

中国西南部小檗科新植物

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NEW TAXA OF BERBERIDACEAE FROM S. W. CHINA

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Key words *Mahonia; Nandina; Dysosma; Epimedium; Berberis; New taxa*

关键词 十大功劳属; 南天竹属; 八角莲属; 滇羊踯躅属; 小檗属; 新分类群

一、十大功劳属 *Mahonia* Nutt

1. 兰果十大功劳 新种 图 1

Mahonia caelicolor S. Y. Bao, sp. nov.

Species valde affinis *M. confertae* Takeda, a qua differt pedicellis brevioribus vix 3—5mm longis; baccis ellipsoideis ad 1.2cm longis, diam. 8—9mm dense caeruleo-pruinosis; semenibus (1—)2.

Frutex 2—2.5m altus, ramulis brunneo-griseis. Folia imparipinnata 25—35cm longa; petiolis brevioribus. Foliola 7—13-juga, coriacea, terminalia lanceolata, 6—8cm longa, 2—2.5cm lata, basi rotunda vel subcordata non obliqua, media oblango-lanceolata, 4—8cm longa, 1.5—2.5cm lata, basi obliqua, infima minora, oblonga, c. 2.5cm longa, 2cm lata, margine 2—4 spinoso-dentata, trinervia, venis reticulatis utrinque inconspicuis. Racemi 3—5 fasciculati, 8—14cm longi. Flores flavi. Bracteae florum lanceolatae, 4—7mm longae, apice acuminatae. Pedicelli 4—7mm longi. Sepala externa longe triangularia, c. 3mm longa, 1.5mm lata, apice obtusa, nullinervia, mediana longe elliptica, c. 6mm longa, 3.5mm lata, apice rotundata, trinervia, interna longe elliptica, 5mm longa, 3mm lata, trinervia, in medio conspicue carinata. Petala oblonga, c. 5mm longa, 3mm lata, apice bifida, trinervia, basi nectarifera, nectariis binis distinctis. Stamina ca. 4mm longa, apice truncata. Ovarium oblongum, ca. 5mm longum, 2-ovulatum. Bacca ellipsoidea, usque ad 1.2cm longa, 8—9mm diam, dense caeruleo-pruinosa, apice stylosa.

本种近似密集十大功劳 *M. conferta* Takeda, 不同之点在花柄较短, 长仅 3—5mm。浆果椭圆形, 长达 12mm, 直径 8—9mm, 密被蓝色霜粉; 种子(1)2枚。

云南: 景东, 哀牢山, 徐家坝, 海拔 2400m, 林边, 1981 年 6 月 5 日, 邓向福 0015 号(主模式, 果, KUN); 同地, 海拔 2500m, 林下, 包士英 369 号(副模式, 花, KUN); 景东,

落水洞, 海拔 2350m, 杂木林中, 武全安 9098 号(果)。

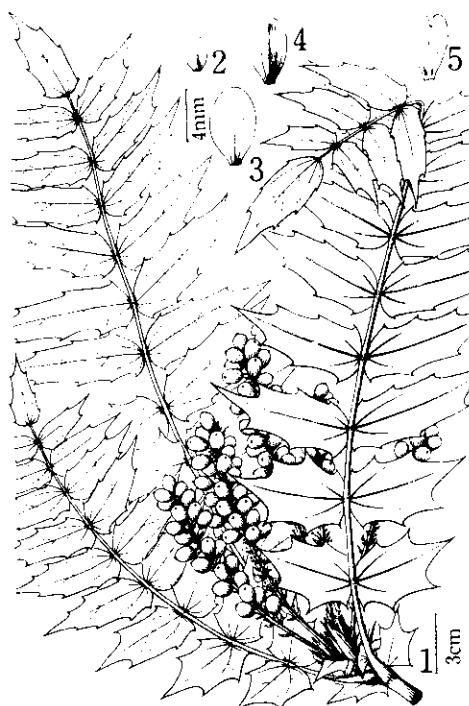


图1 兰果十大功劳 *Mahonia caelicolor* 1. 果枝 fruiting branch; 2. 外萼片 outer sepals;
3. 中萼片 median sepals; 4. 内萼片 inner sepals; 5. 花瓣 petals.

