

## **DEYEUXIA STENOPHYLLA AND D. SUIZANENSIS (GRAMINEAE) IN MALESIA AND TAIWAN**

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**Abstract:** *Deyeuxia suizanensis* (Hayata) Ohwi (*Gramineae*) from Taiwan is identical with *D. stenophylla* Jansen from the Philippines and New Guinea, and the correct name for both, causing two new varietal combinations.

### INTRODUCTION

Dr. T. Koyama (1987) pointed out the conspecificity of *Calamagrostis filifolia* Merr. (1906) from Malesia with *Calamagrostis suizanensis* (Hayata) Honda (1930) from Taiwan. Thanks to a loan from Dr. C.S. Kuoh (National Cheng Kung University: 'CKU') some materials of *C. suizanensis* could be studied which confirmed this. On mainland China *Deyeuxia hupehensis* Rendle (1904) seems closely related, but differs by the sheaths puberulous along the margins and in the throat, the longer blades, pubescent above, the smaller spikelets, and the first glume with ciliolate margins (see also Keng, 1959). Within *Calamagrostis* Adans. the taxon belongs to a large group of some 200 species which for reasons explained elsewhere has been regarded as a distinct genus *Deyeuxia* Clarion ex Beauv. by numerous authors, e.g. Bor (1960) for Burma, Ceylon, India, and Pakistan, Veldkamp (1979, 1982, 1992) and Korthof & Veldkamp (1985) for Malesia, Hsu (1970, 1978) for Taiwan, Rúgolo de Agrasar & Molina (1990) for S. America, Simon (1990) for Australia, Edgar & Forde (1991) for New Zealand, etc. The combination *D. suizanensis* was made by Ohwi (1958) and again by Hsu (1978). Although *C. filifolia* Merr. (1906) provides the oldest epithet, the existence of the earlier *D. filifolia* Wedd. (1875) makes this combination impossible here. Jansen (1952) proposed *D. stenophylla*, but after unification *C. suizanensis* Hayata (1918) offers the next oldest epithet and therefore *D. suizanensis* must be used. In Malesia the species occurs with two varieties which are apparently distinct from the Taiwan form. One, var. *stenophylla*, is found in the Philippines in Luzon and perhaps in Mindanao. The other variety, var. *chaseana*, is widely spread in the high mountains of New Guinea. For both new combinations at the varietal level are now required. This case is another example of the presence of the same taxa in Malesia and Taiwan and students of one flora should take the other into account.

### KEY TO THE VARIETIES

**Note:** Descriptions based on specimens seen, values between brackets taken from literature.

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1. Ligules 2–4 mm long. Blades 10–45 cm long. Inflorescence axes usually smooth. Rachilla process 0.9–1.2 mm long. Anthers 0.4–1.5 mm long. — Malesia ..... 2
- . Ligules (0.5–)0.75–2.5 mm long. Blades 6–8(–15) cm long. Inflorescence ..... axes scaberulous. Rachilla process (1–)1.25–1.75 mm long. Anthers (1–)1.5–2 mm long. Upper glume (4–)5–5.5 mm long, 0.35–0.75 mm longer than the lemma. Awn inserted in the lower 0.27–0.35th of the lemma, (1–)1.5–1.75 mm above its base, subule 2.85–3.85 mm long. — Taiwan ..... **var. *suizanensis***
2. Upper glume 4–5.25 mm long, slightly shorter to slightly longer than the lemma. Awn inserted in the lower 0.17–0.29th of the lemma, 0.7–1.25 mm above its base, subule 2.4–4 mm long. — New Guinea ..... **var. *chaseana***
- . Upper glume 5–6.25 mm long, 0.75–1.5 mm longer than the lemma. Awn inserted in the lower 0.22–0.34th of the lemma, 1–1.65 mm above its base, subule 3.25–5 mm long. — Philippines ..... **var. *stenophylla***

1. *Deyeuxia suizanensis* (Hayata) Ohwi

*Deyeuxia suizanensis* (Hayata) Ohwi, J. Jap. Bot. 33 (1958) 211; Hsu, Taiwania 16 (1971) 233, pro comb. nov. *Agrostis suizanensis* Hayata, Icon. Pl. Form. 7 (1918) 83, t. 50. *Calamagrostis suizanensis* Honda, Bot. Mag. Tokyo 40 (1926) 440, 444. Type: T. Soma s.n., December 1914 (TI, holo).

