

Eriocaulon taishanense F. Z. Li, a New Record for the Flora of Taiwan

Sung-Po Li⁽¹⁾, Huan-Yu Chen⁽²⁾, Chun-Chi Lin⁽³⁾, Wu-Tsang Cheng⁽²⁾ and Chang-Fu Hsieh^(2,4)

(Manuscript received 10 August, 2000; accepted 6 September, 2000)

ABSTRACT: *Eriocaulon taishanense* F. Z. Li (Eriocaulaceae) is a small herb distributed in Shandong, China. It is reported for the first time from Chiayi City, southwestern Taiwan. A taxonomic description, habitat information and SEM of seed are provided.

KEY WORDS: *Eriocaulon taishanense* F. Z. Li, Eriocaulaceae, Taiwan.

The genus *Eriocaulon* L. (Eriocaulaceae), consisting of about 400 species, occurs mainly in wet places of the tropics and subtropics, with a few species extending into temperate regions (Ma, 1997; Zhang, 1999). Six species and two varieties were previously reported in Taiwan (Chang, 1978). A recent collection made by the third author has resulted in the discovery of *Eriocaulon taishanense* F. Z. Li which has hitherto not been known to occur in Taiwan.

Eriocaulon taishanense F. Z. Li, Acta Phytotax. Sin. 26 (4): 318-319, f. 1. 1988; Ma, Acta Phytotax. Sin. 29 (4): 307. 1991; Ma, Fl. Reipubl. Popul. Sin. 13 (3): 51, f 14 12-22. 1997; Zhang, Monographic der Eriocaulon in Ostasien p. 192. 1999. 泰山穀精草 Figs. 1-3

A stemless annual herb; leaves radical, linear-lanceolate, ribbonlike, glabrous, 2-4.3 cm long, 1.5-3 mm wide, apex attenuate, 5-7-nerved. Peduncles numerous, glabrous, 7-14 cm long, 5-ribbed, twisted, with a tubular bladeless sheath surrounded at base; the sheath glabrous, 1.2-3 cm long, oblique at apex; heads ovoid, 3 mm long, 3 mm in diameter; involucre bracts obovate, 2 mm long, 1 mm wide, membranous, pale-brownish, glabrous, apex obtuse; receptacle pilose; floral bracts obovate, 2 mm long, 1 mm wide, membranous, pale-brownish, glabrous, apex deltoid. Staminate flowers: calyx spathe-like, 1.5 mm long, hyaline, glabrous, open on one side, apex deeply bilobate, the lobes longer than the half of calyx, acute at apex; corolla tubular, trilobate at apex, glabrous; anthers 5, black. Pistillate flowers: sepals 2(-3), free, filiform, 1 mm long, glabrous; petals none; ovary 3-locular, glabrous; stigma 3, longer than the style. Seeds ellipsoid, 0.3-0.4 mm long, yellow, with transverse reticulations on the surface, without appendages.

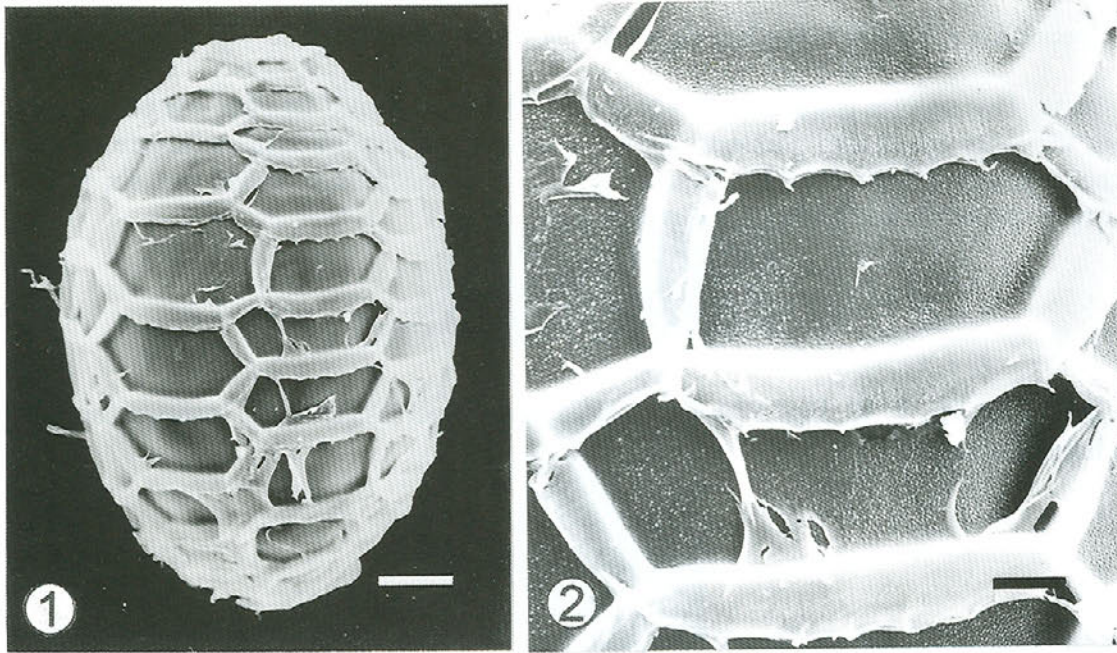
Distribution: China (Shandong: Taishan) and Taiwan.

