

# Chapter 3

## Medicinal Angiosperms of Caprifoliaceae, Valerianaceae, and Dipsacaceae



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This chapter introduces 24 species of medicinal plants in 3 families, mainly including *Abelia chinensis*, *Lonicera acuminata*, *Lonicera macranthoides*, *Lonicera hypoglauca*, *Lonicera macranthoides*, *Lonicera japonica*, *Lonicera pampaninii*, *Lonicera rhytidophylla*, *Lonicera tangutica*, *Lonicera trichosantha*, *Lonicera webbiana*, *Sambucus chinensis*, *Sambucus williamsii*, *Viburnum brachybotryum*, *Viburnum cylindricum*, *Viburnum dilatatum*, and *Viburnum setigerum* of Caprifoliaceae; *Nardostachys jatamansi*, *Patrinia scabiosaefolia*, and *Patrinia villosa* of Valerianaceae; and *Dipsacus asperoides* of Dipsacaceae.

This chapter introduces the scientific names, medicinal names, morphologies, habitats, distributions, acquisition and processing methods of these medicinal plants, content of medicinal properties, therapeutic effects, and usage and dosage of

these medicinal plants and attaches unedited color pictures and pictures of part herbal medicines of each species.

## 3.1 Family: Caprifoliaceae

### 3.1.1 *Abelia chinensis*

**Chinese Name(s):** nuo mi tiao, da ye bai gu ma.

**Source:** This medicine is made of the roots and flowers of *Abelia chinensis* (*Abelia chinensis* R. Br.).

**Morphology:** The plant is a shrub, deciduous and highly branched, up to 2 m in height. The young branches are slender, red-brown, pubescent, barks being longitudinal split when old. The leaves are opposite or in whorls of three, rounded-ovate to elliptic-ovate, 2–5 cm long, 1–3.5 cm wide, apically acute to long acuminate, basally rounded or cordate, remotely crenate-serrate at margins, abaxially densely white villous at the base of the midvein and lateral veins. The inflorescences are a large terminal panicle of paired flowers, and the peduncles are pubescent, glabrescent when fruiting. The flowers are fragrant, with three pairs of bracteoles at the base of paired ovaries. The bracteoles are oblong or lanceolate, ciliate. The calyx tubes are cylindrical, pubescent, slightly flattened, with longitudinal stripes, and limbs five-lobed, lobe being elliptic or obovate-oblong, 5–6 mm long, turning red at fruiting stage. The corollas are white to red, funnelform, 1–1.2 cm long, about one time longer than calyx lobes, outside pubescent, with five lobes, lobes being rounded-ovate. The stamens are inserted in base of corolla tubes, and the filaments are slender, exserted. The styles are slender, stigmas being capitate. The achenes are crowned with persistent and slightly enlarged calyx lobes.

**Habitat:** It grows under forests or shrubs or by streams and is also cultivated in gardens.

**Distribution:** It's distributed in Hong Kong, Guangdong, Guangxi, Hubei, Hunan, Sichuan, Guizhou, Yunnan, Zhejiang, Jiangxi, Fujian, and Taiwan of China.

**Acquisition and Processing:** The roots and flowers are harvested in summer and autumn and dried in the sun.

**Natural Taste and Meridian Tropism:** It's bitter in taste, cold in property.

**Functions:** Clearing heat and detoxicating, cooling blood, and stopping bleeding, it's often used for treatment of diarrhea, dysentery, a boil on the nape, infantile malnutrition, macula, mumps due to heat and toxin, caries, epistaxis, hemoptysis, hematemesis, hematochezia, influenza, injury due to knocks and falls, and traumatic bleeding.

**Use and Dosage:** 6–15 g per dose, decocted in water for oral use. For external treatment, the decoctum is used for washing the affected areas with.



## 3.2 Family: Caprifoliaceae

### 3.2.1 *Lonicera acuminata*

**Chinese Name(s):** dan hong ren dong, ba dong ren dong.

**Source:** This medicine is made of the buds of *Lonicera acuminata* (*Lonicera acuminata* Wall. [*L. henryi* Hemsl.]).

**Morphology:** The plant is a climber. The branches, petioles, and peduncles are densely covered with curved or spreading brown-yellow stiff hairs, sometimes interspersed with long glandular hairs. The leaves are papery or leathery, ovate-oblong, ovate-elliptic, or lanceolate, 4–8.5 cm long, 2–3 cm wide, apically acuminate to caudate, basally rounded to cordate, sparsely strigose on both surfaces, or brown-yellow hirsute at least on the midvein adaxially, ciliate at margins. The petioles are 3–5 mm long. The flowers are paired, axillary at apices of branchlets, sometimes paniculate. The peduncles are 5–18 mm. The bracts are linear or subulate, slightly shorter or longer than calyx tubes. The bracteoles are broadly ovate or obovate, 1–1.5 mm long, apically obtuse or impressed, ciliate. The flowers are yellowish white, tinged red. The calyx tubes are 2.5–3 mm long, glabrous or slightly shortly strigose, lobes being ovate to ovate-lanceolate, 1–1.5 mm long, glabrous or ciliate at margins. The corollas are bilabiate, 1.5–2.4 cm long, usually shortly strigose and sparsely glandular, and the tubes are broadly and shallowly gibbous toward the base, the upper lip being irregularly four-lobed and erect, lobes being orbicular-ovate, the lower lip being recurved. The stamens are exserted, and the styles are hirsute at least in lower half. The berries are blue-black, ovoid, 6–7 mm in diameter. The flowering period is in April. The fruiting period is in November.

**Habitat:** It grows on valleys, hillsides, and roadsides.

**Distribution:** It's distributed in Shaanxi, Gansu, Anhui, Zhejiang, Jiangxi, Fujian, Taiwan, Hubei, Hunan, Guangxi, Sichuan, Guizhou, Yunnan, Tibet, and the eastern Himalayas of China, as well as in Myanmar, Sumatra, Java, Bali, and the Philippines.

**Acquisition and Processing:** The buds are harvested in summer and autumn and dried in the sun.

**Natural Taste and Meridian Tropism:** It's sweet in taste, cold in property, belonging to the meridians of the spleen, stomach, small intestine, and gallbladder.

**Functions:** Clearing heat and detoxicating, dispelling wind, cooling blood, and stopping dysentery, it's often used for treatment of carbuncle, sore throat, mastitis, intestinal carbuncle, cold, and dysentery with blood.

**Use and Dosage:** 3–10 g per dose, decocted in water for oral use.





### 3.3 Family: Caprifoliaceae

#### 3.3.1 *Lonicera confusa* [1], *Lonicera hypoglauca* [1], *Lonicera macranthoides* [1]

**Chinese Name(s):** shan yin hua, jin yin hua, tu yin hua.

**Source:** This medicine is made of the buds of *Lonicera confusa* (*Lonicera confusa* (Sweet) DC.), *Lonicera hypoglauca* (*Lonicera hypoglauca* Miq.), and *Lonicera macranthoides* (*Lonicera macranthoides* Hand. - Mazz.).

**Morphology:** (A) *Lonicera confusa*: The plant is a climber. The branches, petioles, peduncles, calyx tubes, and bracts are densely covered with curved or spreading brown-yellow pubescence, sometimes interspersed with glandular hairs. The leaves are papery, ovate, or ovate-oblong, 3-6(-7) cm long, 2-4 cm wide, apically acute, sometimes mucronate, basally rounded, truncate, or cordate, pubescent on both surfaces, becoming glabrous except on the midveins adaxially when old, abaxially densely pubescent, thinly revolute at margins when dry, ciliate. The lateral veins are in three to four, and the petioles are 5-8 mm long. The flowers are paired, axillary at the apex of branchlets, sometimes densely short racemose, with visible bracts. The peduncles are 2-8 mm. The bracts are lanceolate, 1-2 mm long. The bracteoles are ovate or suborbicular-ovate, about 1 mm long, densely pubescent, and the flowers are white, becoming yellow when dry. The corollas are bilabiate, 3.2-5 cm long, tubes being erect or slightly recurved, outside inversed pubescent and glandular, lips being shorter than tubes. The stamens and styles are exerted, the filaments being glabrous. The berries are ellipsoid or subglobose, 6-10 mm in diameter, black when mature. The flowering period is from April to May and September to October (the second flowering). The fruiting period is from August to October.

**Habitat:** It grows in the mountain shrubs at altitudes of 800 m and in the plains.

**Distribution:** It's distributed in Hong Kong, Guangdong, Hainan, and Guangxi of China, as well as in Vietnam and Nepal.









