



# *Pelargonium conradiae* (Geraniaceae), a new species in section *Ligularia* from Worcester, Western Cape, South Africa



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## ABSTRACT

*Pelargonium conradiae* is a new species of section *Ligularia* from southeast of Worcester, allied to *Pelargonium hirtum* but characterised by its larger, unmarked white or pale pink flower with petals 15–20 mm long, and stipules adnate to the petioles for more than half their length. It is one of several locally endemic species from the northeastern foothills of the Riviersonderend Mountains that have been discovered in recent years. The new species is fully illustrated and we provide a revised key to the species of the *P. hirtum* group of sect. *Ligularia*.

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## 1. Introduction

The genus *Pelargonium* L'Hér. ex Aiton (Geraniaceae) includes some 280 species distributed among four subgenera and 16 sections (Bakker et al. 2004; Röschénbleck et al. 2014). *Pelargonium* sect. *Ligularia* Harv. sensu stricto currently comprises ten, mostly subshrubby species with pinnatisect leaves and often spinescent stipules, shortly pedicellate flowers with five petals and usually seven fertile stamens (rarely four or five), and a basic chromosome number  $x = 11$  (Albers et al. 2000). The section was fully reviewed by Albers et al. (2000).

Within sect. *Ligularia* the three species *Pelargonium crassipes* Harv., *Pelargonium oreophilum* Schltr. and *Pelargonium hirtum* (Burm.f.) Jacq. comprise a well-defined group characterised by bi- or tripinnatisect leaves and short hypanthia less than 15 mm long. All are restricted to the West Coast and adjacent interior of Western Cape Province. Several collections of a member of this group from the southeast of Worcester constitute a fourth species characterised by its large, unmarked white or rarely pale pink flowers. We describe it here under the name *Pelargonium conradiae*. It is the latest of several endemic species to be described from the northeastern foothills of the Riviersonderend Mountains as a result of intensive collecting in the area by local ecologist Anso le Roux

(eg. Manning and Goldblatt 2001; Goldblatt and Manning 2010; Snijman and Manning 2013; Goldblatt et al. 2015). *P. conradiae* is evidently a highly local endemic, and we provided notes on its conservation status, as well as an updated key to the members of the *P. hirtum* group.

## 2. Materials and methods

We examined all relevant herbarium material at BOL, NBG and SAM (acronyms after Holmgren et al. 1990), the primary collections of species from southwestern South Africa, and studied the new species in the field.

## 3. Taxonomy

3.1. Key to species of the *Pelargonium hirtum* species group: subshrubs with bi- or tripinnatisect leaves, seven fertile stamens, and short hypanthia less than 15 mm long (adapted from Albers et al., 2000)

- 1a. Flowers white or rarely tinged pale pink, unmarked; petals 15–20 mm long; pedicels  $\pm 1$  mm long; plants from the Worcester area ..... *P. conradiae*
- 1b. Flowers pink to mauve, posterior two petals with darker markings; petals 10–15 mm long; pedicels 1–8 mm long; plants from West Coast and adjacent mountains:

  - 2a. Leaf bases herbaceous and not persistent; stipules adnate to petioles for halfway or more, remaining papery; plants from coastal

