
黄杨属 huang yang shu

Shrubs or small trees, 0.15–6 m tall, evergreen, monoecious. Leaves opposite, shortly petiolate, leathery or thinly leathery, often shining, margin entire, venation pinnate. Inflorescences axillary or terminal, racemose, spicate, or converted into capitule cluster, bracteate; female flower solitary, apical, male flowers several, basal. Flowers small, unisexual. Male flowers: tepals 4; stamens 4; central pistillode present. Female flowers: tepals 5 or 6; carpels 3; ovary 3-locular; styles 3, free; stigma often decurrent; interstyal nectaries or nectariferous tissue present; ovules 2 per locale, pendent, anatropous, bitegmic, crassinucellar; micropyte formed by inner integument, radidimentary aril. Fruit a dry capsule, globose or ovoid, usually glabrous, loculicidal, splitting into 3 valves; styles persistent. Seeds 2 per locale, oblong; testa black, shining; endosperm fleshy; cotyledons oblong.

About 100 species: Africa, America, Asia, Europe; 17 species (15 endemic) in China.

The following taxa have been described or recorded from Taiwan but are not treated here because we were unable to examine any material:

Buxus liukiensis (Makino) Makino (Bot. Mag. (Tokyo) 16: 179. 1902; B. sempervirens Linnaeus var. liukiensis Makino, Bot. Mag. (Tokyo) 9: 279. 1895; B. microphylla Siebold & Zuccarini var. liukiensis (Makino) S. S. Ying). This taxon was described from Taiwan by Yang and Lu (Fl. Taiwan, ed. 2, 3: 666–668. 1993), who erroneously treated it as endemic (the type is from Ishigaki-jima, Ryukyu Islands, Japan) and included in its synonymy B. liukiensis var. longipes dicella Hatusima (J. Dept. Agric. Kyushu Imp. Univ. 6: 293. 1942), which was described from “Syusyu Nantu” (Shuishe, Nantou), Taiwan.

Buxus microphylla Siebold & Zuccarini var. tarokoensis S. Y. Lu & Yuen P. Yang (Fl. Taiwan, ed. 2, 3: 668. 1993). This taxon was described from an elevation of 1800 m in the Taroko gorge, Hualien, Taiwan.

1a. Female flowers: style 2–3 × longer than ovary.
2a. Inflorescences 1–1.5 cm; bracts many, densely imbricate ........................................................................... 1. B. henryi
2b. Inflorescences shorter than 1 cm; bracts sparsely arranged.
3a. Lateral veins parallel, obscure .................................................................................................................. 2. B. pubiramea
3b. Lateral veins parallel, visible on both surfaces in dried state.
4a. Leaves broadly ovate or elliptic, base usually rounded ........................................................................ 3. B. latistyla
4b. Leaves elliptic-lanceolate, narrowly lanceolate, or oblongate.
5a. Some leaves elliptic-lanceolate, 8.5–12 × 3–3.8 cm .............................................................................. 4. B. hainanensis
5b. Most leaves lanceolate or oblongate, less than 7 cm, ca. 2 cm in diam.
6a. Leaves oblong-lanceolate or narrowly lanceolate, 3–7 × ca. 1.2 cm; style narrow and elongate at apex, recurved; branchlets sparsely pubescent or glabrescent ........................................... 5. B. myrica
6b. Leaves oblongate or narrowly obovate, 2–3.5 × 0.7–1 cm; style shorter and wider at apex, erect; branchlets pubescent ........................................................................................................ 6. B. austroyunnanensis
1b. Female flowers: style shorter than, equaling, or slightly longer than ovary.
7a. Sterile pistil not exceeding 1/2 of tepal in length (B. linearifolia sterile pistil up to 2/3 of tepal in length).
8a. Leaves larger, oblong-lanceolate or elliptic-lanceolate, rarely lanceolate, (4–)6–8 cm ................................. 7. B. megistophylla
8b. Leaves small and narrow.
9a. Leaves ovate, elliptic, or oblong, 3–6 × 1.5–2.5 cm; branchlets pubescent.
10a. Leaves velutinous on both surfaces or glabrescent, lateral veins obscure; style and ovary equal in length; capsule glabrous .................................................................................................................. 8. B. mollicula
10b. Leaves glabrous, lateral veins visible adaxially; style ± shorter than ovary; capsule velutinous ................................................................................................................................. 9. B. hebecarpa
9b. Leaves spatulate, lanceolate, spatulate to linear, or obovate, elliptic, or oblong, less than 3(–4) cm and ca. 1 cm in diam.; branchlets pubescent or glabrous.
11a. Leaves elliptic or oblong, lateral veins obscure adaxially, rugulose in dried state ................................. 10. B. rugulosa
11b. Leaves more varied in shape, lateral veins visible adaxially, not rugulose in dried state.
12a. Branchlets densely pubescent; leaves narrowly obovate, oblong, or elliptic-oblong, 1–2 × 0.4–0.8 cm ................................................................. 11. B. stenophylla
12b. Branchlets glabrous or pubescent; leaves narrowly oblong, narrowly obovate, spatulate, or linear.
13a. Ovary hirtellous; male flowers sessile; leaf blade lateral veins and midrib in 45° angles ........................................................................................................ 12. B. cephalantha
13b. Ovary glabrous; male flowers pedicellate; leaf blade lateral veins and midrib in 30°–35° angles.
14a. Leaves spatulate or narrowly oblong, 2–3.5(–4) × 0.5–0.8(–0.9) cm; sterile
7b. Sterile pistil equaling or exceeding sepal in length (rarely pistil ca. 2/3 of sepals in length, but then leaf not linear).

