

**FIFTY NEW COMBINATIONS IN *PHANERA* LOUR. (LEGUMINOSAE:
CAESALPINIOIDEAE) FROM PALEOTROPICAL REGION**

S. BANDYOPADHYAY¹, P.P. GHOSHAL AND M.K. PATHAK

*Central National Herbarium, Botanical Survey of India, P.O. Botanic Garden,
Howrah 711 103, West Bengal, India*

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Abstract

Fifty new combinations are proposed in *Phanera* for species earlier treated in *Bauhinia* L.

Introduction

The subgenus *Phanera* (Lour.) Kurz (Wunderlin *et al.*, 1987; Bandyopadhyay, 1999) under *Bauhinia* L. is now recognized as a genus distinct from *Bauhinia* based on recent advances in molecular phylogeny (Lewis and Forest, 2005; Bruneau *et al.*, 2008; Sinou *et al.*, 2009). Thirty two new combinations have already been proposed in *Phanera* Lour. occurring in the Neotropical region from Brazil (Queiroz, 2006; Vaz, 2010) and for one species from the Palaeotropical region (Wunderlin, 2011). Fifty new combinations are proposed here in *Phanera* occurring in the Palaeotropical region from China, India and Myanmar to Malesia along with the types of the names which have been cited either by scrutinizing the relevant protologues or from the publication of Larsen and Larsen (1996).

- 1. *Phanera aherniana* (Perkins) de Wit var. **subglabra** (Merr.) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. et stat. nov.**
Bauhinia subglabra Merr., Philipp. J. Sci., C. 3: 230 (1908).
Bauhinia aherniana Perkins var. *subglabra* (Merr.) K. Larsen & S.S. Larsen, Nordic J. Bot. 13: 661 (1993). Type: *F.W. Foxworthy*, Bureau of Science no. 821 (K, image! lecto; NY, image! isolecto).**
- 2. *Phanera andersonii* (K. Larsen & S.S. Larsen) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia andersonii K. Larsen & S.S. Larsen, Nordic J. Bot. 2: 330 (1982). Type: UNESCO Limestone Expedition 1962, no. 653 (K, image! holo; L, SING, iso).**
- 3. *Phanera aureifolia* (K. Larsen & S.S. Larsen) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia aureifolia K. Larsen & S.S. Larsen, Nordic J. Bot. 11: 633 (1991).
Bauhinia chrysophylla K. Larsen & S.S. Larsen, Nordic J. Bot. 9: 253 (1989), non Vahl *ex* DC. (1825) nec Vogel (1839). Type: *C. Niyomdham* & *W. Ueachirakan* 1837 (AAU, holo; BKF, K, image! iso).**
- 4. *Phanera bidentata* (Jack) Benth. var. **breviflora** (Ridl.) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. et stat. nov.**
Bauhinia breviflora Ridl., Fl. Malay Penins. 5: 306 (1925).
Bauhinia bidentata Jack var. *breviflora* (Ridl.) K. Larsen & S.S. Larsen, Nordic J. Bot. 13: 663 (1993). Type: Pahang, *I.H. Burkill* & *Haniff*, Singapore Field no. 16867 (K, image! holo; SING, iso).**

