

短柄。雌花鳞片长圆状卵形，顶端锐尖，长4—5毫米，两侧深紫红色，背面中间绿色，边缘具狭的白色膜质。果囊短于鳞片，长圆形或倒卵形，三棱形，长3—3.5毫米，革质，麦秆黄色，上部暗紫红色，脉不明显，基部具短柄，顶端急缩成短喙，喙口微凹。小坚果倒卵形或倒卵状长圆形，长约2毫米，淡黄褐色；花柱基部不膨大，柱头3个。

花果期6—8月。

产新疆；生于山坡阴处和高山草甸，海拔2 500—4 500米。分布于蒙古、俄罗斯（西伯利亚）和中亚地区。

42. 青藏薹草（中国高等植物图鉴） 图版18：9—12

Carex moorcroftii Falc. ex Boott in Trans. Linn. Soc. **20**: 140, 1846. et Illustr. Carex **1**: 9, t. 27, 1858; Egorora in Grubor. Pl. As. Centr. **3**: 67, 1967; 中国高等植物图鉴**5**: 291, 图7412, 1976; 西藏植物志**5**: 425, 图245, 1987; 横断山区维管植物下册: 2372, 1994. ——*C. melanantha* var. *moorcroftii* (Boott) Kükenth. in Engl., Pflanzenr. Heft **38** (IV. 20): 391, 1909. pro parte.

匍匐根状茎粗壮，外被撕裂成纤维状的残存叶鞘。秆高7—20厘米，三棱形，坚硬，基部具褐色分裂成纤维状的叶鞘。叶短于秆，宽2—4毫米，平张，革质，边缘粗糙。苞片刚毛状，无鞘，短于花序。小穗4—5个，密生，仅基部小穗多少离生；顶生1个雄性，长圆形至圆柱形，长1—1.8厘米；侧生小穗雌性，卵形或长圆形，长0.7—1.8厘米；基部小穗具短柄，其余的无柄。雌花鳞片卵状披针形，顶端渐尖。长5—6毫米，紫红色，具宽的白色膜质边缘。果囊等长或稍短于鳞片，椭圆状倒卵形，三棱形，革质，黄绿色，上部紫色，脉不明显，顶端急缩成短喙，喙口具2齿。小坚果倒卵形，三棱形，长约2—2.3毫米；柱头3个。花果期7—9月。

产青海、四川西部、西藏；生于高山灌丛草甸、高山草甸、湖边草地或低洼处，海拔3 400—5 700米。分布锡金。模式标本采自西藏。

43. 岷县薹草 图版19：5—8

Carex minxianensis S. Y. Liang in Addenda, 522—523, 1999.

根状茎具匍匐茎。秆高25—40厘米，三棱形，平滑，上部稍粗糙，基部叶鞘褐色，分裂成纤维状。叶短于秆，宽2—3毫米，平张，先端渐尖。苞片上部的鳞片状，最下部的刚毛状，基部耳状抱茎。小穗4—6个，顶端1个雄性，圆柱形，长1.2—3厘米；侧生小穗雌性，长圆形至圆柱形，长1—2.5厘米，花密生，无柄或最下部的稍远离，具柄。雌花鳞片卵状披针形，顶端渐尖，具小尖头。长4.5—5毫米，暗紫红色，有时边缘为狭的白色膜质，脉1条。果囊短于鳞片，卵形，三棱形，长3.5—4毫米黄绿色，基部渐狭，顶端急缩成短喙，喙黑紫红色，喙口具短2齿。小坚果紧包于果囊中，倒卵形，三棱形，长约2毫米；柱头3个。花果期6—7月。

产甘肃（岷县）；生山谷潮湿处，海拔3 000米。模式标本采自甘肃岷县。



图版 19 1—4. 红原薹草 *Carex hongyuanensis* Y. C. Tang et S. Y. Liang; 1. 花序, 2. 雌花鳞片, 3. 果囊,
4. 小坚果; 5—8. 岷县薹草 *C. minxianensis* S. Y. Liang, :5. 植株, 6. 雌花鳞片, 7. 果囊, 8. 小坚果。(李爱莉绘)

附录

ADDENDA

DIAGNOSES PLANTARUM NOVARUM IN HOC TOMO DESCRIPTARUM

本卷新种拉丁文记载

(April, 1999)

Subgen. 2 Carex

Sect. 11 Atratae Kunth

37. **Carex hongyuanensis** Y. C. Tang et S. Y. Liang sp. nov.

Haec species C. meyeriana Kunth affinis, sed spiculis pistillatis cylindricis, 10—15mm longis, ima spicula pedunculata differt.

