NOTE

Pseudoconyza Cuatrec. (Asteraceae), a Newly Recorded Genus for the Flora of Taiwan

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ABSTRACT: *Pseudoconyza viscosa* (Mill.) D'Arcy (Asteraceae) was recently found in lowlands of southern Taiwan. This represents a new record not only for this species but also for the genus on this island. In this study *Pseudoconyza viscosa* is described. A distribution map, line drawings and photographs of this species are also provided.

KEY WORDS: *Pseudoconyza viscosa*, Asteraceae, Taiwan.

INTRODUCTION

Boufford et al. (2003) published a checklist of the vascular plants of Taiwan. Since then, a few genera and many species were reported for the flora of this island (e.g., Chen, 2007; Chen et al., 2007; Chung et al., 2006; Hsu et al., 2004, 2005; Hsu et al., 2006; Huang, 2005; Jung and Kuoh, 2007; Jung et al., 2005; Tseng et al., 2008ab; Yang and Hsieh. 2006). Most of these newly recorded taxa were naturalized or invasive weeds (Chen, 2007; Hsu et al., 2004, 2005; Hsu et al., 2006; Tseng et al., 2008ab; Yang and Hsieh. 2006). Others were considered as neglected in the Flora of Taiwan (Chen et al., 2007; Huang, 2005).

The genus *Pseudoconyza* Cuatrec. (Inuleae, Asteraceae) is a monotypic genus widespread in Africa, Asia, North and Central America (Anderberg et al., 2005; Beenthe, 2002; Boulos, 2002; Chaudhary, 2000; Pornpongrungrueng et al., 2007; Qaiser, 1997; USDA, NRCS. 2004; Wood, 1997). It was not known in Taiwan until this study. The genus is characterized by the combination of a number of diagnostic floral characters such as purplish florets, filiform marginal florets, appressed teeth on pappus bristles and caudate anthers (Anderberg, 1991). Although *Pseudoconyza* has features similar to *Blumea*, *Laggera*, and *Pluchea*, it is more closely related to *Laggera* and *Pluchea* according to recent phylogenetic studies on Inuleae (Anderberg, 1991; Anderberg et al., 2005; Pornpongrungrueng et al., 2007). In our botanical survey, we found plants *Pseudoconyza viscosa* (Mill.) D'Arcy in lowlands of southern Taiwan. This species and its genus are here documented with detailed description of salient features, a line drawing (Fig. 1), color photographs (Fig. 2) and a distribution map (Fig. 3). A key to *Pseudoconyza viscosa* and several similar species in Taiwan was also presented.

TAXONOMIC TREATMENT

Pseudoconyza viscosa (Mill.) D'Arcy, Phytologia 25(5): 281. 1973; Anderberg. Pl. Syst. Evol. 176: 145-177. 1991; Chaudhary. Fl. Kingd. Saudi Arabia II (3): 135-136. 2000; Beenthe. Fl. Trop. E. Africa, Compositae: 315. 2002; Boulos. Fl. Egypt 3: 189-190. 2002. —*Conyza viscosa* Mill., Gard. Dict., ed. 8. n. 8. 1768. 毛假蓬舅 Figs. 1 & 2

Conyza aurita L. f., Suppl. Pl. 367. 1782. —*Blumea aurita* (L. f.) DC. In: Wight. Contrib. Bot. Ind. 16. 1834); Wood. A Handbook of the Yemen Flora: 290-291. 1997. —*Laggera aurita* (L. f.) Sch. Bip. Tent. Fl. Abyss.: 393. 1848; Chaudhary. Fl. Kingd. Saudi Arabia 2 (3): 135-136. 2000; Beenthe. Fl. Trop. E. Africa: 315. 2002.

Herb to 1 m tall, erect, sometimes branched at base, usually branched on upper part of stem, culms cylindrical, villous and glandular; leaves alternate, sessile, blade oblance-ovate to obovate, apex round to acute, margin serrate to doubly serrate, base cuneate to attenuate, 1-8 cm long, parted or not, both surfaces villous. Inflorescence a lax corymb or cymbose panicle, terminal and axillary, branches leafy, capitulum 8-9 mm tall, 4-6 mm wide, receptacle concave, glabrous; involucres 4-seriate, apex acuminate; margin entire or pilose, outer involucral bracts lanceolate, 2.5-5 mm long, abaxial surface villous and glandular, adaxial surface glabrous to sparsely villous, innermost involucral bracts linear, central part glabrous to sparsely villous, margin membranous, 1-veined, ca. 8 mm long; pappus whitish, ca. 4.5-5 mm long, with appressed teeth; marginal disc florets numerous, pistillate and fertile,