¹Email: subirbandyopadhyay@yahoo.com

5. **Phanera bidentata** (Jack) Benth. var. **cornifolia** (Baker) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. et stat. nov.**
Bauhinia cornifolia Baker in Hook.f., Fl. Brit. India 2: 278 (1878).
Bauhinia bidentata Jack var. *cornifolia* (Baker) Bennet, Indian J. Forest. 5: 326 (1982).
 Type: *Griffith* 1878 (K, image!).
6. **Phanera bidentata** (Jack) Benth. var. **gracilipes** (Merr.) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. et stat. nov.**
Bauhinia gracilipes Merr., Pap. Michigan Acad. Sci. 19: 157 (1934).
Bauhinia bidentata Jack var. *gracilipes* (Merr.) K. Larsen & S.S. Larsen, Nordic J. Bot. 13: 663 (1993). Type: *H.H. Bartlett* 7600 (A, holo; C, L, image!, NY, image!, W, iso).
7. **Phanera bidentata** (Jack) Benth. var. **monticola** (Ridl.) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. et stat. nov.**
Bauhinia monticola Ridl., J. Straits Branch Roy. Asiat. Soc. 75: 28 (1917).
Bauhinia bidentata Jack var. *monticola* (Ridl.) K. Larsen & S.S. Larsen, Nordic J. Bot. 13: 663 (1993). Type: *H.C. Robinson s.n.* (SING, holo; K, image! iso).
8. **Phanera bracteata** Benth. subsp. **astylosa** (K. Larsen & S.S. Larsen) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia bracteata (Benth.) J. Graham *ex* Baker subsp. *astylosa* K. Larsen & S.S. Larsen, Fl. Cambodge, Laos & Vietnam 18: 178 (1980). Type: *Dournes s.n.* (P, image!).
9. **Phanera burbridgei** (Stapf) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia burbridgei Stapf, Trans. Linn. Soc. London, Bot. 4: 143 (1894). Type: *O. Beccari* 633 (FI, image! holo).
10. **Phanera campanulata** (S.S. Larsen) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia campanulata S. S. Larsen, Nordic J. Bot. 14: 289 (1994). Type: *D.A. Simpson & M. Marsh* 2051 (K, image! holo; AAU, BRUN, iso).
11. **Phanera clemensiorum** (Merr.) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia clemensiorum Merr., J. Arnold Arbor. 23:171 (1942). Type: *J. Clemens & M.S. Clemens* 3621 (A, holo; P, K, image! iso).
12. **Phanera excurrens** (Stapf) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia excurrens Stapf, Trans. Linn. Soc. London, Bot. 4: 143 (1894). Type: *G.D. Haviland* 1382 (K, image! holo).
13. **Phanera fabrilis** (de Wit) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. et stat. nov.**
Phanera riedelii (Baker) de Wit var. *fabrilis* de Wit, Reinwardtia 3: 464 (1956).
Bauhinia fabrilis (de Wit) K. Larsen & S.S. Larsen, Nordic J. Bot. 11: 634 (1991).
 Type: *Anthony*, B.N.B. Forestry Department, No. A. 756 (L, holo; K, image!, KEP, SING, iso).
14. **Phanera foraminifera** (Gagnep.) de Wit var. **falcata** (K. Larsen & S.S. Larsen) Bandyop., P. P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia foraminifera Gagnep. var. *falcata* K. Larsen & S.S. Larsen, Nordic J. Bot. 13: 661 (1993). Type: *P.S. Ashton*, BRUN 5614 (L, holo; K, image! iso).

15. ***Phanera ferruginea*** (Roxb.) Benth. var. ***griffithiana*** (Benth.) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. et stat. nov.**
Phanera griffithiana Benth. in Miq., Pl. Jungh.: 263 (1852).
Bauhinia ferruginea Roxb. var. *griffithiana* (Benth.) Baker in Hook.f., Fl. Brit. India 2: 283 (1878). Type: *Griffith s.n.* (K, image!, BR).
16. ***Phanera franckii*** (K. Larsen & S.S. Larsen) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia franckii K. Larsen & S.S. Larsen, Nordic J. Bot. 11: 633 (1991). Type: *C.W. Franck* 1406 (C, image! holo).
17. ***Phanera havilandii*** (Merr.) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia havilandii Merr., Philipp. J. Sci., C. 11: 79 (1916). Type: *Native collector*, Bureau of Science no. 199 (US, lecto).
18. ***Phanera khasiana*** (Baker) Thoth. subsp. ***polystachya*** (Gagnep.) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. et stat. nov.**
Bauhinia polystachya Gagnep., Notul. Syst. (Paris) 2: 178 (1912).
Bauhinia khasiana Baker subsp. *polystachya* (Gagnep.) K. Larsen & S.S. Larsen, Fl. Cambodge, Laos & Vietnam 18: 189 (1980). Type: *Massie s.n.* (P, image!).
19. ***Phanera khasiana*** (Baker) Thoth. var. ***gigalobia*** (D.X. Zhang) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia khasiana Baker var. *gigalobia* D.X. Zhang, Nordic J. Bot. 13: 401 (1993).
Type: *Cai Kehua* 584 (KUN, holo & iso).
20. ***Phanera khasiana*** (Baker) Thoth. var. ***tomentella*** (T.C. Chen) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia khasiana Baker var. *tomentella* T.C.Chen, Guihaia 8: 46 (1988). Type: *W.S. Liou* 303 (KUN, holo).
21. ***Phanera kingii*** (Prain *ex* King) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia kingii Prain *ex* King, J. Asiat. Soc. Bengal, Pt. 2, Nat. Hist. 66: 189 (1897). Type: *Scortechini* 320 (K, image! lecto).
22. ***Phanera kockiana*** (Korth.) Benth. var. ***angustifolia*** (K. Larsen & S.S. Larsen) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia kockiana Korth. var. *angustifolia* K. Larsen & S.S. Larsen, Nordic J. Bot. 13: 664 (1993). Type: *W.L. Chew et al.* 2968 (K, image! holo; L, image!, SING, iso).
23. ***Phanera kockiana*** (Korth.) Benth. var. ***bakoensis*** (K. Larsen & S.S. Larsen) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia kockiana Korth. var. *bakoensis* K. Larsen & S.S. Larsen, Nordic J. Bot. 13: 664 (1993). Type: *Ilias Paie* S.17902 (L, image! holo; K, SAN, SING, iso).
24. ***Phanera kockiana*** (Korth.) Benth. var. ***beccarii*** (K. Larsen & S.S. Larsen) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia kockiana Korth. var. *beccarii* K. Larsen & S.S. Larsen, Nordic J. Bot. 13: 664 (1993). Type: *Petrus & Dewol*, SAN 89576 (SAN, holo; AAU, MO, SING, iso).

