



New combinations in *Senegalia* and *Vachellia* (Leguminosae: Mimosoideae) for Southeast Asia and China

B.R. Maslin¹, D.S. Seigler², J. Ebinger³

Key words

Acacia
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Abstract Fragmentation of the former broadly circumscribed genus *Acacia* (Leguminosae: Mimosoideae) necessitates combinations in *Senegalia* (syn. *Acacia* subg. *Aculeiferum*) and *Vachellia* (syn. former *Acacia* subg. *Acacia*) for the following 40 taxa that are recorded for the region encompassed by Southeast Asia and China. *Senegalia andamanica*, *S. borneensis*, *S. caesia*, *S. comosa*, *S. delavayi*, *S. delavayi* var. *kunmingensis*, *S. donnaiensis*, *S. gageana*, *S. intsia*, *S. kekapur*, *S. kostermansii*, *S. meeboldii*, *S. megaladena*, *S. megaladena* var. *garrettii*, *S. megala* dena var. *indochinensis*, *S. merrillii*, *S. palawanensis*, *S. pennata* subsp. *hainanensis*, *S. pennata* subsp. *insuavis*, *S. pluricapitata*, *S. pluriglandulosa*, *S. pruinascens*, *S. pseudointsia*, *S. sulitii*, *S. tawitawiensis*, *S. teniana*, *S. thailandica*, *S. tonkinensis*, *S. torta*, *S. verheijenii*, *S. vietnamensis* and *S. yunnanensis*. *Vachellia harmandiana*, *V. inopinata*, *V. kingii*, *V. leucophloea*, *V. leucophloea* var. *microcephala*, *V. myaingii*, *V. siamensis* (syn. *Acacia craibii*) and *V. tormentosa*. *Senegalia rugata* replaces the well-known name *Acacia concinna*. There are four doubtful names for the region, namely, *Acacia brunnescens*, *A. microcephala*, *A. obcordata* and *A. pseudoarabica*.

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INTRODUCTION

Molecular and other evidence has shown that the former, broadly circumscribed genus *Acacia* Mill. (Leguminosae: Mimosoideae) is polyphyletic; it is now regarded as comprising at least five genera, *Acacia* (s.str.), *Acaciella* Britton & Rose, *Mariosousa* Seigler & Ebinger, *Senegalia* Raf. and *Vachellia* Wight & Arn. (see Miller & Seigler 2012 for the overview of the new generic classification). Collectively, these genera are called *Acacia* s.lat. in the discussion below. *Acacia* is now conserved with a new type (see McNeill & Turland 2011), requiring new names in *Vachellia* for many taxa formerly included in *Acacia* subg. *Acacia*; new names are also needed for many taxa of the segregate genus *Senegalia* (syn. *Acacia* subg. *Aculeiferum* Vassal). Both these genera are pantropical.

Names are already available for all New World and Australian taxa of *Senegalia* and *Vachellia*, and for most taxa in the Africa/Asia region (see Seigler & Ebinger 2005, 2010, Glass & Seigler 2006, Kodela & Wilson 2006, Banfi & Galasso 2008, Hurter & Mabberley in Mabberley 2008, Clarke et al. 2009, Maslin 2012, Kyalangalilwa et al. 2013). Therefore, apart from Madagascar which has very few species, Asia and the Middle East are the only regions for which combinations are needed in order that all taxa of *Acacia* s.lat. will have names available under the new classification.

The present paper provides combinations for the indigenous taxa of Southeast Asia and China that are referable to *Senegalia* and *Vachellia*. This is not a taxonomic revision of these two genera. In undertaking this work we have relied on previous

relevant studies of *Acacia* s.lat., the most important being those of the late Ivan Nielsen (Nielsen 1980, 1981, 1985a, b and 1992) for Southeast Asian taxa and Wu De-Lin & Nielsen (2010) for those from China. Unless otherwise indicated, all new combinations presented here apply to taxa that were accepted as current under *Acacia* in these publications. Full synonymy (under *Acacia*) for these taxa is given in the above references, and in Roskov et al. (2005, which extensively cites the works of Nielsen). The only synonyms included here are basionyms and names that were accepted as current under *Acacia* in the above works. We have also noted cases where taxonomic opinion differs from that which we have adopted.

