**Triadenum breviflorum** (Hypericaceae): First report in Korea

Ji Hyeon So, Myoung Jun Kim and Nam Sook Lee

*Division of EcoScience, Graduate School, Ewha Womans University, Seoul 120-750, Korea*

7 Shinhwa-ro 25 Beon-gil, Seogwipo-si, Jeju 697-855, Korea

(Received 16 August 2011; Revised 01 September 2011; Accepted 16 September 2011)

**ABSTRACT:** Triadenum breviflorum (Wallich ex Dyer) Y. Kimura in Nakai & Honda (Hypericaceae), previously known only in northeast India, China and Taiwan, was found in a few wetlands of Jeju Island in 2008. Additionally, some images online of *T. breviflorum* suggest that it exists in other places on the Korean peninsula but that it has been misidentified as *Triadenum japonicum*. This species is distinguished from the latter by white petals, inflorescence from nodes 6-11, linear to narrowly elliptic leaves, and an attenuated base. The local name Huin-kkot-mul-go-chu-na-mul implies a white flower rather than the flesh-pink color of *T. japonicum*. The morphological characteristics of the species are provided with photographs of the habitat.

**Keywords:** Triadenum breviflorum, Korea, Hypericaceae

The genus *Triadenum* Raf. belongs to Hypericaceae (Clusiaceae or Gutiferae) and comprises about 6-10 taxa in eastern Asia and eastern North America (Mabberley, 1993). Only one taxon, *T. japonicum*, has been reported for Korea and for Japan, China and the Russian Far East (Satake et al., 1983; Lee, 1996; Lee, 1998). In the present study, *T. breviflorum*, which was collected from Seogwipo-si and Jeju-si, Jeju-do, is newly reported for Korea. This taxon was previously known to exist in northeast India, China (Li and Robson, 2007) and Taiwan (Robson, 1996). A number of images online of *T. breviflorum* suggest that it exists in other places on the Korean peninsula. However, it appears to have been confused with the more popular and widely known *T. japonicum*, a close relative of *T. breviflorum*. *Triadenum breviflorum* is distinguished from *T. japonicum* by its white petals, inflorescence from nodes 6-11, its narrowly elliptic leaves, and by its attenuated base. The latter has fleshy pink flowers. The given local name was `Huin-kkot-mul-go-chu-na-mul` based on the white flower as compared to the flesh pink color of *T. japonicum* voucher specimens are preserved in the Ewha Womans University Herbarium (EWH).

**Description**

*Triadenum breviflorum* (Wallich ex Dyer) Y. Kimura in

Nakai & Honda, Nov. Fl. Jap. 10: 79. 1951. (Figs. 1, 2)


Korean name: Huin-kkot-mul-go-chu-na-mul

Herbs perennial, rhizomatous, (15-)30–55 cm tall, ascending from a creeping and rooting base; stems solitary or few, unbranched or branched above middle. Stems acipicous when young, soon terete, eglandular, with the lower part reddish brown. Leaves sessile or petiolate (1–2 mm), blade linear to narrowly elliptic, (1.5)–5.5–(6.7) × (0.6)–1.3–(1.5) cm, abaxially paler green, laminar glands scattered dots, glandular hairs, main lateral veins (4)–5–(6)–paired, tertiary reticulation lax; base attenuate, margin revolute, apex obtuse. Inflorescence 1–3–flowered at the terminal and with paired 1–3–flowered at branches with up to 6–11 nodes, spiciform; bracts and bracteoles lance-ovate; peduncles 0.5–5 mm, pedicels 1–2 mm. Flowers white, diurnal; 5–6 mm in diam., funnel-shaped; sepals erect, ovate, 4–5 × 1.5–2 mm; laminar glands 5, lines; margin entire, apex obtuse, seven-veined; petals white, ovate-oblong, 3.5–6 mm long, 2–3 mm wide; laminar glands scattered dots; margin entire. Stamens nine (3 per fascicle), 3–3.5 mm; filaments united for 2/3 (1.3 mm). Fascicloles yellowish orange, scalelike, subrectangular, 1 mm long, ca. 0.7 mm wide, emarginate. Ovary ovoid, 1.5 mm long, 1.3 mm wide; styles 3, ca. 1 mm, ca. 2/5 as long as ovary, appressed, distally spreading. Capsule ovoid, 7–8 × 3–4 mm, septical, carinate, apex acute. Seeds dark red-brown, ca. 1 mm, testa alveolate. Fl. Jul-Aug, Fr. Aug-Sep.

**Distribution:** NE India, Taiwan, China, and Korea, wetlands, usually at 200 m.
Triadenum breviflorum (Wallich ex Dyer) Y. Kimura can be distinguished from T. japonicum as follows:

1. Leaves linear to narrowly elliptic (L/W = 4.5-5.5), leaf base attenuate; inflorescence from 6–11 nodes, flower white, diurnal ........................................... T. breviflorum

1. Leaves ovate-oblong to oblong or oblong-lanceolate (L/W = 1.7–2.5), leaf base cordate-amplexicaul; inflorescence from 2–4 nodes, flower flesh-pink, nocturnal .................................. T. japonicum

Acknowledgement

This research was supported by the Core Environmental Technology Development Project for Next Generation (Project No. 052-091-079) founded by the Ministry of Environment of the Korean Government.

Literature Cited