15a. Leaves spatulate or obovate, 2–4 × 0.8–1.8 cm, midrib and lateral veins distinctly prominent ................ 15. B. bodinieri
15b. Leaves many and varied in shape, lateral veins obscure or visible adaxially.

16a. Leaves oblanceolate or narrowly obovate, 1–1.6 × 0.4–0.6 cm, lateral veins obscure and not rugulose on either surface; male flowers shortly pedicellate ....................................................... 16. B. ichangensis
16b. Leaves broadly elliptic or oblong-elliptic, 1.5–3.5 × 0.8–2 cm, lateral veins visible or not and rugulose adaxially; male flowers sessile ................................................................. 17. B. sinica


大花黄杨 da hua huang yang

Shrubs, ca. 3 m tall; branchlets terete; young branches tetragonal, glabrous; internodes 1.5–3 cm. Petiole 1–2 mm; leaf blade lanceolate, oblong-lanceolate, or obovate-oblong, 4.7 × 1.5–2.5(–3.5) cm, thinly coriaceous, base cuneate or acute, margin slightly reflexed, apex obtuse or slightly acute; midrib prominent on both surfaces, lateral veins obscure on both surfaces or visible on upper surface. Inflorescences axillary, 1–1.5 cm, 0.7–1 cm in diam., flowers dense, basal bracts ovate, 3–4 mm, grayish brown, apical bracts obovate-oblong, ca. 6 mm. Male flowers ca. 8; pedicels 2–4 mm, glabrous; tepals oblong or obovate-oblong, 4.5–5 mm, scarious, glabrous; stamens ca. 11 mm; sterile pistil with slender terete gynophore, apex slightly inflated, 1–1.5 mm. Female flowers: pistil 4–5 mm; ovary 1.2–1.5 mm; style narrow and long, persistent tepals many, ovate, acuminate, ca. 1/4 of style; persistent sepals ca. 1.5 mm; carpopodium 5–7 mm; bracts persistent. Fl. Jun–Jul.

● Forests; 1300–2000 m. Guizhou, W Hubei, Sichuan.


毛枝黄杨 mao zhi huang yang

Shrubs, ca. 3 m tall; branchlets terete; young branches tetragonal, 1–2 mm in diam., densely pubescent. Petiole flat, 1–5 mm; leaf blade lanceolate, rarely oblong-obovate, 5–7 × 1.5–2(–2.5) cm, thickly coriaceous, base cuneate, margin cartilaginous, slightly revolute, apex attenuate, rounded, or obtuse, or with retuse tip; adaxial midrib elevated, lateral veins sparse, at intervals of 1.5–2.5 mm, obscure on both surfaces. Inflorescences axillary or terminal. Flowers not seen. Capsule oblong, ca. 9 mm; persistent style ca. 7 mm; stigma deciduous to ca. 1/4 of style; persistent tepals ca. 1.5 mm; capropodium 5–8 mm, pubescent; persistent bracts many, ovate, acuminate, ca. 1 mm. Fr. Jun–Jul.

● Forests on slopes; ca. 700 m. Hainan (Baoting).


