

急尖,长约3毫米,黑褐色,稍有光泽,背面具3条脉,麦稈黄色,两侧无脉;雄蕊3,花药线形;花柱较短,柱头2,细长。小坚果长圆状倒卵形,顶端具短尖,双凸状,长约鳞片1/2,黑色,表面具六角形网纹,网心突起呈密的细点。 花果期6月。

产于云南;生长于沼泽中。

2. 禾状扁莎 图版 LVIII, 1—4

Pycrus unioloides (R. Br.) Urb. Symb. Antill. II (1900) 164 —— *Cyperus unioloides* R. Br. Prodr. (1810) 216; Kunth, Enum. II (1884) 60; Kükenth. in Engl. Pflanzenr. Heft 101, IV, 20 (1936) 338.

根状茎短。秆丛生,细长,坚挺,三棱形,平滑,基部具少数叶。叶短于秆,宽约3毫米,折合或平张,较硬;叶鞘长,红棕色。苞片叶状,通常2枚,下面1枚长于花序;简单长侧枝聚繖花序具2—6个辐射枝;辐射枝有时短缩,有时长可达5厘米;小穗3—9个排列成穗状,长圆状披针形或披针形,扁平,长8—18毫米,宽3—4.5毫米,具10—22朵花;小穗轴多次迴折,无翅;鳞片近于革质,卵形,顶端急尖,长约4毫米,背面具3条脉,绿色,两侧无脉,呈麦稈黄色或有时为黄褐色;雄蕊3,花药线形,红棕色,药隔稍突出;花柱长,柱头2。小坚果宽倒卵形,扁双凸状,长约鳞片的1/4—1/3,初期黄白色,后呈黑色,表面具密的突起细点。 花期6—7月。

产于云南(昆明市);生长于山谷溪旁潮湿处。也分布于伊里安岛,印度、缅甸、越南、菲律宾、日本、非洲、澳洲以及美洲。

3. 浙江扁莎 图版 LVIII, 5—6

Pycrus chekiangensis Tang et Wang, sp. nov.

根状茎短,具细长须根。秆高52—60厘米,纤细,三棱形,平滑,基部叶少。叶短于秆,宽约4毫米,常折合,有时平张;叶鞘长,褐红色。苞片3枚,叶状,下面2枚较花序长;简单长侧枝聚繖花序具3—4个辐射枝,辐射枝最长达6厘米;每一辐射枝具4—9个小穗;小穗排列疏松,两侧小穗平展,椭圆形或长圆状卵形,压扁,长6—10毫米,宽3.5—5毫米,具6—12朵花;小穗轴呈多次迴折,四棱形,无翅;鳞片稍松的复瓦状排列,近于革质,卵形,顶端急尖,长4—5毫米,背面龙骨状突起,绿色,具3条较粗的脉,两侧无脉,麦稈黄色,有时稍带红棕色,具光泽;雄蕊3,花药线形,红棕色;花柱长,柱头2,细长。小坚果(不很成熟)倒卵形或椭圆形,双凸状,黄白色,表面具密的突起细点。 花期9月间。

产于我国浙江、台湾;生长在溪边潮湿的地方。

组 2. 球穗扁莎组 Sect. Globosi C. B. Clarke in Kew Bull. Add. Ser. VIII

(1908) 95; Kükenth. in Engl. Pflanzenr. Heft 101, IV, 20 (1936) 352.

一年生或多年生草本。秆丛生,基部具叶。长侧枝聚繖花序简单,疏展或聚缩;小穗线形,向外展开;鳞片近于复瓦状排列,棕色、栗色或黑棕色,顶端钝;雄蕊2,花药短,长圆形。小坚果倒卵形或倒卵状长圆形,扁双凸状。

4. 球穗扁莎 图版 LVIII, 7—10

Pycnus globosus (All.) Reichb. Fl. Germ. Excurs. (1830) 140; C. B. Clarke in Journ. Linn. Soc. Bot. XXXVI (1903) 203; E.-G. Camus in Lecomte, Fl. Gén. Indo-Chine VII (1912) 31; B. Schischk. in Kom. Fl. URSS. III (1935) 8——*Cyperus globosus* All. Auctuar. Fl. Pedem. (1789) 49; C. B. Clarke in Journ. Linn. Soc. Bot. XX (1883) 279 et XXI (1884) 47; Kükenth. in Act. Hort. Gothob. V (1929) 33 et in Engl. Pflanzenr. Heft 101, IV, 20 (1936) 352; Hand.-Mzt. Symb. Sin. VII (1936) 1247; Ohwi, Cyper. Jap. II (1944) 155; 侯寬昭等, 广州植物誌 (1956) 746.