Apart from the 40 new combinations presented here, the only indigenous taxa of *Vachellia* and *Senegalia* in Southeast Asia and China are the following: *S. catechu* (L.f.) P.J.H.Hurter & Mabb., *S. chundra* (Roxb. ex Rottler) Maslin, *S. ferruginea* (DC.) Pedley, *S. pennata*, *S. pennata* subsp. *kerrii* (I.C.Nielsen) Maslin, *S. rugata* (see below under this species for discussion) and *V. nilotica* subsp. *indica* (Benth.) Kyal. & Boatwr. and *S. brevispica* (Harms) Seigler & Ebinger subsp. *brevispica* (see Kyalangalilwa et al. 2013).

Unless otherwise indicated, type information for most taxa has been taken from Nielsen (1980, 1981, 1985a); in the remaining cases the type citation from the protologue is provided. Type specimens have not been checked by the authors. Distributions given below are taken from Roskov et al. (2005) and Wu De-Lin & Nielsen (2010) unless otherwise stated.

The geographic scope of this paper includes Southeast Asia and southern China. As used here the term Southeast Asia is the area extending from Myanmar (Burma), Vietnam, Laos, Cambodia and Thailand to the Malesian region as defined by Van Steenis (1948).

¹ Western Australian Herbarium, Department of Environment and Conservation, Locked Bag 104, Bentley Delivery Centre, Western Australia 6983; corresponding author e-mail: bruce.maslin@dec.wa.gov.au.

² Department of Plant Biology, University of Illinois, Urbana, Illinois 61801, USA.

³ Emeritus Professor of Botany, Eastern Illinois University, Charleston, Illinois 61920, USA.

NEW COMBINATIONS

Senegalia Raf.

(syn. *Acacia* subg. *Aculeiferum* Vassal)

1. ***Senegalia andamanica* (I.C.Nielsen) Maslin, Seigler & Ebinger, comb. nov.**

Acacia andamanica I.C.Nielsen, Adansonia sér. 2, 19 (1980) 354. — Type: *King's Collector* s.n. (lecto K, Nielsen 1980: 354), Andaman Isl.

Distribution — India (Andaman Islands), Thailand.

2. ***Senegalia borneensis* (I.C.Nielsen) Maslin, Seigler & Ebinger, comb. nov.**

Acacia borneensis I.C.Nielsen, Opera Bot. 81 (1985) 20, f. 9 (7–13). — Type: *Endert* 2189 (holo L; iso A, K), Borneo, C.E. Kalimantan, W. Kutai, m. 10/11 near Mt Antjaloeng, 15 m, 24 July 1925.

Distribution — Indonesia (Kalimantan), Malaysia (Sabah).

3. ***Senegalia caesia* (L.) Maslin, Seigler & Ebinger, comb. nov.**

Mimosa caesia L., Sp. Pl. ed.1, 1 (1753) 522. — *Acacia caesia* (L.) Willd. (1806) 1090. — Lectotype: Herb. Herman 2: 50, No. 217, BM (Rico in Turland & Jarvis 1997: 475).

Distribution — India, Sri Lanka, Bhutan, Bangladesh, Myanmar (Burma), central and southern China (Guangdong, Hainan, Sichuan & Yunnan Provinces), Thailand, Laos, Cambodia, Vietnam, Taiwan.

Notes — Although *A. caesia* var. *subnuda* is recognized by Roskov et al. (2005), based on the works of Nielsen (1981: 53) and Sanjappa (1992: 37), it is regarded as conspecific with *A. caesia* by Chakrabarty & Gangopadhyay (1996: 604) and Wu De-Lin & Nielsen (2010: 57). We have therefore followed the most recent taxonomy in not recognizing the variety here. However, it should be noted that Nielsen should have adopted the name var. *oxyphylla* for this taxon; therefore, if this entity is ever recognized as a variety, either in *Acacia* or *Senegalia*, then the combination based on *A. oxyphylla* will need to be made. Although Roskov et al. (2005) list *A. caesia* as occurring in Java and the Philippines it is doubtfully native there because it is not listed for these regions by Nielsen (1992) or Wu De-Lin & Nielsen (2010).