阔柱黄杨 ku o zhu huang yang

Shrubs, 1–4 m tall; branchlets terete, ribbed and grooved; young branches tetragonal or subterete, glabrous or sparsely pubescent. Leaves inserted in different plants or sometimes in same plant, dimorphic in size; large leaves: petiole flat, 1–3 mm; leaf blade ovate or oblong-ovate, rarely rhomboid-ovate or lanceolate, 5–7 × 2–3.5 cm, coriaceous or chartaceous, adaxially puberulent along midrib, base rounded or obtuse, rarely acute, margin revolute, apex acuminate or acute, obtuse or with mucronulate tip; midrib elevated on both surfaces, lateral veins many, between them dense veinslets visible or obscure; small leaves: broadly ovate or elliptic, 2–4 × 1–1.5(–2) cm, base rounded, apex acute; lateral veins and veinslets more obscure on both surfaces. Inflorescences axillary and terminal, 8–10 mm, 5–6 mm in diam.; bracts ovate, apiculate, 2–2.5 mm, abaxially puberulent. Male flowers: pedicels ca. 1 mm; outer tepals ovate, ca. 2.5 mm, acute, abaxially puberulent; inner tepals longer and wider, glabrous; stamens 4.5–5 mm; anthers and superior half of filaments puberulent; sterile pistil discoid-tetragonal, ca. 1 mm in diam. Female flowers: pistil 4–5 mm; ovary 1.2–1.5 mm; style compressed and broad, 2.8–3.5 mm, apex attenuate, base ca. 1.6 mm in diam.; stigma oblong, decurrent to middle part of style. Capsule globose, up to 8.5 mm when mature, smooth; persistent style ca. 4 mm; persistent tepals triangular-ovate, ca. 2 mm; capropodium 5–7 mm; bracts persistent. Fl. Mar–Apr, fr. May–Jul.

Forests on slopes, beside mountain streams. NW Guangxi, SE Yunnan (Funing) [Laos, N Vietnam].


海南黄杨 hai nan huang yang

Shrubs, 1–2 m tall; branchlets terete, ribbed; young branches subterete, ca. 1 mm in diam., longitudinally channeled laterally, sparsely puberulent in channels; internode 2–6 cm. Petiole ca. 1 mm; leaf blade elliptic-oblong or oblong-lanceolate, leaves on old lower branches small, 5.5–7 × 1.8–2.3 cm, on young upper branches large, 8.5–12 × 3–3.8 cm, thinly coriaceous or chartaceous, both surfaces glabrous, shining, base cuneate, margin revolute, apex acuminate, obtuse, or with mucronulate tip; midrib elevated on both surfaces, lateral veins 18–20 pairs, 2–4 mm between veins, veinslets dense. Flowers not seen. Capsule axillary or terminal, young fruit globose; persistent style ca. 5 mm; persistent tepals 2–2.5 mm; capropodium ca. 4 mm; persistent bracts lanceolate, subglabrous. Fr. Sep–Dec.

● Streamside in forests, damp areas. S Hainan (Sanya).

**杨梅黄杨** yang mei huang yang

Shrubs, 1–3 m tall; branchlets terete; young branches slender, tetragonal, inner sides puberulent. Petiolo 1–3 mm, puberulent; leaf blade oblong-lanceolate or narrowly lanceolate, 3–7 × (0.8–)1–2 cm or 2–3.5(–4) × 0.5–0.7 cm, thinly leathery or leathery, axially puberulent along midrib, base cuneate, margin revolute, apex acute, acuminate, or obtuse, with retuse or mucronulate tip; midrib elevated on both surfaces, lateral veins and veinlets visible on both surfaces or axially more distinct. Inflorescences axillary; 2–3.5 cm, margin scarious; ovary ca. 1.5 mm; style 2.5–3 mm or 3.5–4 mm, recurved at apex; stigma narrowly obcordate, decurrent to middle-lower part of style. Capsule subglobose, 6–7 mm in diam.; persistent style ca. 3 mm; carpodipodium 3–4 mm; bracts many, persistent.

Forests, forests on slopes, along mountain streams, riverbanks; ± elongate, 3–4 mm, densely velutinous; bracts broadly ovate, acute, margins scarious, abaxially puberulent near base. Male flowers 8–10; pedicels ca. 0.8 mm; outer tepals broadly ovate, ca. 2 mm; inner tepals orbicular, 2–2.5 mm, glabrous; stamens ca. 6 mm; sterile pistil ca. 1 mm. Female flowers: tepals ovate-elliptic, ca. 3 mm, glabrous; ovary 2–2.5 mm; style ca. 2.5 mm, erect, slightly recurved at apex; stigma obcordate, decurrent to 1/3 of style. Capsule subglobose, 6–7 mm; persistent style ca. 5 mm. Fl. Mar–Apr, fr. Sep–Nov.

