



## Taxonomic notes on the *Acanthopsis disperma-hoffmannseggiana* complex (Acanthaceae, tribe Acantheae), with an interim key to members of the genus

HESTER M. STEYN<sup>1,2\*</sup> & ABRAHAM E. VAN WYK<sup>2</sup>

<sup>1</sup>National Herbarium, South African National Biodiversity Institute, Private Bag X101, Pretoria 0001, South Africa.

<sup>2</sup>H.G.W.J. Schweickerdt Herbarium, Department of Plant Science, University of Pretoria, Pretoria 0002, South Africa.

\*Author for correspondence. E-mail: [h.steyn@sanbi.org.za](mailto:h.steyn@sanbi.org.za)

### Abstract

*Acanthopsis* is a taxonomically poorly understood genus confined to arid parts of southern Africa. This contribution is the first detailed assessment of the diversity within the *Acanthopsis disperma-hoffmannseggiana* complex, the latter of which comprises the bulk of the specimens of the genus represented in herbaria. Species concepts are resolved and the misapplication of names is noted. In addition to the recognition of *A. disperma* and *A. hoffmannseggiana*, five new species of *Acanthopsis* formerly treated under these two names, are described, namely *A. tuba* and *A. ludoviciana* (both confined to the Richtersveld, Northern Cape, South Africa), *A. adamanticola* (endemic to southern Namibia), *A. villosa* (endemic to Bushmanland, Northern Cape) and *A. dispermoides* (endemic to the Western Cape, South Africa). The names *A. disperma* and *A. hoffmannseggiana* are lectotypified here. An identification key to the members of the *Acanthopsis disperma-hoffmannseggiana* complex is provided, as well as an interim key to the major artificial groupings in the genus, the taxonomy of some which still needs to be resolved.

**Key words:** *Acanthodium*, *Acanthus*, *Blepharis*, Gariep Centre of Endemism, Klein Karoo Centre of Endemism, Namibia, South Africa

### Introduction

*Acanthopsis* Harvey (1842: 28) is a distinct and easily recognizable genus confined to arid parts of southern Africa. With the exception of *Blepharis* Jussieu (1789: 103), it is unlikely to be confused with any other genus of Acanthaceae native to the subcontinent. A member of the tribe Acantheae, *Acanthopsis* is a monophyletic group belonging to the so-called “one-lipped corolla lineage”, the latter which comprises six clades of Old World taxa (McDade *et al.* 2005). The phylogenetic relationship among *Acanthopsis*, *Acanthus* (Linnaeus 1753: 639) and *Blepharis* is not yet fully resolved, but available molecular evidence suggests that *Acanthopsis* and *Acanthus* are sister taxa (McDade *et al.* 2005).

Morphologically, *Acanthopsis* can be distinguished from other members of the Acanthaceae by a combination of four characters, namely a one-lipped corolla, spinous bracts terminating in 3–5 simple or compound spines (lobes), outer stamen filaments without an appendage at the tip, and a simple, unbranched filiform style with a single-lobed stigma. In contrast, all southern African representatives of *Blepharis* have outer stamen filaments with an appendage at the tip, and a bilobed stigma (Vollesen 2000).

Although superficially rather similar-looking, members of *Acanthopsis* display intricate patterns of variation and the infrageneric classification of the group is far from clear. Depending on the authority, eight (Welman 2003) or seven (Balkwill 2012) species have been recognized in recent years, all of which are confined to Namibia and South Africa. However, in the absence of a reliable key and well-defined diagnostic characters, identification of species has been an almost impossible task. The last complete genus account and only available identification key to members of *Acanthopsis* have been the one by Clarke (1901), now largely outdated. The present contribution emanates from an on-going taxonomic revision of the group by one of us (HMS) initiated in 2011.

Harvey (1842) established the genus *Acanthopsis* with, as the type species the nomen nudum *Acanthodium dispermum* E.Meyer in Drège (1837: 2), the latter name based on an annotated specimen in the herbarium of Jean François (Johann Franz) Drège [1794–1881]. Although Harvey (1842) referred to E. Meyer’s name, he did not