25. **Phanera kockiana** (Korth.) Benth. var. **brevipedicellata** (K. Larsen & S.S. Larsen) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia kockiana Korth. var. *brevipedicellata* K. Larsen & S.S. Larsen, *Nordic J. Bot.* 13: 664 (1993). Type: *Mogea* 3508 (L, image! holo; BO, iso).
26. **Phanera kockiana** (Korth.) Benth. var. **calvicola** (K. Larsen & S.S. Larsen) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia kockiana Korth. var. *calvicola* K. Larsen & S.S. Larsen, *Nordic J. Bot.* 13: 664 (1993). Type: *P.J. Martin* S. 38676 (L, image! holo; AAU, K, KEP, iso).
27. **Phanera kockiana** (Korth.) Benth. var. **scarlatina** (Backer *ex* Cammerl.) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. et stat. nov.**
Bauhinia scarlatina Backer *ex* Cammerl., *Bul. Fac. Sti. Cernăuți* 3: 171 (1929).
Bauhinia kockiana Korth. var. *scarlatina* (Backer *ex* Cammerl.) K. Larsen & S.S. Larsen, *Nordic J. Bot.* 13: 665 (1993). Type: *Jaheri* 1181 (BO, holo; L, image! iso).
28. **Phanera kostermansii** (K. Larsen & S.S. Larsen) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia kostermansii K. Larsen & S.S. Larsen, *Nordic J. Bot.* 11: 629 (1991).
Type: *A. Kostermans* 13549 (L, holo; BO, K, image!, P, iso).
29. **Phanera lingua** (DC.) Miq. var. **antipolana** (Perkins) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. et stat. nov.**
Bauhinia antipolana Perkins, *Fragm. Fl. Philipp.* 1: 9 (1904).
Bauhinia lingua DC. var. *antipolana* (Perkins) K. Larsen & S.S. Larsen, *Nordic J. Bot.* 13: 660 (1993). Type: *E.D. Merrill* 1317 (NY, image! lecto).
30. **Phanera lingua** (DC.) Miq. var. **riedelii** (Baker) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. et stat. nov.**
Bauhinia riedelii Baker, *J. Linn. Soc., Bot.* 15: 98 (1876).
Bauhinia lingua DC. var. *riedelii* (Baker) K. Larsen & S.S. Larsen, *Nordic J. Bot.* 13: 660 (1993). Type: *Riedel s.n.* (K, lecto; P, W, iso).
31. **Phanera merrilliana** (Perkins) de Wit var. **borneensis** (K. Larsen & S.S. Larsen) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia merrilliana Perkins var. *borneensis* K. Larsen & S.S. Larsen, *Nordic J. Bot.* 13: 658 (1993). Type: *Ilias bin Paie* S. 28594 (L, image! holo; E, K, SAR, SING, iso).
32. **Phanera ornata** (Kurz) Thoth. subsp. **mizoramensis** (Bandyop. *et al.*) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia ornata Kurz subsp. *mizoramensis* Bandyop. *et al.*, *Nordic J. Bot.* 12: 223 (1992).
Type: *R. Dutta* 33793 (CAL!, holo).
33. **Phanera ornata** (Kurz) Thoth. var. **balansae** (Gagnep.) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. et stat. nov.**
Bauhinia balansae Gagnep., *Notul. Syst. (Paris)* 2: 168 (1912).
Bauhinia ornata Kurz var. *balansae* (Gagnep.) K. Larsen & S.S. Larsen, *Fl. Cambodge, Laos & Vietnam* 18: 209 (1980). Type: *M. Balansa* 2140 (P, image!).