- In crevices or thickets along riverbanks or streamssides; 400–900 m. S Yunnan (Jinghong, Lancang, Shuangjiang).


**大叶黄杨** da ye huang yang

Shrubs or small trees, 0.6–2 m tall; young branches tetragonous or subterete, ribbed and grooved, glabrous. Petiole 2–3 mm, puberulent; leaf blade ovate, elliptic, or oblong-lanceolate, 4–8 × 1.5–3 cm, rarely lanceolate, up to 9 cm, or rhomboidal, ovate, up to 4 cm wide, leathery or thinly leathery, shining above, puberulent along midrib, base cuneate, margin revolute, apex acuminate, obtuse, or with apiculate tip; midrib elevated on both surfaces, lateral veins many, visible on both surfaces. Inflorescences axillary; rachis 5–7 mm, pubescent or glabrescent; bracts broadly ovate, acute, margins scarious, abaxially puberulent near base. Male flowers 8–10; pedicels ca. 0.8 mm; outer tepals broadly ovate, ca. 2 mm; inner tepals orbicular, 2–2.5 mm, glabrous; stamens ca. 6 mm; sterile pistil ca. 1 mm. Female flowers: tepals ovate-elliptic, ca. 3 mm, glabrous; ovary 2–2.5 mm; style ca. 2.5 mm, erect; slightly recurved at apex; stigma obcordate, decurrent to 1/3 of style. Capsule subglobose, 6–7 mm; persistent style ca. 5 mm. Fl. Mar–Apr, fr. Jun–Jul.

- Forests on mountain slopes, valleys, riverbanks; 500–1400 m. NW Guangdong (Lianxian), NE Guangxi, S Hunan (Yizhang), S Jiangxi (Anyuan, Huichang).


**软毛黄杨** ruan mao huang yang

Shrubs or small trees, 3 m tall; young branches subtetragonous, ca. 2 mm in diam., pubescent or glabrous. Petiole 1–2 mm, pubescent; leaf blade ovate, oblong, or elliptic, rarely oblong-lanceolate, 3–5 × 1.2–1.8(–2) cm, leathery, densely velutinous on both surfaces, base broadly cuneate or cuneate, margin slightly revolute, apex rounded or obtuse, with retuse or mucronulate tip; midrib elevated on both surfaces, lateral veins obscure. Inflorescences axillary, shortly terete, ca. 1 cm; rachis ± elongate, 3–4 mm, densely velutinous; bracts ovate-
8a. Buxus mollicula

Soft-haired yellow box (var. mollicula) ruan mao huang yang (yuan bian zhong)

*Buxus wallichiana* Baillon var. *velutina* Franchet.


- Thickets in river valleys; 1700–2100 m. NW Yunnan (Binhuan, Lijiang, Ninglang, Yongsheng).

8b. Buxus mollicula var. *glabra*

Handel-Mazzetti, Symb. Sin. 7: 236. 1931.

- Mixed forests and forest margins on limestone, thickets on mountain branches; 1900–4000 m. SW and W Sichuan, E and SE Xizang, NW Yunnan.

9. Buxus hebecarpa


- Forests, stony areas; 1500–2000 m. Sichuan (Emei Shan, Tian-quan).

10. Buxus rugulosa


皱叶黄杨 zhou ye huang yang

- Shrubs, 1–2 m tall; branchlets subterete; young branches tetragonal, 1–2 mm in diam., pubescent on 4 sides, or 2 opposite sides glabrous. Petiole 2–3 mm, densely puberulent; leaf blade leathery, elliptic, obovate-elliptic, rhomboid-oblong, oblong, or narrowly oblong, 0.8–2.5 × 0.5–1.2 cm, adaxially shining, puberulent along midrib, slightly pinnate-rugulose in dried state, base broadly cuneate or cuneate, margin revolute, apex obtuse, rounded, or retuse; abaxial midrib and lateral veins obscure. Inflorescences axillary and terminal, capitulate; rachis 3–4 mm, puberulent; bracts ovate, 2.5–3 mm, puberulent. Male flowers 8–10; pedicels 0.5–1 mm; outer tepals ovate; inner tepals suborbicular, 2–3 mm, glabrous, reddish brown or light yellow in dried state; sterile pistil ca. 1 mm, apex inflated. Female flowers: tepals broadly ovate, 2.5–3 mm, abaxially pubescent; ovary ca. 3 mm; style thick, ca. 1.5 mm; stigma obcordate, decurrent to middle part of style. Capsule ovoid-globose, 8–10 mm, glabrous; persistent style 2–3 mm.

