

glaber. Folia caulina media longe ovata, 10 cm longa, 4.5 cm lata, apice acuminata, basi in petiolos late alatos 10 cm longos, 4 cm latos contracta; folia superiora longe lanceolata vel longe elliptico-lanceolata, 8.5—17 cm longa, 1.5—4.5 cm lata, apice acuminata vel acuta, basi attenuata, sessilia; omnia integra, utrinque glabra. Calathidia numerosa, cernua, erecta vel inclinata, ad ramos et caulem inflorescentiam paniculatam formantia. Involucrum campanulatum, 3—4 mm in diametro, phyllis 3-seriatis, externis medisque late ovatis ad lanceolata, 2—3.5 mm longis, 1—1.5 mm latis, apice obtusis vel acutis, internis 5 in numero, longe ellipticis, 1.2 cm longis, 2 mm latis, omnibus glabris, purpureis. Flosculi purpurei, 5 in numero, ligulati, ligulis apice minute 5-fidis, tubis ad faucem albo-pilosis. Achaenia rufo-purpurea, dorsi-ventraliter compressa, anguste oblanceolata, 3.5 mm longa, 1 mm lata, apice truncata, non rostrata, costulata, facie costulis 7 in numero, inaequicrassis, prominentibus. Pappi setae albae, 2-seriatae, 7 mm longae, obscure minute scabrae, fragiles.

Guizhou (贵州): Puan (普安), inter frutices, alt. 2000 m, 7 IX 1957, Exped. Anshun. (安顺队) 1620 (Typus, PE).

与光苞紫菊 *Notoseris psilolepis* Shih 接近, 但本种叶长卵形、长披针形或长椭圆状披针形, 极易与后者相区别。

2. 光苞紫菊 新种 图 2; 图版 3:3

Notoseris psilolepis Shih, sp. nov.

Herba perennis. Caulis solitarius, erectus, 0.3—1.3 m altus, basi 3 mm in diametro, superne paniculato-ramosus, omnino glaber. Folia basalia, inferiora mediaque hastata, ovato-hastata vel triangulari-hastata, ovato-cordata, 7—14 cm longa, 4.5—7 cm lata, apice acuta vel acuminata, margine inaequaliter denticulata, apice dentium apiculato, petiolis ad 21 cm longis; folia superiora basalibus, inferioribus mediisque similia vel sagittato-triangularia vel oblique triangularia, minora, breviter petiolata, petiolis ad 2 cm longis; suprema sub inflorescentia elliptica, 4—6.5 cm longa, 2 cm lata, apice acuminata, basi cuneata, vix petiolata; omnia utrinque aspera, strigosiuscula. Calathidia numerosa vel pauca, ad ramos et caulem inflorescentiam paniculatam amplam vel anguste formantia, cernua, erecta vel inclinata. Involucrum calyculatum, campanulatum, 1.3 cm longum, 3 mm in diametro, phyllis 3-seriatis, externis ovatis, 2—2.5 mm longis, 1 mm latis, mediis ovato-lanceolatis, 4 mm longis, 1 mm latis, internis 5 in numero, longe lineari-ellipticis vel lineari-ellipticis, 1.4 cm longis, 1.5 mm latis, omnibus purpureis, glabris, apice obtusis. Flosculi purpurei, 5 in numero ligulati. Corollae 1.4 cm longae, tubis 6 mm longis, ad faucem albo-pilosis, ligulis 8 mm longis, apice truncatis, acute 5-fidis. Achaenia anguste oblanceolata, dorsi-ventraliter compressa, atropurpurea, 6 mm longa, 1 mm lata, apice truncata, non rostrata, costulata, facie costulis 7 in numero, inaequicrassis, prominentibus. Pappi setae albae, 2-seriatae, 8 mm longae, obscure minute scabrae.

