

## *Laportea aestuans* (L.) Chew (Urticaceae), a Newly Recorded Plant in Taiwan

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**ABSTRACT:** *Laportea*, comprising ca. 22 species, is a genus of the Urticaceae. Two species were previously recorded in the 2<sup>nd</sup> edition of Flora of Taiwan. In the course of our botanical inventory, one additional weedy species, namely *Laportea aestuans* (L.) Chew, was found in the central Taiwan. Morphologically, *L. aestuans* is closely related to *L. interrupta* (L.) Chew by sharing ovate leaves. Branched racemes of *L. aestuans* are distinct from the unbranched racemes of *L. interrupta*. *Laportea aestuans* is a species mainly distributed at low elevations in central Taiwan.

**KEY WORDS:** Urticaceae, *Laportea aestuans*, Taiwan, Taxonomy, New record.

### INTRODUCTION

Urticaceae comprise about 45 genera and 1,000 species in the world (Friis, 1993). Taxonomy of the family in Taiwan has been recently revised by Shih *et al.* (1995a, 1995b). In total, 21 genera and 63 species and one variety distributed in Taiwan have been recorded (Yang *et al.*, 1996). Subsequently, Shih and Yang (1998) reported a new record, *Pilea swinglei* Merr. The present account describes a new record of the genus *Laportea* for the flora of Taiwan.

*Laportea*, an element of the Urticaceae, is composed of ca. 22 species (Chew, 1969). It is a predominant Old World genus (Miller, 1971). Two species were previously recorded in the revised Flora of Taiwan (Yang *et al.*, 1996). In the course of our botanical inventory, one additional weedy species, namely *Laportea aestuans* (L.) Chew, was found in central Taiwan. This study provides the additional species distribution, and photographs to aid in identification.

#### Keys to Species of *Laportea* in Taiwan

1. Stigma trifid; inflorescence in simple branched, cymose glomerules; leaves cordiform or triangular ovate; leaf base truncate to truncate cordate ..... *L. interrupta*
1. Stigma simple; inflorescence in many branched, paniculate glomerules; leaves ovate to lanceolate; leaf base rounded to broad cuneate
  2. Herbs with glandular hairs; leaves ovate ..... *L. aestuans*
  2. Herbs without glandular hairs; leaves lanceolate ..... *L. bulbifera*

*Laportea aestuans* (L.) Chew, Gard. Bull. Singapore 21: 200. 1965, 25:164. f. 19. 1969.

Figs. 1, 2

*Urtica aestuans* L., Sp. Pl. ed.2. 1397. 1763.

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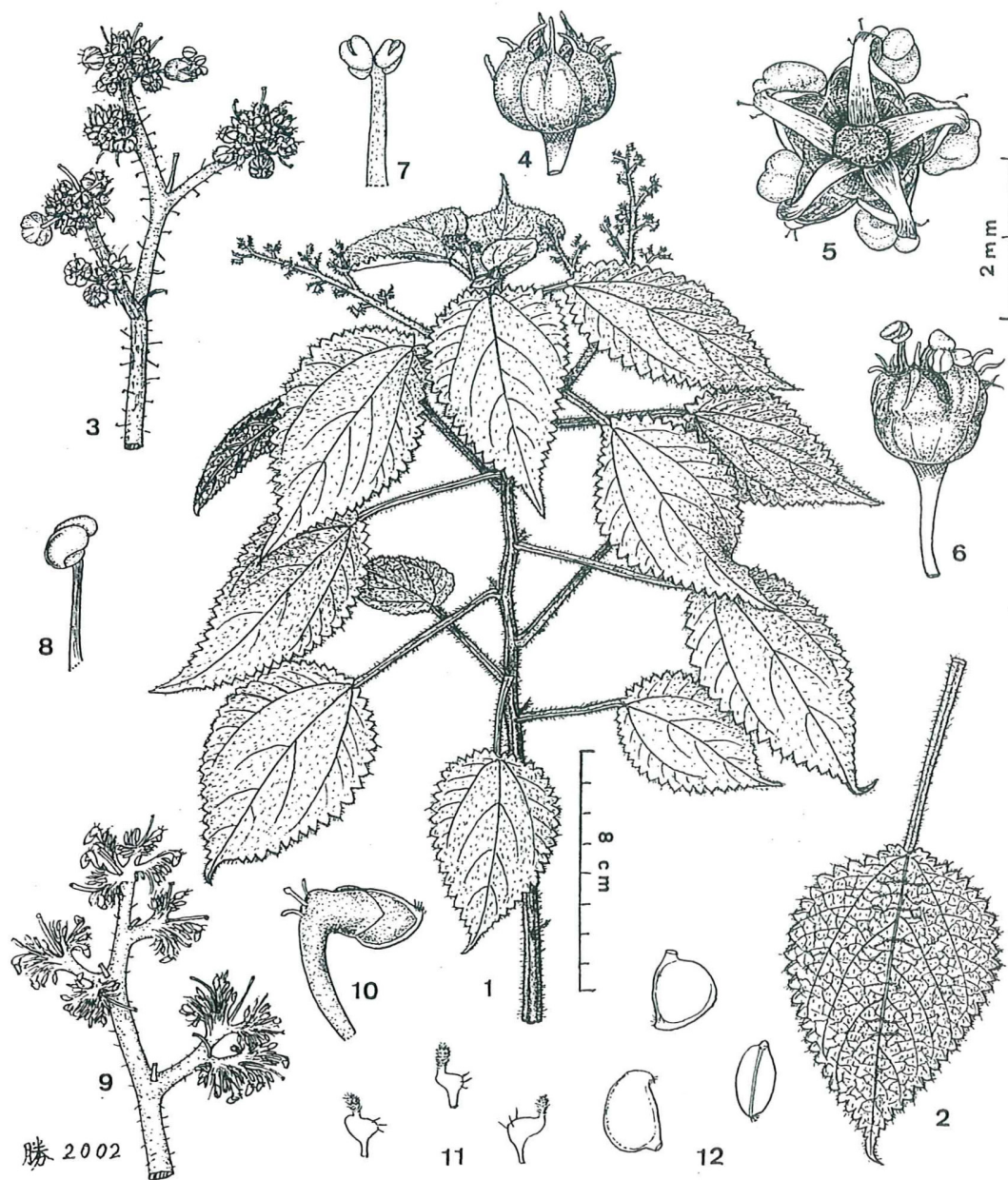


