



Stylidium javanicum (Stylidiaceae), a new triggerplant record for the Philippines

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Abstract

Stylidium javanicum, a very poorly known species formerly only recorded from Java, Sumba, and New Guinea, is here reported as a new record for the Philippines, where it was found in grasslands in Antique Province of Panay Island. It is morphologically similar to *S. alsinoides*, the only other *Stylidium* species known for the country, but can be distinguished from it by larger flowers, smaller fruits, and more narrowly acute petal apices.

Key words: Antique Province, flora, Panay, subg. *Andersonia*, sect. *Alsinoida*, taxonomy

Introduction

Stylidiaceae are a small, predominantly Australasian and Southeast Asian plant family in the Asterales. In its broadest delimitation, the family includes *Donatia* Forster & Forster (1776: 9), but this genus is often segregated and recognized as the sole member of Donatiaceae (Gustafsson & Bremer 1995). Stylidiaceae *sensu stricto* are in some taxonomic treatments subdivided into five genera: *Forstera* Linnaeus ex Forster (1780: 184), *Levenhookia* Brown (1810: 572), *Oreostylidium* Berggren (1878: 1), *Phyllachne* Forster & Forster (1776: 115), and *Stylidium* Swartz in Willdenow (1805: 146). However, because *Oreostylidium* is nested within an otherwise monophyletic *Stylidium* and *Phyllachne* is similarly placed within *Forstera*, a classification into three genera has likewise been proposed (Wagstaff & Wege 2002).

The majority of the 220–300 species of Stylidiaceae are placed in *Stylidium* (Wagstaff & Wege 2002). This genus is characterized by a unique pollination system. The flowers bear stamens that are adnate to the style, forming a very sensitive ‘column’ that moves swiftly to strike a potential pollinator when triggered (Bean 2000). The majority of *Stylidium* species occur in sand heaths (Carlquist 1969), and often have glandular hairs that are commonly associated with various inflorescence and flower parts and have a role in trapping small insects (Darnowski 2006).

Most *Stylidium* species are endemic to Australia, but nine are found in other countries (Bean 2000). One species, *S. alsinoides* Brown (1810: 572), has thus far been reported for the Philippines (Merrill 1912a,b, 1923, Van Slooten 1954). However, in 2011, as part of the Co’s Digital Flora of the Philippines project (Pelser *et al.* 2011 onwards), Pelsler and Barcelona photographed a *Stylidium* specimen in Antique Province on the island of Panay (Fig. 1) that looked morphologically different from *S. alsinoides*. They collected specimens of this species (*Barcelona 3920 with Pelsler* (CANU, PNH)) at the same locality in 2014. This prompted an investigation into the taxonomic identity of this plant on which we report here.

Taxonomic comparison

In his taxonomic revision of *Stylidium* subg. *Andersonia* (Brown ex Don 1834: 721) Mildbraed (1908: 34), Bean (2000) recognized three subgenera of *Stylidium* present in northeastern Australia and Southeast Asia. Our specimens from Panay (*Barcelona 3920*) represent *S.* subg. *Andersonia*, which is composed of mostly annual species and is characterized by sessile or nearly sessile and linear hypanthia and capsules that are 8–20 times longer than wide. The corolla has a labellum without basal appendages and a calyx composed of sepals that exhibit some degree of connation

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