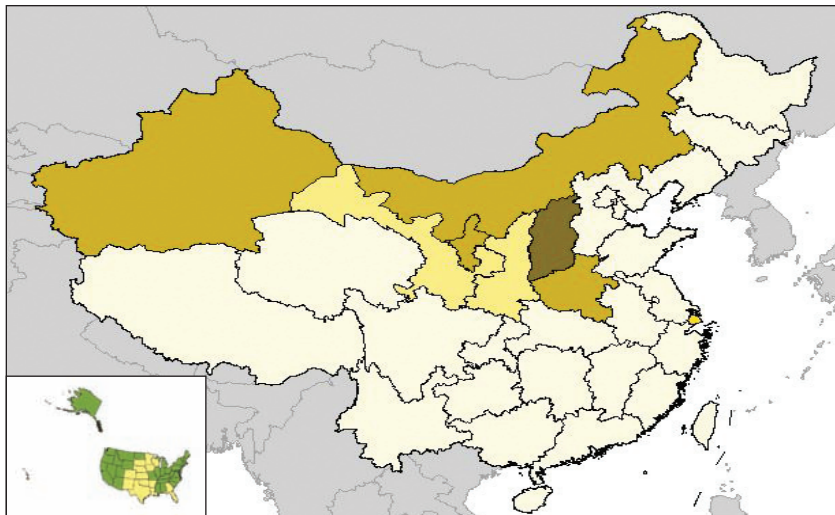


Agrostis tenuis Bentgrass

Introduction

Agrostis is a genus that includes about 200 species worldwide. The main distribution is in the cooler areas of temperate zones, especially in the northern hemisphere. At least 32 species and 10 varieties of the genus are reported in China. Most of them are forage favored by livestock such as cattle and horses ^[180].



Species of *Agrostis* in China

Scientific Name	Scientific Name
<i>A. arisan-montana</i> Ohwi.	<i>A. micrantha</i> Steud.
<i>A. canina</i> L.	<i>A. morrisonensis</i> Hayata
<i>A. clavata</i> Trin.	<i>A. myriantha</i> Hook. f.
<i>A. contracta</i> Y. C. Tong ex Y. C. Yang	<i>A. perlaxa</i> Pilger
<i>A. divaricatissima</i> Mez	<i>A. pubicallis</i> Keng ex Y. C. Yang
<i>A. eriolepis</i> Keng ex Y. C. Yang	<i>A. rupestris</i> All.
<i>A. flaccida</i> Hack.	<i>A. schneideri</i> Pilger
<i>A. fukuyamae</i> Ohwi	<i>A. sibirica</i> V. Petr.
<i>A. gigantea</i> Roth	<i>A. sinkiangensis</i> Y. C. Yang
<i>A. hookeriana</i> Clarke ex Hook. f.	<i>A. subaristata</i> Aitch. et Hemsl.
<i>A. hugoniana</i> Rendle	<i>A. tenuis</i> Sibth.
<i>A. inaequiglumis</i> Griseb.	<i>A. transmorrisonensis</i> Hayata
<i>A. limprichtii</i> Pilger	<i>A. trinii</i> Turcz.
<i>A. matsumurae</i> Hack. ex Honda	<i>A. turkestanica</i> Drob.
<i>A. megathyrsa</i> Keng	

The above list of species is recorded in *Flora Reipublicae Popularis Sinicae* published in the late 1980s ^[180]. Recently, some new taxa, including three species (*A. pilosula* Trin., *A. lushuiensis* B. S. Sun et Y. C. Wang, and *A. kunmingensis* B. S. Sun et Y. C. Wang) and two varieties (*A. pilosula* Trin. var. *wallichiana* [Steud.] Bor. and *A. myriantha* Hook. f. var. *yangbiensis* B. S. Sun et Y. V. Wang), were identified ^{[148][147]}.

Taxonomy

Family: Gramineae (Poaceae)
Genus: *Agrostis* Linn.

Description

Agrostis tenuis is a perennial grass that can reach 20-25 cm in height. Rhizomes are short; slender culms about 1 mm in diameter, with three

to four nodes clump at the base, and then become erect. Leaf sheaths are smooth and often taller than the internode. Ligules are dry and membranous, about 1 mm long, with a truncate apex. The thick leaves are flat and narrow, 2-4 cm long and 1-1.5 mm wide, acuminate apically and often rolled in dry conditions. Nearly elliptic in shape, panicles are

spreading with two to five branches at each node. Spikelets are purple-brown, elliptical to lanceolate, 1.5-1.7 cm long and coarse on the surface, with awnless lemma. Flowers appear in August, with golden anthers 0.8-1 mm long ^[180].

Distribution

A. tenuis occurs in and Shanxi provinces ^{[75][180]}, and probably in Henan, Ningxia^[116], Inner Mongolia^[121], and Xinjiang provinces^[21].

Habitat

In China, bentgrass commonly grows in wetlands, ^[75] especially in moist grasslands^[180] at elevations of 1000 - 1500 m. In some areas of Xinjiang, the grass is found in oases, meadows, and cultivated areas at elevations of 800 - 2300 m ^[21].

Economic Importance

Bentgrass is grown as a lawn grass in some areas.

Related Species

Agrostis sibirica V. Petr. can be differentiated from *A. tenuis* by its yellowish green spikelets and lanceolate leaves; *A. sibirica* occurs in roadside wetlands at an elevation of 400 m in the provinces of northeastern China ^[180].

Natural Enemies of *Agrostis*

Thirteen fungi, and four insect species are recorded as associated with plants

of the genus *Agrotis* in China. Two fungi, *Puccinia agrostidicola* Tai and *Puccinia recondita* Rob. et Desm. f. sp. *agrostidis* D. M. Hend. may have narrow host ranges. All four insect species are polyphagous.

Fungi

Phylum	Family	Species	H. R.	Ref.
Ascomycota	Clavicipitaceae	<i>Claviceps purpurea</i> (Fr.) Tul.	po	23
Basidiomycota	Pucciniaceae	<i>Puccinia agropyricola</i> Hiratsuka	po	149
		<i>Puccinia agrostidicola</i> F.L. Tai	o	23
			o	149
		<i>Puccinia brachypodii</i> var. <i>poae-nemoralis</i> (G.H. Otth) Cummins & H.C. Greene	po	23
			po	149
		<i>Puccinia coronata</i> Corda	po	23
			po	149
		<i>Puccinia coronata</i> var. <i>himalensis</i> Barclay	po	149
		<i>Puccinia graminis</i> Pers.	po	149
		<i>Puccinia pygmaea</i> Erikss.	po	149
		<i>Puccinia rangiferina</i> S. Ito	po	23
po	149			
<i>Puccinia recondita</i> f.sp. <i>agrostidis</i> D.M. Hend.	o	23		
<i>Puccinia recondita</i> Dietel & Holw.	po	149		
	Ustilaginaceae	<i>Ustilago striiformis</i> (Westend.) Niessl	po	54
Oomycota	Pythiaceae	<i>Pythium mamillatum</i> Meurs	po	188

Arthropods

Order	Family	Species	H. R.	Ref.
Hemiptera	Piesmatidae	<i>Piesma quadratum</i> (Fieber)	po	106
Homoptera	Pseudococcidae	<i>Saccharicoccus penium</i> Williams	po	152
		<i>Trionymus thulensis</i> Green	po	152
Lepidoptera	Noctuidae	<i>Agrotis ipsilon</i> (Hufnagel)	po	190†

† Recorded as *Agrotis ypsilon* (Rottemberg)