

Epirixanthes elongata Bl.-- a New Record to the Flora of Taiwan

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ABSTRACT : *Epirixanthes elongata* Bl. (Polygalaceae) is a small parasitic herb distributed in S. China, Vietnam, Burma, and Indonesia. It is reported for the first time from Nanjenshan Nature Reserve, southern Taiwan. Taxonomic description, habitat information, an illustration and pollen morphology are provided here.

KEY WORDS : *Epirixanthes elongata* Bl., Polygalaceae, Taiwan.

Epirixanthes Bl., consisting of 3 or 4 species of small parasite herbs, is distributed in S. China, Vietnam, Burma, and Indonesia (Backer and Bakh. van den Brink Jr. 1963). This genus, published by Blume in 1825, is related to *Salomoonia* Lour., but can be distinguished from the latter by the following characters; parasites with minute, scale-like leaves; 3 or 5 stamens; fruits enclosed by calyx, slightly compressed, inermous, with a pellucid pericarp, indehiscent (Ridley 1922; Backer and Bakh. van den Brink Jr. 1963).

Recently, we found *Epirixanthes elongata* Bl. from Nanjenshan Nature Reserve, southern Taiwan for the first time. This species is characterized by ovate-lanceolate, very acute bracts; the free, ovate sepals with narrow and rather acute apex; and styles being 0.5-1.3 mm long (Penzig 1901; Backer and Bakh. van den Brink Jr. 1963.).

***Epirixanthes* Bl.**

Flesh-colored parasitic herbs, erect, simple or branched. Branches ascending. Leaves reduced to scale-like. Spikes terminal, elongate, dense, many-flowered. Flowers bisexual, zygomorphic, small, 1-2 mm long, each in axil of bract, minutely bibracteolate at base; sepals 5, persistent, free or connate at base, subequal, imbricate; petals 3, connate at base; the lowermost one (keel) broader than the others; stamens 3 or 5, monadelphous, adenate at base to petals; anther opening by a terminal pore; ovary 2-celled; style short or filiform. Fruit enclosed by calyx, slightly compressed; seed black, glabrous, without a caruncle.

***Epirixanthes elongata* Bl.** Flor. Bot. Zeit. 123. 1825; Penzig in Ann. Jard. Buitenz. 17: 142. 1901. pl. 24.

Figs 1-3. 寄生鱗葉草

A parasitic small herb, 10-25 cm tall, simple or branched. Leaves reduced to scale-like, 1-2 mm long, puberulent. Spike terminal, 5-30 mm long; flowers dense, yellowish white or white, ca. 1.2 mm long; bracts linear-lanceolate, acuminate, longer than the flower bud; sepals 5, imbricate, ovate-lanceolate, ca. 0.5 mm long, persistent; petals 3, connate at base,

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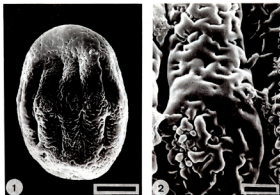


Fig 1, 2. SEM micrographs of pollen grains of *Epirixanthes elongata* Bl. Fig 1. scale bar = 10 μ m, fig 2. scale bar = 2 μ m.

the middle lobe boat-shaped, keeled, obtuse or emarginate at apex; stamens 5, monadelphous, adnate at base to petals; pollen grains polycolporate, subprolate, isopolar, ovary 2-locular, 1 ovule in each locule. Fruit small, transversely oval, enclosed in calyx; seeds black.

Distribution: South China (Yunnan Prov. and Hainan Prov.), Vietnam, Burma, and Indonesia. Taiwan, found in Nanjenshan Nature Reserve, Kingting National Park, Pingtung Hsien, southern Taiwan.

Specimens examination:

Pingtung Hsien: Nanjenshan, *Lai s. n.* Aug 4. 1995 (TAI), *Lai s. n.* Oct 10. 1995 (TAI).

Note: The discovery of *Epirixanthes elongata* Bl. in Taiwan adds a new genus to the flora of the island. It is very rare and grows in the windward slope of the lowland evergreen forest dominated by *Syzygium kusukusense* (Hayata) Mori, *Ilex cochinchinensis* (Lour.) Loes., *Ilex maximowicziana* Loes., and *Acuba chinensis* Benth.

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LITERATURE CITED

Backer, C. A. and R. C. Bakhuizen van den Brink Jr. 1963. Polygalaceae. *In* Fl. Java. Vol. 1. pp. 196-201.

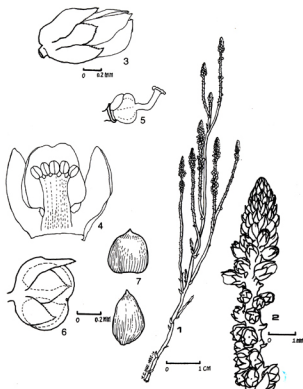


Fig 3. Illustration of *Epirixanthes elongata* Bl. 1. Habit; 2. Spike; 3. Flower; 4. Petals and stamens; 5. Pistil; 6. Fruit; 7. Seeds.

- Huang, S. M. 1991. Polygalaceae. In: *Fl. Guangdong*. F. Chen (ed.), Vol. 2. Guangdong Science and Technology Press. pp. 49-62. (in Chinese).
- Huang, T. C. 1993. Polygalaceae. In: T. C. Huang *et al.*, (eds). *Fl. Taiwan*. 2nd. Vol. 3. Dept. of Botany, National Taiwan University. pp. 571-578.
- Penzig, O. 1901. Beitrage zur kenntniss der gattung *Epirrhizanthes* Bl. *Ann. Jard. Buitenz.* 17: 142-170.
- Ridley, H. N. 1922. Polygalaceae. In: *Fl. Malay Peninsula*. Vol. 1. pp. 137-149.
- Wu, C. Y. (ed.) 1983. Polygalaceae. In: *Fl. Yunnanica*. Vol. 3. Science Press. pp. 261-293. (in Chinese).

臺灣新記錄植物—寄生鱗葉草

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摘 要

寄生鱗葉草(*Epirixanthes elongata* Bl.)為遠志科(Polygalaceae)之寄生植物，分佈於中國南部(雲南省和海南省)、越南、緬甸、和印度尼西亞。臺灣首次發現於南部恆春半島南仁山保護區內，位於迎風坡以高士佛赤楠占優勢的常綠闊葉林下。本文描述其形態特徵、花粉形態、生育地狀況，並附其手繪圖。對臺灣而言，此發現不僅增加一新記錄種，且為新記錄屬。

關鍵字：寄生鱗葉草，遠志科，臺灣。

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