

毫米。花期6月。

产河北、四川西北部。生于山坡草地，海拔1350—3300（—4300）米。模式标本采自河北东陵。

162. 大药早熟禾 (西北植物学报)

Poa macroanthera D. F. Cui in Act. Bot. Bor Occ. Sinica 7 (2): 100, 图9. 1987; 新疆植物志 6: 98, 图版 35. 1996.

多年生，疏丛。秆高40—50厘米，具4—5节，平滑无毛。叶鞘短于其节间，平滑无毛；叶舌长1.5—3毫米，两侧稍有微刺毛；叶片长6—8厘米，宽1—3毫米，两面及边缘平滑无毛。圆锥花序开展，长8—15厘米；分枝长达8厘米，下部长裸露，小枝先端具1—2小穗；小穗长6—7（—9）毫米，含3—4（—5）小花，着花稀疏，宽5—7毫米；小穗轴细长，平滑无毛，长2毫米，外露；第一颖长3—5毫米，具3脉，第二颖长4—5毫米；外稃质地薄，5脉明显，第一外稃长5.5毫米，脊中部与边脉1/3以下及间脉基部均生柔毛，基盘具少量绵毛；内稃较外稃短1/4，两脊微糙；花药长3毫米，退化花药长约0.5毫米。花期6—7月。

产新疆（和静、博克达山马牙山）。生于山谷河旁、林缘亚高山森林草甸，海拔2500—2800米。模式标本采自新疆和静。

163. 恒山早熟禾 (禾本科图说) 图版 21: 10

Poa hengshanica Keng ex L. Liu, in Addenda; 中国主要植物图说·禾本科 176, 图127. 1959; 河北植物志 2: 1169. 1984; 横断山区维管植物 2: 2193. 1994, sine latin. descr.

多年生。秆高50—60厘米，具2—3节，压扁，多少粗糙。叶鞘微粗糙，顶生者长约10厘米，短于其叶片；叶舌长1—2毫米；叶片扁平，长12—17厘米，宽1—2毫米，上面粗糙。圆锥花序长15—20厘米，宽约4厘米；分枝每节3枚，糙涩，主枝长达8厘米，上部疏生小穗；小穗倒卵形，较大，长5—7毫米，含3—5小花；小穗轴具微毛；颖具3脉，先端锐尖，微粗糙，第一颖长3.5—5毫米，第二颖长4—5毫米，稍宽，具5脉；外稃先端具少些膜质，其下带紫色，间脉不甚明显，长3.5—5毫米，脊中部以下和边脉下部1/3具长柔毛，基盘具少量绵毛；内稃稍短，两脊中部具纤毛；花药长约2毫米。花期6—7月。

产河北、四川北部。生于山坡阳处湿润草地。模式标本采自河北涞源。

164. 变色早熟禾 (横断山区维管植物) 图版 20: 6

Poa versicolor Boss. in Enum. Pl. Volhyn. 41. 1821; Roshev. in Kom. Fl. URSS 2: 399, Pl. 30. fig. 1. 1934; Fl. Recp. Soc. Roaman. 12: 407. 1972; Tzvel. in Fed. Poac. URSS 472. 1976; Edm. in Tutin et al. Fl. Europ. 5: 163. 1980; 横断山区维管植物 2: 2193. 1994. — *Poa sterilis* var. *versicolor* Griseb. in Ledeb. Fl. Ross. 4: 375. 1853.



图版 21 早熟禾属 *Poa* 各种小穗。1. 细早熟禾 *P. debillior* Hitchc.。2. 糙叶早熟禾 *P. asperifolia* Bor. 3. 疏穗早熟禾 *P. lipskyi* Roshev.。4. 多鞘早熟禾 *P. polycolea* Stapf. 5. 那菲早熟禾 *P. nephetophila* Bor. 6. 拉哈尔早熟禾 *P. lahulensis* Bor. 7. 毛轴早熟禾 *P. pilipes* Keng. 8. 喀斯早熟禾 *P. khasiana* Stapf. 9. 罗氏早熟禾 *P. rossbergiana* Hao. 10. 恒山早熟禾 *P. hengshanica* Keng ex L. Liu. (刘平绘)

clausae, summa 5.5—10cm longa, lamina sua longiore; ligula membranacea, truncata, 0.5—1mm longa; laminae tenerae, 2.5—4cm surculariae usque ad 1111cm longae, 0.5—1mm latae, planae, glabrae vel supra minime puberulae; panicula angusta, 7—9cm longa, ramis binis, gracilibus, inferne levibus, superne scaberulis, basalibus 4.5—5.5cm longis, in $\frac{2}{3}$ inferiore nudis, ramulis apicum versus 2—5-spiculatis; spiculae 4—5mm longae, 2—3-florae, prasiniae; glumae lanceolatae, acutae, marginibus anguste membranaceis, carina superne scaberula, prima 2—3mm longa, 1-nervi, secunda 3—4mm longa, 3-nervi; lemmata lanceolata, acuta, antice anguste emembranacea, nervis intermediis haud valde distinctis, medianis in $\frac{2}{3}$ marginalibus in $\frac{1}{2}$ inferiore breviter pilosis, callo mederatim lanuginoso, lemmate primo circ. 4mm longo; palea lemmate $\frac{1}{2}$ — $\frac{2}{3}$ brevior, carinis sparse longeque ciliolatis; antherae circ. 0.6 mm longae; caryopsis immatura.

Sichuan: W. P. Fang 1581 (Typus, JSBI)

Poa grandispica Keng ex L. Liu, sp. nov.