**Morphology:** (B) *Lonicera hypoglauca*: The plant is a climber. The branches, petioles, and peduncles are densely covered with curved or spreading brown-yellow pubescence and stiff hairs. The leaves are papery, ovate or ovate-elliptic, 6–9 cm long, 2.5–3.5 cm wide, apically acuminate or acute, basally rounded or cordate, slightly oblique, with dense curved or spreading brown-yellow pubescence and stiff hairs adaxially on the midveins and abaxially, with sessile or petiolate yellow or orange glands. The lateral veins are in four to five pairs, and the petioles are 5–12 mm long. The flowers are paired, axillary at apices of branchlets, sometimes densely short racemose. The peduncles are 5–20 mm long. The bracts are linear-lanceolate, about 3 mm long, shortly strigose and ciliate. The bracteoles are ovate or suborbicular-ovate, about 1 mm long, ciliate. The flowers are white, becoming yellow when dry, and the calyx tubes are pubescent or glabrous, about 3 mm, lobes

being triangular-lanceolate or long-triangular, 1.5–2 mm long, ciliate. The corollas are bilabiate, 3.5–4 cm long, lips being shorter than tubes, inversed pubescent and sparsely glandular. The stamens and styles are exserted. The berries are subglobose, 8 mm in diameter, black when mature, glaucous. The flowering period is from April to May and September to October (the second flowering). The fruiting period is from August to October.

**Habitat:** It grows in mountains, valley shrubs, or sparse forests at altitudes of 200–700 m.

**Distribution:** It's distributed in the provinces of Guangdong, Guangxi, Sichuan, Guizhou, and Yunnan, as well as in Japan.





**Morphology:** (C) *Lonicera macranthoides*: The plant is a climber. The branchlets are tomentose-strigose when young, sometimes interspersed with glandular hairs. The leaves are leathery, ovate, elliptic or ovate-lanceolate, 5–14 cm long, 2–4.5 cm wide, apically acute or acuminate, basally rounded or subcordate, entire and thinly revolute at margins, adaxially glabrous or only pubescent on the midveins, abaxially densely white or yellow-brown tomentose-strigose, interspersed with orange glandular hairs. The lateral veins are in five to six pairs, and the petioles are 6–10 mm long, densely tomentose-strigose. The flowers are paired, axillary at apices of branchlets, sometimes arranged in racemes, paniculate with leaf. The peduncles are 1–5 mm, densely tomentose, and ciliate with bracts, bracteoles, and calyx lobes. The bracts are lanceolate or linear-lanceolate, 2–4 mm long, and the bracteoles are ovate or ovate-triangular, about 1/2 of the tubes in length. The flowers are white or pale yellow. The calyx tubes are 2 mm long, usually glaucous, glabrous or pubescent, or adaxially pubescent, lobes being triangular or subulate, 1–2 mm long. The corollas are bilabiate, 3.5–5 cm long, outside strigose, sometimes with orange glandular hairs, tubes being slender, equaling to or longer than lips, inside strigose, upper lip being ovate and irregularly four-lobed, subequal in length, lobes being 4–8 mm long, the lower lip being oblanceolate, recurved. The stamens and styles are exserted, glabrous. The berries are globose, 6–10 mm in diameter, black when mature, glaucous. The flowering period is from June to July. The fruiting period is from October to November.

**Habitat:** It grows in valleys, hillsides, roadside shrubs, or sparse forests at altitudes of 300–1200 m.

**Distribution:** It's distributed in provinces of Guizhou, Anhui, Zhejiang, Jiangxi, Fujian, Hubei, Hunan, Guangdong, Guangxi, and Sichuan.

**Acquisition and Processing:** The buds are harvested in summer and autumn and dried in the sun.





**Medicinal Properties:** *Lonicera confusa*—The product is clavate and slightly curved, 1.6–3.5 cm long and 0.5–2 mm in diameter, densely grayish white hairy on the calyx tube and corolla, and hairy on the ovary.

*Lonicera hypoglauca*: The product is clavate and slightly curved, 2.5–4.5 cm long, 2 mm in diameter in the upper part, and 1 mm in diameter in the lower part. The surface is greenish brown to yellowish white. The main pedicels are fascicled, and the corolla lobes are less than half of the full length when blooming. It's hard in quality, slightly elastic when pressed, fragrant in odor, slightly bitter, and sweet in taste.

*Lonicera macranthoides*: It is clavate and slightly curved, 3–4.5 cm long and 0.8–2 mm in diameter, yellowish white to yellowish brown on surfaces, glabrous or sparsely hairy, apically five-lobed, with the lobes being long triangular and tomentose. The lower lip of the corolla reversed in flowers opening, and the style is glabrous.

**Natural Taste and Meridian Tropism:** It's sweet in taste, cold in property, belonging to the meridians of the spleen, stomach, small intestine, and gallbladder.

**Functions:** Clearing heat and detoxicating, dispelling wind, cooling blood, and stopping dysentery, it is often used for treatment of carbuncle, swelling, sore throat, erysipelas, dysentery with blood due to heat, cold of wind heat type, and epidemic febrile diseases.

**Use and Dosage:** 6–15 g per dose, decocted in water for oral use.

**Prescription Example(s):**

1. Clinical diagnoses and symptoms: cold—(Yinqiao powder) *Lonicera macranthoides* and *Forsythia suspensa* each 12 g, *Lophatherum gracile* 15 g, *Schizonepeta* spike 6 g, peppermint and liquorice 3 g each, fermented soybean 9 g, *Arctium* fruit, *Platycodon grandiflorum* 11 g, *Rhizoma phragmitis* 18 g, mixed and ground to powder, 18 g per dose, decocted in water for oral use.



2. Clinical diagnoses and symptoms: leptospirosis—(a) Prevention: *Lonicera macranthoides* and *Forsythia suspensa* each 30 g, *Imperata cylindrica* root 60 g, *Scutellaria* 18 g, *Agastache rugosus* 12 g, decocted in water and taken one dose per day three times during the period of contact with the epidemic water. (b) Treatment: the former formula reduced citronella root and added with 15 g of cape jasmine, 12 g of *Lophatherum gracile* (or tender *Lophatherum* leaf), 9 g of *Tetrapanax papyrifer*, added with 500 ml of water, decocted for half an hour. Take the decoctum, add cold boiled water to 600 ml; take 100 ml every 4 h during the fever. After abatement of fever, take 150 ml every 6 h for 3–5 days to consolidate the curative effect.
3. Clinical diagnoses and symptoms: acute simple appendicitis—*Lonicera macranthoides* 60–90 g, dandelion 30–60 g, licorice 9–15 g, decocted in water and taken one dose daily two times in the morning and evening.
4. Clinical diagnoses and symptoms: hemorrhagic measles—*Lonicera macranthoides*, *Alkanna tinctoria*, *Paeonia veitchii*, moutan bark, and *Radix rehmanniae*, licorice 9–15 g, decocted in water for oral use.
5. Clinical diagnoses and symptoms: surgical suppurative diseases—*Lonicera macranthoides* injection, once every 4–6 h, 2–4 ml per dose, added with 1–2 ml of 2% procaine for intramuscular injection.
6. Clinical diagnoses and symptoms: cervical erosion—*Lonicera macranthoides* powder 1000 g, soaked in 40% alcohol 1500 ml for 48 h, filtrated and decocted to 400 ml. Smear on the affected area one to two times a day, 7–12 days as a course of treatment.
7. Clinical diagnoses and symptoms: infectious osteomyelitis—*Lonicera macranthoides* 30 g, *Forsythia suspensa* 24 g, Chinese violet 15 g, wild graperoot, each 15 g, *Scutellaria* 9 g, moutan bark 6 g, decocted in water for oral use.

## 3.4 Family: Caprifoliaceae

### 3.4.1 *Lonicera japonica* [2]

**Chinese Name(s):** jin yin hua, ren dong teng, tu yin hua, shuang hua, er hua, er bao hua.

**Source:** This medicine is made of the buds of *Lonicera japonica* (*Lonicera japonica* Thunb.).

**Morphology:** The plant is a climber. The young branches are dark red, with dense spreading stiff hairs, sometimes interspersed with glandular hairs. The leaves are papery, ovate, elliptic-ovate, rarely obovate or ovate-lanceolate, 3–6 cm long, 1.5–4 cm wide, apically acute or obtuse, basally rounded or broadly cuneate, rarely subcordate, ciliate, usually with dense dark yellow short stiff hairs on both surfaces when young, glabrescent, adaxially glabrous or only pubescent on the veins,



abaxially glabrous or sparsely pubescent, and the lateral veins are in three to five pairs. The petioles are 4–8 mm long, densely pubescent. The flowers are paired, axillary at apices of branchlets, sometimes arranged in cymes, racemose. The peduncles are 2–4 mm, densely pubescent and interspersed with glandular hairs. The bracts, bracteoles, and calyx lobes are densely pubescent and interspersed with glandular hairs. The bracts are leaflike, 2–3 mm long, and the bracteoles are ovate or rounded, about 1.5 mm long. The flowers are fragrant, white, becoming yellow when dry. The calyx tubes are 2 mm long, glabrous, ovate-triangular or long-triangular. The corollas are bilabiate, 3–4.5 cm long, and tubes are slightly longer than lobes, spreading hairy with interspersed long glandular hairs outside, the upper lip lobes being obtuse at the apex, the lower lip being linear, recurved. The stamens and styles are exserted. The berries are globose, 6–7 mm in diameter, blue-black when mature, shiny. The flowering period is from April to June and August to September (the second flowering). The fruiting period is from October to November.