34. ***Phanera ornata*** (Kurz) Thoth. var. ***burmanica*** (K.Larsen & S.S.Larsen) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia ornata Kurz var. *burmanica* K. Larsen & S.S. Larsen, Thai Forest Bull., Bot. 13: 42 (1980). Type: *J. Keenan et al.* 735 (E, holo; A, K, image! iso).
35. ***Phanera ornata*** (Kurz) Thoth. var. ***kerrii*** (Gagnep.) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. et stat. nov.**
Bauhinia kerrii Gagnep., Notul. Syst. (Paris) 2: 173 (1912).
Bauhinia ornata Kurz var. *kerrii* (Gagnep.) K. Larsen & S.S. Larsen, Fl. Cambodge, Laos & Vietnam 18: 208 (1980). Type: *Kerr* 1740 (K, image! lecto; P, image!, BM, image! isolecto).
36. ***Phanera ornata*** (Kurz) Thoth. var. ***subumbellata*** (Pierre *ex* Gagnep.) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. et stat. nov.**
Bauhinia subumbellata Pierre *ex* Gagnep., Notul. Syst. (Paris) 2: 180 (1912).
Bauhinia ornata Kurz var. *subumbellata* (Pierre *ex* Gagnep.) K. Larsen & S.S. Larsen, Fl. Cambodge, Laos & Vietnam 18: 209 (1980). Type: *Harmand* 1119 (P, image! holo).
37. ***Phanera pachyphylla*** (Merr.) de Wit var. ***wenzelii*** (K. Larsen & S.S. Larsen) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia pachyphylla Merr. var. *wenzelii* K. Larsen & S.S. Larsen, Nordic J. Bot. 13: 659 (1993). Type: *Wenzel* 2537 (NY, image! holo; BO, BR, K, MO, PR, iso).
38. ***Phanera rahmatii*** (Merr.) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia rahmatii Merr., Pap. Michigan Acad. Sci. 19: 158 (1934). Type: *Rahmat Si Toroes* 161 (A, holo; NY, image! iso).
39. ***Phanera ridleyi*** (Prain *ex* King) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia ridleyi Prain *ex* King, J. Asiat. Soc. Bengal, Pt. 2, Nat. Hist. 66: 185 (1897).
Type: *Ridley s.n.* (K, lecto).
40. ***Phanera semibifida*** (Roxb.) Benth. var. ***acuminata*** (K. Larsen & S.S. Larsen) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia semibifida Roxb. var. *acuminata* K. Larsen & S.S. Larsen, Nordic J. Bot. 13: 660 (1993). Type: *F. Krispinus*, SAN 105335 (K, image! holo; SAN, iso).
41. ***Phanera semibifida*** (Roxb.) Benth. var. ***bruneiana*** (K. Larsen & S.S. Larsen) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia semibifida Roxb. var. *bruneiana* K. Larsen & S. S. Larsen, Nordic J. Bot. 13: 660 (1993). Type: *J.P. van Neil* 3455 (L, image! holo).
42. ***Phanera semibifida*** (Roxb.) Benth. var. ***longibracteata*** (K. Larsen & S.S. Larsen) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia semibifida Roxb. var. *longibracteata* K. Larsen & S.S. Larsen, Nordic J. Bot. 13: 660 (1993). Type: *Winkler* 176 (HBG, holo; AAU, L, iso).
43. ***Phanera semibifida*** (Roxb.) Benth. var. ***perkinsiae*** (Merr.) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. et stat. nov.**
Bauhinia perkinsiae Merr., Publ. Bur. Sci. Gov. Lab. 17: 21 (1904), '*perkinsae*'.
Bauhinia semibifida Roxb. var. *perkinsiae* (Merr.) K. Larsen & S.S. Larsen, Nordic J. Bot. 13: 661 (1993). Type: *E.D. Merrill* 731 (NY, lecto; K, image! isolecto).