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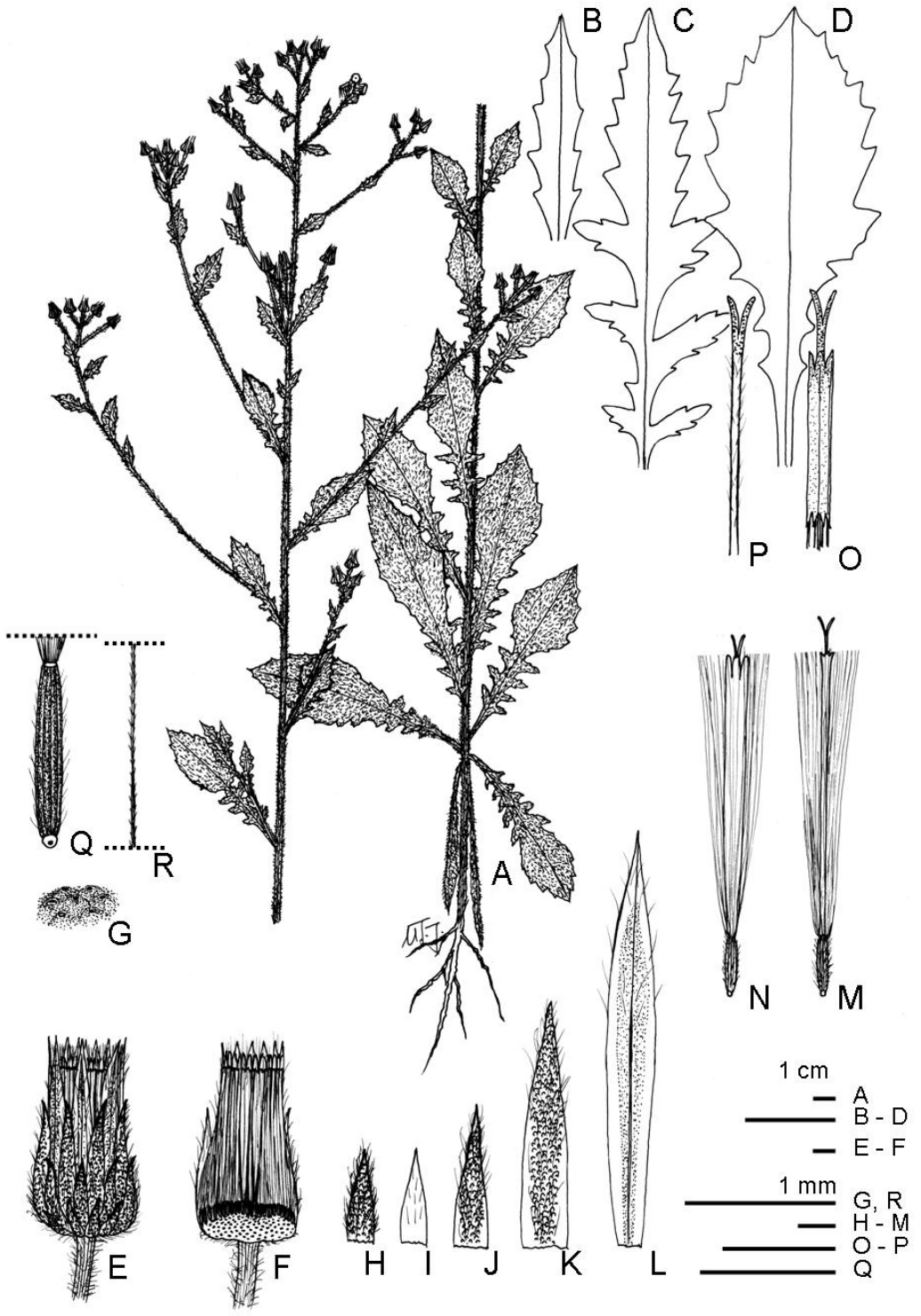


Fig. 1. ***Pseudoconyza viscosa*****. A: Habit. B-D: Leaf outlines. E: Capitulum. F: Capitulum, part of involucres and florets removed. G: Part of receptacle, glabrous. H-L: Involucral bracts, I: adaxial view of outermost bract, L: innermost bract. M: Marginal disc floret. N: Central disc floret. O: Anthers and stigma. P: Style and stigma. Q: Achene, distal part of pappus hairs excluded. R: Part of pappus, showing appressed teeth.**

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Fig. 2. *Pseudoconyza viscosa*. A: Habit. B: Capitula. C: Mature achenes and glabrous receptacle.

corolla filiform, whitish to pale-purplish, 3.5-4.5 mm long, stigma exposed, 0.5-1 mm long; central disc florets fewer than 10 per capitulum, bisexual and fertile, corolla tabular, whitish to pale-purplish, ca. 4.5 mm long, 5-lobed, lobes ca. 0.5 mm long, anthers obtuse at apex, shortly tailed at base, style sparsely pilose, stigma bifid, extracted; achene cylindrical, 10-ribbed, sparsely pilose, carpopodium a broad circle, conspicuous.

