



The genus *Mycaranthes* Blume (Orchidaceae) in Thailand

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ABSTRACT: A taxonomic account of the genus *Mycaranthes* in Thailand is presented based on herbarium specimens and fresh material from field surveys. Five species are recognized including two new species records: *M. clemensiae* and *M. latifolia*. A key to the species, descriptions, and illustrations are provided. In addition, lectotypes of *Eria clemensiae*, *E. kingii* Hook.f., and *Mycaranthes oblitterata* are designated here.

KEY WORDS: diversity, *Eria*, lectotype, *M. brevicaulis*, *M. clemensiae*, *M. floribunda*, *M. latifolia*, *M. oblitterata*, new records.

INTRODUCTION

The genus *Mycaranthes* was established by Blume (1825), including three species from Java: *M. lobata* Blume, *M. latifolia* Blume and *M. oblitterata* Blume. To date, the genus contains approximately 40 accepted species (Ng *et al.*, 2018; Ormerod *et al.*, 2019), and is mainly represented in Sumatra, Java and Borneo with a few species ranging to India, Nepal, Bhutan, China, Thailand, Indochina, New Guinea and the Philippines (Seidenfaden, 1982; Pridgeon *et al.*, 2005). Members of the genus tend to be relatively large plants with cylindrical stems, which have long lanceolate leaves along their length. The inflorescences are terminal or subterminal, racemose or paniculate, and are densely covered with stellate hairs. Each inflorescence produces numerous small flowers with widely spreading sepals, tomentose on the outer surface, and a labellum with well-developed side lobes. The labellum has a farinaceous powdery median ridge connecting a proximal callus to a large mealy callus on the mid-lobe (Davies and Turner, 2004; Pridgeon *et al.*, 2005). Recent molecular results confirmed that *Mycaranthes* is a member of subtribe Eriinae and is closely related to *Oxystophyllum* Blume and *Trichotosia* Blume (Ng *et al.*, 2018).

The first floristic account of *Mycaranthes* in Thailand was provided by Seidenfaden and Smitinand (1960), who published a preliminary list of Thai orchids which included *M. floribunda* (D. Don) S.C. Chen & J.J. Wood (as *Eria paniculata* Lindl.) and *M. oblitterata* Blume (as *E. ridleyi* Rolfe). More than two decades later, Seidenfaden (1982) described *M. brevicaulis* (Seidenf.) Schuit. *et al.* (as *Eria brevicaulis* Seidenf.) from Khao Luang, Nakhon Si Thammarat province. However, further new species records are expected from unexplored areas, especially in southern part of the country. The aim of the present study was to prepare a revision of *Mycaranthes* in the framework of the orchid flora of Thailand. In this study, we have re-examined all

available material and provide an updated treatment of the genus in Thailand, including two new species records (*M. clemensiae* and *M. latifolia*).

This study is based on herbarium specimens in BCU, BK, BKF, C, K, PSU and QBG. Morphological characters were studied using stereo and compound microscopes. The distinctive characters of the species were illustrated with the aid of an Olympus drawing tube. Ecological and geographical data were compiled from field observations, specimen labels and publications. In addition, descriptions, illustrations and a key to species are provided.

TAXONOMIC TREATMENT

Mycaranthes Blume, Bijdr. Fl. Ned. Ind.: 352. 1825.

Type species: *Mycaranthes lobata* Blume.

For synonyms see Pridgeon *et al.* (2005) [excluding *Eria* Lindl. sect. *Strongyleria* Pfitzer].

Epiphytic, lithophytic or rarely terrestrial herbs. *Rhizome* short, creeping. *Stems* short or elongate, usually slender, cylindrical, of few to many internodes, non-pseudobulbous, bearing leaves along the length. *Foliage leaves* conduplicate, distichous, usually long and narrow, glabrous, herbaceous to coriaceous, articulate, base tightly enveloping stem, leaf sheaths persistent. *Inflorescences* subterminal or terminal, racemose or paniculate, accrescent, densely covered with stellate hairs, many-flowered; floral bracts triangular to ovate-lanceolate, broad at the base and covered in stellate hairs, caducous or persistent. *Flowers* small, resupinate, spirally arranged, usually creamy white or greenish yellow and sometimes spotted purple. *Sepals* widely spreading, outer surfaces tomentose; dorsal sepal elliptical to triangular, acute to obtuse; lateral sepals obliquely triangular, broadened at base, acute to obtuse. *Petals* free, narrow, smaller than sepals. *Labellum* distinctly 3-lobed or simple, rigid, perpendicular to column-foot, callus bipartite, farinose, with a powdery median ridge that usually ends in a protruding globular callus. *Column* erect; anther hat-shaped, ventral side almost flat, hinged at base through a

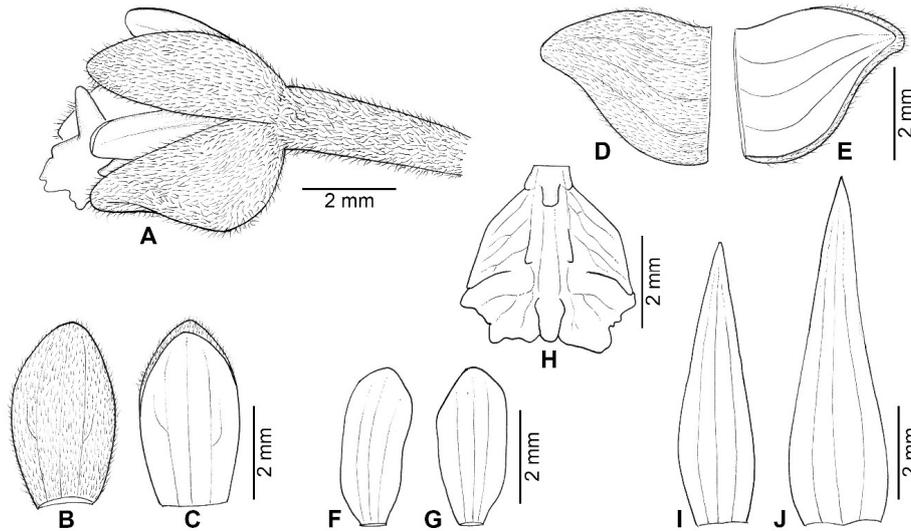


Fig. 1. *Mycaranthes brevicaulis*: A: Flower. B–C: Dorsal sepal. D–E: Lateral sepals. F–G: Petals. H: Labellum. I–J: Floral bracts.

