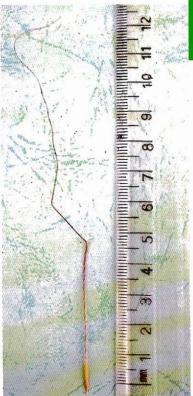
Habitat: Montane-scrubs and meadows











## 贝加尔针茅

### Stipa baicalensis Roshev.

禾本科

Gramineae

【特征】多年生草本,高50~80cm;秆密丛生,直立;叶片内卷;圆锥花序每节具2~4分枝;外稃顶端关节处被一圈短毛;芒二回膝曲,无毛,第一芒柱长3~4cm,第二芒柱长1.5~2cm,芒针长8~13cm。花期7~8月。

【分布】东北、华北;蒙古、俄罗斯(西伯利亚、远东)。

【生境】平原、山地、丘陵, 草原、草甸。温带草原建群种。

【用途】饲用。

#### Baikal needlegrass

Grass family

Perennial  $50\sim80$  cm tall; culms densely cespitose, erect; leaf blades involute; panicles with  $2\sim4$  branches per node; lemmas with a ring of short hairs at apex articulation; awn 2-geniculate, glabrous throughout, awn with column  $3\sim4$  cm to first bend,  $1.5\sim2$  cm to second bend, bristle  $8\sim13$  cm long. Flowering July to August.

Distribution: NE and N China; Mongolia and Russia (Siberia and Far East)

Habitat: Plains, mountains and hills, grassland and meadow. A dominant species in temperate steppe

## 短花针茅

### Stipa breviflora Griseb.

禾本科

Gramineae

【特征】多年生草本,高30~60cm; 秆密丛生,直立,基部膝曲;叶片内卷; 圆锥花序 每节具2~4分枝,有时具二回分枝;外稃顶端关节被一圈短毛;芒二回膝曲, 通体被毛,毛长约1mm,芒针长3~6cm。花期6~7月。

【分布】华北、西北,四川、西藏;蒙古、中亚、尼泊尔。

【生境】平原、丘陵、山地、沟谷。荒漠草原建群种。

【用途】饲用。

#### Short-panicled needlegrass

Grass family

Perennial  $30\sim60$  cm tall; culms densely cespitose, erect, geniculate at base; leaf blades involute; panicles with  $2\sim4$  branches per node, sometimes twice branched; lemmas with a ring of short hairs at apex articulation; awn 2-geniculate, hairy throughout, hairs 1 mm, bristle  $3\sim6$  cm long. Flowering June to July.

**Distribution:** N and NW China, Sichuan and Tibet; Mongolia, Central Asia and Nepal **Habitat:** Plains, hills, mountains and ravines. A dominant species in desert-steppe

Use: Forage

左图拍摄人:赵利清 Photo by Zhao Liqing







拍摄人: 赵利清 Photo by Zhao Liging

# 沙生针茅

## Stipa glareosa P. Smirn.

禾本科

Gramineae

【特征】多年生草本,高10~50cm; 秆丛生, 斜升或直立, 基部膝曲; 叶片内卷; 圆锥花序基部被顶生叶鞘包裹, 分枝单生; 芒一回膝曲, 通体被毛, 毛长2~4mm, 芒柱扭转, 长约1.5cm, 芒针常弧形弯曲, 长4~7cm。花期6~7月。

【分布】华北、西北,西藏;蒙古、西伯利亚、中亚。

【生境】海拔1 000~5 000m的沙质或砂砾质荒漠草原。沙质荒漠草原建群种。

【用途】饲用。

#### Sand needlegrass

Grass (amily

Perennial  $10\sim50$  cm tall; culms cespitose, ascending or erect, geniculate at base; leaf blades involute; panicles basally covered in a terminal sheath, with single branch; awn 1-geniculate, hairy throughout, hairs  $2\sim4$  mm long; column twisted. 1.5 cm long, bristle usually arcuate-curved,  $4\sim7$  cm long. Flowering June to July.

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

Habitat: Sandy and sandy-gravelly desert-steppe at 1 000~5 000 m. A dominant species in

sandy desert-steppe

## 戈壁针茅

## Stipa gobica Roshev.

禾本科

Gramineae

【特征】多年生草本,高10~50cm; 秆密丛生,直立,基部膝曲; 叶片内卷; 圆锥花 序每节分枝单生或孪生; 外稃顶端关节处光滑,芒一回膝曲,芒柱光滑,芒针急折弯曲,长4~7cm,被毛,毛长3~5mm。花期6~7月。

【分布】华北、西北;蒙古。

【生境】砾石质荒漠草原或荒漠。荒漠草原建群种。

【用途】饲用。

#### Gobi needlegrass

Grass family

Perennial  $10\sim50$  cm tall; culms densely cespitose, erect, geniculate at base; leaf blades involute; panicles with single or paired branches per node; lemmas glabrous at apex articulation; awn 1-geniculate, column smooth, bristle folding-bent,  $4\sim7$  cm long with hairs in  $3\sim5$  mm long. Flowering June to July.

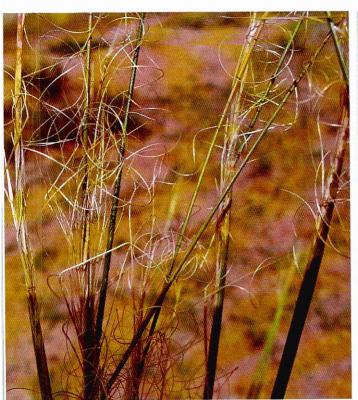
Distribution: N and NW China; Mongolia

Habitat: Gravelly desert-steppe to desert. A dominant species in desert-steppe

Use: Forage

拍摄人: 赵利清 Photo by Zhao Liqing







## 大针茅

## Stipa grandis P. Smirn.

禾本科

Gramineae

【特征】多年生草本,高50~100cm; 秆密丛生,直立; 叶片内卷; 圆锥花序每节具2~4分枝; 外稃顶端关节处被一圈短毛,芒二回膝曲,光滑或粗糙,第一芒柱长6~10cm,第二芒柱长2~2.5cm,芒针长10~18cm。花期6~7月。

【分布】东北、华北, 甘肃、青海;蒙古、俄罗斯。

【生境】高原、平原、丘陵。温带草原建群种。

【用途】饲用。

### Great needlegrass

Grass family

Perennial  $50\sim100$  cm tall; culms densely cespitose, erect; leaf blades involute; panicles with  $2\sim4$  branches per node; lemmas with a ring of short hairs at apex articulation: awn 2-geniculate, glabrous or scabrous throughout, awn with column  $6\sim10$  cm to first bend,  $2\sim2.5$  cm to second bend, bristle  $10\sim18$  cm long. Flowering June to July.

**Distribution:** NE and N China, Gansu and Qinghai; Mongolia and Russia **Habitat:** Plateau, plains and hills. A dominant species in temperate steppe

## 长羽针茅

## Stipa kirghisorum P. Smirn.

禾本科

Gramineae

【特征】多年生草本,高35~60cm; 积密丛生,直立; 叶片内卷; 圆锥花序狭窄; 外稃被柔毛,芒二回膝曲,芒柱光滑,芒针长12~18cm,被羽状毛,毛长4~5mm。花期5~7月。

【分布】新疆;蒙古、中亚。

【生境】山地草原的石质山坡、冲积扇。

【用途】饲用。

#### Longfeather needlegrass

Grass family

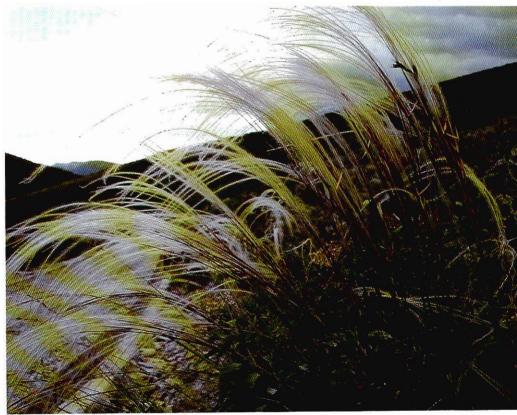
Perennial 35 $\sim$ 60 cm tall; culms densely cespitose, erect; leaf blades involute; panicles narrow; lemmas pubescent; awn 2-geniculate, column smooth, bristle 12 $\sim$ 18 cm long, with plumose hairs 4 $\sim$ 5 mm long. Flowering May to July.

Distribution: Xinjiang; Mongolia and Central Asia

Habitat: Rocky slopes and alluvial fans in montane-steppe

Use: Forage

拍摄人: 张洪江 Photo by Zhang Hongjiang





# 石生针茅

### Stipa klemenzii Roshev.

禾本科

Gramineae

拍摄人: 赵利清 Photo by Zhao Liqing

【特征】多年生草本,高10~40cm; 秆密丛生,斜升或直立,基部膝曲;叶片内卷; 圆锥花序被膨大的顶生叶鞘包裹,分枝单生或孪生; 芒一回膝曲,芒柱扭转,光滑,长2~2.5cm,芒针弧形弯曲,长10~15cm,被毛,毛长3~6mm。花期6~7月。

【分布】内蒙古、宁夏;蒙古、西伯利亚。

【生境】草原和荒漠草原带石质山坡和丘顶。砾石质荒漠草原建群种。

【用途】饲用。

#### Rock needlegrass

Grass family

Perennial  $10\sim40$  cm tall; culms densely cespitose, ascending or erect, geniculate at base; leaf blades involute; panicle covered in an inflated terminal sheath, with single or paired branches; awn 1-geniculate, column twisted, glabrous,  $2\sim2.5$  cm long, bristle arcuate-curved,  $10\sim15$  cm long, with hairs  $3\sim6$  nm long. Flowering June to July.

Distribution: Inner Mongolia and Ningxia; Mongolia and Siberia

Habitat: Rocky and gravelly slopes, and hilltops in steppe to desert-steppe regions. A dominant species in gravelly desert-steppe

## 克氏针茅

## Stipa krylovii Roshev.

禾本科

Gramineae

【特征】多年生草本,高30~60cm; 秆密丛生,直立; 叶鞘光滑; 叶片内卷; 圆锥花 序每节具2~4分枝; 外稃顶端关节处被短毛; 芒二回膝曲,光滑,第一芒柱 长1.5~2.5cm,第二芒柱长约1cm,芒针长7~12cm。花期6~7月。

【分布】华北至西北,西藏;蒙古、西伯利亚、中亚。

【生境】平原、高原、山地、丘陵。温带草原建群种。

【用途】饲用。

#### Krylov needlegrass

Grass family

Perennial  $30\sim60$  cm tall; culms densely cespitose, erect; leaf sheaths smooth; leaf blades involute; panicles with  $2\sim4$  branches per node; lemmas with short hairs at apex articulation; awn 2-geniculate, glabrous throughout, awn with column  $1.5\sim2.5$  cm to first bend, about 1 cm to second bend, bristle  $7\sim12$  cm long. Flowering June to July.

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

Habitat: Plains, plateau, mountains and hills. A dominant species in temperate steppe







上图拍摄人: 拾 涛 Photo by Shi Tao

## 紫花针茅

### Stipa purpurea Griseb.

禾本科

Gramineae

【特征】多年生草本,高20~50cm; 秆密丛生,直立; 叶片内 卷; 圆锥花序分枝稀少; 颖深紫色; 外稃顶端关节疏 被短毛,芒二回膝曲,通体被毛,毛长2~3mm,芒针 长5~7cm。花期7~8月。

【分布】西北,西藏、四川;中亚。

【生境】海拔1900~5100m的高原、平原、丘陵。高寒草原建 群种。

【用途】饲用。

#### Purpleflower needlegrass

Grass family

Perennial  $20\sim50$  cm tall; culms densely cespitose, erect; leaf blades involute; panicles rarely branched; glumes dark purple; lemmas loosely short-hairy at apex articulation; awn 2-geniculate, hairy throughout, hairs  $2\sim3$  mm long, bristle  $5\sim7$  cm long. Flowering July to August.

Distribution: NW China, Tibet and Sichuan; Central Asia

Habitat: Plateau, plains and hills at 1 900∼5 100 m. A dominant species in alpine-steppe



### 蒙古锋芒草

## Tragus mongolorum Ohwi

禾本科

Gramineae

【特征】一年生夏雨型小禾草,高5~30cm;秆直立或铺散状;叶片扁平,边缘具刺毛;总状花序紧密呈穗状,具短分枝;小憩含1小花;第一颖微小,膜质,第二颖革质,背部具肋,肋上具钩刺;外稃膜质,扁平。花期7~8月。

【分布】华北,四川;蒙古。

【生境】荒漠草原地区的田野、田边、路旁。

【用途】饲用。

#### Spike burgrass

Grass family

Ephemeral  $5\sim30$  cm tall; culms erect or diffuse: leaf blades flat, with spine-hairy margins; racemes dense to spicate, short-branched; spikelets with 1 floret; lower glume tiny, membranous, upper glume coriaceous with hooked-spiny ribs; lemmas membranous, flat. Flowering July to August.

Distribution: N China and Sichuan; Mongolia

Habitat: Wild fields, field sides and roadsides in desert-steppe areas





## 狐尾蓼

# Polygonum alopecuroides

Turcz. ex Besser

蓼科

Polygonaceae

【特征】多年生草本,高80~100cm;茎直立;叶草质,基生叶和茎下部叶基部楔形,茎生叶不抱茎; 想状花序圆柱形;苞片膜质,锈色,具尾尖;花被白色或粉红色,5深裂;瘦果菱状卵形,具3棱。花期6~7月。

【分布】东北,内蒙古;蒙古、西伯利亚。

【生境】林缘及河谷草甸。

【用途】饲用;根茎药用。

#### Foxtail knotweed

Buckwheat family

Perennial herb 80~100 cm tall; stems erect; leaves herbaceous, basal and lower cauline leaves cuneate at base, cauline leaves unclasping; spike terete; bracts membranous, rubiginous, caudate; white or pinkish perianth 5-parted; achene rhombic-ovoid, 3-angular. Flowering June to July.

Distribution: NE China and Inner Mongolia;

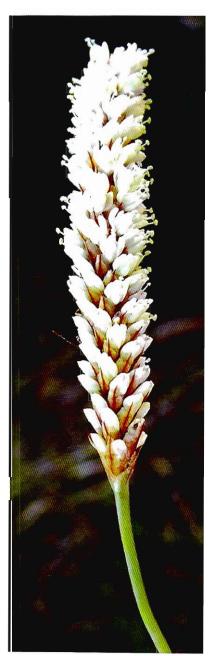
Mongolia and Siberia

Habitat: Meadows along forest edges and in river

valleys

Use: Forage; rhizomes for medicine





## 拳参

## Polygonum bistorta L.

#### 蓼科

#### Polygonaceae

【特征】多年生草本,高20~80cm;根状茎肥厚;茎直立,不分枝;叶近革质,基生叶和茎下部叶基部钝圆或截形,具长柄,上部叶无柄或抱茎;穗状花序圆柱形;花被白色或粉红色,5深裂;瘦果椭圆状,具3棱。花期6~7月。

【分布】东北至西北, 江苏、浙江、湖北; 蒙古、西伯利亚、朝鲜、日本。

【生境】林缘、灌丛及草甸。

【用途】饲用; 根茎药用。

#### Meadow bistort

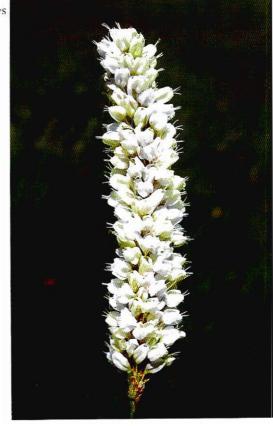
Buckwheat family

Perennial herb 20~80 cm tall; rhizomes thick; stems erect, unbranched; leaves subcoriaceous, basal and lower cauline leaves obtuse or truncate at base, long-petiolate, upper leaves sessile or clasping; spikes terete; white or pinkish perianth 5-parted; achene ellipsoid, 3-angular. Flowering June to July.

Distribution: NE to NW China, Jiangsu, Zhejiang and Hubei; Mongolia, Siberia, Korca and

Japan

**Habitat:** Forest edges, thickets and meadows **Use:** Forage; rhizomes for medicine





## 叉分蓼

#### Polygonum divaricatum L.

蓼科

Polygonaceae

【特征】多年生草本,高50~150cm;茎直立或斜升,多分枝;叶披针形至矩圆状条形;大型圆锥花序顶生,升展;花被白色或淡黄色,5深裂;瘦果具3锐棱。花期6~7月。

【分布】东北、华北;蒙古、西伯利亚、朝鲜。

【生境】草甸、沙地和沙丘。

【用途】饲用。

#### Branched knotweed

Buckwheat family

Perennial herb  $50 \sim 150$  cm tall; stems erect or ascending with numerous branches; leaves lanceolate to oblong-linear; large panicles terminal and spreading; perianth white or pale yellow, 5-parted; achene 3 argute-angular. Flowering June to July.

Distribution: NE and N China; Mongolia, Siberia and

Korea

Habitat: Meadows, sands and dunes





### 草原石头花

## Gypsophila davurica Turcz. ex Fenzl

石竹科

Caryophyllaceae

【特征】多年生草本,高30~70cm;茎丛生,直立或斜升,二歧分枝;叶条状披针形;花疏松排列成聚伞状圆锥花序;花瓣5,白色或淡粉色。花期7~8月。

【分布】东北,内蒙古、河北;蒙古、俄罗斯(西伯利亚、远东)。

【生境】草原带的砾石质坡地、沙地或沙丘。

【用途】饲用;根药用。

#### Dahurian baby's breath

Pink family

Perennial herb  $30\sim70$  cm tall; stems cespitose, erect or ascending, dichotomous-branched; leaves linear-lanceolate; flowers sparse in a thyrse; petals 5, white or pale pink. Flowering July to August.

**Distribution:** NE China, Inner Mongolia and Hebei; Mongolia and Russia (Siberia and Far East)

Habitat: Gravelly slopes, sands and dunes in steppe areas

Use: Forage; roots for medicine





# 荒漠石头花 Gypsophila desertorum (Bunge) Fenzl

石竹科

Caryophyllaceae

【特征】多年生草本,高5~15cm,全株密被腺毛;茎丛生,直立或斜升;叶条状钻形;二歧聚伞花序顶生,具花2~5枚;花梗及花萼密被腺毛;花瓣5,白色带淡紫纹,先端微凹或截形。花期5~7月。

【分布】内蒙古;蒙古、西伯利亚。

【生境】砾质或沙质的荒漠草原。

【用途】饲用。

#### Desert baby's breath

Pink family

Perennial herb  $5\sim15$  cm tall; whole plant glandular-pubescent; stems cespitose, erect or ascending; leaves linear-subutale; dichasium terminal, with  $2\sim5$  flowers; pedicel and calyx densely glandular-pubescent; petals 5, white with purplish streaks, apex retuse or truncate. Flowering May to July.

Distribution: Inner Mongolia; Mongolia and Siberia

Habitat: Gravelly and sandy desert-steppe

### 尖叶石头花

### Gypsophila licentiana Hand.-Mazz.

石竹科

Caryophyllaceae

【特征】多年生草本,高25~50cm;茎丛生,上部多分枝;叶扁平,条状披针形;花密 集成头状聚伞花序;花癖5,白色或淡粉色。花期7~9月。

【分布】华北,甘肃、四川。

【生境】砾质或石质山坡。

【用途】饲用。

#### Thinleaf baby's breath

Pink family

Perennial herb  $25\sim50$  cm tall; stems cespitose, branched above; leaves flat, linear-lanceolate; flowers dense in capitate cymes; petals 5, white or pinkish. Flowering July to

September.

**Distribution:** N China, Gansu and Sichuan **Habitat:** Gravelly and rocky slopes







# **遂瓣繁缕**Stellaria radians L. 石竹科 Caryophyllaceae

【特征】多年生草本,高40~60cm,全株伏生绢毛;茎直立或斜升,上部有分枝;二 歧聚伞花序顶生;花瓣5,白色,掌状5~7中裂,裂片条形。花期6~8月。

【分布】东北,内蒙古、河北;蒙古、俄罗斯(西伯利亚、远东)、朝鲜、日本。

【生境】草甸、河边、林问。

【用途】饲用。

#### Radiation chickweed

Buttercup family

Perennial herb  $40\sim60$  cm tall; whole plant appressed-sericous; stems erect or ascending, branched above; dichasium terminal; white petals 5, palmately and moderately dissected into 5 to 7 linear segments. Flowering June to August.

Distribution: NE China. Inner Mongolia and Hebei; Mongolia, Russia (Siberia and Far East), Korea and Japan

Habitat: Meadows, riverbanks and forest



## 大花银莲花

Anemone silvestris L.

毛茛科

Ranunculaceae

【特征】多年生草本,高20~60cm;叶基生,具长柄,掌状3全裂,中央裂片3中裂,侧裂片2深裂;花葶直立,花单生;萼片5,花瓣状,白色;花瓣无;雄蕊多数。花期6~7月。

【分布】东北、华北,新疆;蒙古、俄罗斯、欧洲。

【生境】林间空地、疏林、潍丛和草甸。

【用途】观赏。

#### Snowdrop windflower

Buttercup family

Perennial herb 20~60 cm tall; leaves basal, long-petiolate, palmately 3-divided, middle lobe 3-cleft, lateral lobes 2-parted; scapes erect with solitary flower; white sepals 5, petal-like; petals absent; stamens numerous. Flowering June to July.

Distribution: NE and N China, Xinjiang; Mongolia, Russia and Europe

Habitat: Forest openings, woodland, scrubland and meadows

Use: Ornamental





# 荒漠石头花 Gypsophila desertorum (Bunge) Fenzl

石竹科

Caryophyllaceae

【特征】多年生草本,高5~15cm,全株密被腺毛;茎丛生,直立或斜升;叶条状钻形;二歧聚伞花序顶生,具花2~5枚;花梗及花萼密被腺毛;花瓣5,白色带淡紫纹,先端微凹或截形。花期5~7月。

【分布】内蒙古;蒙古、西伯利亚。

【生境】砾质或沙质的荒漠草原。

【用途】饲用。

#### Desert baby's breath

Pink family

Perennial herb  $5\sim15$  cm tall; whole plant glandular-pubescent; stems cespitose, erect or ascending; leaves linear-subutale; dichasium terminal, with  $2\sim5$  flowers; pedicel and calyx densely glandular-pubescent; petals 5, white with purplish streaks, apex retuse or truncate. Flowering May to July.

Distribution: Inner Mongolia; Mongolia and Siberia

Habitat: Gravelly and sandy desert-steppe



## 大花银莲花

## Anemone silvestris L.

毛茛科

Ranunculaceae

【特征】多年生草本,高20~60cm;叶基生,具长柄,掌状3全裂,中央裂片3中裂,侧裂片2深裂;花孳直立,花单生;萼片5,花瓣状,白色;花瓣无;雄蕊多数。花期6~7月。

【分布】东北、华北,新疆;蒙古、俄罗斯、欧洲。

【生境】林间空地、疏林、潍丛和草甸。

【用途】观赏。

#### Snowdrop windflower

Buttercup family

Perennial herb 20~60 cm tall; leaves basal, long-petiolate, palmately 3-divided, middle lobe 3-cleft, lateral lobes 2-parted; scapes erect with solitary flower; white sepals 5, petal-like; petals absent; stamens numerous. Flowering June to July.

Distribution: NE and N China, Xinjiang; Mongolia, Russia and Europe

Habitat: Forest openings, woodland, scrubland and meadows

Use: Ornamental



### 单穗升麻

### Cimicifuga simplex Wormsk.

毛茛科

Ranunculaceae

【特征】多年生草本,高达1m;茎直立,单一;叶大型,二至三回三出羽状复叶,叶柄长20~30cm,小叶分裂或不裂,边缘有齿;总状花序长达35cm;萼片4~5,花瓣状,白色;无花瓣。花期7~8月。

【分布】东北、华北,四川;蒙古、朝鲜、日本、俄罗斯(西伯利亚、远东)。

【生境】山地渤从、林间和林缘草甸。

【用途】药用; 茎、叶提取芳香油。

#### Kamchatka snakeroot

Buttercup family

Perennial herb to 1 m tall; stems erect, single; compound leaves large, doubly to triply ternate, petioles  $20\sim30$  cm long, leaflet blades dissected or not, toothed at margins; racemes to 35 cm long; white sepals  $4\sim5$ , petal-like; petals absent. Flowering July to August.

Distribution: NE and N China, Sichuan; Mongolia, Korea, Japan and Russia (Siberia and Far East)

Habitat: Montane-scrubs, meadows in forest openings and along forest edges

Use: Medicine; stems and leaves for extracting essential oil









## 棉团铁线莲

## Clematis hexapetala Pall.

毛茛科

Ranunculaceae

【特征】多年生草本,高40~100cm;茎直立;单叶,近革质,一至二回羽状全裂; 聚伞花序通常3花;萼片6,稀4或8,白色,外面密被白毡毛,花蕾时似棉球;无花瓣;瘦果多数,密被柔毛,宿存花柱羽毛状。花期6~8月。

【分布】东北、华北;蒙古、朝鲜、俄罗斯(西伯利亚、远东)。

【生境】草地、潍丛、疏林、林缘。

【用途】药用;饲用。

## Six-petalled clematis

Buttercup family

Perennial herb  $40\sim100$  cm tall; stems erect; simple leaves subcoriaceous, pinnatisect to bipinnatisect; cymes usually with 3 flowers; white sepals 6, rarely 4 or 8, densely white-pannose outside, cotton-boll-like when budding; petals absent; achenes numerous, densely pubescent, persistent styles feather-like. Flowering June to August.

Distribution: NE and N China; Mongolia, Korea and Russia (Siberia and Far East)

Habitat: Grassland, scrubland, woodland and forest edges

Use: Medicine; forage

## 香唐松草

### Thalictrum foetidum L.

毛茛科

Ranunculaceae

【特征】多年生草本,高20~50cm;茎上部被腺毛;三至四回三出羽状复叶,小叶片 先端3浅裂,两面被腺毛或柔毛;圆锥花序疏松,花小;萼片5,白色稍带绿或 紫色;无花瓣;雄蕊多数,长于萼片1.5~2倍,花药粗于花丝。花期8月。

【分布】东北至西北及西南;蒙古、西伯利亚、欧洲。

【生境】草甸、山地草原和灌丛。

【用途】药用; 种子可提炼工业用油。

#### Fetid meadowrue

Buttercup family

Perennial herb  $20\sim50$  cm tall: stems glandular-pubescent at terminal end; leaves thrice to four times ternate, leaflets 3-lobed, glandular-pubescent both sides; small flowers in a loose panicle; sepals 5, white to greenish or purplish; petals absent; stamens numerous,  $1.5\sim2$  times longer than sepals, filaments thinner than anthers. Flowering August.

Distribution: NE to NW and SW China; Mongolia, Siberia and Europe

Habitat: Meadows, montane-steppe and scrubland Use: Medicine; seeds for extracting industrial oil

拍摄人: 赵凡 Photo by Zhao Fan







拍摄人: 赵 凡 Photo by Zhao Fan

## 瓣蕊唐松草

#### Thalictrum petaloideum L.

毛茛科

Ranunculaceae

【特征】多年生草本,高20~60cm;茎直立,无毛;三至四回三出羽状复叶;聚伞花序花多数;萼片4,白色,早落;无花瓣;雄蕊多数,花丝白色,棒状,似花瓣,远比花药粗。花期6~7月。

【分布】东北至西北,华中及四川;朝鲜、蒙古、西伯利 亚。

【生境】草原草甸、沟谷。

【用途】药用;观赏。

#### Showy meadowrue

Buttercup family

Perennial herb 20~60 cm tall; stems erect, glabrous; leaves thrice to four times ternate; numerous flowers in cymes; white sepals 4, caducous; petals absent; stamens numerous, filaments petal-like, white, clavate, much thicker than anthers. Flowering June to July.

Distribution: NE to NW, C China and Sichuan; Korea, Mongolia and Siberia

Habitat: Steppe-meadows and ravines

Use: Medicine; ornamental



## 团扇荠

### Berteroa incana (L.) DC.

十字花科

Brassicaceae

【特征】二年生草本,高20~80cm,全株被星状毛;茎直立,分枝;叶全缘或齿不明显;命房花序果时延长成总状;花瓣4,白色,顶端2深裂;短角果椭圆形,被星状毛。花期6~8月。

【分布】新疆; 西伯利亚、中亚、欧洲。

【牛境】草地、灌丛、田边。

【用途】饲用;种子提炼工业用油。

#### Hoary alyssum

Mustard family

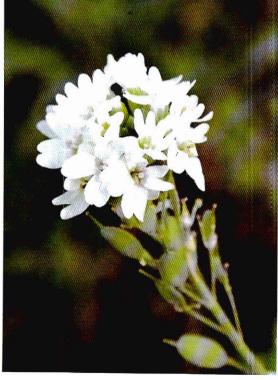
Biennial herb 20~80 cm tall, whole plant stelipilous; stems erect, branched; leaves entire or unclearly toothed; corymb elongate into a raceme in fruit; petals 4, white, deeply bifid at apex; silicle ellipsoid, stelipilous. Flowering June to August.

Distribution: Xinjiang; Siberia, Central Asia and Europe

**Habitat:** Grassland, scrubland and farmland edges Use: Forage; seeds for extracting industrial oil

右图拍摄人: 拾涛 Photo by Shi Tao





### 异蕊芥

## Dimorphostemon pinnatus (Pers.) Kitag.

十字花科

Brassicaceae

【特征】一年生或二年生草本,高10~40cm,全株有腺体或被硬毛;茎直立或斜升,单一或分枝;叶羽状分裂;总状花序;花瓣4,白色或粉红色;长角果圆柱状,被腺体。花期6~7月。

【分布】华北,四川;蒙古、西伯利亚。

【生境】向阳山坡、石缝,海拔1500~3000m。

【用途】饲用。

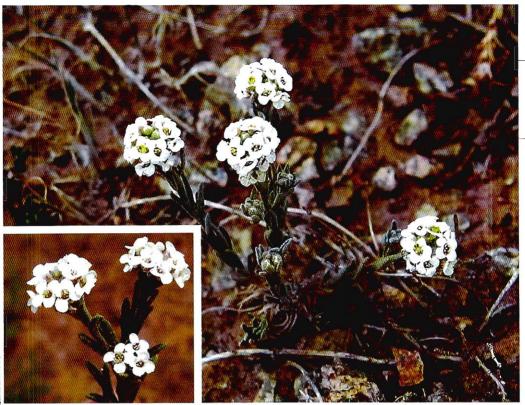
#### Lobed dontostemon

Mustard family

Annual or biennial herb  $10\sim40$  cm tall; whole plant glandular or hirsute: stems crect or ascending, single or branched; leaves pinnately lobed; flowers in racemes; petals 4, white or pink; siliques terete, glandular. Flowering June to July.

**Distribution:** N China and Sichuan; Mongolia and Siberia **Habitat:** Sunny slopes and rock crevices at 1 500~3 000 m





拍摄人: 赵 凡 Photo by Zhao Fan

### 燥原荠

### Ptilotrichum canescens C. A. Mey.

十字花科

Brassicaceae

【特征】半灌木状草本,高5~20cm,全株密被灰色星状毛;茎自基部分枝;叶全缘; 伞房花序果时总状;花瓣4,白色;短角果卵形,密被星状毛。花期6~8月。

【分布】西北,内蒙古、宁夏、西藏;蒙古、中亚、西伯利亚、印度。

【生境】草原或荒漠带的砾质地,海拔1000~5200m。

【用途】饲用。

#### Hoary shrub alyssum

Mustard family

Subfrutical herb  $5\sim20$  cm tall; whole plant densely grey-stelipilous; stems basally branched: leaves entire; corymbs elongate into racemes in fruit; petals 4, white; silicles ovoid, densely stelipilous. Flowering June to August.

Distribution: NW China, Inner Mongolia, Ningxia and Tibet: Mongolia, Central Asia, Siberia and India

**Habitat:** Gravelly ground in steppe and desert areas at 1 000~5 200 m

### 沙芥

#### Pugionium cornutum (L.) Gaertn.

十字花科

Brassicaceae

【特征】二年生草本,高70~150cm;茎直立,极多分枝;叶肉质,下部叶羽状全裂,上部叶条形或披针形;总状花序圆锥状;花瓣4,白色或淡粉色;短角果两侧具翅,翅剑形,上举,果核表面有刺状突起。花期6~7月。

【分布】内蒙古、陕西、宁夏。

【生境】草原带流动或半流动沙丘。沙地先锋植物。

【 用途 】固沙; 饲用; 食用; 药用。

#### Horned sandcress

Mustard family

Biennial herb 70~150 cm tall; stems erect, strongly branched; leaves fleshy, lower leaves pinnatisect, upper leaves linear or lanceolate; flowers in a paniculate raceme; petals 4, white or pinkish: silicle with 2 ascending-gladiate wings and spine-tuberculate surface. Flowering June to July.

Distribution: Inner Mongolia, Shaanxi and Ningxia

Habitat: Moving or semi-moving dunes in steppe areas; Pioneer in sands

Use: Fixing dunes; forage; edible; medicine

拍摄人: 赵凡 (左图) 拾涛 (右图) Photo by Zhao Fan and Shi Tao









拍摄人: 赵 凡 Photo by Zhao Fan

## 山遏蓝菜

#### Thlaspi thlaspidioides (Pall.) Kitag.

十字花科

Brassicaceae

【特征】多年生草本,高5~20cm; 茎单一或丛生,直立或斜升; 基生叶莲座状,具长柄,茎生叶基部筛形或心形抱茎,全缘或有疏齿,稍肉质;总状花序顶生;花瓣4,白色;短角果倒卵状楔形。花期5~6月。

【分布】东北、华北、甘肃、西藏;蒙古、俄罗斯、巴基斯坦、尼泊尔。

【生境】石质山坡、岩石缝。

【用途】药用。

#### Wild pennycress

Mustard family

Perennial herb  $5\sim20$  cm tall; stems single or tufted, erect or ascending: basal leaves rosulate, long petiolate, cauline leaves basally sagittate or cordate and clasping, entire or loosely toothed, somewhat fleshy; flowers in a terminal raceme; petals 4, white; silicle obovoid-cuneate, Flowering May to June.

Distribution: NE and N China, Gansu and Tibet; Mongolia, Russia, Pakistan and Nepal

Habitat: Rocky slopes and rock crevices

Use: Medicine

## 梅花草

#### Parnassia palustris L.

虎耳草科

Saxifragaceae

【特征】多年生草本,高20~40cm,基生叶丛生,具长柄、花茎具1片无柄叶;花单生于花茎顶;花瓣5,白色或淡黄色;雄蕊5;退化雄蕊5,有多数裂条,上有头状腺体; 蒴果4裂。花期7~8月。

【分布】东北至西北; 北半球温带及亚寒带。

【生境】沼泽和草甸。

【用途】观赏;药用;蜜源。

#### Marsh grass-of-parnassus

Saxifrage family

Perennial herb  $20\sim40$  cm tall; basal leaves tufted, long-petiolate; flowering stems with 1 sessile leaf; solitary flowers terminal; petals 5, white or pale yellow; stamens 5; staminodia 5, cleft into several segments with globose-glandular apex; capsules 4-parted. Flowering July to August.

Distribution: NE to NW China; temperate and sub-frigid zones in the Northern Hemisphere

Habitat: Swamps and meadows

Use: Ornamental; medicine; honey source









蔷薇科

Rosaceae

【特征】超旱生灌木,高20~50cm;茎多分枝,茎皮纵向刺裂;羽状三出复叶,簇生 或互生, 顶生小叶3全裂, 侧生小叶全缘, 叶草质, 被长柔毛; 花单生于短枝 上; 花冠直径约4mm. 花三基数, 副萼片, 萼片、花瓣和雄蕊各3, 花瓣白色至 粉色。花期6~8月。

【分布】内蒙古、宁夏;蒙古。

【生境】砾质、沙砾质、覆沙石质的荒漠。

【用途】饲用。

#### Mongolian potaninia

Rose family

Super-xerophytic shrub, 20~50 cm tall; stems much branched, barks longitudinal-split; leaves pinnately ternate, tufted or alternate, terminal leaflet 3-divided, lateral leaflets entire. blades coriaceous, villous; flowers solitary on short branches; corolla 4 mm across, all of calycle lobes, sepals, petals and stamens 3 in number; petals white or pink. Flowering June to August.

Distribution: Inner Mongolia and Ningxia; Mongolia Habitat: Gravelly, sandy-gravelly and sandy-stony desert





拍摄人: 赵 凡 Photo by Zhao Fan

#### 华西银露梅

Potentilla glabra Lodd. var. mandshurica (Maxim.) Hand.-Mazz.

蔷薇科

Rosaceae

【特征】灌木,高30~100cm; 茎多分枝; 单数羽状复叶,小叶3~5,近革质,全缘,边缘反卷,两面被绢毛; 花单生或数枚呈伞房状; 花贈5,白色。花期6~8月。

【分布】华北, 甘肃、青海、四川、云南、湖北; 朝鲜和俄罗斯。

【生境】海拔1000~4500m的山地或高山滩丛、林间空地、河谷。

【用途】饲用; 药用; 观赏; 纤维; 提制栲胶。

#### Snow-petal cinquefoil

Rose family

Shrub  $30\sim100$  cm tall; stems much branched; leaves odd-pinnate, leaflets  $3\sim5$ , subcoriaceous, entire, recurved at margins, sericeous both sides; flowers solitary or several in corymbs; petals 5, white. Flowering June to August.

**Distribution:** N China, Gansu, Qinghai, Sichuan, Yunnan and Hubei; Korea and Russia **Habitat:** Montane and alpine scrubs, forest openings and river valleys at 1 000~4 500 m

Use: Forage: medicine: ornamental; fiber material; extracting tannin

### 稠李

#### Prunus padus L.

(Padus racemosa (Lam.) Gilib.)

蔷薇科

#### Rosaceae

【特征】小乔木,高3~8m; 树皮黑褐色;单叶互生,边缘具齿;叶柄上端有2腺体;总状花序疏松下垂;花瓣5,白色;核果近球形,黑色。花期5~6月。

【分布】东北至西北; 朝鲜、蒙古、俄罗斯(西伯利亚、远东)、日本、欧洲。

【生境】沙地、山地阴坡、丘陵、坡麓、河岸。

【用途】树皮可提取栲胶,并作染料;果实可食;种子可榨工业用油,并制肥皂;树 干供建筑和家具用材。

#### European bird cherry

Rose family

Small tree  $3\sim8$  m tall; barks black-brown; simple leaves alternate, toothed at margins; petiole with 2 glands nearly upper end; flowers in loose and nodding racemes; petals 5, white; drupes subglobose, black. Flowering May to June.

Distribution: NE to NW China; Korea, Mongolia, Russia (Siberia and Far East), Japan and Europe

Habitat: Sands, mountain shady slopes, hills, foothills and riverbanks

Use: Barks for extracting tannin and making dyestuff; fruits edible; seeds for extracting industrial oil and making soaps; trunks for buildings and furniture materials



拍摄人: 赵 凡 Photo by Zhao Fan

## 西伯利亚杏

#### Prunus sibirica L.

(Armeniaca sibirica (L.) Lam.)

蔷薇科

Rosaceae

【特征】小乔木或灌木,高1~4m;单叶互生,先端尾尖,边缘具细钝齿,两面无毛或下面有短柔毛;花单生,先叶开放;花瓣5,白色或粉红色;核果近球形,被短柔毛。花期5月。

【分布】东北、华北;蒙古、俄罗斯(西伯利亚、远东)。

【生境】灌丛草原石质山坡、沙地。

【用途】饲用;水土保持;观赏;核仁药用。

#### Siberian plum

Rose family

Small tree or shrub  $1 \sim 4$  m tall; simple leaves alternate, with caudate-acuminate apex and thin-toothed edges, glabrous both sides or pubescent beneath; flowers solitary, opening before leaves; petals 5, white or pink; drupes subglobose, pubescent. Flowering May.

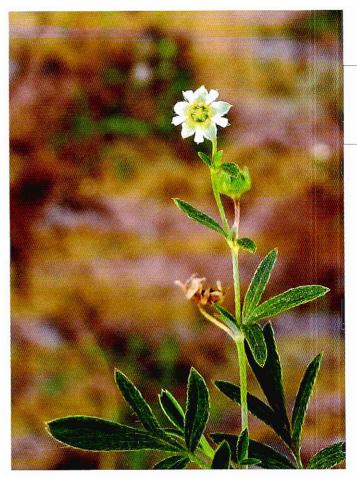
Distribution: NE and N China; Mongolia and Russia (Siberia and Far East)

Habitat: Rocky slopes and sands in shrub-steppe

Use: Forage; soil conservation; ornamental; kernels for medicine







## 伏毛山莓草

## Sibbaldia adpressa Bunge

薔薇科

Rosaceae

【特征】多年生草本,高5~20cm;茎丛生,斜倚或斜升;羽状复叶,小叶全缘或顶端有3齿;聚伞花序,花1至数枚;花瓣5,白色或黄色。花期5~7月。

【分布】黑龙江、内蒙古、河北、西藏, 西北; 蒙古、俄罗斯。

【生境】砾石质或沙质草原。

【用途】饲用。

### Hairy sibbaldia

Rose family

Perennial herb  $5\sim20$  cm tall; stems tufted, decumbent or ascending; leaves pinnate, leaflets entire or 3-toothed at apex; flowers solitary or several in cymes; petals 5, white or yellow. Flowering May to July.

Distribution: Heilongjiang, Inner Mongolia, Hebei and Tibet, NW China; Mongolia and Russia

Habitat: Gravelly and sandy steppe

## 耧斗叶绣线菊

### Spiraea aquilegifolia Pall.

蔷薇科

Rosaceae

【特征】灌木,高50~60cm;叶全缘或先端3~5浅裂,两面被短柔毛;伞形花序具花2~7枚,基部有数片簇生的小叶;花瓣5,白色;果为蓇葖果。花期5~6月。

【分布】黑龙江、内蒙古、山西、陕西、甘肃;蒙古、西伯利亚。

【生境】草原至荒漠草原带的低山阴坡、冲蚀沟和沙地。

【用途】水土保持; 观赏。

#### Meadowrue-leaf spiraea

Rose family

Shrub  $50\sim60$  cm tall; leaves entire or  $3\sim5$ -lobed at apex, pubescent both sides; umbel with  $2\sim7$  flowers, base with tufted leaves; petals 5, white; fruit a follicle. Flowering May to June.

Distribution: Heilongjiang. Inner Mongolia, Shanxi, Shaanxi and Gansu; Mongolia and Siberia

Habitat: Low mountain shady slopes, water-eroded ditches and sands in steppe to desert-

steppe areas

Use: Soil conservation; ornamental





蔷薇科

Rosaceae

【特征】灌木,高1~2m;单叶互生,中下部以上边缘有锯齿,有时3浅裂,下面密被 柔毛; 伞房花序具花15~20枚; 花瓣5,白色; 果为蓇葖果。花期5~6月。

【分布】东北至西北及华中; 朝鲜、蒙古、西伯利亚。

【生境】山地疏林、灌丛或沙地。

【用途】观赏。

#### Pubescent meadowsweet

Rose family

Shrub  $1\sim2$  m tall; simple leaves alternate, serrate at margins above the lower middle, sometimes 3-lobed, densely pubescent beneath; corymb with  $15\sim20$  flowers; petals 5, white; fruit a follicle. Flowering May to June.

Distribution: NE to NW and C China; Korea, Mongolia and Siberia

Habitat: Montane open woodland, scrubland and sands

Use: Ornamental

## 三裂绣线菊

### Spiraea trilobata L.

蔷薇科

Rosaceae

【特征】灌木,高1~1.5m;单叶互生,先端3裂,或中部以上边缘有钝圆齿,两面无毛; 伞房花序具花10~20枚;花瓣5,白色; 蓇葖果直立。花期6~7月。

【分布】东北至西北及华中; 西伯利亚。

【生境】山地疏林、灌丛。

【用途】观赏。

#### Asian meadowsweet

Rose family

Shrub  $1 \sim 1.5$  m tall; simple leaves alternate, 3-lobed at apex, or crenate at margins in upper half, glabrous both sides; corymb with  $10 \sim 20$  flowers; petals 5, white; follicles erect. Flowering June to July.

**Distribution:** NE to NW, and C China; Siberia **Habitat:** Montane woodland and scrubland

Use: Ornamental





## 白花黄耆

### Astragalus galactites Pall.

豆科

Leguminosae

【特征】多年生草本,高3~10cm;茎无或极短缩;单数羽状复叶,小叶矩圆形至披针形,两面被丁字毛,或上面无毛;花通常2枚簇生于叶丛基部;蝶形花冠白色或略带黄色。花期5~6月。

【分布】东北、华北;蒙古、西伯利亚。

【生境】砾质和沙质草原至荒漠草原。

#### Whiteflower milkvetch

Pea family

Perennial herb  $3\sim10$  cm tall: acaulescent or stems very shorten; leaves odd-pinnate. leaflets oblong to lanceolate, T-shaped-hairy both sides or glabrous above; usually 2 flowers tufted at base of leaf cluster; papilionaccous corolla white to yellowish. Flowering May to June.

**Distribution:** NE and N China; Mongolia and Siberia **Habitat:** Gravelly and sandy steppe to desert-steppe

### 糙叶黄耆

## Astragalus scaberrimus Bunge

豆科

Leguminosae

【特征】多年生草本,高5~10cm;茎无或极短缩;单数羽状复叶,小叶椭圆形至披针形,灰绿色,两面密被白色丁字毛;总状花序具花3~5枚,总花梗长1~3.5cm;蝶形花冠白色或淡黄色。花期5~6月。

【分布】东北至西北;蒙古、西伯利亚。

【生境】砾质和沙质草原至荒漠草原。

#### Coarseleaf milkvetch

Pea family

Perennial herb  $5\sim10$  cm tall; acaulescent or stems very shorten; leaves odd-pinnate, leaflets elliptic to lanceolate, grey-green, densely white T-shaped-hairy both sides; raceme with  $3\sim5$  flowers, peduncle  $1\sim3.5$  cm long; papilionaceous corolla white or yellowish. Flowering May to June.

**Distribution:** NE to NW China; Mongolia and Siberia **Habitat:** Gravelly and sandy steppe to desert-steppe







## 兴安胡枝子

### Lespedeza davurica (Laxm.) Schindl.

豆科

Leguminosae

【特征】半灌木,高10~50cm; 茎平卧或斜升; 羽状三出复叶,小叶矩圆形至披针状 矩圆形,下面被柔毛; 总状花序腋生,短于或等长于叶; 蝶形花冠白色或黄白色,旗瓣中央略带紫色; 具闭锁花。花期7~8月。

【分布】东北至西北,华中至西南;朝鲜、日本、西伯利亚。

【生境】草原区的沙地、沙质至砾质生境。

【用途】饲用;绿肥;水上保持。

#### Dahurian lespedeza

Pea family

Subshrub  $10\sim50$  cm tall; stems procumbent or ascending; leaves pinnate-ternate, leaflets oblong to lanceolate-oblong, pubescent beneath; raceines axillary, shorter than or equaling leaves; papilionaceous corolla white or yellow-white, purplish at the middle of banner; cleistogamous flowers present. Flowering July to August.

Distribution: NE to NW, C to SW China; Korea, Japan and Siberia

Habitat: Sands, sandy and gravelly ground in steppe areas

Use: Forage; green manure; soil conservation

### 阴山胡枝子

### Lespedeza inschanica (Maxim.) Schindl.

豆科

Leguminosae

【特征】半灌木,高40~60cm;茎直立,多分枝;羽状三出复叶,小叶矩圆形至矩圆 状倒卵形,下面被短柔毛;总状花序腋生;小苞片卵形,紧贴萼筒下;蝶形 花冠白色,有紫斑;具闭锁花。花期8~9月。

【分布】东北、华北; 日本、朝鲜。

【生境】山坡疏林和灌丛。

【用途】饲用;水土保持。

#### Yinshan lespedeza

Pea family

Subshrub  $40\sim60$  cm tall; stems erect, much branched; leaves pinnate-ternate, leaflets oblong to oblong-obovate, pubescent beneath; racemes axillary; bracteole ovate, closely adpressed to base of calyx tube; papilionaceous corolla white with purple spots; cleistogamous flowers present. Flowering August to September.

**Distribution:** NE and N China; Japan and Korea **Habitat:** Sloping woodland and scrubland

Use: Forage; soil conservation







## 尖叶胡枝子

Lespedeza juncea (L.) Pers.

豆科

Leguminosae

【特征】半灌木,高30~50cm;茎直立,上部多分枝;羽状三出复叶,小叶条状矩圆形 至倒披针形,下面灰绿色,密被柔毛;总状花序腋生,花2~5枚;小苞片条状 披针形,与萼筒近等长;蝶形花冠白色,有紫斑;具闭锁花。花期8~9月。

【分布】东北、华北;朝鲜、日本、俄罗斯(西伯利亚、远东)。

【生境】丘陵、坡地、林缘。

【用途】饲用; 水土保持。

#### Juncea lespedeza

Pea family

Subshrub 30~50 cm tall; stems erect, branched above; leaves pinnate-ternate, leaflets linear-oblong to oblanceolate, grey-green and densely pubescent beneath; axillary racemes with 2~5 flowers: bracteole linear-lanceolate, subequaling calyx tube; papilionaceous corolla white with purple spots; cleistogamous flowers present. Flowering August to September.

Distribution: NE and N China; Korea, Japan and Russia (Siberia and Far East)

Habitat: Hills, slopes and forest margins

Use: Forage; soil conservation

#### 牛枝子

#### Lespedeza potaninii Vass.

豆科

Leguminosae

【特征】半灌木,高10~50cm; 茎平卧或斜升,基部有分枝;羽状三出复叶,小叶 狭矩圆形至椭圆形,下面被粗硬毛;总状花序腋生,长于叶;蝶形花冠黄白 色,旗瓣中央略带紫色;具闭锁花。花期7~9月。

【分布】华北、西北、西南、华中。

【生境】荒漠草原区的沙地、沙质至砾质生境。

【用途】饲用;绿肥;水土保持。

#### Potanin lespedeza

Pea family

Subshrub  $10\sim50$  cm tall; stems procumbent or ascending, branched from base; leaves pinnate-ternate, leaflets narrowly oblong to elliptic. hispid beneath; racemes axillary, longer than leaves; papilionaceous corolla yellow-white, purplish at the middle of banner; cleistogamous flowers present. Flowering July to September.

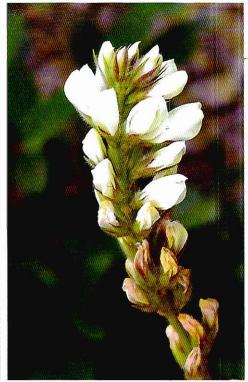
Distribution: N, NW, SW and C China

Habitat: Sands, sandy and gravelly ground in descrt-steppe areas

Use: Forage; green manure; soil conservation







## 绒毛胡枝子

Lespedeza tomentosa (Thunb.) Sieb. ex Maxim.

豆科

Leguminosae

【特征】灌木,高50~100cm;全株密被黄褐色绒毛;茎直立,单一或上部少分枝; 羽状三出复叶,小叶长3~6cm,质厚,椭圆形至卵状短圆形,两面密被长柔 毛;总状花序顶生或腋生;蝶形花冠黄白色;具闭锁花。花期7~8月。

【分布】东北、华北,华东至西南;朝鲜、俄罗斯(远东)、日本。

【生境】山坡灌丛。

【用途】饲用;绿肥;水上保持;药用。

#### Hairy lespedeza

Pea family

Shrub 50~100 cm tall; whole plant densely yellow-brown tomentose; stems erect, single or few branched; leaves pinnate-ternate, leaflets 3~6 cm long, thick, elliptic to ovate-oblong, densely villous both sides; racemes terminal or axillary; papilionaceous corolla yellow-white; cleistogamous flowers present. Flowering July to August.

Distribution: NE and N, E to SW China; Korea, Russia (Far East) and Japan

Habitat: Sloping scrubland

Use: Forage; green manure; soil conservation; medicine

# 白花草木犀

## Melilotus albus Desr.

豆科

Leguminosae

【特征】一年生或二年生草本,高70~200cm,全株有香味;茎直立,有分枝;羽状三出复叶,小叶边缘疏生浅齿;总状花序细长,花小,多数;蝶形花冠白色;荚果表面具网纹。花期5~7月。

【分布】东北至西北及西南; 欧亚大部分地区。

【生境】田间、路旁、盐碱荒地、草甸。

【用途】饲用;绿肥。

#### White sweetclover

Pea family

Annual or biennial herb 70~200 cm tall; whole plant fragrant; stems erect. branched; leaves pinnate-ternate, leaflets sparsely short-toothed; slender racemes with numerous small flowers; papilionaceous corolla white: pods reticulate-veined. Flowering May to July.

Distribution: NE to NW, and SW China; most regions of Eurasia

Habitat: Farming fields, roadsides, saline-alkaline waste places and meadows

Use: Forage: green manure







# 缘毛棘豆

## Oxytropis ciliata Turcz.

豆科

Leguminosae

【特征】多年生草本,高5~20cm;茎无或极短缩;叶单数羽状复叶,基生,小叶两面无毛;总状花序具花3~10枚;苞片宽卵形,近透明,具略突起的深绿色脉纹;蝶形花冠白色或淡黄色,长约2~2.5cm;荚果卵球状,膨胀,无毛。花期5~6月。

【分布】内蒙古、河北;蒙古。

【生境】草原带砾质山坡、丘顶、坡麓。

【用途】饲用。

#### Ciliate locoweed

Pea family

Perennial herb  $5\sim20$  cm tall; acaulescent or stems very shorten; leaves odd-pinnate, basal, leaflets glabrous both sides; racemes with  $3\sim10$  flowers; bracts broadly ovate, subhyaline with dark green and slightly prominent veins; papilionaceous corolla white to pale yellow,  $2\sim2.5$  cm long; pods ovoid, inflated, glabrous. Flowering May to June.

