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An update of the Brazilian species of *Aeschynomene* sect. *Ochopodium* ser. *Viscidulae* including a new species and a new synonym

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Abstract

Aeschynomene veadeirana, a new species from the highlands of the state of Goiás, Brazil, is described and illustrated here. This species is closer to *A. viscidula* but differs from it in stems and branches predominantly puberulous to sparsely hispidulous or glabrescent, leaflets preponderantly oblong with revolute, ciliate margins, apressed trichomes, wing petals dorsally overlapping, and fruits pubescent, not reflexed or viscous. The geographical distribution, status of conservation, phenology of the new species, and a key to the species of *Aeschynomene* sect. *Ochopodium* ser. *Viscidulae* which occur in Brazil are provided. Also, the synonymization of *A. gilbertoi* under *A. viscidula* is herein proposed.

Key words: Brazilian Cerrado, Chapada dos Veadeiros, *Ochopodium*, *Aechynomene* ser. *Viscidulae*

Introduction

Aeschynomene Linnaeus (1753: 713) belongs to the Dalbergia clade of the tribe Dalbergieae *sensu lato* Klitgaard & Lavin 2005. The genus usually includes subshrubby or shrubby plants, erect, prostrate to decumbent, with stems and branches viscous or not, imparipinnate leaves, stipules peltate or not, papilionaceous flowers with campanulate or bilabiate calyx, and fruits with articles joined by isthmus or septa (Rudd 1955).

The genus *Aeschynomene* has pantropical distribution and encompasses about 180 species (Lewis *et al.* 2005), among which 84 are present in the Neotropical region (Klitgaard & Lavin 2005). In the Americas, most members of this genus grow in Brazil, where 53 species are found distributed especially in the Cerrado region, Central Brazil, in flooded or non-flooded areas, and also in the Caatinga, located in the Northeastern Region.

Rudd (1955, 1959) and Fernandes (1996) presented the most recent and important taxonomic studies of American and Brazilian species of *Aeschynomene*, respectively. The authors admitted that the genus has two sections and nine series: *Aeschynomene* sect. *Aeschynomene* ser. *Americanae* Rudd (1955: 22), *Fluminensis* Rudd (1955: 37), *Indicae* Rudd (1955: 55), *Montevidensis* Rudd (1955: 40), and *Sensitivae* Rudd (1955: 46), and *Aeschynomene* sect. *Ochopodium* ser. *Pleuronerviae* Rudd (1955: 93), *Scopariae* Rudd (1955: 110), *Sclerosae* Fernandes (1996: 116), and *Viscidulae* Rudd (1955: 17). However, Ribeiro *et al.* (2007) noted the paraphyletic nature of the genus and suggested that *Aeschynomene* sect. *Ochopodium* is more related to the genus *Machaerium* than to *Aeschynomene* sect. *Aeschynomene.*

Although Fernandes (1996) conducted a taxonomic study of the Brazilian species of *Aeschynomene*, the author did not present illustrations of the species or comments on the morphological relationships among them. Furthermore, he mentioned only few herbaria collections from the Midwestern Region of the country, where the genus is well represented and diverse. Moreover, the descriptions provided do not help diagnose the taxa, and in many cases the identification key is composed of continuous characters, which makes difficult to establish a precise delimitation of the species.

During one expedition as part of the project "Phylogeny and evolution of *Aeschynomene* (Leguminosae, Papilionoideae, Dalbergieae) and taxonomy of species occurring in the Midwestern Region of Brazil", we found a population of *Aeschynomene* growing among native pastures near streams, in the Chapada dos Veadeiros region. The

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Secula viscidula (Michaux) Small (1913: 200) is a homotypic synonym of *Aeschynomene viscidula* Michaux (1803: 74–75). *Aeschynomene prostrata* Poiret (1816: 76) was suggested because the author considered *A. viscidula* Michx. a posterior homonym for another *A. viscidula* that was written by Roxburgh in an exsiccatae label. However, the name proposed by Roxburgh was not formally proposed until the publication of *A. viscidula* Roxb. ex Willdenow (1809: 776), that occurred only six years after Michaux established it. Therefore, since the name proposed by Willdenow is a posterior homonym, *A. viscidula* was chosen in name that has to be accepted and that was used in the present work.

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