Specimens examined: Taiwan. Kaohsiung Co., Gangshan Town, Gangshan, 30 Apr 2008, *M.-J. Jung 2805* (TAIF); Chautou Town, Chautou, 30 Apr 2008, *M.-J. Jung 2810* (TAIF); abandoned farm near the National Kaohsiung University campus, 30 Apr 2008, *M.-J. Jung 2811* (TAIF); Pingtung Co., Hengchun Town, Hengchun, 7 Apr 2004, *G.-P. Hsieh 1964* (PPI), Sherpai Park, 7 Apr 2005, *K.-P. Lo 746* (PPI); Linpien Town, Linpien, 26 Dec 2004, *K.-P. Lo 595* (PPI); Shuili, 28 Jan 2000, *S.-M. Ku 414* (TAIF), Tientzu, 20 Mar 2005, *K.-P. Lo 728* (PPI); Tungkang Town, Tungkang, 30 Dec 1999, *Y.-P. Cheng 2877* (TAIF). India. Bengal, Buddh Gaya, 17 Jan 1912, *T. Kawakami s.n.* (TAIF).

Vernacular name of *Pseudoconyza viscosa* (Mill.) D'Arcy is clammy false ox tongue. *P. viscosa* is widely distributed in the tropics and the subtropics (Anderberg et al., 2005; Beenthe, 2002; Boulos, 2002; Pornpongrungrueng et al., 2007; Qaiser, 1997; USDA, NRCS, 2004). In Taiwan, it occurs at roadsides or waste places at low elevations in the south (Fig. 3).

Habit outline of *Pseudoconyza viscosa* resembles the closely related genera such as *Blumea*, *Laggera* and *Pluchea* (Anderberg, 1991; Anderberg et al., 2005). In Taiwan it is also similar to *Conyza spp*. Florets of *Pseudoconyza viscosa* are pale-purplish, occasionally whitish (Fig. 3). In Taiwan, plants resembling *Pseudoconyza viscosa* include *Blumea mollis*, *Conyza leucantha*, *Laggera alata* and *Pluchea spp.* All of them share floral features such as purplish corolla, filiform pistillate marginal florets and tubular bisexual central florets. A key to these species in Taiwan are provided below to aid in identification.

Key to *Pseudoconyza viscosa* and several similar Asteraceae species in Taiwan

1. Stem cylindrical, not winged ……..... 2
1. Stem winged …… 7
2. Plants decumbent to ascending; branches glabrous to sparingly puberulent; leaf lateral veins inconspicuous …...… *Pluchea pteropoda*
2. Plant erect; branches densely pubescent; leaf lateral veins prominent ... ……..... 3
3. Basal cauline leaves parted ……...…… *Pseudoconyza viscosa*
3. All leaves simple ……..... 4
4. Leaf margin entire ……...…… 5
4. Leaf margin serrate or double serrate ……..…… 6
5. Leaf oblong-ovate to elliptic, apex mucronulate-obtuse; inflorescence an elongate or flat-topped panicle …… *Pluchea carolinensis*
5. Leaf elliptic-lanceolate, apex acute to acuminate; inflorescence an open corymb or a cymbose panicle, capitula upward …… ……... *Conyza leucantha*
6. Leaf apex obtuse to apiculate, inflorescence a compact, spiciform panicle, capitula usually downward …… *Blumea mollis*
6. Leaf apex acute to mucronate, inflorescence a elongate or flat topped panicle, capitula upward …… *Pluchea indica*
7. Leaf blade linear, involucral bracts reflexed ……...… *Laggera alata*
7. Leaf blade oblance-ovate, involucral bract not reflexed ……..… ……... *Pluchea sagittalis*

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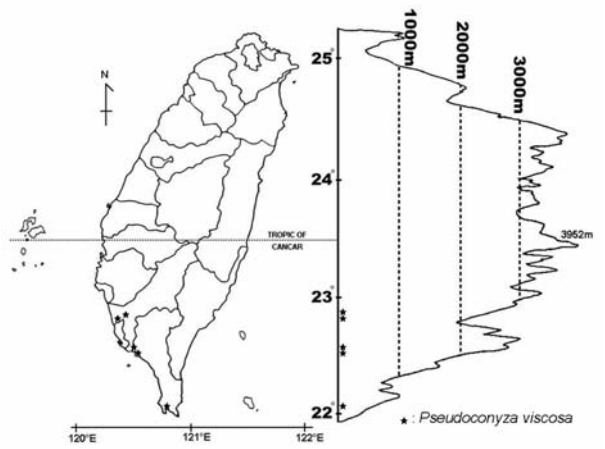


Fig. 3. Map of Taiwan showing the horizontal and altitudinal distribution of *Pseudoconyza viscosa* (★).

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臺灣新記錄屬－假蓬鼻屬 (*Pseudoconyza* Cuatrec.)

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摘要：本文報導臺灣南部低海拔地區新記錄菊科植物－毛假蓬鼻 (*Pseudoconyza viscosa* (Mill.) D'Arcy)。假蓬鼻屬 (*Pseudoconyza* Cuatrec.) 為臺灣新記錄屬，本文描述此一新記錄植物，並提供線繪圖、照片及分布圖。

關鍵詞：毛假蓬鼻、菊科、臺灣。

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