

# 点叶菊属, 中国菊科一新归化属

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**摘要:** 报道了中国菊科的新归化属种: 点叶菊属(*Porophyllum* Guettard)点叶菊(*[P. ruderale* (Jacquin) Cassini]). 点叶菊属原产于美洲, 这是本属植物在我国境内归化的首次记录。该种在许多地方表现出入侵性, 建议加强动态监测。

**关键词:** 菊科; 点叶菊属; 点叶菊; 新记录; 中国

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## *Porophyllum* Guettard (Asteraceae), A Newly Naturalized Genus to China

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**Abstract:** The genus *Porophyllum* Guettard and a species of this genus, *P. ruderale* are firstly reported naturalized in China. Due to its invasiveness, it is necessary to carry out a dynamic monitoring for the species.

**Key words:** Asteraceae; *Porophyllum*; *P. ruderale*; New record; China

During an investigation of invasive plants, we found a puzzling herbaceous plant population of Asteraceae in Shenzhen, Guangdong. By the foundation of related literature<sup>[1-5]</sup> and type specimen, it was confirmed that the herb species *Porophyllum ruderale* (Jacquin) Cassini represented a newly naturalized genus to China.

*Porophyllum* Guettard, Hist. Acad. Roy. Sci. Mém. Math. Phys. (Paris, 4). **1750**: 377. 1754. 点叶菊属

Annual or perennial erect herbs, shrubs or subshrubs, with strong smell. Leaves simple, opposite or alternate, sessile or petiolate; leaf blade rounded, elliptic to linear, leaf margin entire to crenate, with transparent glands. Capitula solitary or in lax corymbs. Involucres cylindrical, campanulate or turbinate. Phyllaries 5–10, free to base, 1 series, glandular, oblong to linear. Ray florets absent, disk flowers

bisexual, fertile, 10–100 per capitula, corolla 5-lobed. Cypselas fusiform to cylindrical, pappus free bristles, persistent.

About 25 species, distributed in the southwestern United States, Mexico, West Indies, Central America, South America<sup>[1,3]</sup>. Recently, one species was found in Guangdong, China. The name of the genus is derived from the Creek word *porus* and *phyllon*, meaning pore and leaf, referring to the peculiar glands on the leaf blade of many species of this genus.

*Porophyllum ruderale* (Jacquin) Cassini, F. Cuvier (ed.), Dict. Sci. Nat. (ed. 2) **43**: 56. 1826. 点叶菊 (新拟) Fig. 1

Annual herbs, or subshrubs, 0.7–1.3 m tall, with white latex or not. Leaf alternate or opposite, 1.5–4.5 (5.5) cm × 0.5–3 cm; leaf blade ovate, elliptic or obovate, apex rounded or acute, mucronulate, base

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Fig. 1 *Porophyllum ruderale* (Jacquin) Cassini. A: Habitat; B: Plant; C: Seedlings; D: Leaves; E: Capitula; F: Cypsela.

attenuate, cuneate to broadly cuneate, margin crenate or entire, petiole 0.5–2.5(3.5) cm long. Capitula solitary or in lax corymbs, 1.5–2.5 cm long, pedicel

2–5(7) cm long, distally inflated. Phyllaries 5, purple tinged, 1.5–2.5 cm long. Disk flowers bisexual, 25–30 per head or more, corolla tube campanulate, yellow

or greenish to purplish, 5-lobed, lobes ovate to triangular, stamens 5, anthers apical appendages acute. Style 2-branched, curvate. Cypsela 7–10 mm long, hispidulous, pappus 6–9 mm long. Fl. Apr.–Sept.

**Distribution:** Native to SW. United States, Mexico, West Indies, Central America, South America<sup>[1,3]</sup>. It is found naturalized in Guangdong Province, China.

**Voucher specimens:** China (中国), Guangdong (广东), Shenzhen (深圳), Baoan District (宝安区), Tiegang Reservoir (铁岗水库), on the plant nursery, abandoned land, roadside, alt. 40–50 m. 2015–05–06, W. Y. Zhao, W. S. Yang, J. Sun SZ-1-1746 (SYS), 2017–07–27, B. H. Wu PP2017451 to PP2017480 (CANT).

**Usage:** It is reported to be used as traditional medicine and pesticide<sup>[6–7]</sup>.

**Discussion:** *Porophyllum ruderale* grows well in the area of Tiegang Reservoir, with a large quantity of fruiting individuals and seedlings. It mainly grows in the abandoned place and ornamental plant nursery and can adapt to different intensity of illumination. *Porophyllum ruderale* was once cultivated in Hong Kong bordering on Shenzhen City<sup>[5]</sup>. Taking into account the close relationship between the two cities, especially the active nursery stock transaction, it may be reasonable to infer that the population in Tiegang Reservoir seems to be introduced from Hong Kong with the nursery stock production, such as plant seeds or seedlings. *Porophyllum ruderale* is a kind of potential invasiveness herbs with high risk<sup>[8]</sup>. It's a common invasive weeds in Brasil<sup>[9–10]</sup>. It can adapt to many soil types<sup>[7]</sup> and can even form thickets in the native range<sup>[8]</sup>. In the past 50 years, this herb has spread out of the Americas, it was recorded naturalized in Hawaii<sup>[11]</sup>, Indonesia<sup>[12]</sup> and Singapore<sup>[13]</sup>, and a variety of this species, *P. ruderale* var. *macrocephalum* (de Candolle) Cronquist was recorded naturalized in Galapagos Islands<sup>[14]</sup>. It's appearance in Guangdong must be brought to the attention of the agricultural and forestry researchers and managers. It would be better to give

the necessary monitoring of its distribution and spread in Guangdong.

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