



New combinations in *Vachellia* and *Senegalia* (Leguminosae: Mimosoideae) for south and west Asia

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Abstract

Fragmentation of the former broadly circumscribed genus *Acacia* necessitates new names in *Vachellia* (syn. former *Acacia* subg. *Acacia*) and *Senegalia* (syn. *Acacia* subg. *Aculeiferum*) for the following 21 taxa that are recorded for the south and west Asian regions (i.e. Bangladesh west to the Arabian Peninsula). *Senegalia diadenia*, *Senegalia donaldii*, *Senegalia hohenackeri*, *Senegalia lankaensis*, *Senegalia lenticularis* and *Senegalia mahrana*. *Vachellia gerrardii* subsp. *negevensis*, *Vachellia gerrardii* subsp. *negevensis* var. *najdensis*, *Vachellia hunteri*, *Vachellia harala*, *Vachellia hydaspica*, *Vachellia jacquemontii*, *Vachellia johnwoodii*, *Vachellia nilotica* subsp. *cupressiformis*, *Vachellia nilotica* subsp. *hemispherica*, *Vachellia planifrons*, *Vachellia pseudoeburnea*, *Vachellia tanjorensis*, *Vachellia tortilis* subsp. *campoptila*, *Vachellia wightii* (syn. *Acacia bolei*) and *Vachellia yemenensis*. There are two unresolved names for the west Asian region: *Acacia pachyceras* and *Acacia yemenensis* subsp. *obtusifoliolata*.

Introduction

Molecular and other evidence has shown that the former, broadly circumscribed genus *Acacia* Miller (1754; Leguminosae: Mimosoideae) is polyphyletic; it is now regarded as comprising at least five genera, *Acacia sens. str.*, *Acaciella* Britton & Rose (1928: 96), *Mariosousa* Seigler & Ebinger (Seigler et al. 2006: 415), *Senegalia* Rafinesque (1838: 119), and *Vachellia* Wight & Arnott (1834: 272) (see Miller & Seigler 2012 for overview of the new generic classification). Collectively, these genera are called *Acacia sens. lat.* in the discussion below. *Acacia* is now conserved with a new type (see McNeill & Turland 2011), necessitating 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, 1972: 108). Both these genera are pantropical in their distribution.

Names are currently available in *Senegalia* and *Vachellia* for all New World and Australian taxa, and for some from the Africa/Asia region (Seigler & Ebinger 2005, Glass & Seigler 2006, Kodela & Wilson 2006, Banfi & Galasso 2008, Hurter & Mabberley in Mabberley 2008, Clarke *et al.* 2009, Seigler & Ebinger 2010, Maslin 2012, Kyalangalilwa *et al.* 2013 and Maslin *et al.* 2013). Therefore, apart from the few taxa in Madagascar, it is only those from the south and west Asian region for which combinations are needed in order that all taxa of *Acacia sens. lat.* will have names available under the new classification.

The present paper provides the necessary, outstanding combinations for taxa from south and west Asia that are referable to *Senegalia* and *Vachellia*. Combinations for other taxa from the region are included in the above-cited works. This is not a taxonomic revision of these two genera. In undertaking this work we have relied largely on the names base for *Acacia sens. lat.* that is provided in the check-lists of Kumar & Sane (2003) for South Asia and

Note:—*Acacia wightii* Baker ex Bentham is illegitimate in *Acacia* because of the pre-existing *A. wightii* Wight & Arnott, however, in *Vachellia* the epithet ‘wightii’ is not pre-occupied and therefore must be used instead of ‘bolei’.

20. *Vachellia yemenensis* (Boulos) Ragupathy, Seigler, Ebinger & Maslin, *comb. nov.*

Bas.: *Acacia yemenensis* Boulos (1995: 330 fig. 2). *Type:*—YEMEN. *N. Taiz, F.N. Hepper & J.R.I. Wood 5852* (holotype K); fide Boulos (1995: 331).

Distribution. Yemen (Boulos 1995: 331).

Note:—*Acacia yemenensis* is not listed by Lock & Simpson (1991) or Roskov *et al.* (2005), but it is regarded as a good species by A. G. (Tony) Miller (see Acknowledgements) and the combination in *Vachellia* is therefore made here. The taxonomic status of *Acacia yemenensis* subsp. *obtusifoliolata* Boulos (1995) requires further study (Miller, pers. comm.).

UNRESOLVED NAMES

Acacia pachyceras O. Schwartz (1939: 85). *Type:*—YEMEN. *J.R.I. Wood 2401* (neotype K isoneotype BM); fide Boulos (1995: 336). Chaudhary (1999: 605) discusses the application of this name and considers that it most likely is synonymous with *Acacia (Vachellia) origena* Asfaw (1982: 337), but recognizes that further study is warranted. Lock & Simpson (1991) did recognize *A. pachyceras* and provisionally treated *A. iraqensis* (Rechinger 1999: 16) as a synonym of it; Chaudhary (1999: 604) considers *A. iraqensis* as conspecific with *A. (Vachellia) gerrardii* subsp. *negevensis*

Acacia yemenensis* subsp. *obtusifoliolata Boulos (1995: 333, fig. 2F–G). *Type:*—YEMEN. Shakahrah, *J.R.I. Wood 3388* (holotype K isotype BM). See note under *V. yemenensis* above.

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