

Vachellia acuifera (Fabaceae: Mimosoideae) new to Cuba

Author: González-Gutiérrez, Pedro A.

Source: Willdenowia, 37(2) : 547-549

Published By: Botanic Garden and Botanical Museum Berlin (BGBM)

URL: <https://doi.org/10.3372/wi.37.37213>

BioOne Complete (complete.BioOne.org) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at www.bioone.org/terms-of-use.

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

PEDRO A. GONZÁLEZ-GUTIÉRREZ

Vachellia acuífera (Fabaceae: Mimosoideae) new to Cuba

Abstract

González-Gutiérrez, P. A.: *Vachellia acuífera* (Fabaceae: Mimosoideae) new to Cuba [Novitiae florae cubensis 25]. – Willdenowia 37: 547-549. – ISSN 0511-9618; © 2007 BGBM Berlin-Dahlem. doi:10.3372/wi.37.37213 (available via <http://dx.doi.org/>)

Vachellia acuífera, hitherto considered endemic to the Bahamas, has been found as a native element in the natural vegetation of Caletones, a coastal locality of Holguín province, northeastern Cuba. This new record for Cuba is an additional indication for the strong phylogeographic affinities between the northern coast of Cuba and the Bahamas.

Key words: *Acacia acuífera*, Antilles, Bahamas, phylogeography.

A total of 19 species of the genus *Acacia* L. have been reported for Cuba by León & Alain (1951) and Bässler (1998). Since Maslin (1988) morphological and molecular evidence has been accumulated for the polyphyly of the large genus *Acacia* (for references see Seigler & Ebinger 2006) and the necessity to divide it into more natural, monophyletic units. After the debate about the nomenclatural consequences had been concluded with the decision of the International Botanical Congress in Vienna 2005 to endorse the proposal by Orchard & Maslin (2003) of conserving the name *Acacia* with a new type, Seigler & Ebinger (2006) validated the new combinations of former New World *Acacia* names in the genus *Vachellia* and Seigler & al. (2006) those in *Senegalia*.

In December 2006, during an expedition to Caletones, a coastal locality of the municipality of Gibara in the province of Holguín, an infertile plant of the genus *Vachellia* was found. The features of this plant did not correspond to the descriptions of any of the species that appear in the works of León & Alain (1951) and Bässler (1998). On a second visit to Caletones in February 2007, three additional individuals of the unidentified taxon were found growing as native elements in the natural vegetation. Two of these shrubs were in flower. In order to identify these plants, the reference collections at HAJB and HAC were searched; however, no collections matched the species collected at Caletones. To pursue further its identity, I contacted D. S. Seigler and J. E. Ebinger, who kindly sent me their suggestions as to the identity of the species.



Fig. 1. Flowering specimen of *Vachellia acuífera* collected at Caletones (P. A. González 84639, HAJB).

The plants proved to be *Vachellia acuífera* (Benth.) Seigler & Ebinger (\equiv *Acacia acuífera* Benth.), a species so far considered endemic to the Bahama archipelago. This finding thus constitutes a new report of a shared taxon for the Cuban and the Bahaman archipelagos and is therefore of particular phylogeographic significance. The floristic affinities between the Bahamas and the northern coast of Cuba are in fact strong (see Howard 1973, Klotz 1978, Borhidi 1991).

At Caletones individuals of *Vachellia acuífera* inhabit a patch of xeromorphic thicket included in a microphyllous evergreen forest, behind a plantation of “henequén” (*Agave furcoides* Lem.). Other common species in this thicket are: *Coccoloba diversifolia* Jacq., *Agave legrelliana* Jacobi, *Tabebuia trachycarpa* (Griseb.) K. Schum., *Evolvulus squamosus* Britton, *Pithecellobium keyense* Britton and *Calliandra colletioides* Griseb. For further information on the flora and vegetation of the coastal fringe of Holguín see González-Gutiérrez & al. (2001, 2006a-b). A specimen of *Vachellia acuífera* (Fig. 1, Holguín province, municipality of Gibara, at Caletones, 4.2007, P. A. González 84639) has been deposited at HAJB.

Acknowledgements

I am grateful to Ricardo García (JBSD), D. S. Seigler (ILL) and J. E. Ebinger (EIU) for their kind assistance.

References

- Bässler, M. 1998: *Mimosaceae*. – In: Flora de la República de Cuba. Series A. Plantas vasculares **2**. – Königstein.
- Borhidi, A. 1991: Phytogeography and vegetation ecology of Cuba. – Budapest.
- González Gutiérrez, P. A., La 'O Osorio, J. A. & Sigarreta, S. 2001: Vegetación del Parque Monumento Nacional Bariay, Cuba. – Brenesia **55-56**: 81-100.
- , Suarez Terán, S. I., Sigarreta Vilches, S., Fernández Velázquez [“Velásquez”], A. & Laffita Gámez, O. 2006a [“2004-2005”]: Apuntes sobre la flora y vegetación del sector costero Bahía de Vita-Pesquero, Rafael Freyre, Holguín. – Revista Jard. Bot. Nac. Univ. Habana **25-26**: 119-130.
- , —, — & — 2006b [“2004-2005”]: Flora y vegetación de Caletica, Rafael Freyre, Holguín. – Revista Jard. Bot. Nac. Univ. Habana **25-26**: 131-140.
- Howard, R. A. 1973: The vegetation of the Antilles. – Pp. 1-38 in: Graham, A. (ed.), Vegetation and vegetational history of northern Latin America. – Amsterdam, etc.
- Klotz, G. 1978: Arealtypen cubanischer Pflanzensippen I. – Beitr. Phytotax. (Jena) **6**: 7-77.
- León & Alain [Bro.] 1951: Flora de Cuba 2. Dicotiledóneas: Casuarinaceas a Meliaceas. – Contr. Ocas. Mus. Hist. Nat. Colegio “De La Salle” **10**.
- Maslin, B. R. 1988: Should *Acacia* be divided? – Bull. Int. Group Stud. Mimosoideae **16**: 54-76.
- Orchard, A. E. & Maslin, B. R. 2003: Proposal to conserve the name *Acacia* (*Leguminosae: Mimosoideae*) with a conserved type. – Taxon **52**: 362-363. [[CrossRef](#)]
- Seigler, D. S. & Ebinger, J. E. 2006 [“2005”]: New combinations in the genus *Vachellia* (*Fabaceae: Mimosoideae*) from the New World. – Phytologia **87**: 139-178.
- , — & Miller, J. T. 2006: The genus *Senegalia* (*Fabaceae: Mimosoideae*) from the New World. – Phytologia **88**: 38-93.

Address of the author:

Pedro A. González-Gutiérrez, Centro de Investigaciones y Servicios Ambientales de Holguín (CISAT)-CITMA, Calle 18 esquina a Maceo, Rpto “El Llano”, Holguín 80 100, Cuba; e-mail: pagg@cisat.holguin.inf.cu