Hubei (湖北): Lichuan (利川), in sylvis, 4 X 1957, G. X. Fu (傅国勋) 1817; Jianshi (建始), 29 IX 1951, Zh. H. Qian (钱重海) 1437. Hunan (湖南): Xinning (新

宁), in sylvis, alt. 1200m, 9 X 1962, L. H. Liou (刘林翰) 15031, Wugang (武岗), 19528; S. S. Sin (辛树帜) 794。 Jiangxi (江西): Jinggangshan (井岗山), J. S. Yue (岳俊三) 5382; Jiangxi Exped (江西队) 877; Wugong Shan (武功山), Jiangxi Exped. (江西队) 1230。 Sichuan (四川): Nanchuan (南川), alt. 1500m, 17 IX 1957, J. H. Xong et Z. L. Zhou (熊济华与周子林) 93525 (Typus, PE)、93336; Tianquan (天全), K. C. Kuan et W. T. Wang (关克俭与王文采) 2148。 Guizhou (贵州): Fanjing Shan (梵净山), N. Steward 435。 Yunnan (云南): Jingdong (景东), B. Y. Qiu (邱炳云) 52973。 Guangdong (广东): Lianxian (连县), P. X. Tang (谭沛祥) 60125; Ruyuan (乳源), Z. Huang (黄志) 44318。 Guangxi (广西): Lingui (临桂), C. F. Liang (梁畴芬) 31019; Yangshuo (阳朔), R. H. Shan (单人骅) 617。

本种以叶戟形、卵状戟形、三角状戟形或卵状心形,中下部叶有长柄,上部叶有短柄,叶边缘有小锯齿,与本属其他各种相区别。

3. 腺毛紫菊

Notoseris glandulosa (Dunn) Shih, comb. nov.—*Prenanthes glandulosa* Dunn in Journ. Linn. Soc. Bot. **35**:514, 1903; Hand.-Mazz. in Act. Hort. Gothob. **12**:350, 1938。

尽管我们没有见到 S. T. Dunn 的 *Prenanthes glandulosa* 模式标本,但根据模式照片和原始记载中有关要点,比如“总苞紫兰色……瘦果向顶端渐收窄……有 6 条小纵肋”,显然,这个种应属于紫菊属。

这个种的中下部茎叶三角状或卵状心形,质地坚硬,有叶柄,叶柄中部以下扩大成翼,柄基鞘状半抱茎,容易与本属其他各种相区别。

模式标本是通过中国西部种子采集在英国皇家植物园邱园繁育的植株。

4. 黑花紫菊 图版 1:4; 3:2

Notoseris melanantha (Franch.) Shih, comb. nov.—*Lactuca melanantha* Franch. in Journ. de Bot. **9**: 291, 1895; Diels in Bot. Jahrb. **29**: 634, 1901; S. Y. Hu in Quart. Journ. Taiwan Mus. **20**(3—4): 304, 1967。

四川: 熊济华与周子林 92336。

本种接近细梗紫菊 *N. gracilipes* Shih, 但前者叶柄有宽或窄翼,容易区别。两者都具有大头羽状分裂的叶,顶裂片大,戟状三角形或三角形,侧裂片小。

