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Floribunda merupakan organ resmi Penggalang Taksonomi Tumbuhan Indonesia, diterbitkan dua kali setahun dan menerbitkan makalah dalam bahasa Indonesia dan Inggris mengenai pelbagai gatra sistematika keanekaragaman flora Malesia pada umumnya dan Indonesia pada khususnya yang berasal dari hasil penelitian, pengamatan lapangan, pengalaman pribadi, telaahan berbagai, dan tinjauan kritis.

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Jenis tulisan

Makalah lengkap memuat hasil penelitian floristik, revisi, atau monografi unsur-unsur flora Malesia. Komunikasi pendek mencakup laporan kegiatan keanekaragaman flora Malesia yang perlu segera dikomunikasikan.

Tulisan lain meliputi obituary tokoh keanekaragaman flora Malesia yang perlu segera dikomunikasikan. Tulisan lain meliputi obituary tokoh keanekaragaman flora Malesia yang perlu segera dikomunikasikan. Tulisan lain meliputi obituary tokoh keanekaragaman flora Malesia yang perlu segera dikomunikasikan.

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Bilamana diperlukan ucapan terima kasih dan bentuk persantunan lain dapat dicantumkan sesudah tubuh teks tetapi sebelum daftar pustaka.

Pengacuan pada pustaka hendaklah dilakukan dengan sistem nama-tahun. Daftar pustaka supaya disusun bersesuaian alfabet nama pengarang dengan memakai sistem Harvard.

Gambar dan tabel merupakan pendukung teks sehingga perlu disusun secara logis dalam bentuk teks atau tabel atau sebagai gambar, tetapi tidak dalam bentuk ketiga sekaligus. Siapkan gambar yang lebarnya dua kolom cetak.

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A NEW RECORD OF CHLOOTHAMNUS BUSE (POACEAE: BAMBUSOIDEAE) FROM SUMBAWA ISLAND AND NOTES ON THE GENUS IN MALESIA

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1) Herbarium Bogoriense, Research Center for Biology, Indonesian Institute of Sciences (LIPI) Jl. Jakarta-Bogor km 46, Cibinong, Bogor, West Java. Indonesia. 16911.
2) “Eka Karya” Bali Botanic Garden, Indonesian Institute of Sciences (LIPI) Candikuning, Baturiti, Tabanan, Bali. Indonesia. 82191.
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I Putu Gede P. Damayanto, Ida Bagus K. Arinasa, I Gede Tirta, Elizabeth A. Widjaja. 2020. A New Record of Chloothamnus Buse (Poaceae: Bambusoideae) from Sumbawa Island and Notes on the Genus in Malesia. Floribunda 6(4): 127–132. — From the exploration occurred at Sumbawa Island, it was found that Chloothamnus schmutzii which was reported only found in Manggarai, Flores Island. Through the discovery of this species proves that Sumbawa has close relationship geography with the West Flores mainland. The description of Chloothamnus schmutzii is presented to fulfill the species description which was not completed when it is described. The photograph of culm-sheath of Chloothamnus schmutzii specimen is presented. Overall, there are 11 species of Chloothamnus in Malesia (eight in Papua New Guinea, two in the Lesser Sunda Islands, one in Java).

Keywords: Chloothamnus schmutzii, new record, Sumbawa Island.
found an unidentified flowering bamboo specimen (I Gede Tirta 3496). The vernacular name of this bamboo is ropeng. This specimen was identified later as *C. schmutzii* that previously only found in Flores. Hereinafter, an expedition was conducted by Herbarium Bogoriense staff in May 2016, took place in Sumbawa also. They found a flowering specimen of bamboo (*LD Sulistyawingsih 297*) that was also identified as *C. schmutzii*. Both specimens were found around Batulanteh, Sumbawa Besar. Therefore, *C. schmutzii* is no longer endemic to Flores and it is newly recorded in Sumbawa after 22 years without any collected specimens since 1993. The description of *C. schmutzii* is presented below to fulfill the species description which was not completed when it was described. A note on this genus in Malesia is also provided.

### MATERIALS AND METHODS

Fieldworks were conducted in April 2015 and May 2016, took place on Batulanteh, Sumbawa Besar District, Sumbawa Island. This study was conducted by using a method of collecting flora diversity by Rugayah et al. (2004). Morphology, location, coordinates, altitude, local name, and habitat data were collected. All of the specimens were sent to the Herbarium Bogoriense (BO) for further processing, following Djarwani et al. (2002). The specimens were identified by using related literature such as Soenarko (1977), Dransfield (1980) and Widjaja (2001a) and available BO specimens.