44. **Phanera stipularis** (Korth.) Benth. var. **brachystylus** (K. Larsen & S.S. Larsen) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia stipularis Korth. var. *brachystylus* K. Larsen & S.S. Larsen, *Nordic J. Bot.* 13: 659 (1993). Type: *J. van Borssum Waalkes* 2552 (L, image! holo; BO, K, iso).
45. **Phanera steenisii** (K. Larsen & S. S. Larsen) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia steenisii K. Larsen & S.S. Larsen, *Nordic J. Bot.* 11: 630 (1991). Type: A. *Kanis*, SAN No. 50115 (L, image! holo; K, SAN, iso).
46. **Phanera wrayi** (Prain *ex* King) de Wit var. **blumeana** (K. Larsen & S.S. Larsen) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia wrayi Prain *ex* King var. *blumeana* K. Larsen & S.S. Larsen, *Nordic J. Bot.* 13: 662 (1993). Type: *T.C. Whitmore* 3342 (K, holo; L, image! iso).
47. **Phanera wrayi** (Prain *ex* King) de Wit var. **borneensis** (K. Larsen & S.S. Larsen) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia wrayi Prain *ex* King var. *borneensis* K. Larsen & S.S. Larsen, *Nordic J. Bot.* 13: 662 (1993). Type: *W. Meijer* 47492 (L, image! holo; K, SAN, iso).
48. **Phanera wrayi** (Prain *ex* King) de Wit var. **cardiophylla** (Merr.) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. et stat. nov.**
Bauhinia cardiophylla Merr., *Philipp. J. Sci.*, C. 11: 79 (1916).
Bauhinia wrayi Prain *ex* King var. *cardiophylla* (Merr.) K. Larsen & S.S. Larsen, *Nordic J. Bot.* 13: 662 (1993). Type: *Native collector* 1858 (A, image!). Dr. Emily W. Wood (*pers. comm.*) informed that there is only a photo of *Native collector* 1858 at A and not any specimen as cited by Larsen and Larsen (1996).
49. **Phanera wrayi** (Prain *ex* King) de Wit var. **moultonii** (Merr.) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. et stat. nov.**
Bauhinia moultonii Merr., *Philipp. J. Sci.*, C. 11: 82 (1916).
Bauhinia wrayi Prain *ex* King var. *moultonii* (Merr.) K. Larsen & S.S. Larsen, *Nordic J. Bot.* 13: 662 (1993). Type: *Native collector*, Bureau of Science no. 202 (A, holo; K, image! iso).
50. **Phanera wuzhengyii** (S.S. Larsen) Bandyop., P.P. Ghoshal *et* M.K. Pathak, **comb. nov.**
Bauhinia wuzhengyii S.S. Larsen, *Novon* 9: 526 (1999). Type: *H.Y. Ying & W. S. Kong* 580812 (KUN, holo).

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References

- Bandyopadhyay, S. 1999. Nomenclatural replacements in *Bauhinia* (Leguminosae: Caesalpinioideae). Kew Bull. **54**: 974.
- Bruneau, A., Mercure, M., Lewis, G.P. and Herendeen, P.S. 2008. Phylogenetic patterns and diversification in the caesalpinoid legumes. Botany **86**: 697-718.
- Larsen, K. and Larsen, S.S. 1996. *Bauhinia*. In: Kalkman, C., Kirkup, D.W., Nooteboom, H.P., Stevens, P.F. and Wilde, W.J.J.O. de (eds), Flora Malesiana **12**: 442-535. Rijksherbarium/Hortus Botanicus, Leiden University, The Netherlands.
- Lewis, G.P. and Forest, F. 2005. Cercideae. In: Lewis, G., Schrire, B., Mackinder, B. and Lock, M. (eds), Legumes of the World. Royal Botanic Gardens, Kew, pp. 57-67.
- Queiroz, L.P. 2006. New species and new combinations in *Phanera* Lour. (Caesalpinioideae: Cercideae) from the Caatinga biome. Neodiversity **1**: 6-10.
- Sinou, C., Forest, F., Lewis, G.P. and Bruneau, A. 2009. The genus *Bauhinia* s.l. (Leguminosae): a phylogeny based on the plastid trnL-trnF region. Botany **87**: 947-960.
- Vaz, A.M.S.F. 2010. New combinations in *Phanera* (Leguminosae; Cercideae) from Brazil. *Rodriguésia* **61** (Suppl.): S33-S40.
- Wunderlin, R.P. 2011. New combination in *Phanera* (Fabaceae). Phytoneuron **19**: 1-2.
- Wunderlin, R., Larsen, K. and Larsen, S.S. 1987. Reorganization of the Cercideae (Fabaceae: Caesalpinioideae). Biol. Skr. **28**: 1-40.

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