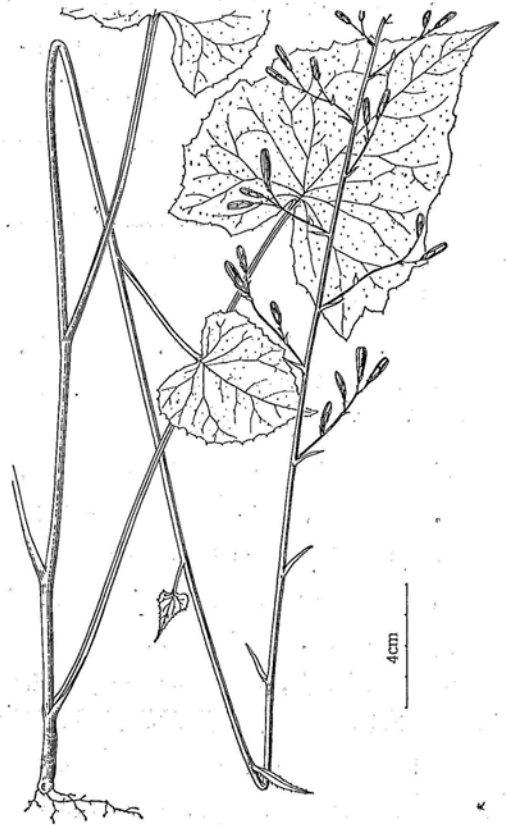
模式标本采自四川城口。

5. 细梗紫菊 新种 图 1; 图版 3:8

Notoseris gracilipes Shih, sp. nov.—*Prenanthes henryi* auct. non Dunn: 中国高等植物图鉴 **4**:695, 1975, 6803 图。

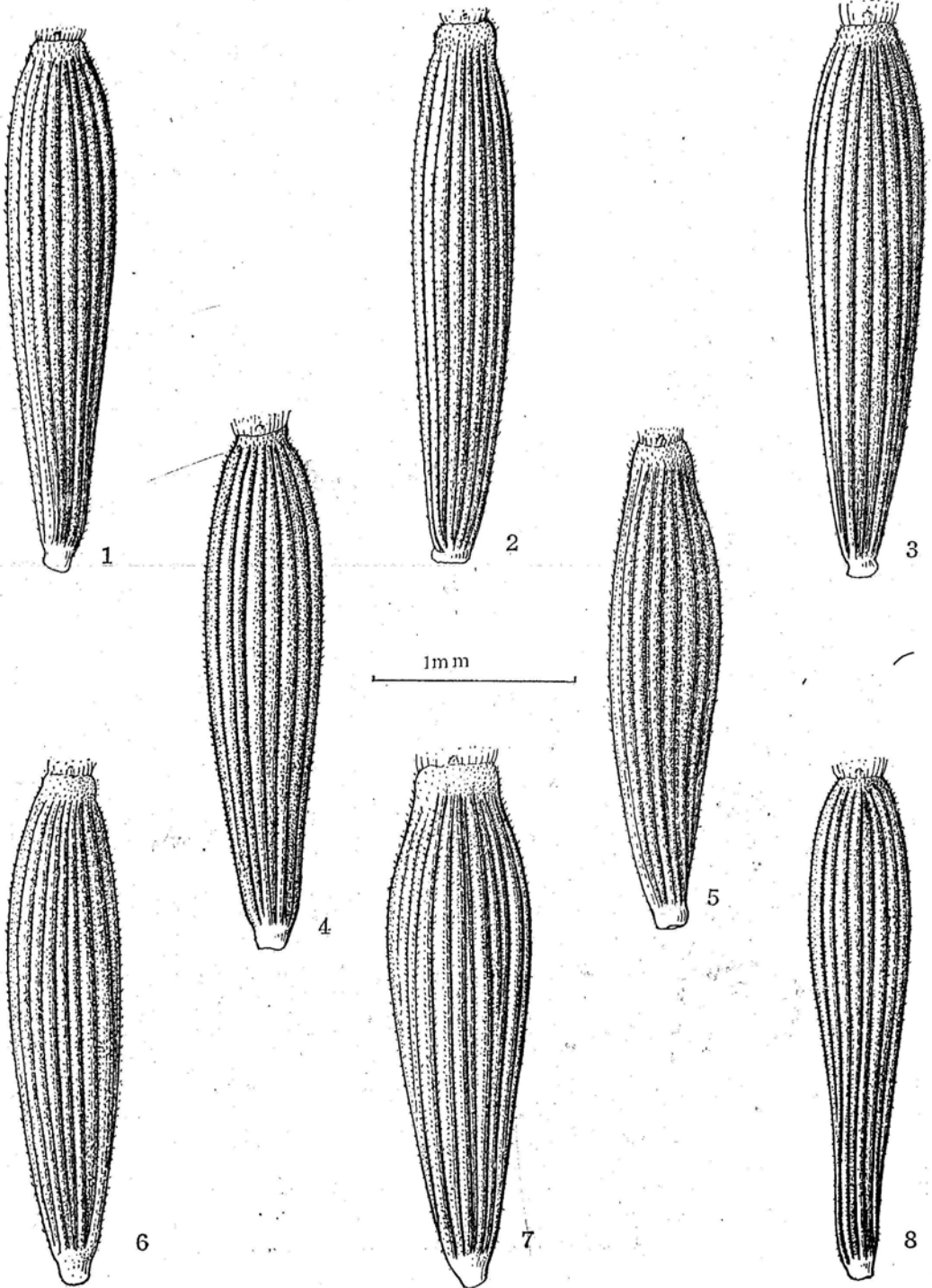
A. N. melanantha (Franch.) Shih, cui affinis, sed petiolis exalatis bene differt.