4. ***Senegalia comosa* (Gagnep.) Maslin, Seigler & Ebinger, comb. nov.**

Acacia comosa Gagnep., Notul. Syst. (Paris) 2 (1911) 113. — Type: *Pierre* 5977 (lecto P; iso K, L, Nielsen 1980: 348), South Vietnam, Bien Hoa, Mar. 1869.

Distribution — Thailand, Laos, Cambodia, Vietnam (southern).

5. ***Senegalia delavayi* (Franch.) Maslin, Seigler & Ebinger, comb. nov.**

Acacia delavayi Franch., Pl. Delavay. (1890) 194. — Type citation: *Delavay*, "Yun-nan, in collibus in cultis ad Kiang-yn; fruct. 5. Sept. 1888".

Distribution — China (Guizhou, Yunnan).

Note — Varieties are not given in Roskov et al. (2005) but they are recognized in Wu De-Lin & Nielsen (2010) whose classification is adopted here.

a. var. ***delavayi***

Acacia delavayi C.Chen & H.Sun var. *delavayi* (Sun & Chen 1990: 261).

Distribution — China (Yunnan).

b. var. ***kunmingensis* (C.Chen & H.Sun) Maslin, Seigler & Ebinger, comb. nov.**

Acacia delavayi var. *kunmingensis* C.Chen & H.Sun, Acta Bot. Yunnan. 12 (1990) 262. — Type: *Xiangkun Deng* 673 (holo KUN), Kunming (translation of Chinese script by Libing Zhang).

Distribution — China (Guizhou, Yunnan).

6. ***Senegalia donnaiensis* (Gagnep.) Maslin, Seigler & Ebinger, comb. nov.**

Acacia donnaiensis Gagnep., Not. Syst. (Paris) 2 (1911) 114. — Type: *Harmand* 965 (lecto P, Nielsen 1980: 349), Vietnam, bords du Donnai, Nov. 1876.

Distribution — Cambodia, Vietnam (southern), Malaysia (Sabah), Indonesia (Kalimantan).

7. ***Senegalia gageana* (Craib) Maslin, Seigler & Ebinger, comb. nov.**

Acacia gageana Craib, Bull. Misc. Inform. Kew (1915) 409. — Type: *J.D. Hooker* s.n. (holo K; iso CAL, Chakrabarty & Gangopadhyay 1996: 604), India, Sikkim.

Distribution — Pakistan, Nepal, Bhutan, India, Bangladesh; also recorded for Myanmar (Burma) by Kress et al. (2003: 299).

Note — Sanjappa (1992: 40), Kumar & Sane (2003: 86), Kress et al. (2003) and Roskov et al. (2005) recognize this entity as a distinct species, but Chakrabarty & Gangopadhyay (1996: 604, 606) consider it conspecific with *A. (Senegalia) caesia*.

8. ***Senegalia intsia* (L.) Maslin, Seigler & Ebinger, comb. nov.**

Mimosa intsia L., Sp. Pl. (1753) 522. — Lectotype: 'Inja' in Rheede, Hort. Malab. 6 (1686) t. 4 [icon], (Rico in Turland & Jarvis 1997: 476).

Distribution — Nepal, India, Sri Lanka, Bangladesh, Myanmar (Burma).

Note — *Acacia intsia* is recognized as a distinct species by Sanjappa (1992: 40), Kumar & Sane (2003: 87) and Roskov et al. (2005). However, Chakrabarty & Gangopadhyay (1996: 606) consider this a *nomen confusum* and refer the Indian material of it to *A. caesia*.

9. ***Senegalia kekapur* (I.C.Nielsen) Maslin, Seigler & Ebinger, comb. nov.**

Acacia kekapur I.C.Nielsen, Opera Bot. 81 (1985) 13, f. 5 (1–8). — Type: *Winckel* 438B (holo L; iso BO), Java, Preanger, S of Tjibeber, Tjadas Malang, ± 1000 m, 20 Oct. 1919.

Distribution — Indonesia (Sumatra, Java), Singapore.

10. ***Senegalia kostermansii* (I.C.Nielsen) Maslin, Seigler & Ebinger, comb. nov.**

Acacia kostermansii I.C.Nielsen, Opera Bot. 81 (1985) 15, f. 5 (9–14). — Type: *Elbert* 4140 (holo BO; iso L), Lesser Sunda Islands, Sumbawa, Sultanat Sumbawa, bei Lapi, 100–200 m, 1910.