**Habitat:** It grows on roadsides and hillside shrubs or in sparse forests.

**Distribution:** It's distributed in China from Liaoning in the north to Shaanxi in the west to Guangxi in the south to Yunnan and Guizhou in the southwest, as well as in Japan and North Korea.

**Acquisition and Processing:** The buds and flowers are harvested in summer and autumn and dried in the sun.

**Natural Taste and Meridian Tropism:** It's sweet in taste, cold in property, belonging to the meridians of the spleen, stomach, small intestine, and gallbladder.

**Functions:** Clearing heat and detoxicating, dispersing wind heat, cooling blood, and stopping dysentery, it's often used for treatment of upper respiratory tract infection, influenza, tonsillitis, acute mastitis, lobar pneumonia, lung abscess, bacillary dysentery, leptospirosis, acute appendicitis, carbuncle, abscess, erysipelas, traumatic infection, and cervical erosion.

**Use and Dosage:** 6–15 g per dose, decocted in water for oral use.

**Prescription Example(s):**

1. Clinical diagnoses and symptoms: cold—(Yinqiao powder) *Lonicera japonica*, *Forsythia suspensa*, each 12 g, *Lophatherum gracile* 15 g, *Schizonepeta* spike 6 g, peppermint, liquorice 3 g each, fermented soybean 9 g, *Arctium* fruit, *Platycodon grandiflorum* 11 g, *Rhizoma phragmitis* 18 g, mixed and ground to powder, 18 g per dose, decocted in water for oral use.
2. Clinical diagnoses and symptoms: leptospirosis—(a) Prevention: *Lonicera japonica* and *Forsythia suspensa* each 30 g, *Imperata cylindrica* root 60 g, *Scutellaria* 18 g, *Agastache rugosus* 12 g, decocted in water and taken one dose per day three times during the period of contact with the epidemic water. (b) Treatment: the former formula reduced citronella root and added with 15 g of cape jasmine, 12 g of *Lophatherum gracile* (or tender *Lophatherum* leaf), 9 g of *Tetrapanax papyrifer*, added with 500 ml of water, decocted for half an hour. Take the decoctum, add cold boiled water to 600 ml; take 100 ml every 4 h during the fever. After abatement of fever, take 150 ml every 6 h for 3–5 days to consolidate the curative effect.

3. Clinical diagnoses and symptoms: acute simple appendicitis—*Lonicera japonica* 60–90 g, dandelion 30–60 g, licorice 9–15 g, decocted in water and taken one dose daily two times in the morning and evening.
4. Clinical diagnoses and symptoms: hemorrhagic measles—*Lonicera japonica*, *Alkanna tinctoria*, *Paeonia veitchii*, moutan bark and Radix rehmanniae, licorice 9–15 g, decocted in water for oral use.
5. Clinical diagnoses and symptoms: surgical suppurative diseases—*Lonicera japonica* injection, once every 4–6 h, 2–4 ml per dose, added with 1–2 ml of 2% procaine for intramuscular injection.
6. Clinical diagnoses and symptoms: cervical erosion—*Lonicera japonica* powder 1000 g, soaked in 40% alcohol 1500 ml for 48 h, filtrated and decocted to 400 ml. Smear on the affected area one to two times a day, 7–12 days as a course of treatment.
7. Clinical diagnoses and symptoms: infectious osteomyelitis—*Lonicera japonica* 30 g, *Forsythia suspensa* 24 g, Chinese violet 15 g, wild graperoot, each 15 g, *Scutellaria* 9 g, moutan bark 6 g, decocted in water for oral use.





### 3.5 Family: Caprifoliaceae

#### 3.5.1 *Lonicera pampaninii* [3]

**Chinese Name(s):** duan bing ren dong.

**Source:** This medicine is made of the buds of *Lonicera pampaninii* (*Lonicera pampaninii* Lévl.).

**Morphology:** The plant is a climber. The young branches and petioles are densely covered with shortly curved brown-yellow stiff hairs, becoming brown purple and glabrescent. The leaves are occasionally three-whorled, thinly leathery, oblong-lanceolate, narrowly elliptic, or ovate-lanceolate, 3–10 cm long, apically

acuminate to caudate, basally subcordate, with short stiff hairs along midveins on both surfaces, abaxially sparsely shortly strigose when young, revolute and ciliate at margins. The petioles are short, 2–5 mm long. The flowers are paired, axillary at apices of branchlets, fragrant. The peduncles are very short or sessile. The bracts, bracteoles, and calyx lobes are shortly strigose. The bracts are narrowly lanceolate or ovate-lanceolate, sometimes leaflike, 5–15 mm long. The bracteoles are suborbicular-ovate or ovate,  $1/2$ – $2/3$  of the calyx tubes in length. The calyx tubes are less than 2 mm long, lobes being ovate-triangular to long-triangular, shorter than calyx tubes, outside shortly strigose, ciliate at margins. The corollas are white-tinged red, becoming yellow, bilabiate, 1.5–2 cm long, outside densely inverted shortly strigose and glandular, and the lips being slightly shorter than tubes, recurved. The stamens and styles are slightly exerted, and the filaments are pilose at the base, anthers being 2 mm long, styles being glabrous. The berries are ovoid, blue or black, 5–6 mm in diameter. The flowering period is from May to June. The fruiting period is from October to November.

**Habitat:** It grows under forests or shrubs at altitudes of 150–800 m.

**Distribution:** It's distributed in provinces of Anhui, Zhejiang, Jiangxi, Fujian, Hubei, Hunan, Guangdong, Guangxi, Sichuan, Guizhou, and Yunnan.

**Acquisition and Processing:** The buds are harvested in summer and autumn and dried in the sun.

**Natural Taste and Meridian Tropism:** It's sweet and slightly bitter in taste, cold in property, belonging to the meridians of the spleen, stomach, small intestine, and gallbladder.

**Functions:** Clearing heat and detoxicating, it's often used for treatment of cold, coughing, and pharyngitis.

**Use and Dosage:** 3–9 g per dose, decocted in water for oral use.







## 3.6 Family: Caprifoliaceae

### 3.6.1 *Lonicera rhytidophylla*

**Chinese Name(s):** zhou ye ren dong.

**Source:** This medicine is made of the flowers of *Lonicera rhytidophylla* (*Lonicera rhytidophylla* Hand.-Mazz. [*L. reticulata* Champ.]).

**Morphology:** The plant is a climber. The young branches, petioles, and inflorescences are covered with short brown-yellow stiff hairs. The leaves are leathery, broadly elliptic, ovate, or ovate-oblong to oblong, 3–10 cm long, apically sub-rounded or obtuse and mucronate, basally rounded to broadly cuneate, rarely truncate, revolute at margins, adaxially midveins being conspicuously impressed and wrinkled, glabrous except the midveins, abaxially pubescent, becoming yellow-white when dry. The petioles are 8–15 mm long. The flowers are paired, axillary at apices of branchlets, rorymbose or paniculate, with bracts in the base of peduncles. The bracts are linear-lanceolate, 2–3 mm long, equaling to or slightly longer than calyx tubes, densely short strigose and ciliate with bracteoles and calyx lobes. The bracteoles are narrowly ovate to suborbicular-ovate, apically acute, equaling or subequaling to calyx tubes. The calyx tubes are suborbicular-ovate, about 2 mm long, glabrous or sometimes short strigose, pink blue, lobes being subulate, 1–2 mm long, apically acute. The corollas are white, becoming yellow, 2.5–3.5(–4.5) cm long, outside densely appressed inversed shortly strigose and glandular, bilabiate, pilose in the lower part of lips and tubes, upper lips being erect, lower lips being recurved. The stamens are slightly exerted, and the filaments are glabrous or white pilose inside, anthers being 2.5–3 mm long. The styles are exerted, glabrous, with stout stigmas. The berries are ellipsoid, blue-black, 7–8 mm in diameter. The flowering period is from June to July. The fruiting period is from October to November.

**Habitat:** It grows in shrubs of valleys and creeks and by roadsides at altitudes of 400–600 m.

**Distribution:** It's distributed in Hong Kong, Guangdong, Guangxi, Jiangxi, Fujian, and Hunan of China.

**Acquisition and Processing:** The buds are harvested in summer and autumn and dried in the sun.

**Natural Taste and Meridian Tropism:** It's sweet and slightly bitter in taste, cold in property, belonging to the meridians of the spleen, stomach, small intestine, and gallbladder.

**Functions:** Clearing heat and detoxicating, it is often used for treatment of carbuncle, swelling, sore throat, erysipelas, blood dysentery due to heat and toxin, cold of wind heat type, and epidemic febrile diseases.