### RESULT AND DISCUSSION

#### The New Record

*Chloothamnus schmutzii* (S.Dransf.) Widjaja, Sandakania 22: 39. 2016. Basionym: *Nastus schmutzii* S.Dransf., Reinwardtia 9(4): 388. 1980. Type: *Schmutz 2789*, Manggarai, Nunang, Todong Rancang (holo BO!).

Scrambling bamboo. **Shoot** green. **Culm** internode 45–55 cm and 3–5 cm in diameter. **Culm-sheath** (Fig. 1) 22–27 × 9.2–10.5 cm; green when young, yellow when mature; young and mature culm-sheath covered by white wax (spreading) and blackish brown hairs; auricle horn-like, easily broken, 0.5–0.6 cm high with bristles 1–1.5 cm long; ligule toothed 1–2 mm high, glabrous; blade deflexed when mature, narrowly lanceolate, 17–22.7 × 1–1.2 cm. **Leaves** 9–14.3 × 1.4–2 cm, pubescent beneath; auricle horn-like 2–2.5 cm high with bristles 0.5–1 cm long; ligule serrate and glabrous. **Flowering** branches with leaf-blades 2.5–4.5 × 4–8 mm wide, glabrous, lanceolate with a tapering tip. **Spikelet** 5–6 mm long, glabrous; first glumes up to 1.5 mm long and mucronate, second glumes up to 2 mm long and mucronate, third glumes up to 2.5 mm long and acuminate, fourth glumes up to 3.5 mm long and acuminate; lemma and palea up to 6.5 mm long, acuminate, and glabrous; lodicules three up to 1 mm long; stigma three; stamen six.

**Distribution:** Lesser Sunda Islands; Flores Island (Nusa Tenggara Timur) and Sumbawa Island (Nusa Tenggara Barat).

**Habitat:** Grows near the lake in Flores at the altitude of 700–1,083 m and in Sumbawa, this species grows in protected forest and also forest border at an altitude 707 m.

Vernacular names and uses: the vernacular names of this bamboo are *heko* (Flores) and ropeng (Sumbawa). No uses of *C. schmutzii* have been recorded.

**Conservation status:** This bamboo found abundantly in Sumbawa and occupied a large area of the forest. However, the accurate information of the population of *C. schmutzii* is not available, thus, the conservation status is Not Evaluated (NE).

**Notes:** This species originally only found in Manggarai District, Nunang, West Flores that was collected by Schmutz (no. 2789) on 18 November 1971. After his first collection, he collected again in Nunang on 16 January 1976 (no. 3853). Finally, these collections were published by Dransfield (1980) as *Nastus schmutzii*, although without culm-sheath information (now, *N. schmutzii* is a synonym of *C. schmutzii*). This species was also collected by Widjaja (no. 6602) on 20 January 1993 in Perwakilan Komodo-Manggarai District, Werak, Flores. Twenty-two years later, on 20 April 2015, I Gede Tirta (no. 3496) collected this species in Batulanteh Subdistrict, Sumbawa Besar District, Sumbawa. This species was collected again in Batulanteh on 16 May 2016 by Lulut D. Sulistyawingsih (no. 297). This new record showed that there is a biogeographical relation between Sumbawa and West Flores. Although Monk et al. (1997) mentioned that Lombok and Sumbawa are the easternmost islands of the Sunda Arc. The discontinuity between the Sunda Arc and the Banda Arc is marked by the Sumba Fracture separating Sumba and Flores from Sumbawa (Hutchinson 1992). In fact, bamboo which originally found in West Flores is also still found in Sumbawa.

**Specimens examined:** Lesser Sunda Islands: Flores, Manggarai, Nunang, Todong Rancang, 18 November 1971, *Schmutz 2789* (BO); Flores, Nunang, 16 January 1976, *Schmutz 3853* (BO);
Flores, Perwakilan Komodo-Manggarai District, Werak Subdistrict, Kp. Taal, 20 January 1993, Wi-
djaja 6602 (BO); Sumbawa, Sumbawa Besar Dis-
trict, Batulanteh Subdistrict, Ds. Batu Dulang, Re-
nik Forest, 08°36’123”S 117°14’369”E, 20 April
2015, I Gede Tirta 3496 (BO); Sumbawa, Sum-
bawa Besar, KPPH Batulanteh, Berang Hode, 08°
35’613”S 117°15’870”E, 16 May 2016, LD Su-
listyaningsih 297 (BO).