Distribution — Indonesia (Lesser Sunda Islands: Sumbawa, West Flores, Alor).

11. ***Senegalia meeboldii* (Craib) Maslin, Seigler & Ebinger, comb. nov.**

Acacia meeboldii Craib, Bull. Misc. Inform. Kew (1928) 66. — Type: *Kerr* 12197 (lecto ABD; iso BM, K; Nielsen 1980: 350), Thailand, Chumphon, Lang Suan, Pato, 200 m, common in evergreen forest.

Distribution — Myanmar (Burma), Thailand.

12. *Senegalia megaladena* (Desv.) Maslin, Seigler & Ebinger, comb. nov.

Acacia megaladena Desv., J. Bot. Agric. 3 (1814) 69. — Type: *Desvaux s.n.* (holo P, Nielsen 1980: 350), Inde orientale.

Distribution — Nepal, India, Bangladesh, Myanmar (Burma), China (Guangxi, Yunnan), Thailand, Laos, Cambodia, Vietnam, Malaysia (northern Peninsular Malaysia), Indonesia (Java), Philippines.

a. var. *megaladena*

Acacia megaladena var. *megaladena* (Nielsen 1980: 351).

Distribution — Nepal, India, Myanmar (Burma), China (Guangxi, Yunnan), Thailand, Laos, Vietnam (northern), Indonesia (Java).

b. var. *garrettii* (I.C.Nielsen) Maslin, Seigler & Ebinger, comb. nov.

Acacia megaladena var. *garrettii* I.C.Nielsen, Adansonia sér. 2, 19 (1980) 351. — Type: Garrett 1239 (holo K; iso ABD, E), Thailand, Chiang Mai, Doi Chawm Hot, c. 1420 m.

Distribution — China (Guangxi, Yunnan), Thailand.

c. var. *indochinensis* (I.C.Nielsen) Maslin, Seigler & Ebinger, comb. nov.

Acacia megaladena var. *indochinensis* I.C.Nielsen, Adansonia sér. 2, 19 (1980) 351. — Type: Larsen, Smitinand & Warncke 375 (holo AAU), South-eastern Thailand, Prachin Buri, KhaoYai National Park, alt. 750 m.

Distribution — Cambodia, Thailand, Laos, Vietnam (southern), Malaysia (northern Peninsula Malaysia, but not listed for this region in Turner (1997: 290), Indonesia (Java).

13. *Senegalia merrillii* (I.C.Nielsen) Maslin, Seigler & Ebinger, comb. nov.

Acacia merrillii I.C.Nielsen, Opera Bot. 81 (1985) 9, f. 2. — Type: Conklin PNH 18680 (holo P; iso A, L), Philippines, Mindoro, Mt Yagaw, SW slope, Lumun, alt. 330 m, 27 July 1953.

Distribution — Indonesia (Sulawesi, Moluccas – Mangole Island & Halmahera Island), Philippines.

14. *Senegalia palawanensis* (I.C.Nielsen) Maslin, Seigler & Ebinger, comb. nov.

Acacia palawanensis I.C.Nielsen, Opera Bot. 81 (1985) 16, f. 6 (7–11). — Type: Sulit PNH 12528 (holo L; iso A, US), Philippines, Palawan, Mt Iraan, SE Slope, Aborlan, vic. of Ibato River, 100 m, 5 June 1950.

Distribution — Philippines (Palawan).

15. *Senegalia pennata* (L.) Maslin

Senegalia pennata (L.) Maslin (2012) 466.

This species comprises three subspecies but the combination *Senegalia pennata* subsp. *kerrii* has already been provided (Maslin 2012).

a. subsp. *hainanensis* (Hayata) Maslin, Seigler & Ebinger, comb. nov.

Acacia hainanensis Hayata, Ic. Pl. Formos. 3 (1913) 86. — *Acacia pennata* subsp. *hainanensis* (Hayata) I.C.Nielsen (1980) 352. — Type: Katzumada s.n. (holo TI), Hainan, 1910.

Distribution — India, Myanmar (Burma), China (Fujian, Guangdong, Guangxi, Hainan, Yunnan), Vietnam.

b. subsp. *insuavis* (Lace) Maslin, Seigler & Ebinger, comb. nov.