**Use and Dosage:** 6–15 g per dose, decocted in water for oral use.





## 3.7 Family: Caprifoliaceae

### 3.7.1 *Lonicera tangutica*

**Chinese Name(s):** tang gu te ren dong, ai jin yin hua, gui lian ci, long zhai ren dong.

**Source:** This medicine is made of the roots of *Lonicera tangutica* (*Lonicera tangutica* Maxim.).

**Morphology:** The plant is a deciduous shrub, up to 2–4 m in height. The leaves are papery, oblanceolate to oblong, apically obtuse, basally tapering, 1–4 cm long, with short stiff hairs on both surfaces. The petioles are 2–3 mm long. The peduncles are inserted in the leaf axils of young branches, slightly curved, 1.5–3 cm long. The bracteoles are 1/4–1/5 of the calyx tubes in length. The calyx tubes are connated from the middle part, tubes being ellipsoid or oblong, 2–4 mm long, glabrous, limbs being cupulate, apically triangular denticulate. The corollas are white, yellow-white, or tinged red, tubular funnelform, and the tubes are broadly and shallowly gibbous toward the base, lobes being erect, orbicular-ovate, 2–3 mm long. The stamens are inserted in the middle of tubes, anther being exerted, and the styles are exceeding the corolla lobes. The fruits are red, 5–6 mm in diameter. The seeds are pale brown, ovoid or oblong-globose, 2–2.5 mm long. The flowering period is from May to June. The fruiting period is from July to August.

**Habitat:** It grows in hillside grasslands, shrubs by streams, or mixed forests at altitudes of 1600–3900 m.

**Distribution:** It's distributed in provinces of Shaanxi, Ningxia, Gansu, Qinghai, Hubei, Sichuan, Yunnan, and Tibet.

**Acquisition and Processing:** The roots are harvested in autumn, removed the coarse barks, washed, sliced, and dried in the sun.

**Natural Taste and Meridian Tropism:** It's bland in taste, slightly cold in property.

**Functions:** Clearing heat, detoxicating, and stopping malaria, it's often used for treatment of orchitis, asthma, furuncle, carbuncle, etc.

**Use and Dosage:** 10–15 g per dose, decocted in water for oral use.





## 3.8 Family: Caprifoliaceae

### 3.8.1 *Lonicera trichosantha*

**Chinese Name(s):** mao hua ren dong.

**Source:** This medicine is made of the branches and leaves of *Lonicera trichosantha* (*Lonicera trichosantha* Bur. et Franch.).

**Morphology:** The plant is a deciduous shrub, up to 3–4 m in height, and the branches are horizontally spreading. The leaves are papery, abaxially glaucous, oblong to obovate-oblong, 2–6 cm long, apically obtuse, basally rounded, sparsely pubescent on both surfaces. The peduncles are 2–6 mm long, shorter than petioles, elongating when fruiting. The bracts are linear-lanceolate, equaling to calyx tubes. The bracteoles are suborbicular-ovate, about 2 mm long, apically truncate, basally connate. The calyx tubes are separated, limbs being campanulate, 1.5–2 mm long, lobes being triangular. The corollas are yellow, 12–15 mm long, bilabiate, tubes being 4 mm long, often shallowly gibbous toward the base, outside strigose and glandular hairy, upper corolla lip lobes being shallowly rounded, lower lips being oblong, 8–10 mm. The filaments are inserted in the throat of corollas, and the styles are about 1 cm long, stigmas being discoid. The fruits are orange-red to red, globose, 6–8 mm in diameter. The flowering period is from May to July. The fruiting period is in August.

**Habitat:** It grows in the thickets of forests, at forest margins, and by riversides or field side at altitudes of 2700–4100 m.

**Distribution:** It's distributed in provinces of Sichuan, Gansu, Yunnan, Tibet, and Shaanxi and other provinces of China.

**Acquisition and Processing:** It's harvested in spring and summer when the branches and leaves are luxuriant and the flowers didn't bloom, cut off, and dried in the sun.

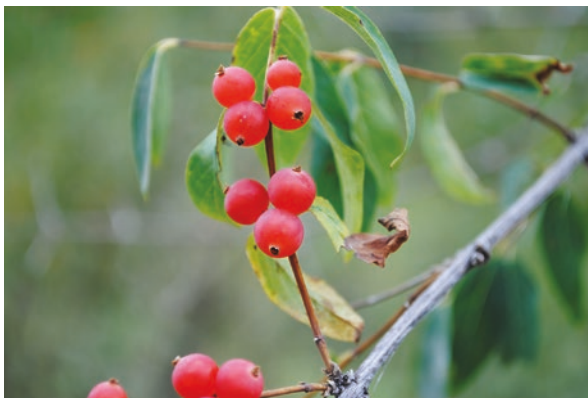
**Natural Taste and Meridian Tropism:** It's sweet and bland in taste, slightly cold in property.

**Functions:** Clearing heat and detoxicating, it is often used for treatment of pulmonary disease, eye disease, Baconic's disease, dysentery, sores, and furuncles.

**Use and Dosage:** 10–15 g per dose, decocted in water for oral use.







### 3.9 Family: Caprifoliaceae

#### 3.9.1 *Lonicera webbiana*

**Chinese Name(s):** hua xi ren dong, lie ye ren dong, lv zi ren dong.

**Source:** This medicine is made of the buds of *Lonicera webbiana* (*Lonicera webbiana* Wall. ex DC.).

**Morphology:** The plant is a deciduous shrub, up to 3–4 m in height. The leaves are ovate-elliptic to ovate-lanceolate, 4–9 cm long, apically acuminate, basally rounded. The bracts are linear, 2–5 mm long. The bracteoles are ovate to oblong, less than 1 mm long. The calyx tubes are separated, sinuate denticulate. The corollas are purple red, about 1 cm long, bilabiate, outside sparsely pubescent, tubes being short, often shallowly gibbous toward the base, the upper corolla lip being erect, lobes being rounded, lower lips being 1/3 longer than the upper lips, recurved. The

stamens are equaling to corollas, pilose at the lower part of filaments and styles. The fruits are turning from red to black, globose, ca. 1 mm in diameter. The seeds are ellipsoid, 5–6 mm long, foveolate. The flowering period is from May to June. The fruiting period is from August to September.

**Habitat:** It grows in needle-leaved and broad-leaved mixed forests and scrub and on grassy slopes at altitudes of 1800–4000 m.

**Distribution:** It's distributed in provinces of Shanxi, Shaanxi, Ningxia, Gansu, Qinghai, Jiangxi, Hubei, Chongqing, Sichuan, Yunnan, and Tibet, as well as in southeastern Europe, Afghanistan, and Bhutan.

**Acquisition and Processing:** The buds are collected in the flowering period from May to June when about to open, removed the impurities, and dried in the sun.

**Natural Taste and Meridian Tropism:** It's sweet and bland in taste, cold in property.

**Functions:** Dispelling wind, clearing heat, and detoxicating, it's often used for treatment of cold, coughing, sore throat, conjunctivitis, lungs carbuncle, mastitis, eczema, etc.

**Use and Dosage:** 9–15 g per dose, decocted in water for oral use.





## 3.10 Family: Caprifoliaceae

### 3.10.1 *Sambucus chinensis*

**Chinese Name(s):** jie gu cao, lu ying, zou ma jian, zou ma feng, ba leng ma, ba li ma, chou cao, shuo diao.

**Source:** This medicine is made of the whole plants of *Sambucus chinensis* (*Sambucus chinensis* Lindl. [*S. javanica* Bl.]).

**Morphology:** The plant is a large herb or subshrub, 1–2 m in height. The stems are obviously striate, with white pith. The leaves are imparipinnate. The stipules are leaflike or sometimes reduced to blue glands. The lateral leaflets are in two to three pairs, alternate or opposite, narrowly ovate, 6–13 cm long, 2–3 cm wide, adaxially sparsely pubescent when young, apically long acuminate, basally obtuse and oblique, serrulate at margins, often with one to several glandular teeth from below middle nearly to the base. The terminal leaflets are ovate or obovate, basally cuneate, sometimes connected with next lower leaflets, basal pair of leaflets being shortly petiolulate. The stipules are absent of leaflets. The inflorescences are terminal, compound umbellate cymes, lax, pedunculate, with leaflike bracts at the base of peduncle, with three to five slender rays, with sparse yellow pubescence. Some flowers modified into persistent urceolate nectaries. The calyx tubes are urceolate, lobes being triangular. The corollas are white, connate at the base. The anthers are yellow or purple. The ovaries are three-loculed, and the styles are short or nearly absent, stigmas being three-lobed. The fruits are red, subglobose, 3–4 mm in diameter. There are two to three pyrenes, which are ovoid, about 2.5 mm, verrucate. The flowering period is from April to May. The fruiting period is from August to September.

**Habitat:** It grows on mountain slopes, grasslands, in forests, by streamsides, at altitudes of 300–2600 m.

**Distribution:** It's distributed in Shaanxi, Gansu, Jiangsu, Anhui, Zhejiang, Jiangxi, Fujian, Taiwan, Henan, Hubei, Hunan, Guangdong, Guangxi, Sichuan, Guizhou, Yunnan, and Tibet of China, as well as in Japan.

