



Article

Re-establishment of *Drosera spiralis* (Droseraceae), and a new circumscription of *D. graminifolia*

PAULO MINATEL GONELLA¹, FERNANDO RIVADAVIA² & PAULO TAKEO SANO³

¹ Programa de Pós-Graduação em Botânica, Laboratório de Sistemática Vegetal, Departamento de Botânica, Instituto de Biociências, Universidade de São Paulo, CEP 05508–900, São Paulo, Brasil; e-mail: paulogonella@uol.com.br

² 1 Daniel Burnham Ct., San Francisco, 94109, USA; e-mail: fe_riva@uol.com.br

³ Laboratório de Sistemática Vegetal, Departamento de Botânica, Instituto de Biociências, Universidade de São Paulo, CEP 05508–900, São Paulo, Brasil; e-mail: ptsano@usp.br

Abstract

Drosera graminifolia and *D. spiralis* have long been considered conspecific, but new morphological and ecological data support the recognition of these taxa as distinct species. Both species are here described and illustrated, including observations on ecology, habitat, and conservation status, together with a distribution map, line drawings, photographs, and a table containing the distinctive characters.

Resumo

Drosera graminifolia e *D. spiralis* foram por muito tempo consideradas co-específicas, mas novos dados morfológicos e ecológicos mostraram que as espécies são bastante distintas. Ambas as espécies são aqui descritas e ilustradas, incluindo observações sobre ecologia, habitat e status de conservação, junto com um mapa de distribuição, ilustrações, fotografias e uma tabela com as características distintas.

Key words: Cadeia do Espinhaço, carnivorous plants, ecology, IUCN Red List, Minas Gerais, morphology, sister species

Introduction

The genus *Drosera* Linnaeus (1753: 281) was first thoroughly studied in Brazil by the French naturalist Auguste de Saint-Hilaire (1824, 1826), who traveled the country in the early 19th century, and later published several new *Drosera* taxa, including two that were characterized by their long, grass-like leaves: *D. graminifolia* Saint-Hilaire (1826: 269), based on material collected at the Serra do Caraça, and *D. spiralis* Saint-Hilaire (1826: 270), based on material collected at the Serra de Curumatahy (currently Curimataí), northwest of the town of Diamantina, both in Minas Gerais state, southeastern Brazil.

Eichler (1872), in Martius' *Flora Brasiliensis*, added a new taxon to this complex: *D. graminifolia* var. *major* Eichler (1872: 396), based on material collected by the German plant collector Friedrich Sellow at the Serra do Caraça. Also, based on the manuscripts and material studied by Martius, Eichler included *D. brasiliensis* Martius ex Eichler (1872: 396) under synonymy of *D. graminifolia*.

Diels (1906), in his generic revision, included *D. spiralis*, *D. brasiliensis* and *D. graminifolia* var. *major* as synonyms under *D. graminifolia*, and his taxonomic opinion has been strictly followed in all subsequent floristic and taxonomic treatments (including Silva 1994, Silva & Giulietti 1998, Correa & Silva 2005, Silva 2012).