Yunnan: Jingdong, Ailao Shan, Suijaba, alt. 2400m, by side of forests, June 5 1981, Deng Xiang-fu 0015 (holotype fr., KUN); Same locality, alt. 2500m, under forests, Bao Shi-ying 369 (fl., KUN); Jingdong Luo shui dong, alt. 2350m, under mixed woods, Wu Quan-an 9098 (fr.)

2. 景东十大功劳 新种 图2

Mahonia paucijuga C. Y. Wu, sp. nov.

Species affinis *M. polyodontae* Fedde, sed foliolis vix 2—3(—4)-jugis, oblongo-ovatis vel ellipticis, apice acuminatis vel acutis, mucronibus c. 1—2cm longis, basi late cuneatis, non obliquis; pedicellis 4—5mm longis, bracteis linear-lanceolatis 8—12mm longis; baccis apice estylatis valde insignis.

Frutex 1—3m altus, ramis brunneo-griseis. Folia imparipinnata, 17—30cm longa; petiolis 2—8cm longis. Foliola 2—3(—4)-juga, crassa coriacea, subaequalia, oblongo-ovata vel elliptica, 6—12cm longa, 2.5—5.5cm lata, apice acuminata vel acuta, mucronibus c. 1—2cm longis, basi late cuneata, non obliqua, margine 6—16-spinoso-dentata, in sicco supra nigro-viridia nitida, nervis planis, infra flavid-viridia, nitida, nervis elevatis conspicuis. Racemi 4—6 fasciculati, usque ad 4—6cm longi, a basi densiflori. Flores flavi. Bracteae linear-lanceolatae, apice longe acuminatae, c. 8—12mm longae. Pedicelli ad 4—5mm

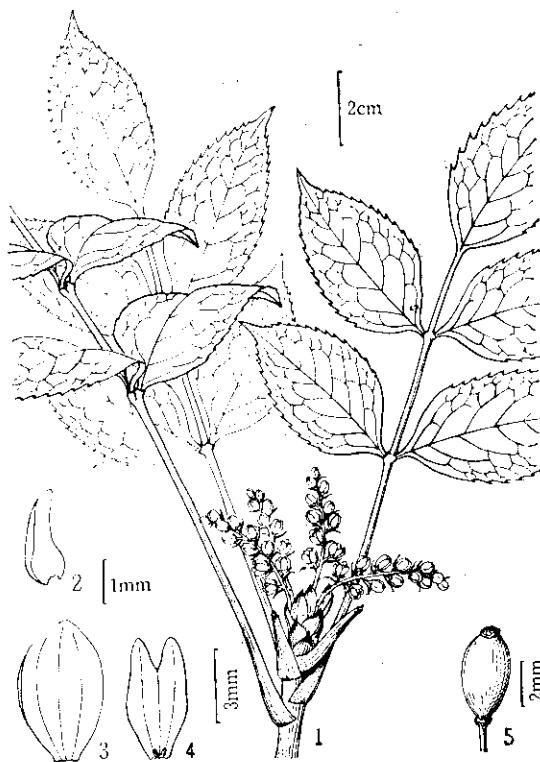


图 2 景东十大功劳 *M. paucijuga* 1. 花枝 flowering branch; 2. 外萼片 outer sepals; 3. 中萼片 median sepals; 4. 花瓣 petals; 5. 浆果 berry.

longi. Sepala externa triangularia, c. 2.5mm longa, mediana elliptica, ca. 6mm longa, apice rotundata, trinervia, interna oblonga, c. 5mm longa. Petala oblonga, c. 5mm longa, trinervia, apice bifida, basi nectarifera, nectariis binis distinctis. Stamina c. 3mm longa, apice truncata. Ovarium c. 3mm longum, apice estylatum, 2-ovulatum. Bacca longe ellipsoidea, tenuiter pruinosa, c. 4mm longa.

Yunnan; Jingdong, Wuliang Shan, alt. 2500m, under forests, April 2 1959, Xu Su-gui 3533 (Holotype fl., KUN); Same locality, alt. 3100m, Wu Quan-an 9229 (fl.); Same locality, Longtan Shan, alt. 2800m, under Rhododendron forests, Wu Quan-an 9135 (fr., KUN); Same locality, Modaohe, 2600m, in bushs, Lin Qin 531 (fl.).

