

Persicaria capitata (Buchanan-Hamilton ex D. Don) H. Gross (Polygonaceae), A Newly Naturalized Plant in Taiwan

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(Manuscript received 27 May, 2004; accepted 6 July, 2004)

ABSTRACT: *Persicaria capitata* (Buchanan-Hamilton ex D. Don) H. Gross, a species of the Polygonaceae widespread in mainland China and neighboring countries, has recently naturalized at ca. 2,000 m altitude in central Taiwan. Morphologically, *P. capitata* resembles *P. chinensis*, both belonging to section *Cephalophilon*, but can be easily distinguished from *P. chinensis* by accrescent and fleshy perianth in fruit. This paper provides a description of the species, line drawings, and color photographs to aid in identification.

KEY WORDS: Naturalized plant, *Persicaria capitata*, Polygonaceae, Taiwan, Taxonomy.

INTRODUCTION

The genus *Polygonum sensu lato*, comprising about 300 species, is one of the largest genera of the Polygonaceae. It is widespread in cold or warm regions of the world, especially abundant in Northern Hemisphere (Kuo *et al.*, 1996). Thirty-seven taxa were recorded in the revised Flora of Taiwan (Kuo *et al.*, 1996). Based on molecular evidence Frye and Kron (2003) separated *Persicaria*, which comprises ca. 150 species (Brandbyge, 1993), from *Polygonum sensu lato*. According to the taxonomic treatment, there are 32 species of *Persicaria* in Taiwan. In the course of our botanical inventory, one additional weedy species, *Persicaria capitata* (Buchanan-Hamilton ex D. Don) H. Gross, is found naturalized in central Taiwan. This study provides notes on its distribution, line drawing, and photographs to aid in identification.

TAXONOMIC TREATMENT

Persicaria capitata (Buchanan-Hamilton ex D. Don) H. Gross, Bot. Jahrb. 49: 277. 1913.

Figs. 1 & 2

Polygonum capitatum Buchanan-Hamilton ex D. Don, Prodr. Fl. Nep. 73. 1825; Forbes & Hemsley, J. Linn. Soc. Bot. 26: 335. 1891; Osada, Col. Ill. Nat. Pl. Japan 349. pl. 56. 1976; Li, Fl. Reip. Pop. Sin. 25(1): 57. 1998.

Perennial herbs. Stem ascending or creeping, tufted, ligneous at base, red, sparsely glandular hairy, rooting from nodes. Leaves alternate, petiole 2-4 mm long, sometimes auriculate at base; leaf blade with a blackish spot adaxially, ovate or elliptic, 2-5.5 cm long, 1.2-2 cm wide, both surfaces hairy, base obtuse, margin entire and ciliate, apex acute; ocrea

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Fig. 1. *Persicaria capitata* (Buchanan-Hamilton ex D. Don) H. Gross. A: Habit. B: Leaf from shoot. B': Leaf, note venation. C: Ocrea. D: Inflorescence. E: Bract. F: Achene. F': Achene, transverse section.

tubular, 7-10 mm, membranous, sparsely glandular hairy, apex truncate. Inflorescence terminal, capitate, solitary or geminate; peduncle, 1-4 cm, glandular hairy; bracts lanceolate-ovate, 3-3.5 mm long, 1-1.5 mm wide, membranous, glabrous. Pedicel very short. Perianth pinkish, 5-lobed, glabrous; perianth segments elliptic. Stamens 8, in two wheels, outer 5, inner 3, 1.5-2.2 mm, included. Styles 3, connate to below middle, equaling perianth; stigmas capitate. Achenes included in persistent perianth, black-brown, slightly shiny, narrowly ovoid, trigonous, 1.5-2 mm.