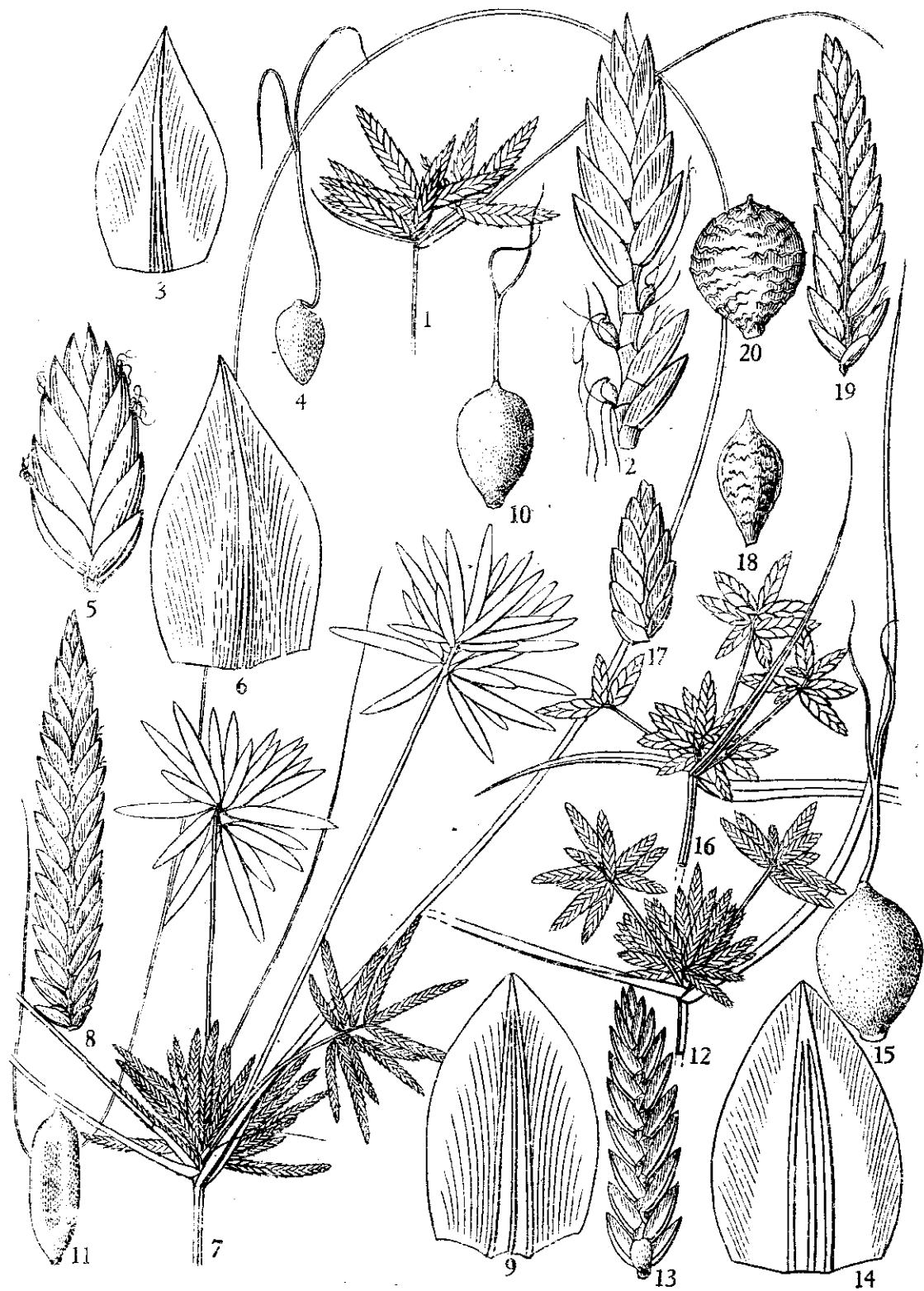
var. **globosus**

根状茎短,具须根。秆丛生,细弱,高7—50厘米,钝三棱形,一面具沟,平滑。叶少,短于秆,宽1—2毫米,折合或平张;叶鞘长,下部红棕色。苞片2—4枚,细长,较长于花序;简单长侧枝聚繖花序具1—6个辐射枝,辐射枝长短不等,最长达6厘米,有时极短缩成头状;每一辐射枝具2—20余个小穗;小穗密聚于辐射枝上端呈球形,辐射展开,线状长圆形或线形,极压扁,长6—18毫米,宽1.5—3毫米,具12—34(—66)朵花;小穗轴近四棱形,两侧有具横隔的槽;鳞片稍疏松排列,膜质,长圆状卵形,顶端钝,长1.5—2毫米,背面龙骨状突起绿色;具3条脉,两侧黄褐色、红褐色或为暗紫红色,具白色透明的狭边;雄蕊2,花药短,长圆形;花柱中等长,柱头2,细长。小坚果倒卵形,顶端有短尖,双凸状,稍扁,长约为鳞片的1/3,褐色或暗褐色,具白色透明有光泽的细胞层和微突起的细点。花果期6—11月。