本种近似多齿十大功劳 *M. polyodonta* Fedde, 但不同之点在小叶 2—3(—4) 对, 长圆状卵形或椭圆形, 顶端渐尖或急尖, 尖头长约 1—2cm, 基部阔楔形, 不偏斜; 花柄长 4—5mm; 基部苞片线状披针形, 长 8—12mm; 浆果顶端无花柱。

云南: 景东, 无量山, 海拔 2500m, 林下, 1959 年 4 月 2 日, 许溯桂 3533 号(主模式, 花, KUN); 同地, 海拔 3100m, 武全安 9229 号(花); 同地, 龙潭山, 海拔 2800m, 杜鹃林下, 武全安 9135 号(副模式, 果, KUN); 同地, 磨刀河, 海拔 2600m, 灌丛中, 林芹 531 号(花)。

3. 网脉十大功劳 新种 图3

Mahonia reticulinervia C. Y. Wu, sp. nov.

Species valde insignis foliolis crassissimis coreaceis, supra venis reticulatis, elevatis conspicuis; fructibus uniseminalibus.

Frutex c. 1m altus, ramulis brunneo-griseis. Folia imparipinnata, 18—22cm longa; petiolis 3—7cm longis. Foliola 3—4 juga, crassissima, coriacea, terminalia late ovata, 7—8cm longa, 2—5cm lata, apice acuminata, basi cordata non obliqua, media longe ovata, 6—8 cm longa, 2—3cm lata, basi obliqua, margine revoluta, 3—7-spinoso-decurrentia, 5—7-nervia, supra nitida, venis reticulatis elevatis conspicuis, infra inconspicue reticulatis. Racemi 5—10 fasciculati, 4—8cm longi. Flores non vidi. Bracteae oblongae, apice acuminatae, 2—

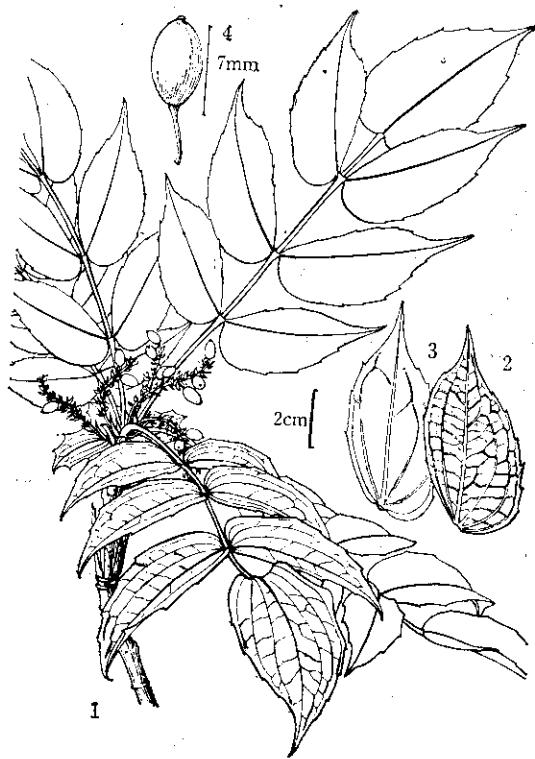


图3 网脉十大功劳 *Mahonia reticulinervia* 1. 果枝 fruiting branch; 2. 小叶表面(示网脉) upper surface of leaflet (showing reticulate venation); 3. 小叶背面 lower surface of leaflet; 4. 浆果 berry.

3mm longae, 1.5—2mm latae. Pedicelli fructuun 5—6mm longi. Bacca caeruleo-nigra, oblonga, 7mm longa, 4mm diam. c., tenuiter pruinosa. Semina unica.

Yunnan: Xichou, Garbong, alt. 1000m, open slope, Dec. 27 1939, C. W. Wang 86066 (Holotype, fr., KUN); Malipo Tungting, alt. 1000—1500m, in open thickets, K. M. Feng 13942 (fr., KUN).

本种小叶厚革质, 叶表面网脉显著突起; 种子 1 枚, 与本属其他种相比较是很不同的。

云南: 西畴, 莞邦, 海拔 1000m, 开阔山坡, 1939 年 12 月 27 日, 王启无 86066 号(主模式, 果, KUN); 麻栗坡, 海拔 1000—1500m, 石灰山杂木林内, 冯国楣 13492 号(果, KUN)。

4a. 中甸十大功劳 新变种

Mahonia bracteolata Takeda var. *zhongdianensis* S. Y. Bao, var. nov.

