

**NEW COMBINATIONS IN *SENEGALIA* AND *VACHELLIA*
(FABACEAE: MIMOSOIDEAE)****David S. Seigler**Department of Plant Biology, University of Illinois, Urbana, Illinois
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and

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Morphological and genetic differences separating the subgenera of *Acacia* *s.l.* and molecular evidence that the genus *Acacia* *s.l.* is polyphyletic necessitate transfer of species from *Acacia* subgenus *Aculeiferum* Vassal to *Senegalia* and from *Acacia* subgenus *Acacia* to *Vachellia*, resulting in six new combinations in the genus *Senegalia*: *S. angico* (Mart. in Colla) Seigler & Ebinger, **comb. nov.**; *S. brevispica* (Harms) Seigler & Ebinger, **comb. nov.**; *S. galpinii* (Burtt Davy) Seigler & Ebinger, **comb. nov.**; *S. incerta* (Hoehne) Seigler & Ebinger, *S. mellifera* (Vahl) Seigler & Ebinger, **comb. nov.**; *S. schweinfurthii* (Brenan & Excell) Seigler & Ebinger **comb. nov.**; and five in *Vachellia*: *V. erioloba* (E. Mey.) Seigler & Ebinger, **comb. nov.**; *V. grandicornuta* (Gerstner) Seigler & Ebinger, **comb. nov.**; *V. haematoxylon* (Willd.) Seigler & Ebinger, **comb. nov.**; *V. hockii* (De Wild) Seigler & Ebinger, **comb. nov.**; and *V. nebrownii* (Burtt Davy) Seigler & Ebinger, **comb. nov.**. *Phytologia* 92(1): 92-95 (April, 2010).

KEY WORDS: *Acacia* *sensu lato*, Fabaceae, Mimosoideae, *Senegalia*, *Vachellia*.

Morphological and genetic differences separating the subgenera of *Acacia* *s.l.* and molecular evidence that the genus *Acacia* *s.l.* is polyphyletic necessitate recognition of segregate genera and transfer of many *Acacia* species to these genera. A large number of

species of *Acacia* subgenus *Aculeiferum* must be referred to *Senegalia* Rafinesque and some of *Acacia* subgenus *Acacia* to *Vachellia* Wight & Arnott. For the following 11 taxa, this results in new combinations, in either the genus *Senegalia* or *Vachellia*:

1. **SENEGALIA ANGICO** (Mart. in Colla) Seigler & Ebinger, **comb. nov.** Basionym: *Acacia angico* Mart. in Colla, Herb. pedem. 2: 268. 1834. – TYPE: BRAZIL. RIO GRANDE DO SUL (Martius 1843), Villa Nova (holotype: BM; isotype: P, probable isotype K). The situation is confusing because Bentham (1876) considered *Acacia angico* Martius to be a synonym of *Piptadenia rigida* Benth., J. Bot. (Hooker) 4: 338. 1842. [now recognized as *Parapiptadenia rigida* (Benth.) Brenan, Kew Bull. 17: 228. 1963.] based on Martius (1843).
2. **SENEGALIA BREVISPICA** (Harms) Seigler & Ebinger, **comb. nov.** Basionym: *Acacia brevispica* Harms, Notizbl. Bot. Gart. Berl. 8: 370. 1923. – TYPE: TANZANIA: Lushoto Dist., Kitivo, Holst 606 (holotype: B, probably destroyed; BM, drawing) (Ross 1979).
3. **SENEGALIA GALPINII** (Burtt Davy) Seigler & Ebinger, **comb. nov.** Basionym: *Acacia galpinii* Burtt Davy, Bull. Misc. Inform. Kew. 326. 1922. – TYPE: SOUTH AFRICA. TRANSVAAL: banks of the Bad-zyn-loop River, Mosdene Estate, Naboomspruit, 19 Sep 1920, *Galpin 483M* (holotype: K; isotypes: BM, GRA, PRE) (Ross 1979).
4. **SENEGALIA INCERTA** (Hoehne) Seigler & Ebinger, **comb. nov.** Basionym: *Acacia incerta* Hoehne, Com. lin. telegr., Bot., pt. 8: 22. (pl. 135). 1919. – TYPE: BRAZIL. MATTOGROSSO: em Copipo da ponte, Cuyaba, F. C. Hoehne 2534 and 2535 (syntypes: possibly at R or RB). The numbers 2534 and 2535 are for the Comissão de Linhas Telegraphicas Estratégicas de Matto Grosso ao Amazonas – CLTE and are not personal collection numbers (M. C. Mamede, personal communication).

5. **SENEGALIA MELLIFERA** (Vahl) Seigler & Ebinger, **comb. nov.** Basionym: *Acacia mellifera* (Vahl) Benth. in Hook., Lond. J. Bot. 1: 507. 1842. – TYPE: ARABIA. Surdud and elsewhere, *Forsskal s.n.* (holotype: C) (Ross 1979).
6. **SENEGALIA SCHWEINFURTHII** (Burtt Davy) Seigler & Ebinger, **comb. nov.** Basionym: *Acacia schweinfurthii* Brenan & Exell, Bol. Soc. Brot., ser. 2. 31: 128. t. 1, fig. E. 1957. – TYPE: SUDAN: Gubbiki. *Schweinfurth* 2206 (holotype: BM; isotypes: HT, K, P, Z) (Ross 1979).
7. **VACHELLIA ERIOLOBA** (E. Mey.) Seigler & Ebinger, **comb. nov.** Basionym: *Acacia erioloba* E. Mey., Comm. 1: 171. 1836. – TYPE: SOUTH AFRICA. TRANSVAAL: Namaqualand, Wolmaransstad Dist. Between Kommandodrif and Makwassie, *J. W. Morris* 1042 [neotype: K; isotype: PRE] (Ross 1979).
8. **VACHELLIA GRANDICORNUTA** (Gerstner) Seigler & Ebinger, **comb. nov.** Basionym: *Acacia grandicornuta* Gerstner, J. S. Afr. Bot. 4: 55. Fig. 1. 1938. – TYPE: SOUTH AFRICA. NATAL: 1) flowered at Emkunzana and Mkuzi Drift between Nongoma and Magudu, 6 Jan 1936, *Gerstner* 2870 and 2) fruits found at same places and at lower Pongola, 13 May 1936, *Gerstner* 2870 (syntypes: BOL) (Ross 1979).
9. **VACHELLIA HAEMATOXYLON** (Willd.) Seigler & Ebinger, **comb. nov.** Basionym: *Acacia haematoxylon* Willd., Enum. Pl. 1056. 1809. – TYPE: SOUTH AFRICA. CAPE PROVINCE: *Lichtenstein s.n.* (holotype: B-Willd.) (Ross 1979).
10. **VACHELLIA HOCKII** (De Wild) Seigler & Ebinger, **comb. nov.** Basionym: *Acacia hockii* De Wild, Reptium nov. Spec. Regni veg. 11: 502. 1913. – TYPE: ZAIRE. KATANGA: Luafu valley, *Hock s.n.* (holotype: BR) (Ross 1979).

11. **VACHELLIA NEBROWNII** (Burtt Davy) Seigler & Ebinger,
comb. nov. Basionym: *Acacia nebrownii* Burtt Davy, Kew Bull.
1921: 50. 1921. – TYPE: BOTSWANA: Kwebe Hills, *Mrs. E. J.*
Lugard 14 & 16 (syntypes: K) (Ross 1979).

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