- Mixed forests and forest margins on limestone, thickets on mountain slopes and on limestone; 1900–4000 m. SW and W Sichuan, E and SE Xizang, NW Yunnan.

1a. Leaf blade villous on both surfaces; petiole villosus. 10c. var. *rupicola*

1b. Leaf blade adaxially puberulent only along midrib; petiole pubescent.

2a. Shrubs, 1–2 m tall; young branches pubescent; leaf blade rhomboid-oblong, oblong, or narrowly oblong, 1.5–2.5(–3.5) × 0.6–1.2 cm. 10a. var. *rugulosa*

2b. Shrubs prostrate, multibranched, 0.3–1.2 m tall; young branches densely pannose-tomentulose; leaf blade elliptic, obovate-elliptic, or oblong, 8–11(–14) × 5–8 mm. 10b. var. *prostrata*

10a. Buxus rugulosa var. *rugulosa*

皱叶黄杨 (原变种) zhou ye huang yang (yuan bian zhong)

*Buxus microphylla* Siebold & Zuccarini var. *platyphylla* (Schneider) Handel-Mazzetti.

- Shrubs, 1–2 m tall; young branches pubescent. Petiole pubescent; leaf blade rhomboid-oblong, oblong, or narrowly oblong, 1.5–2.5(–3.5) × 0.6–1.2 cm, adaxially puberulent along midrib. Fl. Mar.–May, fr. Jun.–Sep.

- Thickets on mountain slopes; 1900–3500 m. W Sichuan (Barkam, Jinchuan), NW Yunnan (Dali, Deqin, Lijiang, Weishan).


平卧皱叶黄杨 ping wo zhou ye huang yang

*Buxus microphylla* var. *prostrata* W. W. Smith, Notes...
Shrubs prostrate, multibranched, 0.3–1.2 m tall; young branches densely pannose–mentolulose. Petiole pubescent; leaf blade elliptic, obovate-elliptic, or oblong, 8–11(–14) × 5–8 mm, adaxially puberulent along midrib. Fl. Mar–Apr, fr. Jun–Jul.

- Mixed forests on limestone; 2400–4000 m. SW Sichuan, SE Xizang, NW Yunnan.

10c. Buxus rugulosa var. rupicola (W. W. Smith) P. Brückner & T. L. Ming. comb. in stat. nov.

Shrubs prostrate, multibranched, 0.3–1.2 m tall; young branches densely pannose–mentolulose. Petiole pubescent; leaf blade elliptic, obovate-elliptic, or oblong, 8–11(–14) × 5–8 mm, adaxially puberulent along midrib. Fl. Mar–Apr, fr. Jun–Jul.

- Mixed forests on limestone; 2400–4000 m. SW Sichuan, SE Xizang, NW Yunnan.


Shrubs small, 0.5–1 m tall; branchlets subtetragonous; young branches tetragonous, 0.5–1 mm in diam., puberulent or glabrous; internode 3–5 mm. Petiole ca. 1 mm; leaf blade obovate-spatulate or spatulate, 8–12 × 3–4 mm, rarely spatulate-linear, 1.5–2 × 2.5–4 mm, or narrowly oblong or narrowly ob-lanceolate, 15–25 × 5–7 mm, thinly leathery, adaxially puberulent along midrib, base narrowly cuneate, apex obtuse, with mucronulate or retuse tip; midrib elevated on both surfaces, lateral veins dense and visible on surface. Inflorescences axillary and terminal, capitate; rachis 3–5 mm, densely pubescent; bracts 6–8 pairs, ovate-triangular, ca. 1.5 mm, acute, pubescent toward base abaxially. Male flowers sessile; tepals ovate, ca. 1.3 mm, glabrous; sterile pistil ca. 0.8 mm. Female flowers: tepals ovate-elliptic, ca. 1.5 mm; ovary longer than style. Capsule ovoid, to 6 mm, hirtellous initially, later subglabrous or glabrous; persistent style ca. 1.5 mm; stigma obovate, decurrent to middle part of style. Fl. Mar, fr. Jul.

- Rock crevices in valleys, rocky areas; 300–700 m. NE Guangdong, N Guangxi, S Guizhou.