2. *Deyeuxia suizanensis* (Hayata) Ohwi var. *suizanensis*

Perennials. Culms 0.5–0.65 m long. Ligules (0.5–)0.75–2.5 mm long. Blades involute, stiff, 6–8(–15) cm by (0.3–)0.5–0.8 mm diam. Panicles contracted, (5–)8–16 cm by 6–10 mm diam., axis scaberulous, lower most branches 2 or 3 together, longest ones 2.5–5 cm long, 5–15-spiked. Spikelets (4–)5–5.5 mm long (excl. awns). Glumes slightly unequal, upper glume as long as the spikelet, 0.35–0.75 mm longer than the lemma, keeled, scabrous on the midrib, acuminate to apiculate. Rachilla-process (1–)1.25–1.75 mm long, with up to 1.6(–3) mm long hairs. Lemma (3.5–)4.6–5.5 mm long, minutely scaberulous, apex acuminate, bidentate, callus with 0.25–1 mm long hairs, awn geniculate, inserted in the lower 0.27–0.35th, 1.5–1.75 mm above its base, (6–)6.25–7.5 mm long, subule 2.85–3.85 mm long. Anthers (chasmogamous) (1–)1.5–2 mm long.  $2n = ?$

**Distribution:** Taiwan.

**Habitat:** Subalpine grasslands.

**SPECIMENS EXAMINED:**

Chen 11295 ('NCKU'), 15247 (L), 15533 ('NCKU').

3. *Deyeuxia suizanensis* (Hayata) Ohwi var. *chaseana* (Bor.) Veldk., **comb. nov.**

*Deyeuxia chaseana* Bor, Brittonia 14 (1962) 48, f. 2. *Deyeuxia stenophylla* Jansen var. *chaseana* (Bor) Veldk. in Royen, Alp. Fl. N.G. 2 (1980) 1132, t. 367. Type: Lae Botanic Garden 4555-54 (K, holo, photo in US, L, fragm, US, fragm).

Upper glume 4–5.25 mm long, slightly shorter to slightly longer than the lemma. Awn inserted in the lower 0.17–0.29th of the lemma, 0.7–1.25 mm above its base, 2.4–4 mm long.

**Distribution:** New Guinea from Wilhelmina to Simpson.

**Habitat:** Open subalpine grasslands, pioneering, (1900–)2800–3900 m.

4. *Deyeuxia suizanensis* (Hayata) Ohwi var. *stenophylla* (Jansen) Veldk., **comb. nov.**

*Deyeuxia stenophylla* Jansen, Acta Bot. Neerl. 1 (1952) 472. *Calamagrostis filifolia* Merr., Philip. J. Sc. 1, Suppl. (1906) 179, non *Deyeuxia filifolia* Wedd. (1875).  
*Lectotype:* Merrill 4839 (PNH, holo, lost, L, P).

*Calamagrostis filifolia* Merr. forma *cleistogama* Hack. in Merr., Philip. J. Sc. 1, Suppl. (1906) 180. *Lectotype:* Merrill4537 (PNH, lost, BO, L).

Upper glume 5–6.25 mm long, 0.75–1.5 mm longer than the lemma. Awn inserted in the lower 0.22–0.34th of the lemma, 1–1.65 mm above its base, subule 3.25–5 mm long.

**Distribution:** Philippines: Luzon (Benguet: Pauai, Tonglon; Lepanto: Data), ? Mindanao (Mt. Apo).

**Habitat:** Open, dry soil, disturbed areas, (pine) forests, montane and subalpine grasslands, (900–)2250–2940 m.

**Note:** The single collection from Mindanao, Mt. Apo (Elmer11553, L), is aberrant by its rather flat leaf blades, open panicle, very long callus hairs, and ca. 2 mm long anthers. It comes close to *D. pyramidalis* (Host) Veldk. (*D.arundinacea* Jansen, non Beauv., 1812, see Veldkamp, 1992), but the awn insertion is that of *D. suizanensis*.

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# 東南亞及台灣之狹葉野青茅及水山野青 茅（禾本科）

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## 摘要

分布於菲律賓及新畿內亞之狹葉野青茅 (*Deyeuxia stenophylla*)，證實與分布於台灣之水山野青茅 (*Deyeuxia suizanensis*) 為同一種，根據命名法規，本文將其處理為水山野青茅下的兩個變種。