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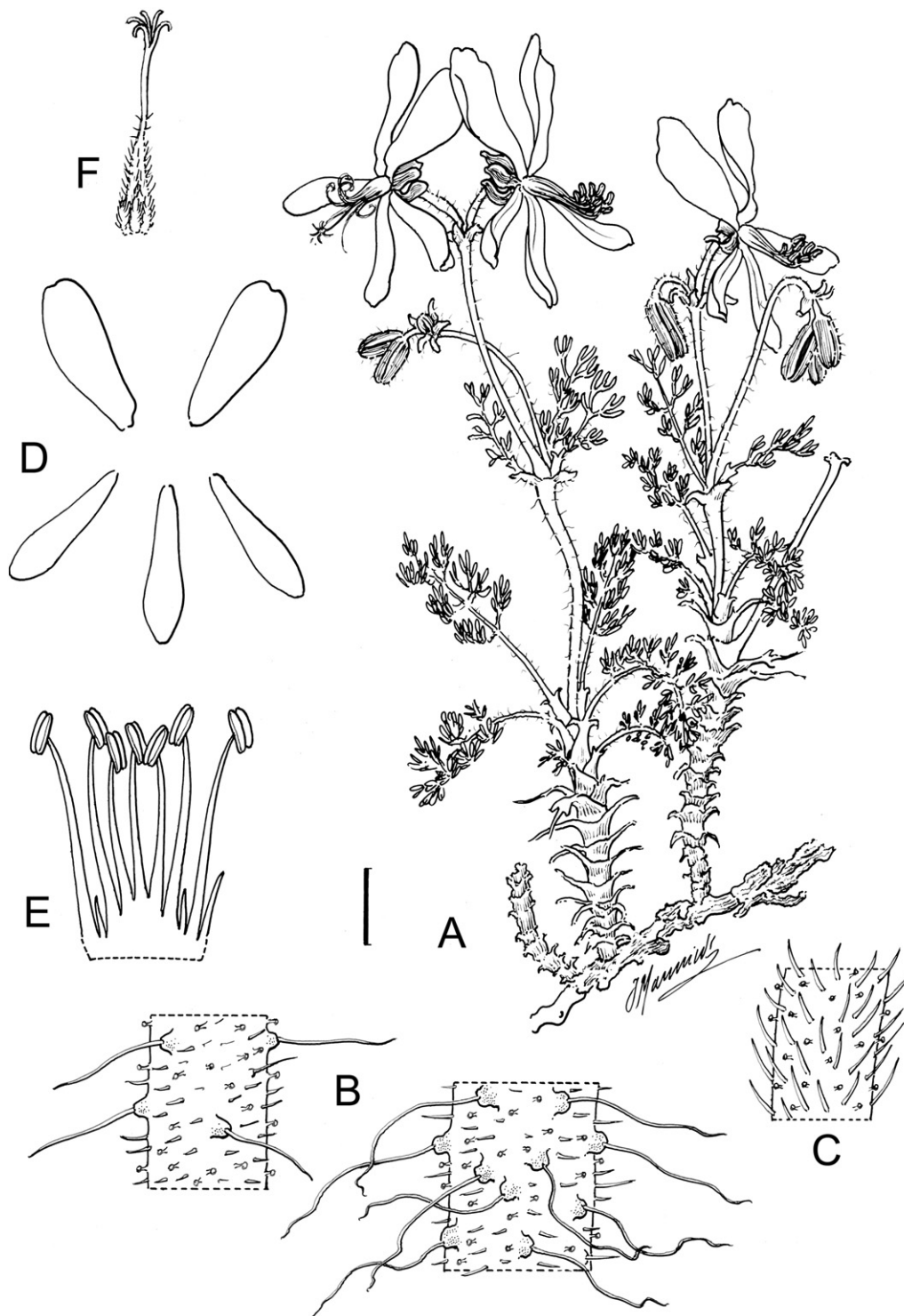
E-mail address: [J.Manning@sanbi.org.za](mailto:J.Manning@sanbi.org.za) (J.C. Manning).

- granites from Velddrif to Faure and extending inland to Citrusdal and De Wet ..... *P. hirtum*
- 2b. Leaf bases cartilaginous or woody and  $\pm$  persistent; stipules adnate to petioles for up to halfway, becoming indurated and hook-like; plants from Olifants River Mouth and Bokkeveld Mtns to Cederberg:
- 3a. Leaf bases very conspicuous, woody and persistent, sharply deflexed; posterior petals wider than anterior petals ..... *P. crassipes*

- 3b. Leaf bases cartilaginous and semi-persistent, spreading or weakly re-curved; posterior petals  $\pm$  as wide as anterior petals ... *P. oreophilum*

### 3.2. New species

***Pelargonium conradiae*** J.C. Manning & A.le Roux, *sp. nov.* Type: South Africa. Western Cape Province, Worcester (3319): Farm Droog



**Fig. 1.** *Pelargonium conradiae* (Le Roux 1150, NBG). A, Flowering stems; B, detail of peduncular indumentum; C, detail of foliar indumentum; D, detached petals; E, androecium spread out; F, gynoecium. Scale bar: A, D, 10 mm; B, C, 1 mm; E, F, 5 mm. Artist: J. Manning.

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