12a. Buxus cephalantha var. cephalantha

Shrubs small, 0.5–1 m tall; branchlets subtetragonous; young branches subtetragonous, slender, ca. 1 mm in diam., sparsely pubescent; internode 1–2 cm. Petiole not obvious; leaf blade spatulate, rarely narrowly oblong, 20–35(–40) × 5–8(–9) mm, thinly leathery, adaxially shiny, puberulent along basal part of midrib, base cuneate, apex acute, rounded to obtuse, or


Shrubs small, 0.5–1 m tall; branchlets subtetragonous; young branches subtetragonous, slender, ca. 1 mm in diam., sparsely pubescent; internode 1–2 cm. Petiole not obvious; leaf blade spatulate, rarely narrowly oblong, 20–35(–40) × 5–8(–9) mm, thinly leathery, adaxially shiny, puberulent along basal part of midrib, base cuneate, apex acute, rounded to obtuse, or


Shrubs small, 0.5–1 m tall; branchlets subtetragonous; young branches subtetragonous, slender, ca. 1 mm in diam., sparsely pubescent; internode 1–2 cm. Petiole not obvious; leaf blade spatulate, rarely narrowly oblong, 20–35(–40) × 5–8(–9) mm, thinly leathery, adaxially shiny, puberulent along basal part of midrib, base cuneate, apex acute, rounded to obtuse, or


Shrubs small, 0.5–1 m tall; branchlets subtetragonous; young branches subtetragonous, slender, ca. 1 mm in diam., sparsely pubescent; internode 1–2 cm. Petiole not obvious; leaf blade spatulate, rarely narrowly oblong, 20–35(–40) × 5–8(–9) mm, thinly leathery, adaxially shiny, puberulent along basal part of midrib, base cuneate, apex acute, rounded to obtuse, or


Shrubs small, 0.5–1 m tall; branchlets subtetragonous; young branches subtetragonous, slender, ca. 1 mm in diam., sparsely pubescent; internode 1–2 cm. Petiole not obvious; leaf blade spatulate, rarely narrowly oblong, 20–35(–40) × 5–8(–9) mm, thinly leathery, adaxially shiny, puberulent along basal part of midrib, base cuneate, apex acute, rounded to obtuse, or
with retuse tip; midrib elevated on both surfaces, lateral veins and veinlets dense and visible adaxially, obscure abaxially. Inflorescences axillary and terminal, capitulate, dense; rachis 3–4 mm; bracts ovate, mucronate. Male flowers 8–10; pedicels ca. 1 mm; tepals broadly ovate or broadly elliptic, ca. 2 mm. Female flowers: tepals broadly ovate, ca. 2 mm, margins scarious; ovary glabrous; style longer than ovary, erect, compressed and broad at lower part; stigma obcordate, decurrent to ca. 1/4 length of style. Capsule subglobose, ca. 7 mm, smooth; persistent style ca. 3 mm, apex slightly recurved. Fl. May, fr. Oct.


线叶黄杨  xian ye huang yang

Shrubs small, ca. 1 m tall; branchlets terete, grayish white; young branches tetragonous, ca. 1 mm in diam., sparsely pubescent; internodes 4–6 mm. Petiole not obvious; leaf blade densely linear or rarely linear-lanceolate, 15–25 × 3–5 mm, thinly leathery, puberulent abaxially, base cuneate, apex obtuse, tip retuse; adaxial midrib elevated, abaxially slightly plane, lateral veins visible adaxially, obscure abaxially. Inflorescence axillary and terminal, capitulate; rachis ca. 4 mm; bracts numerous, densely imbricate, ovate, mucronate. Male flowers 4; pedicels ca. 0.8 mm; tepals broadly ovate, ca. 2 mm; outer tepals recurved; sterile pistil with slender gynophore, apex inflated, ca. 1.4 mm. Female flowers: ovary and style equal in length, glabrous; style compressed and wide, slightly curved; stigma decurrent to middle part of style. Mature capsule not seen. Fl. Mar.

- S Guangxi (Shangsi).


雀舌黄杨  que she huang yang


Shrubs, 3–4 m tall; branchlets terete; young branches tetragonous, pubescent or glabrescent. Petiole 1–2 mm; leaf blade usually spatulate, also narrowly ovate or obovate, widest in apical part, 20–40 × 8–18 mm, thinly leathery, adaxially green and shining, puberulent on basal half of midrib, abaxially glaucous, base narrowly cuneate, apex rounded or obtuse, usually with retuse tip; midrib elevated, lateral veins visible on both surfaces or only adaxially. Inflorescence axillary, capitulate; rachis 5–6 mm, flowers dense; rachis ca. 2.5 mm; bracts ovate, glabrous abaxially or pubescent. Male flowers ca. 10; pedicels only ca. 0.4 mm; tepals ovate-elliptic, ca. 2.5 mm; stamens ca. 6 mm; sterile pistil with terete gynophore, apex inflated, ca. 2.5 mm, equal to tepals in length or slightly longer. Female flowers: outer tepals ca. 2 mm; inner tepals ca. 2.5 mm; ovary ca. 2 mm, glabrous; style ca. 1.5 mm, slightly compressed; stigma obcordate, decurrent to 1/3–1/2 of style. Capsule ovoid, ca. 5 mm; persistent style erect, 3–4 mm. Fl. Feb, fr. May–Aug.