Acacia insuavis Lace, Bull. Misc. Inform. Kew (1915) 401. — *Acacia pennata* subsp. *insuavis* (Lace) I.C.Nielsen (1980) 353. — Type: Lace 6173 (holo E; iso K), Burma.

Distribution — India, Myanmar (Burma); uncertain for Thailand, Laos, Cambodia.

16. *Senegalia pluricapitata* (Steud. ex Benth.) Maslin, Seigler & Ebinger, comb. nov.

Acacia pluricapitata Steud. ex Benth., London J. Bot. 1 (1842) 516. — Type: G. Porter in Wallich Cat. no. 5255A (holo K-WALL).

Distribution — Burma, Thailand, Vietnam (southern), Malaysia (Peninsular Malaysia), Indonesia (Sumatra, Java, Kalimantan), Philippines.

17. *Senegalia pluriglandulosa* (Verdc.) Maslin, Seigler & Ebinger, comb. nov.

Acacia pluriglandulosa Verdc., Kew Bull. 32 (1978) 472. — Type: Hoogland & Craven 10334 (holo K; iso A, BO, BRI, CANB, L, LAE, US), Papua New Guinea.

Distribution — Philippines, Indonesia (Papua), Papua New Guinea.

18. *Senegalia pruinescens* (Kurz) Maslin, Seigler & Ebinger, comb. nov.

Acacia pruinescens Kurz, J. Asiatic Soc. Bengal, Pt. 2, Nat. Hist. 45 (1877) 296, 298. — Type: J.D.Anderson s.n. (lecto CAL, Nielsen 1980: 355), Burma (Poneshee district), 26 April 1866.

Distribution — India, Myanmar (Burma), China (Guangxi, Yunnan), Vietnam (northern).

19. *Senegalia pseudointisia* (Miq.) Maslin, Seigler & Ebinger, comb. nov.

Acacia pseudointisia Miq., Fl. Ned. Ind. 1 (1855) 12, as ‘*Pseudo-Intsia*’. — Type: Blume s.n. (holo L), Java.

Distribution — Thailand, Malaysia (Peninsula, Sabah, Sarawak), Indonesia (Sumatra, Java), Singapore.

Note — In accordance with Art. 60.9 of the ICN (McNeill et al. 2012) the hyphen is removed from this name (‘*pseudo-intsia*’ has commonly been used in literature, including Roskov et al. 2005).

20. *Senegalia rugata* (Lam.) Britton & Rose

Senegalia rugata (Lam.) Britton & Rose (1928) 120. — *Mimosa rugata* Lam., Encycl. 1 (1783) 20. — Type: Sonnerat s.n. (holo P-LAM), India. *Mimosa concinna* Willd., Sp. Pl. ed. 4, 4 (2) (1806) 1039. — *Acacia concinna* (Willd.) DC. (1825) 464. — Type: D. Klein s.n. (holo B-WILLD), Ind. Or. *Acacia rugata* Buch.-Ham. ex Benth. (1842) 514. — Type: Wallich Cat. no. 5251 (holo K-WALL).

Distribution — India, Nepal, Bhutan, Bangladesh, Myanmar (Burma), Laos, Cambodia, Thailand, Vietnam, Malaysia (Peninsula), Indonesia (Sumatra, Java, Sumba, Flores, Sulawesi, Ambon, Moluccas, Kai Is.), Singapore, Philippines, Papua New Guinea; introduced Madagascar, Reunion & Mauritius.

Note — As discussed by Nielsen (1980: 349) the entities described as *A. rugata* and *A. concinna* have at times been treated as separate species or as varieties of the one species, but he considered that they are conspecific and correctly applied the name *A. concinna* to the combined entity. Under *Senegalia*, however, the correct name for this entity is *S. rugata*. It is regrettable that the well-known epithet *concinna* must be

replaced, however, it may possibly be reinstated in the future if studies show that it is best to recognize two taxa for what is here called *S. rugata*.

21. *Senegalia sulitii* (I.C.Nielsen) Maslin, Seigler & Ebinger, comb. nov.

