

19. POLYSCIAS J. R. Forster & G. Forster, Char. Gen. Pl. 32. 1775.

南洋参属 nan yang shen shu

Nothopanax Miquel.

Shrubs or trees, evergreen, hermaphroditic, andromonoecious or dioecious, unarmed, often glabrous, some with sharply aromatic herbage. Leaves 1–5-pinnately compound, margins entire to crenate or serrate; stipules sometimes intrapetiolar and adnate to inside of petiole or absent. Inflorescence a terminal panicle of umbels, heads or spikes, sometimes with a terminal umbel of bisexual flowers and 1 to several lateral umbels of male flowers. Pedicel articulate below ovary. Calyx undulate or with 4 or 5(–8 or more) small lobes. Petals 4 or 5(–8 or more), valvate. Stamens as many as petals. Ovary 4 or 5(–8 or more) carpellate; styles free or rarely connate at base. Fruit a drupe, terete or laterally flattened. Seeds compressed, endosperm smooth.

About 150 species: paleotropical; five species (all introduced and cultivated) in S China.

- 1a. Leaves 3–5-pinnately compound 2. *P. fruticosa*
- 1b. Leaves 1- or 2-pinnately compound.
 - 2a. Flowers in heads, sessile; petiole with a short sheathing base, not clasping or alate 4. *P. nodosa*
 - 2b. Flowers in umbels, distinctly pedicellate; petiole with an evident sheathing, alate base.
 - 3a. Leaflets 1–5, blades broadly elliptic to obovate or reniform, apex rounded, base shallowly cordate to convex (rarely rounded-truncate) 5. *P. scutellaria*
 - 3b. Leaflets 5–15, blades elliptic to oblong, base and apex obtuse to acute or acuminate.
 - 4a. Margins of leaflets entire to coarsely crenate 1. *P. cumingiana*
 - 4b. Margins of leaflets sharply serrulate 3. *P. guilfoylei*

1. *Polyscias cumingiana* (C. Presl) Fernández-Villar in Blanco, Fl. Filip., ed. 3, 4(Nov. App.): 102. 1880.

线叶南洋参 xian ye nan yang shen

Paratropia cumingiana C. Presl, Epimel. Bot. 250. 1831; *Aralia filicifolia* Moore ex E. Fournier; *Polyscias filicifolia* (Moore ex E. Fournier) Bailey.

Shrubs or treelets, 1.5–4 m tall, andromonoecious. Leaves 1- or 2-pinnate; petiole 8–20 cm, clasping at base, alate for 3–4.5 cm with membranous wings; petiolules 0.5–3 cm; leaflets 9–15, often variegated, elliptic to lanceolate or ovate, often narrowly so, 10–35 × 2–10 cm, papery, base obtuse to attenuate, margin entire to coarsely crenate, often with minute teeth, apex acuminate or acute to obtuse. Inflorescence terminal, pendent, a panicle of umbels; primary axis 15–30 cm; secondary axes 5–7, usually in verticils, 20–80(–140) cm; tertiary axes 10–25 per secondary axis, mostly grouped in 2–4(or 5) verticils, with a terminal umbellule of bisexual flowers and 2–6 lateral umbellules of staminate flowers, or further divided into 4th order axes; pedicels 4–8 mm (shorter in staminate flowers). Ovary (2 or)3–5-carpellate; styles free nearly to base, 1–1.4 mm at anthesis, diverging, expanding in fruit to 1.7 mm. Fruit subglobose to broadly ovoid, 3–4(–5) mm high, base often shallowly cordate. Fl. autumn.

Cultivated in Fujian (Xiamen) and Hainan (Haikou) [native to SW Pacific islands].

This species is used as an ornamental.

2. *Polyscias fruticosa* (Linnaeus) Harms in Engler & Prantl, Nat. Pflanzenfam. 3(8): 45. 1894.

南洋参 nan yang shen

Panax fruticosus Linnaeus, Sp. Pl., ed. 2, 2: 1513. 1763 [“*fruticosum*”]; *Nothopanax fruticosus* (Linnaeus) Miquel.

Shrubs or treelets, to 3(–5) m tall, andromonoecious. Leaves 3–5-pinnate; petiole (2–)5–15 cm, clasping at base, inconspicuously alate with membranous wings; petiolules 1–5 cm; primary leaf divisions (7–)11–15, each further divided once or twice, sometimes variegated, usually lanceolate, (1–)2–18 × 0.2–5 cm, papery, base narrowly cuneate to attenuate, margin lacinate to spinulose-serrate, teeth 5–10 mm, apex long acuminate. Inflorescence terminal, erect, a panicle of umbels; primary axis 8–30(–60) cm; secondary axes 5–15, scattered or subverticillate, 7–25(–30) cm; tertiary axes 5–15 per secondary axis, mostly grouped in 2–4 verticils, with a terminal umbellule of bisexual flowers and 2–6 lateral umbellules of staminate flowers; pedicels 1.5–5 mm (shorter in staminate flowers). Ovary 2- or 3(or 4)-carpellate; styles free nearly to base, 0.8–1.2 mm at anthesis, recurving, expanding in fruit to 1.5 mm. Fruit laterally compressed or trigonous (rarely quadrangular), orbicular to ovate-orbicular, 4–5 × 4.5–6 mm, base rounded (sometimes shallowly subcordate). Fl. Aug–Sep.