- Forests in mountain valleys and on slopes, thickets, streamsides, stony areas; 600–2600 m. Anhui, Chongqing, Fujian, Gansu, Guangdong, Guangxi, Guizhou, Hunan, Hubei, Jiangsu, Jiangxi, Shaanxi, Sichuan, Taiwan, Zhejiang.


宜昌黄杨  yi chang huang yang

Shrubs, 15–30(–100) cm tall; branchlets terete; young branches dense, tetragonous, very slender, ca. 0.5 mm in diam., densely or sparsely pubescent. Petiole ca. 1 mm; leaf blade oblanceolate or narrowly obovate, 10–16 × 4–6 mm, thinly leathery, glabrous on both surfaces, adaxially shining, base cuneate, apex rounded, with mucronate tip; midrib elevated on both surfaces or only adaxially. Inflorescences axillary or terminal, capitulate; rachis pubescent; bracts ovate, 1–2 mm, acute. Male flowers 8–12; pedicels ca. 0.4 mm; tepals ovate, 1.8–2 mm, bracts and tepals reddish brown interrupted striate; stamens 4–5 mm; sterile pistil slender, with terete gynophore, apex inflated, 1.4–1.8 mm, subequal to tepals in length. Female flowers: tepals ovate-oblong, ca. 2.5 mm; ovary longer than style, glabrous. Capsule ellipsoid or oblong, ca. 5 mm, shining, longitudinally grooved; persistent style ca. 2 mm, slender; stigma decurrent to middle part of style. Fl. May, fr. Jul.

- Stony areas on riverbanks; below 100–300 m. W Hubei (Badong, Yichang, Zigui).


黄杨  huang yang

Shrubs or small trees; branchlets terete, longitudinally ribbed, grayish white; young branches tetragonous, pubescent; internode (3–)5–20 mm. Petiole 1–2 mm; leaf blade varied in shape and size, broadly elliptic, broadly obovate, orbicular, obovate, obovate-oblong, or elliptic-lanceolate to lanceolate, (5–)7–35 × (3.5–)5–20 mm, leathery, thickly leathery, or thinly leathery, shining adaxially, glabrous on both surfaces or puberulent along basal half of midrib, base rounded to cuneate, apex rounded, obtuse with retuse tip or acuminate with acute tip; midrib elevated adaxially, lateral veins obscure and rugulose adaxially. Inflorescences axillary, capitulate; rachis 3–4 mm, pubescent; bracts broadly ovate, 2–2.5 mm, ± pubescent abaxially. Male flowers ca. 10, sessile; outer tepals ovate-elliptic; inner tepals suborbicular, 2.5–3 mm, glabrous; stamens ca. 4 mm; sterile pistil with clavate gynophore, apex slightly inflated, ca. 2 mm, sterile pistil and tepals length ca. 2:3 or equal to 3:2. Female flowers: tepals ca. 3 mm; ovary slightly longer than style, glabrous; style thick and compressed; stigma obcordate, decurrent to middle part of style. Capsule subglobose, 6–8(–10) mm; persistent style 2–3 mm.

- Forests in mountain valleys and on slopes, thickets, streamsides, stony areas; 600–2600 m. Anhui, Chongqing, Fujian, Gansu, Guangdong, Guangxi, Guizhou, Hubei, Jiangsu, Jiangxi, Shaanxi, Sichuan, Taiwan, Zhejiang.

1a. Leaf blade elliptic-lanceolate or lanceolate, 2–3.5 × 1–1.3 cm, apex acuminate, with acute tip, midrib elevated on both surfaces,
1b. Leaf blade broadly elliptic, broadly obovate, orbicular, obovate-elliptic, or obovate-oblong, apex rounded or obtuse, with retuse tip; midrib elevated adaxially; style 6–8(–10) mm.

2a. Leaf blade larger, 1.5–3.5 × 0.8–2 cm, puberulent along basal part of midrib adaxially, densely white papillate along midrib abaxially, lateral veins prominent adaxially.

