



## A new species of *Torenia* (Linderniaceae) from Gabon, remarks on *Torenia mannii* Skan, and a key to the African and Madagascan *Torenia* species

EBERHARD FISCHER<sup>1</sup> & OLIVIER LACHENAUD<sup>2</sup>

<sup>1</sup> Institut für Integrierte Naturwissenschaften – Biologie, Universität Koblenz-Landau, Universitätsstraße 1, 56070 Koblenz, Germany; e-mail: [efischer@uni-koblenz.de](mailto:efischer@uni-koblenz.de)

<sup>2</sup> Service d'Evolution Biologique et Ecologie – CP 160/12, Université Libre de Bruxelles, 50 Avenue F.Roosevelt, 1050 Bruxelles, Belgium; e-mail: [olachena@ulb.ac.be](mailto:olachena@ulb.ac.be)

<sup>3</sup> Jardin Botanique National de Belgique, Domaine du Bouchout, 1860 Meise, Belgium.

### Abstract

The new species *Torenia daubyi* from Gabon is described and illustrated. It is closely related to *T. mannii* from which it differs in the smaller and relatively broader leaves, the broader calyx wings, and the shorter corolla. From *T. silvicola* it differs in the acute calyx lobes, broader calyx wings, and the filaments of the abaxial stamens bearing a clavate appendage. A key to the African and Madagascan species of *Torenia* is provided and the rediscovery of *Torenia mannii*, hitherto only known from the type, is reported.

**Key words:** *Torenia*, Linderniaceae, Scrophulariaceae, Gabon, endemism

### Introduction

The genus *Torenia* Linnaeus (1753: 619) has traditionally been placed in Scrophulariaceae tribe Lindernieae. Following molecular studies (Rahmanzadeh *et al.* 2005) this group is now recognised as a distinct family, Linderniaceae Borsch, Kai Müller & Eb.Fischer. Albach *et al.* (2005), Oxelman *et al.* (2005) and Schäferhoff *et al.* (2010) confirm that the Linderniaceae represent a separate clade.

*Torenia* has a palaeotropical, but predominantly Asian distribution (Yamazaki 1954a, 1954b, 1955, 1985, 1990). The type species is *Torenia asiatica* Linnaeus (1753: 619) from India, Nepal and China.

The delimitation of *Torenia* and the African genus *Craterostigma* Hochstetter (1841: 668) has long been controversial. Bentham (1846: 411) treated *Craterostigma* as a section of *Torenia*. Subsequent authors, e.g. Wettstein (1891), Engler (1897), Fischer (1986) and Hepper (1987a, 1987b, 2008) treated them as separate, but with varying circumscriptions.

*Craterostigma* s. str. includes rosulate plants with truncate inflorescences and bothrospermous seeds (Fischer 1986, Hepper 1987a). Several African species not fitting these characters, e.g. *Craterostigma schweinfurthii* (Oliver 1878: t. 1251. Engler (1897b: 501) had been included in *Craterostigma* since Engler (1897) and following their exclusion from this genus were transferred to *Torenia* (Hepper 1987b). This position was followed by Philcox (1987; 1990) when describing new species from this group, and later by Hepper (2008). However, *Torenia* in this delimitation was a heterogeneous and highly unnatural generic concept as already Schlechter (1924) noted.

Fischer (1989: 443) solved this problem by creating the new genus *Crepidorhopalon* Eb.Fisch., uniting all former African species of *Craterostigma* with aulacospermous seeds, non-rosulate habit and anatomically highly complex clavate hairs on the lower corolla-lip comprising a distinct multicellular socle. Some species formerly placed in *Lindernia* Allioni (1766: 178), *Torenia* and even *Stemodiopsis* Engler (1897a: 25) also