**Acquisition and Processing:** The whole plants are collected in the summer and autumn and dried in the sun.

**Natural Taste and Meridian Tropism:** It's sweet and slightly bitter in taste, neutral in property.

**Functions:** The root functions in removing blood stasis and swelling, dispelling, wind and activating collaterals. The stem and leaf function in promoting diuresis and reducing swelling, promoting blood circulation, and relieving pain. The root is often used for treatment of bruise, sprain, swelling and pain, fracture, and rheumatic joint pain. The stem and leaf are often used for treatment of nephritis, edema, lumbago, and knee pain, as well as for external treatment of injury caused by knocks and fall.

**Use and Dosage:** 30–60 g per dose, decocted in water for oral use. For external treatment, proper amounts of fresh products are mashed and applied to the affected areas.

**Prescription Example(s):**

1. Clinical diagnoses and symptoms: injury caused by knocks and falls—*Sambucus chinensis* root 60 g (120 g for fresh product), decocted in water. In addition, appropriate amounts of fresh leaves shall be mashed and applied to the affected area.
2. Clinical diagnoses and symptoms: nephritis and edema—whole plants of *Sambucus chinensis* 30–60 g, decocted in water for oral use.
3. Clinical diagnoses and symptoms: chronic tracheitis—fresh *Sambucus chinensis* stem and leaf 120 g, decocted three times in water, concentrated and taken three times, 10 days as a course of treatment.





### 3.11 Family: Caprifoliaceae

#### 3.11.1 *Sambucus williamsii*

**Chinese Name(s):** jie gu mu, mu shuo diao, xu gu cao, jiu jie feng.

**Source:** This medicine is made of the whole plants of *Sambucus williamsii* (*Sambucus williamsii* Hance).

**Morphology:** The plant is a deciduous shrub or a small tree, 5–6 m in height. The old branches are reddish brown, with conspicuous, narrowly elliptic lenticels, with brownish pith. The leaves are imparipinnate. The leaflets are in 2–3 jugate. The lateral leaflets are ovate-orbicular or narrowly elliptic to oblong-ob lanceolate, 5–15 cm long, 1.2–7 cm wide, apically acute to acuminate or caudate, basally cuneate or rounded, sometimes cordate, asymmetrical, irregularly serrate at margins, sometimes with one to several glandular teeth at the base or below middle. The lowest pair of leaflets is sessile or petiole to about 0.5 cm, and the terminal leaflet is ovate or obovate, apically acuminate or caudate, basally cuneate, petiolule about 2 cm, adaxially sparsely pubescent when young, glabrescent. The stipules are narrowly linear or reduced to bluish protrusions. The inflorescences are terminal cymose panicles, 5–11 cm long, 4–14 cm wide, pedunculate, sometimes sparsely pubescent, soon glabrescent. The flowers are appearing simultaneously with leaves, dense. The calyx tubes are urceolate, about 1 mm long, lobes being triangular-lanceolate, slightly shorter than tubes. The corollas are pinkish in bud, white or yellowish when open, and the tubes are short, lobes being oblong or narrowly ovate-orbicular, about 2 mm. The stamens are spreading, about as long as corolla lobes. The filaments are slightly dilated at the base, and the anthers are yellow. The ovary is three-loculed, and styles are short, stigmas being three-lobed. The fruits are red, rarely bluish or purplish

black, ovoid or subglobose, 3–5 mm in diameter. There are two or three pyrenes, which are ovoid to ellipsoid, 2.5–3.5 mm long, slightly rugose. The flowering period is from April to May. The fruiting period is from September to October.

**Habitat:** It grows in mountain slopes, scrub, by stream sides, roadsides, beside houses at altitudes of 500–1600 m.

**Distribution:** It's distributed in provinces of Hainan, Guangdong, Fujian, Hubei, Hunan, Guangxi, Sichuan, Guizhou, Yunnan, Heilongjiang, Jilin, Liaoning, Hebei, Shanxi, Shaanxi, Gansu, Shandong, Jiangsu, Anhui, Zhejiang, and Henan.

**Acquisition and Processing:** The stems and branches are collected in the summer and autumn and dried in the sun.

**Natural Taste and Meridian Tropism:** It's sweet and bitter in taste, neutral in property.

**Functions:** Expelling wind and dampness, promoting blood circulation, and stopping bleeding, it's often used for treatment of rheumatic arthralgia, gout, Kashin-Beck disease, acute and chronic nephritis, rubella, injury caused by knocks and falls, fracture, and traumatic bleeding.

**Use and Dosage:** 15–30 g per dose, decocted in water for oral use. For external treatment, proper amounts of fresh products are mashed and applied to the affected areas.





### 3.12 Family: Caprifoliaceae

#### 3.12.1 *Viburnum brachybotryum*

**Chinese Name(s):** duan xu jia mi, duan qiu jia mi, qiu hua jia mi.

**Source:** This medicine is made of the roots and leaves of *Viburnum brachybotryum* (*Viburnum brachybotryum* Hemsl.).

**Morphology:** The plant is a shrub or a small tree, evergreen, up to 8 m in height. The young branchlets, buds, inflorescences, calyxes, outside the corollas, bracts, and bracteoles are yellow-brownish stellate-pubescent. The leaves are leathery, obovate, obovate-oblong, or oblong, 7–20 cm long, apically acuminate or acute, basally broadly cuneate to subrounded, marginally remotely serrate except at the base, sometimes subentire, adaxially intense green and lustrous, abaxially sparsely yellow-brownish stellate-pubescent or subglabrous. The lateral veins are in five to seven jugate, pinnate, arched, rarely branched, anastomosing near margin, conspicuously raised abaxially, slightly impressed adaxially, veinlets being transverse, conspicuous abaxially, inconspicuous adaxially. The petioles are 1–2 cm long, sparsely stellate-pubescent, glabrescent. The inflorescences are paniculate, usually pyramidal, terminal or axillary on short branches, erect or nodding, 5–11(–22) cm long, 2.5–8.5(–15) cm wide. The rays are opposite, decussate, with two rays in the first node of inflorescences, lax, large, yellow-brownish stellate-pubescent, without large sterile radiant flowers. The bracts and bracteoles are persistent. The flowers are on rays of second and third orders, not fragrant, sessile or shortly pedicellate. The calyx tubes are tubular-campanulate, about 1.5 mm, lobes being ovate, about 1 mm long, apically obtuse. The corollas are white, rotate, 4–5(–6) mm in diameter, and tubes are very short, lobes being spreading, ovate to oblong-ovate, about 1.5 mm, about two times as long as tubes, apically obtuse. The anthers are yellow-whitish, ellipsoid. The stigmas are capitate, three-lobed, obviously exceeding calyx lobes. The fruits are initially turning yellow, maturing red, ovoid, about 1 cm long, 6 mm in diameter, apically acuminate, basally rounded, often stellate-pubescent. The pyrenes are slightly compressed, ovoid or narrowly ovoid, about 8 cm long, 5 mm in



diameter, apically acuminate, with a deep ventral groove. The flowering period is from January to March. The fruiting period is from July to August.

**Habitat:** It grows in dense forests, scrub at altitudes of 400–1000 m.

**Distribution:** It is distributed in provinces of Jiangxi, Hubei, Hunan, Guangdong, Guangxi, Sichuan, Guizhou, and Yunnan.

**Acquisition and Processing:** The roots and leaves are collected in the summer and autumn and dried in the sun.

**Natural Taste and Meridian Tropism:** It's bitter in taste, cool in property.

**Functions:** Clearing heat, dispelling wind and dampness, astringing, and relieving diarrhea, it's often used for treatment of enteritis, dysentery, rheumatoid joint pain, and injury caused by knocks and falls.

**Use and Dosage:** 9–15 g per dose, decocted in water for oral use. For external treatment, proper amounts of fresh products are mashed and applied to the affected areas.



### 3.13 Family: Caprifoliaceae

#### 3.13.1 *Viburnum cylindricum*

**Chinese Name(s):** shui hong mu, gou lei ba, ban jiu shi, ban jiu zhe, chao mian ye, che bai ye.

**Source:** This medicine is made of the roots of *Viburnum cylindricum* (*Viburnum cylindricum* Buch.-Ham. ex D. Don.).

**Morphology:** The plant is a small tree, up to 8–15 m in height. The barks are reddish or light brown, with sparse, small lenticels. The branchlets are glabrous or initially sparsely stellate-pubescent. The winter buds have a pair of separate scales. The leaves are leathery, elliptic to oblong or ovate-oblong, 8–16 cm long, apically acuminate or acute, basally gradually angustate to rounded, entire or irregularly shallowly dentate at margins, usually glabrous, abaxially with dispersed reddish or yellow minute glandular dots (sometimes compressed to appear like lepidote scales), with one to several glands on both sides of the midvein near the base. The lateral veins are in 3–5(–18) jugate, pinnate, arched. The petioles are 1–3.5(–5) cm long, glabrous or stellate-pubescent. The inflorescences are compound umbel-like cymes, terminal, 4–10(–18) cm in diameter, with whorled rays. The peduncles are 1–6 cm long. The first node of inflorescence is usually with seven rays, and the bracts and bracteoles are usually caducous. The flowers are usually on rays of third order. The calyx tubes are ovoid-orbicular or obconical, about 1.5 mm, sometimes with minute glandular dots, lobes being very small and inconspicuous. The corollas are white or reddish, campanulate, 4–6 mm, with minute lepidote glands, lobes being erect, orbicular-ovate, about 1 mm long. The stamens are 3 mm longer than corollas, and the anthers are purple, oblong, 1–1.8 mm long. The fruits are initially turning red, blue-black when mature, ovoid, about 5 mm. The pyrenes are compressed ovoid, about 4 cm long, 3.5–4 mm in diameter, with two shallow dorsal grooves and one shallow ventral groove. The flowering period is from June to October. The fruiting period is from October to December.