3a. Sterile pistil and tepals length 2:3 .......................... 17a. var. sinica
3b. Sterile pistil and tepals length 3:2 or equal .................. 17c. var. intermedia

2b. Leaf blade smaller, glabrous and not papillate along midrib adaxially, lateral veins prominent or obscure adaxially.

4a. Leaf blade thinly leathery, lateral veins prominent adaxially; capsule glabrous .................. 17d. var. parvifolia
4b. Leaf blade thickly leathery, lateral veins obscure adaxially and rugulose; capsule pubescent or glabrous.

5a. Leaf blade 9–11(–12) × 8–10 mm; capsule pubescent initially ... 17e. var. vacciniifolia
5b. Leaf blade very small, 5–7(–9) × 3.5(–6) mm; capsule glabrous ............... 17f. var. pumila

17a. Buxus sinica var. sinica

黄杨 (原变种) huang yang (yuan bian zhong)


Shrubs or small trees, 1–6 m tall; internode 5–20 mm. Leaf blade broadly elliptic, broadly obovate, obovate-elliptic, or obovate-oblong, 1.5–3.5 × 0.8–2 cm, lucid and puberulent along basal half of midrib adaxially, densely white papillate along midrib abaxially, apex rounded or obtuse, with retuse tip; midrib elevated and lateral veins visible adaxially. Sterile pistil and tepals length 2:3. Capsule globose, 6–8(–10) mm. Fl. Mar, fr. May–Jun.

- Forests in mountain valleys, streamside; 1200–2600 m. Anhui, Gansu, Guangdong, Guangxi, Guizhou, Hubei, Jiangsu, Jiangxi, Shandong, Sichuan, Zhejiang.

17b. Buxus sinica var. aemulans (Rehder & E. H. Wilson) P. Brückner & T. L. Ming, comb. in stat. nov.

尖叶黄杨 jian ye huang yang


_B. sinica_ subsp. aemulans (Rehder & E. H. Wilson) M. Cheng.

Leaf blade rather variable from rhomboid-ovate to narrowly lanceolate, usually elliptic-lanceolate or lanceolate, 2–3.5 × 1–1.3 cm, apex acuminate, acute or slightly obtuse at tip; midrib elevated on both surfaces, lateral veins visible adaxially. Sterile pistil length and capsule indumentum also variable. Capsule ca. 7 mm; persistent style ca. 3 mm.

- Thickets, stony areas along streamsides; 600–2000 m. Anhui, Chongqing, Fujian, Guangdong, Guangxi, Hubei, Hunan, Jiangxi, Sichuan, Zhejiang.


中间黄杨 zhong jian huang yang

_Buxus intermedia_ Kanehira, Formosan Trees, rev. ed., 359. 1936; _B. microphylla_ var. intermedia (Kanehira) H. L. Li.

Leaf blade 1.5–3.5 × 0.8–2 cm, puberulent along basal part of midrib adaxially, densely white papillate along midrib abaxially; lateral veins prominent adaxially. Sterile pistil and tepals length equal or 3:2.

- Taiwan.


小叶黄杨 xiao ye huang yang

Leaf blade small, broadly elliptic or broadly ovate, 7–10 × 5–7 mm, thinly leathery; lateral veins prominent adaxially. Capsule 6–7 mm, glabrous.

- Stony areas; ca. 1000 m. S Anhui (Huang Shan), Chongqing, Hubei, Jiangxi (Lushan), Zhejiang (Longtang Shan).


越桔叶黄杨 yue ju ye huang yang

Small shrubs, densely ramified; internode 3–6 mm. Leaf blade small, orbicular or broadly elliptic, rarely obovate, 9–11(–12) × 8–10 mm, thickly leathery, lucid, margins strangely reflexed, apex rounded, with retuse tip, rarely acute; lateral veins

_B. microphylla_ Siebold & Zuccarini var. vacciniifolia Hu & F. H. Chen;
obscure adaxially, rugulose. Capsule ovate-globose, 7–8 mm, pubescent initially or glabrescent.

● Stony areas, thickets; 1000–1800 m. Chongqing, N Guangdong (Ruyuan), S Hunan (Yizhang), Jiangxi (Lushan).


矮生黄杨 ai sheng huang yang

Leaf blade very small, 5–7(–9) × 3.5(–6) mm, thickly leathery; lateral veins obscure adaxially, rugulose. Capsule globose, ca. 4 mm; persistent style very short, glabrous.

● Forests on slopes; ca. 2100 m. W Hubei (Badong).