Acacia sulitii I.C.Nielsen, Opera Bot. 81 (1985) 24, f. 10 (6–10). — Type: *Sulit PNH 6082* (holo L), Philippines, Samar, Loquilocon, Wright, banks of Ulut River, 100 m, 29 May 1948.

Distribution — Philippines, Indonesia (Sulawesi).

22. *Senegalia tawitawiensis* (I.C.Nielsen) Maslin, Seigler & Ebinger, comb. nov.

Acacia tawitawiensis I.C.Nielsen, Opera Bot. 81 (1985) 22, f. 10 (1–5). — Type: *Ramos & Edaño BS 44167* (holo NY; iso A, BM, BO, SING), Philippines, Sulu Province, Tawitawi, July–Aug. 1924.

Distribution — Philippines (Tawitawi).

23. *Senegalia teniana* (Harms) Maslin, Seigler & Ebinger, comb. nov.

Acacia teniana Harms, Repert. Spec. Nov. Regni Veg. 17 (1921) 133. — Type citation: *Simeon Ten.* 349, 113, "Yunnan: Pe yen tsin"; *S. Tenin* (Herb. Haun) "San ly tsin Kouty (23.IV.1919)".

Distribution — China (Sichuan, Yunnan).

24. *Senegalia thailandica* (I.C.Nielsen) Maslin, Seigler & Ebinger, comb. nov.

Acacia thailandica I.C.Nielsen, Adansonia sér. 2, 19 (1980) 356, pl. 1. — Type: *Put 2537* (holo K; iso C, P), Central Thailand (Ang Thong).

Distribution — Thailand, Cambodia.

25. *Senegalia tonkinensis* (I.C.Nielsen) Maslin, Seigler & Ebinger, comb. nov.

Acacia tonkinensis I.C.Nielsen, Adansonia sér. 2, 19 (1980) 358, pl. 2. — Type: *Wilson 2715* (holo K), Vietnam (Lao Cai), Aug. 1899.

Distribution — China (Yunnan), Laos, Vietnam (northern).

26. *Senegalia torta* (Roxb.) Maslin, Seigler & Ebinger, comb. nov.

Mimosa torta Roxb., Fl. Ind., ed. 2, 2 (1832) 566. — *Acacia torta* (Roxb.) Craib (1915) 410. — Type: Roxburgh drawing n. 1865 (K).

Distribution — Pakistan, India, Thailand.

Note — Nielsen (1985b: 166), Sanjappa (1992: 44), Kumar & Sane (2003: 99) and Roskov et al. (2005) recognize *Acacia torta* as a distinct species, but Chakrabarty & Gangopadhyay (1996: 604, 606) consider it conspecific with *A. (Senegalia) caesia*.

27. *Senegalia verheijenii* (I.C.Nielsen) Maslin, Seigler & Ebinger, comb. nov.

Acacia verheijenii I.C.Nielsen, Opera Bot. 81 (1985) 16, f. 6 (1–6). — Type: *Verheijen 3504* (holo L), Lesser Sunda Islands, Flores, between N. Lanang and T. Golo, 7 Mar. 1974.

Distribution — Indonesia (Flores).

28. *Senegalia vietnamensis* (I.C.Nielsen) Maslin, Seigler & Ebinger, comb. nov.

Acacia vietnamensis I.C.Nielsen, Adansonia sér. 2, 19 (1980) 360, pl. 3. — Type: *Poilane 19678* (holo K; iso P), Southern Vietnam (Bien Hoa, Dinh-Quan), 13 Oct. 1931.

Distribution — China (Guangxi, Guangdong, Hainan, Hunan, Jiangxi, Zhejiang, Yunnan), Laos, Vietnam.

29. *Senegalia yunnanensis* (Franch.) Maslin, Seigler & Ebinger, comb. nov.

Acacia yunnanensis Franch., Pl. Delavay. (1890) 193. — Type citation: *Delavay 2555* "Yun-nan, in collibus calcareis et silvulis ad Che-tong, prope Tapin-tze; fl. 13 Maj. 1886".

Distribution — China (Yunnan, Sichuan).

Vachellia Wight & Arn.

(syn. former *Acacia* Mill. subg. *Acacia*)

30. *Vachellia harmandiana* (Pierre) Maslin, Seigler & Ebinger, comb. nov.