Figure 1. Culm-sheath of Chloothamnus schmutzii (S.Dransf.) Widjaja, horn-like auricle with long bristles (inset). Based on a specimen of Widjaja 6602 (BO).
Notes on the Genus *Chloothamnus* in Malesia

*Chloothamnus* can be recognized with scrambling culms with one dominant lateral branches and several smaller branches. The lateral branches elongated and climbing to another tree. Culm-sheath auricles rounded with bristles. Blades of culm-sheath triangular and spreading. Leaf-sheath auricles rounded. This species is mostly grown in ultrabasic soil and limestone in the highland forest (Ervianti *et al.* 2019).

*Chloothamnus* was first described by Buse in 1854 (Henrard 1936) based on *Chloothamnus chilianthus* Buse as a type species (see Miquel 185−1857). In fact, *C. chilianthus* is a synonym of *C. elegantissimus* (Hassk.) Henrard (Holttum 1955, Wong & Dransfield 2016), thus, *C. chilianthus* is an invalid name. Holttum (1955) then transferred all members of *Chloothamnus* (and also *Oreiostachys* Gamble) to *Nastus* Juss. joined with African *Nastus*. Recently, Chokthaweepanich (2014), Wong *et al.* (2016), and Zhou *et al.* (2017) confirmed that the Malesian *Nastus* were clearly misplaced in that genus. Wong & Dransfield (2016) then proposed three distinct genera of Malesian *Nastus*: *Chloothamnus* Buse, *Ruhoglandia* S.Dransf. & K.M.Wong, and *Widjajachla*K.M.Wong & S.Dransf. Hereinafter, Widjaja & Wong (2016) recombined the nine species of Malesian *Nastus* into *Chloothamnus*.

According to Widjaja & Wong (2016), there are 11 species of *Chloothamnus* in the world and all of them occurs in Malesia (Fig. 2). Eight of them are found in Papua New Guinea i.e. *C. elatooides* (Widjaja) Widjaja, *C. elatus* (Holttum) Widjaja, *C. glaucus* (Widjaja) Widjaja, *C. holltumianus* (Bor) Widjaja, *C. longispiculus* (Holttum) Widjaja, *C. obtusus* (Holttum) Widjaja, and *C. rudimentifer* (Holttum) Widjaja, and *C. schlechteri* (Pilg.) Henrard (see Bor 1972; Widjaja 1997; Widjaja & Wong 2016). Two species are found in LSI i.e. *C. reholttumianus* (S.Soenarko) Widjaja which endemic to Sumba Island (Soenarko 1977; Widjaja 2001a; Widjaja & Karsono 2005) and *C. schmutzii* (S.Dransf.) Widjaja which previously endemic to Flores Island (Dransfield 1980; Widjaja 2001a) but now found in Sumbawa Island. Only one species is found in Java, *C. elegantissimus* (Widjaja 2001b) and endemic to West Java (Dransfield & Widjaja 1995). In addition, actually, Ervianti *et al.* (2019) noted that *Chloothamnus* also occurred in Sulawesi, particularly at Mt Mekongga, based on a specimen of Widjaja 8863 (BO!, K, L). However, this *Chloothamnus* is still unidentified to species level and it has been put under the *Chloothamnus* at the time being, due to peculiar bud character (Ervianti *et al.* 2019).

Figure 2. A distribution of genus *Chloothamnus* in Malesia. The number shows the number of species.
According to Holttum (1955), *N. elegantissimus* (now *C. elegantissimus*) found in Java and also Sumatra. The Sumatran specimen collected by *Junghuhn s.n.* from Hoch-Angkola, South Tapanuli as a type of *C. chilianthus* Buse in *Miq. Pl. Jungh.* (see Miquel 1851–1857; Henrard 1936). The specimens of *Junghuhn s.n.* for *C. chilianthus* was kept in L and Holttum (1955) also include this species as the synonym of *N. elegantissimus*. A further study need to be done to review whether the type specimens of *C. chilianthus* (*Junghuhn s.n.*) from Sumatra is same as the type of *N. elegantissimus* (*Junghuhn 143*) which collected from Java, although we doubt this species occurs in Sumatra because the author (EAW) has collected extensively in Sumatra and did not record the presence of this species until now. It could be that Junghuhn’s material collected in Java before 1839 and after March 1842, and in Sumatra during 1840–1842 had been mixed up (Wong & Dransfield 2016). An exploration to Angkola need to be done to find out whether this species can be found in that area, and then after a careful study on both type specimen of Junghuhn and result of the exploration, a conclusion can be made.

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