

NEW COMBINATIONS IN *SENEGALIA* RAF. (LEGUMINOSAE: MIMOSOIDEAE)

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ABSTRACT

Acacia Mill. in the traditional sense embraces c. 1,400 species from tropical areas of the World. Phylogenetic studies carried out since the decade of 1990 have shown that the genus is polyphyletic and should be split into five genera. Species native to the Caatinga of Northeastern Brazil belong to the former subgenus *Aculeiferum*, a group now segregated from *Acacia* and renamed as *Senegalia*. In this work, eight new combinations are presented in this genus: *Senegalia bahiensis* (Benth.) A.Bocage & L.P.Queiroz, *Senegalia kallunkiae* (J.W.Grimes & Barneby) A.Bocage & L.P.Queiroz, *Senegalia langsdorffii* (Benth.) A.Bocage & L.P.Queiroz, *Senegalia martiusiana* (Steud.) A.Bocage & L.P.Queiroz, *Senegalia monacantha* (Willd.) A.Bocage & L.P.Queiroz, *Senegalia piauiensis* (Benth.) A.Bocage & L.P.Queiroz, *Senegalia santosii* (G.P.Lewis) A.Bocage & L.P.Queiroz and *Senegalia velutina* (DC.) A.Bocage & L.P.Queiroz.

The genus *Acacia* Mill., in its widest sense, is one of the largest of the Leguminosae, embracing more than 1,400 species of tropical and subtropical areas of the New World, Africa, Asia and Oceania (Lewis, 2005). Traditionally, *Acacia* has been subdivided in three subgenera following the taxonomic proposals by Vassal (1981): *Acacia*, *Aculeiferum* Vassal and *Phyllodinae* (DC.) Ser. Pedley (1986) recognized the same three groups but ascribed generic status to them: *Acacia*, *Senegalia* Raf. and *Racosperma* Mart.

More recently, cladistic works showed that the genus *Acacia* s.l. is not monophyletic (Luow et al. 2003, Maslin et al. 2003, Miller & Bayer 2003, Miller et al. 2003) and at least five genera should be resurrected or newly described from within it (Lewis et al. 2005). Orchard & Maslin (2003) proposed to conserve a new type of

Acacia based on the Australian species *Acacia penninervis* Sieber ex DC. This proposal was accepted by the Nomenclature Section of the XVII International Botany Congress on 16th July 2005 and subsequently ratified at the Plenary Session of the Congress on 23 July 2005. According to this decision, the name *Acacia* is now attached to the group formerly named as subgenus *Phyllodinae* or the genus *Racosperma*, a group with about 1,045 species, mostly from Australia. The former genus *Acacia* has to be changed to *Vachellia* Wight & Arn. and subgenus *Aculeiferum* to genus *Senegalia*.

The species of *Acacia* from the Brazilian Caatinga belong to the former subgenus *Aculeiferum*, except for the spontaneous *Acacia farnesiana* (L.) Willd., which belongs to subgenus *Acacia* (currently *Vachellia farnesiana* (L.) Wight & Arn.).

Some combinations of *Acacia* species from the Caatinga in *Senegalia* were made by Britton & Rose (1928) and Britton & Killip (1936). Combinations for the remaining species are provided here.

Senegalia bahiensis (Benth.) A.Bocage & L.P.Queiroz, **comb. nov.**

Basionym: *Acacia bahiensis* Benth., Trans. Linn. Soc. London 30: 525. 1875.

Senegalia kallunkiae (J.W.Grimes & Barneby) A.Bocage & L.P.Queiroz, **comb. nov.**

Basionym: *Acacia kallunkiae* J.W. Grimes & Barneby, Brittonia 37: 186. 1985.

Senegalia langsdorffii (Benth.) A.Bocage & L.P.Queiroz, **comb. nov.**

Basionym: *Acacia langsdorffii* Benth., London J. Bot. 1: 421. 1842.

Senegalia martiusiana (Steud.) A.Bocage & L.P.Queiroz, **comb. nov.**

Basionym: *Mimosa martiusiana* Steud., Nomenc. Bot. (ed. 2) 2: 148. 1841.

Senegalia monacantha (Willd.) A.Bocage & L.P.Queiroz, **comb. nov.**

Basionym: *Acacia monacantha* Willd., Enum. Hort. Berol.: 1056. 1809.

Senegalia piauhiensis (Benth.) A.Bocage & L.P.Queiroz, **comb. nov.**

Basionym: *Acacia piauhiensis* Benth., Trans. Linn. Soc. London 30: 523. 1875.

Senegalia santosii (G.P.Lewis) A.Bocage & L.P.Queiroz, **comb. nov.**

Basionym: *Acacia santosii* G.P.Lewis, Kew Bull. 51: 371. 1996.

Senegalia velutina (DC.) A.Bocage & L.P.Queiroz, **comb. nov.**

Basionym: *Acacia velutina* DC., Prodr. 2: 459. 1825.

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