



Pseudognaphalium munoziae (Gnaphalieae, Asteraceae): A new South American species from Chile

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Abstract

Pseudognaphalium is a large genus with about 90 species distributed worldwide, but with most species in America, and some in Asia, and Africa. A new species, *P. munoziae*, from the north of Chile (Parinacota and Iquique provinces), is described and illustrated. *Pseudognaphalium munoziae* is similar to *P. glandulosum* but it is principally distinguished by its rosulate basal leaves which are longer than the upper, all of which are apically acute to subobtusate. A key to the species of dwarf *Pseudognaphalium* occurring in Chile is provided along with a map of their distribution.

Key words: Compositae, Arica-Parinacota, Tarapacá, taxonomy

Introduction

The cosmopolitan genus *Pseudognaphalium* Kirpicznikov (1950: 33) is one of the largest genera of the tribe Gnaphalieae (Asteraceae) and is represented by about 90 species, ranging in habit from dwarf prostrate to large erect herbs. The vast majority of species are distributed in South, Central and North America, but some species also occur in Asia and Africa (Anderberg 1991, Bayer *et al.* 2007). South American species of *Pseudognaphalium* have been typically treated as *Gnaphalium* Linnaeus (1753: 850), e.g. Cabrera (1963, 1971, 1974, 1978), Aristeguieta (1964), Dillon & Sagástegui-Alva (1991a, b), Freire (1995, 1998), Freire & Iharlegui (2008), Badillo *et al.* (2008), Cerana & Ariza Espinar (2008), Bayón (2009). However, studies of detailed morphological characters (Hilliard & Burt 1981) and results based on cladistic analyses (Anderberg 1991) have been interpreted as providing support for recognizing *Pseudognaphalium* as a distinct genus, e.g. Hilliard (1983), for South African species, Nesom (2001, 2004, 2006) and Ballard *et al.* (2004), for North American species, Deble & Marchiori (2006), Hind (2011), Freire *et al.* (2011), and Monti *et al.* (2013), for South American species, and Chen & Bayer (2011), for Asian species.

Pseudognaphalium can be recognized as having monochromous phyllaries with divided stereomes, monomorphic pappus bristles, clusters of capitula arranged in corymbs or panicles, and the achenes either glabrous or with oblong myxogenic duplex setulae. In contrast, *Gnaphalium* has polychromous phyllaries with entire stereomes, dimorphic pappus bristles, few capitula in sometimes leafy clusters, and pilose achenes with oblong non-myxogenic duplex hairs (Drury 1970, under 'achyroclinoid' cudweeds, Hilliard & Burt 1981, Anderberg 1991). Furthermore, these and recent molecular studies (Ward *et al.* 2009, Smitsen *et al.* 2011, Nie *et al.* 2013) noted that *Pseudognaphalium* is more closely related to *Helichrysum* and *Anaphalis* than to *Gnaphalium*. Morphologically, *Pseudognaphalium*, including *Laphangium* (Hilliard & B.L. Burt