Distribution: Inner Mongolia and Hebei; Mongolia

Habitat: Gravelly slopes, hilltops and foothills in steppe areas

Use: Forage

# 白刺花

## Sophora davidii (Franch.) Skeels

豆科

Leguminosae

【特征】灌木或小乔木,高1~2m;分枝开展,不育枝末端刺状;单数羽状复叶,小叶片形态多变,通常为椭圆状卵形或倒卵状矩圆形;总状花序生于小枝顶端;花萼淡蓝紫色,蝶形花冠白色或淡黄色,有时旗瓣稍带紫红色;荚果近念珠状。花期3~8月。

【分布】华北、华中、西南、甘肃、江苏、浙江、广西。

【生境】河谷、沙丘、山坡、路边。

【用途】固沙;水土保持。

## Shrub pagoda tree

Pea family

Shrub or small tree  $1\sim2$  m tall; branches spreading, sterile branchlets with thorn-like apex; leaves odd-pinnate, leaflet blades variable in shape, usually elliptic-ovate or obovate-oblong; racemes terminal on branchlets; calyx bluish-purple; papilionaceous corolla white or yellowish, sometimes banner purplish-red; pods subtorose. Flowering March to August.

Distribution: N, C and SW China, Gansu, Jiangsu, Zhejiang and Guangxi

Habitat: Valleys, sand dunes, slopes and roadsides

Use: Fixing dunes; soil conservation





**白车轴草** (白三叶草) Trifolium repens L.

豆科

Leguminosae

【特征】多年生草本,高10~30cm;茎匍匐,长20~100cm;掌状三出复叶,小叶边缘具细锯齿,叶脉隆起;花多数,密集成头状;蝶形花冠白色,稀乳黄色或淡粉红色。花期7~8月。

【分布】原产于欧洲、北非;中国引入,在内蒙古、新疆等地有逸生种群分布。

【生境】林间或林缘草何。

【用途】饲用;绿肥;蜜源。世界上广泛种植。

#### White clover

Pea family

Perennial herb  $10\sim30$  cm tall; stems creeping,  $20\sim100$  cm long; leaves palmate-ternate, leaflets serrulate, veins prominent; numerous flowers glomerate in a head; papilionaceous corolla white, rarely creamy-yellow or pinkish. Flowering July to August.

**Distribution:** Native to Europe and N Africa; introduced to China, escaping populations founded in Inner Mongolia and Xinjiang

Habitat: Meadows in forest openings and edges

Use: Forage; green manure; honey source. Widely cultivated in the world

## 新疆野豌豆

## Vicia costata Ledeb.

豆科

Leguminosae

【特征】多年生草本,高20~80cm;茎多分枝,斜升、直立或攀援;偶数羽状复叶,叶轴末端具卷须;小叶矩圆状披针形或椭圆形,叶脉凸出;总状花序腋生,花3~11枚;蝶形花冠黄色至白色。花期6~8月。

【分布】东北、西北,内蒙古、西藏。

【生境】草原至荒漠地区海拔550~3 700m的干旱坡地和沙地。

【用途】饲用;绿肥。

#### Xinjiang vetch

Pea family

Perennial herb  $20\sim80$  cm tall; stems much branched, ascending, erect or climbing; leaves even-pinnate, rachis terminating in a tendril; leaflets oblong-lanceolate to elliptic, veins prominent; axillary racemes with  $3\sim11$  flowers; papilionaceous corolla yellow to white. Flowering June to August.

Distribution: NE and NW China, Inner Mongolia and Tibet

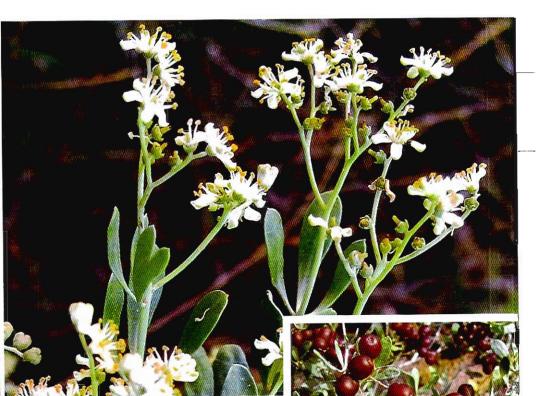
**Habitat:** Dry slopes and sands at 550~3 700 m in steppe to desert areas

Use: Forage; green manure









# 大白刺

## Nitraria roborowskii Kom.

蒺藜科

Zygophyllaceae

【特征】灌木,高1~2m; 茎平卧或直立,多分枝; 小枝白色,先端刺状; 叶2~3簇生,肉质,全缘或先端2~3齿裂; 聚伞花序,花稀疏;花瓣5,黄白色; 核果卵形,红色,熟时深红色,果汁紫黑色;果核长8~11mm,先端钝。花期5~6月。

【分布】内蒙古、宁夏,西北;蒙古、中亚。

【生境】荒漠区的沙地、湖盆边缘。

【用途】饲用; 固沙; 果实富含维生素C, 可食用、药用。

## Large nitraria

Caltrop family

Shrub  $1 \sim 2$  m tall; stems procumbent or erect, much branched; branchlets white, with thorn-like apex; leaves  $2 \sim 3$  tufted, fleshy, entire or  $2 \sim 3$  tooth-lobed at apex; flowers sparse in cymes; petals 5, yellow-white; drupes ovoid, red, becoming dark at maturity, with purple-black juice; pits  $8 \sim 11$  mm long, apex obtuse. Flowering May to June.

Distribution: Inner Mongolia, Ningxia and NW China; Mongolia and Central Asia

Habitat: Sands, lake basin edges in desert areas

Use: Forage; fixing sand dunes; fruits rich in VC, edible and for medicine

## 小果白刺

## Nitraria sibirica Pall.

蒺藜科

Zygophyllaceae

【特征】灌木,高50~100cm;茎弯曲或横卧,多分枝,铺散状;小枝灰白色,先端刺状;叶4~6簇生,肉质,全缘;聚伞花序;花瓣5,白色至黄绿色;核果近球形或椭圆形,红色,熟时深红色,果汁蓝紫色;果核长4~5mm,先端尖。花期5~6月。

【分布】东北至西北;蒙古、中亚、西伯利亚。

【生境】荒漠至荒漠草原区的盐化沙地、湖盆边缘,沿海盐化沙地。

【用途】饲用; 固沙; 果实富含维生素C, 可食用、药用。

#### Siberian nitraria

Caltrop family

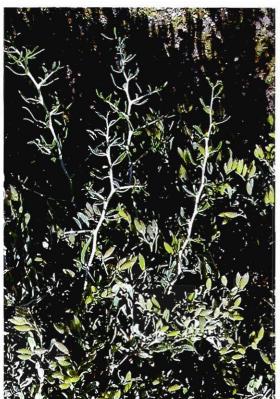
Shrub 50~100 cm tall; stems curved or recumbent, much branched, diffuse; branchlets grey-white, with thorn-like apex; leaves 4~6 tufted, fleshy, entire; flowers in cymes; petals 5, white to yellowish-green; drupe subglobose or ellipsoid, red, becoming dark at maturity, with blue-purple juice; pits 4~5 mm long, apex pointed. Flowering May to June.

Distribution: NE to NW China; Mongolia, Central Asia and Siberia

Habitat: Saline-sands, lake basin edges in desert to desert-steppe areas, and saline-sands along seashores

Use: Forage; fixing sand dunes; fruits rich in VC, edible and for medicine









拍摄人: 赵 凡 Photo by Zhao Fan

# 球果白刺

# Nitraria sphaerocarpa Maxim.

蒺藜科

Zygophyllaceae

【特征】超旱生灌木,高30~60cm;茎弯曲,不孕枝先端刺状;幼枝乳白色;叫2~3 簇生,肉质,全缘;聚伞花序;花瓣5,白色;核果未成熟时披针状,密被柔毛,成熟时果皮膨胀成球形,膜质;果核纺锤形,长8~9mm。花期5~6月。

【分布】内蒙古、宁夏, 西北; 蒙古。

【生境】荒漠区的戈壁、石质坡地、干河床。

【用途】饲用; 固沙。

#### Globefruit nitraria

Caltrop family

Super-xerophytic shrub 30 $\sim$ 60 cm tall; stems curved, sterile branches with thorn-like apex; young branches creamy-white; leaves 2 $\sim$ 3 tufted, fleshy, entire; flowers in cymes; petals 5, white; drupe lanceolate and densely pubescent when young, rind inflated to globose and membranous at maturity; pits fusiform,  $8\sim$ 9 mm long. Flowering May to June.

**Distribution:** Inner Mongolia, Ningxia and NW China; Mongolia **Habitat:** Gobi, stony slopes and dry riverbed in desert areas

Use: Forage; fixing sand dunes

# 白刺

## Nitraria tangutorum Bobr.

蒺藜科

Zygophyllaceae

【特征】灌木,高1~2m; 茎平卧或开展,多分枝; 小枝灰白色,先端刺状; 叶2~3 簇生,肉质,全缘; 聚伞花序; 花瓣5,黄白色; 核果卵形或椭圆形,红色,熟时深红色,果汁玫瑰红色; 果核长5~8mm,上部渐尖。花期5~6月。

【分布】内蒙古、宁夏, 西北; 蒙古。

【生境】荒漠至荒漠草原区的沙地、盐化低地、湖盆边缘、古河床阶地。

【用途】饲用; 固沙; 果实富含维生素C, 可食用、药用。

#### Tangut nitraria

Caltrop family

Shrub  $1\sim2$  m tall; stems procumbent or spreading, much branched; branchlets grey-white, with thorn-like apex; leaves  $2\sim3$  tufted, fleshy, entire; flowers in cymes; petals 5, yellow-white; drupes ovoid or ellipsoid, red, becoming dark at maturity, with rosy-red juice; pits  $5\sim8$  mm long, apex acuminate. Flowering May to June.

Distribution: Inner Mongolia, Ningxia and NW China; Mongolia

Habitat: Sands, saline lowlands, lake basin edges and old river terraces in desert to desertsteppe areas

Use: Forage; fixing sand dunes; fruits rich in VC, edible and for medicine





拍摄人: 赵 凡 Photo by Zhao Fan

## 霸王

# Sarcozygium xanthoxylon Bunge

蒺藜科

Zygophyllaceae

【特征】超旱生灌木,高70~150cm; 茎枝弯曲,开展,先端具刺尖;偶数羽状复叶,在老枝上簇生,幼枝上对生;小叶肉质,椭圆状条形至长匙形;花1~2枚腋生;花瓣4,黄白色;蒴果具3宽翅,偶有4或5翅。花期5~6月。

【分布】内蒙古、宁夏, 西北; 蒙古。

【生境】砂砾质或沙质荒漠。

【用途】饲用;根药用。

## Yellow-wood beancaper

Caltrop family

Super-xerophytic shrub, 70~150 cm tall; stems and branches curved, spreading, with thorny apex; leaves even-pinnate, tufted on old branches and opposite on young branches; leaflets fleshy, elliptic-linear to long-spatulate; flowers solitary or 2 in axils; petals 4, yellowish-white; capsules with wide wings 3, rarely 4 or 5. Flowering May to June.

Distribution: Inner Mongolia, Ningxia and NW China; Mongolia

**Habitat:** Gravelly and sandy desert **Use:** Forage; roots for medicine







拍摄人: 赵 凡 Photo by Zhao Fan

# 四合木

# Tetraena mongolica Maxim.

蒺藜科

Zygophyllaceae

【特征】超旱生灌木,高40~90cm; 茎由基部分枝,老枝弯曲,红褐色,有光泽;小枝密被丁字毛;偶数羽状复叶,簇生或对生;小叶倒披针形,肉质,两面密被叉状毛;花小,单生;花瓣4,白色;蒴果4瓣裂,果瓣长卵形或新月形。花期5~6月。

【分布】中国特有,内蒙古西部、宁夏北部。

【生境】砾质或沙质荒漠。

【用途】饲用; 枝含油脂。

## Mongolian four-tongue

Caltrop family

Super-xerophytic shrub, 40~90 cm tall; stems branched from base, old branches curved, red-brown and shiny; branchlets densely T-shaped-hairy; leaves even-pinnate, tufted or opposite; leaflets oblanceolate, fleshy, densely forked-hairy; tiny flowers solitary; petals 4, white; capsules 4-valved, valves long-ovate or lunate. Flowering May to June.

Distribution: Endemic to W Inner Mongolia and N Ningxia

**Habitat:** Gravelly and sandy desert Use: Forage; branches rich in oil

## 地锦

## Euphorbia humifusa Willd.

大戟科

Euphorbiaceae

【特征】一年生小草本,内含乳汁;茎多分枝,纤细,平卧,长10~30cm;单叶对生,叶片基部偏斜,边缘具细齿,绿色,或秋后带紫色;聚伞花序极小;腺体4。花期6~7月。

【分布】除广东、广西外, 儿遍全国; 蒙古、俄罗斯、朝鲜、日本。

【生境】田野、河滩、路旁。

【用途】药用; 茎叶制栲胶。

#### Creeping euphorbia

Spurge family

Annual small herb, with milky juice; stems branched, slender, procumbent,  $10 \sim 30$  cm long; simple leaves opposite, oblique at blade base, thin-toothed, green to purplish in fall; cymes tiny; glands 4. Flowering June to July.

Distribution: Throughout China except Guangdong and Guangxi: Mongolia. Russia, Korea and Japan

Habitat: Fields, flood lands and roadsides

Use: Medicine; stems and leaves for extracting tannin



## 红砂

## Reaumuria soongorica (Pall.) Maxim.

柽柳科

Tamaricaceae

【特征】小灌木,高10~30cm;多分枝;叶圆柱形,3~5簇生,长1~5mm,肉质;花单生于叶腋;花瓣5,粉白色;蒴果椭圆形;种子被毛。花期7~8月。

【分布】内蒙古、宁夏,西北;蒙古、俄罗斯。

【生境】荒漠地带的山前洪积或冲积平原,半荒漠和草原地带的盐渍低地。

【用途】饲用; 药用。

#### Red reaumuria

Tamarix family

Dwarf shrub  $10 \sim 30$  cm tall; stems much branched; leaves terete,  $3 \sim 5$  tufted,  $1 \sim 5$  mm long, fleshy; flowers solitary in axils; petals 5, pinkish-white; capsules ellipsoid; seeds hairy. Flowering July to August.

Distribution: Inner Mongolia, Ningxia and NW China: Mongolia and

Russia

Habitat: Diluvial or alluvial plains in desert zone, saline lowlands in

semi-desert to steppe zone Use: Forage; medicine











# 长叶红砂

## Reaumuria trigyna Maxim.

柽柳科

Tamaricaceae

【特征】小灌木,高10~30cm;多分枝;叶长圆柱形, 微弯,2~5簇生,长5~15mm,肉质;花单 生于叶腋;花瓣5,黄白色或略带粉色; 蒴果 卵状矩圆形;种子被毛。花期7~8月。

【分布】内蒙古、甘肃、新疆。

【生境】荒漠地带的石质山坡、山前洪积或冲积平原。

【用途】饲用; 药用。

## Longleaf reaumuria

Tamarix family

Dwarf shrub  $10\sim30$  cm tall; stems much branched; leaves long-terete, slightly curved,  $2\sim5$  tufted,  $5\sim15$  mm long, fleshy; flowers solitary in axils; petals 5. yellowish-white or pinkish; capsules ovoid-oblong; seeds hairy. Flowering July to August.

Distribution: Inner Mongolia, Gansu and Xinjiang

Habitat: Rocky slopes and diluvial or alluvial plains in desert zone

Use: Forage; medicine



## 狼毒

# Stellera chamaejasme L.

瑞香科

Thymelaeaceae

【特征】多年生草本,高20~50cm;根粗大,木质;茎从生,直立,不分枝;单叶较密生,全缘;头状花序顶生;花萼筒红色或紫红色;萼裂片5,外折,花瓣状,上面白色;无花瓣。花期6~7月。

【分布】东北至西北及西南;朝鲜、蒙古、西伯利亚、中亚。

【生境】砾质和沙质草原。

【用途】有毒植物。根药用。

#### Chinese stellera

Mezereum family

Perennial herb 20~50 cm tall; roots thick, woody; stems tufted, erect, unbranched; simple leaves dense, entire; flowers in a terminal head; calyx tube red or purple-red, sepals 5, deflexed, petal-like, white above; petals absent. Flowering June to July.

Distribution: NE to NW and SW China; Korea, Mongolia, Siberia and Central Asia

Habitat: Gravelly and sandy steppe Use: Poisonous plant. Roots for medicine







# 蛇床

## Cnidium monnieri (L.) Cuss.

**伞形科** 

Umbelliferae

【特征】一年生草本,高30~80cm; 茎单一, 上部稍分枝;叶2~3回羽状全裂;复 伞形花序,伞幅12~20;小伞形花 序具花20~30枚;花小,花瓣5,白 色,先端具内卷小舌片;分生果具棱 翅。花期6~7月。

【分布】东北至西北,华东至西南; 朝鲜、俄罗 斯。

【生境】河边或湖边草地。

【用途】果实药用。

## Monnier's snowparsley

Parsley family

Annual herb  $30\sim80$  cm tall; stems single, slightly branched above; leaves twice to thrice pinnatisect; compound umbels with  $12\sim20$  rays; umbellets with tiny flowers  $20\sim30$ ; white petals 5 with involute ligule at apex; schizocarps with winged ribs. Flowering June to July.

Distribution: NE to NW, and E to SW China; Korea and Russia

Habitat: Meadows along banks of rivers and lakes

Use: Fruits for medicine



## 防风

## Saposhnikovia divaricata (Turcz.) Schischk.

伞形科

Umbelliferae

【特征】多年生草本,高30~70cm;茎直立,二歧式多分枝;叶2~3回羽状深裂至全裂,灰绿色;复伞形花序,伞幅6~10;小伞形花序具花4~10枚;花小,花瓣5,白色;子房具小瘤状突起。花期7~8月。

【分布】东北至西北;蒙古、朝鲜、俄罗斯。

【生境】山地草坡、丘陵和固定沙丘。

【用途】饲用;根药用。

#### Fang feng

Parsley family

Perennial herb  $30\sim70$  cm tall; stems erect, much dichotomous-branched; leaves twice to thrice pinnately parted to divided, grey-green; compound umbels with  $6\sim10$  rays; umbellets with tiny flowers  $4\sim10$ ; white petals 5; ovary verruculose. Flowering July to August.

**Distribution:** NE to NW China; Mongolia, Korea and Russia **Habitat:** Mountain grassy slopes, hillsides and fixed sand dunes

Use: Forage; roots for medicine













泽芹 Sium suave Walt.

伞形科

Umbelliferae

【特征】多年生草本,高40~100cm;茎直立,上部分枝;羽状复叶,小叶条形至披针形,边缘具锯齿;复伞形花序,伞幅10~20;小伞形花序具花10~20余枚;花小,花瓣5,白色,顶端具内卷小舌片;分生果近球状。花期7~8月。

【分布】东北、华北、华东;蒙古、朝鲜、日本、俄罗斯、北美。

【生境】沼泽或沼泽草甸。

【用途】饲用;药用。

## Water parsnip

Parsley family

Perennial herb  $40\sim100$  cm tall; stems erect, branched above; leaves pinnate, leaflets linear to lanceolate, serrate; compound umbels with  $10\sim20$  rays; umbellets with tiny flowers  $10\sim20$  or more; white petals 5 with involute ligule at apex; schizocarps subglobose. Flowering July to August.

Distribution: NE, N and E China; Mongolia, Korea, Japan, Russia and North America

Habitat: Swamps and marsh-meadows

Use: Forage; medicine

## 迷果芹

## Sphallerocarpus gracilis (Bess.) K.-Pol.

伞形科

Umbelliferae

【特征】一年生或二年生草本,高30~120cm;茎直立,多分枝,下部被长柔毛;叶 3~4回羽状全裂;复伞形花序,伞幅5~9;小伞形花序具花12~20枚;花小、 花瓣5, 白色, 先端具内卷小舌片; 分生果两侧压扁。花期7~8月。

【分布】东北至西北;蒙古、朝鲜、俄罗斯。

【生境】林缘草甸、撂荒地、沟边、村旁。

【用途】饲用。

#### Slender Chinese celery

Parsley family

Annual or biennial herb 30~120 cm tall; stems erect, much branched, villous below; leaves thrice to four times puntatisect; compound umbels with  $5 \sim 9$  rays; umbellets with tiny flowers  $12\sim20$ ; white petals 5 with involute ligule at apex; schizocarps laterally compressed. Flowering July to August.

Distribution: NE to NW China; Mongolia, Korea and Russia

Habitat: Meadows along forest edges, abandoned lands. ditch sides and village sides

Use: Forage





拍摄人: 赵 凡 Photo by Zhao Γan

# 白花点地梅

## Androsace incana Lam.

报春花科

Primulaceae

【特征】多年生矮小草本,高2~3cm,全株密被绢毛,灰绿色; 具匍匐茎; 叶质厚, 簇生呈莲座状; 伞形花序,花1~4枚; 花冠白色、淡黄色或淡粉色, 喉部黄色、粉红色或绿色,花瓣片5。花期4~5月。

【分布】华北,新疆;蒙古、西伯利亚。

【生境】石质和砾质山坡及坡顶。

【用途】观赏。

## Snowblossom rock-jasmine

Primula family

Perennial dwarf herb  $2\sim3$  cm tall, whole plant densely sericeous, grey-green; stoloniferous; leaves thick, clustered into a basal rosette; umbels with flowers  $1\sim4$ ; corolla white to pale yellow or pinkish, throats yellow, pink or green; petals 5. Flowering April to May.

Distribution: N China and Xinjiang; Mongolia and Siberia

Habitat: Rocky and gravelly slopes and hilltops

Use: Ornamental

## 西藏点地梅

## Androsace mariae Kanitz

报春花科

Primulaceae

【特征】多年生矮小草本;具匍匐茎;莲座丛疏或密,叶匙形至倒披针形,具缘毛;花草1至2,直立,高2~12cm;伞形花序具花2~10枚;花冠白色至淡紫红色,喉部绿色、粉红色或黄色,花瓣片5。花期4~5月。

【分布】内蒙古、山西、甘肃、青海、四川、西藏。

【生境】海拔1 600~2 900m的山地和亚高山砂砾质生境。

【用途】药用;观赏。

#### Tibetan rock-jasmine

Primula family

Perennial dwarf herb; stoloniferous; rosettes loose or dense; leaves spatulate to oblanceolate, fringed; scapes  $1 \sim 2$ , erect,  $2 \sim 12$  cm tall; umbels with flowers  $2 \sim 10$ ; corolla white to purplish-red, throats green, pink or yellow; petals 5. Flowering April to May.

**Distribution:** Inner Mongolia, Shanxi, Gansu, Qinghai, Sichuan and Tibet **Habitat:** Sandy-gravelly sites in montane and subalpine belt at 1 600~2 900 m





拍摄人: 赵 凡 Photo by Zhao Fan

# 大苞点地梅

## Androsace maxima L.

报春花科

Primulaceae

【特征】二年生矮小草本,全株被糙伏毛;叶基生,莲座状;花擘3至多数,直立或斜升;伞形花序具花2~10余枚;苞片大,椭圆形至倒卵状矩圆形;花冠白色至粉色,喉部黄色,花瓣片5。花期4~5月。

【分布】华北, 新疆; 蒙古、西伯利亚。

【生境】石质和砾质山坡及坡顶。

【用途】观赏。

## Greater rock-jasmine

Primula family

Biennial dwarf herb, whole plant strigose; leaves basal, rosulate; scapes 3 to many, erect or ascending; umbels with flowers  $2\sim10$  or more; bracts large, elliptic to obovate-oblong; corolla white to pink, with yellow throat; petals 5. Flowering April to May.

Distribution: N China and Xinjiang; Mongolia and Siberia

Habitat: Rocky and gravelly slopes and hilltops

Use: Ornamental

## 海乳草

#### Glaux maritima L.

报春花科

Primulaceae

【特征】多年生小草本,高4~30cm;茎直立或斜升,单一或下部分枝;叶交互对生,偶轮生;花单生于叶腋;萼片5,白色至淡粉色;无花瓣。花期6月。

【分布】东北至西北,长江流域;北半球温带地区。

【生境】轻度盐碱化的低湿草甸。

#### Sea milkwort

Primula family

Perennial dwarf herb  $4\sim30$  cm tall; stems erect or ascending, single or branched below; leaves decussate, rarely whorled; flowers solitary in leaf axils; sepals 5, white to pinkish; petals absent. Flowering June.

Distribution: NE to NW China, and regions along Changjiang River; temperate regions in

the Northern Hemisphere

Habitat: Lightly saline or alkaline meadows in moist lowlands







## 狼尾花

## Lysimachia barystachys Bunge

报春花科

Primulaceae

【特征】多年生草本,高30~70cm;茎直立,上部密被长柔毛;叶互生;总状花序顶生,花密集,常向一侧弯曲;花瓣片5,白色。花期6~7月。

【分布】东北至西北,华东至西南; 朝鲜、日本、俄罗斯(远东)。

【生境】草甸、潍丛。

【用途】药用。

#### Wolftail loosestrife

Primula family

Perennial herb 30~70 cm tall; stems erect, densely villous above; leaves alternate; racemes terminal, dense flowers usually curved to one side; white petals 5. Flowering June to July.

Distribution: NE to NW, E to SW China; Korea, Japan and Russia (Far East)

Habitat: Meadows and thickets

## 高山龙胆

## Gentiana algida Pall.

龙胆科

Gentianaceae

【特征】多年生草本,高5~20cm;茎直立;叶多基生,条状椭圆形至条状披针形,常对折;花1~3枚,稀至5枚,顶生;萼筒膜质;花冠管钟状或狭漏斗状,黄白色,具深蓝色斑点,裂片5,裂片间具褶。花期7~8月。

【分布】吉林、新疆; 俄罗斯、哈萨克斯坦。

【生境】山地和亚高山草甸及草原,海拔1700~3500m。

【用途】药用。

#### Whitish gentian

Gentian family

Perennial herb  $5\sim20$  cm tall; stems erect; leaves mostly basal, linear-elliptic to linear-lanceolate, usually folded; terminal flowers  $1\sim3$ , rarely to 5; calyx tube membranous; corolla tube-campanulate or narrowly funnelform, yellow-white with dark blue spots, 5-lobed, with plaited folds between the lobes. Flowering July to August.

Distribution: Jilin and Xinjiang; Russia and Kazakhstan

Habitat: Montane and subalpine meadows and grasslands at 1 700~3 500 m

拍摄人: 张洪江 Photo by Zhang Hongjiang





# 鹅绒藤

## Cynanchum chinense R. Br.

萝藦科

Asclepiadaceae

【特征】多年生缠绕草本; 貝乳汁; 茎多分枝,被柔毛; 叶对生, 上而绿色, 下而灰绿色, 两面被柔毛; 聚伞花序, 花多数; 花冠辐状, 5深裂, 白色; 副花冠杯状, 膜质; 蓇葖果圆柱状, 单生, 偶有孪生。花期6~7月。

【分布】东北至西北,华东和华中;蒙古。

【生境】草地、沙地、撂荒地、田埂。

【用途】药用。

#### Chinese swallow-wort

Milkweed family

Perennial twining herb, with milky juice; stems much branched, pubescent; leaves opposite, green above, grey-green beneath, pubescent both sides; many flowers in cymes; corolla rotate, 5-parted, white: corona cupulate, membranous; follicle terete, single, rarely twined. Flowering June to July.

Distribution: NE to NW, E and C China; Mongolia

Habitat: Grasslands, sands, abandoned lands and field ridges

## 地梢瓜

## Cynanchum thesioides (Freyn) K. Schum.

萝蓙科

Asclepiadaceae

【特征】多年生草本,高15~30cm; 具乳汁; 茎自基部分枝,直立; 叶对生,两面被短硬毛; 聚伞花序, 花3~7枚; 花冠辐状,5深裂,白色; 副花冠杯状; 蓇葖果纺锤状,单生。花期6~7月。

【分布】东北至西北及华东;蒙古、朝鲜、俄罗斯(西伯利亚、远东)。

【生境】草地、沙丘、撂荒地、田埂。

【用途】药用;全株含橡胶和树脂,可作工业原料;幼果可食。

#### Thesionlike swallow-wort

Milkweed family

Perennial herb  $15\sim30$  cm tall, with milky juice; stems branched from base, erect; leaves opposite, hispidulous both sides; flowers  $3\sim7$  in cymes; corolla rotate, 5-parted, white; corona cupulate; follicle fusiform, single. Flowering June to July.

Distribution: NE to NW and E China; Mongolia, Korea and Russia (Siberia and Far East)

Habitat: Grassland, sand duncs; abandoned lands and field ridges

Use: Medicine; whole plant containing rubber and resin, raw material for industrial use; young fruits edible







# 银灰旋花

# Convolvulus ammannii Desr.

旋花科

Convolvulaceae

【特征】多年生草本,高2~12cm;全株被银灰色绢毛;茎平卧或上升;叶互生;花单生;花冠漏斗状,白色或淡粉色,外面被毛;蒴果球形。花期7~8月。

【分布】东北至西北及青藏高原;蒙古、西伯利亚、中亚。

【生境】砾质草原和荒漠。

【用途】饲用; 药用。

#### Ammann bindweed

Morning glory family

Perennial berb  $2\sim12$  cm tall, whole plant silvery-sericeous: stems procumbent or ascending; leaves alternate; flowers solitary; corolla funnelform, white to pinkish, pubescent outer side; capsule globose. Flowering July to August.

Distribution: NE to NW China and Tibet-Qinghai Plateau; Mongolia, Siberia and

Central Asia

Habitat: Gravelly steppe and desert

Use: Forage; medicine





# 砂引草

# Messerschmidia sibirica L. var. angustior (DC.) W. T. Wang 紫草科

## Boraginaceae

【特征】多年生草本,高10~30cm;全株密被长柔毛;茎自基部分枝;叶互生;伞房状聚伞花序顶生;花冠漏斗状,5裂,白色,喉部黄色,外面密被柔毛。花期5~6月。

【分布】东北至西北;蒙古、西伯利亚、朝鲜、日本。

【生境】草原和荒漠草原带的沙地、盐化草甸。

【用途】固沙; 花可提取香料。

### Siberian sea rosemary

Borage family

Perennial herb  $10\sim30$  cm tall, whole plant densely villous; stems branched from base; leaves alternate; corymbose cymes terminal; corolla funnelform, 5-lobed, white with yellow throat, densely pubescent outer side. Flowering May to June.

**Distribution:** NE to NW China: Mongolia, Siberia, Korea and Japan **Habitat:** Sands and saline meadows in steppe and desert-steppe zones

Use: Fixing sand dunes; flowers for extracting essential oil

## 白花枝子花

## Dracocephalum heterophyllum Benth.

唇形科

Labiatae

【特征】多年生草本,高10~25cm;茎四棱,平卧或倾斜,密被倒向柔毛;叶对生, 边缘具圆齿,两面被柔毛;轮伞花序;花冠白色或淡黄色,二唇形,外面密 被柔毛;上唇微凹,下唇3裂。花期6~7月。

【分布】西北,内蒙古、山西、宁夏、四川、西藏;蒙古、中亚。

【生境】草原地带的石质和砾质山坡、坡麓。

【用途】药用。

#### Whiteflower dragonhead

Mint family

Perennial herb  $10\sim25$  cm tall; stems quadrangular, procumbent or ascending, densely retrorse-pubescent; leaves opposite, crenate, pubescent both sides; flowers in verticillasters; corolla white or pale yellow, bilabiate, densely pubescent outer side; upper lip retuse, lower lip 3-lobed. Flowering June to July.

Distribution: NW China, Inner Mongolia, Shanxi, Ningxia, Sichuan and Tibet; Mongolia and Central Asia

Habitat: Stony and gravelly slopes and hillsides in steppe zone







# 冬青叶兔唇花

# Lagochilus ilicifolius Bunge

唇形科

Labiatae

【特征】多年生草本,高5~15cm;茎四棱,直立或斜升,具分枝,密被柔毛;叶革质,灰绿色,先端齿裂,具刺尖;轮伞花序,2~4花;花萼革质;花冠黄白色,有时具橙黄色或粉色斑纹,二唇形,外面密被柔毛;上唇2裂,边缘具长柔毛,下唇3裂。花期6~8月。

【分布】内蒙古、陕西、宁夏、甘肃;蒙古、西伯利亚。

【生境】砾质或沙质荒漠草原。

#### Hollyleaf lagochilus

Mint family

Perennial herb  $5\sim15$  cm tall; stems quadrangular, erect or ascending, branched, densely pubescent; leaves coriaceous, grey-green, tooth-cleft with spiny-pointed apex; verticillaster with  $2\sim4$  flowers; calyx coriaceous; corolla yellow-white, sometimes with orange or pink streaks, bilabiate, densely pubescent outer side; upper lip 2-lobed with villous edges, lower lip 3-lobed. Flowering June to August.

Distribution: Inner Mongolia, Shaanxi, Ningxia and Gansu; Mongolia and Siberia

Habitat: Gravelly and sandy desert-steppe

## 夏至草

## Lagopsis supina (Steph. ex willd.) Ik.-Gal. ex Knorr.

唇形科

Labiatae

【特征】多年生草本,高15~30cm;茎四棱,密被微柔毛,具分枝;叶掌状3浅裂至3深裂,裂片有圆齿,两面密被微柔毛;轮伞花序腋生,具疏花;花小,花冠白色,二唇形;上唇全缘,外面密被长柔毛,下唇3裂。花期5~6月。

【分布】几遍全国;蒙古、西伯利亚、朝鲜。

【生境】田野、荒地、农田。

【用途】药用。

#### June mint

Mint family

Perennial herb 15~30 cm tall; stems quadrangular, densely puberulent, branched; leaves palmately 3-lobe to 3-parted, lobes crenate, densely puberulent; verticillaster axillary, with loose and tiny flowers; corolla white, bilabiate; upper lip entire, densely villous outer side, lower lip 3-lobed. Flowering May to June.

Distribution: Much of throughout China; Mongolia, Siberia and Korea

Habitat: Wild fields, wastelands and farmlands





# 短柄野芝麻

#### Lamium album L.

唇形科

Labiatae

【特征】多年生草本,高30~50cm;茎四棱,被刚毛;叶对生,边缘具锯齿,两面疏被短硬毛;轮伞花序具5~10花;花冠白色或淡黄色,二唇形;上唇先端钝圆,外面被柔毛,下唇3裂,中裂片先端2裂,边缘具长睫毛。花期7~8月。

【分布】黑龙江、内蒙古、甘肃、新骊;蒙古、日本、中亚。

【生境】林缘草甸和灌从。

【用途】药用。

#### White deadnettle

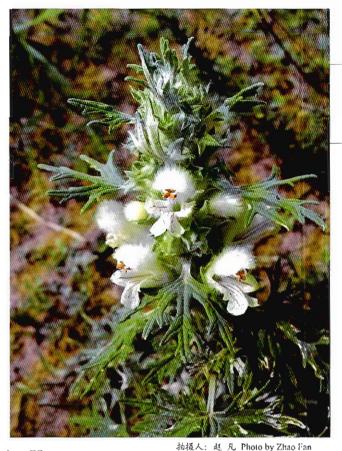
Mint family

Perennial herb  $30\sim50$  cm tall; stems quadrangular, setose; leaves opposite, serrate, loosely hispidulous; verticillaster with  $5\sim10$  flowers; corolla white to pale yellow, bilabiate; upper lip obtuse at apex, villous outer side, lower lip 3-lobed, middle lobe further 2-lobed, with fringed edges. Flowering July to August.

Distribution: Heilongjiang, Inner Mongolia, Gansu and Xinjiang; Mongolia, Japan and Central Asia

Habitat: Meadows and thickets along forest margins





# 阿拉善脓疮草

# Panzeria alaschanica Kupr.

唇形科

Labiatae

【特征】多年生草本,高15~35cm;茎四棱,密被白色绒毛;叶对生,掌状深裂,两面密被绒毛;轮伞花序,花多数;花冠白色或淡黄色,外面被长柔毛,二唇形;上唇盔状,下唇3裂。花期6~7月。

【分布】内蒙古、陕西、宁夏;蒙古。

【生境】荒漠草原或荒漠地带的沙地。

【用途】药用。

#### Alashan panzeria

Mint family

Perennial herb 15~35 cm tall; stems quadrangular, densely white-tomentose; leaves opposite, palmately parted, densely tomentose; verticillaster with many flowers; corolla white or pale yellow, villous outer side, bilabiate; upper lip galeate, lower lip 3-lobed. Flowering June to July.

Distribution: Inner Mongolia, Shaanxi and Ningxia; Mongolia

Habitat: Sands in desert-steppe to desert areas

# 大婆婆纳

## Veronica dahurica Stev.

玄参科

Scrophulariaceae

【特征】多年生草本,高30~70cm,全株密被柔毛或混生腺毛;茎直立,单一或少数;叶对生,边缘具深而钝的齿,下部常羽裂,裂片有齿;总状花序细长;花冠白色,近辐状,4裂。花捌7~8月。

【分布】东北、华北;蒙古、俄罗斯(西伯利亚、远东)、朝鲜、日本。

【生境】山坡草地、沟谷、草甸。

【用途】药用。

#### Dahurian speedwell

Figwort family

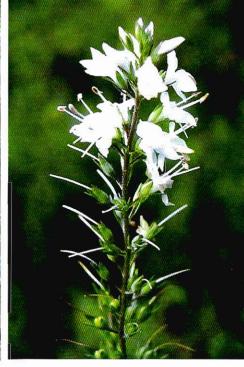
Perennial herb 30~70 cm tall, whole plant densely pubescent with glandular-hairs; stems erect, single or few; leaves opposite, deeply blunt-toothed, pinnately lobed below, lobes toothed; racemes slender; corolla white, subrotate, 4-parted. Flowering July to August.

Distribution: NE and N China; Mongolia, Russia (Siberia and Far East), Korea

and Japan

Habitat: Sloping grassland, ravines and meadows







# 齿叶蓍

# Achillea acuminata (Ledeb.) Sch.-Bip.

菊科

Compositae

【特征】多年生草本,高30~100cm;茎直立,上部密被短柔毛;叶无柄,披针形至 条状披针形,边缘有重锯齿;头状花序多数,伞房状排列;总苞被柔毛;舌 状花和管状花白色。花期6~8月。

【分布】东北,内蒙古、陕西、宁夏、甘肃、青海;蒙古、朝鲜、日本、俄罗斯(西伯利亚、远东)。

【生境】低湿草甸。

【用途】饲用。

#### Toothleaf yarrow

Aster family

Perennial herb  $30\sim100$  cm tall; stems erect, densely pubescent above; leaves sessile, lanceolate to linear-lanceolate, duplicato-serrate; numerous heads in a corymb; involucre pubescent; ray florets and disk florets white. Flowering June to August.

**Distribution:** NE China, Inner Mongolia, Shaanxi, Ningxia, Gansu and Qinghai; Mongolia, Korea, Japan, and Russia (Siberia and Far East)

Habitat: Moist lowland meadows

Use: Forage



## 乳白香青

## Anaphalis lactea Maxim.

菊科

Compositae

【特征】多年生草本,高10~30cm,全株被灰白色绵毛;茎直立,不分枝;叶基生和茎生;头状花序多数,复命房状排列;总苞片外层下部褐色,被蛛丝状毛,内层乳白色,干膜质;花冠管状。花期8~9月。

【分布】华北,甘肃、青海、四川。

【生境】山地草原和草甸,沟谷、河谷。

【用途】饲用。

#### Milky pearly everlasting

Aster family

Perennial herb 10~30 cm tall, whole plant greyish-white lanate; stems erect, unbranched; leaves basal and cauline; numerous heads in a compound corymb; outer involucral bracts brown at lower part, arachnoid, inner ones creamy-white, scarious; corolla tubular. Flowering August to September.

Distribution: N China, Gansu, Qinghai and Sichuan

Habitat: Montane-steppe and meadows, ravines and river valleys

Use: Forage

## 中亚紫菀木

#### Asterothamnus centrali-asiaticus Novopokr.

菊科

Compositae

【特征】半灌木,高20~40cm;茎丛生,多分枝;叶近条形,全缘,边缘反卷,两面被蛛丝状绵毛;头状花序直径1cm,疏伞房状排列;舌状花白色至淡蓝紫色,管状花黄色。花期8~9月。

【分布】内蒙古、宁夏、甘肃、青海;蒙古。

【生境】砂质、砾石质荒漠草原至荒漠。

【用途】饲用。

#### Central Asia asterbush

Aster family

Subshrub 20~40 cm tall; stems tufted, much branched; leaves nearly linear, entire, revolute, arachnoid-lanate both surfaces; heads 1 cm across, in loose corymbs; ray florets white to bluish-purple, disk florets yellow. Flowering August to September.

Distribution: Inner Mongolia, Ningxia, Gansu and Qinghai; Mongolia

Habitat: Sandy or gravelly desert-steppe to desert

Use: Forage



## 苍术

## Atractylodes lancea (Thunb.) DC.

菊科

Compositae

【特征】多年生草本,高30~50cm;茎直立,具纵沟;叶互生,革质,多形,不分裂或3~9羽状浅裂至深裂,边缘有刺状齿;头状花序单生;苞叶栉齿状,有硬刺;总苞片多层;管状花冠白色。花期7~9月。

【分布】东北至西北及华东和华中; 朝鲜、俄罗斯(远东)。

【生境】石质山坡、林缘、灌丛。

【用涂】药用。

#### Common atractylodes

Aster family

Perennial herb  $30\sim50$  cm tall; stems erect, canaliculated; leaves alternate, coriaceous, variable in shape, unlobed to pinnately lobed or parted into  $3\sim9$  segments, with spinytoothed edges; heads solitary; bracteal leaves pectinately toothed with hard spine; involucral bracts in several series; tubular corolla white. Flowering July to September.

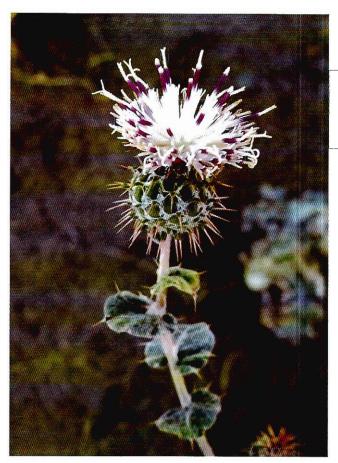
Distribution: NE to NW, E and C China; Korca and Russia (Far East)

Habitat: Rocky slopes, forest edges and thickets

Use: Medicine







## 刺头菊

## Cousinia affinis Schrenk

菊科

Compositae

【特征】多年生草本,高10~60cm; 茎直立,单一或上部有分枝,被蛛丝状毛;叶羽状浅裂或具大锯齿,裂片顶端和边缘有针刺;茎上部叶渐小,基部有圆耳,半抱茎;叶下面密被绒毛;头状花序单生于茎顶;总苞片顶端刺尖外弯;管状花冠白色或淡黄色,花药红紫色或粉色。花期7~9月。

【分布】新疆;蒙古、哈萨克斯坦。

【生境】戈壁、沙丘。

#### Thorny cousinia

Aster family

Perennial herb 10~60 cm tall; stems erect, single or branched above, arachnoid; leaves pinnatilobate or large serrate, lobes with accrose-spiny apex and edges; upper leaves smaller, base auriculate and subclasping; all leaves densely tomentose beneath; solitary heads terminal; involucial bracts with excurved spiny-point at apex; tubular corolla white to pale yellow, anthers red-purple or pink; Flowering July to September.

Distribution: Xinjiang; Mongolia and Kazakhstan

Habitat: Gobi and sand dunes



## 女菀

## Turczaninowia fastigiata (Fisch.) DC.

菊科

Compositae

【特征】多年生草本,高30~40cm;茎直立,上部有分枝,密被短硬毛;叶互生,披针形至条形,全缘,两面密被短硬毛和腺点;头状花序直径5~9mm,多数,复伞房状排列;舌状花白色;管状花白色或黄色。花期7~9月。

【分布】东北、华北及长江流域;朝鲜、日本、俄罗斯(西伯利亚、远东)。

【生境】草原及森林草原带的山坡、荒地、低湿草甸。

【用途】饲用。

#### Clustered turczaninow aster

Aster family

Perennial herb  $30\sim40$  cm tall; stems erect, branched above, densely hispidulous; leaves alternate, lanceolate to linear, entire, densely hispidulous and glandular; heads  $5\sim9$  mm across, numerous in compound corymbs; ray florets white; disk florets white to yellow. Flowering July to September.

**Distribution:** NE and N China, and regions along Changjiang River; Korea, Japan and Russia (Siberia and Far East)

Habitat: Slopes, wastelands, moist lowland meadows in steppe to forest-steppe zones

Use: Forage

#### 野韭

#### Allium ramosum L.

百合科

Liliaceae

【特征】多年生草本;鳞茎外皮破裂成网状纤维状;叶三棱状条形,中空;花葶高20~55cm;总苞单侧开裂或2裂;伞形花序半球状至球状,花多数;花被片6,白色,稀粉色,常具红色中脉,先端具短尖头;花丝短于花被片;花柱内藏。花期6~8月。

【分布】东北至西北;蒙古、西伯利亚、中亚。

【生境】草原砾石质坡地和草甸。

【用途】饲用;食用。

#### Field onion

Lily family

Perennial herb; bulb coat reticulate-fibrous; leaves triangulate-linear, hollow; scapes  $20\sim55$  cm tall; spathe single or 2-divided; umbels hemispheric to globose, with numerous flowers; tepals 6, white, rarely pink, usually with red midvein, mucronulate at apex; filaments shorter than tepals; style included. Flowering June to August.

Distribution: NE to NW China; Mongolia. Siberia and Central Asia

Habitat: Gravelly slopes in steppe and meadows

Use: Forage; edible







## 灌木铁线莲

#### Clematis fruticosa Turcz.

毛茛科

Ranunculaceae

【特征】灌木,高达1m;茎直立,紫褐色;单叶涉革质,疏生齿,下部常羽状深裂或全裂;聚伞花序具1~3花;萼片4,黄色,边缘密被短柔毛;无花瓣;瘦果多数,宿存花柱羽毛状。花期7~8月。

【分布】华北、西北;蒙古。

【生境】石质山坡、沟谷、干河床。

【用途】观赏; 饲用。

#### **Bush clematis**

Buttercup family

Shrub to 1 m tall; stems erect, purple-brown; simple leaves thin-coriaceous, loosely toothed, usually pinnately parted to divided at lower part; cymes with 1 to 3 flowers; yellow sepals 4, densely pubescent at margins; petals absent; achenes numerous, persistent styles feather-like. Flowering July to August.

**Distribution:** N and NW China; Mongolia

Habitat: Rocky slopes, ravines and dry riverbeds

Use: Omamental: forage

## 黄花铁线莲

### Clematis intricata Bunge

毛茛科

Ranunculaceae

【特征】草质藤本; 茎攀援,多分枝; 二回三出羽状复叶,灰绿色,小叶边缘疏生齿或全缘,或下部具1~2小裂片;聚伞花序腋生,通常2~3花;萼片4,黄色,边缘密被柔毛;无花瓣;瘦果多数,宿存花柱羽毛状。花期7~8月。

【分布】 华北、西北;蒙古。

【生境】山坡、丘陵、低湿地、田边、路旁。

【用途】 药用。

#### Intricate clematis

Buttercup family

Herbaceous vine; stems climbing, much branched; leaves biternate, greyish-green; leaflets loosely toothed at margins or entire, or with  $1\sim2$  small lobes at lower part; axillary cymes usually with 2 or 3 flowers; yellow sepals 4, densely pubescent at margins; petals absent; achenes numerous, persistent styles feather-like. Flowering July to August.

Distribution: N and NW China; Mongolia

Habitat: Mountain slopes, hills, moist lowlands, field sides and roadsides

Use: Medicine





## 金莲花

## Trollius chinensis Bunge

毛茛科

Ranunculaceae

【特征】多年生草本,高40~70cm;茎直 立; 叶掌状3全裂, 中央裂片3中 裂,侧裂片2深裂,小裂片具 齿; 花1~2枚顶生; 萼片5 至多数, 花瓣状, 金黄色; 花瓣5至多数, 狭条形, 金 黄色; 雄蕊多数。花期6~7 月。

【分布】华北;俄罗斯(远东)。 【生境】疏林、林缘和草甸。

【用途】观赏; 药用。

#### Chinese globe flower

Buttercup family

Perennial herb  $40 \sim 70$  cm tall; stems erect; leaves palmately 3-divided, middle segment 3-cleft, lateral segments 2-parted, lobules toothed; solitary or 2 flowers terminal; sepals 5 to more, petallike, golden-yellow; petals 5 to more, narrowly linear, golden-yellow; stamens numerous. Flowering June to July.

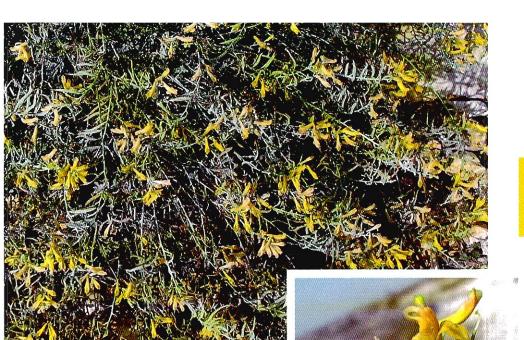
Distribution: N China; Russia (Far

Habitat: Open woodland, forest edges

and meadows

Use: Ornamental: medicine





## 灰绿黄堇

#### Corydalis adunca Maxim.

罂粟科

Papaveraceae

【特征】多年生草本,高20~40cm,全株被 白粉,灰绿色;茎自基部多分枝; 叶三回羽状全裂;总状花序疏散; 花瓣4,黄色;上瓣片基部具短 距;内轮两瓣片先端稍合生;蒴果 条形,具喙。花期5~7月。

【分布】内蒙古、陕西、宁夏、甘肃、青海 和西南各省区。

【生境】荒漠和半荒漠地区的石质生境。

#### Greygreen fumewort

Poppy family

Perennial herb 20~40 cm tall, whole plant white-farinose, grey-green; stems much branched from base; leaves tripinnatisect; flowers in a loose raceme; petals 4, yellow; upper petal basally short-spurred; 2 inner petals nearly connate at apex; capsules linear, beaked. Flowering May to July.

Distribution: Inner Mongolia, Shaanxi, Ningxia, Gansu, Qinghai and SW China

Habitat: Stony ground in desert and semi-desert areas



#### 西伯利亚离子芥

## Chorispora sibirica (L.) DC.

十字花科

Brassicaceae

【特征】一年生草本,高10~50cm;茎自基部分枝,或短缩;叶羽状深裂至全裂;花序伞房状,果时总状;花梗及花萼被腺毛和长毛;花瓣4,黄色;长角果念珠状。花期4~8月。

【分布】新疆; 中亚、巴基斯坦、印度。

【生境】草地、农田、撂荒地。

【用途】饲用。

#### Siberian blue mustard

Mustard family

Annual herb  $10 \sim 50$  cm tall, stems basally branched, or shorten; leaves pinnately parted to divided; inflorescence corymbose, becoming racemose in fruit; pedicles and calyx glandular-hairy and pilose; petals 4, yellow; siliques torose. Flowering April to August.

**Distribution:** Xinjiang; Central Asia, Pakistan and India **Habitat:** Grassland, farmlands and abandoned lands





## 糖芥 Erysimum bungei (Kitag.) Kitag.

十字花科 Brassicaceae

【分布】东北、华北,四川、 江苏;蒙古、朝鲜、 西伯利亚。

【生境】林缘、草甸、沟谷。 【用途】饲用;药用。

#### Orange wallflower

Mustard family

Perennial herb, rarely annual or biennial,  $20 \sim 50$  cm tall; whole plant with T-shaped hairs; stems erect, rarely branched; leaves entire or loosely toothed; flowers in raceines; petals 4, orange or yellow; siliques somewhat quadrangular. Flowering June to July.

Distribution: NE and N China, Sichuan and Jiangsu; Mongolia, Korea and Siberia

Habitat: Woodland edges, meadows and ravines

Use: Forage; medicine

拍摄人·赵凡 Photo by Zhao Fan

## 费菜

#### Sedum aizoon L.

#### 景天科

Crassulaceae

【分布】东北至西北及长江流域;蒙古、朝鲜、日本、俄罗斯(西伯利亚、远东)。

【生境】石质山坡、疏林、灌丛和林间空地。

【用途】药用;根提制栲胶。

#### Aizoon stonecrop

Stonecrop family

Perennial fleshy herb  $20\sim50$  cm tall; stems erect, unbranched; leaves alternate, serrate; cymes terminal; petals 5, yellow, short-pointed at apex; follicle stellate-aristiform. Flowering June to August.