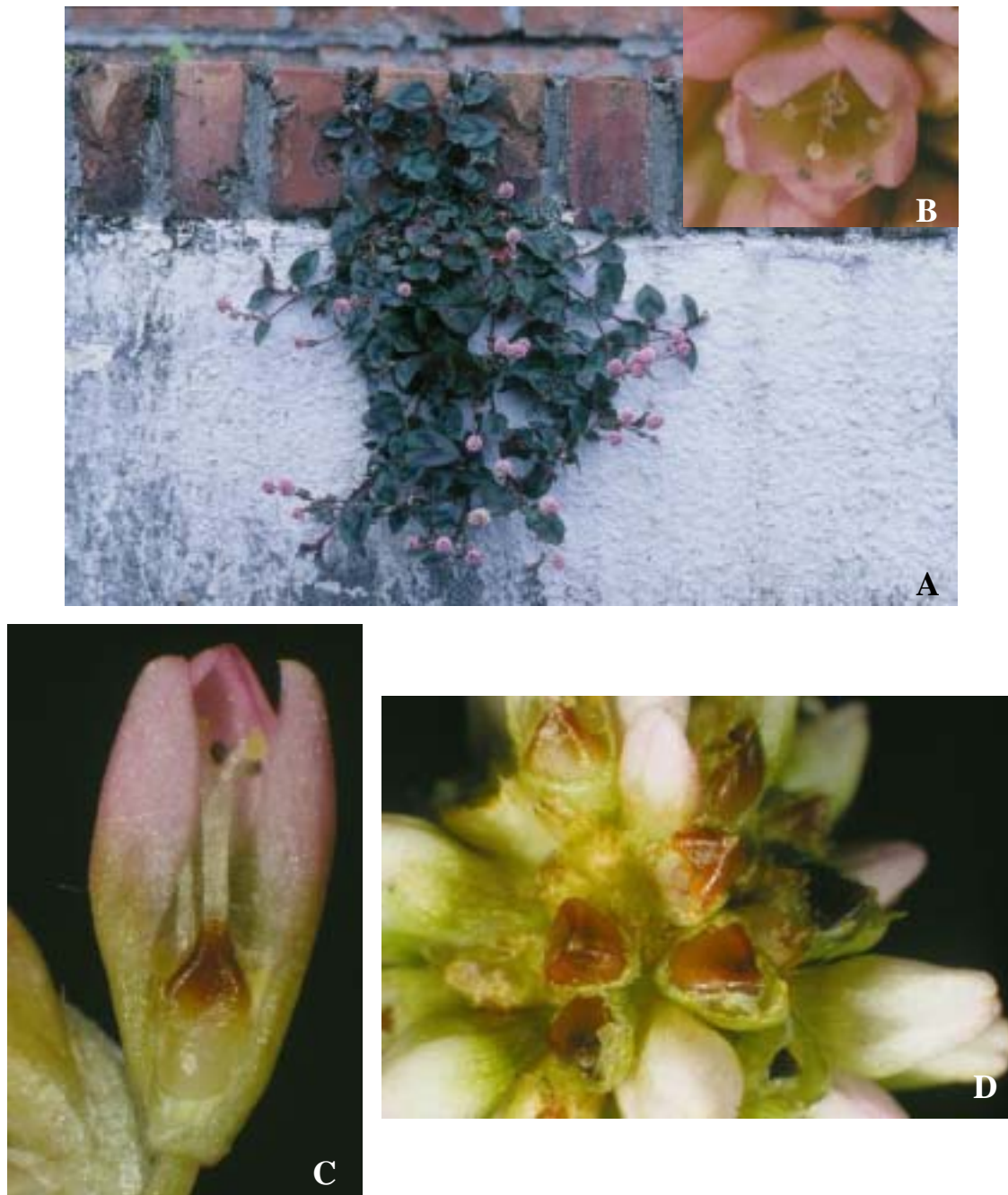


Fig. 2. *Persicaria capitata* (Buchanan-Hamilton *ex* D. Don) H. Gross. A: Habitat. B: Flower. C: Flower, longitudinal section. D: Fruits.

Distribution: China (Guangdong, Guangxi, Guizhou, Hubei, Hunan, Jiangxi, Sichuan, Xizang, Yunnan) (Li *et al.*, 2003), Bhutan, N India, Malaysia, Myanmar, Nepal, Sikkim, Sri Lanka, Thailand, Vietnam.

Specimen examined: TAIWAN. Nantou Co., Jenai Hsiang: Meifeng, 2,010 m alt., crop field on mountain slopes, 22 Nov. 1997, *Y. C. Kao 266* (HAST), 6 Oct. 2003, *S. M. Ku 1845* (HAST).

Persicaria capitata is closely related to *P. chinensis*, both belonging to section *Cephalophilon*, but can be easily distinguished from *P. chinensis* by fleshy and accrescent perianth in fruit. *Persicaria capitata* is a weed native to mainland China, while naturalized in

Japan (Osada, 1976; Shimizu, 2003). It was recently found in the Central Mountain Range in Taiwan.

This species has been used as a medicine. It has also been cultivated as an ornamental plant in other parts of the world (Li *et al.*, 2003).

ACKNOWLEDGMENTS

This work was supported by research grants from the Council of Agriculture, Taiwan.

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台灣新歸化蓼科植物 頭花蓼

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(收稿日期：2004 年 5 月 27 日；接受日期：2004 年 7 月 6 日)

摘 要

本文報導最近在台灣中部發現原產於中國大陸之新歸化種 頭花蓼 (*Persicaria capitata* (Buchanan-Hamilton *ex* D. Don) H. Gross)。本植物與同屬於頭狀蓼組 (section *Cephalophilon*) 的火炭母草 (*Persicaria chinensis* (L.) H. Gross) 外形相似，但火炭母草的花被片花後長大成肉質並包住果實，而本種之花被片花後並不長大成肉質。本文對本植物進行形態觀察，並提供彩色照片及繪圖。

關鍵詞：歸化植物、頭花蓼、蓼科、台灣、分類。

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