产于东北各省、陕西、山西、山东、河北、江苏、浙江、安徽、福建、广东、海南岛、贵州、云南、四川;生长于田边、沟旁潮湿处或溪边湿润的沙土上。亦分布于地中海地区或非洲南部、中亚细亚、印度、越南、日本、朝鲜以及澳洲。

小球穗扁莎(变种)

图版 LVII 1—4. 沼生水莎草 *Juncellus limosus* (Maxim.) C. B. Clarke, 1. 植株 × 1; 2. 小穗 × 10; 3. 鳞片 × 20; 4. 小坚果 × 20. 5—10. 花穗水莎草 *J. pannonicus* (Jacq.) C. B. Clarke, 5. 植株 × 1; 6. 小穗 × 6; 7. 鳞片 × 20; 8. 小坚果 × 20; 9. 花柱和柱头 × 20; 10. 雄蕊 × 20.



Helungkiang: Dailing, in swamps, 宋朝枢, No. 180, typus! 16. VIII. 1953; also in Liaoning.

23b. **Cyperus diffusus** Vahl var. **latifolius** L. K. Dai, var. nov.

A typo foliis ad 2 cm latis, bracteis ad 16 mm latis, spiculis 2—5-nim (raro 1) digitatim dispositis 7×14 mm longis 2 mm latis, squamis dorso late cinereo-viridibus lateribus ferrugineis differt.

Kwangtung: without precise locality, wet places, Levine & McClure, No. 6996, typus!

25. **Cyperus nigrofuscus** L. K. Dai, sp. nov.

Annuus. Culmi plures caespitosi graciles 2—12 cm alti compresso-triquetri trialati laeves inferne foliati. Folia culmo breviora longiorave 2—4 mm lata plana dorso leviter carinata laevia vel interdum marginibus laxa spinulosa, vaginae breves pallide brunneae. Bractaeae 2—4 foliaceae anthela longiores. Anthela simplex conferta 4—7-radiata interdum capitato-contracta, radii ad 1.5 cm longi. Spiculae 7—15-nim digitatim dispositae lineari-oblongae vel lineares 4—10 mm longae 1.8 mm latae 12—30-florae. Rhachilla recta exalata. Squamae remotiusculae demum patentes membranaceae late ovatae vel subrotundae apice rotundae breviter apiculatae 1 mm longae dorso trinerves luteo-virides vel inferne luteo-virides lateribus nigropurpureae vel nigrofuscae rugosae. Stamina 2, antherae breves oblongae, connectivum in appendicem brevem productum. Stylus brevis vel midiocris, stigmata 3. Nux squamam subaequans elliptica vel obovato-elliptica trigona demum pallide brunnea laevis.

Szechuan: Song-pan Xian, wet places, alt. 1500 m., K. T. Fu, No. 2244, typus! 25. X. 1937.

27. **Cyperus nanellus** Tang et Wang, sp. nov.

Annuus. Culmi caespitosi saepe 1—2-ni semitereti 1—3 cm alti basi 1—2 vaginati, vaginae breves pallide brunneae, ima aphylla. Folia saepe culmo breviora 2 mm lata conduplicata vel plana marginibus laevia. Bractaeae 2 foliaceae anthela breviores longioresve basi semper dilatatae inferne marginibus $\pm$ nigropurpureae. Anthela capitato-contracta paucimulti-spiculosa. Spiculae oblongae vel anguste oblongae vel lineari-oblongae 3—7 mm longae 1.2—1.8 mm latae 8—22-florae. Squamae dense imbricatae membranaceae oblatae apice rotundae vel subtruncatae muticae 1 mm longae involutae nigropurpureae interdum inferne luteolae superne marginibus anguste albo-hyalinae dorso obsolete trinerves rugosae. Stamina 2, antherae oblongae breviter apiculatae. Stylus brevis, stigmata 3 stylo longiora. Nux squamam aequans elliptica trigona luteola laevis.