Distribution: NE to NW China, and regions along Changjiang River; Mongolia, Korea,

Japan and Russia (Siberia and Far East)

Habitat: Rocky slopes, open woodland, thickets and forest openings

Use: Medicine; roots for extracting tannin









## 龙牙草

#### Agrimonia pilosa Ledeb.

薔薇科

Rosaceae

【特征】多年生草本,高30~60cm,全株密被长柔毛和腺点;茎单生或丛生,直立; 单数羽状复叶,具小叶3~9,小叶片边缘有锯齿;总状花序顶生;萼筒顶端 有1圈钩状刺;花瓣5,黄色。花期6~7月。

【分布】遍及全国;蒙古、朝鲜、日本、俄罗斯(西伯利亚、远东)。

【生境】林间空地、林缘和河边草甸。

【用途】药用;提制栲胶;作防蚜虫农药。

#### Pilose agrimony

Rose family

Perennial herb  $30\sim60$  cm tall; whole plant densely villous and glandular; stems single or tufted, erect; leaves odd-pinnate with  $3\sim9$  leaflets, leaflets serrate; racemes terminal; calyx tube with a ring of hooked spines at top; petals 5, yellow. Flowering June to July.

Distribution: Throughout whole China; Mongolia, Korea, Japan and Russia (Siberia and Far East)

Habitat: Forest openings and edges, and meadows along river banks Use: Medicine; extracting tannin; making chemical for aphid damage



## 水杨梅

## Geum aleppicum Jacq.

蔷薇科

Rosaceae

【特征】多年生草本,高20~70cm;茎直立,上部分枝,被硬毛和腺毛;单数羽状复叶,顶生小叶片3~5深裂,两面被伏毛;花3枚,伞房状排列;花瓣5,黄色;瘦果被硬毛,顶端有钩状长喙。花期6~7月。

【分布】东北至西北,华中至西南;蒙古、俄罗斯、朝鲜、日本、北欧、北美。

【生境】林间草甸和河滩草甸。

【用途】药用;提制栲胶;种子制肥皂和油漆。

#### Yellow avens

Rose family

Perennial herb  $20\sim70$  cm tall; stems erect, branched above, hirsute and glandular-hairy; leaves odd-pinnate; terminal leaflet  $3\sim5$ -parted, appressed-hairy; 3 flowers in a corymb; petals 5, yellow; achenes hispid, with hooked long beaks at apex. Flowering June to July.

Distribution: NE to NW, C to SW China; Mongolia, Russia, Korea, Japan, N Europe and North America

Habitat: Meadows in forest openings and flood lands

Use: Medicine; extracting tannin: seeds for making soaps and prints

#### 星毛委陵菜

#### Potentilla acaulis L.

薔薇科

Rosaceae

【特征】多年生草本,高2~10cm,全株密被星状毡毛;茎自基部分枝;掌状三出复则,灰绿色;聚伞花序具2~5花,稀单生;花瓣5,黄色。花期5~6月。

【分布】东北至西北;蒙古、俄罗斯(西伯利亚、远东)。

【生境】沙质或砾石质草原。退化草原指示植物。

【用途】饲用。

#### Stemless cinquefoil

Rose family

Perennial herb  $2\sim10$  cm tall, whole plant densely stellate-manicate; stems branched from base; leaves palmate-ternate, grey-green; flowers  $2\sim5$  in a cyme, rarely solitary; petals 5, yellow. Flowering May to June.

**Distribution:** NE to NW China; Mongolia and Russia (Siberia and Far East) **Habitat:** Sandy and gravelly steppe. Indicator species to degraded steppe

Use: Forage





## 鹅绒委陵菜

#### Potentilla anserina L.

蔷薇科

Rosaceae

【特征】多年生草本,高2~5cm;茎匍匐;单数羽状复叶,基生,边缘有锯齿,上面 无毛或疏被毛,下面密被毡毛;花单生于匍匐茎的叶腋;花梗和花萼被长柔 毛;花瓣5,黄色。花期5~8月。

【分布】东北至西北及西南; 欧亚和北美。

【生境】低湿草甸。

【用途】饲用;蜜源;药用;提制栲胶;茎叶可提取黄色染料;块根可食用。

#### Silverweed

Rose family

Perennial herb  $2\sim5$  cm tall; stems repent; leaves basal, odd-pinnate, serrate, glabrous or sparsely pubescent above, densely manicate beneath; flowers solitary in axils of stolons; pedicels and calyx villous; petals 5, yellow. Flowering May to August.

Distribution: NE to NW, and SW China; Eurasia and North America

Habitat: Meadows in moist lowlands

Use: Forage; honey source; medicine; extracting tannin; stems and leaves for making yellow dyestuff; roots edible

#### 二裂委陵菜

#### Potentilla bifurca L. var. bifurca 薔薇科

Rosaceae

【特征】多年生草本,高5~20cm; 蒸自基部分枝; 单数羽状复叶,小叶片椭圆形至倒卵状椭圆形,部分小叶先端2裂,顶生小叶常3裂,两面被柔毛;聚伞花序顶生; 花冠直径7~10mm,花瓣5,黄色。花期5~7月。

【分布】东北至西北和四川;蒙古、朝鲜、俄罗斯 (西伯利亚、远东)。

【生境】草甸、灌丛、林缘、农田、路边。

【用途】饲用; 药用。

#### Split-leaf cinquefoil

Rose family

Perennial herb  $5\sim20$  cm tall; stems branched from base; leaves odd-pinnate, leaflets elliptic to obovate-elliptic, some blades bifid at apex and the terminal one usually trifid, pubescent; cymes terminal; corolla  $7\sim10$  mm across, petals 5, yellow. Flowering May to July.

Distribution: NE to NW China, and Sichuan; Mongolia, Korea and Russia (Siberia and Far East)

Habitat: Meadows, thickets, forest edges, farming fields and roadsides

Use: Forage; medicine



## 高二裂委陵菜 Potentilla bifurca var. maior Ledeb.

【特征】与原变种的区别为:

植株较高;小叶片长椭圆形或条形;花较大,直径12~15mm。

#### Tall split-leaf cinquefoil

**Difference to** *Potentilla bifurca* var. *bifurca*: Plant higher; leaflets long-elliptic or linear; corolla larger, 12~15 mm across.





## 匍枝委陵菜

## Potentilla flagellaris Willd. ex Schlecht.

蔷薇科

Rosaceae

【特征】多年生草本; 茎匍匐, 纤细, 长10~30cm, 被柔毛; 掌状五出复叶, 小叶边缘具缺刻或圆齿片, 两面被柔毛; 花单生; 花瓣5, 黄色。花期6~7月。

【分布】东北至西北大部分省区;蒙古、朝鲜、哈萨克斯坦、俄罗斯。

【生境】山地林间草甸和河滩草甸。

【用途】饲用。

#### Creeping cinquefoil

Rose family

Perennial herb; stems repent, slender,  $10\sim30$  cm long, pubescent; leaves palmate-quinate, leaflet notched or crenate, pubescent; flowers solitary; petals 5, yellow. Flowering June to July.

Distribution: Most regions in NE to NW China; Mongolia, Korea, Kazakhstan and Russia

Habitat: Meadows in montane forest openings and flood lands

Use: Forage

#### 金露梅

#### Potentilla fruticosa L.

薔薇科

Rosaceae

【特征】灌木,高50~130cm;茎多分枝;单数羽状复叶,小叶5,稀3,全缘,边缘 反卷,上面被绢毛;花单生或数枚呈伞房状;花瓣5,黄色。花期6~8月。

【分布】东北至西北及西南;蒙古、日本、西伯利亚、欧洲、北美。

【生境】海拔1 000~4 800m的山地和高山灌丛、河谷、林间空地。

【用途】饲用;药用;观赏;提制栲胶。

#### Shrubby cinquefoil

Rose family

Shrub  $50 \sim 130$  cm tall; stems much branched; leaves odd-pinnate with leaflets 5, rarely 3, entire, revolute at margins, sericeous above; flowers solitary or several in corymbs; petals 5, yellow. Flowering June to August.

Distribution: NE to NW and SW China; Mongolia, Japan. Siberia, Europe and North America

Habitat: Montane and alpine scrubland, river valleys and forest openings at

1 000~4 800 m

Use: Forage; medicine; ornamental; extracting tannin





拍摄人: 赵凡 Photo by Zhao Fan

## 小叶金露梅

#### Potentilla parvifolia Fisch.

薔薇科

Rosaceae

【特征】灌木,高20~80cm;茎多分枝;单数羽状复叶,小叶5~7,近掌状排列,近 革质,全缘,两面密被绢毛,银灰绿色,边缘强烈反卷;花单生或数枚呈伞 房状;花瓣5,黄色。花期6~8月。

【分布】东北至西北及西南;蒙古、西伯利亚、中亚、印度、巴基斯坦、尼泊尔。

【生境】海拔1000~5500m的山地或高山灌丛、草甸、林间空地、河谷。

【用途】饲用;药用;观赏;提制栲胶。

#### Littleleaf gold cinquefoil

Rose family

Shrub  $20\sim80$  cm tall; stems much branched; leaves odd-pinnate, nearly palmate with  $5\sim7$  leaflets, subcoriaceous, entire, densely sericeous and silvery-green both sides, strongly revolute at margins; flowers solitary or several in corymbs; petals 5, yellow. Flowering June to August.

**Distribution:** NE to NW and SW China; Mongolia, Siberia, Central Asia, India, Pakistan and Nepal

Habitat: Montane and alpine scrubland, meadows, forest openings and river valleys at  $1.000 \sim 5.500$  m

Use: Forage; medicin

#### 铺地委陵菜

#### Potentilla supina L.

蔷薇科

Rosaceae

【特征】一年生或二年生草本,高10~35cm;茎自基部分枝,平卧、斜倚或直立,疏被长柔毛;单数羽状复叶,小叶片羽状浅裂或边缘具圆齿,两面疏被柔毛;花单生;花瓣5,黄色。花期5~7月。

【分布】长江以北各省区; 欧亚和北美。

【生境】轻度盐化低湿草甸、农田、路旁。

【用途】饲用。

#### Spreading cinquefoil

Rose family

Annual or biennial herb 10~35 cm tall; stems branched from base, procumbent, decumbent or erect, sparsely villous; leaves odd-pinnate, leaflets pinnatilobate or crenate, sparsely pubescent; flowers solitary; petals 5, yellow. Flowering May to July.

**Distribution:** Regions to north of Changjiang River; Eurasia and North America **Habitat:** Lightly saline meadows in moist lowland, farmlands and roadsides

Use: Forage







## 菊叶委陵菜

## Potentilla tanacetifolia Willd. ex Schlecht.

蔷薇科

Rosaceae

【特征】多年生草本,高10~45cm;茎丛生,斜升、斜倚或直立,上部分枝;单数羽状复叶,小叶片边缘有锯齿,两面被柔毛;伞房状聚伞花序,花多数;花瓣5,黄色。花期7~8月。

【分布】东北、华北;蒙古、西伯利亚。

【生境】沙质草原或草甸。

【用途】饲用;药用。

#### Tansyleaf cinquefoil

Rose family

Perennial herb 10~45 cm tall; stems tufted, ascending, decumbent or erect, branched above; leaves odd-pinnate, leaflets serrate, pubescent both sides; corymbose cymes with many flowers; petals 5, yellow. Flowering July to August.

Distribution: NE and N China; Mongolia and Siberia

Habitat: Sandy steppe and meadows

Use: Forage; medicine

#### 轮叶委陵菜

#### Potentilla verticillaris Steph. ex Willd.

蔷薇科

Rosaceae

【特征】多年生草本,高5~15cm;茎丛生,直立或斜升,被白绒毛和长柔毛;单数 羽状复叶,小叶片深裂为条形,在叶轴上呈假轮生状,边缘反卷,下面被白 绒毛;聚伞花序疏散,花少数;花瓣5,黄色。花期5~6月。

【分布】黑龙江、吉林、河北、内蒙古;蒙古、朝鲜、日本、俄罗斯(西伯利亚、远东)。

【生境】草原带的山坡灌丛、河滩沙地。

【用途】饲用。

#### Whorlleaf cinquefoil

Rose family

Perennial herb  $5\sim15$  cm tall; stems tufted, erect or ascending, white tomentose and villous; leaves odd-pinnate, leaflets parted into linear segments, pseudo-verticillate at rachis, with revolute margins, white-tomentose beneath; few flowers in loose cymes: petals 5, yellow. Flowering May to June.

**Distribution**: Heilongjiang, Jilin, Hebei and Inner Mongolia; Mongolia, Korea, Japan and Russia (Siberia and Far East)

Habitat: Sloping thickets, and riverbank sands in steppe areas

Use: Forage







## 宽刺蔷薇

## Rosa platyacantha Schrenk

薔薇科

Rosaceae

【特征】灌木,高1~2m; 枝具皮刺,皮刺基部宽扁;单数羽状复叶,小叶边缘有锯齿;花单生,花瓣5,黄色;蔷薇果近球形,红色或橘红色,顶端宿存萼片直立。花期5~6月。

【分布】新疆; 中亚。

【生境】海拔1 400~2 200m的河滩、沟谷、坡地、疏林。

【用途】饲用;观赏;果实含维生素C,可食用或药用。

#### Broadthorn rose

Rose family

Shrub  $1\sim2$  m tall; branches with basally broad-flat prickles; leaves odd-pinnate, leaflets serrate; flowers solitary; petals 5, yellow; hips subglobose, red or orange-red, persistent sepals erect at apex. Flowering May to June.

Distribution: Xinjiang; Central Asia

Habitat: Flood lands, ravines, slopes and open woodland at 1 400~2 200 m Use: Forage; ornamental; fruits rich in VC, edible and for medicine

#### 单瓣黄刺玫

#### Rosa xanthina Lindl. f. normalis Rehd. et Wils.

#### 蔷薇科

Rosaceae

【特征】灌木,高1~2m; 枝具皮刺; 单数羽状复叶,小叶边缘有锯齿,叶柄与小叶柄具小皮刺; 花单生,花瓣5,黄色; 蔷薇果近球形,橘红色,顶端宿存萼片 反折。花期5~6月。

【分布】华北、甘肃、青海。

【生境】山地草原或灌丛。

【用途】饲用;观赏;药用。

#### Single-petal yellow rose

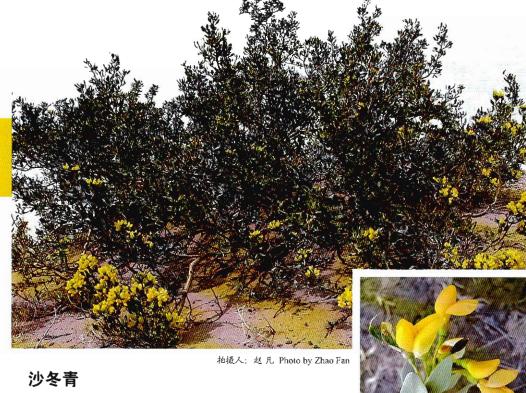
Rose family

Shrub  $1\sim2$  m tall; branches with prickles; leaves odd-pinnate, leaflets serrate; petioles and petiolules with small prickles; flowers solitary; petals 5, yellow; hips subglobose, orangered, persistent sepals reflexed at apex. Flowering May to June.

**Distribution:** N China, Gansu and Qinghai **Habitat:** Montane-steppe and scrubland **Use:** Forage; ornamental: medicine



拍摄人: 赵 凡 Photo by Zhao Fan



## Ammopiptanthus mongolicus (Maxim. ex Kom.) Cheng f.

豆科

Leguminosae

【特征】常绿灌木,高0.5~2m;多分枝;三出复叶或单叶,革质,小叶菱状椭圆形至卵形,全缘,两面密被银灰色毡毛;总状花序顶生,具花8~10枚;蝶形花冠黄色;荚果扁平,矩圆形,长5~8cm。花期4~5月。

【分布】内蒙古、宁夏、甘肃;蒙古。

【生境】荒漠中的沙质或砂砾质平原、丘陵、坡麓。第三纪残遗种。

【用途】固沙;药用。

#### Sandholly

Pea family

Evergreen shrub  $0.5\sim2$  m tall, much branched; leaves trifoliolate or simple, coriaceous, leaflets rhombic-elliptic to ovate, entire, densely silvery-grey manicate both surfaces;  $8\sim10$  flowers in a terminal raceme; papilionaceous corolla yellow; pods oblong, flat,  $5\sim8$  cm long. Flowering April to May.

Distribution: Inner Mongolia, Ningxia and Gansu; Mongolia

Habitat: Sandy and gravelly flats, foothills and hillsides in desert areas. Relict species from Tertiary period

Use: Fixing sand dunes; medicine

#### 长尾黄耆 (脬萼黄耆)

#### Astragalus alopecias Pall.

豆科

Leguminosae

【特征】多年生草本,高40~90cm,全株被白色长柔毛;茎直立或斜升;单数羽状复叶,小叶宽椭圆形至倒卵形;总状花序圆柱状或卵状,花紧密,多数;蝶形花冠淡黄色;荚果卵状,被白色柔毛。花期5~6月。

【分布】新疆; 西伯利亚、中亚、阿富汗、伊朗。

【生境】山坡草地及路旁。

【用途】饲用。

#### Longtail milkvetch

Pea family

Perennial herb  $40\sim90$  cm tall, whole plant white-villous; stems erect or ascending; leaves odd-pinnate, leaflets broadly elliptic to obovate; racemes terete to ovoid, with dense and numerous flowers; papilionaceous corolla pale yellow; pods ovoid, white villous. Flowering May to June.

Distribution: Xinjiang; Siberia, Central Asia, Afghanistan and Iran

Habitat: Grassy slopes and roadsides

Use: Forage

拍摄人: 张洪江 Photo by Zhang Hongjiang





## 胀萼黄耆

#### Astragalus ellipsoideus Ledeb.

豆科

Leguminosae

【特征】多年生草本,高10~30cm;近无茎;单数羽状复叶,小叶椭圆形至倒卵形, 两面密被丁字毛;总状花序,花密集;花萼筒状,果时膨胀,被白色和黑色长 柔毛;蝶形花冠黄色或淡黄色;荚果卵状矩圆形,包于萼筒内。花期4~5月。

【分布】内蒙古、宁夏, 西北; 哈萨克斯坦。

【生境】荒漠草原和荒漠地区的砾质坡地。

#### Ellipsoid milkvetch

Pea family

Perennial herb  $10\sim30$  cm tall; subacaulescent; leaves odd-pinnate, leaflets elliptic to obovate, with densely T-shaped hairs both sides; flowers dense in a raceme; calyx tubular, inflated in fruit, with white and black pubescence; papilionaceous corolla yellow or pale yellow; pods ovate-oblong, covered in calyx tube. Flowering April to May.

Distribution: Inner Mongolia, Ningxia and NW China; Kazakhstan

Habitat: Gravelly slopes in desert-steppe and desert areas

#### 蒙古黄耆

# Astragalus membranaceus Bunge var. mongholicus (Bunge) Hsiao

豆科

Leguminosae

【特征】多年生草本,高50~100cm;茎直立或斜升,多分枝;单数羽状复叶,小叶25~37,下面被柔毛;总状花序具花10~20枚;蝶形花冠黄色或淡黄色;荚果膨胀,薄膜质,无毛。花期6~8月。

【分布】华北;蒙古、西伯利亚。

【生境】草甸、灌丛、林缘。

【用途】饲用;绿肥;根药用。

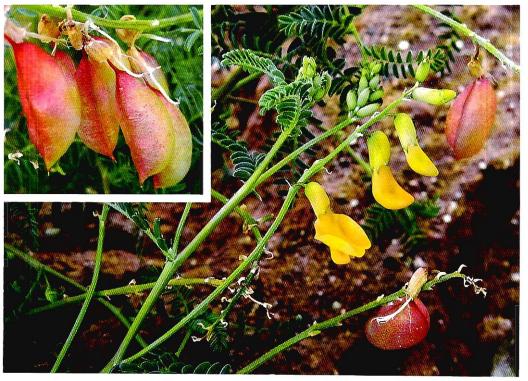
#### Mongolian milkvetch

Pea family

Perennial herb  $50 \sim 100$  cm tall; stems erect or ascending, much branched; leaves odd-pinnate, with  $25 \sim 37$  leaflets, pubescent beneath;  $10 \sim 20$  flowers in a raceme; papilionaceous corolla yellow to pale yellow; pods inflated, thin-membranous, glabrous. Flowering June to August.

**Distribution:** N China: Mongolia and Siberia **Habitat:** Meadows, scrubland and forest margins **Use:** Forage; green manure; roots for medicine

拍摄人: 赵 凡 Photo by Zhao Fan





## 树锦鸡儿

#### Caragana arborescens Lam.

豆科

Leguminosae

【特征】灌木或小乔木,高约2~6m;树皮灰绿色,有光泽;偶数羽状复叶,托叶脱落,或有时针刺状,小叶4~7对,幼时被柔毛;花1~4枚;蝶形花冠黄色;葵果圆筒形,稍扁。花期5~6月。

【分布】黑龙江、内蒙古、新疆;蒙古、西伯利亚。

【生境】森林草原带的石质或沙质坡地、河岸。

【用途】饲用; 防护林。

#### Siberian pea-tree

Pea family

Shrub or small tree,  $2\sim6$  m tall; bark grey-green, lustrous; leaves even-pinnate, stipules deciduous, or sometimes spine-like, leaflets in  $4\sim7$  pairs, pubescent when young; flowers  $1\sim4$ ; papilionaceous corolla yellow; pods cylindrical, slightly compressed. Flowering May to June.

**Distribution:** Heilongjiang, Inner Mongolia and Xinjiang: Mongolia and Siberia **Habitat:** Stony and sandy slopes and river banks in forest-steppe areas **Use:** Forage; shelter-belt



#### 短脚锦鸡儿

## Caragana brachypoda Pojark.

豆科

Leguminosae

【特征】超旱生矮灌木,高约20cm; 枝条短而密集,老枝黄褐色,稍有光泽; 假掌状复叶,托叶针刺状,小叶4,倒披针形,两面被柔毛; 花单生; 花萼筒基部浅囊状; 蝶形花冠黄色,常带紫色; 荚果近纺锤形。花期4~5月。

【分布】内蒙古、宁夏、甘肃;蒙古。

【生境】荒漠中的沙砾质平原、坡麓、下河床和沙丘。

【用涂】饲用; 水上保持。

#### Short-stalked peashrub

Pea family

Super-xerophytic dwarf shrub to 20 cm tall: branches short and dense, old branches yellow-brown, slightly lustrous; leaves pseudo-palmate, stipules spine-like, leaflets 4, oblanceolate, pubescent both sides; flowers solitary; calyx tube shallowly saccate at base; papilionaceous corolla yellow and usually purplish; pods sub-fusiform. Flowering April to May.

Distribution: Inner Mongolia, Ningxia and Gansu; Mongolia

Habitat: Sandy and gravelly flats, foothills, dry riverbeds and sand dunes in desert areas

Use: Forage; soil conservation





拍摄人: 拾涛 Photo by Shi Tao

## 短叶锦鸡儿

## Caragana brevifolia Kom.

豆科

Leguminosae

【特征】灌木,高约1~2m.全株无毛;茎皮深灰褐色,稍有光泽;假掌状复叶,托叶针刺状,小叶4,披针形至倒卵状披针形;花单生;花萼常被白粉;蝶形花冠黄色;荚果圆筒状。花期6~7月。

【分布】甘肃、青海、四川、西藏。

【生境】海拔2 600~3 600m的山坡、谷地、河岸。

【用途】饲用; 水土保持; 绿篱。

#### Shortleaf peashrub

Pea family

Shrub 1~2 m tall; whole plant glabrous; bark dark grey-brown, slightly lustrous; leaves pseudo-palmate, stipules spine-like, leaflets 4, lanceolate to obovate-lanceolate; flowers solitary; calyx usually white-farinose; papilionaceous corolla yellow; pods cylindrical. Flowering June to July.

Distribution: Gansu, Qinghai, Sichuan and Tibet

Habitat: Slopes, valleys and river banks at 2 600~3 600 m

Use: Forage; soil conservation; green fences

#### 黄刺条

## Caragana frutex (L.) K. Koch

豆科

Leguminosae

【特征】灌木,高约50~200cm; 枝条细长; 假掌状复叶,托叶针刺状,小叶4, 倒卵 形至倒卵状披针形; 花单生,少有并生; 萼筒基部浅骤状; 蝶形花冠黄色; 荚果圆筒状。花期5~6月。

【分布】新疆;蒙古、俄罗斯。

【生境】林地山坡。

【用途】饲用;水土保持;绿篱。

Distribution: Xinjiang; Mongolia and Russia

#### Russian peashrub

Pea family

Shrub  $50 \sim 200$  cm tall; branches slender; leaves pseudo-palmate, stipules spine-like, leaflets 4, obovate to obovate-lanceolate; flowers solitary, rarely 2; calyx tube shallowly saccate at base; papilionaceous corolla yellow; pods cylindrical. Flowering May to June.

Habitat: Wooded slopes
Use: Forage; soil conservation; green fences



## 中间锦鸡儿

## Caragana intermedia Kuang et H. C. Fu

Leguminosae

【特征】灌木,高约70~150cm;茎皮黄灰色至褐色;偶数羽状复叶,托叶针刺状, 小叶椭圆形至倒卵状椭圆形,两面密被柔毛,有时上面无毛;花单生;蝶形 花冠黄色;荚果革质。花期5月。

【分布】内蒙古、陕西、宁夏;蒙古。

【生境】草原至荒漠草原区的沙地、沙丘。

【用途】饲用; 固沙; 绿篱。

#### Intermediate peashrub

Pea family

Shrub 70~150 cm tall; bark yellow-grey to brown; leaves even-pinnate, stipules spine-like, leaflets elliptic to obovate-elliptic, densely pubescent both sides, sometimes glabrous above; flowers solitary; papilionaceous corolla yellow; pods coriaceous. Flowering May.

**Distribution:** Inner Mongolia, Shaanxi and Ningxia; Mongolia **Habitat:** Sands and dunes in steppe to desert-steppe areas

Use: Forage; fixing dunes; green fences

#### 浪麻鬼箭

## Caragana jubata (Pall.) Poir. var. czetyrkininii (Sancz.) Liou f. নম

Leguminosae

【特征】灌木,高30~200cm;基部分校;偶数羽状复叶,托叶先端刚毛状,叶轴针刺状,小叶4~6对,两而被长柔毛;花单生;蝶形花冠淡黄色、粉色至淡紫色;翼瓣具2耳;荚果圆筒状,密被长柔毛。花期6~7月。

【分布】青海、西藏、云南西北。

【生境】海拔2 500~4 400m的山地和高山坡地。

【用途】纤维。

#### Langma shag-spine

Pea family

Shrub  $30\sim200$  cm tall; branched from base; leaves even-pinnate, stipules sctaceous at apex. rachis spine-like, leaflets in  $4\sim6$  pairs, villous both sides; flowers solitary; papilionaceous corolla pale yellow or pink to pale purple; wings with 2 ears; pods cylindrical, densely villous. Flowering June to July.

Distribution: Qinghai, Tibet and NW Yunnan

Habitat: Montane and alpine slopes at 2 500~4 400 m

Use: Fiber material







拍扳人: 赵凡 Photo by Zhao Fan

### 柠条锦鸡儿

### Caragana korshinskii Kom.

豆科

Leguminosae

【特征】灌木,高约1~3m;老枝金黄色,有光泽;偶数羽状复叶,托叶针刺状,小叶倒披针形至矩圆状倒披针形,两面密生绢毛;花单生;蝶形花冠黄色;荚果革质,红褐色。花期5~6月。

【分布】内蒙古、宁夏、甘肃;蒙古。

【生境】荒漠及荒漠草原区的流动及半固定沙丘。

【用途】饲用; 固沙; 绿篱。

#### Korshinski peashrub

Pea family

Shrub 1~3 m tall; old branches golden-yellow, lustrous; leaves even-pinnate, stipules spine-like, leaflets oblanceolate to oblong-oblanceolate, densely sericeous both sides; flowers solitary; papilionaceous corolla yellow; pods coriaceous, red-brown. Flowering May to June.

Distribution: Inner Mongolia, Ningxia and Gansu; Mongolia

Habitat: Moving and semi-fixed dunes in desert and desert-steppe areas

Use: Forage; fixing dunes; green fences

### 小叶锦鸡儿

# Caragana microphylla Lam.

豆科

#### Leguminosae

【特征】灌木,高40~100cm;老枝灰黄色;偶数羽状复叶,托叶针刺状,小叶倒卵形至近圆形,近革质,绿色;花单生;蝶形花冠黄色;荚果深红褐色,顶端斜长渐尖。花期5~6月。

【分布】东北、华北, 甘肃; 蒙古、西伯利亚。

【生境】草原区沙地。 【用途】饲用; 固沙。

#### Littleleaf peashrub

Pea family

Shrub 40~100 cm tall; old branches grey-yellow; leaves even-pinnate, stipules spinelike, leaflets obovate to suborbicular, subcoriaceous, green; flowers solitary; papilionaceous corolla yellow; pods dark red-brown, long oblique-attenuate at apex. Flowering May to June.

Distribution: NE, N China and Gansu; Mongolia and Siberia

Habitat: Sands in steppe areas Use: Forage; fixing dunes









### 甘蒙锦鸡儿

#### Caragana opulens Kom.

豆科

Leguminosae

【特征】灌木,高40~60cm; 茎皮灰褐色,有光泽; 假掌状复叶,托叶针刺状,小叶 4,倒卵状披针形; 花单生; 萼筒基部深囊状; 蝶形花冠黄色,略带红色; 荚果圆筒状。花期5~6月。

【分布】华北、西北,四川、西藏。

【生境】海拔1 300~3 400m的山地、丘陵、沟谷。

【用途】饲用;水土保持。

#### Gansu-Mongolian peashrub

Pea family

Shrub 40~60 cm tall; bark grey-brown, lustrous; leaves pseudo-palmate, stipules spine-like, leaflets 4, obovate-lanceolate; flowers solitary; calyx tube deeply saccate at base; papilionaceous corolla yellow to reddish; pods cylindrical. Flowering May to June.

Distribution: N and NW China, Sichuan and Tibet

Habitat: Mountains, hills and ravines at 1 300~3 400 m

Use: Forage; soil conservation

### 粉刺锦鸡儿

### Caragana pruinosa Kom.

豆科

#### Leguminosae

【特征】灌木,高40~100cm; 茎皮绿褐色至黄褐色; 羽状或假掌状复叶,托叶先端 有刺尖,叶轴针刺状,小叶2~3对,倒披针形至倒卵状披针形; 花单生; 蝶 形花冠黄色; 荚果条形。花期5月。

【分布】内蒙古、新疆;中亚。

【生境】石质和砾质荒漠。

【用途】饲用; 水土保持。

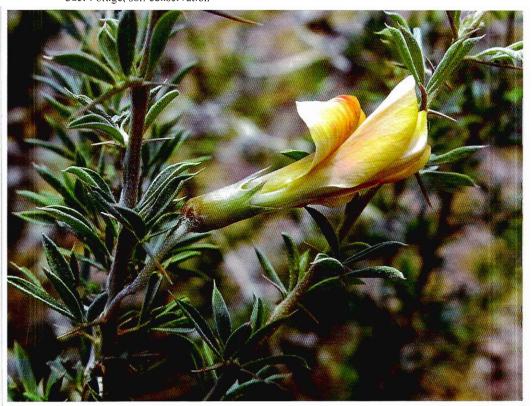
#### Frosted peashrub

Pea family

Shrub  $40 \sim 100$  cm tall; bark green-brown to yellow-brown; leaves pinnate or pseudo-palmate, stipules spine-pointed at apex, rachis spine-like, leaflets in  $2 \sim 3$  pairs, oblanceolate to obovate-lanceolate; flowers solitary; papilionaceous corolla yellow; pods linear. Flowering May.

Distribution: Inner Mongolia and Xinjiang; Central Asia

**Habitat:** Rocky and gravelly desert **Use:** Forage; soil conservation





# 窄叶矮锦鸡儿

# Caragana pygmaea (L.) DC. var. angustissima Schneid.

豆科

Leguminosae

【特征】灌木,高30~40cm;茎皮金黄色,有光泽;小枝条细长;假掌状复叶,托叶针刺状,小叶4,狭条形,灰绿色,两面被柔毛;花单生;花梗较叶长,中部以上具关节;蝶形花冠黄色。花期5月。

【分布】内蒙古。

【生境】荒漠草原带的沙质或砂砾质生境。

【用途】饲用; 固沙; 纤维材料。

#### Karlikovan peashrub

Pca family

Shrub 30~40 cm tall; barks golden-yellow, lustrous; branchlets slender; leaves pseudo-palmate, stipules spine-like, leaflets 4, narrowly linear, grey-green, pubescent both sides; flowers solitary; pedicels longer than leaflets, jointed at the upper half; papilionaceous corolla yellow. Flowering May.

Distribution: Inner Mongolia

**Habitat:** Sandy and gravelly sites in desert-steppe areas

Use: Forage; fixing sand dunes: fiber material

# 小花矮锦鸡儿

### Caragana pygmaea (L.) DC. var. parviflora H. C. Fu

豆科

Leguminosae

【特征】与上一变种的区别为: 花梗与叶近等长或稍短, 中部以下具关节。花期6月。

【分布】内蒙古。

【生境】荒漠草原带的沙质或砂砾质生境。

【用途】饲用; 固沙; 纤维材料。

#### Small-flowered dwarf peashrub

Pea family

Difference to Caragana pygmaea var. angustissima: Pedicels shorter than or subequaling

leaflets, jointed below the middle. Flowering June.

Distribution: Inner Mongolia

Habitat: Sandy and gravelly sites in desert-steppe areas

Use: Forage; fixing sand dunes; fiber material





Leguminosae

【特征】超旱生灌木,高30~100cm; 茎皮黄褐色,略有光泽;偶数羽状复叶,托叶膜质,先端具刺尖,叶轴针刺状,小叶3~6 对,宽倒卵形至矩圆形,两面密被柔毛;花单生;蝶形花冠黄色,族癖有时带紫色;荚果圆筒状,被白色长柔毛。花期4~5月。

【分布】内蒙古、宁夏,西北。

【生境】荒漠中的沙地、山坡、沟壑。

【用途】饲用; 水上保持。

#### Roborovsky globe peashrub

Pea family

Super-xerophytic shrub  $30 \sim 100$  cm tall; bark yellow-brown, slightly lustrous; leaves even-pinnate, stipules membranous, spine-pointed at apex, rachis spine-like, leaflets in  $3 \sim 6$  pairs; broadly obovate to oblong, densely pubescent both sides; flowers solitary; papilionaceous corolla yellow, sometimes banner purplish; pods cylindrical, white-villous. Flowering April to May.

**Distribution:** Inner Mongolia, Ningxia and NW China **Habitat:** Sands, slopes and ravines in desert areas

Use: Forage; soil conservation

### 狭叶锦鸡儿

# Caragana stenophylla Pojark.

豆科

Leguminosae

【特征】灌木,高15~80cm; 茎皮灰绿色至深褐色,小枝细长; 假掌状复叶,托叶针刺状,小叶4,条状披针形至条形; 花单生; 蝶形花冠黄色; 英果圆筒状。花期4~6月。

【分布】东北至西北;蒙古、俄罗斯。

【生境】草原至草原荒漠带的沙地、沙质及砾石质生境。

【用途】饲用; 固沙。

#### Narrowleaf peashrub

Pea family

Shrub 15~80 cm tall; bark grey-green to dark brown, branchlets slender; leaves pseudopalmate, stipules spine-like, leaflets 4, linear-lanceolate to linear; flowers solitary; papilionaceous corolla yellow; pods cylindrical. Flowering April to June.

Distribution: NE to NW China; Mongolia and Russia

Habitat: Sands, sandy and gravelly sites in steppe to steppe-desert zones

Use: Forage; fixing sand dunes





# 垫状锦鸡儿

# Caragana tibetica Kom.

豆科

Leguminosae

【特征】垫状矮灌木,高15~30cm;小枝密集,密被长柔毛;偶数羽状复叶,托叶 膜质,叶轴针刺状,小叶3~4对,条形,密被长柔毛;花单生;蝶形花冠黄 色; 荚果椭圆状, 果皮内、外密被毛。花期5~7月。

【分布】内蒙古、陕西、宁夏、甘肃、青海、四川、西藏;蒙古。

【生境】荒漠及荒漠草原带的沙地。

【用途】饲用;固沙。

#### Tibetan peashrub

Pea family

Cushion-like shrub 15~30 cm tall; branchlets dense, densely villous; leaves even-pinnate, stipules membranous, rachis spine-like, leaflets in 3~4 pairs, linear, densely villous; flowers solitary; papilionaceous corolla yellow; pods ellipsoid, coat densely hairy inner and outer sides. Flowering May to July.

Distribution: Inner Mongolia, Shaanxi, Ningxia, Gansu, Qinghai, Sichuan and Tibet; Mongolia

Habitat: Sands in desert and desert-steppe zones

Use: Forage; fixing sand dunes

### 百脉根

#### Lotus corniculatus L.

豆科

Leguminosae

【特征】多年生草本,高15~50cm;茎多数,平卧或斜倚;羽状复叶,小叶5,基部2 小叶呈托叶状,斜卵形至倒披针状卵形;托叶退化为黑色腺点;伞形花序,花 3~7枚;蝶形花冠黄色或橙黄色,干后变蓝色;荚果细圆柱状。花期5~9月。

【分布】西北、西南,长江中上游各省区;亚洲、欧洲、北美、大洋洲。

【生境】湿润弱碱性生境。

【用途】饲用。

#### Bird's-foot trefoil

Pea family

Perennial herb  $15\sim50$  cm tall; stems several, procumbent or decumbent; leaves pinnate with 5 leaflets, the lower pair of leaflets stipule-like, oblique-ovate to oblanceolate-ovate; stipules reduced into black glands; flowers  $3\sim7$  in an umbel; papilionaceous corolla yellow or orange-yellow, becoming bluish when dry; pods narrowly terete. Flowering May to September.

Distribution: NW and SW China, regions along the middle-upper reaches of Changjiang

River; Asia, Europe, North America and Oceania

Habitat: Moist and weakly alkaline sites

Use: Forage









豆科

Leguminosae

【特征】多年生草本,高10~40cm; 茎基部多分枝,直立或上升;羽状复叶,小叶5,顶端3小叶倒卵形至倒卵状椭圆形,基部2小叶斜卵形;托叶退化为黑色腺点;伞形花序,花1~3枚;蝶形花冠橙黄色,具红色斑纹,干后变红;荚果圆柱状。花期5~8月。

【分布】新疆;蒙古、伊朗、印度、巴基斯坦、中亚、欧洲东南部。

【生境】盐碱草甸。

【用途】饲用; 盐碱地改良。

#### Leafy bird's-foot trefoil

Pea family

Perennial herb  $10\sim40$  cm tall; stems much branched from base, erect or ascending; leaves pinnate with 5 leaflets, the upper 3 obovate to obovate-elliptic, the lower pair oblique-ovate; stipules reduced into black glands; flowers  $1\sim3$  in an umbel; papilionaceous corolla orange-yellow with reddish streak, becoming reddish when dry; pods terete. Flowering May to August.

Distribution: Xinjiang; Mongolia, Iran, India, Pakistan, Central Asia and SE Europe

Habitat: Saline-alkaline meadows

Use: Forage; improving saline-alkaline soils

#### 黄花苜蓿

### Medicago falcata L.

豆科

#### Leguminosae

【特征】多年生草本,高20~80cm;茎平卧或上升,多分枝;羽状三出复叶,小叶边缘上部1/4具锯齿,下面被长柔毛;总状花序短,花6~25枚;蝶形花冠黄色;荚果镰形,稀直。花期6~8月。

【分布】东北至西北;蒙古、西伯利亚、中亚、伊朗、欧洲。

【生境】坡地、河边、谷地。 【用途】饲用;绿肥;蜜源。

#### Yellowflower alfalfa

Pea family

Perennial herb  $20 \sim 80$  cm tall; stems procumbent to ascending, much branched; leaves pinnate-ternate, leaflets serrate in 1/4 above, villous beneath; racemes short, with  $6 \sim 25$  flowers; papilionaceous corolla yellow; pods falcate, rarely erect. Flowering June to August.

Distribution: NE to NW China; Mongolia. Siberia, Central Asia, Iran and Europe

**Habitat:** Hillsides, riversides and valleys Use: Forage; green manure; honey source









# 天蓝苜蓿

# Medicago lupulina L.

豆科

Leguminosae

【特征】一年生或二年生草本,高5~40cm;全株被细柔毛或腺毛;茎平卧或上升,多分枝;羽状三出复叶;小叶边缘上半部具锯齿;花小,8~20枚密集成头状;蝶形花冠黄色;荚果肾形,表面具脉纹,成熟时黑色。花期7~9月。

【分布】东北至西北,中南和西南;欧亚大陆大部分地区。

【生境】湿润微碱性草甸和灌丛。

【用途】饲用;绿肥。

#### Black medick

Pea family

Annual or biennial herb 5~40 cm tall; whole plant finely villous or glandular-pubescent: stems procumbent or ascending, much branched; leaves pinnate-ternate, leaflets serrate in upper half; small flowers 8~20 glomerate into a head; papilionaceous corolla yellow; pods reniform, reticulate, black at maturity. Flowering July to September.

Distribution: NE to NW, CS and SW China; most regions of Eurasia

Habitat: Moist light-alkaline meadows and thickets

Use: Forage; green manure

#### 花苜蓿 (扁蓿豆)

#### Medicago ruthenica (L.) Trautv.

豆科

Leguminosae

【特征】多年生草本,高10~60cm;茎平卧或上升,多分枝;羽状三出复叶,小叶形状 多变化,条形至近圆形,通常边缘在中部以上具齿,下面被柔毛;总状花序, 花4~15枚;蝶形花冠黄色,通常带紫色斑纹;荚果矩圆状至卵状矩圆形,扁 平。花期6~9月。

【分布】东北至西北及西南;蒙古、朝鲜、西伯利亚。

【生境】沙质草原和草甸。

【用途】饲用;绿肥;水土保持。

#### Ruthenia alfalfa

Pea family

Perennial herb  $10\sim60$  cm tall; stems procumbent or ascending, much branched; leaves pinnate-ternate, leaflets variable, linear to suborbicular, usually serrate in 1/2 above, pubescent beneath;  $4\sim15$  flowers in a raceme; papilionaceous corolla yellow, usually with purple streak; pods oblong to ovate-oblong, flat. Flowering June to September.

Distribution: NE to NW, and SW China; Mongolia, Korea and Siberia

Habitat: Sandy steppe and meadows

Use: Forage; green manure; soil conservation







# 草木犀

### Melilotus officinalis (L.) Lam.

豆科

Leguminosae

【特征】-年生或二年生草本,高40~200cm;茎直立,多分枝;羽状三出复叶;小叶边缘疏生浅齿;总状花序细长,花小;蝶形花冠黄色;荚果表面具网纹。花期5~9月。

【分布】东北至西北及华东; 欧亚大部分地区。

【生境】田间、路旁、河岸、林缘、轻度盐碱化草甸。

【用途】饲用;绿肥。

#### Yellow sweet clover

Pea family

Annual or biennial herb  $40\sim200$  cm tall; stems erect, much branched: leaves pinnate-ternate, leaflets sparsely short-toothed; slender racemes with small flowers; papilionaccous corolla yellow; pods cross-veined. Flowering May to September.

Distribution: NE to NW, and E China; most regions in Eurasia

Habitat: Farming fields, roadsides, riverbanks, forest margins and lightly saline-alkaline meadows

Use: Forage; green manure

### 黄毛棘豆

### Oxytropis ochrantha Turcz.

豆科

Leguminosae

【特征】多年生草本,高10~30cm;茎极短缩,有分枝;羽状复叶,小叶对生或轮生,6~9对(轮),卵形至条形,两面密生柔毛;总状花序圆柱状,花多数;蝶形花冠黄色或白色;荚果卵状,膨胀,密生土黄色长柔毛。花期6~7月。

【分布】华北、西北;蒙古。

【生境】草原地带的坡地、干河床、轻度盐碱滩。

【用途】饲用。

#### Yellowhair crazyweed

Pea family

Perennial herb  $10 \sim 30$  cm tall; stems much shorten, branched; leaves pinnate, leaflets opposite or whorled, in  $6 \sim 9$  pairs (or whorls), ovate to linear, densely pubescent both sides; terete racemes with many flowers; papilionaceous corolla yellow or white; pods ovoid, inflated, densely other-yellow villous. Flowering June to July.

Distribution: N and NW China; Mongolia

Habitat: Slopes, dry riverbeds and lightly saline-alkaline flats in steppe areas

Use: Forage











### 苦豆子

### Sophora alopecuroides L.

豆科

Leguminosae

【特征】多年生草本,高30~100cm;全株密被绢毛,灰绿色;茎直立;单数羽状复叶,小叶矩圆状披针形至卵形;总状花序顶生,花多数;蝶形花冠淡黄色或白色;荚果念珠状,长5~12cm,密被绢毛。花期5~6月。

【分布】华北、西北、华中,西藏;蒙古、中亚、西伯利亚、阿富汗、巴基斯坦、印度、伊朗、土耳其。

【生境】草原或荒漠区的沙丘、盐化覆沙地。

【用途】固沙;绿肥;根药用。有毒植物。

#### Bitter necklacepod

Pea family

Perennial herb  $30\sim100$  cm tall; whole plant densely sericeous, grey-green; stems erect; leaves odd-pinnate, leaflets oblong-lanceolate to ovate; terminal racemes with many flowers; papilionaceous corolla pale yellow or white; pods torose,  $5\sim12$  cm long, densely sericeous. Flowering May to June.

**Distribution:** N, NW and C China, Tibet; Mongolia, Central Asia, Siberia, Afghanistan, Pakistan, India, Iran and Turkey

Habitat: Sand dunes and saline sands in steppe and desert areas

Use: Fixing dunes; green manure; roots for medicine. Poisonous plant

### 披针叶黄华

#### Thermopsis lanceolata R. Br.

豆科

Leguminosae

【特征】多年生草本,高10~30cm;茎直立,分枝,被柔毛;掌状三出复叶,小叶下面疏被柔毛;总状花序顶生,花序轴每节3~7枚花轮生;蝶形花冠黄色;荚果条状,扁平。花期5~7月。

【分布】东北至西北;蒙古、俄罗斯(远东)。

【生境】盐化草甸、沙质地。

【用途】药用。

#### Lanceleaf goldbanner

Pea family

Perennial herb  $10\sim30$  cm tall; stems erect, branched, pubescent; leaves palmate-ternate, leaflets sparsely pubescent beneath; racemes terminal, flowers  $3\sim7$  whorled per rachis node: papilionaceous corolla yellow; pods linear, flat. Flowering May to July.

Distribution: NE to NW China; Mongolia and Russia (Far East)

Habitat: Saline meadows and sandy ground

Use: Medicine







# 匍根骆驼蓬

### Peganum nigellastrum Bunge

蒺藜科

Zygophyllaceae

【特征】多年生草本,高10~25cm,全株密生短硬毛;装直立或开展,多分枝;叶2~3回羽状全裂;花单生;花瓣5,黄白色,中间橘黄色。花期5~7月。

【分布】内蒙古、宁夏,西北;蒙古。

【生境】荒漠至荒漠草原区的砾质和盐化生境、村旁、路边。

【用途】药用。

# Dark peganum

Caltrop family

Perennial herb 10~25 cm tall; whole plant hirsutulous; stems erect or spreading, much branched; leaves twice to thrice pinnatisect; flowers solitary; petals 5, yellowish-white with orange middle. Flowering May to July.

Distribution: Inner Mongolia, Ningxia and NW China; Mongolia

Habitat: Gravelly and saline sites, village sides and roadsides in desert to desert-steppe areas

Use: Medicine

### 北芸香

# Haplophyllum dauricum (L.) G. Don

芸香科

Rutaceae

【特征】多年生草本,高5~25cm;全株有特殊香气;茎丛生,直立、斜升或近于平卧;单叶互生,条状披针形至狭矩圆形,灰绿色,两面具腺点;聚伞花序顶生;花瓣5,黄色。花期6~7月。

【分布】东北至西北;蒙古、西伯利亚。

【生境】砾质或沙质草原和荒漠草原。

【用涂】饲用。

#### Dahurian ruc

Citrus family

Perennial,  $5\sim25$  cm tall; special fragrant; stems tufted, erect, ascending or nearly procumbent; simple leaves alternate, linear-lanceolate or narrowly oblong, grey-green, glandular both sides; cymes terminal; petals 5, yellow. Flowering June to July.

**Distribution:** NE to NW China; Mongolia and Siberia **Habitat:** Gravelly and sandy steppe and desert-steppe

Use: Forage

拍摄人: 赵 凡 Photo by Zhao Fan





拍摄人·赵凡 Photo by Zhao Fan

# 半日花

# Helianthemum songaricum Schrenk

半日花科

Cistaceae

【特征】超旱生矮灌木,高5~20cm; 茎多分枝,稍呈垫状;单叶革质,披针形或狭卵形,全缘,边缘反卷,两面被绵毛;花单生于枝顶;花瓣5,黄色;雄蕊多数; 蒴果卵形,被柔毛。花期6~8月。

【分布】内蒙古、甘肃、新疆; 中亚。

【生境】荒漠地带的石质或砾石质山坡、刺蚀残丘和坡麓。

【用途】可作红色染料。

#### Frostweed

Rockrose family

Super-xerophytic dwarf shrub,  $5\sim20$  cm tall; stems much branched, somewhat cushion-like; simple leaves coriaceous, lanceolate to narrowly ovate, entire, revolute, lanate both sides; solitary flowers terminal: petals 5, yellow; stamens numerous; capsules ovoid, pubescent. Flowering June to August.

Distribution: Inner Mongolia, Gansu and Xinjiang; Central Asia

Habitat: Rocky and gravelly slopes, eroded hills and foothills in desert areas

Use: Making dyestuff of red color

#### 沙枣

### Elaeagnus angustifolia L.

胡颓子科

Elaeagnaceae

【特征】灌木或乔木,高达15m; 具枝刺,幼枝被灰白色鳞片及星状毛;叶两面被银色鳞片;花1~3枚簇生于叶腋;花萼筒4裂,外面银白色,里面黄色;无花瓣;果实橙黄色至栗红色,直径约1cm。花期5~6月。

【分布】东北至西北;地中海沿岸、亚洲西部、俄罗斯。

【生境】荒漠区的河滩、盐碱低地。

【用途】水土保持;药用;饲用;家具及建筑用材;果实食用。

#### Russian olive

Oleaster family

Shrub or tree to 15 m tall; branch-thorned, young branches greyish-scurfy and stelipilous; leaves silvery-scurfy; flowers  $1 \sim 3$  tufted in axils; calyx tube 4-lobed, silvery-white outer side, yellow inner side; petals absent; fruits orange-yellow to maroon-red, 1 cm in diameter. Flowering May to June.

Distribution: NE to NW China; regions along Mediterranean, W Asia and Russia

Habitat: Flood lands and saline-alkaline lowlands in desert areas

Use: Soil conservation; medicine; forage; buildings and furniture materials; fruits edible





拍摄人: 张洪江 Photo by Zhang Hongjiang

### 中国沙棘

### Hippophae rhamnoides L. ssp. sinensis Rousi

胡颓子科

Elaeagnaceae

【特征】灌木或乔木,高1.5~2m; 枝灰色,有棘刺,幼枝具锈色鳞片;单叶全缘,下面密被白色鳞片;花小,先于叶开放,萼裂片2,淡黄色,无花瓣;果实近球形,橙黄色或橘红色,直径4~6mm。花期5月,果熟期9~10月。

【分布】华北、西北、西南。

【生境】山坡、沟谷、盐碱荒地。

【用途】绿篱; 水土保持及盐碱地改良; 果实含有机酸、维生素C、醣类, 可制作饮料; 果实药用。

#### Chinese seaberry

Oleaster family

Shrub or tree  $1.5\sim2$  m tall; branches grey, thorned; young branches rust-scurfy; simple leaves entire, densely white-scurfy beneath; small flowers appearing before leaves; calyx 2-lobed, pale yellow; petals absent; fruits subglobose, orange-yellow to orange-red,  $4\sim6$  mm in diameter. Flowering May and fruiting September to October.

Distribution: N, NW and SW China

Habitat: Mountain slopes, ravines and saline-alkaline wastelands

Use: Green fences; soil conservation and saline sites improvement; fruits rich in organic acid, vitamin C and carbohydrate for making soft drinks; fruits for medicine

### 黄花补血草

### Limonium aureum (L.) Hill

白花丹科

Plumbaginaceae

【特征】多年生草本,高10~30cm;叶基生,莲座状,灰绿色;伞房状圆锥花序多回 叉状分枝;花萼漏斗状,干膜质,萼檐与花冠均为黄色或橙黄色;花冠5裂。 花期6~8月。

【分布】华北、西北,四川;蒙古、西伯利亚。

Habitat: Gravelly slopes and saline lowlands

【生境】荒漠草原和草原带的砾质坡地和盐化低地。

【用途】药用;观赏。

#### Golden marsh rosemary

Leadwort family

Perennial herb 10 ~ 30 cm tall; leaves basal, rosulate, grey-green; corymbose panicle forked-branched several times; calyx funnelform, scarious, calyx limbs and corolla yellow to orange; corolla 5-lobed. Flowering June to August.

