

Synopsis of *Phyllanthus* Section *Pityrocladus*, a New Neotropical Section

Since the publication of my synopsis of the subgenera and sections of *Phyllanthus* over four decades ago (Webster, 1956), a considerable number of new species and some new sections have been published. In anticipation of a new synopsis of the supraspecific taxa of *Phyllanthus* (Webster, ined.), several new sections based on a revision of the neotropical species.

Phyllanthus sect. *Pityrocladus* G. L. Webster, sect. nov. Type species: *Phyllanthus ruscifolius* Kunth

Monoecious (rarely dioecious) shrubs, often scandent; branches and branchlets \pm scabridulous or scurfy; branchlets pinnatifid, with mostly 10—50 leaves; leaf blades chartaceous, ovate to linear-oblong, obtuse or rounded to acuminate; stipules usually persistent; flowers in axillary unisexual or bisexual cymes; sepals 5 or 6, greenish to reddish; σ^7 disk dissected (segments sometimes \pm confluent); stamens 2—5 (-7), filaments connate (rarely free); anthers dehiscing horizontally or obliquely; pollen grains subglobose, 4- or 5-colporate; ρ pedicel 2—7 mm long in fruit; disk patelliform or dissected; ovary 3-locular; styles free or basally connate, bifid to unlobed; fruit dehiscent or indehiscent; seeds smooth (faintly striate), \leq 2 mm long.

This primarily South American group of 7 species has one Central American representative, *Phyllanthus valerii* Standl. (Costa Rica). The 4-5-colporate pollen indicates a probable assignment of the section to subg. *Emblica*, although the pollen grains are divergent in not being prolate. Section *Pityrocladus* is similar to sect. *Microglochidion* Müll. Arg. in a number of respects (including pollen), but differs in its scurfy indumentum, eglandular leaves, and tendency towards a scandent habit.

Key to the species

- 1 Leaves glabrous on both faces (at most scabridulous or papillate on petiole and/or midrib; veins distinctly prominulous on abaxial face; branchlets 10—30 cm long, with 20—35 leaves, 0.8—1.8 mm thick; σ^7 pedicels 3—7 mm long; stamens 3—6; sepals 5; ρ pedicels 2—4 mm long.
 2. Monoecious; leaf blades elliptic, 1.5—2.5 cm long, rounded and apiculate at apex; stamens (3-) 4—6; fruits indehiscent; styles unlobed or apically bifid. 1. *P. symphoricarpoides*
 - 2 Dioecious; leaf blades ovate-lanceolate, 3—6 cm long, acuminate; stamens 3; fruits dehiscent; styles bifid; branchlets winged. 2. *P. sponiifolius*
- 1 Leaf blades glabrous or hirsutulous adaxially; veins not prominulous (or if so, blades distinctly hirsutulous abaxially); branchlets 5—25 cm long, with 5—75 leaves, 0.4—1 mm thick; σ^7 pedicels 0.5—7.5 mm long; stamens 2 or 3; fruiting pedicels 1—4 mm long.
 - 3 Leaf blades abaxially copiously hirsutulous, with prominent laateral veins; stamens 2.
 - 4 Monoecious; branchlets 0.6—0.9 mm thick, with 5—11 leaves; leaf blades 1.5—3.5 cm long; petioles 1—2 mm long; stipules 3—4.5 mm long; styles unlobed. 3. *P. popayanensis*
 - 4 Dioecious; branchlets 0.4—0.6 mm thick, with 20—45 leaves; leaf blades 1—1.5 cm long; petioles ca 0.5 mm long; stipules 1.5—2 mm long. 4. *P. ruscifolius*
 - 3 Leaf blades abaxially glabrous or minutely scabridulous, veins not prominulous; stamens 2 or 3.
 - 5 Stamens 3 (rarely 2); σ^7 pedicels 4—8 mm long; leaves alveolate-punctate beneath.

5. *P. bahiensis*

5 Stamens 2 (rarely 3); ♂ pedicels 1—1.5 mm long.

6 Leaves elliptic, abruptly contracted to a point, alveolate-reticulate abaxially, 0.5--7 cm broad; branchlets 0.4—0.7 mm thick; stipules 1—1.5 mm long; ♂ disk segments discrete, flat.

6. *P. cuatrecasanus*

6 Leaves oblong, obtuse-apiculate, 2—5 mm broad, smooth abaxially, 0.2—0.5 cm broad; branchlets 0.7—1 mm thick; stipules 2—3.5 mm long; ♂ disk segments massive, ± confluent.

7. *P. valerii*

1. *Phyllanthus symphoricarpoides* Kunth in H.B.K., Nov. Gen. Sp. 2: 114. 1817. *Glochidion symphoricarpoides* (Kunth) Pax & K. Hoffm., Nat. Pflanzenfam. ed. 2, 19c: 58. 1931.—T.: Ecuador, “Loxa” [Loja], *Humboldt* (holotype: P!; isotype: B!).

Montane thickets, 1500-2750 m, Colombia to Peru.

2. *Phyllanthus sponiifolius* Müll. Arg., Linnaea 32: 25. 1863; DC. Prodr. 15(2): 378. 1866.—T.: Ecuador, *Fraser* (holotype: G!).

Montane thickets, 1000—2000 m, Colombia to Ecuador.

3. *Phyllanthus popayensis* Pax, Bot. Jahrb. 26: 503. 1899.—T.: Colombia, Popayán, Páramo de Guanacas, *Lehmann 4708* (holotype: B, destroyed; lectotype [chosen here]: K!).

Montane thickets, 2000—2800 m, Colombia (Cauca).

4. *Phyllanthus ruscifolius* Müll. Arg., DC. Prodr. 15(2): 358. 1866.—T.: Colombia, Prov. Cauca, *Triana 3659* (holotype: P).

Montane thickets, 1900—2200 m, Colombia (Valle del Cauca)

5. *Phyllanthus bahiensis* Müll. Arg., Linnaea 32: 20. 1863; DC. Prodr. 15(2): 367. 1866.—T.: Brazil, Bahia, *Blanchet 1842* (holotype: G!).

Coastal forests (Mata Atlántica), Brazil (Bahia and Sergipe).

6. *Phyllanthus cuatrecasanus* G. L. Webster, sp. nov.

T.: Colombia, Caquetá, Quebrada del Río Hacha, 2100—2250 m, *Cuatrecasas 8533* (holotype: US).

Dioecious shrub; branchlets terete, scabrid-hirtellus, 8—15 cm long, 0.4-0.7 mm thick, with 25—50 leaves; leaf blades staminate flowers 2—5 in axillary brachyblasts 1—2 mm long; staminate pedicel c. 1.5 mm long; sepals 5, elliptical, 1.3—1.6 mm long; disk segments 5, roundish, c. 0.2 mm broad; stamens 2, filaments connate; anthers dehiscing obliquely.

Known only from the type collection.

7. *Phyllanthus valerii* Standl., Field Mus. Bot. 18: 619. 1937.—T.: Costa Rica, Heredia, Yerba Buena, NE of San Isidro de Heredia, 2000 m, *Standley & Valerio 49814* (holotype: F).

Montane forests, Costa Rica, 1200—2050 m; very similar plants have been collected in Bolivia.