A typo differt foliolis oblongis, 4—6cm longis, 2—2.5cm latis, margine 4—5—spinoso-dentatis, venis utrinque inconspicuis; baccis majoribus ad 1.2cm longis, ca. 8mm diam.; pedicellis fructiferis brevioribus vix 5—7mm longis.

Yunnan: Zhongdian, E. Haba Snow Mt., on open thickets, Mar. 25 1939, K. M. Feng 592 (Holotype, fr., KUN).

与原变种的区别在小叶长圆形, 长 4—6cm, 宽 2—2.5cm, 边缘仅具 4—5 刺齿, 叶脉两面不显。浆果较大, 长达 1.2cm, 直径约 8mm; 果柄较短, 长仅 5—7mm。

云南: 中甸, 哈巴雪山东部, 杂木林中, 1939 年 3 月 25 日, 冯国楣 592 号(主模式, 果, KUN)。

5a. 无柱十大功劳 新变种

Mahonia lomariifolia Takeda var. *estylis* C. Y. Wu, var. nov.

A typo recedit foliolis brevioribus; fructibus minoribus vix 3—5mm longus, c. 3—4mm diam., apice non stylatis.

Yunnan: Xun diam, alt. 2400m, in oak forests, Aug. 28 1958, Li Xi-wen 0032 (Holotype, fr., KUN); same locality, 2600m, under mixed woods, Y. P. Chang 487 (fr.); Huize, alt. 2000m, Li Xi-wen 0067 (fr.).

与原变种的区别在叶较短; 果亦较小, 长仅 3—5mm, 直径 3—4mm, 顶端无花柱。

云南: 寻甸, 海拔 2400m, 栎树林中, 1958 年 8 月 28 日, 李锡文 0032 号(主模式, 果, KUN) 0076 号(果); 同地, 海拔 2600m, 杂木林中, 张英伯 487 号。

二、南天竹属 *Nandina* Thunb.

1a. 线叶南天竹 新变种 图 4

Nandina domestica Thunb. var. *linearifolia* C. Y. Wu, var. nov.

A typo recedit foliolis linear-lanceolatis margine undulatis.

Sichuan: Oshan, alt. 1000m, July 4 1957, K. H. Yang 55667 (Holotype, KUN); Without locality, Univ. Wuhan 8943.

与原变种的区别在叶为线状披针形, 边缘波状。

四川: 峨眉山, 海拔 1000m, 1957 年 7 月 4 日, 杨光辉 55667 号(主模式, KUN); 无地点, 武汉大学 8943 号。



图4 线叶南天竹 *Nandina domestica* var. *linearifolia* 1. 果枝 fruiting branch; 2. 浆果 berry;
3. 穗片(示多轮萼片) a flower (showing multi-whorled sepals).

三、八角莲属 *Dysosma* Woodson

1. 扁鳞八角莲 新种 图5

Dysosma furfuracea S. Y. Bao, sp. nov. —— *Dysosma aurantiocaulis* auct. non Hu, 中国高等植物图鉴 1: 761. 1983, quoad t. 1521.

Species similis *D. aurantiocauli* (Hand. -Mazz.) Hu, a qua differt floribus vix 2—4 fasciculatis prope basin foliorum sitis; foliis ad margines ciliolato-pilosis et glanduloso-serratis; etiam affinis *D. versipeli* (Hance) M. Cheng, a qua differt foliis infra juxta nervos dense membranaceo-furfuraceis valde insignis.

Herba perennis, rhizome transverso brevi crasso, caule 30—40cm al to erecto glabro. Folium tenuiter chartaceum, peltatum, 15—20cm diam., 7—9-lobatum, lobis late triangularibus, supra glabrum, infra juxta nervos dense membranaceo-furfuraceum, margine ciliolatum et glanduloso-serratum; petiolo 15—20cm longo. Flores purpurei, 2—4 fasciculati, prope basi foliorum affixi. Pedicelli glabri, c. 3.5cm longi. Sepala 6, anguste oblonga, c. 12mm