Distribution: N and NW China, Sichuan; Mongolia and Siberia







# 二色补血草

### Limonium bicolor (Bunge) O. Kuntze

白花丹科

Plumbaginaceae

【特征】多年生草本,高10~50cm;叶基生,莲座状; 伞房状圆锥花序多回分枝;花 萼漏斗状,干膜质,萼檐紫红色至粉红色,干后变白;花冠5裂,黄色。花期 6~7月。

【分布】东北, 黄河流域, 江苏; 蒙古、西伯利亚。

【生境】草原带沙质、砂砾质及轻度盐化生境。

【用途】药用;观赏。

#### Bicolor marsh rosemary

Leadwort family

Perennial herb 10~50 cm tall; leaves basal, rosulate; corymbose panicle branched several times; calyx funnelform, scarious, calyx limbs purple—red to pink, whitish when dry; corolla 5-lobed, yellow. Flowering June to July.

Distribution: NE China, regions along Yellow River, and Jiangsu; Mongolia and Siberia

Habitat: Sandy, gravelly and lightly saline sites in steppe areas

Use: Medicine; ornamental

### 麻花艽

#### Gentiana straminea Maxim.

龙胆科

Gentianaceae

【特征】多年生草本,高10~35cm; 茎斜升; 叶对生,基生叶莲座状,茎生叶较小; 聚伞花序; 花萼筒膜质,黄绿色,一侧开裂呈佛焰苞状; 花冠漏斗状,淡黄 色或黄绿色,喉部具绿色斑点,裂片5,裂片间具褶。花期7~9月。

【分布】宁夏、甘肃、青海、西藏、四川、湖北; 尼泊尔。

【生境】海拔2 000~4 950m的高山草甸、灌丛、林间空地、林缘、河滩。

【用途】药用。

#### Straw-colored gentian

Gentian family

Perennial herb  $10\sim35$  cm tall; stems ascending; leaves opposite, basal leaves rosulate, cauline leaves smaller; flowers in cymes; yellow-green calyx tube membranous, one side cutting to spathiform; corolla funnelform, pale yellow or yellow-green with green spots at throat, 5-lobed, with plaited folds between the lobes. Flowering July to September.

Distribution: Ningxia, Gansu, Qinghai, Tibet, Sichuan and Hubei; Nepal

Habitat: Alpine meadows, scrubland, forest openings and margins, and flood lands at  $2.000 \sim 4.950$  m

Use: Medicine





Boraginaceae

【特征】多年生草本,高8~12cm;全株被糙硬毛;茎自基部分枝;叶互生;浆伞花序顶生;花冠5裂,黄色,常具紫色斑点,花冠筒细长;小坚果有瘤状凸起。花期5~6月。

【分布】西北,内蒙古、宁夏;蒙古、中亚、阿富汗、巴基斯坦、印度、伊朗。

【生境】砾质荒漠草原和荒漠,海拔1000~3000 m。

【用途】药用。

#### Yellow arnebia

Borage family

Perennial herb 8~12 cm tall, whole plant hispid; stems branched from base; leaves alternate; cymes terminal; corolla 5-lobed, yellow with purple spots, corolla tube slender; nutlets tuberculate. Flowering May to June.

Distribution: NW China, Inner Mongolia and Ningxia; Mongolia, Central Asia, Afghanistan, Pakistan, India and Iran

Habitat: Gravelly desert-steppe and desert at 1 000~3 000 m

Use: Medicine

#### 沙穗

#### Eremostachys moluccelloides Bge.

唇形科

Labiatae

【特征】多年生草本,高25~30cm;茎分枝或不分枝;叶椭圆形,具锯齿或全缘,两面被长柔毛;轮伞花序密集组成长穗状花序;花萼漏斗状,果期萼檐极扩大;花冠黄色,二唇形;上唇弧状弯曲,外面被柔毛,下唇3裂,中裂片深橙黄色。花期6~7月。

【分布】新疆;蒙古、中亚、印度、巴基斯坦、伊朗。

【生境】山地阳坡。

#### Common eremostachys

Mint family

Perennial herb  $25\sim30$  cm tall; stems branched or not; leaves elliptic, serrate or entire, villous; verticillasters dense in a long spike; calyx funnelform, with strongly enlarged limb in fruit; corolla yellow, bilabiate: upper lip arcuate with pubescence outer side, lower lip 3-lobed, the middle lobe dark orange-yellow. Flowering June to July.

Distribution: Xinjiang: Mongolia. Central Asia, India. Pakistan and Iran

Habitat: Mountain sunny slopes

拍摄人: 张决江 Photo by Zhang Hongjiang





Labiatae

【特征】半流木,高10~35cm; 茎多数,四棱,平卧或上升,密被柔毛;叶浅裂呈钝齿状,灰绿色,被绒毛;总状花序,花多数;花冠黄色,有时具紫斑,外面被柔毛和腺毛,二唇形;上唇盔状,先端凹缺,下唇3裂。花期5~7月。

【分布】新疆;蒙古、西伯利亚、中亚。

【生境】荒漠地区的干河床,湖边沙砾地和砾石质山坡。

【用途】饲用。

#### Broad-flowered skullcap

Mint family

Subshrub 10~35 cm tall: stems many, quadrangular, procumbent or ascending, densely pubescent; leaves lobed to blunt-toothed, grey-green, tomentose; racemes with many flowers; corolla yellow, sometimes with purple spots, pubescent and glandular-hairy outer side, bilabiate; upper lip galeate, retuse at apex, lower lip 3-lobed. Flowering May to July.

Distribution: Xinjiang; Mongolia, Siberia and Central Asia

Habitat: Dry riverbeds, sandy-gravelly lakeshores and gravelly slopes in desert areas Use: Forage

### 麻花艽

#### Gentiana straminea Maxim.

龙胆科

Gentianaceae

【特征】多年生草本,高10~35cm;茎斜升;叶对生,基生叶莲座状,茎生叶较小;聚伞花序;花萼筒膜质,黄绿色,一侧开裂呈佛焰苞状;花冠漏斗状,淡黄色或黄绿色,喉部具绿色斑点,裂片5,裂片间具褶。花期7~9月。

【分布】宁夏、甘肃、青海、西藏、四川、湖北; 尼泊尔。

【生境】海拔2000~4950m的高山草甸、灌丛、林间空地、林缘、河滩。

【用途】药用。

#### Straw-colored gentian

Gentian family

Perennial herb  $10 \sim 35$  cm tall; stems ascending; leaves opposite, basal leaves rosulate, cauline leaves smaller; flowers in cymes; yellow-green calyx tube membranous, one side cutting to spathiform; corolla funnelform, pale yellow or yellow-green with green spots at throat, 5-lobed, with plaited folds between the lobes. Flowering July to September.

Distribution: Ningxia, Gansu, Qinghai, Tibet, Sichuan and Hubei; Nepal

Habitat: Alpine meadows, scrubland, forest openings and margins, and flood lands at 2 000 ~ 4 950 m

Use: Medicine





Labiatae

【特征】半灌木,高10~35cm; 茎多数,四棱,平卧或上升,密被柔毛;叶浅裂呈钝齿状,灰绿色,被绒毛;总状花序,花多数;花冠黄色,有时具紫斑,外面被柔毛和腺毛,二唇形;上唇盔状,先端凹缺,下唇3裂。花期5~7月。

【分布】新疆;蒙古、西伯利亚、中亚。

【生境】荒漠地区的干河床,湖边沙砾地和砾石质山坡。

【用途】伺用。

#### Broad-flowered skullcap

Mint family

Subshrub 10~35 cm tall; stems many, quadrangular, procumbent or ascending, densely pubescent; leaves lobed to blunt-toothed, grey-green, tomentose; racemes with many flowers; corolla yellow, sometimes with purple spots, pubescent and glandular-hairy outer side, bilabiate; upper lip galeate, retuse at apex, lower lip 3-lobed. Flowering May to July.

Distribution: Xinjiang; Mongolia. Siberia and Central Asia

Habitat: Dry riverbeds, sandy-gravelly lakeshores and gravelly slopes in desert areas

Use: Forage

### 粘毛黄芩

### Scutellaria viscidula Bunge

唇形科

Labiatae

【特征】多年生草本,高10~20cm;茎四棱,直立或斜升,多分枝,密被柔毛;叶全缘,两面具黄色腺点,下面密被短柔毛;总状花序顶生;花冠黄色,外面被腺毛,里面被长柔毛,二唇形;上唇盔状,下唇3裂。花期6~8月。

【分布】东北、华北。

【生境】草地、农田、撂荒地、路边。

【用途】药用。

#### Sticky skullcap

Mint family

Perennial herb  $10\sim20$  cm (all; stems quadrangular, erect or ascending, much branched, densely pubescent: leaves entire, with yellow glands both sides, pubescent beneath; racenies terminal; corolla yellow, glandular-hairy outer side, villous inner side, bilabiate; upper lip galeate, lower lip 3-lobed. Flowering June to August.

Distribution: NE and N China

Habitat: Grassland, farmlands, abandoned lands and roadsides

Use: Medicine





Scrophulariaceae

【特征】多年生草本,高4~20cm,全株密被白色绵毛,呈银灰绿色;茎丛生,斜 升或直立;叶条形至披针形;总状花序,花少数;花冠二唇形,黄色,外 面被柔毛,里面被腺点;花药顶端具长柔毛。花期6~8月。

【分布】黑龙江、内蒙古、河北;蒙占、西伯利亚。

【生境】石砾质草原。

【用途】饲用;药用。

#### Dahurian cymbaria

Figwort family

Perennial herb 4~20 cm tall; whole plant densely white-lanate, silvery-greyish green; stems tufted, ascending or erect: leaves linear to lanceolate; few flowers in a raceme: yellow corolla bilabiate, pubescent outer side, glandular inner side; anthers villous at apex. Flowering June to August.

Distribution: Heilongjiang. Inner Mongolia and Hebei; Mongolia and Siberia

**Habitat:** Gravelly steppe **Use:** Forage; medicine

### 蒙古芯芭

### Cymbaria mongolica Maxim.

玄参科

Scrophulariaceae

【特征】多年生草本,高5~10cm,全株密被柔毛;茎丛生;叶条状披针形或矩圆状披针形;总状花序,花少数;花冠二唇形,黄色,外面被细毛;花药顶部无毛,偶有少量柔毛。花期5~8月。

【分布】内蒙古、山西、陕西、宁夏、甘肃、青海;蒙古。

【生境】砾质或沙质草原至草原荒漠。

【用途】药用。

#### Mongolian cymbaria

Figwort family

Perennial herb  $5\sim10$  cm tall; whole plant densely pubescent; stems tufted; leaves linear-lanceolate to oblong-lanceolate; few flowers in a raceme; yellow corolla bilabiate, thin-pubescent outer side; anthers glabrous, rarely few pubescent at apex. Flowering May to August.

Distribution: Inner Mongolia, Shanxi, Shaanxi, Ningxia, Gansu and Qinghai; Mongolia

Habitat: Gravelly and sandy steppe to steppe-desert

Use: Medicine





# 柳穿鱼

# Linaria vulgaris Mill. ssp. sinensis (Bebeaux) Hong 玄参科

Scrophulariaceae

【特征】多年生草本,高15~50cm,茎直立或斜升,单一或有分枝;叶互生或轮生,条形至披针状条形;总状花序顶生,花多数;花序轴、花梗和花萼无毛或有少量腺毛;花冠二唇形,黄色,花冠筒基部有长距;喉凸橘黄色,具毛。花期7~8月。

【分布】长江以北各省区; 欧亚大陆北方。

【生境】草地、沙地、路边。

【用途】饲用;药用;观赏。

#### Chinese butter-and-eggs

Figwort family

Perennial herb  $15\sim50$  cm tall; stems erect or ascending, single or branched; leaves alternate or whorled, linear to lanceolate-linear; racemes terminal, with many flowers; rachis, pedicel and calyx glabrous or few glandular-hairy; yellow corolla bilabiate, long-spurred at tube base; palate orange-yellow, hairy. Flowering July to August.

Distribution: Regions north to Changjiang River; N Eurasia

**Habitat:** Grassland, sands and roadsides **Use:** Forage; medicine; ornamental

### 弯管马先蒿

#### Pedicularis curvituba Maxim.

玄参科

Scrophulariaceae

【特征】一年生草本,高20~50cm;茎多数,具纵向毛线;叶茎生,4枚轮生,叶片二回羽裂;轮伞花序顶生;花萼裂片5,羽状齿裂;花冠二唇形,淡黄色,花冠管向前膝曲;上唇弓曲,先端渐细成喙,喙长3mm,下唇3裂。花期7~9月。

【分布】中国华北特有。

【生境】山地草甸、灌丛、林缘。

#### Curved-trumpet lousewort

Figwort family

Annual herb  $20\sim50$  cm tall; stems many, hairy-canaliculate; leaves cauline, whorled with 4 per node, blades bipinnatifid; verticillasters terminal; sepals 5, pinnately toothed; corolla bilabiate, pale yellow, the tube geniculate forward; upper lip curved, apex attenuate into a beak 3 mm long, lower lip 3-lobed. Flowering July to September.

Distribution: Endemic to N China

Habitat: Montane-meadows, scrubland and forests edges









## 红纹马先蒿

### Pedicularis striata Pall.

玄参科

Scrophulariaceae

【特征】多年生草本,高20~80cm;茎直立,单生或基部分枝,密被卷毛;茎生叶羽状全裂或深裂,裂片条形,边缘具浅齿,叶轴具翅;穗状花序;花冠二唇形,黄色,具绛红色斑纹。花期7~8月。

【分布】东北至西北;蒙古、俄罗斯(西伯利亚、远东)。

【生境】山地草原、灌丛、林缘、疏林。

### Red-striped lousewort

Figwort family

Perennial herb  $20 \sim 80$  cm tall; stems erect, single or branched from base, densely curly hairy; cauline leaves pinnately divided or parted, segments linear, shallowly toothed, rachis winged; flowers in spikes; corolla bilabiate, yellow with dark red streaks. Flowering July to August.

**Distribution:** NE to NW China; Mongolia, and Russia (Siberia and Far East) **Habitat:** Montane-steppe, scrubland, forest edges and open woodland

## 鼻花

## Rhinanthus glaber Lam.

玄参科

Scrophulariaceae

【特征】一年生半寄生草本,高30~65cm;茎直立,具棱;叶对生,条形至条状披针形,叶缘具三角状锯齿,两面被短硬毛,背面有斑状突起;总状花序顶生,花萼果期膨胀;花冠二唇形,黄色;上唇盔状具短喙,喙2裂,下唇3裂。花期6~8月。

【分布】东北,新疆;西伯利亚至欧洲。

【生境】林缘草甸和灌丛。

#### Smooth yellow rattle

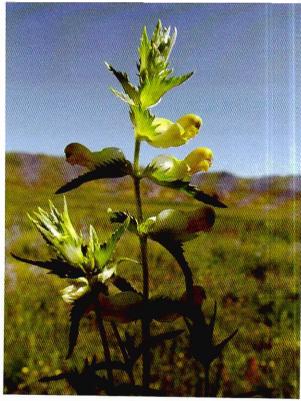
Figwort family

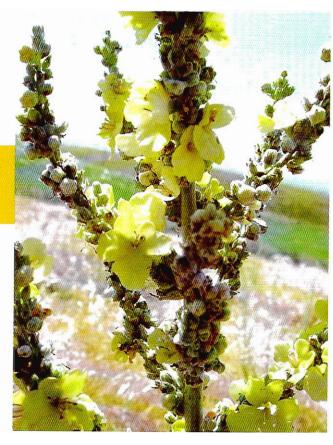
Subparasitic annual herb, 30~65 cm tall; stems erect, angulate; leaves opposite, linear to linear-lanceolate with deltoid-serrate edges, hispidulous both sides, spotted-tubercular beneath; racenies terminal; calyx inflated in fruit; yellow corolla bilabiate; upper lip galeate with a 2-lobed beak, lower lip 3-lobed. Flowering June to August.

**Distribution:** NE China and Xinjiang; Siberia to Europe **Habitat:** Meadows and thickets along forest margins

拍摄人: 张洪江 Photo by Zhang Hongjiang







拍摄人: 张崇江 Photo by Zhang Hongijang

## 准噶尔毛蕊花

## Verbascum songoricum Schrenk ex Fisch. et Mey.

玄参科

Scrophulariaceae

【特征】多年生草本,高达150cm,全株密被灰白色星状毛;茎直立;叶短圆形至倒披针形,基生叶基部渐狭成柄,茎生叶无柄,叶片边缘具浅圆齿;圆锥花序开展,长达40cm,花2~7枚簇生;花冠辐状,黄色,5裂;花丝具白色绵毛。花期6~8月。

【分布】新疆准噶尔盆地;中亚、高加索。

【生境】荒漠区海拔600~1000m的绿洲、草地、田边和其他湿润生境。

### Dzungar mullein

Figwort family

Perennial herb to 150 cm tall, whole plant densely grey-white stelipilous; stems erect; leaves oblong to oblanceolate, basal leaves attenuate into a petiole at base, cauline leaves sessile, blades shallowly crenate: panicle spreading to 40 cm long,  $2\sim7$  flowers tufted; corolla rotate, yellow, 5-parted; filaments white-lanate. Flowering June to August.

Distribution: Zhunge'er Basin in Xinjiang; Central Asia and Caucasia

Habitat: Oasis, grassland, field sides and other moist sites at 600~1 000 m in desert areas





拍摄人: 拾海 Photo by Shi Tao

## 毛蕊花

### Verbascum thapsus L.

### 玄参科

Scrophulariaceae

【特征】二年生草本,高70~150cm,全株密被灰黄色星状毛;茎直立;基生叶莲座状,边缘具浅圆齿,上部茎生叶基部下延;穗状花序圆柱状,长达30cm,花密集;花冠辐状,黄色,5裂;雄蕊5,后方3枚的花丝有毛。花期6~8月。

【分布】新疆、西藏、四川、云南; 中亚、欧洲、北美。

【生境】海拔1400~3200m的山地草原、河谷、滩丛、林缘。

#### Common mullein

Figwort family

Biennial herb 70~150 cm tall, whole plant densely grey-yellow stelipilous; stems erect; basal leaves rosulate, shallowly crenate, upper cauline leaves basally decurrent; spikes terete, to 30 cm long, flowers dense; corolla rotate, yellow, 5-parted; stamens 5, the posterior 3 with hairy filaments. Flowering June to August.

Distribution: Xinjiang, Tibet, Sichuan and Yunnan; Central Asia, Europe and North America

Habitat: Montane-steppe, river valleys, scrubland and forest edges at 1 400 $\sim$ 3 200 m



拍摄人: 赵凡 Photo by Zhao Fan

## 沙苁蓉

### Cistanche sinensis G. Beck

列当科

Orobanchaceae

【特征】根寄生植物,多年生草本,高10~70cm; 茎肉质,圆柱形,鲜黄色,自基部分枝; 叶鳞片状; 穗状花序, 花多数; 苞片和花萼被蛛丝状毛; 花萼4深裂; 花冠淡黄色, 裂片稀粉色。花期5~6月。

【分布】内蒙古、甘肃。

【生境】荒漠中的红砂和珍珠猪毛菜群落;主要寄主为红砂和珍珠猪毛菜。

#### Chinese cistanche

Broomrape family

Root parasitic, perennial herb 10~70 cm tall; stems fleshy, terete, bright-yellow, branched from base; leaves squamiform; spikes with many flowers; bracts and calyx arachnoid; calyx 4-parted; corolla pale yellow, lobes rarely pinkish. Flowering May to June.

Distribution: Inner Mongolia and Gansu

Habitat: Communities dominated by Red reaumuria and Pearl Russian-thistle in desert; mainly parasitic to roots of Red Reaumuria and Pearl Russian-thistle

### 蓬子菜

### Galium verum L.

茜草科

Rubiaceae

【特征】多年生草本,高20~70cm;茎直立,具4纵棱;叶狭条形,6~10片轮生,边缘反卷;聚伞状圆锥花序,花小;花冠黄色或橙黄色,辐状,裂片4。花期7月。

【分布】东北至西北及长江流域; 北半球温带地区。

【生境】草甸、林缘、灌丛。

【用途】药用; 茎可提取绛红色染料; 植株上部含硬性橡胶, 可作工业原料。

### Yellow spring bedstraw

Madder family

Perennial herb  $20\sim70$  cm tall; stems erect, 4-angulate; leaves narrowly linear, whorled with  $6\sim10$ , revolute; thyrses with small flowers: corolla yellow or orange-yellow, rotate, 4-lobed. Flowering July.

**Distribution:** NE to NW China, and regions along Changjiang River; temperate regions in the Northern Hemisphere

Habitat: Meadows, forest edges and scrubland

Use: Medicine; stems for making dark red dyestuff; the upper branches containing hard rubber, for industrial material









## 岩败酱

## Patrinia rupestris (Pall.) Juss.

败酱科

Valerianaceae

【特征】多年生草本,高15~60cm;茎单一或数枝;基生叶早凋,茎生叶对生,羽状深裂至全裂,两面被短硬毛;圆锥状聚伞花序在顶端集成伞房状;花冠黄色,管钟状,裂片5;瘦果具膜质苞片。花期7~8月。

【分布】东北、华北;蒙古、俄罗斯(西伯利亚、远东)、朝鲜。

【生境】森林草原和草原地带的砾石质山坡或丘顶。

【用途】饲用。

### Cliff patrinia

Valerian family

Perennial herb 15~60 cm tall; stems single or several; basal leaves caducous, cauline leaves opposite, pinnately parted to divided, hispidulous both sides; several paniculate cymes gathered in a corymb at top; yellow corolla tubular-campanulate with 5 lobes; achene with membranous bract. Flowering July to August.

Distribution: NE and N China; Mongolia, Russia (Siberia and Far East) and Korea

Habitat: Gravelly slopes and hilltops in forest-steppe to steppe zones

## 蓍状亚菊

## Ajania achilloides (Turcz.) Poljak. ex Grub.

菊科

### Compositae

【特征】小半灌木,高15~30cm;茎直立或斜升,由基部分枝,密被柔毛或分叉毛; 茎下部叶二回羽状全裂,上部叶羽状全裂或不分裂,两面被短柔毛和腺点; 头状花序复伞房状排列;管状花冠黄色。花期7~8月。

【分布】内蒙古;蒙古。

【生境】荒漠和荒漠草原带的砂砾质和石质坡地。

【用途】饲用。

#### Oldman ajania

Aster family

Shrublet 15~30 cm tall; stems erect or ascending, branched from base, densely pubescent or divergent-hairy; lower leaves bipinnatisect, upper leaves pinnatisect or not, pubescent and glandular both surfaces; heads in compound corymbs; tubular corolla yellow. Flowering July to August.

Distribution: Inner Mongolia; Mongolia

Habitat: Gravelly and rocky slopes in desert to desert-steppe zones





Ajania fastigiata (C. Winkl.) Poljak.

菊科

Compositae

【特征】多年生草本,高30~90cm,全株被柔毛,灰绿色;茎直立,单生或少数茎簇生;茎生叶二回羽状全裂,叶向上渐小;头状花序多数,在顶端排列成复伞房状;管状花冠黄色。花期7~8月。

【分布】甘肃、新疆;蒙古、西伯利亚和中亚。

【生境】半荒漠带海拔750~3 900m的砾质和石质山坡。

【用途】饲用。

### Xinjiang ajania

Aster family

Perennial herb 30~90 cm tall, whole plant pubescent, grey-green; stems erect, single or a few tufted; cauline leaves bipinnatisect, smaller upward; numerous heads in a compound corymb at top; tubular corolla yellow. Flowering July to August.

Distribution: Gansu and Xinjiang; Mongolia, Siberia and Central Asia Habitat: Gravelly and rocky slopes in semi-desert areas at 750~3 900 m

### 冷蒿

## Artemisia frigida Willd.

菊科

### Compositae

【特征】小半灌木,高10~50cm; 茎直立或斜升,密被灰白绒毛;下部叶二至三回羽 状全裂,向上叶分裂渐少,两面被绒毛;头状花序直径2~4mm,下垂,排列 成总状或紧缩的圆锥花序。花期8~9月。

【分布】东北、华北,新疆、青海;蒙古、西伯利亚、北美。

【生境】沙质、砂砾质草原、荒漠草原和森林草原。

【用途】饲用。

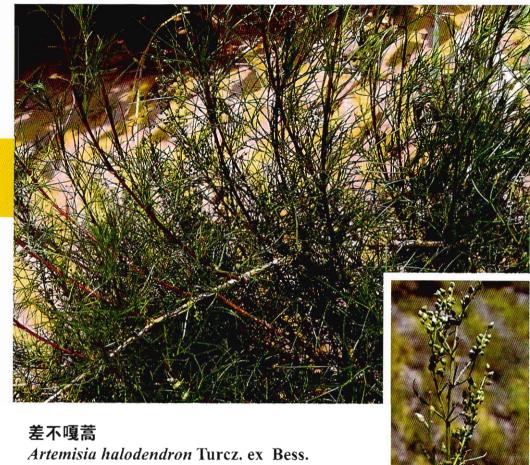
#### Fringed sagewort

Aster family

Shrublet 10~50 cm tall; stems erect or ascending, densely grey-white tomentose; lower leaves twice to thrice pinnatisect, divisions reduced upward, tomentose both sides; heads 2~4 mm across, nodding, in a raceme or contracted panicle. Flowering August to September.

**Distribution:** NE and N China, Xinjiang and Qinghai; Mongolia, Siberia and North America **Habitat:** Sandy and gravelly steppe, desert-steppe and forest-steppe





菊科

Compositae

【特征】半灌木,高50~80cm;茎直立或斜升,自基部分枝,老枝灰褐色,新枝紫褐色;下部叶二回羽状全裂,向上分裂渐少;头状花序卵形,直径3~4mm,直立,排列成大型、开展的圆锥状。花期7~9月。

【分布】东北至西北;蒙古、西伯利亚。

【生境】草原或森林草原带的沙地、沙丘。

【用途】饲用;固沙。

### Salt sagewort

Aster family

Subshrub  $50\sim80$  cm tall; stems erect or ascending, branched from base, old branches greybrown, new branches purple-brown; lower leaves bipinnatisect, divisions reduced upward; heads ovoid,  $3\sim4$  mm across, erect, in a large and spreading panicle. Flowering July to September.

Distribution: NE to NW China: Mongolia and Siberia

Habitat: Sands and sand dunes in steppe to forest-steppe zones

Use: Forage; fixing sand dunes

## 黑沙蒿

### Artemisia ordosica Krasch.

菊科

Compositae

【特征】半灌木,高50~100cm;茎多数,老枝深灰褐色,新枝褐色至紫色;下部叶一至二回羽状全裂,裂片有时再2~3全裂,上部叶3~5全裂;头状花序卵形,直径1.5~2.5mm,斜升或下垂,排列成开展的圆锥状。花期7~9月。

【分布】华北;蒙古。

【生境】草原和荒漠草原带的沙地、沙丘。

【用途】饲用; 固沙。

### Ordos sagebrush

Aster family

Subshrub  $50\sim100$  cm tall; stems many, old branches dark grey-brown, new branches brown to purple; lower leaves once to twice pinnatisect, sometimes segments  $2\sim3$ -divided, upper leaves  $3\sim5$ -divided; heads ovoid,  $1.5\sim2.5$  mm across. ascending or nodding in a open

panicle. Flowering July to September. **Distribution:** N China; Mongolia

Habitat: Sands and sand dunes in steppe to desert-steppe zones





# 白沙蒿

### Artemisia sphaerocephala Krasch.

菊科

Compositae

【特征】半灌木,高达!m;茎多数,稀单一,灰白色至黄褐色;下部叶一至二回羽状全裂,上部叶羽状全裂或3全裂;头状花序球形,直径3~4mm,下垂,排列成大型、开展的圆锥状。花期7~9月。

【分布】华北、西北;蒙古。

【生境】荒漠和荒漠草原带的沙地、沙丘。

【用途】饲用; 固沙; 药用。

### Roundhead sagebrush

Aster family

Subshrub to 1 m tall; stems many, rarely single, grey-white to yellow-brown; lower leaves once to twice pinnatisect, upper leaves pinnatisect or 3-divided; heads globose, 3-4 mm across, nodding, in a large and open panicle. Flowering July to September.

Distribution: N and NW China; Mongolia

Habitat: Sands and sand dunes in desert to desert-steppe zones

Use: Forage; fixing sand dunes; medicine

## 乌丹蒿

## Artemisia wudanica Liou et W. Wang

菊科

Compositae

【特征】半灌木, 高达2m; 茎多数, 灰白色, 光滑, 多分枝; 下部叶二回羽状全裂, 裂片再2~3全裂, 上部叶羽状全裂或3全裂; 头状花序近球形, 直径4~5mm, 下垂, 圆锥状排列。花期8~9月。

【分布】 内蒙古、河北。

Distribution: Inner Mongolia and Hebei

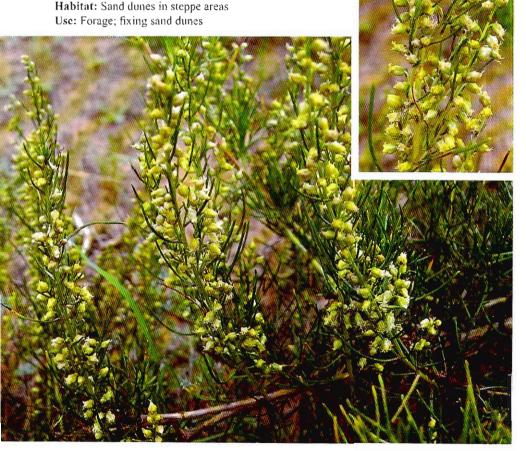
【生境】草原沙丘。

【用途】 饲用; 固沙。

### Wudan sagebrush

Aster family

Subshrub to 2 m tall; stems many, grey-white and glabrous, much branched; lower leaves bipinnatisect, segments  $2 \sim 3$ -divided, upper leaves pinnatisect or 3-divided; heads subglobose,  $4 \sim 5$  mm across, nodding, in a panicle. Flowering August to September.







## 小甘菊

## Cancrinia discoidea (Ledeb.) Poljak.

菊科

Compositae

【特征】二年生草本,高5~20cm,全株被白色绵毛、茎不明显;基生叶多数,一至二回羽状深裂,灰绿色;头状花序单生,总花梗长4~20cm;总苞片边缘膜质;管状花冠黄色。花期6~9月。

【分布】内蒙古、新疆、甘肃、西藏;蒙古、中亚。

【生境】戈壁、石质坡地、覆沙地。

【用途】饲用; 药用。

#### Common cancrinia

Aster family

Biennial herb  $5\sim20$  cm tall, whole plant white lanate, stems indistinct; basal leaves many, once to twice pinnately parted, grey-green; heads solitary; peduncle  $4\sim20$  cm long; involucial bracts with membranous edges; tubular corolla yellow. Flowering June to September.

Distribution: Inner Mongolia, Xinjiang. Gansu and Tibet; Mongolia and Central Asia

Habitat: Gobi, rocky slopes and sands

Use: Forage; medicine

### 线叶菊

### Filifolium sibiricum (L.) Kitam.

菊科

Compositae

【特征】多年生草本,高15~60cm;茎直立,单生至数个,无毛;叶二至三回状羽状 全裂,裂片条形或丝状;头状花序多数,复伞房状排列;总苞直径4~5mm; 管状花冠黄色。花期7~8月。

【分布】东北、华北;蒙古、朝鲜、日本、俄罗斯(西伯利亚、远东)。

【生境】森林草原和草原带的山地、丘陵。

【用途】饲用。

#### Siberian filifolium

Aster family

Perennial herb 15~60 cm tall; stems erect, single to several, glabrous; leaves twice to thrice pinnatisect into linear to filiform segments: many heads in a compound corymb; involucre 4~5 mm across; tubular corolla yellow. Flowering July to August.

Distribution: NE and N China; Mongolia, Korea, Japan and Russia (Siberia and Far East)

Habitat: Mountains and hills in forest-steppe to steppe zones





菊科

Compositae

【特征】小半灌木,高5~25cm;茎斜升,密被银灰色绢毛;叶3浅裂至深裂,灰 绿色,两面密被白色绢毛和腺点,上部叶有时不裂;头状花序钟状,直径 3~5mm, 伞房状排列; 总苞片边缘宽膜质; 管状花冠黄色。花期7~8月。

【分布】内蒙古;蒙古。

【生境】砾塊质半荒漠。

【用途】饲用。

### Trifid hippolytia

Aster family

Shrublet 5~25 cm tall; stems ascending, densely silvery-sericeous; leaves 3-lobed to parted. grey-green, densely white-sericeous and glandular, upper leaves sometimes unlobed; heads campanulate, 3~5 mm across, in a corymb; involucral bracts with widely membranous edges; tubular corolla yellow. Flowering July to August.

Distribution: Inner Mongolia; Mongolia Habitat: Gravelly-loamy semi-desert

### 欧亚旋覆花

### Inula britanica L.

菊科

Compositae

【特征】多年生草本,高20~70cm;茎直立,少分枝,被长柔毛;叶互生,基部心形或有耳,半抱茎,下面密被伏毛和腺点;头状花序1~5顶生;舌状花黄色;管状花橙黄色。花期7~9月。

【分布】东北、华北,新疆;蒙古、朝鲜、日本、俄罗斯(西伯利亚、远东)、中亚、欧洲。

【生境】草甸、河边、田埂、路旁。

【用途】饲用;药用。

### British yellowhead

Aster family

Perennial herb  $20 \sim 70$  cm tall; stems erect, few branched, villous; leaves alternate, base cordate or eared, semi-clasping, densely appressed-pubescent and glandular beneath; heads  $1 \sim 5$  terminal; ray florets yellow; disk florets orange-yellow. Flowering July to September.

Distribution: NE, N China and Xinjiang; Mongolia, Korea, Japan, Russia (Siberia and Far East), Central Asia and Europe

Habitat: Meadows, riverbanks, field ridges and roadsides

Use: Forage; medicine

拍摄人: 赵凡 Photo by Zhao Fan







拍摄人: 赵凡 Photo by Zhao Fan

## 沙地旋覆花

### Inula salsoloides (Turcz.) Ostenf.

菊科

Compositae

【特征】多年生草本,高15~45cm;茎直立、斜升或平卧,多分枝,被糙硬毛、长柔 毛和腺点;叶互生,基部心形或有小耳,半抱茎,稍肉质,两面或下面被长 柔毛和腺点;头状花序单生于顶;舌状花和管状花黄色。花期6~8月。

【分布】华北、西北,辽宁;蒙古、中亚。

【生境】草原及半荒漠带的沙地、沙质和砂砾质生境。

【用途】固沙;药用。

### Sand yellowhead

Aster family

Perennial herb 15~45 cm tall; stems erect, ascending or procumbent, branched, hispidulous, villous and glandular; leaves alternate, base cordate or eared, semi-clasping, slightly fleshy, villous and glandular both sides or only beneath; solitary heads terminal; ray florets and disk florets yellow. Flowering June to August.

**Distribution:** N and NW China, Liaoning; Mongolia and Central Asia **Habitat:** Sands, sandy and gravelly sites in steppe to semi-desert zones

Use: Fixing sand dunes; medicine

## 火绒草

## Leontopodium leontopodioides (Willd.) Beauv.

菊科

Compositae

【特征】多年生草本,高10~40cm;茎丛生,直立或稍弯,不分枝,被绵毛和长柔毛;叶条形或条状披针形,无柄,全缘,有时呈波状或反卷,上面被柔毛,下面密被灰白色绵毛;苞叶少数;头状花序3~7密集;总苞被白色绵毛。花期7~8月。

【分布】东北至西北;蒙古、朝鲜、日本和西伯利亚。

【生境】草原和山地草原的砾石质或砂砾质山坡和丘顶。

#### Common edelweiss

Aster family

Perennial herb 10~40 cm tall; stems tufted, erect to slightly curved, unbranched, lanate and villous; leaves linear to linear-lanceolate, sessile, entire, sometimes crisped to revolute, pubescent above, densely white-lanate beneath; bracteal leaves few; 3~7 heads crowded; involucre white-lanate. Flowering July to August.

Distribution: NE to NW China; Mongolia, Korea, Japan and Siberia

Habitat: Gravelly-stony and sandy-gravelly slopes and hilltops in steppe and montanesteppe





Compositae

【特征】多年生草本,高10~30cm;茎丛生,直立或稍弯,不分枝,被灰白色绵毛或 粘结的绢毛;叶条状披针形,全缘,上面被灰白色柔毛,下面密被白色绵毛 或粘结的绢毛;苞叶3~10,边缘反卷;头状花序3至多数密集;总苞密被白 色绵毛。花期7~8月。

【分布】华北;蒙古。

【生境】山地草原和山地灌丛。

### Silky edelweiss

Aster family

Perennial herb  $10\sim30$  cm tall; stems tufted, erect to slightly curved, unbranched, greywhite lanate or entangled-sericeous; leaves linear-lanceolate, entire, grey-white pubescent above, densely white-lanate or entangled-sericeous beneath; bracteal leaves  $3\sim10$ , with revolute edges; 3 to several heads crowded; involucre densely white-lanate. Flowering July to August.

Distribution: N China; Mongolia

Habitat: Montane-steppe and montane-scrubs

### 大叶臺吾

## Ligularia macrophylla (Ledeb.) DC.

菊科

Compositae

【特征】多年生草本,高50~170cm;茎直立,无毛;基生叶具柄,叶柄下部常成鞘状 抱茎, 茎生叶无柄; 头状花序多数, 组成圆锥花序, 长达40cm; 花冠黄色, 舌状花1~3枚,管状花5~7枚。花期7~8月。

【分布】新疆; 中亚。

【生境】海拔700~2 900m的河谷水边、沼泽、阴坡草地和林缘。

### Bigleaf ragweed

Aster family

Perennial herb 50~170 cm tall; stems creet, glabrous: basal leaves petiolate, usually sheathlike and clasping at lower part, cauline leaves sessile; many heads in panicles to 40 cm long; yellow corolla with 1-3 ray florets and 5-7 disk florets. Flowering July to August.

Distribution: Xinjiang; Central Asia

Habitat: Washes, marshes, shady sloping grassland and forest edges at 700~2 900 m

拍摄人: 张洪江 Photo by Zhang Hongpang





### 箭叶橐吾

## Ligularia sagitta (Maxim.) Mattf.

菊科

Compositae

【特征】多年生草本,高25~75cm;茎单一,直立,被蛛丝状毛及短柔毛;基生叶2~3,三角状卵形,叶柄长3~35cm,基部扩大而抱茎;头状花序总状排列,基部具苞叶;舌状花和管状花黄色。花期7~8月。

【分布】华北、西北,四川、西藏。

【生境】低湿草甸或沼泽,海拔800~4000m。

#### Arrowleaf ragweed

Aster family

Perennial herb  $25 \sim 75$  cm tall; stems single, erect, arachnoid-pubescent; basal leaves  $2 \sim 3$ , deltoid-ovate, petiole  $3 \sim 35$  cm long, base enlarged and clasping; heads in racemes with bracteal leaves at base; ray florets and disk florets yellow. Flowering July to August.

Distribution: N and NW China, Sichuan and Tibet

Habitat: Moist lowland meadows and marshes at 800~4 000 m







## 黄帚囊吾

## Ligularia virgaurea (Maxim.) Mattf.

菊科

Compositae

【特征】多年生草本,高30~50cm;茎直立,无毛;下部叶常直立,椭圆状至矩圆状披针形或卵形,具翅状抱茎的长柄,上部叶渐狭,无柄,抱茎;头状花序多数,总状排列,基部具苞叶;舌状花和管状花黄色。花期7~8月。

【分布】青海、甘肃及西南; 不凡、尼泊尔。

【生境】海拔2 600~4 700m的低湿草甸、沼泽、阴坡灌丛。

### Goldenrod ragweed

Aster family

Perennial herb 30~50 cm tall; stems erect, glabrous; lower leaves usually erect, elliptic to oblong-lanceolate or ovate, with winged and clasping petiole, upper leaves attenuate, sessile, clasping; many heads in racemes with bracteal leaves at base; ray florets and disk florets yellow. Flowering July to August.

Distribution: Qinghai, Gansu and SW China; Bhutan and Nepal

Habitat: Moist lowland meadows, marshes and shady scrubby slopes at 2 600~4 700 m

### 栉叶蒿(篦齿蒿)

### Neopallasia pectinata (Pall.) Poljak.

菊科

Compositae

【特征】一年生或二年生草本,高15~50cm; 茎直立或斜升,被白色绢毛;叶一至二回篦齿状羽状全裂;头状花序卵状,3至数枚排列成穗状,再组成圆锥状;管状花冠黄色。花期7~8月。

【分布】东北至西北及西南大部分省区;蒙古、西伯利亚、中亚。

【生境】草原及半荒漠带的壤质、粘壤质或砂砾质生境。

【用途】饲用;药用。

#### Combleaf wormwood

Aster family

Annual to biennial herb 15~50 cm tall; stems erect or ascending, white-sericeous; leaves once to twice pectinately pinnatisect; heads ovoid, 3 to several in spikes, further to paniculate; tubular corolla yellow. Flowering July to August.

Distribution: Most regions in NE to NW and SW China; Mongolia, Siberia and Central Asia

Habitat: Loamy, clay-loamy and gravelly sites in steppe to semi-desert zones







## 华北鸦葱

## Scorzonera albicaulis Bunge

菊科

Compositae

【特征】多年生草本,高20~90cm,含白色乳汁;茎直立,不分枝或上部有分枝,被蛛丝状毛或绵毛;叶条形或宽条形,边缘平展,基生叶长达40cm,茎生叶向上渐小;头状花序数个,伞房状排列;总苞片被蛛丝状毛或无毛;舌状花黄色。花期7~8月。

【分布】东北至西北;蒙古、朝鲜、俄罗斯(西伯利亚、远东)。

【生境】林中坡地、林缘、灌丛、草甸。

【用途】饲用;药用。

### Whitestem vipergrass

Aster family

Perennial herb 20~90 cm tall, with white milky juice; stems erect, unbranched or branched above, arachnoid or lanate; leaves linear to broadly linear, with plane edges, basal leaves to 40 cm long, cauline leaves smaller upward; several heads in corymbs; involucral bracts arachnoid or glabrous; ray florets yellow. Flowering July to August.

Distribution: NE to NW China: Mongolia. Korea and Russia (Siberia and Far East)

Habitat: Wooded slopes, forest edges, scrubland and meadows

Use: Forage; medicine



### Scorzonera curvata (Popl.) Lipsch.

菊科

Compositae

【特征】多年生草本,高3~10cm,含白色乳汁;茎极短;基生叶丝状或丝状条形, 灰绿色,常呈蜿蜒状,茎生叶小或无;头状花序单生茎顶或根颈顶端;舌状 花黄色。花期5~6月。

【分布】内蒙古;蒙古、西伯利亚。

【生境】草原带的砾质生境。

【用途】饲用。

### Silk leaf vipergrass

Aster family

Perennial herb 3~10 cm tall, with white milky juice; stems very short; basal leaves filiform to filiform-linear, grey-green, usually wriggled, cauline leaves smaller or absent; solitary heads terminal on stem and crown; ray florets yellow. Flowering May to June.

Distribution: Inner Mongolia; Mongolia and Siberia

Habitat: Gravelly sites in steppe zone

### 拐轴鸦葱

### Scorzonera divaricata Turcz.

菊科

Compositae

【特征】多年生草本,高15~50cm,含白色乳汁;茎灰绿色,自基部多分枝,分枝 铺散或斜升,形成半球形株丛;叶条形或丝状,常反卷成钩状;头状花序 单生枝顶,具3~5舌状小花,稀5枚以上,黄色。花期6~7月。

【分布】华北;蒙古。

【生境】半荒漠和荒漠带的砂砾质地。

【用途】饲用。

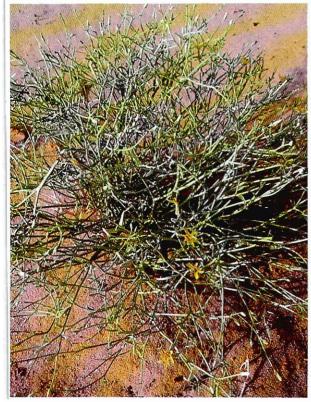
### Spreading vipergrass

Aster family

Perennial herb  $15\sim50$  cm tall, with white milky juice: stems grey-green, much branched from base; branches diffuse to ascending, forming subglobose stands; leaves linear to filiform, usually revolute to hamate; solitary heads terminal; yellow ray florets  $3\sim5$ , rarely over 5. Flowering June to July.

Distribution: N China; Mongolia

Habitat: Gravelly sites in semi-desert to desert zones









### 额河千里光

### Senecio argunensis Turcz.

菊科

Compositae

【特征】多年生草本,高30~100cm;茎单一,直立,中部以上有分枝;下部叶花期凋萎,中部叶羽状半裂、深裂,或近二回羽裂,裂片全缘或具齿;上部叶裂片少或全缘;头状花序多数,复伞房状排列;舌状花和管状花黄色。花期7~8月。

【分布】东北至西北,华东和华中;朝鲜、日本、俄罗斯(西伯利亚、远东)。

【生境】林缘、草甸。

### Argun River groundsel

Aster family

Percnnial herb  $30\sim100$  cm tall; stems single, erect, branched from the upper half; lower leaves withered when flowering, middle leaves pinnately cleft to parted, or nearly bipinnatifid, with entire or toothed lobes, leaf divisions reduced to entire upward; many heads in compound corymbs; ray florets and disk florets yellow. Flowering July to August.

Distribution: NE to NW, E and C China; Korea, Japan and Russia (Siberia and Far East)

Habitat: Forest edges and meadows

### 麻叶千里光

## Senecio cannabifolius Less.

菊科

Compositae

【特征】多年生草本,高60~150cm;茎直立,上部分枝;下部叶花期凋萎,中部叶大,羽状或近掌状深裂,上部叶裂片少或全缘或具微锯齿;头状花序多数,复伞房状排列;舌状花和管状花黄色。花期7~8月。

【分布】东北和华北; 朝鲜、日本、俄罗斯(西伯利亚、远东)。

【生境】林缘、河边草何。

### Hempleaf groundsel

Aster family

Perennial herb 60~150 cm tall; stems erect, branched above; lower leaves withered when flowering, middle leaves larger, pinnately or subpalmately parted, leaf divisions reduced upward, or entire to lightly toothed; many heads in compound corymbs; ray florets and disk florets yellow. Flowering July to August.

Distribution: NE and N China; Korea, Japan and Russia (Siberia and Far East)

Habitat: Forest edges, and meadows along river banks





### 细茎黄鹌菜

### Youngia tenuicaulis (Babc. et Stebb.) Czer.

菊科

### Compositae

【特征】多年生草本,高5~40cm,含白色乳汁;茎多数,由基部二叉分枝;基生叶多数,羽状全裂,具长柄,上部叶不分裂,无柄;头状花序具8~12舌状小花,黄色;总苞片背部近顶端有角状突起。花期7~8月。

【分布】东北至西北;蒙古、西伯利亚、中亚。

【生境】草原至荒漠带的砾质或石质山坡和坡顶。

【用途】饲用。

#### Slender false hawksbeard

Aster family

Perennial herb 5~40 cm tall, with white milky juice; stems many, bifurcate-branched from base; basal leaves many, pinnatisect, with long petiole, upper leaves entire, sessile; heads with 8~12 yellow ray florets; involucial bracts cornute nearly back top. Flowering July to August.

**Distribution:** NE to NW China; Mongolia, Siberia and Central Asia **Habitat:** Gravelly and rocky slopes and hilltops in steppe to desert zones

### 黄花葱

### Allium condensatum Turcz.

百合科

Liliaceae

【特征】多年生草本;鳞茎外皮红褐色,革质,条裂;叶圆柱状或半圆柱状,中空;花葶高30~60cm;总苞2裂;伞形花序球状,花密集;花被片6,淡黄色至白色;花丝长于花被片;花柱伸出花被外。花期7~8月。

【分布】东北、华北;蒙古、朝鲜、西伯利亚。

【生境】山地草原、草原及草甸。

【用途】饲用;食用。

#### Yellowflower onion

Lily family

Perennial herb; bulb coat red-brown, coriaceous, linear-split; leaves terete to semi-terete, hollow: scapes  $30\sim60$  cm tall; spathe 2-divided; umbels globose, with dense flowers; tepals 6, pale yellow to white; filaments longer than tepals; style exserted. Flowering July to August.

Distribution: NE and N China; Mongolia, Korea and Siberia

Habitat: Montane-steppe, steppe and meadows

Use: Forage; edible







拍摄人: 赵凡 Photo by Zhao Fan

## 小黄花菜

### Hemerocallis minor Miller

百合科

Liliaceae

【特征】多年生草本;叶基生,条形,长20~50cm;花1~2枚顶生;花被近漏斗状,黄色,花被裂片6。花期6~7月。

【分布】东北、华北;蒙古、朝鲜、俄罗斯(西伯利亚、远东)。

【生境】草甸、潍丛和林缘。

【用途】饲用;食用;观赏;药用。

### Small daylily

Lily family

Perennial herb; leaves basal, linear,  $20 \sim 50$  cm long;  $1 \sim 2$  flowers terminal; perianth nearly funnelform, yellow, with 6 tepals. Flowering June to July.

Distribution: NE and N China; Mongolia, Korea and Russia (Siberia and Far East)

**Habitat:** Meadows, scrubland and forest edges **Use:** Forage; edible; ornamental; medicine



### 阿尔泰藜芦

### Veratrum lobelianum Bernh.

百合科

Liliaceae

【特征】多年生草本,高50~100cm;具根茎;茎直立,圆柱形;叶互生,宽卵状椭圆形或条形,长达30cm,全缘;圆锥花序,花密生;花被片6,绿黄色。花期7月。

【分布】新疆; 中亚。

【生境】海拔1500~2000m的山地林下。

【用途】药用; 杀虫剂。

#### Altai falsehellebore

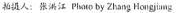
Lily family

Perennial herb 50~100 cm tall; rhizomatous; stems erect, terete; leaves alternate, broadly ovate-elliptic or linear, to 30 cm long, entire; dense flowers in a panicle; tepals 6, greenish yellow. Flowering July.

Distribution: Xinjiang; Central Asia

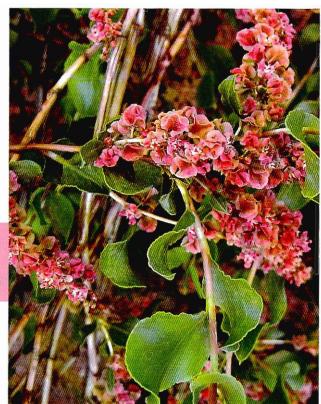
Habitat: Montane forests at 1 500~2 000 m

Use: Medicine; insecticide











拍摄人: 赵 凡 Photo by Zhao Fan

### 沙木蓼

### Atraphaxis bracteata A. Los.

蓼科

Polygonaceae

【特征】灌木,高1~2m;直立或开展;老枝灰褐色;叶互生,革质,圆形至长卵形;总状花序顶生,花被片5,粉红色;瘦果具3棱。花期5~8月。

【分布】内蒙古、陕西、宁夏、甘肃、青海。

【生境】半荒漠至荒漠地区的沙地、流动和半流动沙丘。

【用途】周沙;饲用。

### Sandy knotwood

Buckwheat family

Shrub1~2 m tall; erect or spreading; old branches grey-brown; leaves alternate, coriaceous, rotund to long-ovate: racemes terminal, pink tepals 5; achene 3-angular. Flowering May to August.

Distribution: Inner Mongolia, Shaanxi, Ningxia, Gansu and Qinghai

Habitat: Sands, moving and semi-moving dunes in semi-desert to desert areas

Use: Fixing sand dunes; forage

### 拳木蓼

### Atraphaxis compacta Ledeb.

蓼科

Polygonaceae

【特征】灌木,高10~30cm; 自基部分枝,分枝开展,顶端成棘刺;叶近簇生,圆形 至倒卵形;总状花序短,顶生;花2~6枚簇生;花被片4,粉红色至白色;瘦 果扁平。花期6~9月。

【分布】新孤; 蒙古、中亚和西伯利亚。

【生境】荒漠戈壁和沙地。

【用途】饲用。

#### Fist knotwood

Buckwheat family

Shrub  $10\sim30$  cm tall; branching from base, spreading, thorned at apex; leaves nearly fascicled, rotund to obovate; short raceines terminal, with clustered flowers  $2\sim6$ , pink to white tepals 4; achiene flat. Flowering June to September.

Distribution: Xinjiang; Mongolia, Central Asia and Siberia

**Habitat:** Gobi and sands in desert areas **Use:** Forage







# 木蓼

# Atraphaxis frutescens (L.) Ewersm.

蓼科

Polygonaceae

【特征】 灌木,高20~70cm;分枝开展或向上,顶端无刺;叶狭披针形至倒卵形;总状花序顶生,通常不分枝;花2~6枚簇生;花被片5,粉红色至白色,外轮花被片小,果期反折;瘦果具3棱。花期6~8月。

【分布】内蒙古、新疆;蒙古、俄罗斯、哈萨克斯坦。

【生境】荒漠地带的沙地、石质山坡、下河床及戈壁。

【用途】饲用。

#### Knotwood

Buckwheat family

Shrub  $20\sim70$  cm tall; branches spreading or ascending, without thorn at apex; leaves narrowly lanceolate to obovate; racemes terminal, rarely branched; flowers  $2\sim6$  clustered; pink to white tepals 5, outer tepals smaller and reflexed in fruit; achene 3-angular. Flowering June to August.

