NOTE

A Newly Naturalized Species in Taiwan: *Phytolacca icosandra* L. (Phytolaccaceae)

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**ABSTRACT:** *Phytolacca icosandra* Linnæus, Systema Naturae ed. 10. 2: 1040. 1759. Perennial herbs 1–2 m high, glabrous; stems succulent; leaves elliptic to ovate, 7–20 cm long and 3–10 cm wide, acute or acuminate, attenuate or acuminate at the base, glabrous. Inflorescences spike-like racemes, erect in fruit, 7–16 cm long; pedicel less than 2 mm; bracts subulate; sepal 5 pink to pale reddish, broadly elliptic 3 × 2 mm; stamens 12–20, usually in 2 whorled; carpels mostly 6–10, connate; ovary 6–10 loculed. Berries purple-black, 7–8 mm in diam. Seeds black, thickly lenticular, 2–3 mm long, shiny.

**KEY WORDS:** Phytolaccaceae, *Phytolacca icosandra*, naturalized, Taiwan.

**INTRODUCTION**

The genus *Phytolacca* L. comprises about 25 species mostly native to South America and widely spread in America, Eurasia, Africa, China, Pacific Islands and Australia (Lu, 2003; Nienaber, 2003). In Flora of Taiwan 2nd edition, only two species have been recorded (Huang and Huang, 1996). During our recent field research, *P. icosandra* L. was found in central Taiwan. This species can be distinguished to the other Taiwanese species by its erect inflorescence, pedicels less than 2 mm, and smooth seed.

The young shoots and leaves of this species are used as a pot herb along the Atlantic coast of Central America. In Guatemala, its green berries are of economic importance as a soap substitute. The juice of the ripe fruits gives a red-purple color that is sometimes used for ink or for coloring various small articles. The roots are known to be poisonous (Standley and Steyermark, 1946). In Indonesia, this species had been reported as a naturalized species (Bakker and Bakhuizen van den Brink, 1963).

We considered this species as a naturalized species based on its original distribution and the population survived in abandoned fields and reproduced without human efforts. The newly naturalized species to Taiwan is described and illustrated below.

**TAXONOMIC TREATMENTS**


Perennial herbs 1–2 m high, glabrous; stems succulent; leaves elliptic to ovate, 7–20 cm long and 3–10 cm wide, acute or acuminate, attenuate or acuminate at the base, glabrous. Inflorescences spike-like racemes, erect in fruit, 7–16 cm long; pedicel less than 2 mm; bracts subulate; sepal 5 pink to pale reddish, broadly elliptic 3 × 2 mm; stamens 12–20, usually in 2 whorled; carpels mostly 6–10, connate; ovary 6–10 loculed. Berries purple-black, 7–8 mm in diam. Seeds black, thickly lenticular, 2–3 mm long, shiny.

Specimens examined: TAIWAN, Taichung City: Taiping Dist. 24°07'01"N, 120°47'28"E, alt. 230–250 m, 4 April 2012, S. I. Hsieh 002 (PP), same loc., S. I. Hsieh 003 (TAIF).

**Key to species in Taiwan**

1a. Inflorescence arching or pendulous; flowers loosely spaced; infructescence pendent .......................... *P. americana*
1b. Inflorescence erect; flowers densely spaced; infructescence erect ..........................
2a. Raceme; seeds with concentric striations; pedicel 3–20 mm long; stamens 10 .................................. *P. japonica*
2b. Spike-like raceme; seeds smooth; pedicel less than 2 mm long; stamens 12–20 .............................. *P. icosandra*

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