**Habitat:** It grows in sparse forests or thickets on hillsides.

**Distribution:** It's distributed in provinces of Gansu, Hubei, Hunan, Guangdong, Guangxi, Sichuan, Guizhou, Yunnan, Tibet, as well as in India, Nepal, Myanmar, Thailand, and Indochina.

**Acquisition and Processing:** The roots are collected in the summer and autumn and dried in the sun.

**Natural Taste and Meridian Tropism:** It's bitter in taste, cold in property.

**Functions:** Expelling wind and dampness, promoting blood circulation, unblocking collaterals, and detoxicating, it's often used for treatment of traumatic injury, rheumatism, stomachache, hepatitis, urinary tract infection, infantile pneumonia, and bronchitis.

**Use and Dosage:** 15–30 g per dose, decocted in water for oral use.



### 3.14 Family: Caprifoliaceae

#### 3.14.1 *Viburnum dilatatum*

**Chinese Name(s):** jia mi, zi suan tang gan, ku chai.

**Source:** This medicine is made of the roots, branches, and leaves of *Viburnum dilatatum* (*Viburnum dilatatum* Thunb.).

**Morphology:** The plant is a deciduous shrub, 1.5–3 m in height. The branchlets of the current year, buds, petioles, and inflorescences are densely yellow-brown or yellowish green, spreading bristlelike hairy and stellate-pubescent. The branchlets of the previous year are dark purple-brown, terete, sparsely hairy, or subglabrous, with dispersed, small, rounded lenticels. The leaves are papery, broadly obovate, obovate, or broadly ovate, 3–10(–13) cm long, apically acute, basally rounded to obtuse or slightly cordate, sometimes cuneate, serrate at margins, adaxially appressed hairy, abaxially yellowish forklike pubescent and stellate-pubescent,

denser along the veins, usually with dispersed yellowish or nearly colorless transparent glandular dots, with some circular glands on both sides of the midvein near the base. The lateral veins are in six to eight jugate, pinnate, straight or slightly arched, branched, ending in teeth, conspicuously raised abaxially, impressed adaxially. The petioles are (5–)10–15 mm long, stipules being absent. The inflorescences are compound umbel-like cymes, dense, at apices of short branchlets with a pair of leaves, 4–10 cm in diameter, rays being whorled. The first node of inflorescences is with five rays, and the flowers are on rays of third and fourth orders, fragrant, densely bristlelike hairy and stellate-pubescent outside bracts and bracteoles. The peduncles are 1–2(–3) cm. The calyx tubes are narrowly tubular, about 1 mm long, stellate-pubescent, lobes being ovate. The corollas are white, rotate, about 5 mm in diameter, lobes being orbicular-ovate. The stamens are conspicuously exceeding corolla, and the anthers are yellow-whitish, broadly elliptic, small. The styles are exceeding calyx lobes. The fruits are maturing red, elliptic-ovoid, 7–8 cm long. The pyrenes are compressed, ovoid, 6–8 cm long, 5–6 mm in diameter, with two shallow dorsal grooves and three shallow ventral grooves. The flowering period is from May to June. The fruiting period is from September to November.

**Habitat:** It grows under the forest or in thickets.

**Distribution:** It's distributed in provinces of Henan, Hubei, Hunan, Guangdong, Guangxi, Sichuan, Guizhou, and Yunnan, as well as in Japan and North Korea.

**Acquisition and Processing:** The roots, branches, and leaves are collected in the summer and autumn and dried in the sun.

**Natural Taste and Meridian Tropism:** The branch and leaf are sour in taste, slightly cold in property. The root is pungent and astringent in taste, slightly cold in property.

**Functions:** The branch and leaf function in clearing heat and detoxicating, dispelling wind, and relieving exterior symptoms and are often used for treatment of sores, fever, and cold of wind heat type, as well as for external treatment for allergic dermatitis. The root functions in removing blood stasis and swelling and is often used for treatment of lymphadenitis (caused by filariasis) and injury caused by knocks and falls.

**Use and Dosage:** 15–30 g per dose, decocted in half water and half wine for oral use.





### 3.15 Family: Caprifoliaceae

#### 3.15.1 Genus: *Viburnum*

##### 3.15.1.1 *Viburnum fordiae*

**Chinese Name(s):** nan fang jia mi, huo chai shu, huo zhai, man shan hong, cang ban zi.

**Source:** This medicine is made of the roots of *Viburnum fordiae* (*Viburnum fordiae* Hance).

**Morphology:** The plant is a small tree, up to 5 m in height. The young branchlets, buds, inflorescences, calyxes, outside the corollas, bracts, and bracteoles are dark yellow or yellow-brownish stellate-tomentose. The leaves are papery to thickly papery, broadly ovate or rhombic-ovate, 4–8 cm long, apically obtuse or shortly



acute to shortly acuminate, basally rounded to obtuse or broadly cuneate, rarely cuneate, marginally often denticulate except at the base, adaxially with dispersed red-brown glandular dots, stellate-pubescent or forklike pubescent, abaxially densely stellate-pubescent. The lateral veins are in five to eight jugate, pinnate, straight or slightly arched, branched, ending in teeth, raised abaxially, slightly impressed adaxially. The leaves of stout branches are leathery, basally broad, abaxially tomentose, sparsely shallowly serrate, or entire at margins. The petioles are 5–15 mm long, sometimes shorter, stipules being absent. The inflorescences are compound umbel-like cymes, terminal or at apices of lateral branchlets, with a pair of leaves, 3–8 cm in diameter, and the peduncles are 1–3.5 cm or very rarely nearly absent, rays being whorled. The first node of inflorescences is usually with five rays, and the flowers are on rays of third and fourth orders. The calyx tubes are obconical, lobes being triangular, apically obtuse. The corollas are white, rotate, 4–5 mm in diameter, lobes being ovate, about 1.5 mm, exceeding tubes. The stamens are equaling or slightly exceeding corolla, and the anthers are suborbicular, small. The styles are exceeding calyx lobes, stigmas being capitate. The fruits are maturing red, ovoid, 6–7 mm. The pyrenes are compressed, about 6 cm long, 4 mm in diameter, with one dorsal groove and two ventral grooves. The flowering period is from April to May. The fruiting period is from October to November.

**Habitat:** It grows in valleys, hillside forests, or shrubs at altitudes of 200–800 m.

**Distribution:** It's distributed in provinces of Guangdong, Guangxi, Fujian, Yunnan, Hunan, Anhui, Zhejiang, Jiangxi, and Guizhou.

**Acquisition and Processing:** The roots and stems are collected in the summer and autumn, sliced, and dried in the sun.

**Natural Taste and Meridian Tropism:** It's bitter in taste, cool in property.

**Functions:** Dispelling wind, clearing heat, dispersing blood stasis, and activating blood circulation, it's often used for treatment of cold, fever, and irregular menstruation, as well as for external treatment of hypertrophic spondylitis, rheumatoid arthralgia, and fracture.

**Use and Dosage:** 9–15 g per dose, decocted in water for oral use. For external treatment, the products are soaked in wine and used for smearing onto the affected areas.





## 3.16 Family: Caprifoliaceae

### 3.16.1 *Viburnum odoratissimum*

**Chinese Name(s):** shan hu shu, sha tang mu, xiang bing mu, feng fan shu, ma you xiang, zao he shu, zhu er mu.

**Source:** This medicine is made of the barks and roots of *Viburnum odoratissimum* (*Viburnum odoratissimum* Ker-Gawl.).