Distribution: Inner Mongolia and Xinjiang; Mongolia, Russia and Kazakhstan

Habitat: Sands, rocky slopes, dry riverbeds and gobi in desert areas

# 东北木蓼

# Atraphaxis manshurica Kitag.

蓼科

Polygonaceae

【特征】灌木,高约1m,多分枝;叶互生,革质,倒披针形至条形;总状花序顶生;花被片5,粉红色;瘦果具3棱。花期7~8月。

【分布】中国东北及华北特有种。

【生境】草原区沙地或砾石质山坡。

【用途】饲用。

#### Northeastern knotwood

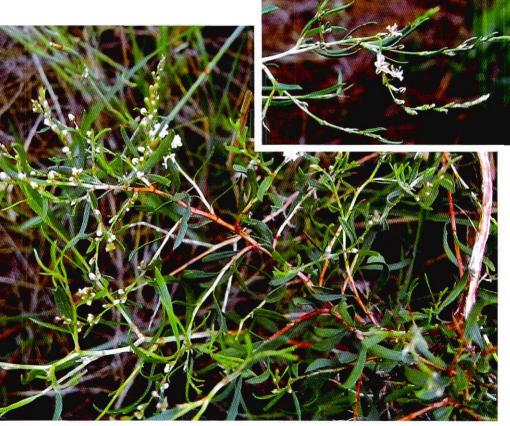
Buckwheat family

Shrub to 1 m tall; branched; leaves alternate, coriaceous, oblanceolate to linear; racemes terminal, pink tepals 5; achene 3-angular. Flowering July to August.

Distribution: Endemic to NE and N China

Habitat: Sands and gravelly slopes in steppe areas







# 长枝木蓼

Atraphaxis virgata (Regel) Krasn.

蓼科

Polygonaceae

【特征】灌木,高1~2m;分枝开展,皮褐色;叶灰绿色,矩圆状椭圆形或矩圆状倒卵形;总状花序顶生,通常分枝;花被片5,粉红色至白色;外轮花被片小,果期反折;瘦果具3棱。花期5~8月。

【分布】新疆; 中亚、蒙古。

【生境】荒漠戈壁、沙地、石质山坡。

【用途】饲用。

#### **Broom knotwood**

Buckwheat family

Shrub 1~2 m tall; branches spreading, bark brown; leaves grey-green, oblong-elliptic to oblong-obovate; racemes terminal, usually branched; pink to white tepals 5; outer tepals smaller and reflexed in fruit; achene 3-angular. Flowering May to August.

**Distribution:** Xinjiang; Central Asia and Mongolia **Habitat:** Gobi, sands and rocky slopes in desert areas

# 阿拉善沙拐枣

### Calligonum alaschanicum A. Los.

蓼科

Polygonaceae

【特征】半灌木,高1~3m;老枝暗灰色;叶鳞片状;花2~3枚簇生,花被片5,粉红色;果实宽卵状或近球状,瘦果扭转,果劢具刺毛2~3行,2~3回分叉,顶叉交织。花果期6~8月。

【分布】内蒙古、甘肃。

【生境】荒漠中的流动、半流动沙丘。

【用途】饲用; 固沙。

#### Alashan kneejujube

Buckwheat family

Subshrub  $1\sim3$  m tall; old branches dark grey; leaves squamiform; flowers  $2\sim3$  clustered; pink tepals 5; fruits broadly ovoid or subglobose, achene twisted, rips each with spine-like hairs in  $2\sim3$  lines, twice to thrice forked, top forks interwoven. Flowering June to August.

Distribution: Inner Mongolia and Gansu

Habitat: Moving and semi-moving dunes in desert

Use: Forage; fixing dunes





拍摄人: 张洪江 Photo by Zhang Hongjiang

# 泡果沙拐枣

### Calligonum junceum (Fisch. et Mey.) Litv.

蓼科

Polygonaceae

【特征】半灌木,高40~100cm;多分枝,分枝呈"之"字形弯曲;老枝黄灰色至淡褐色;叶条形,长3~6mm;花2~4枚簇生于叶腋;花被片5,白色至粉红色;瘦果直,具4条宽肋,每肋有3行柔软刺毛;其外有一层泡状薄膜包围整个瘦果,呈球状或宽椭圆状。花期4~6月。

【分布】新疆;蒙古和中亚。

【生境】平原荒漠中的砾石质地、沙地、沙丘。

【用途】饲用; 固沙。

### Dunkfruit kneejujube

Buckwheat family

Subshrub  $40\sim100$  cm tall; branches many, zigzagged, old branches yellow-grey to pale brown; leaves linear,  $3\sim6$  mm long; flowers  $2\sim4$  clustered in axils, white to pink tepals 5; achene straight with 4 broad ribs, each rib with soft spine-like hairs in 3 lines; whole achene covered in a vesicular membrane, globose or broadly ellipsoid. Flowering April to June.

Distribution: Xinjiang; Mongolia and Central Asia

Habitat: Gravelly sites, sands and sand dunes in plain desert

Use: Forage; fixing dunes

# 沙拐枣

# Calligonum mongolicum Turcz.

蓼科

Polygonaceae

【特征】半灌木,高25~150cm;分枝呈"之"字形弯曲;老枝灰白色;叶细鳞片状;花2~3枚簇生于叶腋;花被片5,白色至粉红色;果实宽椭圆状;瘦果直或扭转,果肋具毛发状刺2~3行,2~3回2~3分叉。花期5~7月。

【分布】内蒙古、宁夏,西北;蒙古。

【生境】荒漠中的沙地、沙丘。

【用途】饲用; 固沙。

#### Kneejujube

Buckwheat family

Subshrub  $25 \sim 150$  cm tall; branches zigzagged, old branches greyish-white; leaves thin squamiform; flowers  $2 \sim 3$  clustered in axils, white to pink tepals 5; fruits broadly ellipsoid, achene straight or twisted; rips each with capillary spines in  $2 \sim 3$  lines, spines twice to thrice  $2 \sim 3$ -forked. Flowering May to July.

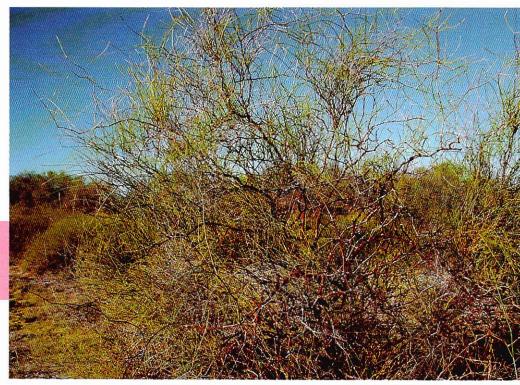
Distribution: Inner Mongolia, Ningxia and NW China; Mongolia

Habitat: Sands and sand dunes in desert areas

Use: Forage; fixing dunes

拍摄人: 拾涛(左上图) 牛晚荣(右上图)Photo by Shi Tao and Niu Xiaorong





拍摄人: 拾 涛 (上图) 张洪江 (右下图) Photos by Shi Tao and Zhang Hongjiang

# **红果沙拐枣**(红皮沙拐枣)

# Calligonum rubicundum Bge.

蓼科

Polygonaceae

【特征】灌木,高80~200cm;老枝暗红色;花被片粉红色;果实卵状或近球状,红色;瘦果扭转,具翅,翅近革质,边缘具齿或全缘。花期5~6月。

【分布】新疆;哈萨克斯坦。

【生境】荒漠中的流动沙丘、半固定沙丘、沙地。

【用途】固沙; 饲用。

### Redfruit kneejujube

Buckwheat family

Shrub 80~200 cm tall; old branches dark red; tepals pink; fruits ovoid or subglobose, red; achene twisted, with subcoriacous wings, toothed or entire at wing margins. Flowering May to June.

Distribution: Xinjiang; Kazakhstan

Habitat: Moving or semi-fixed dunes and sands in desert areas

Use: Fixing dunes; forage



### 酸模叶蓼

# Polygonum lapathifolium L.

蓼科

Polygonaceae

【特征】一年生草本,高30~80cm;茎直立,有分枝;叶面常有深色斑痕、叶柄及叶缘被刺毛;数个总状花序组成圆锥状;花被淡绿色或粉红色,4深裂,被腺点;瘦果扁平,微具棱。花期6~8月。

【分布】全国各地; 欧亚大陆温带地区。

【生境】低湿草甸。

【用途】饲用;药用。

#### Curlytop knotweed

Buckwheat family

Annual herb  $30 \sim 80$  cm tall; stems erect, branched; leaves with darkened spots above; petiole and margins with stiff hairs; several racemes in a panicle; pale green or pink perianth 4-parted, glandular; achene flat, slightly angular. Flowering June to August.

Distribution: Throughout whole China; temperate regions in Eurasia

Habitat: Meadows in moist lowlands

Use: Forage; medicine





短叶假木贼
Anabasis brevifolia C. A. Mey. 藜科 Chenopodiaceae (描述见12页) Shortleaf anabasis Goosefoot family (Descriptions in page 12)





珍珠猪毛菜
Salsola passerina Bunge 藜科 Chenopodiaceae (描述见37页)
Pearl Russian thistle Goosefoot family (Descriptions in page 37)





# 无腺花旗杆

# Dontostemon eglandulosus (DC.) Ledeb.

十字花科

Brassicaceae

【特征】一年生或二年生草本,高5~25cm;全株被毛;茎直立,有分枝;叶条形,全缘;总状花序;花瓣4,白色或淡紫色;长角果狭条状,微被毛或无毛。花期6~7月。

【分布】东北,内蒙古;蒙古、西伯利亚。

【生境】石砾质草原、轻度盐化沙地。

【用途】饲用。

### Eglandulose dontostemon

Mustard family

Annual or biennial herb  $5\sim25$  cm tall; whole plant hairy; stems erect, branched; leaves linear, entire; flowers in racemes; petals 4, white or pale purple; siliques narrowly linear, hirsutulous or glabrous. Flowering June to July.

Distribution: NE China and Inner Mongolia; Mongolia and Siberia

Habitat: Gravelly steppe and light-saline sands





# 瓦松

# Orostachys fimbriatus (Turcz.) Berger

景天科

Crassulaceae

【特征】二年生肉质草本,高10~30cm,全株粉绿色,密生紫红色斑点;莲座叶和茎 生叶先端具刺尖头;花序总状或圆锥状;花瓣5,粉红色,先端具凸尖头;花 药紫色;蓇葖果。花期8~9月。

【分布】东北至西北,华东和华中;蒙古、西伯利亚、朝鲜。

【生境】石质坡地和沙质地。

【用途】饲用;药用。

### Fringed orostachys

Stonecrop family

Biennial fleshy herb  $10\sim30$  cm tall; whole plant pinkish-green, with densely purple-red spots; rosulate and cauline leaves spine-mucronate at apex; flowers in racemes or panicles; pink petals 5, mucronate at apex; anthers purple; fruit a follicle. Flowering August to September.

Distribution: NE to NW, E and C China; Mongolia, Siberia and Korea

Habitat: Rocky slopes and sandy ground

Use: Forage; medicine

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# 小苞瓦松

# Orostachys thyrsiflorus Fisch.

景天科

Crassulaceae

【特征】二年生肉质草本,高5~20cm; 莲座叶和茎生叶先端有尖头; 总状花序; 花瓣5,白色或粉红色; 花药紫色; 蓇葖果。花期7~8月。

【分布】甘肃、新疆、西藏;蒙古、中亚。

【生境】石质山坡、山顶石缝、山前砾石地、河谷阶地。

【用途】饲用; 药用。

#### Dense-flowered orostachys

Stonecrop family

Biennial fleshy herb  $5\sim20$  cm tall; rosulate and cauline leaves mucronate at apex; flowers in racemes; petals 5, white or pink; anthers purple; fruit a follicle. Flowering July to August.

Distribution: Gansu. Xinjiang and Tibet; Mongolia and Central Asia

Habitat: Rocky slopes, rock crevices on hilltops, gravelly hillsides and river terraces

Use: Forage; medicine







# 地薔薇

### Chamaerhodos erecta (L.) Bunge

#### 薔薇科

Rosaceae

【特征】一年生或二年生草本,高10~50cm;茎单生,稀丛生,密被腺毛和短柔毛; 单叶三回三出羽状全裂,疏被柔毛;聚伞花序顶生;萼筒倒圆锥状;花瓣 5,粉红色。花期7~8月。

【分布】东北至西北;蒙古、朝鲜、西伯利亚。

【生境】草原带的砾质或沙质生境。

【用途】饲用。

#### Little rose

Rose family

Annual or biennial herb 10~50 cm tall; stems single, rarely tufted, densely glandular-pubescent; simple leaves triternate-pinnatisect, sparsely pubescent; cymes terminal; calyx tube obconic; petals 5, pink. Flowering July to August.

Distribution: NE to NW China; Mongolia, Korea and Siberia

Habitat: Gravelly and sandy sites in steppe areas

# 三裂地蔷薇

# Chamaerhodos trifida Ledeb.

#### 蔷薇科

Rosaceae

【特征】多年生草本,高5~20cm; 茎丛生; 单叶羽状3全裂,被长柔毛; 聚伞花序花 疏松; 花萼筒略膨大; 花瓣5,粉红色。花期6~8月。

【分布】东北,内蒙古;蒙古、西伯利亚。

【生境】草原带的砾质或沙质生境。

【用途】饲用。

#### Trifid little rose

Rose family

Perennial herb  $5\sim20$  cm tall; stems tufted; simple leaves pinnately 3-divided, villous; flowers loose in cymes; calyx tube slightly inflated; petals 5, pink. Flowering June to August.

Distribution: NE China and Inner Mongolia; Mongolia and Siberia

Habitat: Gravelly and sandy sites in steppe areas





# 长蕊地榆

# Sanguisorba officinalis L. var. longifila (Kitag.) Yu et Li

蔷薇科

Rosaceae

【特征】多年生草本,高20~80 cm;茎直立,上部分枝,被硬毛和腺毛;单数羽状复叶,边缘具齿,两面无毛;穗状花序顶生,花密集,由顶端向下逐渐开放;花萼紫红色,萼片4;无花瓣;雄蕊比萼片长,花药黑紫色。花期7~8月。

【分布】东北,内蒙古;朝鲜、日本、俄罗斯(远东)。

【生境】草甸和湿润沟谷。

【用途】药用;提制栲胶。

#### Official burnet

Rose family

Perennial herb 20~80 cm tall; stems erect, branched above, hispid and glandular-pubescent; leaves odd-pinnate, toothed, glabrous both sides; flowers dense in a terminal spike, opening gradually downward; calyx purple-red, sepals 4; petals absent; stamens longer than sepals, anthers black-purple. Flowering July to August.

Distribution: NE China and Inner Mongolia; Korea, Japan and Russia (Far East)

**Habitat:** Meadows and moist ravines **Use:** Medicine; extracting tannin

### 柳叶绣线菊

# Spiraea salicifolia L.

蔷薇科

Rosaceae

【特征】灌木,高1~2m; 茎直立; 单叶互生,边缘有锯齿,两面无毛;圆锥花序,花密集;花瓣5,粉红色;蓇葖果直立。花期7~8月。

【分布】东北,内蒙古、河北;蒙古、朝鲜、日本、西伯利亚、欧洲东南。

【生境】沼泽灌丛、草甸、落叶松林下。

【用途】观赏。

#### Willowleaf meadowsweet

Rose family

Shrub  $1 \sim 2$  in tall; stems erect; simple leaves alternate, serrate, glabrous both sides; flowers dense in panicles; petals 5, pink; follicles erect. Flowering July to August.

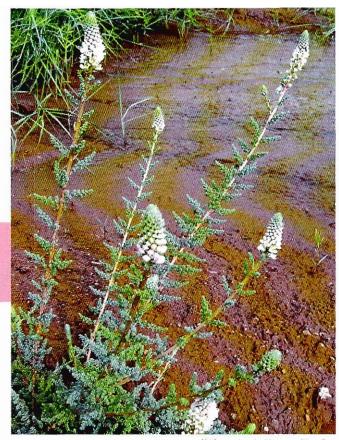
Distribution: NE China, Inner Mongolia and Hebei; Mongolia, Korea, Japan, Siberia and SE Europe

Habitat: Boggy thickets, meadows and larch forests

Use: Ornamental







拍摄人: 赵 凡 Photo by Zhao Fan

# 河柏

### Myricaria alopecuroides Schrenk

柽柳科

Tamaricaceae

【特征】灌木,高1~2m; 茎斜升; 叶小,密生,灰绿色; 总状花序,花密集; 花瓣5,粉红色; 蒴果圆锥状; 种子顶端具簇生毛。花期6~7月。

【分布】作北、西北,西藏;蒙古、俄罗斯、巴基斯坦、印度、伊朗。

【生境】半荒漠地带的河滩、低地、沟谷。

【用途】饲用;药用。

#### Falsetamarisk

Tamarix family

Shrub  $1\sim2$  m tall; stems ascending; leaves tiny and dense, grey-green; flowers dense in racemes; pink petals 5; capsules conic; seeds with tufted hairs at apex. Flowering June to July.

Distribution: N and NW China, and Tibet; Mongolia. Russia, Pakistan, India and Iran

Habitat: Flood lands, lowlands and ravines in semi-desert areas

Use: Forage: medicine

# 甘蒙柽柳

# Tamarix austromongolica Nakai

柽柳科

Tamaricaceae

【特征】灌木,高1.5~3m;树干和老枝褐红色,枝直立或斜升;叶小,鳞片状,开张,灰绿色;总状花序组成圆锥花序;花直径约2 mm,花瓣5,粉红色,升张。花期5~9月。

【分布】华北, 甘肃、青海。

【生境】盐渍化河漫滩、冲积平原、沙质地和次生盐渍地。

【用途】饲用;水土保持;药用。

#### Gansu-Mongolian salt cedar

Tamarix family

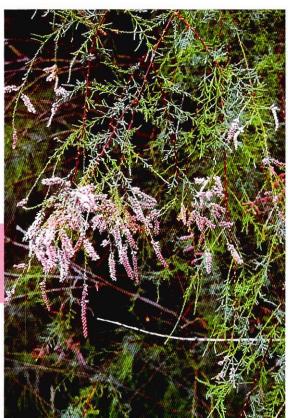
Shrub  $1.5 \sim 3$  m tall; barks and old branches brown-red, branches erect or ascending: small leaves squamiform, patent, grey-green; racemes forming a large panicle; flowers about 2 mm across; petals 5, pink, patent. Flowering May to September.

Distribution: N China, Gansu and Qinghai

Habitat: Saline flood lands, alluvial plains, sandy lands, and secondary-saline lands

Use: Forage; soil conservation; medicine









### 柽柳

### Tamarix chinensis Lour.

柽柳科

Tamaricaceae

【特征】乔木或灌木,高3~8m;树干和老枝紫红色,光亮;幼枝稠密,细弱,开展或下垂;叶小,鳞片状,平贴或微开张;总状花序组成圆锥花序;花直径约2mm,花瓣5,粉红色,开张。花期5~9月。

【分布】东北至西北。

【生境】低湿盐碱地、沙质荒地、河岸冲积地和次生盐渍地。

【用途】饲用; 水上保持; 药用。

#### Five-stamen tamarisk

Tamarix family

Tree or shrub  $3 \sim 8$  m tall; barks and old branches purple-red, shiny; young branches dense and slender, spreading or drooping; small leaves squamiform, appressed or slightly patent: racemes forming a large panicle; flowers about 2 mm across; petals 5, pink, patent. Flowering May to September.

Distribution: NE to NW China

**Habitat:** Saline lowlands, sandy wastelands, alluvial riverbanks, and secondary-saline lands **Use:** Forage; soil conservation; medicine

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# 多枝柽柳

### Tamarix ramosissima Ledeb.

#### 柽柳科

Tamaricaceae

【特征】灌木或小乔木,高2~3m;老枝暗红色;叶小,鳞片状,平贴于枝上;总 状花序组成顶生的圆锥花序;花直径约2mm,花瓣5,粉红色或紫红色,直 立。花期5~8月。

【分布】华北和西北;蒙古、俄罗斯、阿富汗、伊朗、上耳其和欧洲。

【生境】荒漠区的盐渍低地、冲积或淤积平原、沙质地和灌区次生盐清单。

【用途】饲用;水上保持;药用。

#### Salt cedar

Tamarix family

Shrub or small tree  $2 \sim 3$  m tall; barks dark red; small leaves squamiform, appressed; racemes forming a large terminal panicle: flowers about 2 mm across; petals 5, pink or purple-red, erect. Flowering May to August.

Distribution: N and NW China; Mongolia, Russia, Afghanistan, Iran, Turkey and Europe Habitat: Saline lowlands, alluvial and silted flats, and sandy lands in desert areas; secondary-saline lands in irrigated areas

Use: Forage; soil conservation; medicine









Apocynaceae

【特征】半灌木或多年生草本,高1~3m,具乳汁;茎直立,光滑,紫红色;单叶,边 缘具细齿;聚伞花序,花小;花冠钟状,瓣片5,粉红色或紫红色,具深色 脉纹;花冠内基部具副花冠和肉质花盘;蓇葖果2,筷状圆筒形,平行或叉 生,长8~15cm。花期6~7月。

【分布】华北、西北、江苏。

【生境】沙漠边缘、盐碱滩地、沟谷。

【用途】纤维; 蜜源; 药用。

### Dogbane

Dogbane family

Subshrub or perennial,  $1 \sim 3$  m tall, with milky juice; stems erect, smooth, purple-red; leaves simple, thin-toothed; small flowers in cymes; corolla campanulate, 5-lobed, pink to purple-red, with dark vein-streaks; corolla with corona and fleshy disk at base inside; fruit a 2-follicle, chopsticks-like cylindrical,  $8\sim15$  cm long, parallel or crossed. Flowering June to July.

Distribution: N and NW China, Jiangsu

Habitat: Edges of sandy desert, saline-alkali flats, and ravines

Use: Fiber material; honey source; medicine

# 鹰爪柴

# Convolvulus gortschakovii Schrenk

旋花科

Convolvulaceae

【特征】半灌木,高10~30m;全株被银灰色绢毛;分枝几呈直角开展,小枝坚硬, 具刺;叶互生;花单生短侧枝上;外萼片显著宽于内萼片;花冠漏斗状.淡粉 色至粉红色。花期5~8月。

【分布】内蒙古、宁夏、甘肃、新弼;蒙古、西伯利亚、中亚。

【生境】砾质、石质半荒漠或荒漠。

#### Eagle-clawed glorybind

Morning glory family

Subshrub  $10\sim30$  cm tall, whole plant silvery-sericeous; branches somewhat quadrate-spreading; branchlets hard, with thorns; leaves alternate; flowers solitary on short lateral branchlets; outer sepals distinctly wider than inner sepals; corolla funnelform, pinkish to pink. Flowering May to August.

Distribution: Inner Mongolia, Ningxia, Gansu and Xinjiang; Mongolia, Siberia and Central Asia

Habitat: Gravelly and rocky semi-desert and desert





拍摄人: 赵 凡 Photo by Zhao Fan

# 刺旋花

# Convolvulus tragacanthoides Turcz.

旋花科

Convolvulaceae

【特征】半灌木,高5~15cm; 全株被银灰色绢毛; 茎 密集分枝,铺散呈垫状,小枝坚硬,具刺;叶 互生; 花单生或2~3枚生于枝端; 外萼片与内 萼片等大; 花冠漏斗状,淡粉色至粉红色。花 期5~8月。

【分布】华北、西北;蒙古、西伯利亚、中亚。

【生境】砾质、石质半荒漠或荒漠。

#### Spiny glorybind

Morning glory family

Subshrub  $5\sim15$  cm tall, whole plant silvery-sericeous; stems densely branched, diffuse to cushion-like; branchlets hard, with thorns; leaves alternate; flowers solitary or  $2\sim3$  terminal; sepals equal in size; corolla funnelform, pinkish to pink. Flowering May to August. Distribution: N and NW China; Mongolia, Siberia and Central Asia

Habitat: Gravelly and rocky semi-desert and desert



### 鼬瓣花

# Galeopsis bifida Boenn.

唇形科

Labiatae

【特征】一年生草本,高20~60cm;茎直立,密被刚毛和腺毛;叶对生,边缘具圆齿,两而被柔毛;轮伞花序腋生;花冠紫红色,二唇形,外面密被刚毛;上唇先端具数齿,下唇3裂,中裂片具深色斑纹。花期7~8月。

【分布】东北至西北,西南,湖北;蒙古、朝鲜、日本、俄罗斯、中欧、北美。

【生境】林缘、草坡、农田、果园。

#### Split-lip hempnettle

Mint family

Annual herb  $20\sim60$  cm tall; stems erect, densely setose and glandular-pubescent; leaves opposite, crenate, pubescent both sides; verticillasters axillary; corolla purple-red, bilabiate, densely setose outer side; upper lip with several teeth at apex, lower lip 3-lobed, the middle lobe with dark streaks. Flowering July to August.

Distribution: NE to NW, SW China. and Hubei: Mongolia. Korea, Japan, Russia, C Europe and North America

Habitat: Forest edges, grassy slopes, farming fields and orchards





# 细叶益母草

### Leonurus sibiricus L.

唇形科

Labiatae

【特征】-年生或二年生草本,高30~70cm;茎四棱,直立,被糙伏毛;叶对生,掌状全裂,裂片羽裂;轮伞花序腋生;花冠粉红色,外面密被柔毛,二唇形;上唇全缘,下唇短于上唇,3裂。花期7~9月。

【分布】华北;蒙古、西伯利亚。

【生境】林地、林缘、灌丛、草原、村旁、路边。

【用途】药用。

#### Siberian motherwort

Mint family

Annual or biennial herb 30~70 cm tall; stems quadrangular, erect, strigulose; leaves opposite, palmately divided, segments pinnatisect; verticillasters axillary; corolla pink, densely pubescent outer side, bilabiate; upper lip entire, lower lip shorter than the upper. 3-lobed. Flowering July to September.

Distribution: N China; Mongolia and Siberia

Habitat: Forest, forest edges, scrubland, steppe, village sides and roadsides

Use: Medicine

### 碎米蕨叶马先蒿

# Pedicularis cheilanthifolia Schrenk

玄参科

Scrophulariaceae

【特征】多年生草本,高5~30cm;茎直立,单生或丛生,不分枝,具4条沟纹,沟中有毛; 基生叶丛生,茎生叶4枚轮生,叶片二回羽裂;花序近头状至总状;花冠二唇形,紫红色至白色,花冠管向前膝曲;上唇弓曲,端部有短喙,下唇3裂。花期6~8月。

【分布】甘肃、青海、新疆、西藏;中亚。

【生境】海拔2 150~4 900m的亚高山至高山带的草甸、灌丛、林地。

#### Lipleaf lousewort

Figwort family

Perennial herb 5~30 cm tall; stems erect, single or tufted, unbranched, 4-canaliculate with hairs; basal leaves tufted, cauling leaves whorled with 4 per node, blades bipinnatipartite; inflorescence subcapitate to racemose; corolla bilabiate, purple-red to white, tube geniculate forward; upper lip curved with a short beak, lower lip 3-lobed. Flowering June to August.

Distribution: Gansu, Qinghai, Xinjiang and Tibet; Central Asia

Habitat: Meadows, scrubland and forests in subalpine to alpine zones at

2 150 ~4 900 m







# 毛节缬草

# Valeriana alternifolia Bunge

败酱科

Valerianaceae

【特征】多年生草本,高60~150cm; 茎中空,有纵棱,被粗毛; 基生叶丛生,早凋,茎生叶对生,羽状全裂呈复叶状;三出聚伞圆锥花序;花小,花冠淡粉色,管钟状,5裂片。花期6~8月。

【分布】东北至西南;亚洲、欧洲。

【生境】林下、林缘、灌丛、草甸。

【用途】根药用。

#### Hairy valerian

Valerian family

Perennial herb  $60\sim150$  cm tall: stems hollow, angulate, hispid; basal leaves tufted, caducous, cauline leaves opposite, pinnatisect to compound leaf; ternate-thyrse with small flowers; pinkish corolla tubular-campanulate with 5 lobes. Flowering June to August.

Distribution: NE to SW China; Asia and Europe

Habitat: Forest and forest edges, scrubland and meadows

Use: Roots for medicine

### 亚洲蓍

# Achillea asiatica Serg.

菊科

Compositae

【特征】多年生草本,高15~50cm;茎直立或斜升,被长柔毛;叶二至三回羽状全裂,末回裂片条形或披针形,两面疏被长柔毛和腺点;头状花序多数,复伞房状排列; 舌状花粉红色,稀白色;管状花淡粉色。花期7~8月。

【分布】东北、华北,新强;蒙古、俄罗斯(西伯利亚、远东)、中亚。

【生境】山地草甸和低湿草甸。

【用途】饲用; 药用。

#### Asian yarrow

Aster family

Perennial herb  $15 \sim 50$  cm tall; stems erect or ascending, villous; leaves twice to thrice pinnatisect, ultimate segments linear to lanceolate, loosely villous and glandular both surfaces; numerous heads in a compound corymb; ray florets pink, rarely white; disk florets pale pink. Flowering July to August.

Distribution: NE, N China and Xinjiang: Mongolia, Russia (Siberia and Far East), and Central Asia

Habitat: Montane-meadows, and moist lowland meadows

Use: Forage; medicine







### Compositae

【特征】多年生草本,高50~100cm; 茎直立,上部有分枝;下部叶边缘具粗齿或羽状浅裂,有细刺,上部叶渐小;头状花序多数,排列成伞房状;总苞片边缘有睫毛,外层者先端有刺尖,内层者先端略扩大而外曲;管状花冠紫红色。花期7~8月。

【分布】东北、华北,甘肃;蒙古、日本、俄罗斯(西伯利亚、远东)。

【生境】山野、荒地、田间、路旁。

【用途】饲用; 药用。

#### Setose thistle

Aster family

Perennial herb 50~100 cm tall; stems erect, branched above; lower leaves rough-toothed or pinnatilobate, with thin spines at edges, upper leaves smaller; many heads in corymbs; involucial bracts fringed, outer ones spine-pointed at apex, inner ones slightly enlarged and excurved at apex; tubular corolla purple-red. Flowering July to August.

Distribution: NE and N China, and Gansu; Mongolia, Japan and Russia (Siberia and Far East)

Habitat: Wild fields, wastelands, farmlands and roadsides

Use: Forage; medicine

### 小红菊

### Dendranthema chanetii (Levl.) Shih

菊科

Compositae

【特征】多年生草本,高10~60cm;茎单一或数个,中部以上分枝;叶3~5掌状或 羽状浅裂,少深裂,两面有腺点,花序下部的叶有时不裂;头状花序2至多 数伞房状排列,稀单生;舌状花粉红色,紫红色或白色;管状花黄色。花期 7~8月。

【分布】东北、华北,甘肃、青海;朝鲜、俄罗斯(远东)。

【生境】山坡、林缘、沟谷。

【用途】饲用。

#### Little red daisy

Aster family

Perennial herb 10~60 cm tall; stems single to several, branched from upper half; leaves palmately or pinnately 3~5-lobed, rarely parted, glandular both sides; leaves below the inflorescence sometimes unlobed; heads 2 to several in corymbs, rarely solitary; ray florets pink to purple-red or white; disk florets yellow. Flowering July to August.

Distribution: NE and N China, Gansu and Qinghai; Korea and Russia (Far East)

Habitat: Slopes, forest edges and ravines







# 砂韭(双齿葱)

# Allium bidentatum Fisch. ex Prokh. et Ikonn.-Gal.

百合科

Liliaceae

【特征】多年生草本;鳞茎外皮薄革质,条状撕裂;叶半圆柱状,宽1~1.5mm;花葶高10~35cm;总苞2裂;伞形花序半球状;花被片6,淡紫红色或淡紫色;花丝近等长于花被片,内轮花丝基部具钝齿;花柱内藏。花期7~8月。

【分布】东北、华北,新疆;蒙古、西伯利亚。

【生境】砾石质草原。

【用途】饲用。

#### Two-teeth onion

Lily family

Perennial herb; bulb coat thin-coriaceous, linear-split; leaves semi-terete,  $1 \sim 1.5$  mm wide; scapes  $10 \sim 35$  cm tall; spathe 2-divided; umbels hemispheric; tepals 6, purplish-red to pale purple; filaments subequaling tepals, inner filaments blunt-toothed at base; style included. Flowering July to August.

Distribution: NE and N China, Xinjiang; Mongolia and Siberia

Habitat: Gravelly steppe

### 碱韭(多根葱)

### Allium polyrhizum Turcz. ex Regel

百合科

Liliaceae

【特征】多年生草本;鳞茎外皮破裂成纤维状;叶半圆柱状,粗0.3~1mm;花葶高 10~20cm;总苞2裂;伞形花序半球状,花多数;花被片6,粉红色至淡紫 色,或白色;花丝长于花被片;花柱稍伸出花被外。花期7~8月。

【分布】华北、西北;蒙古、西伯利亚、中亚。

【生境】草原至荒漠地带的壤质、沙壤质和砾石质生境。

【用途】饲用。

#### Alkali onion

Lily family

Use: Forage

Perennial herb; bulb coat fibrous; leaves semi-terete,  $0.3 \sim 1$  mm wide; scapes  $10 \sim 20$  cm tall; spathe 2-divided; umbels hemispheric, with numerous flowers; tepals 6, pink to pale purple or white; filaments longer than tepals; style slightly exserted. Flowering July to August.

Distribution: N and NW China: Mongolia, Siberia and Central Asia Habitat: Loamy, sandy-loamy and gravelly sites in steppe to desert zones



# 苦马豆

### Sphaerophysa salsula (Pall.) DC.

豆科

Leguminosae

【特征】多年生草本,高20~60cm;茎直立或斜升,分枝开展;单数羽状复叶,小叶倒卵状椭圆形至椭圆形,下面被糙伏毛;总状花序腋生;蝶形花冠红色;荚果膜质,膨胀,椭圆状或卵球状。花期6~7月。

【分布】东北至西北;蒙古、西伯利亚。

【生境】草原或荒漠带的沙质地、盐碱滩地。

【用途】药用。

#### Alkali swainson pea

Pea family

Perennial herb  $20\sim60$  cm tall; stems erect or ascending, branches spreading; leaves odd-pinnate, leaflets obovate-elliptic to elliptic, strigulose beneath; racemes axillary; papilionaceous corolla red: pods membranous, inflated, ellipsoid or ovoid. Flowering June to July.

Distribution: NE to NW China; Mongolia and Siberia

Habitat: Sandy and saline-alkalı sites in steppe to desert areas

Use: Medicine







# 粗茎驼蹄瓣

# Zygophyllum loczyi Kanitz

蒺藜科

Zygophyllaceae

【特征】超旱生肉质草本,一年生或二年生,高5~25cm; 茎由基部多分枝,开展或直立; 偶数羽状复叶,叶柄具翼; 茎上部小叶为1对,巾下部为2~3对,椭圆形或斜倒卵形; 花1~2枚腋生; 花瓣5,橘红色,边缘白色。花期5~7月。

【分布】中国特有,内蒙古、宁夏和西北。

【生境】石砾质、沙质或盐化荒漠。

【用途】饲用。

### Thickstemmed beancaper

Caltrop family

Super-xerophytic fleshy herb, annual or biennial  $5\sim25$  cm tall; stems much branched from base, spreading or erect; leaves even-pinnate, petiole winged; upper leaf with leaflets in 1 pairs, lower in  $2\sim3$  pairs, elliptic or oblique-obovate; flowers solitary or 2 in axils; petals 5, reddish-orange with white edges. Flowering May to July.

Distribution: Endemic to Inner Mongolia. Ningxia and NW China

Habitat: Gravelly, sandy and saline desert

# 山丹

# Lilium pumilum Redoute

百合科

Liliaceae

【特征】多年生草本,高20~70cm;具鳞茎;茎直立;叶条形;花1至数枚顶生;花被片6,反卷,鲜红色。花期6~8月。

【分布】东北至西北;蒙古、朝鲜、俄罗斯(西伯利亚、远东)。

【生境】山地草甸、草甸草原和林缘。

【用途】饲用; 观赏; 药用。

#### Low lily

Lily family

Perennial herb 20~70 cm tall, bulbiferous; stems erect; leaves linear; 1 to several flowers terminal; tepals 6, revolute, bright red. Flowering June to August.

Distribution: NE to NW China; Mongolia, Korea and Russia (Siberia and Far East)

Habitat: Montane-meadow, meadow-steppe, and forest edges

Use: Forage; ornamental; medicine

拍摄人: 赵 凡 Photo by Zhao Fan







短叶假木贼 Anabasis brevifolia C. A. Mey.

藜科 Chenopodiaceae (描述见12页) Shortleaf anabasis Goosefoot family (Descriptions in page 12)



# 散枝猪毛菜 Salsola brachiata Pall.

藜科 Chenopodiaceae (描述见32页) Scatterbranch Russian thistle Goosefoot family (Descriptions in page 32)

右下图拍摄人: 拾 涛 Photo by Shi Tao



短柱猪毛菜 Salsoal lanata Pall.

藜科 Chenopodiaceae (描述见35页)

Woolly Russian thistle Goosefoot family (Descriptions in page 35)

# 松叶猪毛菜

Salsola laricifolia Turcz. ex Litv.

藜科 Chenopodiaceae (描述见36页)

Larshleaf Russian thistle

Goosefoot family (Descriptions in page 36)



# 刺沙蓬 Salsola ruthenica Iljin

藜科 Chenopodiaceae (描述见38页)

Prickly Russian thistle Goosefoot family (Descriptions in page 38)

# 粗枝猪毛菜 Salsola subcrassa M. Pop.

藜科 Chenopodiaceae (描述见39页)

Thickbranched Russian thistle Goosefoot family (Descriptions in page 39)

# 合头草

# Sympegma regelii Bunge

藜科 Chenopodiaceae (描述见41页)

Sympegma Goosefoot family (Descriptions in page 41)





拍摄人: 拾 涛 Photo by Shi Tao

# 圆叶八宝

# Hylotelephium ewersii (Ldb.) H. Ohba

#### 晏天科

Crassulaceae

【特征】多年生肉质草本,高5~25cm,茎近基部分枝;叶阔卵形或近圆形,对生, 上面常有斑点;聚伞花序,花密集;花瓣5,紫红色;花药紫色;膏葖果。花 期7~8月。

【分布】新疆;蒙古、中亚、阿富汗、巴基斯坦。

【生境】海拔400~4 200m的石质坡地、石缝、河边。

# Roundleaf stonecrop

Stonecrop family

Perennial fleshy herb  $5\sim25$  cm tall; stems branched near base; leaves broadly ovate or suborbicular, opposite, usually blotched above; flowers dense in cymes; petals 5, purple-red; anthers purple; fruit a follicle. Flowering July to August.

Distribution: Xinjiang; Mongolia. Central Asia. Afghanistan and Pakistan

Habitat: Rocky slopes, rock crevices, river sides at 400 ~ 4 200 m





# 紫八宝

# Hylotelephium purpureum (L.) Holub

景天科

Crassulaceae

【特征】多年生肉质草本,高30~60cm,茎直立,单生或聚生;叶卵状矩圆形至矩圆形,互生,上面散生斑点;聚伞花序,花密集;花瓣5,紫红色;花药黄色; 苍葵果。花期7~8月。

【分布】东北,内蒙古、新疆;日本、俄罗斯、欧洲、北美。

【生境】海拔800~2 200m的林间或林缘草甸和灌丛。

#### Purpleflower stonecrop

Stonecrop family

Perennial fleshy herb  $30\sim60$  cm tall; stems erect, simple or clustered; leaves ovate-oblong to oblong, alternate. blotched above; flowers dense in cymes; petals 5, purple-red; anthers yellow; fruit a follicle. Flowering July to August.

Distribution: NE China, Inner Mongolia and Xinjiang; Japan, Russia, Europe and North America

**Habitat:** Meadows and thickets in forests openings and edges at 800 ~ 2 200 m

# 山刺玫

#### Rosa davurica Pall.

#### 蔷薇科

Rosaceae

【特征】灌木,高1~2m; 枝具皮刺; 单数羽状复叶,小叶边缘有细锯齿,近基部全缘; 花单生或簇生; 萼片被柔毛和腺毛,先端尾尖; 花瓣5,玫瑰红色; 蔷薇果近球形或卵形,光滑,成熟时红色,宿存萼片直立。花期6~7月。

【分布】东北、华北;朝鲜、蒙古、俄罗斯(西伯利亚、远东)。

【生境】疏林、山坡和坡麓灌丛、沙地。

【用途】饲用;观赏;药用;果实含维生素C,可食;根、茎、叶可提制栲胶。

#### Amur rose

Rose family

Shrub 1~2 m tall; branches with prickles; leaves odd-pinnate, leaflets thin-serrate, entire near base; flowers solitary or clustered; sepals pubescent and glandular, caudate-acuminate at apex; petals 5, rosy-red; fruit a hip, subglobose or ovoid, smooth, red at maturity, persistent sepals creet. Flowering June to July.

Distribution: NE and N China; Korea, Mongolia and Russia (Siberia and Far East)

Habitat: Open woods, sloping and foothill scrubs, and sands

Use: Forage; ornamental; medicine; fruits rich in VC, edible; roots, stems and leaves for extracting tannin

拍摄人: 赵 凡 Photo by Zhao Fan



# 达乌里黄耆

# Astragalus dahuricus (Pall.) DC.

豆科

Leguminosae

【特征】一年生或二年生草本,高30~60cm.全株被白色柔毛;茎直立,多分枝;单数羽状复叶,小叶矩圆形至倒卵形;总状花序腋生,花10~20枚;蝶形花冠紫红色;荚果直或弯,被短毛。花期7~9月。

【分布】东北、华北;蒙古、俄罗斯(西伯利亚、远东)。

【生境】草地、农田、撂荒地、路边。

【用途】饲用;绿肥。

#### Dahurian milkvetch

Use: Forage; green manure

Pea family

Annual or biennial herb  $30 \sim 60$  cm tall; whole plant white pubescent; stems erect, much branched; leaves odd-pinnate, leaflets oblong to obovate;  $10 \sim 20$  flowers in an axillary raceme; papilionaceous corolla purple-red; pods erect or slightly curved, short-hairy. Flowering July to September.

Distribution: NE and N China; Mongolia and Russia (Siberia and Far East)

Habitat: Grassland, farmlands, abandoned lands and roadsides





# 山岩黄耆

# Hedysarum alpinus L.

豆科

Leguminosae

【特征】多年生草本,高40~100cm;茎直立或斜升;单数羽状复叶,小叶卵状矩圆形至披针形;总状花序腋生,花多数,稍下倾;蝶形花冠紫红色或蓝紫色;荚果2~4节,扁平,边缘具狭翅。花期7~8月。

【分布】东北;蒙古、朝鲜、俄罗斯、日本、北美。

【生境】林缘、灌丛、河谷草甸。

【用途】饲用。

#### Alpine sweetvetch

Pea family

Perennial herb  $40 \sim 100$  cm tall; stems erect or ascending; leaves odd-pinnate, leaflets ovateoblong to lanceolate; axillary racemes with dense and deflexed flowers; papilionaceous corolla purple-red to blue-purple; pod with  $2 \sim 4$  loments, flat, narrowly winged at margins. Flowering July to August.

Distribution: NE China; Mongolia, Korea, Russia, Japan and North America

Habitat: Forest edges, scrubland and river valley meadows

# 短翼岩黄耆

# Hedysarum brachypterum Bunge

豆科

Leguminosae

【特征】多年生草本,高20~30cm; 茎仰卧,多分枝; 单数羽状复叶,小叶片椭圆形至条状矩圆形; 总状花序腋生,花10~20枚; 蝶形花冠紫红色; 翼瓣短小,长约为旗瓣的2/5; 荚果1~4节,略膨胀,密被柔毛,具针刺。花期5~6月。

【分布】内蒙古、河北;蒙古。

【生境】草原或荒漠草原区的砾石质山坡、丘陵或平原。

【用途】饲用。

#### Short-winged sweetvetch

Pea family

Perennial herb  $20\sim30$  cm tall; stems procumbent, much branched; leaves odd-pinnate, leaflets elliptic to linear-oblong; axillary racemes with  $10\sim20$  flowers; papilionaceous corolla purple-red; wings to 2/5 length of banner; pod with  $1\sim4$  loments, slightly inflated, densely pubescent, with acerose-spines. Flowering May to June.

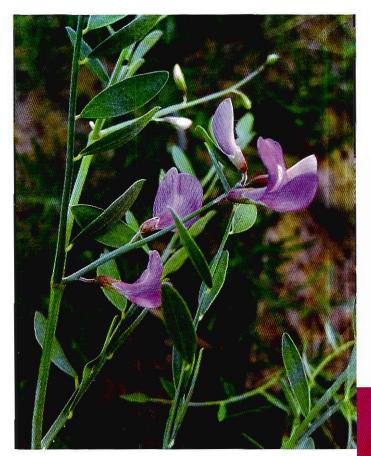
Distribution: Inner Mongolia and Hebei; Mongolia

Habitat: Gravelly slopes, hills and flats in steppe to desert-steppe areas









# 山竹岩黄耆

# Hedysarum fruticosum Pall.

豆科

Leguminosae

【特征】半流水,高40~80cm;茎直立,多分枝;单数羽状复叶,小叶矩圆形至条状矩圆形,两面被毛;总状花序腋生;萼裂片三角形;蝶形花冠紫红色,偶有白黄色;荚果2~3节,略膨胀,幼果密被柔毛,成熟荚果具刺。花期7~9月。

【分布】内蒙古;蒙古、西伯利亚。

【生境】草原区的沙地、沙丘。

【用途】饲用;固沙。

# Shrubby sweetvetch

Pea family

Subshrub 40~80 cm tall; stems erect, much branched; leaves odd-pinnate, leaflets oblong to linear-oblong, pubescent both sides; flowers in axillary racemes; calyx lobe deltoid; papilionaceous corolla purple-red, rarely white-yellow; pod with 2~3 loments, slightly inflated, densely pubescent when young, spinose at maturity. Flowering July to September.

Distribution: Inner Mongolia; Mongolia and Siberia

Habitat: Sands and dunes in steppe areas

Use: Forage; fixing dunes

# 塔落岩黄耆

# Hedysarum fruticosum var. laeve (Maxim.) H. C. Fu

豆科

#### Leguminosae

【特征】与原变种的区别:植株上部小叶较疏离;萼裂片为短三角形;节荚扁平,无毛,无刺。花期6~10月。

【分布】内蒙古、宁夏、陕西。

【生境】草原至荒漠草原区的流动沙丘、半固定沙丘或覆沙地。

【用途】饲用; 固沙。

#### Taluo shrubby sweetvetch

Pea family

Difference to *Hedysarum fruticosum* var. *fruticosum*: Plant with spaced leaves at the upper part; calyx lobe wide-deltoid; loments flat, glabrous and without spine. Flowering June to October.

Distribution: Inner Mongolia, Ningxia and Shaanxi

Habitat: Moving and semi-fixed duncs, and sandy ground in steppe to desert-steppe areas







# 蒙古岩黄耆

# Hedysarum fruticosum

var. mongolicum (Turcz.) Turcz. ex B. Fedtsch.

豆科

Leguminosae

【特征】与原变种的区别:植株上部小叶疏离;荚果无刺。花期6~10月。

【分布】内蒙古。

【生境】草原至荒漠草原区的流动沙丘、半固定沙丘或覆沙地。

【用途】饲用;固沙。

#### Mongolian shrubby sweetvetch

Pea family

Difference to Hedysarum fruticosum var. fruticosum: Plant with spaced leaves at the upper part; Ioments without spine. Flowering June to October.

Distribution: Inner Mongolia

Habitat: Moving and semi-fixed dunes, and sandy ground in steppe to desert-steppe areas

Use: Forage; fixing dunes



# 华北岩黄耆

# Hedysarum gmelinii Ledeb.

豆科

Leguminosae

【特征】多年生草本, 高20~30cm; 茎基部仰卧, 多分枝; 单数羽状复叶, 小叶片椭 网形至卵状矩圆形;总状花序腋生,花15~40枚;蝶形花冠玫瑰红色,偶有 淡黄色; 翼瓣长为旗瓣的2/3~3/4; 荚果3~6节, 两侧膨胀, 被柔毛, 具针 刺或无。花期6~8月。

【分布】内蒙古、河北、甘肃、新疆;蒙古、中亚、西伯利亚。

【生境】沙质或砂砾质草原。

【用涂】饲用。

#### Gmelin sweetvetch

Pea family

Perennial herb 20~30 cm tall; stems procumbent at base, much branched; leaves odd-pinnate, leaflets elliptic to ovate-oblong; axillary racemes with 15~40 flowers: papilionaceous corolla rosy-red, rarely pale yellow; wings to  $2/3 \sim 3/4$  length of banner; pod with 3~6 loments, inflated, pubescent, accrose-spinose or not. Flowering June to August.

Distribution: Inner Mongolia, Hebei, Gansu and Xinjiang; Mongolia, Central Asia and Siberia

Habitat: Sandy and gravelly steppe

# 红花岩黄耆

# Hedysarum multijugum Maxim.

豆科

Leguminosae

【特征】半灌木,高40~100cm;茎直立,具分枝;单数羽状复叶,小叶片卵形至阔卵形,上面无毛,下面密被柔毛;总状花序腋生,花9~25枚;蝶形花冠紫红色,偶有黄白色;荚果2~3节,略膨胀,被柔毛,具针刺。花期6~8月。

【分布】西北,山西、四川、西藏。

【生境】草原至荒漠区的石质、砾质和沙质坡地、沙地和沟谷。

【用途】饲用;水土保持。

#### Red-flowered sweetvetch

Pea family

Subshrub  $40 \sim 100$  cm tall; stems erect, branched; leaves odd-pinnate, leaflets ovate to broadly ovate, glabrous above, densely pubescent beneath; axillary racemes with  $9 \sim 25$  flowers; papilionaceous corolla purple-red, rarely yellowish-white; pod with  $2 \sim 3$  loments, slightly inflated, pubescent, acerose-spinose. Flowering June to August.

Distribution: NW China, Shanxi, Sichuan and Tibet

Habitat: Stony, gravelly and sandy slopes and hillsides, sands and ravines in steppe to desert areas

Use: Forage; soil conservation







# 细枝岩黄耆

# Hedysarum scoparium Fisch. et Mey.

豆科

Leguminosae

【特征】灌木,高80~300cm;茎直立,多分枝;单数羽状复叶,小叶稀疏,矩圆形至条形,下面被柔毛;总状花序腋生,花少数;蝶形花冠紫红色;英果2~4节,节荚近球形,密被白色毡毛。化期6~9月。

【分布】内蒙古、宁夏, 西北; 蒙古、中亚。

【生境】荒漠区的沙地及沙丘。

【用途】饲用; 固沙。

#### Broom sweetvetch

Pea family

Shrub  $80\sim300$  cm tall; stems erect. much branched: leaves odd-pinnate, leaflets sparse, oblong to linear, pubescent beneath; axillary racemes with few flowers; papilionaceous corolla purple-red; pod with  $2\sim4$  subglobose loments, densely white-manicate. Flowering June to September.

Distribution: Inner Mongolia, Ningxia and NW China; Mongolia and Central Asia

Habitat: Sands and dunes in desert areas

Use: Forage; fixing dunes









# 胡枝子

# Lespedeza bicolor Turcz.

豆科

Leguminosae

【特征】灌木,高1~3m;茎直立,多分枝;羽状三出复叶,小叶阔椭圆形至卵形; 总状花序腋生,形成大型圆锥花序;蝶形花冠紫红色,稀白色;荚果卵形.被 柔毛。花期7~8月。

【分布】东北、华北; 朝鲜、日本、西伯利亚。

【生境】山地阴坡、林缘。

【用途】饲用;观赏;绿肥;水土保持;药用。

# Shrub lespedeza

Pea family

Shrub  $1\sim3$  m tall; stems erect, much branched: leaves pinnate-ternate, leaflets broadly elliptic to ovate; axillary racemes forming a large panicle: papilionaceous corolla purple-red, rarely white; pods ovoid, pubescent. Flowering July to August.

Distribution: NE and N China: Korea, Japan and Siberia

Habitat: Shady slopes and forest margins

Use: Forage; ornamental: green manure; soil conservation; medicine







# 顿河红豆草 Onobrychis tanaitica Spreng.

豆科

Leguminosae

【特征】多年生草本,高40~60cm;茎直立或斜升,被柔毛;单数羽状复叶,小叶狭 椭圆形或矩圆状条形,下面被短柔毛;总状花序腋生,花紧密;蝶形花冠玫 瑰红色;葵果被柔毛,脉纹上疏生乳突状短刺。花期6~8月。

【分布】新疆; 中亚、西伯利亚、欧洲东南部。

【生境】山地草甸、林间空地或林缘。

【用途】饲用;绿肥;蜜源。

#### Don River sainfoin

Pea family

Perennial herb  $40\sim60$  cm tall; stems erect or ascending, pubescent; leaves odd-pinnate, leaflets narrowly elliptic or oblong-linear, pubescent beneath; flowers dense in axillary racemes; papilionaceous corolla rosy-red; pods pubescent, loosely papillose-spinose at veins. Flowering June to August.