Widely cultivated in Hainan (Wanning) [native to SW Pacific islands].

This species is used as an ornamental and for medicinal purposes.

3. *Polyscias guilfoylei* (W. Bull) L. H. Bailey, Rhodora 18: 153. 1916.

银边南洋参 yin bian nan yang shen

Aralia guilfoylei W. Bull, Cat. 83: 4. 1873.

Shrubs or treelets, to 5 m tall, andromonoecious. Leaves 1-pinnate (irregularly decomposed or 2- or 3-pinnate in some forms); petiole 7–18 cm, clasping at base, alate for 1.5–3 cm with membranous wings; petiolules 1–3.5 cm; leaflets (5–)7–9, often variegated, elliptic, ovate, or obovate, often broadly so, 5–20 × 2.5–12 cm, papery, base broadly cuneate to attenuate, margin spinulose-serrate, teeth (1–)1.5–5 mm, apex obtuse to broad-

ly acute or acuminate. Inflorescence terminal, pendent, a panicle of umbels; primary axis 3–6 cm; secondary axes 5–10, scattered toward base, upper ones forming a terminal umbel, 20–60 cm; tertiary axes 8–12 per secondary axis, grouped in 1–3 ver-

ticils, (1.5–)3–12 cm; peduncles 1–2 cm, with a terminal umbel of bisexual flowers and often 1 (or 2) lateral umbels of staminate flowers; pedicels 4–10 mm. Ovary 3- or 4 (or 5)-carpellate; styles free nearly to base, recurving in fruit. Fruit rarely seen, subglobose, 4–5 mm high.

Cultivated in gardens, yards, and as hedges. Fujian (Xiamen), Guangdong (Guangzhou), Hainan [native to SW Pacific islands].

4. *Polyscias nodosa* (Blume) Seemann, J. Bot. 3: 181. 1865.

结节南洋参 jie jie nan yang shen

Aralia nodosa Blume, Bijdr. 873. 1826.

Trees, to 25 m tall, dioecious. Leaves 1- or 2-pinnate; petiole ca. 30 cm, with a short sheathing base, not clasping or alate; petiolules absent or very short (leaflets sessile to subsessile); leaflets 21–33, ovate-oblong, 15–20 × 4–5 cm, papery, base rounded to truncate, margin shallowly crenate, apex apiculate. Inflorescence terminal, erect, a panicle of heads; primary axis 50–150 cm, secondary axes 15–40 cm, peduncles 6–15 mm, with heads of hermaphroditic flowers. Ovary 5-carpellate; styles free, spreading. Fruit subglobose, ca. 4 mm high.

Widely cultivated in Fujian (Fuzhou) and Guangdong (Guangzhou) [native to Malesia and the Solomon Islands].

This species is used as an ornamental.

5. *Polyscias scutellaria* (N. L. Burman) Fosberg, Occas. Pap. Univ. Hawaii 46: 9. 1948.

圆叶南洋参 yuan ye nan yang shen

Crassula scutellaria N. L. Burman, Fl. Indica, 78. 1768; *Aralia balfouriana* André; *Polyscias balfouriana* (André) L. H. Bailey.

Treelets or small trees, 2–6(–7) m tall, andromonoecious. Leaves 1- or 2-pinnate; petiole 35–30 cm, enlarged and clasping at base, alate for 1–6 cm with membranous wings; petiolules 1–5 cm; leaflets 1 (leaves unifoliolate), 3, or 5 (rarely 2 or 4), broadly elliptic to oblate or reniform, occasionally ovate or obovate, 5–20(–24) × 5–20(–26) cm, papery to subleathery, base shallowly cordate or convex, margin subentire to coarsely crenulate or shallowly serrate, teeth short, apex rounded. Inflorescence terminal, erect, a panicle of umbels; primary axis 30–100 cm; secondary axes 15–30, in 2–4 verticils, 15–50 cm; tertiary axes (peduncles) 7–30 per secondary axis, in irregular verticils, 2–18 mm, with a terminal umbel bisexual and lateral umbels of staminate flowers; pedicels 1.5–7 mm. Ovary (2 or)3–5-carpellate; styles free nearly to base, 0.4–0.6 mm at anthesis, spreading, expanding in fruit to 0.8 mm. Fruit infrequently seen, subglobose to depressed-globose (somewhat triangular to quadrangular when 3- or 4-carpellate), 4–6 mm high.

Cultivated in gardens. Fujian (Xiamen), Guangdong (Guangzhou) [native to SW Pacific islands].

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