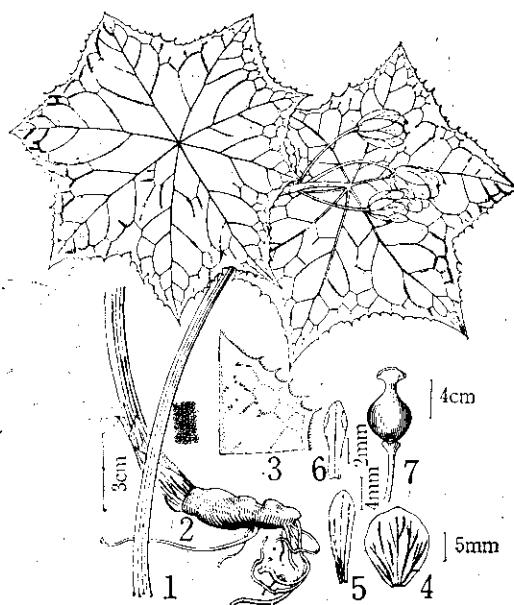


图5 粽鳞八角莲 *Dysosma furfuracea*. 1. 花枝 plant with flowers; 2. 根 root; 3. 叶背面 (示糠粃状鳞片) leaf beneath (showing furfur scale); 4. 花瓣 petals; 5. 簇片 sepals; 6. 雄蕊 stamens; 7. 雌蕊 pistils.

longa, 4mm lata, glabra. Petala 6, oblonga, 15mm longa, usque ad 10mm lata, apice rotunda, glabra. Stamina 6, c. 6mm longa, connectivis brevioribus oblongis apice non productis, filamentis complanatis. Ovarium subglobosum, apice in stylum brevem productum, stigmate pelviformi, margine erosulo, multiovalatum. Bacca subglobosa (immatura).

Yunnan: Feng qing (Shunning), Snow range, alt. 3000m, under thickets, May 26 1938, T. T. Yu 15977 (Holotype, fr., KUN); Yangbi, commune of Meiweng, alt. 2800m, under oak forestis, Expedition of N. W. Yunnan 4100.

本种在外形上近似云南八角莲 *D. aurantiacaulis* (Hand.-Mazz.) Hu, 但花2—4朵簇生, 着生于叶的近基部; 叶边缘具睫毛状柔毛和腺齿, 亦近八角莲 *D. versipellis* (Hance) M. Cheng, 其主要区别为沿叶脉密被糠粃状膜质鳞片。

云南: 凤庆(原顺宁), 雪岭, 海拔3000m, 林下, 1938年5月28日, 俞德浚15977号(主模式, 果, KUN); 漾濞, 美翁公社, 海拔2800m, 桤树林下, 滇西北考察队4100号。

四、淫羊藿属 *Epimedium* Linn.

1. 草叶淫羊藿 新种 图6

Epimedium reticulatum C. Y. Wu, sp. nov.

Species affinis *E. davidii* Franch., sed foliis crasse coriaceis, nervis reticulatis utrinque prominentibus valde recedit.

Herbae perennes, rhizomate rigido purpureo-rubro, fibris tenuissimis. Caules 30—40

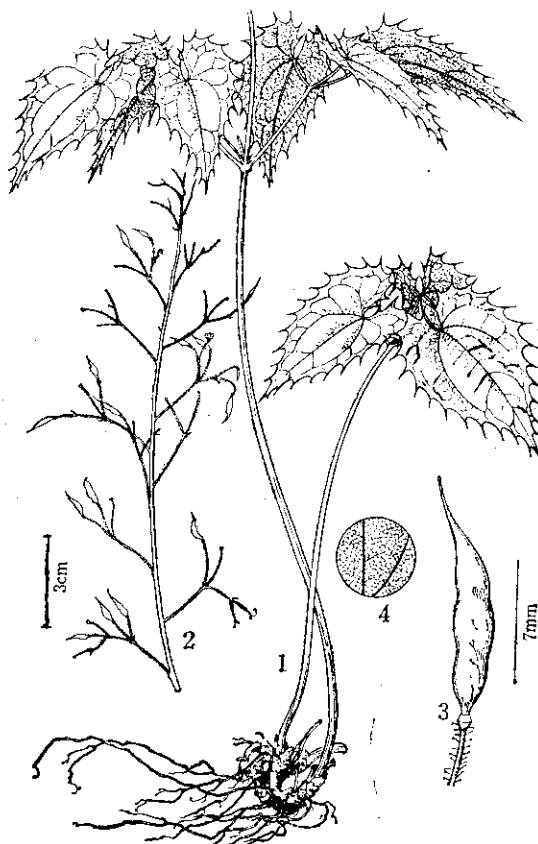


图6 革叶淫羊藿 *Epimedium reticulatum* 1. 基生与茎生叶 basal and caudine leaves; 2. 花序 inflorescence; 3. 荚果 capsule; 4. 小叶表面(示网状脉序) upper surface of leaflet (showing reticulate venation).