Herba perennis. Caulis solitarius, erectus, 1 m altus, robustus, basi 1 cm in diametro, superne paniculato-ramosus, omnino pubibus multicellularibus noduliformibus inferne sparse superne dense obtectus. Folia inferiora mediaque lyrato-pinnatisecta, petiolata, petiolis 4—8 cm longis, lobis terminalibus hastato-triangularibus, 10—14 cm longis, 9—10 cm latis, apice acuminatis, lobis latelariibus 1—2(3)-jugis, in paribus aequimagnis, 2.5—4.5 cm longis 1.3 cm

图1 细梗紫菊 *Notoseris gracilipes* Shih (冀朝祯绘)图2 光苞紫菊 *N. psilolepis* Shih (冀朝祯绘)

latis, apice acutis vel obtusis vel rotundatis; folia superiora inferioribus mediisque similia, sed minora, divisa vel indivisa, lineari-elliptica, late lanceolata vel ovato-lanceolata; omnia margine dense vel sparse, obtuse vel acute inaequaliter dentata, utrinque pubibus multicellularibus noduliformibus sparsissime oblecta. Calathidia numerosa, cernua, inclinata vel erecta, ad ramos et caulem inflorescentiam paniculatam formantia. Involucrum campanulatum, 0.8—1 cm longum, 3—4mm in diametro, calyculatum, phyllis 3-seriatis, externis mediisque triangulato-lanceolatis vel lanceolatis, 2—4 mm longis, vix 1 mm latis, internis 5 in numero, longe ellipticis vel longe elliptico-lanceolatis, 8 mm longis, 2 mm latis, omnibus purpureis, apice obtusis vel acutis, glabris, Flosculi purpurei, ligulati, 5 in numero. Corollae 1.1 cm longae, tubis 4mm longis, ad faucem albo-pilosis, ligulis 7mm longis, apice truncatis, acute 5-fidis. Achaenia anguste oblanceolata, dorsi-ventraliter compressa, 4 mm longa, 1 mm lata, atropurpurea, apice truncata, non rostrata, costulata, facie costulis 7 in numero, inaequicrassis, prominentibus. Pappi setae albae, 2-seriatae, 7 mm longae, obscure minute scabrae.

Sichuan (四川): Baoxing (宝兴), 1934, K. L. Chu (曲桂龄) 3005 (Typus, PE); Nanchuan (南川), G. F. Li (李国凤) 64159, 64320, K. C. Kuan et al. (关克俭等) 2030; Pingshan (屏山), T. T. Yu (俞德浚) 3094; Hanyuan (汉元), C. Pei (裴德)



紫菊属一些种的瘦果示意 Achenes of some species of *Notoseris* Shih 1. 云南紫菊 *N. yunnanensis* Shih; 2. 黑花紫菊 *N. metanantha* (Franch.) Shih; 3. 光苞紫菊 *N. psilolepis* Shih; 4. 全叶紫菊 *N. guizhouensis* Shih; 5. 菱叶紫菊 *N. rhombiformis* Shih; 6. 多裂紫菊 *N. henryi* (Dunn) Shih; 7. 南川紫菊 *N. porpyreolepis* Shih; 8. 细梗紫菊 *N. gracilipes* Shih. (冀朝祉绘画 drawn by Ji Chao-zhen)