Shansi: T'ai-yuan, by stream, Harry Smith, No. 7955, typus!; ibidem, Harry Smith, No. 8009.

16. **Pycreus** P. Beauv.

3. **Pycreus chekiangensis** Tang et Wang, sp. nov.

Rhizoma breve. Radices fibrosae. Culmi caespitosi graciles 52—60 cm alti triquetri laeves inferne paucifoliati. Folia culmo breviora 4 mm lata saepe conduplicata interdum plana, vaginae longae brunneo-rufae. Bractaeae 3 foliaceae, inferiores 2 anthelam superantes. Anthela simplex 3—4-radiata, radii saepe ad 6 cm longi 4—9-spiculosi. Spiculae remotae

divaricatae ellipticae vel oblongo-ovatae compressae 6—10 mm longae 3.5—5 mm latae 6—12-florae. Rhachilla quadrangulata flexuosa exalata. Squamae subaxe imbricatae subcoriaceae ovatae apice acutae 4—5 mm longae dorso viridi-carinatae tricoatae lateribus enerves stramineae rubrobrunneo-tinctae nitidae. Stamina 3, atherae lineares. Stylus longus, stigmata 2 tenuia. Nux immatura obovata vel oblonga biconvexa lactea dense punctulata.

Checkiang: Yünhuo Xian, 陈詩 (H. Chen), No. 758, typus!; Taiwan: Kudo & Sasak, No. 15375.

5. **Pycreus lijiangensis** L. K. Dai, sp. nov.

Rhizoma abbreviatum, fibrillae paucae tenues. Culmus sparsus tenuis rigidulus obtuse trigonus interdum leviter semiteres laevis inferne paucifolius interdum basi surculos adscendentes emittens. Folia culmo breviora 1—2 mm lata saepe complicata superne marginibus laxa spinulosa, vaginae breves cinereo-brunneae. Bractae 3 foliaceae anthela longiores. Anthela simplex semper capitato-contracta raro radiata, radii 1.5 cm longi pauci-multi-spiculosi. Spiculae in capitulum globosum confertae lanceolatae vel lineari-lanceolatae apice acuminatae 4.5—11 mm longae 1.5—2.2 mm latae 10—26-florae. Rhachilla quadrangulata. Squamae subaxe imbricatae membranaceae ellipticae vel ovato-ellipticae obtusae 1.8—2 mm longae muticae nigropurpureae dorso trinerves, nervi viridi-lutei. Stamina 2, atherae breves lineares breviter apiculatae. Stylus brevis, stigmata 2 tenuia. Nux $2/5$ — $1/2$ squamae aequans castanea dense punctulata.

Yunnan: Lijiang (Likiang), by stream, alt. 2000 m., W. C. Wang, No. 65044, typus! VI, 1935.

11. **Pycreus pseudo-latespicatus** L. K. Dai, sp. nov.

Culmi caespitosi pumili 3—15 cm alti triquetri laeves inferne foliati. Folia culmo breviora longiorave plana 1—3 mm lata superne marginibus laxa spinulosa, vaginae breves rufo-brunneae saepe fissae. Bractae 3—4 foliaceae anthela longiores divaricatae. Anthela simplex 3—5-radiata, radii breves ad 2.5 cm longi 3—8-spiculosi. Spiculae congestae oblongo-ovatae vel subovatae 3—4 mm longae 8—14-florae. Rhachilla subrecta exalata. Squamae subaxe imbricatae membranaceae ovatae apice obtusae muticae 3 mm longae concavae stramineae vel fulvae dorso tricoatae lateribus enerves. Stamina 2, antherae breves lineares, connectivum in appendicem brevem productum. Stylus tenuis longus, stigmata 2. Nux $1/3$ squamae aequans late obovata biconvexa subtumida pallide brunnea conspicue zonata.

Szechuan: without precise locality, in rice-fields, K. K. Tsoong, No. 8416, typus! ibidem, K. K. Tsoong, No. 8415.

23. **Mapania** Aubl.

2. **Mapania dolichopoda** Tang et Wang, sp. nov. — *Mapania longa* Groff in Lingn. Agr. Rev. I (1923) 56; Merr. in Lingn. Sci. Journ. V (1927) 40, non Ridley (1891).

Rhizoma repens lignum 27 cm longum vel ultra antice 3.5 cm diam medio 1.6 cm diam. Radix fibrosa pauca mediocris. Culmi laterales sulcati 30—70 cm alti 2—4 mm lati basi vaginati, vaginae inferiores squamiformes superiores aphyllae. Folia linearia apicem versus