cm altus, graciles, glabri. Folia basalia solitaria, petiolis ad 20 cm longis, caulina opposita, petiolis 5—6 cm longis. Foliola glabra, crasse coriacea, ovata, 5—7 cm longa, 3.5—5 cm lata, apice acuta vel acuminata, basi cordata non obliqua, margine multi-spinosa, juxta nervos laxe pilosa, 5-nervia, nervis supra subconcavis infra elevatis, reticulatis, utrinque conspicuus. Inflorescentia paniculata, terminalis, ad 30—35 cm longa. Flores minores, flavi. Pedicelli graciles, ad 1.5cm longi, glandulosi-pilos. Sepala externa oblonga, c. 5mm longa, interna elliptica, c. 6mm longa, apice rotunda. Petala brevia, calcariforma, 1—2mm longa. Stamina 3mm longa, filamentis brevioribus complanatis. Carpida cylindrica, glabra. Capsula 1.2—1.5cm longa, apice longe rostrata. Semina 3—5, reniformia.

Sichuan: Jinyin, alt. 1100m, in woods, June 1 1959, Expedition of Sichuan Economic Plants (Liangshan) 3357 (Holotype, KUN).

本种近似宝兴淫羊藿 *E. davidi* Franch., 但叶厚革质, 网脉两面显著, 易于区别。

四川: 金阴, 海拔 1100m, 林中, 1959 年 6 月 1 日, 川经凉考察队 3357 号 (主模式, KUN)。

五、小檗属 *Berberis* Linn.

1. 天宝山小檗 新种 图 7

Berberis tianbaoshanensis S. Y. Bao, sp. nov.

Species affinis *B. stiebritziana* Schneid., sed a qua recedit ramulis nigro-griseis etiam nigro-verruculatis, spinis gracilibus flavidis; foliis tenuiter membranaceis infra epruinosis; petiolis 5—7 mm longis; floribus majoribus ad 1.4 cm diam.

Frutex c. 2m altus, ramulis nigro-griseis etiam nigro-verruculatis; spinis trifidis gracilibus 1—2 cm longis flavidis. Folia tenuiter membranacea, oblonga, 2—3 cm longa, 7—10mm lata, apice obtusa vel acuta, spinulis 1—2 mm longis, basi cuneata, margine integrum, supra viridia, infra viridula epruinosa, nervis lateralibus patentibus utrinque conspicuis; petiolis 5—7mm longis. Flores solitarii. Pedicelli graciles, 1.5—2.5 cm longi. Sepala externa longe elliptica, c. 11 mm longa, 7 mm lata, interna oblonga, c. 10 mm longa, 5 mm lata. Petala obovata, c. 10 mm longa, 5.5 mm lata, apice rotundata, bifida, basi cuneata, prope basin 2-glandulosa. Stamina c. 6 mm longa, apice obtusa. Ovarium c. 5 mm long-

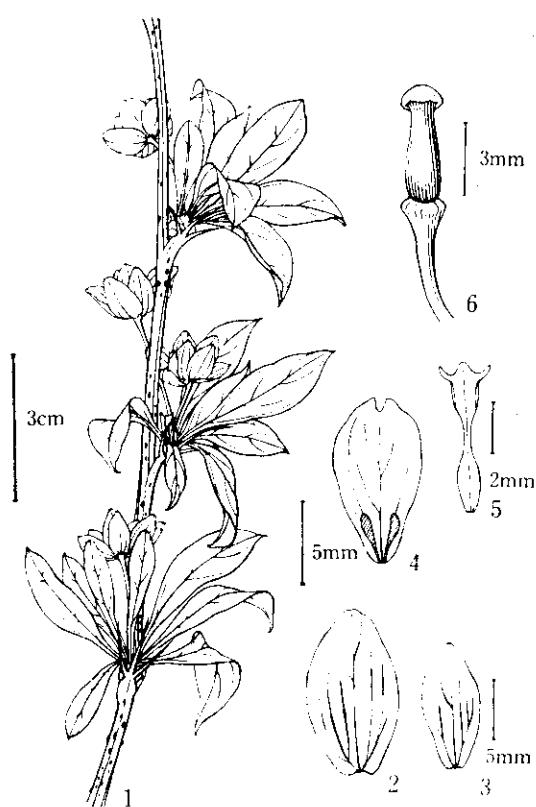


图 7 天宝山小檗 *Berberis tianbaoshanensis*

1. 花枝 flowering branch;
2. 外萼片 outer sepals;
3. 内萼片 inner sepals;
4. 花瓣 petals;
5. 雄蕊 stamens;
6. 雌蕊 pistils.

