# 150．TRAGUS Haller，Hist．Stirp．Helv．2：203．1768，nom．cons． 

锋芒草属 feng mang cao shu
Chen Shouliang（陈守良）；Sylvia M．Phillips
Nazia Adanson，nom．rej．
Annuals or perennials．Leaf blades narrow，flat；ligule a line of hairs，sometimes from a membranous base．Inflorescence linear， cylindrical，spikelike，dense，axis bearing numerous very short racemes；racemes subsessile or shortly pedunculate，falling entire as spiny burrs；spikelets $2-5$ ，contiguous or on a short rachis，sometimes the upper reduced．Spikelets elliptic to lanceolate，floret 1 ； lower glume a tiny scale or suppressed；upper glume as long as spikelet，rounded，prominently $5-7$－veined，veins forming ribs armed with conspicuous，stout，hooked spines，thin between ribs，apex acute to acuminate；lemma ovate，almost as long as glume，flattened， membranous，3－veined，pubescent around midvein，apex entire；palea slightly shorter than lemma．Caryopsis ellipsoid to oblong， slightly dorsally compressed．

Seven species：tropical and warm－temperate regions of the Old World；introduced in America；two species in China．
Both species occurring in China have been confused with the Mediterranean，African，and SW Asian Tragus racemosus（Linnaeus）Allioni， which differs in having 7 veins（vs．5）in the upper glume．

1a．Lower spikelet 3．5－4 mm，upper spikelet subequal，3．2－3．7 mm；apex of upper glume extended beyond spines as long point

1．T．mongolorum
1b．Lower spikelet 2－3 mm，upper spikelet clearly smaller， $1.5-2.2 \mathrm{~mm}$ ；apex of upper glume scarcely extended beyond spines

2．T．berteronianus

1．Tragus mongolorum Ohwi，Acta Phytotax．Geobot．10： 268． 1941.

锋芒草 feng mang cao

## Tragus roxburghii Panigrahi．

Annual，mat－forming．Culms tufted，ascending from pro－ strate base，rooting at nodes，up to 25 cm tall．Leaf sheaths usu－ ally shorter than internodes，uppermost longer，inflated，often clasping base of inflorescence；leaf blades broadly linear，tough， flat，glaucous，3－8 cm，2－4 mm wide，margins thick，pectinate－ spinose，apex acute．Inflorescence $3-6 \times \mathrm{ca} .0 .8 \mathrm{~cm}$ ；racemes of 2 subequal contiguous spikelets，rachis internode ca． 0.2 mm ； rachis extension absent or up to 1.5 mm beyond upper spikelet， sometimes bearing rudimentary 3rd spikelet，this often reduced to a row of spines；basal peduncle $0.3-0.5 \mathrm{~mm}$ ．Lower spikelet fertile，elliptic，3．5－4 mm；lower glume very small，membran－ ous；upper glume 5－ribbed，ribs bearing hooked，thick－based spines，apex acuminate－attenuate；lemma ovate－lanceolate，ca． 3 mm ，puberulous，apex sharply acute．Upper spikelet similar to lower but slightly smaller，3．2－3．7 mm，fertile．Fl．and fr．Jul－ Sep．

Hill slopes，roadsides，a weed of cultivation．Gansu，Hebei，Nei Mongol，Ningxia，Qinghai，Shanxi，Sichuan，Xizang，Yunnan［India， Malaysia，Myanmar，Pakistan，Thailand；Indian Ocean Islands（Masca－ renes）］．

This species has been widely known under the name Tragus biflorus Schultes，which is illegitimate because it was nomenclaturally
superfluous when published．Panigrahi replaced T．biflorus with $T$ ． roxburghii，but overlooked Ohwi＇s earlier name，T．mongolorum，which was validly published，is legitimate，and is therefore the correct name for the species．

The spiny burrs cling easily to skin and clothing．
2．Tragus berteronianus Schultes，Mant．2： 205.1824.

## 風子草 shi zi cao

Tragus racemosus（Linnaeus）Allioni var．berteronianus （Schultes）Hackel；T．tcheliensis Debeaux．

Annual，mat－forming．Culms tufted，usually decumbent at base and rooting at lower nodes， $15-30 \mathrm{~cm}$ tall．Leaf sheaths shorter than or subequal to internodes；leaf blades broadly line－ ar，tough，flat，glaucous，3－7 cm，3－4 mm wide，margins thick， pectinate－spinose，apex acute．Inflorescence $4-11 \times \mathrm{ca} .0 .5 \mathrm{~cm}$ ； racemes of 2 unequal spikelets separated by a $0.4-0.6 \mathrm{~mm}$ ra－ chis internode；rachis not extended beyond upper spikelet；basal peduncle $0.2-0.4 \mathrm{~mm}$ ．Lower spikelet fertile，elliptic，2－3 mm； lower glume suppressed；upper glume 5－ribbed，ribs bearing hooked，swollen－based spines，apex acute；lemma ovate－lanceo－ late， $1.8-2.1 \mathrm{~mm}$ ，puberulous，apex sharply acute．Upper spike－ let sterile，narrowly elliptic， $1.5-2.2 \mathrm{~mm}$ ，often reduced to the upper glume．Fl．and fr．summer to autumn． $2 n=20$ ．

Roadsides，other weedy places．Anhui，Gansu，Hebei，Jiangsu，Nei Mongol，Shaanxi，Sichuan［Afghanistan，Pakistan；Africa，America， SW Asia］．

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