Pithecolobium ? harmandianum Pierre, Fl. Forest. Cochinch. 5 (1899) t. 394A. — *Acacia harmandiana* (Pierre) Gagnep. (1911) 115. — Lectotype: *Pierre 5982* "Harmand 77 & 125" (P; iso E, K, Nielsen 1980: 345), Laos, Dec. 1875.

Distribution — Thailand, Laos, Cambodia, Vietnam.

31. *Vachellia inopinata* (Prain) Maslin, Seigler & Ebinger, comb. nov.

Acacia inopinata Prain, J. Asiatic. Soc. Bengal, Pt. 2, Nat. Hist. 66 (1897) 507. — Type citation: *King's Collector*, "Shan Hills".

Distribution — Myanmar (Burma).

Note — Despite no formal taxonomic treatment being presented by Nielsen (1981: 42; 1985b: 157) he clearly accepted *Acacia inopinata* by including it in his key; the provenance was given as Burma. Thus, *A. inopinata* was out of geographic scope for Nielsen's treatment, but not for his key. This species is also accepted by Kumar & Sane (2003: 87) and Roskov et al. (2005).

32. *Vachellia kingii* (Prain) Maslin, Seigler & Ebinger, comb. nov.

Acacia kingii Prain, J. Asiatic. Soc. Bengal, Pt. 2, Nat. Hist. 66 (1897) 506. — Type citation: *King's Collector*, "Shan Hills".

Distribution — Myanmar (Burma).

Note — Despite no formal taxonomic treatment being presented by Nielsen (1981: 42; 1985b: 157) he clearly accepted *Acacia kingii* by including it in his key; the provenance was given as Burma. Thus, *A. kingii* was out of geographic scope for Nielsen's treatment, but not for his key. This species is also accepted by Kumar & Sane (2003: 87) and Roskov et al. (2005).

33. *Vachellia leucophloea* (Roxb.) Maslin, Seigler & Ebinger, comb. nov.

Mimosa leucophloea Roxb., Pl. Coromandel 2 (1800) 27, t. 150. — *Acacia leucophloea* (Roxb.) Willd. (1806) 1083. — Lectotype: Roxburgh, Pl. Corom. 2 (1800) t. 150; [icon] (Nielsen 1980: 345).

Distribution — Pakistan, India, Sri Lanka, Myanmar (Burma), Thailand, Vietnam (southern), Malaysia, Indonesia (Java, Bali), East Timor; introduced in Trinidad and Mauritius.

Note — Varieties are recognized for this species in ILDIS (Roskov et al. 2005), based on Kumar & Sane (2003: 89), therefore, combinations in *Vachellia* are provided here. However, it is noted that in the latter publication the authors' note that the variety is "not maintained in recent literature", citing Chakrabarty & Gangopadhyay (1996) as their validating reference.

a. var. *leucophloea*

Acacia leucophloea var. *leucophloea* (Miquel 1855: 9).

Distribution — Pakistan, India, Sri Lanka, Myanmar (Burma).

b. var. *microcephala* (Kurz) Maslin, Seigler & Ebinger, comb. nov.

Acacia leucophloea var. *microcephala* Kurz, J. Asiatic Soc. Bengal, Pt. 2, Nat. Hist. 45 (1877) 297. — Type: None cited in protologue.

Distribution — Myanmar (Burma).

Note — This variety is recognized by Kumar & Sane (2003, who note that it is not maintained in current literature) and was subsequently listed in Roskov et al. (2005). It was not included in any of Nielsen's publications of Southeast Asian acacias, but this is perhaps not surprising because Myanmar was beyond the geographic scope of Nielsen's work.

34. *Vachellia myaingii* (Lace) Maslin, Seigler & Ebinger, comb. nov.

Acacia myaingii Lace, Bull. Misc. Inform. Kew (1915) 114, as '*myaingii*'. — Type citation: *Maung Tha Myaing* 238 (quoad spec. florifera), "Burma: Meiktila district, Menyo Reserve, 200 m"; *English* 21, "Wundwin Hill".

Distribution — Myanmar (Burma) (Kress et al. 2003: 299).