Fig. 1. *Laportea aestuans* (L.) Chew. 1: Habit; 2: Leaf; 3: Inflorescences; 4-6: Male flower; 7, 8: Stamen; 9: Inflorescences with female flower; 10: Female flower; 11. Gynoecium; 12: Fruit.

Annual herbs, 1.3 m high. Stem covered with long hairs. Leaves alternate, stipules partially connate, bifid at apex, intrapetiolar; petioles 7-11 cm long; lamina broadly ovate, 8-17 cm long, 6-13 cm broad, irritant hairs scattered on both surfaces, base rounded to cordate, apex acuminate, margin dentate. Inflorescences bisexual, axillary, paniculate; peduncle covered with irritant hairs. Male flowers: tepals 4 or 5, with few long glandular or irritant hairs at the apex; stamens 4 or 5, white. Female flowers: tepals 4, the two lateral ones ca. 0.5 mm long, the dorsal one ca. 0.25 mm long, geniculate, bearing 3-5 glandular hairs, the ventral one very minute. Ovary asymmetrically ovoid, stigma linear, unbranched; pedicel ca. 0.5 mm. Achenes asymmetrically ovoid; pedicel up to 2 mm long.



A.



B.

Fig. 2. *Laportea aestuans* (L.) Chew. A: Habit; B: Inflorescences.

Distribution: Tropical America, West Indies, Tropical Africa, Madagascar, Arabia, India, Sumatra, Java and Lesser Sunda Islands (Chew, 1969). In Taiwan, found at low elevations in the central part.

**Specimen examined:** TAIWAN. NANTOU: Puli, 2 Sep 2001, *T. W. Hsu 10402* (TESRI); Jushan, 18 Oct 2002, *T. W. Hsu 11066* (TESRI).

Notes: Morphologically *Laportea aestuans* is closely related to *L. interrupta* by sharing numerous characters. For example, the two species have ovate leaves and same size throughout its range. Despite the high similarities between these two species, inflorescences of branched racemes of *L. aestuans* are distinct from the unbranched racemes of *Laportea interrupta*, in which lateral branches are greatly reduced with flowers fasciculate at intervals along the elongated peduncle.

*Laportea aestuans* is a herbaceous weed. Geographically and ecologically different distributional ranges were found in three species of *Laportea* in Taiwan. *Laportea bulbifera* usually grows at the medium elevations, around Chingshuishan and the vicinity of Taipei; *L. interrupta* is mostly distributed at low elevations in the southern part (Shih *et al.*, 1995b); while *L. aestuans* is a lowland species in the central Taiwan.

### ACKNOWLEDGMENTS

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## 台灣蕁麻科的新紀錄植物—火焰桑葉麻

許再文<sup>(1,2)</sup>、蔣鎮宇<sup>(2)</sup>、鍾年鈞<sup>(3,4)</sup>

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### 摘 要

桑葉麻屬植物為蕁麻科的一個屬約共有 22 種。台灣植物誌記載了 2 種。本研究報導台灣中部地區的 1 新紀錄種—火焰桑葉麻。本文提供新紀錄種的描述、分布、繪圖及彩色照片。

關鍵詞：蕁麻科、火焰桑葉麻、台灣、分類、新紀錄。

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