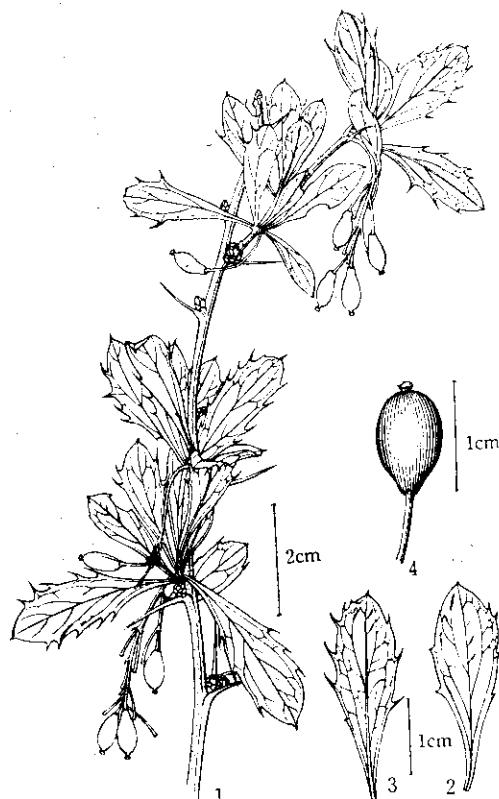


图 8 假藏小檗 *B. pseudo-tibetica* 1.果枝

- fruiting branch;
2. 叶表面 upper surface of leaf;
3. 叶背面 lower surface of leaf;
4. 浆果 berry .

um, apice estylatum 4-ovulatum. Fructus ignoti.

Yunnan: Zhongdian, Tianbao Shan, alt. 2600m, under Abies forest, June 15 1981, Exp. Qinghai-Xizang 1510 (Holotype, fl., KUN).

本种近似云南小檗 *B. stiebritziana* Schneid., 但不同点在于幼枝灰黑色并具有黑色小疣点；刺黄色，细弱。叶薄膜质，背面无白粉；具柄。花大形，直径达 1.4cm。

云南：中甸，天宝山，海拔 2600m，冷杉林下，1981 年 6 月 5 日，青藏考察队 1510 号（主模式，花，KUN）。

2. 假藏小檗 新种 图 8

Berberis pseudo-tibetica C. Y. Wu, sp. nov.

Species affinis *B. dawoensi* K. Meyer, sed foliis crassioribus angustioribusque, margine irregulariter et semper paucе spinoso-dentatis; baccis minoribus valde differt.

Frutex 1—2 m altus, ramulis nigro-griseis etiam sparse nigro-puncticulatis; spinis simplicibus vel trifidis gracilibus 2—25 mm longis. Folia tenuiter coriacea, oblongo-obovata, 2.5—4 cm longa, 6—10 mm lata, apice obtusa, basi cuneata, margine supra medium 2—5-spinoso-dentata, in sicco supra flavescentia, infra glauca, nervis lateralibus 2—4-jugis utrinque elevatis, conspicue reticulatis. Flores ignoti. Infructescencia racemosa, pedunculis 1—2 cm longis, pedicellis fructiferis 7—11 mm longis. Bacca parva, oblonga, 7—11 mm longa, 4—5 mm, diam. rubra, epruinosa, apice breviter stylata. Semina 2.

Yunnan: Deqin, alt. 800—3200 m, under pine forests, July 8 1981, Exp. Qinghai-Xizang 2191 (Holotype, fr., KUN); Zhongdian, alt. 2500—3000m, in woods, K. M. Feng 20981.

本种近似道孚小檗 *B. dawoensis* K. Meyer, 但叶窄而厚, 边缘仅具 2—5 齿；浆果较小而易于区别。

云南：德钦，海拔 800—3200m，松林下，1981 年 7 月 8 日，青藏考察队 2191 号（主模式，果，KUN）；中甸，海拔 2500—3000m，灌木丛中，冯国楣 20981 号。