Note — Despite no formal taxonomic treatment being presented by Nielsen (1981: 42; 1985b: 157) he clearly accepted *Acacia myaingii* by including it in his key; the provenance was given as Burma. Thus, *A. myaingii* was out of geographic scope for Nielsen's treatment, but not for his key. The species is also recognized in Kress et al. (2003) but is not included in Lock & Heald (1994), Kumar & Sane (2003) or Roskov et al. (2005).

35. *Vachellia siamensis* (Craib) Maslin, Seigler & Ebinger, comb. nov.

Nimiria siamensis Craib, Bull. Misc. Inform. Kew (1927) 393. — *Acacia craibii* I.C.Nielsen (1980) 344. — Type: *Kerr* 10180 (holo K; iso ABD, BM), Thailand, Kanchanaburi, Si Sawat, 150 m, open deciduous forest.

Distribution — Thailand.

Note — In *Acacia* the correct name for this species is *A. craibii* because Nielsen (1980) could not adopt the epithet 'siamensis' as the combination was already occupied by *A. siamensis* Craib (see under *V. harmandiana* below). However, in *Vachellia* the epithet is not pre-occupied and therefore the correct name for the species is *V. siamensis*.

36. *Vachellia tomentosa* (Rottler) Maslin, Seigler & Ebinger, comb. nov.

Mimosa tomentosa Rottler, Ges. Naturf. Freunde Berlin Neue Schriften 4 (1803) 208. — Type citation: "Marmelon [Tharangambadi (formerly Tranquebar), Tamil Nadu, SE India]. Octobr. 16. 1799."

Acacia tomentosa Willd. (1806) 1087. — Type: *Rottler* 784 (holo B-W) (sphalm. Klein s.n., Nielsen 1981: 50), India, Madras, Marmelon, 16 Oct. 1799.

Distribution — India, Sri Lanka, Bangladesh, Myanmar (Burma), Thailand, Vietnam, Indonesia (Java, Sumba, Sumbawa, Sulawesi).

Note — This name is presumably homotypic with *Mimosa tomentosa* Rottler.

DOUBTFUL NAMES

Acacia brunnescens C.E.Parkinson, Bull. Misc. Inform. Kew (1932) 103. — Type: *C.E. Parkinson* s.n., Pegu Yoma, Insein District, Pyinmadaw, flowers Dec.

The taxonomic status of this entity requires further study. It was provisionally treated as conspecific with *A. megaladena* by Nielsen (1980: 350; 1981: 72), and although recognized as a Myanmar (Burma) endemic by Kress et al. (2003: 299) the name does not appear in Lock & Heald (1994), Kumar & Sane (2003) or Roskov et al. (2005).

Acacia microcephala Graham

Kress et al. (2003: 299) list this name for an entity from Myanmar, citing its distribution and common names within that country, and describing the plant simply as a 'Tree'. The name *A. microcephala* Graham first appeared in Wallich *Num. List [Wallich] n.* 5263 (1831–1832). Names on this list are regarded as being effectively published but are to be treated as *nomina nuda* unless a subsequent combination cites (or infers) a basionym, in which case they are considered to be validly published (Forman 1997). We consider the Kress et al. (2003) listing of *A. microcephala* Graham as a *nomen nudum*. Besides, even if it were regarded as having validly published it would be a *nom. illeg.* because it would be a later homonym on account of *A. microcephala* Macfadyen (1837). The taxon to which Kress et al. applied the name *A. microcephala* is perhaps *A. leucophloea* var. *microcephala* Grah. ex Baker in Hook.f., Fl. Brit. India 2 (1878) 294; the latter name is possibly an isonym of *A. leucophloea* var. *microcephala* Kurz (1877: 297) which is the basionym of *Vachellia leucophloea* var. *microcephala* (see above).

Acacia obcordata Hemsl.

This name appears in Kress et al. (2003: 300) who say that it is "Reported from Myanmar"; the only other information provided is that the plant is described as a "Small tree". We have not been able to locate this name in any source available to us and it is therefore considered *nomen nudum*, but the taxon to which this name might apply is unknown.

Acacia pseudoarabica Blume ex Miq., Fl. Ind. Bat. 1 (1855) 8. — Type: ? *Zippelius* (Verdcourt 1979: 172–173), Nov. Guinea.

According to Verdcourt (1979) this name is based on a cultivated specimen of *A. (Vachellia) nilotica* (L.) Willd. ex Delile.

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