**Morphology:** The plant is a small tree, up to 10 m in height. The leaves are leathery, elliptic to oblong or oblong-obovate to obovate, sometimes suborbicular, 7–20 cm long, apically shortly acute to obtusely acute and mucronate, sometimes obtuse or subrounded, basally broadly cuneate, rarely rounded, without glands, irregularly serrate except at the base or subentire at margins, becoming intense green and lustrous adaxially, glabrous or sparsely stellate-pubescent on veins on both surfaces, abaxially sometimes with sparse, dispersed dark red minute glands, midvein raised and conspicuous abaxially. The lateral veins are in five to six jugate, pinnate, arched, branched, anastomosing near margin, conspicuously raised abaxially. The petioles are 1–2 cm, glabrous or stellate-pubescent. The inflorescences are paniculate, pyramidal, terminal, or at apices of short lateral branchlets with one-jugate leaves, 5–13.5 cm long, 4–6 cm wide, glabrous or stellate-pubescent, and the peduncles are 10 cm long. The bracts are less than 1 cm long, 2 mm wide. The flowers are usually on rays of second and third orders, fragrant, sessile or shortly pedicellate. The calyx tubes are tubular-campanulate, 2–2.5 mm, glabrous, lobes being broadly triangular. The corollas are white, later yellow-whitish, sometimes reddish, rotate, about 7 mm in diameter, and tubes are about 2 mm, lobes being reflexed, orbicular-ovate, 2–3 mm, apically rounded. The stamens are slightly exceeding corolla lobes, and the anthers are yellow, oblong, nearly 2 mm. The stigmas are capitate, not exceeding calyx lobes. The fruits are initially turning red, maturing nigrescent, ovoid or ovoid-ellipsoid, about 8 cm long, 5–6 mm in diameter. The flowering period is from April to May. The fruiting period is from July to September.

**Habitat:** It grows in sparse forests or thickets.

**Distribution:** It's distributed in Hainan, Guangdong, Hong Kong, Guangxi, Taiwan, Fujian, and Hunan of China, as well as in India, Myanmar, Thailand, and Vietnam.

**Acquisition and Processing:** The barks and roots are collected in the summer and autumn, sliced, and dried in the sun.

**Natural Taste and Meridian Tropism:** It's pungent in taste, warm in property.

**Functions:** Clearing heat and dampness, activating meridians and unblocking collaterals, extracting toxin, and promoting granulation, it's often used for treatment of cold, rheumatism, bruise, injury, and fracture.

**Use and Dosage:** 9–15 g per dose for roots, 30–60 g per dose for barks, decocted in water for oral use. For external treatment, the fresh products are mashed for application to the affected areas.







### 3.17 Family: Caprifoliaceae

#### 3.17.1 *Viburnum plicatum*

**Chinese Name(s):** hu die xi zhu hua, hu die hua, hu die shu, hu die jia mi.

**Source:** This medicine is made of the roots and stems of *Viburnum plicatum* (*Viburnum plicatum* Thunb. var. *tomentosum* (Thunb.) Miq.).

**Morphology:** The plant is a deciduous shrub, up to 3 m in height. The branchlets of current year are light brown, quadrangular, densely or sparsely yellowish brown stellate-tomentose. The branchlets of the previous year are gray-brownish or gray-blackish, terete, spreading, with dispersed, small, rounded lenticels. The winter buds are lanceolate-triangular, with a pair of adnate scales. The leaves are broadly ovate, oblong-ovate, or elliptic-obovate, sometimes acuminate on both ends, abaxially glaucous, lateral veins being in 6–12(–17) jugate. The inflorescences are 4–10 cm in diameter, outside composed of fertile flowers with six to eight large sterile radiant flowers, with long peduncles. The corollas are up to 4 cm in diameter, four- to five-lobed. The fertile flowers are 3 mm in diameter, and the calyx tubes are about 15 mm, with rotate



corollas, lobes being broadly ovate, about as long as tubes, stamens being exceeding corolla, anthers being suborbicular. The fruits are initially turning red, maturing black, broadly ovoid-orbicular or obovoid-orbicular, 5–6 cm long, 4 mm wide. The pyrenes are compressed, obtuse at both ends, with a broad ventral groove. The flowering period is from April to May. The fruiting period is from August to September.

**Habitat:** It grows in hillsides and mixed forests of valleys and shrubs near valleys at altitudes of 300–500 m.

**Distribution:** It's distributed in Shaanxi, Anhui, Zhejiang, Jiangxi, Fujian, Taiwan, Henan, Hubei, Hunan, Guangxi, Guangdong, Sichuan, Guizhou, and Yunnan of China, as well as in Japan.

**Acquisition and Processing:** The roots and stems are collected in the summer and autumn, sliced, and dried in the sun.

**Natural Taste and Meridian Tropism:** It's sour, pungent, and bitter in taste, warm in property.

**Functions:** Clearing heat, detoxicating, strengthening the spleen, eliminating accumulation, and dispelling wind and dampness, it is often used for treatment of sore, lymphadenitis, infantile malnutrition, rheumatism and arthralgia, and injuries caused by falls and knocks.

**Use and Dosage:** 3–9 g per dose, decocted in water for oral use.





### 3.18 Family: Caprifoliaceae

#### 3.18.1 *Viburnum setigerum*

**Chinese Name(s):** cha jia mi.

**Source:** This medicine is made of the roots of *Viburnum setigerum* (*Viburnum setigerum* Hance).

**Morphology:** The plant is a deciduous shrub, 1.5–3.5 m in height. The leaves are papery or thinly leathery, ovate-oblong to ovate-lanceolate, rarely ovate, 7–12 cm long, 3–5.5 cm wide, apically acuminate, basally rounded or broadly cuneate, marginally remotely serrate except at the base, adaxially long hairy, glabrescent, abaxially yellowish adpressed long hairy only on the midvein and lateral veins, with one or two circular glands on both sides of the midvein near the base. The lateral veins are in six to eight jugate. The petioles are 1–2 cm long, grayish black, sparsely

appressed long hairy or subglabrous. The inflorescences are compound umbel-like cymes, often nodding, terminal, 2.5–4 cm in diameter, sparsely appressed long hairy or glabrous. The peduncles are 1–2.5 cm long, and the first node of inflorescence is usually with five rays. The flowers are on rays of second or third order, with 5-mm-long petioles or sessile. The calyx tubes are tubular, about 1.5 mm, glabrous, without glands, lobes being ovate, about 0.5 mm long. The corollas are white, rotate, 4–6 mm in diameter, black or dark brown when dry, glabrous, lobes being ovate, about 2.5 mm, exceeding tubes. The stamens are subequaling to corolla, styles being not exceeding calyx lobes. The fruits are maturing red, globose or ovoid, 9–11 mm. The pyrenes are very compressed, ovoid, 8–10 cm long, 5–7 mm wide, slightly impressed on ventral side. The flowering period is from April to May. The fruiting period is from September to October.

**Habitat:** It grows in valleys, sparse forests next to streams, and shrubs on hill-sides at altitudes of 200–1000 m.

**Distribution:** It's distributed in provinces of Guangdong, Hunan, Yunnan, Sichuan, Hubei, and Shaanxi.

**Acquisition and Processing:** The roots are collected in the summer and autumn and dried in the sun.

**Natural Taste and Meridian Tropism:** It's slightly bitter in taste, neutral in property.

**Functions:** Clearing heat, promoting diuresis, activating blood circulation, and removing blood stasis, it's often used for the treatment of strangury and turbid urine, lung carbuncle, coughing and blood abscess, and amenorrhea due to heat and stasis.

**Use and Dosage:** 15–30 g per dose, decocted in water for oral use.





### 3.19 Family: Valerianaceae

#### 3.19.1 *Nardostachys jatamansi*

**Chinese Name(s):** gan song, gan song xiang.

**Source:** This medicine is made of the roots and rhizomes of *Nardostachys jatamansi* (*Nardostachys jatamansi* (D. Don) DC.).

**Morphology:** The plant is a perennial herb, 5–50 cm in height. The rhizomes are woody, stout, densely covered with fiber and strongly aromatic. The leaves are rosulate, narrowly spatulate or linear-oblongate, 3–25 cm long, 0.5–2.5 cm wide. The cauline leaves are mostly one to two paired, lowermost ones being

elliptic to obovate, basally attenuate into petiole, and the uppermost ones are sessile, oblanceolate to lanceolate. The capitula are 1.5–2 cm in diameter, terminal, with four to six involucre bracts at the base, lanceolate, with narrowly ovate to ovate bracts at the base of flowers, subequal to flowers in length. The calyxes are five-lobed, enlarged at fruiting. The corollas are purple-red, campanulate, 4.5–9 mm long, five-lobed, lobes being broadly ovate to oblong, 2–3.8 mm long, villous inside the tubes. The stamens are subequaling to corollas and styles in length, stigmas being capitate. The achenes are obovoid, 3–4 mm, pubescent. The flowering period is from June to August. The fruiting period is from September to October.

**Habitat:** It grows in alpine shrubs and grasslands at altitudes of 2600–5000 m.

**Distribution:** It's distributed in provinces of Sichuan, Yunnan, and Tibet, as well as in India, Nepal, and Bhutan.

**Acquisition and Processing:** The roots and rhizomes are dug up in the spring and autumn, removed the impurities and silt, and dried in the sun or shade.

**Medicinal Properties:** This product is slightly conic, mostly curved, 5–18 cm long. The rhizome is short and small, with residue of the stem and leaf at the upper end, which is long and narrow membranous sheet-like or fibrous. It is black brown on the outer layer and brown or yellow in the inner layer. The roots are single or several intertwined, branched, or juxtaposed, 3–10 mm in diameter, brown in surface, shrunk, with fine roots and fibrous roots. It is crisp and easy to break. The cortex is dark brown, often dehiscent, and the xylem is yellowish white. It's special in odor, bitter, and pungent in taste, with a feeling of cool.