1. Lung-Hai Elementary School, Taichung 434, Taiwan, Republic of China.

2. Department of Botany, National Taiwan University, Taipei 106, Taiwan, Republic of China.

3. 77 Mei-Fu village, Chuang-Wei Hsiang, Ilan 263, Taiwan, Republic of China.

4. Corresponding author.



Figs. 1 & 2. SEM micrograph of seed of *Eriocaulon taishanense* F. Z. Li (Lin s. n. Oct 24 1999). Fig. 1. 223x, scale bar = 44 μm ; Fig. 2. 750x, scale bar = 13 μm .



Fig. 3. Habit of *Eriocaulon taishanense* F. Z. Li in Taiwan (by Chun-Chi Lin).

Habitat and Ecology: The species was found in wet places of lowlands, growing only in autumn. Some associated herbs include *Drosera burmannii* Vahl, *Ludwigia hyssopifolia* (G. Don) Exell, *Ludwigia octovalvis* (Jacq.) Raven, *Ludwigia perennis* L., *Hedyotis brachypoda* (DC) Sivar. & Biju, *Centranthera cochinchinensis* (Lour.) Merr., *Lindernia antipoda* (L.) Alston, *Cyperus difformis* L., *Cyperus haspan* L., *Cyperus pilosus* Vahl, *Diplacrum caricinum* R. Br., *Fimbristylis miliacea* (L.) Vahl, *Fuirena ciliaris* (L.) Roxb., *Scleria rugosa* R. Br., *Eriocaulon truncatum* Buch.-Ham. ex Mart., *Leersia hexandra* Sw., etc.

Specimens examination: Chiay City: Mito Road, *Lin s.n.* Oct 24. 1999.

Note: This species is quite similar to *Eriocaulon cinereum* R. Br., but can be distinguished from the latter by having glabrous staminate flowers, deeply bilobed staminate calyx and 5 anthers. Plants of *Eriocaulon cinereum* have 3-lobed staminate calyx and six anthers. In addition, the staminate flower has clavate hairs.

ACKNOWLEDGMENTS

We thank Mr. T. W. Hsu of the Taiwan Endemic Species Research Institute for providing available literature.

LITERATURE CITED

- Chang, C.-E. 1978. Eriocaulaceae. In: Li, H. L. *et al.* (eds.). Flora of Taiwan. Epoch Publ. Co., Taiwan. **5**: 179-188.
- Ma, W.-L. 1991. New materials of *Eriocaulon* L. from China. *Acta Phytotax. Sin.* **29**: 289-314.
- Ma, W.-L. 1997. Eriocaulaceae. In: Wu, K. *et al.* (eds.). *Fl. Reipubl. Popul. Sin.* **13**: 20-63. Science Press, Beijing.
- Li, F.-Z. 1988. A new species of *Eriocaulon* from Shandong. *Acta Phytotax. Sin.* **26**: 318-319.
- Zhang, Z.-X. 1999. Monographie der Gattung *Eriocaulon* in Ostasien. *Dissertationes Botanicae*. Band 313. J. Cramer, Berlin, Stuttgart.

臺灣新記錄植物—泰山穀精草

李松柏⁽¹⁾、陳奐宇⁽²⁾、林春吉⁽³⁾、鄭武燦⁽²⁾、謝長富^(2,4)

(收稿日期：2000年8月10日；接受日期：2000年9月6日)

摘 要

泰山穀精草 (*Eriocaulon taishanense* F. Z. Li) 為穀精草科 (Eriocaulaceae) 之植物，僅分佈於中國山東省泰山。臺灣首次發現於中部之嘉義市，本文描述其形態特徵、種子形態及生育地狀況。

關鍵詞：泰山穀精草，穀精草科，臺灣。

-
1. 龍海國民小學，台中縣 434，臺灣省，中華民國。
 2. 國立臺灣大學植物學系，台北市 106，臺灣省，中華民國。
 3. 宜蘭縣壯圍鄉 263 美福村 77 號，臺灣省，中華民國。
 4. 通訊連絡員。