Haec species ad Ser. Palustrem pertinet, sed ex omnibus speciebus huius seriei dieffert paniculae magnae ramis e basi dense pluri-spiculatis, spiculis majoribus, 7—10mm longis, 8—10floris, et planta 6—8-nodi.

perennis, rhizomatis brevibus; radices fibrosae crassiores; culmi laxe caespitosi, erecti et robustiores, 6—8-nodes, circ. 50cm alti, circ. 3mm crassi, sub panicula scabriusculi; vaginae scabrae, aquitantes, internodiis longiores, summa medium culmi superante, 6—8cm longa, lamina sua ditiplo-breviore; ligula membranacea, obtusa vel acuta, 2—4mm longa; laminae planae vel marginibus involutae, utrinque scabrae, 14—22cm longae, 4—5mm latae; panicula ovata vel oblonga, dense spiculata, viridis (juvenis), 12cm longa, 2.5—6cm lata, ramis 3—5-natis, scabris, ascendentibus, basalibus usque ad 6cm longis, e basi vel prope basin spiculas gerentibus; spiculae ovato-oblongae vel lanceolatae, (5—) 7—10 mm longae, (5—) 8—11-florae, rhachilla glabra et leviter scabra; glumae lanceolatae, acuminatae 3-nerviae, nervis superne scabris, prima 3.5—4mm longa, secunda 4.5—5mm longa; lemmata oblongo-lanceolata, nervis intermediis leviter distinctis, medianis in $\frac{1}{2}$ marginalibus in $\frac{1}{3}$ inferiore pilosis, callo sparse lanuginoso, lemmatae primo (3—) 4—4.5mm longo; paulo brevior, carinis superne ciliolatis; antherae circ. 2mm longae.

Hebei: Neiqiu, ad pratum declivitatis crescens, alt. 1150m, 13 VII 1950, Y. Liu 13059 (Typus, JSBI).

Poa hengshanica Keng ex L. Liu, sp. nov.

Species *P. mongolicae* (Rendle) Keng valde similis, sed spiculis majoribus, 6—7mm longis, glumis longioribus, 3.5—5mm longis, ramis paniculae multioribus, et ligula longiore

reccedit.

Perennis, radicibus fibrosis; culmi erecti, circ. 50—60cm alti, 2—3-nodes, superne nudiscabrique; vaginae internodiis longiores, leviter scaberulae, summa 8—10cm longa, lamina sua (circ. 17 cm longa) brevior; ligula 1—2mm longa, membranacea, obtuso-rotundata, basi flavo-brunnea; laminae planae, infra leves, supra scabrae, 12—17cm longae, 1—2mm latae; panicula oblongo-lanceolata, 14—20cm longa, circ. 4cm lata, ramis 3-natis, scabris, ascendentibus, in $1/4$ — $2/3$ inferne nudis, superne laxe spiculatis, basalibus usque ad 8 cm longis; spiculae obovatae et oblanceolatae, 5—7mm longae, 3—4-florae, articulis rhachillae dorso minute puberulis; glumae lanceolatae vel ovato-lanceolatae, acuminatae, 3-nerviae, carina scaberula, prima 3.5—5mm longa, secunda 4—5mm. longa; lemmata lanceolato-oblonga, apice leviter membranacea, infra apicem membranaceum purpureo-tincta, nervis intermediis fere obscuris, medianis infra medium marginalibus in $1/3$ inferiore longiuscule pilosis, callo sparse lanuginoso, lemmatae primo 3.5—5mm longo; palea lemmate paulo brevior, carinis ad partem mediam ciliolatis; antherae 1.8—2.2mm longae.

Hebei: Laiyuan, ad terram humidam crescens, alt. 1350, 24 VIII 1934, K. M. Liu 2985 (Typus, JSBI).

Poa incerta Keng ex L. Liu, sp. nov.

Species *P. viridulae* Palib. in valde similis, sed culmo infra paniculam scabro, ramis paniculae saepissime geminis, et glumis longioribus, 3—3.5mm longis differt.

Perennis, radicibus fibrosis; culmi caespitosi, erecti, 60—70cm alti, circ. 1mm crassi, superne nedi, leves vel scabri, 3—4-nodes, nodo supremo e basi culmi 15—21 cm remoto; vaginae scaberulae, internodiis longiores vel breviores, summa circ. 13—14cm longa; ligula membranacea, obtusa, 1—3mm longa; laminae planae vel involutae, firmae et saepe erectae, infra leves, supra scabrae, 5—11cm longae, 1.5—2mm latae; panicula angusta vel linearis, viridis vel purpurea, 7—11cm longa, circ. 1mm lata, ramis binis, scabris, erectis, basalibus usque ad 6cm longis, infra medium nudis; spiculae obovato-lanceolatae, 2—3-florae, (3—) 4—5mm longae, interdum viviparae, rhachilla scaberula; glumae lanceolatae et ovato-lanceolatae, acuminatae, punctate scabrae, 3-neriae, prima 3mm longa, secunda 3—3.5mm longa; lemmata lanceolato-oblonga, apice leviter membranacea, nervis intermediis obscuris, medianis in $1/2$ marginalibus in $1/3$ inferiore pilosis, callo sparse lanuginoso, lemmate primo 3—3.5 mm longo; palea lemmate paulo brevior vel longior, inter carinas scabras puberula; anthera 1.2mm longae.

Shanxi: Wutai, ad declivitatem crescens, alt. 2200m, 12 VII 1929, T. Tang 1073 (Typus, JSBI).