**Natural Taste and Meridian Tropism:** It's pungent and slightly sweet in taste, warm in property.

**Functions:** Regulating Qi, relieving pain, relieving depression, and refreshing the spleen, it is often used for treatment of abdominal distention, anorexia, vomiting, toothache, swelling of feet, etc.

**Use and Dosage:** 4–6 g per dose, decocted in water for oral use. For external treatment, proper amounts of products are soaked in water for gargling, or decocted in water for washing the feet with, or ground to powder and applied to the affected areas.

**Prescription Example(s):**

1. Clinical diagnoses and symptoms: vertigo due to phlegm—*Pinellia* leaven 100 g, rhizoma arisaematis 100 g, *Nardostachys jatamansi* 50 g and tangerine peel 75 g, ground to fine powder, decocted in water, added with flour, and made into pellets as big as Chinese parasol seed. Take 20 pellets each time, and serve with ginger soup.
2. Clinical diagnoses and symptoms: hysteria, neurasthenia, gastrointestinal spasm, etc.—*Nardostachys jatamansi* 30 g, tangerine peel 7.5 g, added with 500 ml of water and immersed in boiling water for 3 h. Take it 12 times, six times a day.







### 3.20 Family: Valerianaceae

#### 3.20.1 *Patrinia scabiosaefolia*, *Patrinia villosa*

**Chinese Name(s):** bai jiang, huang hua long ya, bai jiang cao, long ya bai jiang, ku zhai.

**Source:** This medicine is made of the whole plants of *Patrinia scabiosaefolia* (*Patrinia scabiosaefolia* Fisch. ex Trev.) and *Patrinia villosa* (*Patrinia villosa* Juss.).

**Morphology:** (A) *Patrinia scabiosaefolia*: The plant is a perennial herb, up to 150 cm in height, white hispidulous to glabrescent. The rhizomes are horizontal and slender. The basal leaves are rosulate, broadly ovate, serrate at margins, petiolate. The cauline leaves are opposite, narrowly ovate to lanceolate, 5–15 cm, 2–5 cm wide, apically acuminate, basally cuneate, and attenuate into petiole, usually pinnatifid or pinnatisect, with two to three pairs of segments, terminal segments being ovate or elliptic, large, lateral segments being small, narrowly elliptic or linear. The inflorescences are corymbiform, terminal. The flowers are small, 2–4 mm in diameter, yellow. The calyxes are inconspicuous, small. The corolla tubes are short, five-lobed. There are four stamens, which are almost as long as the corolla tubes. The achenes are oblong, about 5 mm in diameter, compressed, without wings. The flowering period is from July to September. The fruiting period is from September to October.

**Habitat:** It grows in the grass on the hillside.

**Distribution:** It's distributed throughout China, as well as in Mongolia, North Korea, Japan, and Russia.





**Morphology:** (B) *Patrinia villosa*: The plant is a perennial herb, 50–90 cm in height or slightly longer. The stems are erect, inverted white hispidulous, unbranched or few branched in the upper stems, usually with adventitious root at the lower nodes. The basal leaves are rosulate, long petiolate, leaves being ovate, 3–10 cm long, 1.5–5 cm wide, apically mucronate, basally decurrent, marginally coarsely serrate, hispidulous on both surfaces. The upper leaves are narrowly elliptic, subsessile. The flowers are white, small, arranged in terminal or axillary paniculiform or corymbiform. The calyxes and corollas are five-lobed, corolla tubes being short. There are four stamens. The ovary is three-loculed, with one developed. The achenes are obovoid, about 5 mm long, pubescent, with sterile ovary enlarged into membranous-rounded wings. The flowering period is from July to September. The fruiting period is from August to November.

**Habitat:** It grows in grasses in valleys, ravines, and hillsides.

**Distribution:** It's distributed in Taiwan, Hubei, Hunan, Guangdong, Guangxi, Sichuan, Jiangsu, Zhejiang, Jiangxi, Anhui, Henan, and Guizhou of China, as well as in Japan.







**Acquisition and Processing:** The whole plants are dug up in summer and autumn before the flowers bloom, dried to half dry, bundled, and then dried in the shade.



**Medicinal Properties:** *Patrinia scabiosaefolia*: It's 50–100 cm in total length. The rhizome is cylindrical, with a diameter of 0.3–1 cm, dark brown to purplish brown, and no more than 2 cm between internodes, where there are adventitious roots on. The stem is cylindrical, 2–8 mm in diameter, yellowish green to yellowish brown, inverted hirsute. It is brittle and easy to break, with pith in the middle or a small hole of disappeared pith. The leaves are mostly shrunk or broken. After flattening, the whole cauline leaf is pinnate lobed to parted, with five to seven lobes. The top lobes are obviously larger, and the lateral lobes are narrow and small, with rough serrations on the edge, adaxially dark green or yellowish brown, abaxially lighter, sparsely white pubescent on both surfaces, and slightly amplexicaul at the petiole base. The corymbose cymose are often at the top of stems and branches. The flowers are yellow. It's special in odor and bitter in taste. The products with long roots and many leaves, green-colored, and aromatic are better in quality.

*Patrinia villosa*: The stem is white strigose, glabrescent. The cauline leaves are unlobed. The flowers are white, and the rest of the properties are the same as those of *Patrinia scabiosaefolia*.

**Natural Taste and Meridian Tropism:** It's bitter and pungent in taste, cool in property, belonging to the meridians of the liver, stomach, and large intestine.

**Functions:** Clearing heat and dampness, detoxicating and discharging pus, promoting blood circulation, and removing blood stasis, it is used for treatment of appendicitis, dysentery, enteritis, hepatitis, conjunctivitis, postpartum blood stasis, abdominal pain, and carbuncle.

**Use and Dosage:** 15–30 g per dose for dried products or 60–120 g per dose for fresh products, decocted in water for oral use. For external treatment, proper amounts of products are mashed and applied to the affected areas.

**Prescription Example(s):**

Clinical diagnoses and symptoms: appendix abscess—*Patrinia scabiosaefolia*, honeysuckle, viola, purslane, dandelion, prepared rhubarb, 15 g each, decocted in water for oral use.

## 3.21 Family: Dipsacaceae

### 3.21.1 *Dipsacus asperoides*

**Chinese Name(s):** xu duan.

**Source:** This medicine is made of the roots of *Dipsacus asperoides* (*Dipsacus asperoides* C. Y. Cheng et T. M. Ai).

**Morphology:** The plant is a perennial herb, up to 1 m in height. The stems and branches are four to eight ridged, sparsely covered with retrorse spines on ridges. The basal leaves are rosulate, pinnatisect, and the cauline leaves are opposite, deeply three- to five-lobed. The terminal segments are largest, basally decurrent into wings, marginally coarsely serrate, white hispidulous on both surfaces, abaxially with spines on the midveins and petioles. The flowers are white and pale yellow, arranged

in terminal capitulas, globose. The involucre bracts are linear-lanceolate, with several bracts, long obovate, hispidulous, rostrate, rostrum being setose at the apex. The calyxes are four-lobed, disk-shaped. The corollas are funnelform, shorter than bracts, pubescent, with four lobes, two being slightly larger. There are four stamens exerted. The ovary is inferior, included in the involucre bracts with the achenes, slightly exerted. The flowering period is from July to September. The fruiting period is from September to November.

**Habitat:** It grows on the margins of a ditch, grass, and forest wasteland.

**Distribution:** It's distributed in provinces of Hubei, Hunan, Sichuan, Tibet, Yunnan, Guizhou, Guangdong, Guangxi, and Jiangxi, as well as in Japan.

**Acquisition and Processing:** The whole plants are dug up in autumn, removed the root heads and fibrous roots and soil, baked in slow fire until half dry, piled until turning dark green, and baked again or dried in the sun. It could also be dried directly, thus the meat is nearly white, and the quality is inferior to that of the former.

**Medicinal Properties:** The product is cylindrical and slightly compressed, sometimes slightly curved, usually unbranched, 5–15 cm long, 0.4–2.5 cm in diameter, grayish brown or dark brown on surfaces, with obvious twisted longitudinal wrinkles and grooves, and transverse cracks, lenticels, and a few fibrous root marks. It is pliable and turns hard after being placed for a long time, easy to break, uneven on the cross section. The cortex is greenish brown or light brown, and the xylem is yellowish brown. It is slightly fragrant in odor and bitter, slightly sweet, and astringent in taste. The products with thick root, soft in texture, grayish brown, and greenish brown inside the cortex are better in quality.

**Natural Taste and Meridian Tropism:** It's bitter and pungent in taste, slightly warm in property, belonging to the meridians of the liver and kidneys.

**Functions:** Tonifying the liver and kidneys, strengthening the muscles and bones, promoting Qi circulation and eliminating swelling, and relieving pain, it's often used for treatment of lumbago and knee pain, threatened abortion, morbid leucorrhea, spermatorrhea, incised wound, bruise, furuncle, and swelling.

**Use and Dosage:** 5–15 g per dose, decocted in water for oral use.







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