**Distribution:** Xinjiang; Central Asia, Siberia and SE Europe **Habitat:** Montane-meadows, forest openings and margins

Use: Forage; green manure; honey source

# 刺叶柄棘豆(猫头刺)

# Oxytropis aciphylla Ledeb.

豆科

#### Leguminosae

【特征】垫状半灌木,高8~20cm;茎多分枝,呈半球状;偶数羽状复叶,叶轴硬刺状,小叶4~6,条形,密被柔毛;花1~2枚腋生;蝶形花冠紫红色至蓝紫色,稀白色;荚果矩圆状,硬革质,密被柔毛。花期4~6月。

【分布】内蒙古、宁夏, 西北; 蒙古、西伯利亚。

【生境】荒漠和荒漠草原带的砾石质地或覆沙地。

【用途】饲用;固定沙丘。

#### Spearleaf locoweed

Pca family

Cushion-like subshrub  $8\sim20\mathrm{cm}$  tall; stems much branched, forming a hemispheric stand; leaves even-pinnate, rachis hard spine-like, leaflets  $4\sim6$ , linear, densely pubescent:  $1\sim2$  flowers axillary; papilionaceous corolla purple-red to blue-purple, rarely white; pods oblong, hard-coriaceous, densely pubescent. Flowering April to June.

**Distribution:** Inner Mongolia, Ningxia and NW China; Mongolia and Siberia

Habitat: Gravelly ground and sands in desert and desert-

steppe zones

Use: Forage; fixing sand dunes



拍摄人: 赵 凡 Photo by Zhao Fan



# 小花棘豆

# Oxytropis glabra (Lam.) DC.

豆科

Leguminosae

【特征】多年生草本,高10~30cm; 茎有分枝,直立或铺散;单数羽状复叶,小叶披针形至椭圆形,下而被柔毛;总状花序腋生,花10~15枚;花小,蝶形花冠紫红色至蓝紫色;荚果狭椭圆状,密被短柔毛。花期6~7月。

【分布】作北和西北;蒙古、中亚、西伯利亚。

【生境】荒漠草原至荒漠区的低湿地或湖盆边缘。

【 注 】有毒植物。

Small-flowered locoweed (Horse-poisoning weed)

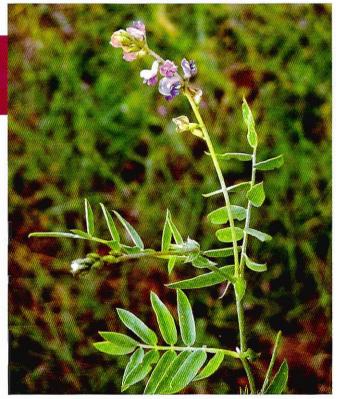
Pea family

Perennial herb  $10\sim30$  cm tall; stems branched, erect or diffuse; leaves odd-pinnate, leaflets lanceolate to elliptic, pubescent beneath; axillary racemes with  $10\sim15$  small flowers; papilionaceous corolla purple-red to blue-purple; pods narrowly ellipsoid, densely pubescent. Flowering June to July.

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

Habitat: Moist lowlands and edges of lake basins in desert-steppe to desert areas

Note: Poisonous plant







# 薄叶棘豆

# Oxytropis leptophylla (Pall.) DC. var. leptophylla

豆科

Leguminosae

【特征】多年生草本,高5~10cm;无地上茎;单数羽状复叶,小叶7~13,条形,下面被柔毛;总状花序短,花2~5枚;蝶形花冠紫红色或蓝紫色;旗瓣近圆形;荚果卵球状,膜质,膨胀,密生柔毛。花期5~6月。

【分布】东北、华北;蒙古、西伯利亚。

【生境】森林草原和草原带砾质或沙质生境。

【用途】饲用。

#### Thinleaf locoweed

Pea family

Perennial herb  $5\sim10$  cm tall; acaulescent; leaves odd-pinnate, leaflets  $7\sim13$ , linear, pubescent beneath; short racemes with  $2\sim5$  flowers; papilionaceous corolla purple-red or blue-purple; banner suborbicular; pods ovoid, membranous, inflated, densely pubescent. Flowering May to June. **Distribution:** NE and N China; Mongolia and Siberia

Habitat: Gravelly and sandy sites in forest-steppe

to steppe zones Use: Forage





# Oxytropis leptophylla var. turbinata H. C. Fu

豆科

Leguminosae

【特征】与原变种的区别为: 茎短缩,分枝簇生呈陀螺状;小叶条状矩圆形;旗瓣 此形。

【分布】内蒙古。

【生境】沙质或砾石质山坡或坡顶。

【用途】饲用。

#### Conelcaf locowced

Pea family

**Difference to** Oxytropis leptophylla var. leptophylla: Plant with shorten stems, branches tufted to turbinate; leaflets linear-oblong; banner spatulate.

Distribution: Inner Mongolia

Habitat: Sandy and gravel-rocky slopes or hilltops

# 东北棘豆

# Oxytropis mandshurica Bunge

豆科

Leguminosae

【特征】多年生草本,高20~30cm;茎无或短缩;单数羽状复叶,小叶21~33,卵状披针形至矩圆状披针形;总状花序,花多数;蝶形花冠紫红色或蓝紫色;荚果矩圆状卵形,膨胀,表面被柔毛。花期6~7月。

【分布】东北、华北; 俄罗斯(远东)。

【生境】林间草甸、河谷草甸。

【用途】饲用。

#### Manchurian locoweed

Pea family

Perennial herb  $20\sim30$  cm tall; acaulescent or stems shorten; leaves odd-pinnate, leaflets  $21\sim33$ , ovate-lanceolate to oblong-lanceolate; racemes with many flowers; papilionaceous corolla purple-red or blue-purple; pods oblong-ovoid, inflated, pubescent. Flowering June to July.

**Distribution:** NE and N China; Russia (Far East) **Habitat:** Meadows in forest openings and river valleys





# 多叶棘豆

# Oxytropis myriophylla (Pall.) DC.

豆科

#### Leguminosae

【特征】多年生草本,高20~30cm;茎极短缩;轮生羽状复叶,小叶25~32轮,每轮4~8小叶,或有时2枚对生,两面密生柔毛;总状花序,花10余枚;蝶形花冠紫红色;荚果披针状矩圆形,膨胀,密生长柔毛。花期6~7月。

【分布】东北、华北;蒙古、西伯利亚。

【生境】森林草原至草原带的砾质和沙质坡地、丘顶。

【用途】饲用。

#### Leafy locoweed

Pea family

Perennial herb  $20\sim30$  cm tall; stems much shorten: leaves whorled-pinnate, leaflets in  $25\sim32$  whorls, each whorl with  $4\sim8$  leaflets, or sometimes opposite, densely pubescent both sides; racemes with 10 to more flowers; papilionaceous corolla purple-red; pods lanceolate-oblong, inflated, densely villous. Flowering June to July.

Distribution: NE and N China; Mongolia and Siberia

Habitat: Gravelly and sandy slopes and hilltops in forest-steppe to steppe zones





# 砂珍棘豆

# Oxytropis racemosa Turcz.

豆科

Leguminosae

【特征】多年生草本,高5~15cm; 茎极短缩; 轮生羽状复叶,小川6~12轮,每轮4~6小叶,或有时2枚对生,两面密生长柔毛;总状花序近头状; 蝶形花冠粉红色至紫红色,或蓝紫色; 荚果卵球状,膨胀,密生短柔毛。花期5~7月。

【分布】东北、华北;蒙古、朝鲜。

【生境】沙地和沙质草原。

【用途】药用。

#### Clustered locoweed

Pea family

Perennial herb  $5\sim15$  cm tall; stems much shorten; leaves whorled-pinnate, leaflets in  $6\sim12$  whorls, each whorl with leaflets  $4\sim6$ , or sometimes opposite, densely villous both sides; racemes nearly capitate; papilionaceous corolla pink to purple-red, or blue-purple; pods ovoid, inflated, densely pubescent. Flowering May to July.

Distribution: NE and N China; Mongolia and Korea

Habitat: Sands and sandy steppe

Use: Medicine



# 野火球 Trifolium lupinaster L. <sup>豆科</sup>

Leguminosae

【特征】多年生草本,高30~60cm;茎直立或斜升;掌状复叶,小叶5,稀3或7,边缘具细锯齿,侧脉密而隆起;花多数,密集呈头状;蝶形花冠紫红色。花期7~8月。

【分布】东北、华北,新疆;蒙古、俄罗斯、朝鲜、日本。

【生境】草甸、林缘。

【用途】饲用;绿肥;蜜源;药用。

#### Lupine clover

Pea family

Perennial herb 30~60 cm tall; stems erect or ascending; leaves palmate, leaflets 5, rarely 3 or 7, with serrulate edges, lateral-veins dense and prominent; numerous flowers glomerate in a head; papilionaceous corolla purple-red. Flowering July to August.

Distribution: NE and N China, Xinjiang; Mongolia, Russia, Korea and Japan

Habitat: Meadows and forest edges

Use: Forage; green manure; honey source; medicine

# Trifolium pratense L.

豆科

Leguminosae

【特征】多年生草本,高20~50cm; 茎直立或平卧上升,分枝;掌状三出复叶,小叶叶面常有"V"字形白斑,两面被柔毛,边缘具齿或全缘;花多数,密集成头状;蝶形花冠紫红色至粉红色。花期7~8月。

【分布】原产欧洲; 我国引入, 内蒙古、新疆等地有逸生种群分布。

【生境】林间或林缘草甸。

【用途】饲用、绿肥、蜜源。世界上广泛种植。

#### Red clover

Pea family

Perennial herb  $20 \sim 50$  cm tall; stems erect or decumbent, branched; leaves palmate-ternate, leaflets usually with white V-like macula above, pubescent both sides, serrate or entire; numerous flowers glomerate in a head; papilionaceous corolla purple-red to pink. Flowering July to August.

**Distribution:** Native to Europe; introduced to China, escaping populations founded in Inner Mongolia and Xinjiang

Habitat: Meadows in forest openings and edges

Use: Forage; green manure; honey source. Widely cultivated in the world



# 山野豌豆

### Vicia amoena Fisch.

豆科

Leguminosae

【特征】多年生草本,高30~100cm;茎多分枝,斜升或攀援;偶数羽状复叶,叶轴末端具卷须;小叶椭圆形至卵状披针形,下面被白粉;总状花序腋生,花10~30枚;蝶形花冠紫红色、蓝紫色或蓝色。花期4~6月。

【分布】东北、华北、华中,安徽、江苏;蒙古、俄罗斯、朝鲜、日本。

【生境】灌丛、草甸或疏林。

【用途】饲用;绿肥;蜜源;药用。

#### Wild vetch

Pea family

Perennial herb  $30\sim100$  cm tall; stems much branched, ascending or climbing; leaves even-pinnate, rachis terminating in a tendril; leaflets elliptic to ovate-lanceolate, white farinose beneath; axillary racemes with  $10\sim30$  flowers; papilionaceous corolla purple-red or blue-purple to blue. Flowering April to June.

Distribution: NE, N and C China, Anhui and Jiangsu; Mongolia, Russia, Korea and Japan

**Habitat:** Scrubland, meadows and open woodland **Use:** Forage; green manure; honey source; medicine







# 广布野豌豆

#### Vicia cracca L. var. cracca

豆科

Leguminosae

【特征】多年生草本,高40~150cm; 茎攀援或蔓生,被柔毛; 偶数羽状复叶,叶轴末端具卷须; 小叶条形至披针状条形; 总状花序腋生, 花7~20枚; 蝶形花冠紫红色至蓝紫色。花期5~8月。

【分布】全国各省区; 欧亚、北美。

【生境】草甸、林缘、林间空地、灌丛。

【用途】饲用;绿肥;蜜源。

#### Bird vetch

Pea family

Perennial herb  $40 \sim 150$  cm tall; stems climbing or trailing, pubescent; leaves even-pinnate, rachis terminating in a tendril; leaflets linear to lanceolate-linear; axillary racemes with  $7 \sim 20$  flowers; papilionaceous corolla purple-red to blue-purple. Flowering May to August.

Distribution: Throughout whole China; Eurasia and North America

Habitat: Meadows, forest edges and openings, and thickets

Use: Forage: green manure; honey source



# 灰野豌豆

Vicia cracca var. canescens Maxim. ex Franch.

豆科

Leguminosae

【特征】与原变种的区别为:全株密被长柔毛,呈灰绿色。

【分布】东北,内蒙古、陕西。

Greyhair bird vetch

Pea family

Difference to Vicia cracca var. cracca: Whole plant densely villous, grey-green

Distribution: NE China, Inner Mongolia and Shaanxi

# 大叶野豌豆

# Vicia pseudorobus Fisch, et C. A. Mey.

豆科

#### Leguminosae

【特征】多年生草本,高50~150cm;茎攀援或蔓生;偶数羽状复叶,叶轴末端具卷须;小叶卵形至矩圆状披针形;总状花序腋生,花20~25枚;蝶形花冠紫红色至蓝紫色。花期6~9月。

【分布】东北至西北及西南;蒙古、俄罗斯、朝鲜、日本。

【生境】海拔800~2 000m的灌丛、草甸或疏林。

【用途】饲用;绿肥;蜜源;药用。

#### Largeleaf vetch

Pea family

Perennial herb  $50\sim150$  cm tall; stems climbing or trailing; leaves even-pinnate, rachis terminating in a tendril; leaflets ovate to oblong-lanceolate; axillary racemes with  $20\sim25$  flowers; papilionaceous corolla purple-red or blue-purple. Flowering June to September.

Distribution: NE to NW, and SW China; Mongolia, Russia, Korea and Japan

Habitat: Scrubland, meadows and open woodland

at 800~2 000 m







# 歪头菜

# Vicia unijuga A. Br.

豆科

Leguminosae

【特征】多年生草本,高15~150cm;茎直立或斜升;叶轴末端细刺状;小叶1对,椭圆形至近菱形,叶脉明显;总状花序腋生或顶生,花15~25枚;蝶形花冠紫红色至蓝紫色。花期6~7月。

【分布】东北、华北、华东、西南;蒙古、俄罗斯、朝鲜、日本。

【生境】山地灌丛、林间、林缘、草甸。

【用途】饲用; 药用。

#### Two-leaf vetch

Pea family

Perennial herb  $15\sim150$  cm tall; stems erect or ascending; rachis terminating in a spine; leaflets in 1 pairs, elliptic to subrhombic with obvious veins; axillary or terminal racenes with  $15\sim25$  flowers; papilionaceous corolla purple-red to blue-purple. Flowering June to July.

Distribution: NE, N, E and SW China; Mongolia, Russia, Korea and Japan

Habitat: Montane-scrubs, forest openings and edges, and meadows

Use: Forage; medicine

# 千屈菜

# Lythrum salicaria L.

千屈菜科

Lythraceae

【特征】多年生草本,高40~100cm; 茎直立,分枝;单叶对生或轮生,下面及边缘被细毛;总状花序顶生,花数枚簇生;花癖片6,紫红色。花期8月。

【分布】华北,四川;蒙古、朝鲜、日本、俄罗斯、阿富汗、伊朗、欧洲、北非。

【生境】低湿草甸。

【用途】观赏; 药用。

#### Purple loosestrife

Loosestrife family

Perennial herb  $40 \sim 100$  cm tall; stems erect, branched; simple leaves opposite or whorled, thinpubescent beneath and at margins; several flowers tufted in a terminal raceme; petals 6, purplered. Flowering August.

Distribution: N China and Sichuan; Mongolia, Korea, Japan, Russia, Afghanistan, Iran.

Europe and N Africa

Habitat: Meadows in moist lowland Use: Omamental: medicine





# 柳兰

# Epilobium angustifolium L.

柳叶菜科

Onagraceae

【特征】多年生草本,高40~100cm; 茎直立;单叶互生,全缘或具疏腺齿;总状 花序顶生;花萼裂片及花瓣片均为4,紫红色;蒴果圆柱状,密被毛。花期 7~8月。

【分布】东北至西北及西南;蒙古、朝鲜、日本、俄罗斯、欧洲、北美。

【生境】林缘、森林采伐迹地。

【用途】观赏; 药用。

#### Fireweed

Evening primrose family

Perennial herb  $40\sim100$  cm tall; stems erect; simple leaves alternate, entire or loosely gland-serrate; racemes terminal; sepals and petals 4, purple-red; capsules terete, hairy. Flowering July to August.

Distribution: NE to NW, and SW China: Mongolia. Korea, Japan, Russia. Europe and

North America

Habitat: Forest edges and clearings

Use: Ornamental; medicine







拍摄人: 赵 凡 Photo by Zhao Fan

# 百里香

# Thymus mongolicus Ronn.

唇形科

Labiatae

【特征】小半灌木,高2~10cm;有香味;茎多数,匍匐或斜升,被柔毛;叶椭圆形或卵形,全缘.两面有腺点,边缘近基部有睫毛;轮伞花序紧密排列成头状;花萼上唇齿三角形;花冠二唇形,紫红色至淡紫色,或粉色,偶有白色。花期6~8月。

【分布】华北,甘肃、青海;蒙古、西伯利亚。

【生境】海拔1 100~3 600m的砾石质山坡、沟谷、沙质草原。

【用途】饲用; 药用; 提炼芳香油。

### Mongolian thyme

Mint family

Shrublet  $2\sim10$  cm tall; plant fragrant; stems numerous, creeping or ascending, pubescent; leaves elliptic to ovate, entire, glandular both sides, ciliated near base of edges; verticillasters dense in a head; upper calyx lip with deltoid teeth; corolla bilabiate, purple-red to pale purple or pink, rarely white. Flowering June to August.

Distribution: N China, Gansu and Qinghai; Mongolia and Siberia Habitat: Gravelly slopes, ravines and sandy steppe at 1 100~3 600 m

Use: Forage; medicine; extracting essential oil



指摄人: 赵 凡 Photo by Zhao Fan

# 亚洲百里香

Thymus quinquecostatus Celak. var. asiaticus (Kitag.) C. Y. Wu et Y. C. Huang

唇形科

Labiatae

【特征】小半灌木,高3~15cm,有香味;茎多数,匍匐或斜升,被柔毛;叶条状披针形或披针形,全缘,边缘近基部有睫毛;轮伞花序紧密排列成头状;花萼上唇齿披针形;花冠二唇形,紫红色或淡紫色。花期7~8月。

【分布】东北、华北,甘肃、新疆;中亚、西伯利亚。

【生境】沙壤质平原、坡地、沟壑。

【用途】饲用; 药用; 提炼芳香油。

#### Asian thyme

Mint family

Shrublet  $3 \sim 15$  cm tall; plant fragrant; stems numerous, creeping or ascending, pubescent; leaves linear-lanceolate to lanceolate, entire, ciliated near base of edges; verticillasters dense in a head; upper calyx lip with lanceolate teeth; corolla bilabiate, purple-red to pale purple. Flowering July to August.

Distribution: NE and N China, Gansu and Xinjiang: Central Asia and Siberia

**Habitat:** Sandy-loamy flats, slopes and ravines **Use:** Forage; medicine; extracting essential oil

# 疗齿草

# Odontites serotina (Lam.) Dum.

玄参科

Scrophulariaceae

【特征】一年生草本,高10~40cm,全株被自硬毛;茎直立,中上部分枝;叶边缘 疏生锯齿;总状花序顶生;花萼被硬毛;花冠二唇形,紫红色,外面被柔 毛;上唇近盔状,先端微凹或2浅裂,下唇开展,3裂。花期7~8月。

【分布】东北至西北;蒙古、西伯利亚至欧洲。

【生境】水边、低湿草甸。

【用途】药用。

#### Lateripening bartsia

Figwort family

Annual herb  $10\sim40$  cm tall; whole plant white hispid; stems erect, branched from the upper half; leaves loosely serrate; racemes terminal; calyx hispid; purple-red corolla bilabiate, pubescent outer side; upper lip subgaleate, retuse or 2-lobed at apex, lower lip spreading, 3-lobed. Flowering July to August.

Distribution: NE to NW China; Mongolia, Siberia to Europe

Habitat: Washes and moist lowland meadows

Use: Medicine





# 穗花马先蒿

# Pedicularis spicata Pall.

玄参科

Scrophulariaceae

【特征】一年生草本,高10~30cm;茎直立,单生或多条,有时上部分枝,被柔毛;茎生叶4枚轮生,被毛,叶片边缘羽状浅裂至深裂;穗状花序顶生;花冠二唇形,紫红色;上唇盔状,先端具喙,额高凸,下唇长于上唇约2倍,3浅裂。花期7~8月。

【分布】东北、华北,甘肃、四川、湖北;蒙古、西伯利亚、朝鲜、日本。

【生境】草甸、灌丛、林缘。

#### Spiked lousewort

Figwort family

Annual herb 10~30 cm tall; stems erect, single or several, sometimes branched above, pubescent; cauline leaves whorled with 4 per node, pubescent, blades pinnately lobed to parted; spikes terminal; corolla bilabiate, purple-red; upper lip galeate, with beaked apex and protruding top; lower lip twice longer than the upper, 3-lobed. Flowering July to August.

Distribution: NE and N China, Gansu, Sichuan and Hubei; Mongolia, Siberia, Korea and Japan

Habitat: Meadows, scrubland and forests edges









# 角蒿

# Incarvillea sinensis Lam.

紫葳科

Bignoniaceae

【特征】一年生草本,高30~80cm; 茎直立; 叶二至三回羽状深裂或全裂; 总状花序 顶生; 花冠玫瑰红色或紫红色,里面有白色或黄色斑点,漏斗形,近于二唇状,先端5裂,裂片不等大。花期6~8月。

【分布】东北至西北,四川;蒙古、俄罗斯(西伯利亚、远东)。

【生境】河滩、田野、撂荒地、路边。

【用途】饲用;药用。

#### Pink fairy

Bignonia family

Annual herb 30~80 cm tall; stems erect; leaves twice to thrice pinnately parted to divided; racemes terminal; corolla rosy-red or purple-red, with white or yellow spots inside, funnelform, nearly bilabiate, unequally 5-lobed. Flowering June to August.

Distribution: NE to NW China, and Sichuan; Mongolia and Russia (Siberia and Far East)

Habitat: Flood lands, wild fields, abandoned lands and roadsides

Use: Forage; medicine





# 顶羽菊

# Acroptilon repens (L.) DC.

菊科

Compositae

【特征】多年生草本,高20~70cm;茎直立,有分枝,密被蛛丝状柔毛;叶全缘,或具细齿至羽状半裂,两而被短硬毛或蛛丝状柔毛及腺点;头状花序单生枝端;总苞片外层上半部膜质,具柔毛;管状花冠紫红色或红紫色。花期7~9月。

【分布】华北、西北;蒙古、西伯利亚、中亚、伊朗。

【生境】干燥山坡、盐化草甸、田野、沟边。

【用途】饲用。

#### Hardheads

Aster family

Percnnial herb 20~70 cm tall; stems erect, branched, densely arachnoid-pubescent; leaves entire or fine-toothed to pinnatifid, hispidulous or arachnoid-pubescent, and glandular both surfaces: solitary heads terminal; outer involucial bracts membranous in half above, pubescent; tubular corolla purple-red or red-purple. Flowering July to September.

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

Habitat: Dry slopes, saline meadows, wild fields and ditches

### 飞廉

## Carduus crispus L.

菊科

#### Compositae

【特征】二年生草本,高70~90cm;茎直立,具纵向的翅,翅具齿刺;叶沿茎下延,下部叶羽状半裂或深裂,裂片边缘具缺刻状或刺状齿,上部叶渐小;头状花序2~3个聚生于枝端;总苞片具刺尖,中层者反曲;管状花冠紫红色,稀白色。花期6~7月。

【分布】全国各地; 日本、伊朗、欧洲、北美。

【生境】田野、田间、路旁。

【用途】药用。

#### Curly plumeless thistle

Aster family

Biennial herb  $70 \sim 90$  cm tall; stems erect, longitudinally winged, with tooth-spines; leaves decurrent along stems, lower leaves pinnately cleft to parted, with notched to spiny-toothed edges, upper leaves smaller; heads  $2 \sim 3$  clustered, terminal; involucial bracts spiny-pointed, the middle ones reflexed; tubular corolla purple-red, rarely white. Flowering June to July.

Distribution: Throughout whole China; Japan, Iran, Europe and North America

Habitat: Wild fields, farmlands and roadsides

Use: Medicine

拍摄人: 赵 凡 Photo by Zhao I an





## 糙叶矢车菊

### Centaurea adpressa Ledeb.

菊科

Compositae

【特征】多年生草本,高50~100cm;茎直立,上部分枝;叶羽状分裂,裂片条形, 全缘,两面被毛和腺点;头状花序少数或多数;总苞片边缘有缘毛状齿和针 刺,顶端有扩大为紫褐色附属物;管状花冠紫红色或淡紫色。花期6~8月。

【分布】新疆; 俄罗斯、中亚、欧洲。

【生境】戈壁、沙地、山坡、沟谷、河滩、田间、路旁。

【用涂】饲用。

#### Rugged knapweed

Aster family

Perennial herb  $50\sim100$  cm tall; stems erect, branched above; leaves pinnatifid into linear and entire segments, hairy and glandular both sides; heads less or more; involucral bracts with fringed teeth and accrose-spines at margins, and with purple-brown expanded appendage at apex; tubular corolla purple-red to pale purple. Flowering June to August.

Distribution: Xinjiang; Russia, Central Asia and Europe

Habitat: Gobi, sands, slopes, ravines, flood lands, farmlands and roadsides







# 莲座蓟

# Cirsium esculentum (Sievers) C. A. Mey.

菊科

Compositae

【特征】多年生草本;近无茎;叶莲座状,羽状深裂,边缘有锯齿或针刺,两面被长柔毛;头状花序数个聚集于叶丛中;总苞片6层;管状花冠紫红色或红紫色。花期7~8月。

【分布】东北,内蒙古、新疆;蒙古、中亚、西伯利亚。

【生境】低湿草甸。

【用途】药用。

#### Rosette thistle

Aster family

Perennial herb; subacaulescent; leaves rosulate, pinnatipartite, with toothed and accrose-spinose edges, villous both sides; several heads crowded in a cluster of leaves; involucral bracts in 6 series; tubular corolla purple-red or red-purple. Flowering July to August.

Distribution: NE China, Inner Mongolia and Xinjiang; Mongolia, Central Asia and Siberia

Habitat: Moist lowland meadows

Use: Medicine



蓟

拍摄人: 赵 凡 Photo by Zhao Fan

# Cirsium japonicum Fisch. ex DC.

#### 菊科

#### Compositae

【特征】多年生草本,高30~80cm;茎直立,花序下密被毛而呈灰白色;基生叶羽状深裂;茎生叶浅裂或深裂,裂片边缘具疏齿或近全缘,齿顶具长针刺,齿缘具小而密的针刺;叶向上渐小,基部半抱茎;头状花序少数或单生;管状花冠紫红色。花期7~8月。

【分布】内蒙古、河北、陕西,长江流域及以南大部分省区;朝鲜、日本。

【生境】林地、灌丛、草甸、田间、路边。

【用途】饲用;药用。

### Japanese thistle

### Aster family

Perennial herb 30~80 cm tall; stems erect, densely hairy and grey-white below inflorescence; basal leaves pinnatipartite, cauline leaves lobed to parted, lobes loosely toothed or nearly entire, tooth tips long accrose-spiny, tooth margins densely spinulose; leaves smaller upwards, base subclasping; heads few or solitary; tubular corolla purple-red. Flowering July to August.

Distribution: Inner Mongolia, Hebei, Shaanxi, most regions along and south to Changjiang River; Korea and Japan

Habitat: Woodland, scrubland, meadows, farmlands and roadsides

Use: Forage; medicine

### 藏蓟

## Cirsium lanatum (Roxb. ex Willd.) Spreng.

#### 菊科

### Compositae

【特征】一年生草本,高30~80cm;茎直立,密被蛛丝状柔毛;叶质厚,两面密被绒毛而呈灰白色,或上而绿色,无毛,羽状浅裂或半裂,或分裂不明显,边缘具刺齿或针刺;头状花序多数或少数,稀单一;外层总苞片顶端具针刺;管状花冠紫红色。花期6~9月。

【分布】新疆、甘肃、青海、西藏; 印度、巴基斯坦。

【生境】荒漠地区的山坡、河岸、路旁、村边,海拔500~4300m。

#### Woolly thistle

Aster family

Annual herb 30 ~ 80 cm tall; stems erect, densely arachnoid-pubescent; leaves thick, densely tomentose and grey-white both sides, or glabrous and green above, pinnately lobed to cleft, or indistinctly lobed, with spine-toothed or acerose-spiny edges; heads more or less, rarely solitary; outer involucral bracts with acerose-spine at apex; tubular corolla purple-red.

Flowering June to September.

**Distribution:** Xinjiang, Gansu, Qinghai and Tibet; India and Pakistan

Habitat: Slopes, riverbanks, roadsides and village sides in desert areas at 500 ~ 4 300 m



# 绒背蓟

#### Cirsium vlassovianum Fisch.

#### 菊科

#### Compositae

【特征】多年生草本,高30~100cm;茎直立,上部有分枝,被毛;叶不分裂,边缘 密生细刺齿;头状花序单生于枝端;总苞片疏被蛛丝状毛,有黑色粘腺;管 状花冠紫红色。花期7~8月。

【分布】东北、华北;蒙古、朝鲜、俄罗斯(西伯利亚、远东)。

【生境】林缘、草地、路边。

#### Velvet back thistle

#### Aster family

Perennial herb 30~100 cm tall; stems erect, branched above, hairy; leaves unlobed, with densely spine-toothed edges; solitary heads terminal; involucral bracts loosely arachnoid, with black clammy-pubescence; tubular corolla purple-red. Flowering July to August.

Distribution: NE and N China; Mongolia, Korea and Russia (Siberia and Far East)

Habitat: Forest edges, grassland and roadsides









# 蒙新苓菊

# Jurinea mongolica Maxim.

菊科

Compositae

【特征】多年生草本,高6~20cm;茎丛生,有分枝,被蛛丝状缩毛;基生叶与茎下部叶羽状深裂或浅裂,边缘皱曲或反卷,两面被蛛丝状绵毛,下面密生腺点,上部叶渐变小;头状花序单生于枝端;总苞片被蛛丝状绵毛和腺体,顶端具尖刺;管状花紫红色,有腺体。花期6~7月。

【分布】内蒙古、陕西、宁夏、新疆;蒙古。

【生境】石砾质、砂砾质荒漠和半荒漠。

【用途】饲用。

# Mongolian jurinea

Aster family

Perennial herb 6~20 cm tall; stems tufted, branched, arachnoid-lanate; basal and lower cauline leaves pinnately parted to lobed, with crisped and revolute edges, densely arachnoid-lanate both sides, densely glandular beneath, upper leaves smaller; solitary head terminal; involuctal bracts arachnoid-lanate and glandular, with spiny tips; tubular corolla purple-red, with glands. Flowering June to July.

Distribution: Inner Mongolia, Shaanxi, Ningxia and Xinjiang; Mongolia

Habitat: Stony-gravelly and sandy-gravelly desert to semi-desert



Compositae

【特征】多年生草本,高50~100cm;茎直立,中空,多分枝,老枝有疣状凸起,小 枝密被糙硬毛; 叶近肉质, 全缘或具短齿, 基部有小耳, 抱茎; 头状花序单 生成3~7伞房状排列;管状花紫红色或黄色。花期7~9月。

【分布】新疆、甘肃、宁夏、内蒙古;蒙古、中亚、伊朗、土耳其。

【生境】荒漠地区的盐生草甸或农田边。

【用途】饲川。

#### Caspian karelinia

Aster family

Perennial herb 50~100 cm tall; stems erect, hollow, much branched, old branches tuberculate, young branches densely hispid; leaves subfleshy, entire or short-toothed, base auriculate, clasping; heads solitary or 3~7 in corymbs; tubular florets purple-red or yellow. Flowering July to September.

Distribution: Xinjiang, Gansu, Ningxia and Inner Mongolia, Mongolia, Central Asia, Iran and Turkey

Habitat: Saline meadows and field sides in desert areas

Use: Forage

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### 鳍蓟

## Olgaea leucophylla Iljin

菊科

Compositae

【特征】多年生草本,高15~70cm;茎粗壮,具纵沟棱,密被白绵毛;茎生叶基部下延成茎翅,边缘有疏齿或羽状浅裂,具针刺,下面密被灰白色毡毛;头状花序单生枝端,或具侧生头状花序1~2;总苞片先端具长刺尖,外层者外弯;管状花冠紫红色。花期6~8月。

【分布】东北,内蒙古、山西、陕西、宁夏、甘肃;蒙古。

【生境】砾质荒漠草原和草原。

#### Mountain white thistle

Aster family

Perennial herb  $15\sim70$  cm tall; stems robust, canaliculated, densely white-lanate; cauline leaves basally decurrent into stem wings, sparsely toothed or pinnatilobate, with accrose-spines, densely grey-white manicate beneath; solitary heads terminal, or accompanied with  $1\sim2$  lateral heads; involucial bracts with long spine-pointed tips, the outer excurved; tubular corolla purple-red. Flowering June to August.

Distribution: NE China, and Inner Mongolia, Shanxi, Shaanxi, Ningxia and Gansu: Mongolia

Habitat: Gravelly desert-steppe to steppe

拍摄人: 赵 凡 Photo by Zhao Fan



## 蝟菊

# Olgaea lomonosowii (Trautv.) Iljin

菊科

Compositae

【特征】多年生草本,高15~30cm;茎直立,具窄翅,边缘具针刺,密被绵毛;叶近革质,基生叶羽状浅裂或深裂,裂片边缘具小刺齿,下面密被灰白色毡毛;茎生叶向上渐小;头状花序单生枝端;总苞片先端具硬长刺尖,外层者外弯;管状花冠紫红色。花期7~8月。

【分布】华北, 吉林、甘肃; 蒙古。

【生境】草原带的砾质和沙壤质生境。

#### Porcupine thistle

Aster family

Perennial herb  $15\sim30$  cm tall; stems erect, narrowly winged with accrose-spiny edges, densely lanate; leaves subcoriaceous, basal leaves pinnately lobed to parted, with spinose teeth at edges, densely grey-white manicate beneath; cauline leaves smaller upwards; solitary heads terminal; involucral bracts with long spine-pointed tips, the outer excurved; tubular corolla purple-red; Flowering July to August.

**Distribution:** N China, Jilin and Gansu; Mongolia **Habitat:** Gravelly and sandy-loamy sites in steppe zone











# 大翅蓟

# Onopordum acanthium L.

菊科

Compositae

【特征】二年生草本,高15~30cm; 茎直立,粗壮,具翅,翅羽状半裂或具三角形刺齿,顶端具黄褐色针刺;叶大,向上渐小,叶缘具三角形齿,齿端具黄褐色针刺;头状花序1~3生于枝端;总苞球形,总苞片先端具黄褐色针刺;管状花冠淡紫红色或粉红色。花期6~9月。

【分布】新疆; 中亚、西伯利亚、伊朗、欧洲。

【生境】荒地、沟谷、田间。

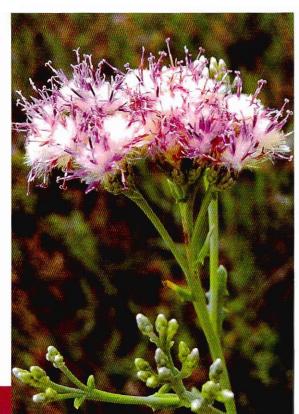
#### Scotch cottonthistle

Aster family

Biennial herb  $15\sim30$  cm tall; stems erect, robust, winged, wings pinnatifid or with deltoid spiny-teeth, lobes and teeth with yellow-brown acerose-spine at apex; leaves large, smaller upward, margins deltoid-toothed, tooth tips with yellow-brown acerose-spine;  $1\sim3$  heads terminal; involucre globose, involucral bracts with yellow-brown acerose-spine at apex; tubular corolla purplish-red or pink. Flowering June to September.

Distribution: Xinjiang; Central Asia, Siberia, Iran and Europe

Habitat: Wastelands, ravines and farming fields





## 盐地风毛菊

Saussurea salsa (Pall.) Spreng.

菊科

Compositae

【特征】多年生草本,高10~40cm; 茎单一或数个,上部分枝;叶质较厚,基部叶和茎下部叶大头羽状深裂或全裂,具长柄,基部扩大成鞘,下面有腺点,上部叶渐小,无柄,全缘或有疏齿;头状花序多数,排列成伞房状或复伞房状;总苞片粉紫色;管状花粉紫色。花期7~8月。

【分布】内蒙古、新疆;蒙古、西伯利亚、中亚。

【生境】盐渍低地。

#### Saline saw-wort

Aster family

Perennial herb 10~40 cm tall; stems single to several, branched above; leaves thick, basal and lower cauline leaves lyrately parted to divided, with long petiole and sheath-like base, glandular beneath, upper leaves smaller, sessile, entire or loosely toothed; many heads in corymbs or compound corymbs; involucral bracts pink-purple; tubular corolla pink-purple. Flowering July to August.

Distribution: Inner Mongolia and Xinjiang; Mongolia. Siberia and Central Asia

Habitat: Saline lowlands

## 麻花头

#### Serratula centauroides L.

菊科

Compositae

【特征】多年生草本,高30~60cm;茎直立,有纵沟棱,被皱曲柔毛;叶羽状深裂或全裂,稀浅裂;头状花序少数;总苞卵状,上部稍收缩,总苞片10~12层,被蛛丝状毛,先端具刺尖头;管状花紫红色。花期6~7月。

【分布】东北、华北;蒙古、西伯利亚。

【生境】草原或阔叶林区的沙壤质生境。

【用途】饲用。

#### Common plumeless saw-wort

Aster family

Perennial herb 30 $\sim$ 60 cm tall; stems erect, with grooves, crinkled-pubescent; leaves pinnately parted to divided, rarely lobed; heads few; involucre ovoid, slightly contracted above, involucral bracts in  $10\sim12$  series, arachnoid, with spine-pointed apex; tubular corolla purple-red. Flowering June to July.

Distribution: NE and N China; Mongolia and Siberia

Habitat: Sandy-loamy sites in steppe

to broadleaf forest areas



拍摄人: 赵 凡 Photo by Zhao Fan



## 祁州漏芦

# Stemmacantha uniflora (L.) Dittrich

菊科

Compositae

【特征】多年生草本,高20~60cm;茎单一,直立,有纵沟棱,被绵毛或短柔毛; 叶羽状深裂至全裂,裂片边缘有牙齿或再裂,两面被蛛丝状毛和短糙毛; 头状花序单生茎顶;总苞宽钟状,总苞片干膜质;管状花淡紫红色。花期 6~8月。

【分布】东北至西北;蒙古、朝鲜、日本、俄罗斯(西伯利亚、远东)。

【生境】山地草原。

【用途】药用。

#### Uniflower Swiss centaury

Aster family

Perennial herb 20~60 cm tall; stems single, erect with grooves, lanate or pubescent; leaves pinnately parted to divided, segments toothed or further lobed, arachnoid and hispidulous both sides; solitary heads terminal; involucre broadly campanulate, involucral bracts scarious; tubular corolla purplish-red. Flowering June to August.

Distribution: NE to NW China; Mongolia, Korea, Japan and Russia (Siberia and Far East)

Habitat: Montane-steppe

Use: Medicine





# 碱菀

## Tripolium vulgare Nees

菊科

Compositae

【特征】一年生草本,高10~60cm;茎直立,单一或分枝,光滑;叶互生,稍肉质,全缘或有微齿;头状花序直径2~2.5cm,复命方状排列;总苞片肉质;舌状花淡紫色或淡蓝紫色;管状花黄色。花期7~9月。

【分布】东北至西北及华东;朝鲜、日本、俄罗斯(西伯利亚、远东)、中亚、 伊朗、欧洲、北非、北美。

【生境】盐渍化低湿地。

【用途】饲用。

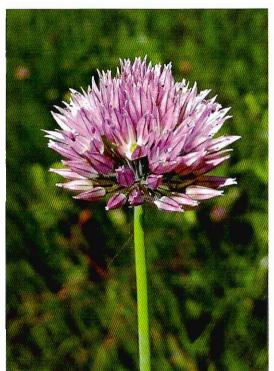
#### Alkali aster

Aster family

Annual herb  $10\sim60$  cm tall; stems erect, single or branched, smooth; leaves alternate, slightly fleshy, entire to lightly toothed; heads  $2\sim2.5$  cm across, in compound corymbs; involucral bracts fleshy; ray florets pale purple to bluish-purple; disk florets yellow. Flowering July to September.

Distribution: NE to NW, and E China; Korea, Japan, Russia (Siberia and Far East), Central Asia, Iran, Europe, N Africa and North America

Habitat: Moist saline lowlands





# 硬皮葱

### Allium ledebourianum Roem. et Schult.

百合科

Liliaceae

【特征】多年生草本;鳞茎外皮薄革质,片状破裂;叶管状,中空;花葶高 40~70cm;总苞2裂;伞形花序半球状至球状,花多而密集;花被片6,淡 紫色,具紫色中脉;花丝短于或近等长于花被片;花柱伸出花被外。花期 7~8月。

【分布】东北,内蒙古;蒙古、俄罗斯(西伯利亚、远东)。

【生境】山地草甸和河谷草甸。

【用途】饲用。

#### Meadow onion

Lily family

Perennial herb; bulb coat thin-coriaceous, lamellar-ruptile; leaves fistulose, hollow; scapes  $40\sim70$  cm tall; spathe 2-divided; umbels hemispheric to globose, with dense flowers; tepals 6, pale purple with purple midvein; filaments shorter than or subequaling tepals; style exserted. Flowering July to August.

Distribution: NE China and Inner Mongolia; Mongolia and Russia (Siberia and Far East)

Habitat: Montane-meadow and river valley meadows

## 长柱韭

### Allium longistylum Baker

百合科

Liliaceae

【特征】多年生草本;鳞茎外皮干膜质至近革质,条裂;叶半圆柱状,中空;花葶高20~45cm;总苞2裂,具喙;伞形花序半球状或近球状,花多数;花被片6,紫红色至粉红色,外轮者背部舟状隆起;花丝长于花被片;花柱伸出花被外。花期7~8月。

【分布】华北。

【生境】山地林缘,海拔1500~2500m。

【用途】饲用。

#### Longstyle onion

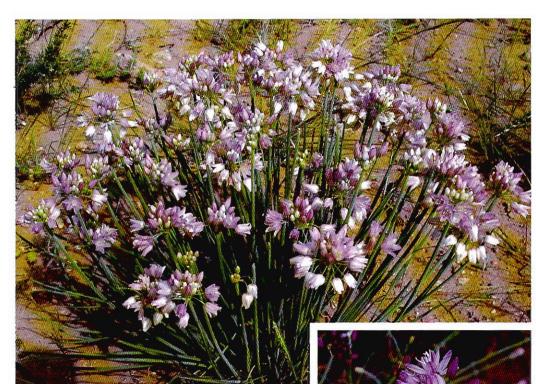
Lily family

Perennial herb; bulb coat scarious to subcoriaceous, linear-split; leaves semi-terete, hollow; scapes 20~45 cm tall; spathe 2-divided, beaked; umbels hemispheric to globose, with many flowers; tepals 6, purple-red to pink, outer tepals navicular, with swelling back; filaments longer than tepals; style exserted. Flowering July to August.

Distribution: N China

Habitat: Mountain forest edges at 1 500~2 500 m





拍扱人; 赵 凡 Photo courtesy of Zhao Fan

# 蒙古韭

## Allium mongolicum Regel

百合科

Liliaceae

【特征】多年生草本;鳞茎外皮破裂成松散纤维状;叶半圆柱状至圆柱状,粗0.5~1.5mm,灰绿色;花葶高10~35cm;总苞单侧开裂;伞形花序半球状至球状,花多数,花被片6,粉红色至紫红色;花丝短于或近等长于花被片;花柱内藏。花期7~9月。

【分布】辽宁、内蒙古,西北;蒙古、西伯利亚。

【生境】半荒漠至荒漠地带的沙地或砂砾质地。

【用途】饲用;食用;药用。

### Mongolian onion

Lily family

Perennial herb; bulb coat loosely fibrous; leaves semi-terete to terete,  $0.5 \sim 1.5$  mm wide, grey-green; scapes  $10 \sim 35$  cm tall; spathe single; umbels hemispheric to globose, with many flowers; tepals 6, pink to purple-red; filaments shorter than or subequaling tepals; style included. Flowering July to September.

Distribution: Liaoning, Inner Mongolia and NW China; Mongolia and Siberia

Habitat: Sands to sandy-gravelly sites in semi-desert to desert zones

Use: Forage; edible; medicine

## 长梗韭

## Allium neriniflorum (Herb.) Baker

百合科

Liliaceae

【特征】多年生草本;鳞茎外皮膜质;叶近圆柱状,中空;花葶高15~35cm;总苞单侧开裂;伞形花序松散;花梗长,3~9cm;花被片6,紫红色至淡紫色,中脉紫色;花丝短于花被片;花柱内藏。花期7~8月。

【分布】东北、华北;蒙古、西伯利亚。 【生境】山地草原砾石质坡地和沙质地。

【用途】饲用; 鳞茎可食用。

#### Beautiful garlic

Lily family

Perennial herb: bulb coat membranous; leaves subterete, hollow; scapes 15~35 cm tall; spathe single; umbels loose; pedicels 3~9 cm long: tepals 6, purple-red to pale purple, with purple midvein; filaments shorter than tepals; style included. Flowering July to August.

Distribution: NE and N China; Mongolia and Siberia

Habitat: Gravelly slopes and sandy ground in montane-steppe

Use: Forage: bulbs edible





### 山韭

#### Allium senescens L.

百合科

Liliaceae

【特征】多年生草本;鳞茎外皮膜质,不破裂;叶条形,肥厚,上部扁平,基部近半圆柱状;花葶高20~50cm,具2纵棱;总苞2裂;伞形花序半球状至近球状,花多数,密集,花被片6,紫红色或淡紫色,先端具微齿,外轮呈舟形;花丝长于花被片;花柱伸出花被外。花期6~8月。

【分布】东北、华北,甘肃、新疆;蒙古、西伯利亚、中亚。

【生境】砾石质和沙质草原。

【用途】饲用;食用。

#### Mountain onion

Lily family

Perennial herb; bulb coat membranous, un-split; leaves linear, thick, somewhat fleshy, flat above, nearly semi-terete at base; scapes  $20\!\sim\!50$  cm tall, 2-ribbed; spathe 2-divided; umbels hemispheric to subglobose, with numerous and dense flowers; tepals 6, purple-red to pale purple, lightly toothed at apex, outer tepals navicular; filaments longer than tepals; style exserted. Flowering June to August.

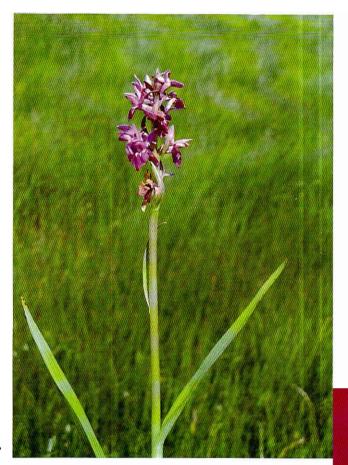
Distribution: NE and N Chma, Gansu and Xinjiang; Mongolia, Siberia and Central Asia

Habitat: Gravelly and sandy steppe

Use: Forage; edible







# 宽叶红门兰 Orchis latifolia L.

4科

Orchidaceae

【特征】多年生草本,高8~50cm; 块茎掌状分裂; 茎直立; 叶条状披针形至长椭圆形, 基部呈鞘状抱茎; 总状花序; 花两侧对称, 花被片6, 2轮, 紫红色或粉红色。 花期6~7月。

【分布】黑龙江、内蒙古、西北,四川、西藏;蒙古、俄罗斯(西伯利亚、远东)、中亚、欧洲。

【生境】低湿草甸。

【用途】观赏。

#### Early marsh orchid

Orchid family

Perennial herb  $8 \sim 50$  cm tall; tubers palmately parted; stems erect; leaves linear-lanceolate to long-elliptic, base sheath-like and clasping; inflorescence a raceme; flowers zygomorphic, tepals 6 in 2 series, purple-red to pink. Flowering June to July.

Distribution: Heilongjiang, Inner Mongolia, NW China, Sichuan and Tibet; Mongolia, Russia (Siberia and Far East), Central Asia and Europe

Habitat: Moist lowland meadows

Use: Ornamental







# 绶草

# Spiranthes sinensis (Pers.) Ames.

兰科

Orchidaceae

【特征】多年生草本,高15~40cm; 茎直立,纤细;叶条形至条状披针形;总状花序 顶生;花序轴螺旋状扭转,被腺毛;苞片卵形;花被紫红色至粉红色;唇瓣 略内卷,上部边缘皱波状。花期6~8月。

【分布】全国各地;蒙古、朝鲜、日本、俄罗斯(西伯利亚、远东)、东南亚、澳大利亚、欧洲。

【生境】林缘、灌丛、草甸。

【用途】观赏。

#### Chinese ladies'-tresses

Orchid family

Perennial herb  $15\sim40$  cm tall; stems erect, slender; leaves linear to linear-lanceolate; flowers in a terminal raceme; rachis spirally twisted, glandular-pubescent; bracts ovate; perianth purple-red to pink, labellum slightly involute, crisped at upper margins. Flowering June to August.

**Distribution:** Throughout whole China; Mongolia, Korea, Japan, Russia (Siberia and Far East), SE Asia, Australia and Europe

Habitat: Forest edges, thickets and meadows

Use: Ornamental

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拍摄人: 赵凡 Photo by Zhao Fan

# 细叶白头翁

## Pulsatilla turczaninovii Kryl. et Serg.

毛茛科

Ranunculaceae

【特征】多年生草本,高10~40cm,叶基生,二至三回羽状分裂,具长柄,被白色柔毛;花葶直立,被白色柔毛;花单生,垂头;萼片6,花瓣状,蓝紫色或红紫色,外面密被伏毛;无花瓣;雄蕊多数。花期5~6月。

【分布】东北、华北;蒙古、俄罗斯(西伯利亚、远东)。

【生境】山地滋丛或草原。

【用途】观赏; 药用。

#### Siberian pasque flower

Buttercup family

Perennial herb 10~40 cm tall; leaves basal, twice to thrice pinnatisect. long-petiolate, white-pubescent; scapes erect, white-pubescent; flowers solitary, nodding; sepals 6, petaloid, blue-purple or red-purple; densely appressed-pubescent outer side; petals absent; stamens numerous. Flowering May to June.

Distribution: NE and N China; Mongolia and Russia (Siberia and Far East)

Habitat: Montane-scrubs and steppe

Use: Ornamental; medicine







## 紫堇

## Corydalis bungeana Turcz.

罂粟科

Papaveraceae

【特征】一年生或二年生草本,高10~30cm,全株被自粉,灰绿色;茎有分枝;叶三回 羽状全裂;总状花序,花两侧对称;花瓣4,淡紫色;上瓣片背部有龙骨状突 起,基部具距;内轮两瓣片合生,先端深紫色。花期5~7月。

【分布】华北,辽宁。

【生境】疏林、沟谷、草甸、农田、渠边。

【用途】药用。

#### Bunge's fumewort

Poppy family

Annual or biennial herb  $10 \sim 30$  cm tall, whole plant white-farinose, grey-green; stems branched; leaves tripinnatisect; zygomorphic flowers in racemes; petals 4, pale purple; upper petal with keeled back and spurred base; 2 inner petals connate, with dark purple apex. Flowering May to July.

Distribution: N China and Liaoning

Habitat: Open woodland, ravines, meadows, farmlands and ditch sides

Use: Medicine

# 香芥

### Clausia trichosepala (Turcz.) Dvorak

十字花科

Brassicaceae

【特征】二年生草本,高20~50cm; 茎直立,分枝或不分枝,被硬毛;叶边缘有齿; 总状花序;萼片背面被硬毛;花瓣4,紫色或红紫色;长角果细长,四棱状圆柱形。花期6~7月。

【分布】华北, 吉林, 朝鲜。

【生境】坡地、沟谷、林缘、溪旁。

【用途】饲用。

#### Aromeress

Mustard family

Biennial herb 20~50 cm tall; stems erect, branched or not, hirsute; leaves toothed: flowers in racemes; sepals hirsute on back; petals 4, purple or red-purple; siliques slender, quadrangular-terete. Flowering June to July.

Distribution: N China and Jilin; Korea

Habitat: Slopes, ravines, forest edges and stream sides





## 斜茎黄耆

### Astragalus adsurgens Pall.

豆科

Leguminosae

【特征】多年生草本,高20~60cm;茎丛生,斜升;单数羽状复叶,小叶卵状椭圆形至矩圆形,下面被白色丁字毛;总状花序腋生,花密集;蝶形花冠蓝紫色至红紫色,稀白色;荚果矩圆状,具3棱,被丁字毛。花期7~9月。

【分布】东北至西北及西南;蒙古、西伯利亚、朝鲜、日本。

【生境】草甸草原、草甸、灌丛、林缘。

【用途】饲用;绿肥。

#### Standing milkvetch

Pea family

Perennial herb 20~60 cm tall; stems tufted, ascending; leaves odd-pinnate, leaflets ovate-elliptic to oblong, with white T-shaped hairs beneath; flowers dense in an axillary raceme; papilionaceous corolla blue-purple to red-purple, rarely white; pods oblong, 3-angular, with T-shaped hairs. Flowering July to September.