Rhizoma lignosum. Culmus ad 50 cm altus, triqueter, laevis, superne scaber, basi vaginis atro-brunneis obtectus. Folia culmo breviora, 3—4mm lata, plana, margine scabra. Bractae inflorescentia breviores, haud vaginantes, ima foliacea. Spiculae 4, approximatae, terminalis staminata, cylindrica, 2.3—2.5cm longa, 2—4mm lata, pedunculo 4mm longo, laterales pistillatae cylindricae, 1—2.5cm longae, 5—6mm latae, densiflorae, basi pedunculo 1—2.7cm longo. Squamae pistillatae oblongae, apice obtusae, ca. 3.5 mm longae, 1.5mm latae, atro-brunneae, dorso flavido 1-nervii. Utriculi squamis longiores, ellipsoidei. compresso-trigoni, 4mm longi, 2mm lati, flavo-virentes, glabri, 7-9-nervii, basi contracti, apice in rostrum breve ore integro abrupte contracti. Stigmata 3.

Sichuan (四川): Hongyuan (红原), Longriba (龙日坝), Wamagou (洼玛沟), side of ditch, alt. 3550m. 1957-08-22, X. Li (李馨) 72247 (holotype, PE).

43. **Carex minxianensis** S. Y. Liang sp. nov.

Species C. moocroftii Falc. ex Boott affinis, sed a qua differt planta 30—55 cm alta, squamis pistillatis interdum margine anguste albo-hyalinis, apice acuminatis mucronatis.

Rhizoma stoloniferum. Culmus 25—40cm altus, triquierter, laevis, superne seabridius-culum, basi vaginis brunneis in fibras solutis obtectus. Folia culmo breviora, 2—3mm lata, plana, acuminata. Bracteae super squamiformes, ima setacea basi auriculata amplexicaulis. Spiculae 4—6, terminalis staminata cylindrica, 1.2—3cm longa, laterales pistillatae, oblongae vel cylindricae, 1—2.5 cm longae, densiflorae, sessiles vel ima remotiuscula pedunculata. Squamae pistillatae ovato-lanceolatae, acuminatae, mucronatae, 4.5—5 mm longae, atropurpureae, 1-nerviae. Utriculi squamis breviores, ovati, tricorni, 3.5—4 mm longi, flavi-virentes, basi attenuati, apice in rostrum breve atro-purpureum ore bidentatum abrupte contracti. Nux arcta inclusa, obovata, trigona, ca. 2 mm longa, Stigmata 3.

Gansu (甘肃): Minxian (岷县), damp place in valley alt. 3 000 m. 1936-07-1, T. P. Wang (王作宾) 4805 (holotype, PE).

Sect. 19 Mitratae Kiikenth.

86. *Carex foraminatiformis* Y. C. Tang et S. Y. Liang sp. nov.

Proxima *C. foraminata* C. B. Clarke, a qua planta molli, utriculis squamas subaequalibus, nuce medio haud constricto, inferne lateribus excavatis, stylo basi dilatato-annulato differt.

Rhizoma robustum. Culmus praeceter terminali foliorum axillis ortus, 30—40 cm altus, compressus, laevis, basi vaginis aphyllis fulvis in fibras solutis obtectus. Folia culmo longiora vel breviora, 6—12 mm lata, mollia, plana, utrinque laevia, margine scabra. Bracteae inferae breviter laminiferae superae setaceae spiculis breviores, longe vaginantes, 1—3.5 cm longae. Spiculae 4—5, terminalis staminata, cylindrica, 3—6 cm longa, 1.5—2 mm lata, pedunculo 2—5 cm longo; laterales pistillatae, remotae, cylindricae, 2—3.5 cm longae, ca. 4 mm latae, densiflorae, pedunculis 1—4.5 cm longis, inferae e vagina exsertae, superae inclusae. Squamae staminatae anguste ob lanceolatae, 6.5—8.5 mm longae, flavo-castaneae, dorso 1-nerviae apice acutae vel mucronatae. Squamae pistillatae oblongae, apice mucronatae, 2—2.5 mm longae, membranaceae, dorso flavo-virides 3-nerviae. Utriculi squamas subaequales, ovati, ca. 2.5 mm longi, prominentes multinerves, sparsim puberuli, subsessiles, apice in rostrum breve ca. 0.5 mm longum curvum ore emarginato abrupte abeunt. Nux arcta inclusa, ovata, 1.5—2 mm longa, fulva, medio haud constricta, inferne lateribus excavata, basi subsessilis, apice in rostrum breve abrupte contracta. Stylus basi dilatato-annulata persistenti; stigmata 3.

Guizhou (贵州): Jiangkou (江口), grass under woods, alt. 600 m. 1964-04-19, Z. S. Chang et al. (张志松等) 400372 (holotype, PE).