Distribution: NE to NW, and SW China; Mongolia, Siberia, Korea and Japan

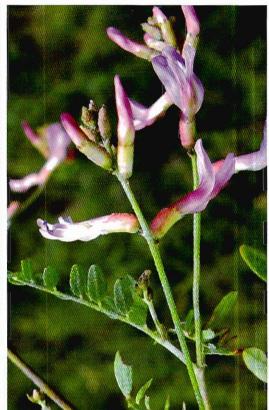
Habitat: Meadow-steppe, meadows, scrubland and forest edges

Use: Forage; green manure









# 灰叶黄耆

### Astragalus discolor Bunge ex Maxim.

豆科

Leguminosae

【特征】多年生草本,高30~50cm;全株被丁字毛,灰绿色;茎直立或斜升;单数羽状复叶,小叶条状矩圆形至矩圆形;总状花序具花8~15枚;蝶形花冠蓝紫色;荚果条状,略弯,被丁字毛。花期7~8月。

【分布】华北,甘肃;俄罗斯。

【生境】沙质、砾质荒漠草原至荒漠。

### Greyleaf milkvetch

Pea family

Perennial herb 30~50 cm tall; whole plant with T-shaped hairs, grey-green; stems erect or ascending; leaves odd-pinnate, leaflets linear-oblong to oblong; 8~15 flowers in a raceme; papilionaceous corolla blue-purple; pods linear, slightly curved, with T-shaped hairs. Flowering July to August.

Distribution: N China and Gansu; Russia

Habitat: Sandy and gravelly desert-steppe to desert



# 单叶黄耆

Astragalus efoliolatus Hand.-Mazz.

豆科

Leguminosae

【特征】多年生草本,高5~10cm;茎短缩;单叶密集,条形,两面疏被丁字毛;总 状花序短,花2~5枚;蝶形花冠淡紫色或紫红色;荚果卵状矩圆形,被白色 丁字毛。花期7~9月。

【分布】内蒙古、陕西、宁夏、[[肃;蒙古。

【生境】荒漠草原沙地和河漫滩。

【用途】饲用。

### Simpleleaf milkvetch

Pea family

Perennial herb 5~10 cm tall; stems shorten; simple leaves dense, linear, sparsely T-shaped-hairy both sides; flowers 2~5 in a short raceme; papilionaceous corolla pale purple or purple-red; pods ovate-oblong, with white T-shaped hairs. Flowering July to September.

Distribution: Inner Mongolia, Shaanxi, Ningxia and Gansu; Mongolia

Habitat: Sands and flood lands in desert-steppe

## 草木犀状黄耆

### Astragalus melilotoides Pall.

豆科

Leguminosae

【特征】多年生草本,高30~100cm;茎直立或斜升,多分枝;单数羽状复叶,小叶3~7,矩圆形至狭条形,两面疏被柔毛;总状花序长,花疏离;蝶形花冠长约5 mm; 粉紫色或白色; 荚果近珠状或椭圆状。花期7~8月。

【分布】东北至西北;蒙古、西伯利亚。

【生境】草原带沙质或壤质生境。

【用途】饲用;水土保持。

#### Sweetclover-like milkyetch

Pea family

Perennial herb  $30 \sim 100$  cm tall; stems erect or ascending, much branched; leaves oddpinnate with  $3 \sim 7$  leaflets, blades oblong to narrowly linear, sparsely pubescent both sides: flowers spaced in a long raceme; papilionaceous corolla 5 mm long, pink-purple to white;

pods subglobose or ellipsoid. Flowering July to August. Distribution: NE to NW China; Mongolia and Siberia

Habitat: Sandy to loamy sites in steppe areas





# 小果黄耆

# Astragalus tataricus Franch.

豆科

Leguminosae

【特征】多年生草本,高10~30cm; 茎多数,细弱,平卧或斜升,散生柔毛;单数羽状复叶,小叶披针形至矩圆形,下而被柔毛;总状花序短,花密集;蝶形花冠淡蓝紫色或天蓝色;荚果密被短柔毛。花期6~7月。

【分布】华北、西北。

【生境】草甸或湖滨、河边的卵石地。

#### Wrinkled milkvetch

Pea family

Perennial herb  $10\sim30$  cm tall; stems many, slender, procumbent or ascending, with scattered pubescence; leaves odd-pinnate, leaflets lanceolate to oblong, pubescent beneath; flowers dense in a short raceme; papilionaceous corolla bluish-purple or bright-blue; pods densely pubescent. Flowering June to July.

Distribution: N and NW China

Habitat: Meadows, and cobbled lakeshores and riversides





# 甘草

## Glycyrrhiza uralensis Fisch.

豆科

Leguminosae

【特征】多年生草本,高30~70cm; 主根圆柱形,内部黄色;全株密被短毛和腺体; 茎直立;单数羽状复叶;总状花序腋生,花密集;蝶形花冠淡蓝紫色或紫红 色;英果镰形或弯曲成环状,密集成球状,密被瘤状突起和刺状腺体。花期 6~7月。

【分布】东北至西北;蒙古、西伯利亚、中亚、巴基斯坦、阿富汗。

【生境】草原至荒漠草原带的碱化沙地、荒地、砾质河滩。

【用途】根药用;饲用。

#### Ural licorice

Pea family

Perennial herb 30~70 cm tall; taproots terete, yellow inside; whole plant densely pubescent and glandular; stems erect; leaves odd-pinnate; racemes axillary with dense flowers; papilionaceous corolla bluish-purple to purple-red; pods falciform or curved to annular, glomerate into a spheroid, densely verruculose and spiny-glandular. Flowering June to July. **Distribution:** NE to NW China; Mongolia, Siberia, Central Asia, Pakistan and Afghanistan **Habitat:** Alkaline sands, waste lands and gravelly flood lands in steppe to desert-steppe zones.

Use: Roots for medicine; forage

## 毛山黧豆

# Lathyrus palustris L. var. pilosus (Cham.) Ledeb.

豆科

Leguminosae

【特征】多年生草本,高15~100cm;茎攀援,具翅,有分枝;偶数羽状复叶,叶轴 末端具卷须;小叶2~5对,条形至披针形,两面被柔毛;总状花序腋生,花 2~6枚;蝶形花冠蓝紫色;荚果条状。花期6~7月。

【分布】东北,内蒙古、山西、甘肃、青海、浙江;蒙古、朝鲜、俄罗斯、日本。

【生境】草甸、林缘、沟谷。

【用途】饲用;绿肥;蜜源。

#### Hairy marsh pea

Pea family

Perennial herb  $15\sim100$  cm tall; stems climbing, winged, branched; leaves even-pinnate, rachis terminating in a tendril; leaflets in  $2\sim5$  pairs, linear to lanceolate, pubescent both sides; axillary racemes with  $2\sim6$  flowers; papilionaceous corolla blue-purple; pods linear. Flowering June to July.

Distribution: NE China, Inner Mongolia, Shanxi, Gansu, Qinghai and Zhejiang; Mongolia, Korea, Russia and Japan

Habitat: Meadows, forest edges and ravines Use: Forage; green manure; honey source





山黧豆

# Lathyrus quinquenervius (Miq.) Litv. ex Kom. et Alis.

豆科

Leguminosae

【特征】多年生草本,高20~40cm; 茎单一,直立或斜升,具翅;偶数羽状复叶,叶 轴末端具卷须;小叶1~3对,椭圆状披针形至条状披针形,5脉平行;总状花序腋生,花5~8枚;蝶形花冠蓝紫色或紫色;荚果条状。花期6~7月。

【分布】东北、华北,甘肃、青海;朝鲜、俄罗斯(远东)、日本。

【生境】疏林、林缘、河谷草甸。

【用途】饲用;绿肥;蜜源。

### Five-veined pea

Pca family

Perennial herb  $20\sim40$  cm tall; stems single, erect or ascending, winged; leaves evenpinnate, rachis terminating in a tendril; leaflets in  $1\sim3$  pairs, elliptic-lanceolate to linearlanceolate, with parallel voins 5; axillary racemes with  $5\sim8$  flowers; papilionaceous corolla blue-purple or purple; pods linear. Flowering June to July.

Distribution: NE and N China, Gansu and Qinghai; Korea, Russia (Far East) and Japan

Habitat: Open woods, forest edges, river valley meadows

Use: Forage; green manure; honey source

# 多花胡枝子

# Lespedeza floribunda Bunge

豆科

#### Leguminosae

【特征】半灌木,高30~100cm;茎多分枝,具细棱;羽状三出复叶,小叶倒卵形至倒卵状矩圆形,下面密被柔毛;总状花序腋生;蝶形花冠紫红色至蓝紫色;具闭锁花。花期6~9月。

【分布】东北至西北,华东至西南; 日本。

【生境】山地、丘陵, 林缘、灌丛。

【用途】饲用;绿肥;水土保持。

#### Showy lespedeza

Pea family

Subshrub  $30\sim100$  cm tall; stems much branched, thin-angulate: leaves pinnate-ternate, leaflets obovate to obovate-oblong, densely pubescent beneath; racemes axillary; papilionaceous corolla purple-red to blue-purple; cleistogamous flowers present. Flowering June to September.

**Distribution:** NE to NW, and E to SW China; Japan **Habitat:** Mountains and hills, forest edges and scrubland







# Oxytropis bicolor Bunge

豆科

Leguminosae

【特征】多年生草本,高5~20cm,全株被长菜毛;茎短缩;轮生羽状复叶,小叶7~17轮(对),条形至披针形;总状花序短,花多数;蝶形花冠蓝紫色至紫红色,旗瓣中部黄色;荚果近革质,卵状矩圆形,膨胀,密被柔毛。花期5~6月。

【分布】华北,甘肃、青海;蒙古。

【生境】草原和荒漠草原区的山坡、撂荒地、路旁。

【用途】饲用。

#### Bicolor locoweed

Pea family

Perennial herb  $5\sim20$  cm tall; whole plant villous; stems shorten; leaves whorled-pinnate, leaflets in  $7\sim17$  whorls (pairs), linear to lanceolate; short racemes with many flowers; papilionaccous corolla blue-purple to purple-red, banner with yellow middle; pods subcoriaccous, ovoid-oblong, inflated, densely pubescent. Flowering May to June.

Distribution: N China, Gansu and Qinghai; Mongolia

**Habitat:** Slopes, abandoned lands and roadsides in steppe to desert-steppe areas



拍摄人: 赵凡 Photo by Zhao Fan

# 牻牛儿苗

# Erodium stephanianum Willd.

牻牛儿苗科

Geraniaceae

【特征】一年生或二年生草本,高10~60cm;茎平卧或斜升,有分枝;叶二回羽状深裂,两面疏被柔毛,叶柄长4~7cm;伞形花序腋生,花2~5枚;萼裂片被长硬毛,先端具长芒;花瓣5,淡紫色或蓝紫色;蒴果顶端具长喙。花期7~8月。

【分布】东北至西北,西南及长江流域;蒙古、俄罗斯、朝鲜、印度。

【生境】草地、沙丘、田间、河边、路旁。

【用途】饲用; 药用; 提取栲胶。

### Stephan's stork's-bill

Geranium family

Annual or biennial herb10 $\sim$ 60 cm tall: stems procumbent or ascending, branched; leaves bipinnatipartite, loosely pubescent both sides, petiole 4 $\sim$ 7 cm long; 2 $\sim$ 5 flowers in an axillary umbel; sepals hirsute, long-awned at apex; petals 5, pale purple or blue-purple; capsule long-beaked at apex. Flowering July to August.

Distribution: NE to NW, and SW China, regions along Changjiang River; Mongolia, Russia, Korea and India

Habitat: Grassland, sand dunes, farming fields, riversides and roadsides

Use: Forage; medicine; extracting tannin

# 鼠掌老鹳草

### Geranium sibiricum L.

牻牛儿苗科

Geraniaceae

【特征】多年生草本,高20~100cm;茎细长,平卧或上部斜升,有分枝,被倒生毛;叶掌状5深裂,裂片羽裂或具缺刻;花单生;萼裂片边缘膜质,先端具芒;花瓣5,淡粉紫色,具深色脉纹;蒴果顶端具喙,被柔毛。花期6~8月。

【分布】东北至西北,华中至西南;蒙古、俄罗斯、朝鲜、日本、欧洲。

【生境】草甸、沟谷、林缘。

【用途】饲用;药用。

#### Siberian geranium

Geranium family

Perennial herb  $20 \sim 100$  cm tall; stems slender, procumbent or ascending above, branched, retrorse-hairy: leaves palmately 5-parted, segments pinnatilobate or incised; flowers solitary; sepals with membranous edges and awned apex; petals 5, pinkish-purple, with dark vein-streaks; capsule beaked at apex, pubescent. Flowering June to August.

Distribution: NE to NW and C to SW China; Mongolia, Russia, Korea, Japan and Europe

Habitat: Meadows, ravines and forest edges

Use: Forage; medicine





# 大花老鹳草

# Geranium transbaicalicum Serg.

牻牛儿苗科

Geraniaceae

【特征】多年生草本,高15~50cm;茎直立或斜升,上部分枝,密被柔毛;叶7~9掌状深裂,裂片再羽裂;聚伞花序,花2枚;花序轴、花梗及花萼被柔毛和腺毛,萼裂片先端具短芒;花瓣5,蓝紫色; 频果顶端具喙,密被柔毛或腺毛。花期7~8月。

【分布】东北;蒙古、西伯利亚。

【生境】山坡草地、河边、林间空地和林缘。

【用途】饲用。

#### Largeflower cranesbill

Geranium family

Perennial herb  $15\sim50$  cm tall; stems erect or ascending, branched above, densely pubescent; leaves palmately parted into  $7\sim9$  segments, further pinnatilobate; flowers 2 in cymes; rachis, pedicels and calyx pubescent and glandular-hairy, sepals short-awned at apex; petals 5, blue-purple; capsule beaked, densely pubescent and glandular-hairy. Flowering July to

August.

Distribution: NE China; Mongolia

and Siberia

Habitat: Sloping grassland, riversides

forest openings and edges







# 灰背老鹳草

# Geranium wlassowianum Fisch. ex Link

牻牛儿苗科

Geraniaceae

【特征】多年生草本,高30~70cm;茎直立或斜升,有分枝,被柔毛;叶3~5掌状深裂,裂片具缺刻或齿;聚伞花序,花2枚;花瓣5,淡紫色或淡紫红色,具深色脉纹;蒴果顶端具喙,被柔毛。花期7~8月。

【分布】东北、华北、华中、西南;蒙古、朝鲜、俄罗斯。

【生境】沼泽草甸、河边和林间空地。

【用途】饲用。

### Greyback cranesbill

Geranium family

Perennial herb  $30\sim70$  cm tall; stems erect or ascending, branched, pubescent; leaves palmately parted into  $3\sim5$  lobes, incised or toothed; flowers 2 in cymes; petals 5, pale purple or purplish-red with dark vein-streaks; capsule beaked, pubescent. Flowering July to August.

Distribution: NE, N, C and SW China; Mongolia, Korea and Russia

Habitat: Swamp-meadows, riversides and forest openings



抽擾人:张崇江 Photo by Zhang Hongjiang



# 大叶补血草

# Limonium gmelinii (Willd.) Kuntze

白花丹科

Plumbaginaceae

【特征】多年生草本,高40~80cm; 叶基生,莲座状,质厚,略革质,长10~40cm; 花序大型, 命房状或圆锥状,3~4回分枝; 花萼倒圆锥状,干膜质,萼檐白色或淡紫色;花冠5裂,红紫色,稀白色。花期7~9月。

【分布】新疆;蒙古、中亚、西伯利亚、欧洲。

【生境】盐渍地,海拔1000~2000 m。

【用途】药用。

### Bigleaf marsh rosemary

Leadwort family

Perennial herb  $40 \sim 80$  cm tall; leaves basal, rosulate, thick, somewhat coriaceous,  $10 \sim 40$  cm long; inflorescence large, corymbose or paniculate, branched  $3 \sim 4$  times; calyx obcornic, scarious, calyx limbs white or pale purple; corolla 5-lobed, red-purple, rarely white. Flowering July to September.

Distribution: Xinjiang; Mongolia, Central Asia, Siberia and Europe

Habitat: Saline sites at 1 000 ~ 2 000 m

Use: Medicine

### 细枝补血草

### Limonium tenellum (Turcz.) O. Kuntze

白花丹科

Plumbaginaceae

【特征】多年生草本,高10~30cm; 茎分枝; 叶基生, 莲座状; 穗状花序集生成头状,再组成伞房状圆锥花序; 花萼漏斗状,干膜质,萼檐淡紫色,干后变白;花冠5裂,淡紫色。花期6~7月。

【分布】内蒙古、宁夏;蒙古。

【生境】荒漠草原带及荒漠带的石质山坡、丘顶。

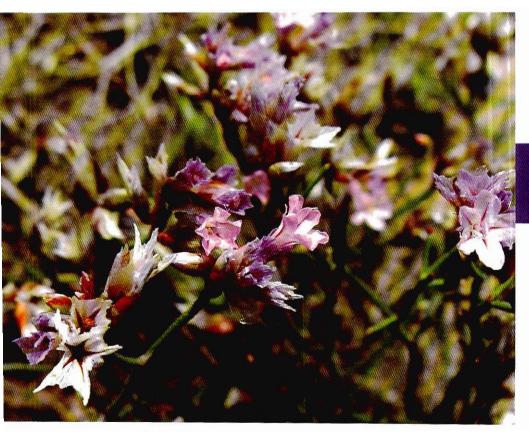
#### Slenderbranch marsh rosemary

Leadwort family

Perennial herb 10 ~ 30 cm tall; stems branched; leaves basal, rosulate; spikes clustered in heads, further forming a corymbose panicle; calyx funnelform, scarious, calyx limbs pale purple, becoming white at dry; corolla 5-lobed, pale purple. Flowering June to July.

Distribution: Inner Mongolia and Ningxia: Mongolia

Habitat: Rocky slopes and hilltops in desert-steppe and desert areas



# 大果琉璃草

# Cynoglossum divaricatum Stephan ex Lehm.

紫草科

Boraginaceae

【特征】二年生或多年生草本,高30~70cm;全株密被短硬毛;茎直立;叶互生; 总状花序,花稀疏;花冠5裂,红紫色或蓝色;小坚果密生锚状刺。花期 6~7月。

【分布】东北至西北;蒙古、西伯利亚。

【生境】沙地、干河床、田边、路旁。

【用途】药用。

#### Large-fruited hound's tongue

Borage family

Biennial or perennial herb  $30 \sim 70$  cm tall, whole plant hispidulous; stems erect; leaves alternate; racemes with loose flowers; corolla 5-lobed, red-purple to blue; nutlets with dense anchor-like spines. Flowering June to July.

**Distribution:** NE to NW China; Mongolia and Siberia **Habitat:** Sands, dry riverbeds, field sides and roadsides

Use: Medicine





# 紫筒草

### Stenosolenium saxatile (Pall.) Turcz.

紫草科

Boraginaceae

【特征】多年生草本,高6~20cm;全株被硬毛;茎直立或斜升,多分枝;叶互生;总状花序顶生;花冠高脚碟状,5裂,紫色、蓝紫色或白色;小坚果具瘤状凸起。花期5~6月。

【分布】东北至西北;蒙古、西伯利亚。

【生境】沙质或砾石质草原。

【用途】药用。

#### Cliff stenosolenium

Borage family

Perennial herb  $6\sim20$  cm tall, whole plant hispid; stems erect or ascending, much branched; leaves alternate; racemes terminal; corolla salverform, 5-lobed, purple to blue-purple or white; nutlets tuberculate. Flowering May to June.

Distribution: NE to NW China; Mongolia and Siberia

Habitat: Sandy or gravelly steppe

Use: Medicine



唇形科

Labiatae

【特征】一年生草本,高15~40cm; 茎四棱,直立,被柔毛,分枝对生;叶对生,边缘具疏齿,两而被微毛或黄色小腺点;轮伞花序,每节具4花;花冠淡蓝色或蓝紫色,二唇形,外面被白色柔毛;上唇先端凹,下唇3裂,中裂片2裂。花期7~8月。

【分布】东北至西北; 亚洲北方至欧洲。

【生境】山坡、沟谷、田野、路边。

【用途】提取芳香油; 药用。

### Moldavian dragonhead

Mint family

Annual herb  $15\sim40$  cm tall; stems quadrangular, erect, pubescent, opposite-branched; leaves opposite, loosely serrate, villosulous with tiny yellow glands both sides; verticillaster with 4 flowers at each node; bilabiate corolla pale blue or blue-purple, white pubescent outer side; upper lip retuse at apex, lower lip 3-lobed, the middle lobe further 2-lobed. Flowering July to August.

**Distribution:** NE to NW China; N Asia to Europe **Habitat:** Slopes, ravines, wild fields and roadsides

Use: Extracting essential oil; medicine

### 细穗香薷

# Elsholtzia densa Benth. var. ianthina (Maxim. et Kanitz) C. Y. Wu et S. C. Huang

唇形科

Labiatae

【特征】一年生草本,高20~80cm;茎四棱,直立,被柔毛;叶对生,边缘具齿,两 面被柔毛;轮伞花序,花密集成穗状;花萼和花冠外面均密被紫色串珠状长 柔毛;花冠淡紫色,二唇形;上唇先端微凹,下唇3裂。花期7~8月。

【分布】华北、西北、西南;蒙古、朝鲜、日本、俄罗斯、阿富汗、巴基斯坦、印度、锡金、尼泊尔。

【生境】山地及高山林地、林缘、草甸。

【用途】种子可提炼工业用油。

#### Thinspike denseflower mint

Mint family

Annual herb  $20 \sim 80$  cm tall; stems quadrangular, erect, pubescent; leaves opposite, serrate, pubescent both sides; verticillaster with dense flowers, spicate; calyx and corolla densely purple torose-villous outer side; bilabiate corolla pale purple; upper lip retuse at apex, lower lip 3-lobed. Flowering July to August.

**Distribution:** N. NW and SW China; Mongolia, Korea, Japan, Russia, Afghanistan, Pakistan, India, Sikkim and Nepal

Habitat: Forests, forest edges and meadows in montane and alpine belt

Use: Seeds for extracting industrial oil





### 草原糙苏

# Phlomis pratensis Kar. et Kir.

唇形科

Labiatae

【特征】多年生草本,高30~60cm;茎四棱,单一或基部分枝,被长柔毛,有时混 生星状毛;叶边缘具圆齿,两面疏被柔毛;轮伞花序顶生,花多数;花冠红 紫色,二唇形;上唇盔状,边缘具被长柔毛的长齿,外面被长柔毛,下唇3 裂;小坚果无毛。花期6~7月。

【分布】新疆; 中亚。

【生境】山地草原、亚高山草何,海拔1500~2500m。

#### Meadow jerusalemsage

Mint family

Perennial herb 30~60 cm tall; stems quadrangular, single or branched from base, villous, or with stellate-pubescence; leaves crenate, loosely pubescent; verticillaster terminal, with dense flowers; bilabiate corolla red-purple; upper lip galeate, with villous long teeth at edges, villous outer side, lower lip 3-lobed; nutlets glabrous. Flowering June to July.

Distribution: Xinjiang; Central Asia

Habitat: Montane-steppe and subalpine meadows at 1 500 ~ 2 500 m







# 毛水苏 Stachys riederi Cham. <sup>医形科</sup>

路形料 Labiatae

【特征】多年生草本,高20~50cm;茎四棱,直立,单一或分枝,茎棱具刚毛;叶边缘有疏齿,两面被刚毛,或下面无毛;轮伞花序组成顶生的穗状花序;花萼外面被刚毛;花冠淡紫色或紫色,二唇形;上唇直,外面被刚毛,下唇3裂,中裂片有白色花纹。花期7~8月。

【分布】东北、华北、甘肃;朝鲜、蒙古和西伯利亚。

【生境】低湿草甸及沟谷。

【用途】药用。

#### Baikal hedgenettle

Mint family

Perennial herb 20~50 cm tall; stems quadrangular, erect, single or branched, setose along acies; leaves loosely toothed, setose both sides or glabrous beneath; verticillasters in a terminal spike; calyx setose outer side; bilabiate corolla pale purple or purple; upper lip erect, setose outer side; lower lip 3-lobed, with white maculas at middle lobe. Flowering July to August.

Distribution: NE and N China, and Gansu; Korea, Mongolia and Siberia

Habitat: Moist lowland meadows and ravines

Use: Medicine



### 新塔花

# Ziziphora bungeana Juz.

唇形科

Labiatae

【特征】半灌木,高10~30cm; 芳香; 茎斜升或近直立,密被短柔毛; 叶对生,狭披 针形至卵状披针形或卵形,全缘,两面具腺点; 轮伞花序紧密排列成头状; 花冠紫红色或淡蓝紫色,内、外被短柔毛,二唇形; 上唇直,先端微凹,下 唇3裂。花期8~9月。

【分布】新疆; 中亚、蒙古。

【生境】荒漠草原地带的砾石质坡地或沙地。

【用途】饲用; 药用; 提炼芳香油。

### Xinjiang false pennyroyal

Mint family

Subshrub 10~30 cm tall; plant fragrant; stems ascending or nearly erect, densely pubescent; leaves opposite, narrowly lanceolate to ovate-lanceolate or ovate, entire, glandular both sides; verticillasters densely arranged in a head; bilabiate corolla purple-red or bluishpurple, pubescent both sides; upper lip erect, retuse at apex, lower lip 3-lobed. Flowering August to September.

Distribution: Xinjiang; Central Asia and Mongolia

Habitat: Gravelly and stony slopes and sands in desert-steppe areas

Use: Forage; medicine; extracting essential oil



# 宁夏枸杞

### Lycium barbarum L.

茄科

Solanaceae

【特征】灌木,高0.6~3m;茎较粗,分枝密,具棘刺;叶互生或簇生;花单生或2~6枚簇生于叶腋;花冠漏斗状,淡紫红色,5裂片;浆果宽椭圆状或卵球状,红色。花期6~8月。

(分布)华北和西北;中亚、欧洲。

【生境】半荒漠地带的山坡、河岸、地埂、渠边。

【用途】饲用; 果实食用; 果实及根皮药用。

### Matrimony vine

Nightshade family

Shrub  $0.6\sim3$  m tall; stems robust, densely branched, with thorns; leaves alternate or fascicled; flowers solitary or  $2\sim6$  clustered in axils; purplish-red corolla funnelform, 5-lobed; berry widely ellipsoid or ovoid, red. Flowering June to August.

Distribution: N and NW China; Central Asia and Europe

Habitat: Slopes, river banks, field ridges and ditch sides in semi-desert areas

Use: Forage; fruits edible; fruits and root coats for medicine



### 黑果枸杞

# Lycium ruthenicum Murr.

茄科

Solanaceae

【特征】灌木,高20~60cm; 茎多棘刺; 分枝斜升或平卧,白色或灰白色; 叶2~6枚 簇生,幼枝上叶互生,肉质; 花1~2枚生于短枝上; 花冠漏斗状,淡紫色, 5裂片; 浆果球状, 黑紫色。花期6~7月。

【分布】内蒙古及西北;中亚、高加索、欧洲。

【生境】荒漠地带的盐化低地、沙地、干河床。

【用途】饲用; 果实富含维生素C, 可食。

#### Blackfruit wolfberry

Nightshade family

Shrub 20~60 cm tall; stems much thorned; branches ascending or procumbent, white or grey-white; leaves 2~6 fascicled, but alternate at young branches, fleshy; flowers solitary or 2 on short branches; pale purple corolla funnelform. 5-lobed; berry globose, black-purple. Flowering June to July.

Distribution: Inner Mongolia and NW China: Central Asia, Caucasia and Europe

Habitat: Saline lowlands, sands and dry riverbeds in desert areas

Use: Forage; fruits rich in VC, edible









# 野胡麻

# Dodartia orientalis L.

玄参科

Scrophulariaceae

【特征】多年生草本,高15~40cm; 老多回分枝; 叶稀疏,条形,全缘或有疏齿; 花 疏离,是总状; 花冠二唇形,深紫色或深紫红色; 下唇长于上唇2~3倍,中 裂片舌状,喉部有两条生腺毛的皱褶。花期5~7月。

【分布】内蒙古、甘肃、新疆、四川;蒙古、西伯利亚、中亚、高加索、伊朗。

【生境】砾质、沙质或盐渍荒漠和荒漠草原。

【用途】饲用;药用。

#### Eastern dodartia

Figwort family

Perennial herb  $15\sim40$  cm tall; stems branched several times; leaves loose, linear, entire or loosely toothed; inflorescence racemose with spaced flowers; corolla bilabiate, dark purple or dark purple-red; lower lip  $2\sim3$  times longer than the upper, the middle lobe ligulate with glandular-hairy plaits in 2 rows at throat. Flowering May to July.

Distribution: Inner Mongolia, Gansu, Xinjiang and Sichuan; Mongolia, Siberia, Central Asia, Caucasia and Iran

Habitat: Gravelly, sandy and saline desert and desert-steppe

Use: Forage; medicine



# 弹刀子菜

# Mazus stachydifolius (Turcz.) Maxim.

玄参科

Scrophulariaceae

【特征】多年生草本,高10~30cm,全株被长柔毛;茎直立;叶边缘具浅锯齿或全缘;总状花序顶生;花梗下部具一白色膜质小苞片;花冠二唇形,蓝紫色或淡紫色;下唇中裂片有两条着生腺毛和黄色斑点的皱褶直达喉部。花期6~7月。

【分布】除西北和西南外,全国大部分省区;蒙古、朝鲜、俄罗斯(远东)。

【生境】林缘、草甸。

【用途】药用。

### Betonyleaf mazus

Figwort family

Perennial herb 10~30 cm tall; whole plant villous; stems erect; leaves shallowly serrate or entire; racemes terminal, pedicel with a white-membranous bractlet at lower part; corolla bilabiate, blue-purple or pale purple; the middle lobe of lower lip with glandular-hairy and yellow spotted plaits in 2 rows through throat. Flowering June to July.

Distribution: Most regions of China except NW and SW; Mongolia, Korea and Russia (Far East)

Habitat: Forest edges and meadows

Use: Medicine

# 长尾婆婆纳

# Veronica longifolia L.

玄参科

Scrophulariaceae

【特征】多年生草本,高达1m;茎直立,通常不分枝;叶对生,披针形,长渐尖,边缘具齿;总状花序细长;花冠近辐状,4裂,蓝色或蓝紫色,稍带白色。花期7~8月。

【分布】东北,内蒙古、新疆;蒙古、俄罗斯(西伯利亚、远东)、朝鲜、日本、中亚、欧洲。

【生境】林缘、林地、沟谷、河谷。

#### Longleaf speedwell

Figwort family

Perennial herb to 1 m tall; stems erect, rarely branched; leaves opposite, lanceolate, long-acuminate, toothed; racemes slender; corolla subrotate, 4-parted, blue to blue-purple, and whitish. Flowering July to August.

**Distribution:** NE China, Inner Mongolia and Xinjiang; Mongolia, Russia (Siberia and Far East), Korea, Japan, Central Asia and Europe

Habitat: Forest edges, woodland, ravines and river valleys









拍攝人: 赵 凡 Photo by /hao Fan

# 肉苁蓉

### Cistanche deserticola Y. C. Ma

列当科

Orobanchaceae

【特征】根寄生植物,多年生草本,高40~160cm;茎肉质,圆柱形;鳞片状叶多数,淡黄白色; 穗状花序,花多数;花萼5浅裂,花冠管淡黄色,管内有2条纵向的黄色凸起;裂片5,黄白色至淡紫色。花期5~6月。

【分布】内蒙古、宁夏、甘肃、青海、新疆。

【生境】荒漠中的梭梭或白梭梭群落;寄主为梭梭和白梭梭。

【用途】药用。

### Desert-living cistanche

Broomrape family

Root parasitic, perennial herb  $40\sim160$  cm tall; stems fleshy, terete; squamiform leaves numerous, yellowish-white; spikes with many flowers; calyx 5-lobed; corolla tube pale yellow, with 2 longitudinal yellow-protuberances inside; corolla lobes 5, yellowish-white to pale purple. Flowering May to June.

Distribution: Inner Mongolia, Ningxia, Gansu, Qinghai and Xinjiang

**Habitat:** Communities dominated by Saxoul (*Haloxylon ammodendro*) or Persian salt tree (*Haloxylon persicum*) in desert: parasitic to roots of Saxoul

Use: Medicine

# 列当

# Orobanche coerulescens Steph.

列当科

Orobanchaceae

【特征】根寄生植物,二年生或多年生草本,高10~35cm;全株被蛛丝状绵毛;茎 肉质,圆柱形,黄褐色;鳞片状叶黄褐色;穗状花序顶生;花冠二唇形, 紫色、蓝紫色或淡紫色,稀淡黄色。花期6~8月。

【分布】东北至西北,四川;欧亚北方和中部。

【生境】 固定或半固定沙丘、向阳山坡、山沟; 寄主为蒿属植物。

【用途】药用。

#### Blue broomrape

Broomrape family

Root parasitic, biennial or perennial herb  $10\!\sim\!35$  cm tall; whole plant arachnoid-lanate; stems fleshy, terete, yellow-brown; squamiform leaves yellow-brown; spikes terminal; corolla bilabiate, purple to blue-purple or pale purple, rarely pale yellow. Flowering June to August.

Distribution: NE to NW China, Sichuan; N and C Eurasia

Habitat: Fixed or semi-fixed sand dunes, sunny slopes and ravines; parasitic to roots of sages (Artemisia spp.)

Use: Medicine



# 窄叶蓝盆花

Scabiosa comosa Fisch, ex Roem, et Schult.

川续断科

Dipsacaceae

【特征】多年生草本,高30~60cm;茎斜升,被毛;基生叶丛生,羽状全裂,茎生叶对生,一至二回羽状深裂;头状花序顶生,浅蓝色至蓝紫色;边缘花呈放射状,5裂片,不等大;中央花花冠较小,5裂片,近等大。花期6~8月。

【分布】东北,内蒙古、河北;蒙古、朝鲜、日本、东西伯利亚。

【生境】森林草原和草原地带的沙地或沙质生境。

【用途】药用;观赏。

#### Narrowleaf pincushion

Teasel family

Perennial herb 30~60 cm tall; stems ascending, pubescent; basal leaves fascicled, pinnatisect, cauline leaves opposite, once to twice pinnately parted; flowers in a terminal head; corolla pale blue to blue-purple; ray flowers radiate, unequally 5-lobed; disk flowers smaller, subequally 5-lobed. Flowering June to August.

Distribution: NE China, Inner Mongolia and Hebei; Mongolia, Korea, Japan and E Siberia

Habitat: Sands and sandy sites in forest-steppe to steppe zones

Use: Medicine; ornamental









# 华北蓝盆花

# Scabiosa tschiliensis Gruning

川续断科

Dipsacaceae

【特征】多年生草本,高20~80cm;茎斜升;基生叶丛生,大头羽裂或边缘具缺刻齿,茎生叶一至二回羽裂;头状花序顶生,蓝紫色;边缘花呈放射状,裂片5,不等大;中央花花冠较小,5裂片,近等大。花期6~8月。

【分布】东北、华北,甘肃。

【生境】沙质草原或草甸。

【用途】药用;观赏。

### North China pincushion

Teasel family

Perennial herb 20~80 cm tall; stems ascending; basal leaves fascicled, lyrate or notched, cauline leaves once to twice pinnatifid; flowers in a terminal head; corolla blue-purple; ray flowers radiate, unequally 5-lobed; disk flowers smaller, subequally 5-lobed. Flowering June to August.

**Distribution:** NE and N China, Gansu **Habitat:** Sandy steppe and meadows

Use: Medicine; ornamental

# 狭叶沙参

# Adenophora gmelinii (Spreng.) Fisch.

#### 桔梗科

Campanulaceae

【特征】多年生草本,高40~60cm;茎直立,单一或数条;茎生叶狭条形或条形,全缘,稀有疏齿;花序总状或单生;花冠宽钟状,5浅裂,蓝紫色;花柱短于花冠。花期7~8月。

【分布】东北、华北; 蒙古、俄罗斯(西伯利亚、远东)。

【生境】山地草原、林缘和草甸。

【用途】饲用。

#### Gmelin ladybells

Bellflower family

Perennial herb 40~60 cm tall; stems erect, single or several; cauline leaves narrowly linear to linear, entire or rarely loosely toothed; flowers in a raceme or solitary; blue-purple corolla broadly campanulate, 5-lobed; style shorter than corolla. Flowering July to August.

Distribution: NE and N China; Mongolia and Russia (Siberia and Far East)

Habitat: Montane-steppe, forest edges and meadows





# 石沙参

# Adenophora polyantha Nakai

桔梗科

Campanulaceae

【特征】多年生草本,高20~50cm; 茎直立,数条,密被硬毛; 基生叶早落,茎生叶狭披针形或披针形,边缘有齿; 花序总状; 花冠钟状,5浅裂,蓝紫色至浅蓝紫色; 花柱稍伸出花冠或与之等长。花期7~8月。

【分布】华北,安徽、江苏;朝鲜。

【生境】草何和山地草原。

【用途】饲用。

# Many-flowered ladybells

Bellflower family

Perennial herb 20~50 cm tall; several stems erect, densely hispid; basal leaves caducous, cauline leaves narrowly lanceolate to lanceolate, with toothed edges; flowers in a raceme; blue-purple or bluish-purple corolla campanulate, 5-lobed; style exserted or equaling corolla. Flowering July to August.

Distribution: N China, Anhui and Jiangsu: Korea

Habitat: Meadows and montane-steppe



# 扫帚沙参

# Adenophora stenophylla Hemsl.

桔梗科

Campanulaceae

【特征】多年生草本,高25~50cm;茎丛生,多分枝;基生叶卵形,茎生叶狭条形或针状,全缘或疏生齿;圆锥花序或近总状花序;花冠钟状,5浅裂,蓝紫色;花柱内藏,稍短于花冠。花期7~8月。

【分布】黑龙江、吉林、内蒙古; 朝鲜。

【生境】山地草原。

【用途】饲用。

### Narrowleaf ladybells

Bellflower family

Perennial herb 25~50 cm tall; stems tufted, much branched; basal leaves ovate, cauline leaves narrowly linear to accrose, entire or loosely toothed; flowers in a panicle or subraceme; blue-purple corolla campanulate, 5-lobed; style included, slightly shorter than corolla. Flowering July to August.

Distribution: Heilongjiang, Jilin and Inner Mongolia; Korea

Habitat: Montane-steppe

# 多歧沙参

# Adenophora wawreana Zahlbr.

桔梗科

Campanulaceae

【特征】多年生草本,高50~100cm;茎直立,被向下的短硬毛或无毛;基生叶心形,茎生叶卵形至狭卵形,边缘具齿;圆锥花序较大,多分枝;花萼裂片常具1~2对狭长齿;花冠宽钟状,5浅裂,蓝紫色或浅蓝紫色;花柱伸出或与花冠近等长。花期7~9月。

【分布】华北。

【生境】山地草原、林地或林缘。

【用途】饲用。

#### Forked ladybells

Bellflower family

Perennial herb  $50\sim100$  cm tall; stems erect, retrorse-hispid or glabrous; basal leaves cordate, cauline leaves ovate to narrowly ovate with toothed edges; panicle large and much branched; sepals narrowly toothed in  $1\sim2$  pairs; blue-purple or bluish-purple corolla broadly campanulate, 5-lobed; style exserted or subequaling corolla. Flowering July to September.

Distribution: N China

Habitat: Montane-steppe, woodland and forest edges



# 聚花风铃草

# Campanula glomerata L. ssp. cephalotes (Nakai) Hong 桔梗科

Campanulaceae

【特征】多年生草本,高40~100cm;茎直立,有时上部分枝;基生叶基部浅心形,茎生叶卵形或卵状披针形,边缘有浅齿;花簇生茎顶和叶腋;花冠蓝紫色或浅蓝紫色,钟状,5浅裂。花期6~8月。

【分布】东北,内蒙古;蒙古、朝鲜、日本、俄罗斯(西伯利亚、远东)。

【生境】山地草甸和灌丛。

【用途】饲用;药用。

#### Clustered bellflower

Bellflower family

Perennial herb 40~100 cm tall; stems erect, sometimes branched above; basal leaves shallowly cordate at base, cauline leaves ovate to ovate-lanceolate, with shallowly toothed edges; clustered flowers terminal and axillary; blue-purple or bluish-purple corolla campanulate, 5-lobed. Flowering June to August.

Distribution: NE China, and Inner Mongolia; Mongolia, Korea, Japan, and Russia (Siberia and Far East)

Habitat: Montane-meadows and scrubland

Use: Forage; medicine





# 高山紫菀 Aster alpinus L. <sup>菊科</sup>

Compositae

【特征】多年生草本,高10~35cm; 茎直立,不分枝,被柔毛; 基生叶有长柄,茎生叶无柄,全缘; 头状花序单生于茎顶; 舌状花紫色、淡蓝紫色或粉红色; 管状花黄色。花期7~8月。

【分布】东北、华北、新疆、亚洲北方、欧洲、北美。

【生境】山地草原、林间空地和林缘。

【用途】饲用。

### Alpine aster

Aster family

Perennial herb  $10\sim35$  cm tall; stems erect, unbranched, pubescent; basal leaves long-petiolate, cauline leaves sessile, entire; solitary heads terminal; ray florets purple or bluish-purple to pink; disk florets yellow. Flowering July to August.

Distribution: NE and N China, and Xinjiang; N Asia, Europe and North America

Habitat: Montane-steppe, forest openings and edges

### 紫菀

### Aster tataricus L. f.

菊科

Compositae

【特征】多年生草本,高30~100cm;茎直立,单一,常带紫色;基生叶大型,有长柄,早凋;茎生叶具短柄至无柄,边缘具齿至全缘,两而被短硬毛;头状花序多数,复伞房状排列;舌状花蓝紫色,管状花黄色。花期7~8月。

【分布】东北至西北;蒙古、朝鲜、日本、俄罗斯(西伯利亚、远东)。

【生境】森林和草原带的山坡林地、林间空地、河谷。

【用途】饲用;药用。

#### Tatarian aster

Aster family

Perennial herb 30~100 cm tall; stems erect, single, usually purplish; basal leaves large, long-petiolate, deciduous; cauline leaves short-petiolate to sessile, toothed to entire, hirsutulous both surfaces; many heads in compound corymbs; ray florets blue-purple, disk florets yellow. Flowering July to August.

Distribution: NE to NW China; Mongolia, Korea, Japan and Russia (Siberia and Far East)

Habitat: Wooded slopes, forest openings and river valleys in forest to steppe zones

Use: Forage; medicine





# 块蓟

# Cirsium salicifolium (Kitag.) Shih

菊科

Compositae

【特征】多年生草本,高20~40cm; 茎直立,单一或少分枝;叶不分裂,基部半抱茎,边缘有缘毛状针刺;头状花序单生于枝顶;总苞片边缘有长柔毛,内层有粘腺;管状花冠紫红色或蓝紫色。花期7~8月。

【分布】吉林、内蒙古、河北。

【生境】林缘和低湿草甸。

【用途】饲用;根药用。

#### Block thistle

Aster family

Perennial herb 20~40 cm tall; stems erect, single to few branched; leaves unlobed, base subclasping, with fringed-spinose edges; solitary heads terminal; involucial bracts with villous edges, inner ones clammy-pubescent; tubular corolla purple-red to blue-purple. Flowering July to August.

**Distribution:** Jilin, Inner Mongolia and Hebei **Habitat:** Forest edges and moist lowland meadows

Use: Forage; roots for medicine

# 阿尔泰狗哇花

# Heteropappus altaicus (Willd.) Novopokr.

菊科

#### Compositae

【特征】多年生草本,高5~40cm;全株被弯曲短硬毛和腺点;茎单一或分枝,斜升;叶互生,全缘;头状花序直径1~3.5cm,单生或命房状排列;舌状花淡蓝紫色;管状花黄色。花期7~9月。

【分布】东北至西北,四川、湖北;蒙古、西伯利亚、中亚。

【生境】森林草原至荒漠草原带的山地、丘陵、平原、沟谷、路旁。

【用途】饲用; 药用。

#### Mongolian Altai aster

Aster family

Perennial herb  $5 \sim 40$  cm tall; whole plant curved-hispidulous and glandular; stems single or branched, ascending; leaves alternate, entire; heads  $1 \sim 3.5$  cm across, solitary or several in corymbs: ray florets bluish-purple; disk florets yellow. Flowering July to September.

Distribution: NE to NW China, Sichuan and Hubei; Mongolia,

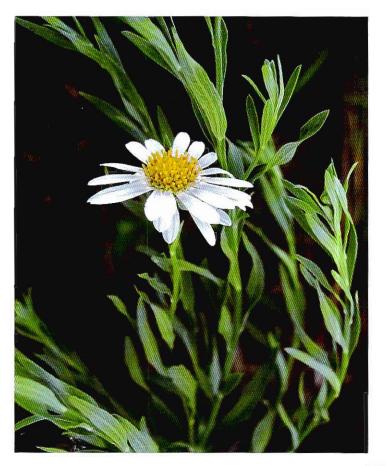
Siberia and Central Asia

Habitat: Mountains, hills, plains, ravines and roadsides in

forest-steppe to desert-steppe zones

Use: Forage; medicine





# 全叶马兰

# Kalimeris integrifolia Turcz. ex DC.

菊科

Compositae

【特征】多年生草本,高30~70cm;茎直立,单一或分枝,被向上的短硬毛;叶互生,全缘,两面密被短硬毛;头状花序直径1~2cm;舌状花淡紫色或淡蓝紫色。花期7~8月。

【分布】东北至西北,华东和华中;朝鲜、日本、西伯利亚。

【生境】山地灌丛、草原、林缘、河岸。

【用途】饲用。

#### Asian aster

Aster family

Perennial herb  $30\sim70$  cm tall; stems erect, single or branched, acroscopic-hirsutulous; leaves alternate, entire, densely hirsutulous both surfaces; heads  $1\sim2$  cm across: ray florets pale purple to bluish-purple. Flowering July to August.

**Distribution:** NE to NW, E and C China; Korea, Japan and Siberia **Habitat:** Montane-scrubs, steppe and forest edges and riverbanks





### 草地风毛菊

Saussurea amara (L.) DC.

菊科

Compositae

【特征】多年生草本,高10~50cm;茎直立,有纵沟棱;基部叶和茎中下部叶全缘或有波状齿至浅裂,具长柄,两面密被腺点,上部叶渐小,全缘;头状花序多数,排列成伞房状;总苞钟状或狭钟状,中、内层总苞片先端具粉红色的膜质附片;管状花粉红色至蓝紫色。花期7~8月。

【分布】东北至西北;蒙古、西伯利亚、中亚、欧洲。

【生境】盐化草甸、撂荒地。

【用途】饲用。

#### Meadow saw-wort

Aster family

Perennial herb 10~50 cm tall; stems erect with grooves; basal and lower cauline leaves entire or undulate-toothed to lobed, with long petiole, densely glandular both sides, upper leaves smaller, entire; many heads crowded in a corymb; involucre campanulate or narrowly campanulate, middle and inner involucral bracts with pink-membranous appendage at apex; tubular corolla pink to blue-purple. Flowering July to August.

Distribution: NE to NW China; Mongolia, Siberia, Central Asia and Europe

Habitat: Saline meadows and abandoned lands

### 风毛菊

# Saussurea japonica (Thunb.) DC.

菊科

Compositae

【特征】二年生草本,高50~150cm;茎直立,有纵沟棱,上部多分枝,疏被柔毛和腺体;基部叶和茎下部叶羽状半裂或深裂,具长柄,两面疏被短毛和腺体,叶向上渐小,羽状分裂或全缘;头状花序多数,密集成伞房状;总苞管钟形,中、内层总苞片先端具带粉红色的膜质附片;管状花紫色。花期7~8月。

【分布】东北至西北; 朝鲜和日本。

【生境】山地草原、河谷草甸、撂荒地和路旁。

【用途】饲用。

#### Japanese saw-wort

Aster family

Biennial herb 50~150 cm tall; stems erect with grooves, much branched above, loosely pubescent and glandular; basal and lower cauline leaves pinnately cleft to parted, with long petiole, loosely pubescent and glandular both sides, leaves smaller upward, pinnately lobed or entire; many heads crowded in a corymb; involucre tubular-campanulate, middle and inner involucral bracts with pinkish-membranous appendage at apex; tubular corolla purple. Flowering July to August.

Distribution: NE to NW China; Korea and Japan

Habitat: Montane-steppe, river valley meadows, abandoned lands and roadsides











# 美花风毛菊

Saussurea pulchella (Fisch.) Fisch.

菊科

Compositae

【特征】多年生草本,高30~90cm; 茎直立,有纵沟棱,上部分棱; 基部叶和茎中下部叶羽状深裂或全裂,具长柄,两面有短糙毛和腺体,上部叶浅裂或全缘; 头状花序多数,密集成伞房状;全部总苞片先端具粉红色的膜质附片;管状花淡紫色。花期7~8月。

【分布】东北、华北;蒙古、朝鲜、日本、俄罗斯(西伯利亚、远东)。

【生境】林缘、灌丛和河谷草甸。

#### Beautiful saw-wort

Aster family

Perennial herb 30~90 cm tall; stems erect with grooves, branched above: basal and lower cauline leaves pinnately parted to divided, with long petiole, hispidulous and glandular both sides, upper leaves lobed to entire, many heads crowded in a corymb; all involucral bracts with pink-membranous appendage at apex; tubular corolla pale purple. Flowering July to August.

**Distribution:** NE and N China: Mongolia, Korea, Japan, and Russia (Siberia and Far East) **Habitat:** Forest edges, scrubland and river valley meadows

# 碱地风毛菊

### Saussurea runcinata DC.

菊科

Compositae

【特征】多年生草本,高5~50cm;茎直立;基部叶和茎下部叶倒向羽状深裂或全裂,叶柄长,基部扩大成鞘,上部叶渐小,全缘或有齿;头状花序数个,密集成伞房状或圆锥状;总苞片顶端有扩大的膜质紫色附片,上部边缘有睫毛;管状花紫红色。花期7~8月。

【分布】东北、华北;蒙古、西伯利亚。

【生境】盐碱低地。

#### Alkali saw-wort

Aster family

Perennial herb 5~50 cm tall; stems erect; basal and lower cauline leaves runcinately parted to divided, with long petiole and sheath-like base, upper leaves smaller, entire or toothed; several heads crowded in a corymb or panicle; involucral bracts with enlarged, membranous and purple appendage at apex, upper edges fringed; tubular corolla purple-red. Flowering July to August.

Distribution: NE and N China; Mongolia and Siberia

Habitat: Saline-alkaline lowlands





## 大苞鸢尾

# Iris bungei Maxim.

鸢尾科

Iridaceae

【特征】多年生草本,高20~40cm;基生叶条形,扁平;花葶高约15cm,短于基生叶;总苞膨胀,纺锤状,边缘膜质,具纵脉;花1~2枚顶生;花被片6,2轮,蓝紫色,具紫色脉纹。花期5~6月。

【分布】内蒙古、山西、宁夏、甘肃;蒙古。

【生境】半荒漠地带的沙质和砂砾质地。

【用途】饲用;观赏。

### Largebract iris

Iris family

Perennial herb  $20\sim40$  cm tall; basal leaves linear and flat; scapes about 15 cm tall, shorter than basal leaves; spathe distended to fusiform, edges membranous, longitudinal-veined;  $1\sim2$  flowers terminal; tepals 6 in 2 series, blue-purple with purple veins. Flowering May to June.

Distribution: Inner Mongolia, Shanxi, Ningxia and Gansu; Mongolia

Habitat: Sandy and Gravelly sites in semi-desert areas

Use: Forage; ornamental

拍摄人: 赵凡 Photo by Zhao Fan







拍摄人; 赵凡 Photo by Zhao Fan

# 射干鸢尾

Iris dichotoma Pall.

鸢尾科

Iridaceae

【特征】多年生草本,高40~100cm;茎上部叉状分枝;基生叶剑形,扁平,基部套折;总苞干膜质,宽卵状;聚伞花序具花3~15枚;花被片6,2轮,淡紫红色或中间白色,具紫褐色斑点和黄褐色斑纹;花柱分枝3,花瓣状;种子具翼。花期7月。

【分布】东北至西北;蒙古、西伯利亚。

【生境】草原、山地林缘或灌丛。

【用途】饲用; 观赏。

## Vesper iris

Iris family

Perennial herb  $40 \sim 100$  cm tall; stems with forked branches above; basal leaves ensiform and flat, equitant at base; spathe scarious, broadly ovoid;  $3 \sim 15$  flowers in a cyme; tepals 6 in 2 series, purplish-red, or white at middle, with purple-brown spots and yellow-brown veins; style 3-branched, petaloid; seeds winged. Flowering July.

**Distribution:** NE to NW China; Mongolia and Siberia **Habitat:** Steppe, mountain forest edges and scrubland

Use: Forage; ornamental



# Iris tigridia Bunge

查屋科

Iridaceae

【特征】多年生草本,高10~30cm;基生叶条形,扁平;花葶短于基生叶;总苞不膨 胀;花常单生;花被片6,2轮,红紫色、蓝紫色至白色,具深色脉纹;外轮 花被片中部有髯毛。花期4~5月。

【分布】东北、华北, 甘肃、青海; 蒙古、西伯利亚。

【生境】沙质和砾石质山坡和丘顶。

【用途】饲用;观赏。

### Thickroot iris

Iris family

Perennial herb 10~30 cm tall; basal leaves linear, flat; scapes shorter than basal leaves; spathe un-distended; flowers usually solitary; tepals 6 in 2 series, red-purple, blue-purple to white, with dark vein-streaks; outer tepals bearded at the middle. Flowering April to May.

Distribution: NE and N China, Gansu and Qinghai; Mongolia and Siberia

Habitat: Sandy and gravelly slopes and hilltops

Use: Forage; ornamental



# 囊花鸢尾

## Iris ventricosa Pall.

鸢尾科

Iridaceae

【特征】多年生草本,高30~60cm;基生叶条形,扁平;花草短于基生叶;总苞膨胀,纺锤形,边缘膜质,密生纵脉和网状横脉;花1~2枚顶生;花被片6,2轮,蓝紫色至淡紫色,具紫色脉纹。花期5~6月。

【分布】东北、华北;蒙古、俄罗斯(西伯利亚、远东)。

【生境】草原、草甸及林缘。

【用途】饲用;观赏。

### Inflated iris

Iris family

Perennial herb  $30\sim60$  cm tall; basal leaves linear, flat; scapes shorter than basal leaves; spathe distended to fusiform, edges membranous, densely longitudinal and net-veined;  $1\sim2$  flowers terminal; tepals 6 in 2 series, blue-purple to pale purple, with purple vein-streaks. Flowering May to June.

Distribution: NE and N China; Mongolia and Russia (Siberia and Far East)

Habitat: Steppe, meadows and forest edges

Use: Forage; ornamental





# 露蕊乌头

## Aconitum gymnandrum Maxim.

毛茛科

Ranunculaceae

【特征】一年生草本,高25~55(100)cm; 茎被短柔毛,有分枝;叶掌状3全裂,裂片 二至三回深裂,两面疏被柔毛;总状花序;萼片5,蓝紫色,稀白色,外面 疏被毛,上萼片船形。花期6~8月。

【分布】青藏高原。

【生境】海拔1550~3800m的草甸、河边。

### Nakedstamen monkshood

Buttercup family

Annual herb 25~55 (100) cm tall; stems pubescent, branched; leaves palmately 3-divided, segments further twice to thrice parted, pubescent both sides; flowers in racemes; sepals 5, blue-purple, rarely white, loosely pubescent outside, upper sepal scaphoid. Flowering June to August.

Distribution: Qinghai-Tibet Plateau

Habitat: Meadows and riverbanks at 1 550~3 800 m

## 草乌头

## Aconitum kusnezoffii Reichb.

毛茛科

Ranunculaceae

【特征】多年生草本,高60~150cm;茎直立,粗壮;叶掌状3全裂,中央裂片近羽状深裂,侧裂片2深裂,上面被短曲毛;总状花序顶生,常分枝,花多数;萼片5,蓝紫色,上萼片盔形。花期7~9月。

【分布】东北、华北;蒙古、朝鲜、俄罗斯(西伯利亚、远东)。

【生境】林地草甸和河谷草甸。

【用途】药用。

### Kusnezoff monkshood

Buttercup family

Perennial herb  $60\sim150$  cm tall; stems erect, robust; leaves palmately 3-divided, middle segment nearly pinnatipartite, lateral segments 2-parted, curly hairy above; terminal racemes usually branched with many flowers; sepals 5, blue-purple; upper sepal galeate. Flowering July to September.

Distribution: NE and N China; Mongolia, Korea and Russia (Siberia and Far East)

Habitat: Meadows in forest openings and river valleys

Use: Medicine









# 细叶乌头

## Aconitum macrorhynchum Turcz.

毛茛科

Ranunculaceae

【分布】黑龙江、吉林、内蒙古;俄罗斯(西伯利亚、远东)。

【生境】林缘草甸。

【用途】根药用。

### Thinleaf monkshood

Buttercup family

Perennial herb to 1 m tall; stems crect, single or branched above; leaves palmately 3-divided, lobes dissected, curly pubescent both sides; racemes terminal; sepals 5, blue-purple, loosely pubescent outside, upper sepal high-galeate with an aquiline beak. Flowering August to September.

Distribution: Heilongjiang, Jilin and Inner Mongolia; Russia (Siberia and Far East)

Habitat: Meadows along forest edges

Use: Roots for medicine

# 全缘铁线莲

# Clematis integrifolia L.

毛茛科

Ranunculaceae

【特征】多年生草本或半灌木,高100~150cm;茎直立,中空;单叶对生,叶片卵形至菱状椭圆形,全缘,无叶柄,抱茎;花单生于顶,下垂;萼片4,紫红色、蓝色或白色,先端反卷并有尖凸;无化瓣;花药窄于花丝;瘦果多数,宿存花柱羽毛状。花期6~7月。

【分布】新疆; 西伯利亚和欧洲。

【生境】山坡草地、灌丛、河谷,海拔1 200~2 000m。

【用途】观赏。

### Solitary clematis

Buttercup family

Perennial herb or subshrub  $100\sim150$  cm tall; stems crect, hollow; simple leaves opposite, blades ovate to rhombic-elliptic, entire, sessile, clasping; solitary flowers terminal, nodding; sepals 4, purple-red to blue or white, apex revolute with a cusp; petals absent; anthers narrower than filaments; achenes numerous, persistent styles feather-like. Flowering June to July.

Distribution: Xinjiang; Siberia and Europe

Habitat: Sloping grassland and scrubland, and river valleys at 1 200~2 000 m

Use: Ornamental







# 翠雀

## Delphinium grandiflorum L.

毛茛科

Ranunculaceae

【特征】多年生草本,高20~70cm;茎直立,单一或分枝;叶掌状3全裂,裂片再细裂;总状花序具花3~15;萼片5,花瓣状,蓝色、蓝紫色或粉紫色,上萼片基部具距;花瓣小,瓣片2,白色,基部有距;退化雄蕊2,瓣片状,蓝色,具黄色髯毛。花期7~8月。

【分布】东北、华北、西南;蒙古、西伯利亚。

【生境】草原、灌丛和草甸。

【用途】观赏; 药用。

### Siberian larkspur

Buttercup family

Perennial herb 20~70 cm tall; stems erect, single or branched; leaves palmately 3-divided, lobes further dissected; racemes with 3~15 flowers; sepals 5, petal-like, blue, blue-purple or pink-purple; upper sepal basally spurred; small petals 2, white, basally spurred; staminodia 2, petal-like, blue with yellow beards. Flowering July to August.

Distribution: NE, N and SW China; Mongolia and Siberia

Habitat: Steppe, scrubland and meadows

Use: Ornamental; medicine

## 远志

## Polygala tenuifolia Willd.

远志科

Polygalaceae

【特征】多年生草本,高8~30cm;根肥厚;茎直立或斜升;单叶互生,条形至条状披针形;总状花序;花两侧对称,瓣片3,蓝色,中央花瓣较大,龙骨状,顶端具流苏状缨,两侧花瓣长倒卵形。花期7~8月。

【分布】东北至西北;蒙古、俄罗斯、朝鲜。

【生境】砾石质草原。

【用途】根药用。

### Thinleaf milkwort

Milkwort family

Perennial 8~30 cm tall; roots thick; stems erect or ascending; simple leaves alternate, linear to linear-lanceolate; flowers zygomorphic, in cymes; blue petals 3, the middle one larger and keeled with fimbria apex, 2 lateral petals long-obovate. Flowering July to August.

Distribution: NE to NW China; Mongolia, Russia and Korea

Habitat: Gravelly steppe Use: Roots for medicine







拍摄人: 赵凡 Photo by Zhao Fan

## 达乌里龙胆

### Gentiana dahurica Fisch.

龙胆科

Gentianaceae

【特征】多年生草本,高10~30cm;茎斜升;叶对生,条状披针形;聚伞花序;花冠管钟状,深蓝色或蓝紫色,裂片5,裂片间具褶。花期7~8月。

【分布】东北至西北,四川;蒙古、俄罗斯(远东)。

【生境】草原、草甸或灌丛。

【用途】药用。

### Dahurian gentian

Gentian family

Perennial herb 10~30 cm tall; stems ascending; leaves opposite, linear-lanceolate; flowers in cymes; dark blue or blue-purple corolla tube-campanulate, 5-lobed, with plaited folds between lobes. Flowering July to August.

Distribution: NE to NW China, and Sichuan; Mongolia and Russia (Far East)

Habitat: Steppe, meadows and scrubland

Use: Medicine



## 线叶龙胆

## Gentiana farreri Balf. f.

龙胆科

Gentianaceae

【特征】多年生草本,高5~10cm;花枝丛生,铺散状;基生叶少,茎生叶多,条形;花单生枝顶;萼筒紫色或黄绿色;花冠倒锥状筒形,上部淡蓝色,下部黄绿色,具深蓝色条纹,裂片5,裂片间具褶。花期5~9月。

【分布】青藏高原。

【生境】海拔2 400~4 600m的高山草甸、灌丛及河滩草甸。

【用途】观赏。

### Linearleaf gentian

Gentian family

Perennial herb  $5\sim10$  cm tall; flowering stems tufted, diffuse; basal leaves few, cauline leaves dense, linear; solitary flowers terminal; calyx tube purple or yellow-green; corolla obconic-tubular, pale blue above, yellow-green with dark blue streaks below, 5-lobed, with plaited folds between lobes. Flowering May to September.

Distribution: Qinghai-Tibet Plateau

Habitat: Alpine-meadows, scrubland and riverbank meadows at 2 400 ~ 4 600 m

Use: Ornamental









## 鳞叶龙胆

# Gentiana squarrosa Ledeb.

龙胆科

Gentianaceae

【特征】一年生草本,高2~8cm;茎纤细,有分枝,密被腺毛;叶对生,基部合生, 先端具芒刺;花单生茎顶;花萼管钟形,裂片5,先端反折;花冠管钟状, 蓝色,裂片5,裂片间具褶。花期6~7月。

【分布】东北至西北,华东和华中;蒙古、中亚、俄罗斯(西伯利亚、远东)。

【生境】草甸、灌丛。

【用途】药用。

## Scale-leaf gentian

Gentian family

Annual herb  $2 \sim 8$  cm tall; stems slender, branched, densely glandular-hairy; leaves opposite, connate at base, with awn-like spine at apex; solitary flowers terminal; callyx tube-campanulate. 5-lobed, with reflexed apex; blue corolla tube-campanulate, 5-lobed, with plaited folds between lobes. Flowering June to July.

**Distribution:** NE to NW, E and C China; Mongolia. Central Asia and Russia (Siberia and Far East)

Habitat: Meadows and thickets

Use: Medicine

# 大花龙胆

# Gentiana szechenyii Kanitz

龙胆科

Gentianaceae

【特征】多年生草本,高5~8cm;茎斜升,不分枝;基生叶莲座状,茎生叶交互对生;花单生茎顶;花萼漏斗状,筒膜质,有时带紫色;花冠管钟状,上部蓝色或蓝紫色,下部黄白色,具深蓝色条纹,裂片5,裂片间具褶。花期6~9月。

【分布】青藏高原。

【生境】海拔4000~4800m的高山草甸、河谷草甸。

【用途】观赏。

### Bigflower gentian

Gentian family

Perennial berb 5~8 cm tall; stems ascending without branches; basal leaves rosulate, cauline leaves decussate; solitary flowers terminal; calyx funnelform, tube membranous, sometimes purplish; corolla tube-campanulate, blue or blue-purple above, yellow-white with dark blue streaks below, 5-lobed, with plaited folds between lobes. Flowering June to September.

Distribution: Qinghai-Tibet Plateau

Habitat: Alpine-meadows and river valley meadows at 4 000~4 800 m

Use: Ornamental





# 瘤毛獐牙菜

# Swertia pseudochinensis Hara

龙肥科

Gentianaceae

【特征】一年生草本,高15~30cm;茎直立,有分枝;叶对生;聚伞花序疏散;花 冠淡蓝紫色,具紫色脉纹,5裂,裂片基部有具流苏状长毛的2腺洼;子房上 位,狭矩圆状,淡紫色。花期7~8月。

【分布】东北、华北; 俄罗斯(远东)、朝鲜。

【生境】林缘、草甸、溪边。

【用途】观赏; 药用。

### Glandular felwort

Gentian family

Annual herb 15~30 cm tall; stems erect, branched; leaves opposite; flowers in a loose cyme; corolla bluish-purple with purple vein-streaks, 5-lobed, with 2 long-fringed glands at lobe base; ovary superior, narrowly oblong, pale purple. Flowering July to August.

Distribution: NE and N China; Russia (Far East) and Korea

Habitat: Forest edges, meadows and stream sides

Use: Ornamental; medicine

## 狭苞斑种草

## Bothriospermum kusnezowii Bunge

紫草科

Boraginaceae

【特征】一年生草本,高10~35cm;全株密被刚毛;茎自基部分枝,斜升;叶互生;总状花序;花冠5裂,蓝色;小坚果密生小瘤状凸起。花期5~6月。

【分布】东北至西北及华东。

【生境】草甸、河谷、路边。

### Narrow-flowered bothriospermum

Borage family

Annual herb  $10\sim35$  cm tall; whole plant densely setose; stems branched from base, ascending; leaves alternate; flowers in racemes; corolla 5-lobed, blue; nutlets densely tuberculate. Flowering May to June.

**Distribution:** NE to NW, and E China

Habitat: Meadows, river valleys and roadsides







拍摄人: 张洪江 Photo by Zhang Hongjiang

# 大花青兰

## Dracocephalum grandiflorum L.

唇形科

Labiatae

【特征】多年生草本,高15~40cm;茎四棱,不分枝,密被倒向短柔毛;基生叶具长柄,边缘具圆齿,茎生叶具短柄或上部叶近无柄;花序假轮生于叶腋;花冠蓝紫色,二唇形,外面被短柔毛;上唇盔状,2圆裂,下唇3裂,中裂片具深色斑点和长柔毛。花期7~8月。

【分布】东北、西北;蒙古和中亚。

【生境】山地草甸、林地阳坡,海拔2 000~3 000m。

### Bigflower dragonhead

Mint family

Perennial herb 15~40 cm tall; stems quadrangular, unbranched, densely retrorse-pubescent; basal leaves long-petiolate, crenate, cauline leaves short-petiolate or subsessile upward; inflorescence pseudo-verticillate in axils; blue-purple corolla bilabiate, pubescent outer side; upper lip galeate, 2-lobed; lower lip 3-lobed, the middle one dark blotched and villous. Flowering July to August.

Distribution: NE and NW China; Mongolia and Central Asia

Habitat: Montane-meadows, sunny wooded slopes at 2 000~3 000 m

# 全缘叶青兰

# Dracocephalum integrifolium Bunge

唇形科

Labiatae

【特征】多年生草本,高20~40cm;茎四棱,少分枝,直立或基部伏地,被柔毛;叶对生,全缘;花序假轮生,每叶腋具3枚花;花萼暗紫红色;花冠蓝紫色,被短柔毛,二唇形;上唇2裂,下唇3裂,中裂片大于侧裂片4~5倍。花期7~8月。

【分布】新疆; 中亚。

【生境】山地草原、针叶林下。

【用途】药用。

### Dragonhead

Mint family

Perennial herb 20~40 cm tall; stems quadrangular, few branched, erect or humistrate at base, pubescent; leaves opposite, entire; inflorescence pseudo-verticillate, 3 flowers in an axil; calyx dark purple-red; corolla blue-purple, pubescent, bilabiate; upper lip 2-lobed, lower lip 3-lobed, the middle lobe 4 to 5 times larger than the lateral ones. Flowering July to August.

Distribution: Xinjiang; Central Asia

Habitat: Montane-steppe and coniferous forests

Use: Medicine







# 新疆鼠尾草 Salvia deserta Schang.

唇形科

Labiatae

【特征】多年生草本、高30~80cm; 茎四棱,单一或从基部分枝; 叶边缘具圆锯齿,叶面被微毛;轮伞花序,4~6花; 苞片紫红色,先端尾状渐尖;花冠蓝紫色,外面被疏柔毛和腺点,二唇形;上唇两侧折合,下唇3裂。花期7~8月。

【分布】新疆; 中亚。

【生境】山地草原、平原绿洲、田间、路旁。

【用途】饲用。

### Descrt sage

Mint family

Perennial herb  $30 \sim 80$  cm tall; stems quadrangular, single or branched from base; leaves crenate, villosulous above; verticillasters with  $4 \sim 6$  flowers; bracts purple-red, with caudate apex; corolla blue-purple, puberulent with glands outer side, bilabiate; upper lip connivent by two sides; lower lip 3-lobed. Flowering July to August.

Distribution: Xinjiang: Central Asia

Habitat: Montane-steppe, plain oasis, fields and roadsides

Use: Forage

## 多裂叶荆芥

## Schizonepeta multifida (L.) Briq.

唇形科

Labiatae

【特征】多年生草本,高30~40cm;茎四棱,被长柔毛;叶羽状分裂或全缘,两面被微柔毛,下面具腺点;多数轮伞花序组成想状花序;花冠蓝紫色,外面被柔毛,二唇形;上唇短,先端2裂,下唇3裂。花期7~8月。

【分布】华北,甘肃;蒙古、俄罗斯(西伯利亚、远东)。

【生境】草甸草原、草甸、林缘或灌丛。

【用途】饲用。

### Common schizonepeta

Mint family

Perennial herb  $30{\sim}40$  cm tall; stems quadrangular, villous; leaves pinnatifid to entire, villosulous both sides, glandular beneath; many verticillasters in a spike; corolla blue-purple, pubescent outer side, bilabiate; upper lip shorter, 2-lobed, lower lip 3-lobed. Flowering July to August.

Distribution: N China and Gansu; Mongolia and Russia (Siberia and Far East)

Habitat: Meadow-steppe, meadows, forest edges and scrubland

Use: Forage









# 黄芩

## Scutellaria baicalensis Georgi

唇形科

Labiatae

【特征】多年生草本,高20~40cm;茎四棱,直立或斜升,多分枝;叶全缘,下面密被腺点;总状花序顶生,花偏于一侧;花冠蓝紫色或蓝色,稀白色,二唇形;上唇盔状,下唇3裂,两侧裂片向上唇靠拢。花期7~8月。

【分布】东北、华北. 甘肃、四川;蒙古、西伯利亚、朝鲜、日本。

【生境】沙质、沙壤质或砾石质草原。

【用途】饲用; 药用。

### Baikal skullcap

Mint family

Perennial herb 20~40 cm tall; stems quadrangular, erect or ascending, much branched; leaves entire, with dense glands beneath; racemes terminal, flowers one-sided; corolla blue-purple or blue, rarely white, bilabiate; upper lip galeate, lower lip 3-lobed, the lateral lobes closing up to upper lip. Flowering July to August.

Distribution: NE and N China, Gansu and Sichuan; Mongolia, Siberia,

Korea and Japan

Habitat: Sandy, sandy-loamy and gravelly steppe

Use: Forage; medicine





# 并头黄芩

# Scutellaria scordifolia Fisch. ex Schrank

唇形科

Labiatae

【特征】多年生草本,高10~30cm;茎四棱,直立或斜升,单生或分枝;叶全缘或边缘具疏锯齿,下面被微毛,具多数腺点;花单生于叶腋;花冠蓝色或蓝紫色,二唇形;上唇盔状,下唇3裂。花期6~8月。

【分布】东北、华北, 背海、新疆; 蒙古、俄罗斯(西伯利亚、远东)、日本。

【生境】草甸、林缘、林地、撂荒地。

【用途】饲用; 药用。

## Twinflower skullcap

Mint family

Perennial herb  $10\sim30$  cm tall; stems quadrangular, erect or ascending, single or branched; leaves entire or loosely serrate, villosulous with many glands beneath; flowers solitary in axils; corolla blue or blue-purple, bilabiate; upper lip galeate, lower lip 3-lobed. Flowering June to August.

Distribution: NE and N China, Qinghai and Xinjiang; Mongolia, Russia (Siberia and Far East) and Japan

Habitat: Meadows, forest edges, woodland and abandoned lands

Use: Forage: medicine

## 白婆婆纳

### Veronica incana L.

玄参科

Scrophulariaceae

【特征】多年生草本,高10~40cm;全株密被白色绵毛;茎直立,单一或丛生;叶全缘或微具圆齿,上面灰绿色,下面灰白色;总状花序单一,细长;花冠蓝色,少白色,近辐状,4裂。花期7~8月。

【分布】东北、华北;蒙古、西伯利亚、朝鲜、日本、中亚、欧洲。

【生境】草原带山坡、沙地。

【用途】药用。

### White-lanate speedwell

Figwort family

Perennial herb  $10\sim40$  cm tall; whole plant densely white-lanate; stems erect, single or tufted; leaves entire or slightly crenate, grey-green above, grey-white beneath; racemes solitary, slender; corolla blue, rarely white, subrotate, 4-parted. Flowering July to August.

**Distribution:** NE and N China; Mongolia, Siberia. Korea, Japan, Central Asia and Europe **Habitat:** Slopes and sands in steppe areas

Use: Medicine







# 细叶婆婆纳

## Veronica linariifolia Pall. ex Link

玄参科

Scrophulariaceae

【特征】多年生草本,高30~80cm;茎直立,单生或丛生,被卷毛;叶互生,条形至倒披针状条形,上部边缘具齿;总状花序细长,长尾状;花冠蓝色或蓝紫色,近辐状,4裂。花期7~8月。

【分布】东北,内蒙古;蒙古、俄罗斯(西伯利亚、远东)、朝鲜、日本。

【生境】山地草坡、灌丛、疏林。

【用途】药用。

## Linearleaf speedwell

Figwort family

Perennial herb 30~80 cm tall; stems erect, single or tufted, curly hairy; leaves alternate, linear to oblanceolate-linear, toothed above; racemes slender, long caudate; corolla blue or blue-purple, subrotate, 4-parted. Flowering July to August.

**Distribution:** NE China and Inner Mongolia; Mongolia, Russia (Siberia and Far East), Korea and Japan

Habitat: Mountain grassy slopes, thickets and open woodland

Use: Medicine





# 山梗菜 Lobelia sessilifolia Lamb.

桔梗科

Campanulaceae

【特征】多年生草本,高30~100cm;含乳汁;茎直立,通常单一;叶呈螺旋状排列,披针形至条状披针形,边缘具小齿;总状花序顶生;花冠蓝紫色,两侧对称,近二唇形;上唇2全裂,裂片上升,具缘毛;下唇3浅裂,裂片具缘毛;雄蕊合生成管状。花期7~9月。

【分布】东北、华北,浙江、台湾、广西、云南;朝鲜、日本、俄罗斯(西伯利亚、远东)。

【生境】低湿草甸。

【用途】饲用;药用。

#### Sessile lobelia

Bellflower family

Percnnial herb 30~100 cm tall; with milky juice; stems erect, usually single; leaves spirally arranged, lanceolate to linear-lanceolate with thin-toothed edges; racemes terminal; blue-purple corolla zygomorphic, nearly bilabiate; upper lip 2-divided, segments ascending and fringed; lower lip 3-lobed, segments fringed; stamens connate into a tube. Flowering July to September.

Distribution: NE and N China, Zhejiang, Taiwan, Guangxi and Yunnan; Korea, Japan, and Russia (Siberia and Far East)

Habitat: Meadows in moist lowlands

Use: Forage; medicine

## 桔梗

## Platycodon grandiflorus (Jacq.) A. DC.

桔梗科

Campanulaceae

【特征】多年生草本,高20~120cm;含乳汁;茎直立,单一或少分枝;叶轮生或互生,卵形至披针形,边缘具细齿,下面有白粉;花1至数枚顶生;花冠大,蓝紫色,宽钟状,5浅裂。花期7~9月。

【分布】东北至华南,云南和贵州;朝鲜、日本、俄罗斯(西伯利亚、远东)。

【生境】草甸、灌丛或林缘。

【用途】饲用;根药用。

#### Balloonflower

Bellflower family

Perennial herb 20~120 cm tall; with milky juice; stems erect, single or few branched; leaves whorled or alternate, blades ovate to lanceolate with thin-toothed edges, white-farinaceous beneath; solitary to several flowers terminal; blue-purple corolla large, widely campanulate, 5-lobed. Flowering July to September.

Distribution: NE to S China, Yunnan and Guizhou; Korea, Japan, and Russia (Siberia and Far East)

Habitat: Meadows, scrubland and forest edges

Use: Forage; roots for medicine









# 砂蓝刺头

## Echinops gmelinii Turcz.

菊科

Compositae

【特征】一年生草本,高15~40cm;茎直立,单一或分枝,白色或淡黄色;叶无柄,基部半抱茎,边缘具齿,齿端有白硬刺,下部叶被绵毛,上部叶有腺毛;复头状花序球形,白色或淡蓝色。花期6~8月。

【分布】东北至西北;蒙古、西伯利亚。

【生境】沙地、沙丘、村庄周围。

【用途】根药用。

### Gmelin globethistle

Aster family

Annual herb 15~40 cm tall; stems erect, single or branched, white or pale yellow; leaves sessile, base semi-clasping, toothed at edges, with white hard-spine at tooth tips, lower leaves lanate, upper leaves glandular-pubescent; compound heads globose, white to pale blue. Flowering June to August.

Distribution: NE to NW China; Mongolia and Siberia

Habitat: Sands, sand dunes and village sides

Use: Roots for medicine

## 驴欺口(蓝刺头)

### Echinops latifolius Tausch

菊科

Compositae

【特征】多年生草本,高30~70cm;茎直立,单一或分枝,上部密被白绵毛,下部疏被蛛丝状毛;叶二回羽状深裂,裂片具刺尖头,下面密被白色绵毛、茎上部叶渐小,基部抱茎;复头状花序球形,蓝色。花期6~8月。

【分布】东北、华北、甘肃; 蒙古、西伯利亚。

【生境】草原和林缘草甸。

【用途】药用。

### Broadleaf globethistle

Aster family

Perennial herb  $30\sim70$  cm tall; stems erect, single or branched, densely white-lanate above, sparsely arachnoid below; leaves bipinnatipartite, with spine-pointed lobes, densely white-lanate beneath, upper leaves smaller, base clasping; compound heads globose, blue. Flowering June to August.

Distribution: NE and N China, and Gansu; Mongolia and Siberia

Habitat: Steppe, and meadows along forest margins

Use: Medicine

拍摄人: 赵 凡 Photo by Zhao Fan





# 硬叶蓝刺头

# Echinops ritro L.

菊科

Compositae

【特征】多年生草本,高20~60cm;茎直立,通常上部分枝,白色或灰白色,密被蛛丝状绵毛;叶革质,一至二回羽状全裂或深裂,顶端和边缘具刺齿或针刺,上部叶渐小,基部半抱茎;全部叶下面密被蛛丝状白色绵毛;复头状花序球形,蓝色。花期6~8月。

【分布】新疆;蒙古、西伯利亚、中亚、伊朗、中欧、东欧。

【生境】戈壁、砾石质山坡,海拔1 200~2 400m。

## Leathery globethistle

Aster family

Perennial herb 20~60 cm tall; stems erect, usually branched above, white or grey-white, densely arachnoid-lanate; leaves coriaceous, once to twice pinnately divided or parted, spine-toothed or acerose-spiny at apex and margins, upper leaves smaller, base subclasping: all leaves densely white arachnoid-lanate beneath; compound heads globose, blue. Flowering June to August.

Distribution: Xinjiang; Mongolia, Siberia, Central Asia, Iran, C and E Europe

Habitat: Gobi and gravelly slopes at 1 200~2 400 m

## 非蓝天

## Allium cyaneum Regel

百合科

Liliaceae

【特征】多年生草本;鳞茎外皮破裂纤维状;叶半圆柱状,上面具沟槽;花葶高 10~45cm;伞形花序近扫帚状或半球状,花疏散;花被片6,天蓝色;花丝 长干花被片;花柱伸出花被外。花期8~9月。

【分布】内蒙古、陕西、宁夏、甘肃、青海、西藏、四川、湖北。

【生境】海拔2 100~5 000m的高山或亚高山草甸、林间或林缘。

【用途】饲用。

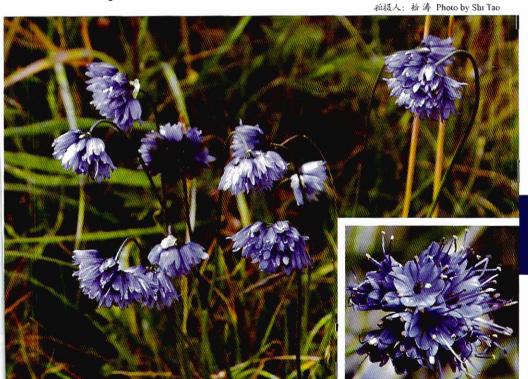
### Skyblue onion

Lily family

Perennial herb; bulb coat fibrous; leaves semi-terete, channeled above; scapes 10~45 cm tall; umbels subfastigiate or hemispheric, with loose flowers; tepals 6, bright blue; filaments longer than tepals; style exserted. Flowering August to September.

Distribution: Inner Mongolia, Shaanxi, Ningxia, Gansu, Qinghai, Tibet, Sichuan and Hubei Habitat: Meadows, forest openings and edges at 2  $100\sim5~000~m$  in alpine and subalpine zones

Use: Forage



## 马蔺

### Iris lactea Pall. var. chinensis Koidz.

鸢尾科

Iridaceae

【特征】多年生草本,高20~50cm; 基生叶多数,剑形,扁平; 花葶短于或等长于基生叶;总苞淡绿色,边缘宽膜质;花1~3枚顶生;花被片6,2轮,蓝色或淡蓝紫色,中间具白色条纹。花期5月。

【分布】东北至西北及华东,西藏;蒙古、朝鲜、日本、西伯利亚、中亚。

【生境】盐碱滩地。

【用途】饲用;观赏;药用。

### Chinese iris

Iris family

Perennial herb  $20\sim50$  cm tall; basal leaves abundant, ensiform, flat; scapes shorter than or equaling basal leaves; spathe pale-green, with widely membranous edges;  $1\sim3$  flowers terminal; tepals 6 in 2 series, blue to bluish-purple, with white streaks at middle. Flowering May.

Distribution: NE to NW, E China and Tibet; Mongolia, Korea, Japan, Siberia and Central

Asia





拍摄人: 赵凡 Photo by Zhao Faπ

# 细叶鸢尾

# Iris tenuifolia Pall.

鸢尾科

Iridaceae

【特征】多年生草本,高20~40cm;基生叶丝状条形,纵卷;花草短于基生叶;总苞膨胀,纺锤形,膜质;花1~2枚顶生;花被片6,2轮,淡蓝色或淡蓝紫色,具蓝白相间的斑纹。花期4~5月。

【分布】东北、华北,甘肃、新疆;蒙古、西伯 利亚、中亚。

【生境】沙质和砂砾质草原和荒漠草原。

【用途】饲用;观赏;药用。



Iris family

Perennial herb  $20\sim40$  cm tall; basal leaves filiform-linear, involute; scapes shorter than basal leaves; spathe distended to fusiform, membranous;  $1\sim2$  flowers terminal; tepals 6 in 2 series, pale blue to bluish-purple, with streaks in blue and white check. Flowering April to May.

Distribution: NE and N China, Gansu and Xinjiang; Mongolia, Siberia and Central Asia

Habitat: Sandy and gravelly steppe and desert-steppe

Use: Forage; ornamental; medicine







拍摄人: 赵凡 Photo by Zhao Fan

## 锁阳

# Cynomorium songaricum Rupr.

锁阳科

Cynomoriaceae

【特征】根寄生植物,多年生肉质草本,高15~100cm;茎圆柱状;叶鳞片状;肉 穗状花序顶生,暗红紫色,棒状至狭椭圆状,花多数;雄花具蜜腺。花期 5~7月。

【分布】内蒙古、宁夏,西北;蒙古、俄罗斯。

【生境】荒漠草原至荒漠中的白刺群落;主要寄主为白刺属植物。

【用途】药用;饲用;酿酒;提炼栲胶。

### Dzungar cynomorium

Cynomorium family

Root parasitic, perennial fleshy herb  $15\sim100$  cm tall; stems terete; leaves squamiform: fleshy spikes terminal, dark red-purple, clavate to narrowly ellipsoid, with numerous flowers; staminate flower with nectary. Flowering May to July.

Distribution: Inner Mongolia, Ningxia and NW China; Mongolia and Russia

Habitat: Communities dominated by Nitraria in desert-steppe to desert; mainly parasitic to roots of Nitraria (*Nitratia* spp.)

Use: Medicine; forage; making wine; extracting tannin

# 牛心朴子

## Cynanchum komarovii Al. Iljinski

萝藦科

Asclepiadaceae

【分布】内蒙古、山西、陕西、宁夏、甘肃、青海。

【生境】荒漠草原带或荒漠带的沙地、半固定沙丘、干河床。

【用途】绿肥;杀虫药原料;种子可提炼工业用油。

### Komarov swallow-wort

Milkweed family

Perennial herb 30 $\sim$ 50 cm tall; with milky juice; stems densely tufted, erect; leaves opposite, subcoriaceous; flowers in cymes; corolla rotate, 5-parted, black-purple or red-purple; corona black-purple, fleshy; follicle solitary, fusiform,  $5\sim$ 7 cm long. Flowering June to July.

**Distribution:** Inner Mongolia, Shanxi. Shaanxi. Ningxia, Gansu and Qinghai **Habitat:** Sands, semi-fixed dunes and dry riverbeds in desert-steppe to desert areas **Use:** Green manure: material for insecticide; seeds for extracting industrial oil



拍摄人: 赵凡 Photo by Zhao Fan







拍摄人: 赵凡 Photo by Zhao Fan

# 地黄

# Rehmannia glutinosa (Gaert.) Libosch. ex Fisch. et Mev.

玄参科

Scrophulariaceae

【特征】多年生草本,高10~30cm,全株密被长柔毛及腺毛;茎单一或基部分枝,紫红色;叶莲座状,边缘具齿,叶面多皱;总状花序顶生,花略下垂;花冠 简状,外面紫红色,里面黄色,具紫色斑纹,两面被长柔毛;上唇2裂片反折,下唇3裂片伸直。花期4~5月。

【分布】华北、华中、江苏、甘肃;朝鲜、日本。

【生境】石质山坡、石缝、沟边、路旁。

【用途】药用。

### Chinese foxglove

Figwort family

Perennial herb 10~30 cm tall, whole plant densely villous and glandular-hairy; stems single or branched from base, purple-red; leaves rosulate, with toothed edges and corrugated surface; racemes terminal, flowers somewhat nodding; corolla tubular, purple-red outer side, yellow with purple-streaks inner side, villous both sides; upper lip with 2 reflexed lobes. lower lip with 3 straight lobes. Flowering April to May.

**Distribution:** N and C China, Jiangsu and Gansu; Korea and Japan **Habitat:** Rocky slopes, rock crevices, ravine sides and roadsides

Use: Medicine

# 毛头牛蒡

### Arctium tomentosum Mill.

### 菊科

### Compositae

【特征】二年生草本,高40~150cm;茎直立,粗壮,分枝;叶具疏齿或全缘,下面密被蛛丝状柔毛和黄色腺点;头状花序多数或少数,伞房状;总苞密被蛛丝状柔毛;外、中层总苞片顶端有钩刺;管状花冠紫色,被黄色腺点。花期7~8月。

【分布】新疆; 俄罗斯、中亚、欧洲。

【生境】山坡、山谷、林间空地、田间、荒地、湿地、路旁,海拔540~2 400m。

【用途】果实和根药用。

### Woolly burdock

Aster family

Biennial herb 40~150 cm tall; stems erect, stout, branched; leaves loosely toothed or entire, densely arachnoid-pubescent and yellow-glandular beneath; heads more or less in a corymb; involucre densely arachnoid-pubescent; outer and middle involucral bracts with uncinate spines; tubular corolla purple with yellow glands. Flowering July to August.

Distribution: Xinjiang; Russia, Central Asia and Europe

Habitat: Slopes, valleys, forest openings, farmlands, wastelands, wetlands and roadsides at

540~2 400 m

Use: Fruits and roots for medicine



Ai摄人: 张决江 Photo by Zhang Hongjiang

400





## 内蒙古旱蒿

## Artemisia xerophytica Krasch.

菊科

Compositae

【特征】小半灌木,高5~40cm;茎平卧或斜升,当年枝条灰白色,密被柔毛;下部叶二回羽状全裂,裂片再3~5全裂,上部叶羽状全裂或3~5全裂,两面密被绒毛;头状化序近球形,直径3~4mm,下垂或倾斜,排列成松散的圆锥状;管状花冠紫色。花期8~9月。

【分布】内蒙古、宁夏,西北;蒙古。

【生境】沙质或砂砾质荒漠和半荒漠。

【用途】饲用。

### Arid land sagebrush

Aster family

Shrublet  $5\sim40$  cm tall; stems procumbent or ascending, new branches grey-white, densely pubescent; lower leaves bipinnatisect, segments further  $3\sim5$ -divided, upper leaves pinnatisect or  $3\sim5$ -divided, densely tomentose both sides; heads subglobose,  $3\sim4$  mm across, nodding or ascending, in a loose panicle; tubular corolla purple. Flowering August to September.

Distribution: Inner Mongolia, Ningxia and NW China; Mongolia

Habitat: Sandy and gravelly desert and semi-desert

## 星状风毛菊

### Saussurea stella Maxim.

菊科

#### Compositae

【特征】一年生或二年生草本;几无茎;叶莲座状,星状排列,全缘,无毛,近基部紫色,基部扩大;头状花序多数,密集成半球状;管状花紫色。花期7~9月。

【分布】青藏高原; 锡金、不丹。

【生境】海拔2 000~5 400m的山地和高山河谷草甸、灌丛草甸。

#### Starry saw-wort

Aster family

Annual or biennial herb; subacaulescent; leaves rosulate, stellate-arranged, entire, glabrous, purple nearly base, base enlarged; many heads crowded to hemispheric; tubular corolla purple. Flowering July to September.

Distribution: Qinghai-Tibet Plateau; Sikkim and Bhutan

Habitat: River valley meadows and scrub-meadows in montane and alpine

belt at 2 000~5 400 m







## 扁囊苔草

## Carex coriophora Fisch. et Mey. ex Kunth

莎草科

Cyperaceae

【特征】多年生草本,具根茎; 秆高50~75cm, 三棱形; 叶条形, 扁平, 质硬; 苞片叶状, 具长鞘; 小穗2~7枚, 下垂; 雄小穗1~2顶生, 狭椭圆形; 雌小穗3~4侧生, 矩圆形或卵状矩圆形。花期6~7月。

【分布】东北、华北,甘肃;蒙古、西伯利亚。

【生境】沼泽、草甸、林下或灌丛。

【用途】饲用。

## Flatpocket sedge

Sedge family

Perennial herb with rhizomes; culms  $50\sim75$  cm tall, triangular; leaves linear, flat, rigid; bracts leaf-like, with long sheath; spikes  $2\sim7$ , nodding;  $1\sim2$  terminal spikes staminate, narrowly ellipsoid;  $3\sim4$  lateral spikes pistillate, oblong to ovoid-oblong. Flowering June to July.

Distribution: NE, N China and Gansu; Mongolia and Siberia

Habitat: Swamps, meadows, forests and thickets

## 寸草苔

## Carex duriuscula C. A. Mey.

莎草科

Cyperaceae

【特征】多年生草本,具根茎; 秆高5~20cm, 疏丛,纤细,近钝三棱形; 叶片内卷; 苞片鳞片状; 小穗3~6枚,雄雌顺序,卵形; 果囊革质。花期4~6月。

【分布】东北、华北;蒙古、朝鲜、俄罗斯(西伯利亚、远东)。

【生境】草原、沙地及盐化草甸。

【用途】饲用。

#### Needleleaf sedge

Sedge family

Perennial herb with rhizomes; culms  $5\sim20$  cm tall, loosely cespitose, slender, obtusely triangular; leaves involute; bracts scale-like; spikes  $3\sim6$ , androgynous, ovoid; perigynia coriaceous. Flowering April to June.

Distribution: NE and N China; Mongolia, Korea, Russia (Siberia and Far East)

Habitat: Steppe, sands and saline meadows







## 黄囊苔草

## Carex korshinskyi Kom.

莎草科

Cyperaceae

【特征】多年生草本,具根茎; 杆高20~40cm, 疏丛,纤细,扁三棱形;叶片狭,扁平或对折;苞片先端刚毛状或芒状,鞘极短;小融2~3枚;雄小穗顶生,棒状条形;雌小穗1~2侧生,近球形至矩圆形;果囊革质。花期6~7月。

【分布】东北,内蒙古、陕西、甘肃、新疆;蒙古、俄罗斯(西伯利亚、远东)。

【生境】沙质草原和山地草原。

【用途】饲用。

### Yellowpocket sedge

Sedge family

Perennial herb with rhizomes; culms  $20{\sim}40$  cm tall, loosely cespitose, slender, flattriangular; leaves narrow, flat or folded; bracts setaceous to aristiform at apex, sheaths very short; spikes  $2{\sim}3$ ; terminal spike staminate, clavate-linear; lateral spikes  $1{\sim}2$ , pistillate, subglobose to oblong; perigynia coriaceous. Flowering June to July.

**Distribution:** NE China, Inner Mongolia, Shaanxi, Gansu and Xinjiang; Mongolia and Russia (Siberia and Far East)

Habitat: Sandy steppe and montane-steppe

## 大穂苔草

## Carex rhynchophysa C. A. Mey.

莎草科

Cyperaceae

【特征】多年生草本,具根茎和匍匐枝; 秆高50~100cm,粗壮,三棱形;基部叶鞘无叶片,上部叶鞘有叶片;叶片扁平;苞片叶状,长于花序,通常无鞘,稀具短鞘;小穗5~10枚,雄雌顺序;雄小穗条状;雌小穗圆柱状,花密生;果囊膜质,水平展升。花期6~7月。

【分布】东北,内蒙古、新疆;朝鲜、日本、中亚和欧洲。

【生境】河漫滩和湖滨沼泽。

【用途】饲用。

#### Largespike sedge

Sedge family

Perennial herb with rhizomes and stolons; culms  $50 \sim 100$  cm tall, robust, triangular; basal sheath without blade, upper sheath with flat blade; bracts leaf-like, longer than inflorescence, usually without sheath, rarely short-sheathing; spikes  $5 \sim 10$ , androgynous; staminate spikes linear; pistillate spikes terete with dense florets: membranous perigynia horizontally spreading. Flowering June to July.

Distribution: NE China, Inner Mongolia and Xinjiang; Korea, Japan, Central Asia and

Europe

Habitat: Flood lands and lakeshore swamps



## 槽鳞扁莎

## Pycreus korshinskyi (Meinsh.) V. Krecz.

莎草科

Cyperaceae

【特征】一年生草本; 秆高5~45cm、丛生, 稀单生, 三棱形; 叶条形, 扁平; 苞片 2~3, 叶状, 比花序长1~2倍; 长侧枝聚伞花序头状, 辐射枝1~4不等长; 小應多数, 长卵形或矩圆形, 具小花5~15; 鳞片两侧具宽槽。花期7~8月。

【分布】全国各地;蒙古、朝鲜、日本、俄罗斯(远东)。

【生境】草甸和河岸沙地。

【用途】饲用。

### Scaly flatsedge

Sedge family

Annual herb; culms  $5\sim45$  cm tall, cespitose, rarely single, triangular; leaves linear, flat; bracts  $2\sim3$ , leaf-like, once to twice longer than inflorescence; cymes capitate at long branches, radiate branches  $1\sim4$ , unequal in length; spikelets many, long-ovate to oblong, with  $5\sim15$  florets; scales bilaterally wide-sulcate. Flowering July to August.

Distribution: Throughout whole China; Mongolia, Korea, Japan and Russia (Far East)

Habitat: Meadows and sands along riverbanks





## 水葱

## Scirpus validus Vahl

莎草科

Cyperaceae

【特征】多年生草本; 秆高30~130cm, 直立, 中空; 常无叶片, 仅上部具短而狭的叶片; 总苞片1, 为秆的延伸、稀2; 花序圆锥状, 长枝假侧生, 辐射枝3~8; 小穗单生或2~3枚聚生, 卵状或圆筒状; 鳞片红褐色, 常具紫红色瘤状突起。花期7~8月。

【分布】东北、华北、西南,甘肃、新疆、江苏;朝鲜、日本、俄罗斯(西伯利亚、 远东)、中亚、欧洲、大洋洲、北美。

【生境】沼泽和沼泽草甸。

【用途】饲用。

#### Softstem bulrush

Sedge family

Perennial herb; culms  $30\sim130$  cm tall, erect, hollow; leaves usually without blades, only upper sheath with short and narrow blade; involucial bracts 1, rarely 2, as a continuation of culm; inflorescence paniculate, long branches pseudo-lateral, radiate branches  $3\sim8$ ; spikelets solitary or  $2\sim3$  clustered, ovoid to cylindrical; scales red-brown, usually with purple-red strumae. Flowering July to August.

Distribution: NE, N and SW China, Gansu, Xinjiang and Jiangsu; Korea, Japan, Russia (Siberia and Far East), Central Asia, Europe, Oceania and North America

Habitat: Swamps and marsh-meadows



## 细灯心草

Juncus gracillimus (Buch.) Krecz. et Gontsch.

灯心草科

Juncaceae

【特征】多年生草本,高30~50cm; 茎丛生,直立; 基生叶1~2片,狭条形; 叶鞘松 弛抱茎,具圆形叶耳; 复聚伞花序顶生,花多数; 花被片6,2轮排列,边缘 膜质; 蒴果卵球形; 种子细小,极多数。花期6~7月。

【分布】长江以北各省区;蒙古、朝鲜、日本、俄罗斯(远东)。

【生境】沼泽或沼泽草何。

【用途】饲用。

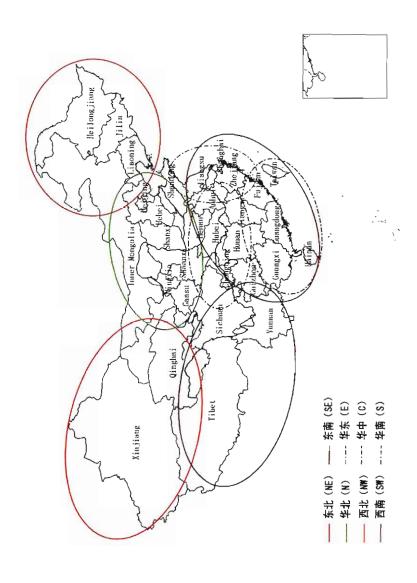
#### Slender rush

Rush family

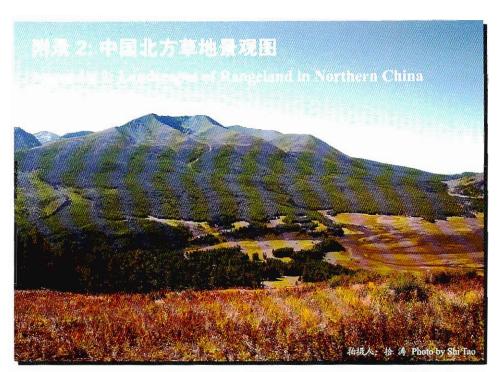
Perennial herb 30~50 cm tall; culms cespitose, erect; basal leaves 1~2, narrowly linear; sheaths loosely clasping, with orbicular auricle: numerous flowers in a terminal compound cyme; tepals 6, dicyclic, with membranous edges; capsule ovoid: tiny seeds much numerous. Flowering June to July.

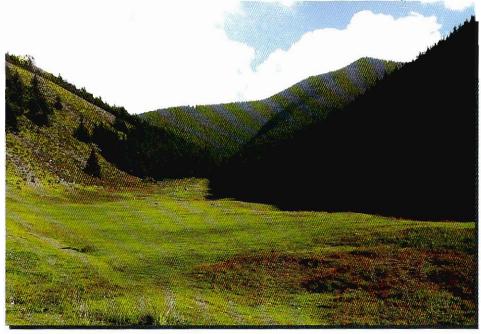
Distribution: Regions to north of Changjiang River; Mongolia, Korca, Japan and Russia (Far Fast)

Habitat: Swamps and marsh-meadows



附录 1: 中国地理区域示意图 Appendix 1: Geographical regions of China



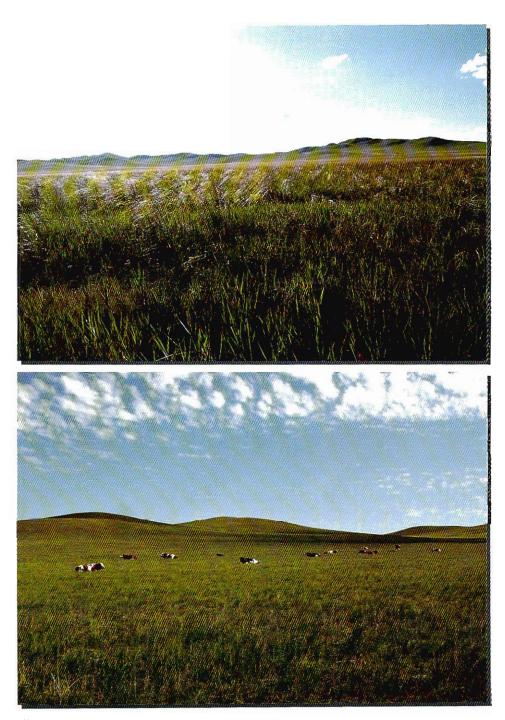


森林草甸 Forest-meadow

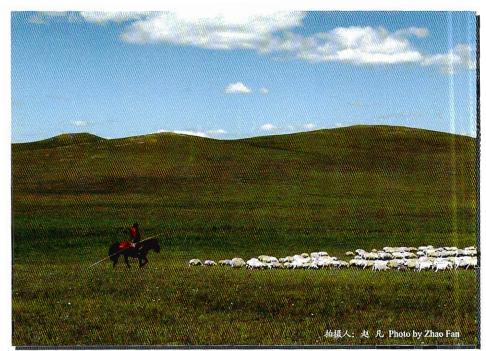


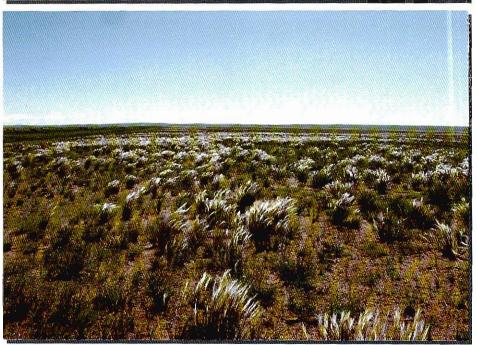


草甸 Meadow



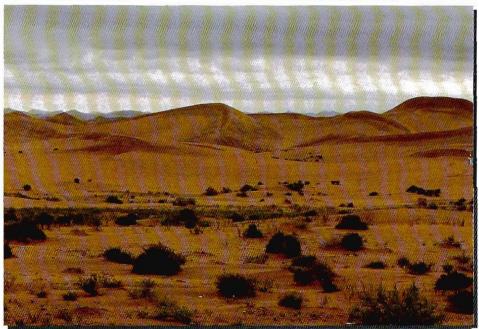
草原 Steppe



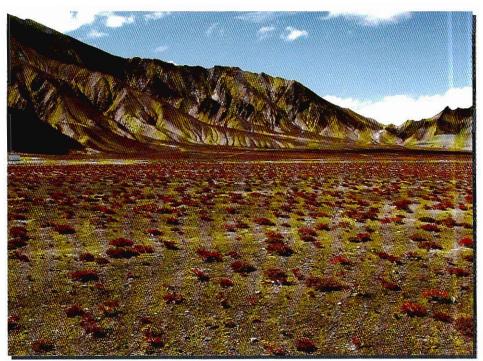


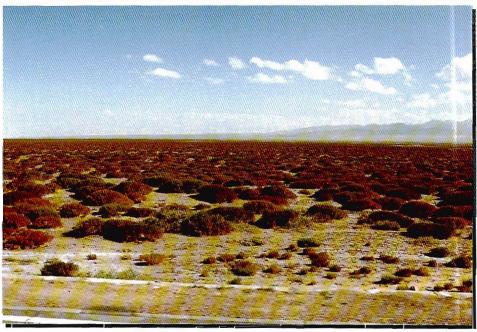
草原 Steppe



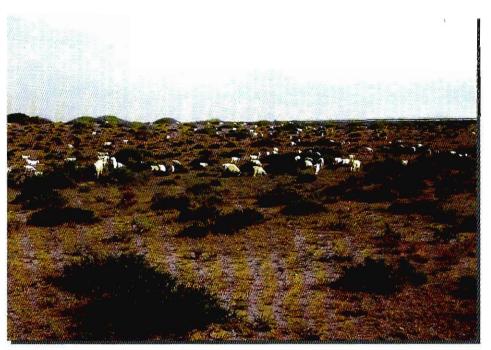


沙漠 Sandy desert



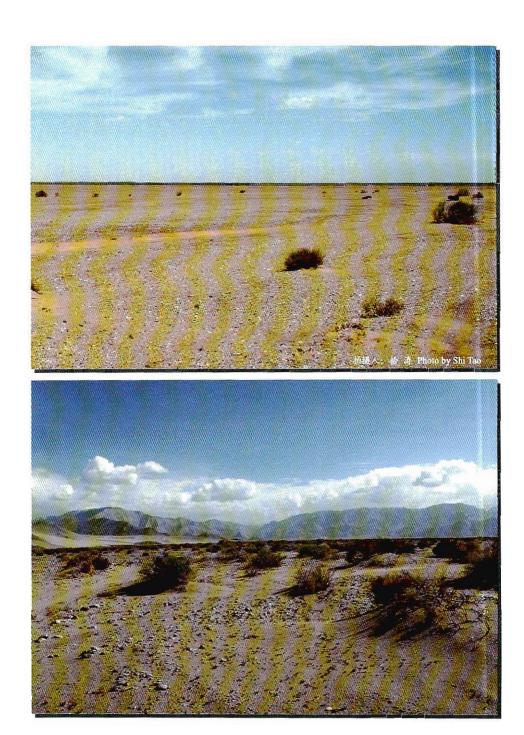


盐漠 Salty desert





荒漠 Desert



戈壁 Gobi

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