thin filament; pollinia 8, clavate, equal in size, with a common caudicle; stigma almost circular or semi-circular. *Ovary* slender, tomentose. *Fruit* a cylindrical capsule.

A genus of ca. 40 species, distributed from the eastern Himalayas of India, Nepal, and Bhutan, across northeast India to southern China, Laos, Vietnam, Thailand, Peninsular Malaysia, Borneo, Sumatra, Java, the Philippines and New Guinea; the center of diversity is in western Malesia; 5 species in Thailand.

Keys to species of *Mycaranthes* in Thailand

- 1a. Mid-lobe of labellum forming a narrow claw. Column and column-foot pink to purple. 2
- 1b. Mid-lobe of labellum not forming a narrow claw. Column and column-foot pale green with purple to reddish edges. 3
- 2a. Floral bracts ovate to ovate-lanceolate. Side lobes of labellum linguulate; mid-lobe obtriangular, more or less 2-lobed, margins of the lateral lobules deeply incised. 2. *M. clemensiae*
- 2b. Floral bracts narrowly lanceolate to lanceolate-triangular. Side lobes of labellum obliquely ovate-triangular; mid-lobe obovate, acute to apiculate, margins nearly entire. 5. *M. oblitterata*
- 3a. Sepals dark purple to reddish-brown, sparsely covered with yellowish-brown hairs; mid-lobe of labellum constituting less than 1/3 of the total labellum length. Floral bracts ovate to ovate-triangular. 4. *M. latifolia*
- 3b. Sepals pale green to yellowish-green, densely covered with white hairs; mid-lobe of labellum constituting more than 1/3 of the total labellum length. Floral bracts narrowly lanceolate to lanceolate-triangular. 4.
- 4a. Stem elongate, to 50 cm long, not completely covered by leaf bases. Side lobes of labellum subovate-falcate, apex obtuse; mid-lobe constituting ca. 1/2 of the total labellum length, margins wavy-erose to irregularly fimbriate. 3. *M. floribunda*
- 4b. Stem short, less than 10 cm long, completely covered by leaf bases. Side lobes of labellum triangular-falcate, apex acute; mid-lobe constituting ca. 1/3 of the total labellum length, margins somewhat irregular. 1. *M. brevicaulis*

1. *Mycaranthes brevicaulis* (Seidenf.) Schuit., Y.P. Ng & H.A. Pedersen, Bot. J. Linn. Soc. 186: 196. 2018.≡ *Eria brevicaulis* Seidenf., Opera Bot. 62: 71, fig. 36. 1982. **Type:** Thailand. Nakhon Si Thammarat, Khao

Luang, 23 May 1968, *Beusekom & Phengkklai* 973 (**holotype:** C!, **isotypes:** BKF!, C!).

Figs. 1 & 6A–B.

Epiphytic herb. *Stems* stout, internodes short, completely covered by leaf bases. *Foliage* leaves many, close together and overlapping at their base; laminae linear, acute, 20–35 by 1.5–2.5 cm, coriaceous. *Inflorescences* 1 or 2, 20–30 cm long, pubescent with dense whitish hairs; floral bracts lanceolate-triangular, acuminate, 4.1–8.2 by 1.6–2.1 mm. *Flowers* not opening widely. *Sepals* yellowish-green, outer surface densely covered with white hairs; dorsal sepal elliptic-oblong, obtuse, 3.9–4.1 by 2.1–2.2 mm, concave; lateral sepals obliquely triangular, acute, 3.6–3.8 mm long, ca. 2.5 mm wide at base, concave. *Petals* pale green, oblong, obtuse, 3.2–3.4 by 1.3–1.5 mm, glabrous. *Labellum* 3-lobed, greenish-white with dark purple spots, obovate in overall outline when flattened, 3.6–4.1 by 3.5–4.0 mm, bearing two smooth keels and a median powdery ridge in between with a conical powdery callus at the base of labellum and a larger one on mid-lobe, basal callus ca. 0.5–0.6 mm high, apical callus ca. 0.8 mm high; side lobes triangular-falcate, acute; mid-lobe reniform with irregular entire edges, c. 4 mm broad, deflexed. *Column* pale green, ca. 0.5 mm long; column-foot ca. 2.5 mm long, pale green with purple to reddish sides; anther dark purple, suborbicular, c. 1 mm in diameter; pollinia ca. 0.3 mm long. *Ovary* (including pedicel) 7–10 mm long, greenish-brown, densely covered with white hairs. *Capsule* greenish, 15–18 by 2.5–4 mm.

Habitat and Ecology: Epiphytic on tree trunks and branches in hill evergreen forest; 1400–1700 m elevation. Flowering and fruiting was observed between March and May.

Distribution: Endemic to Thailand. So far *Mycaranthes brevicaulis* is known only from Khao Luang, Nakhon Si Thammarat province, Southern Thailand; however, it may also occur in other areas in Southern

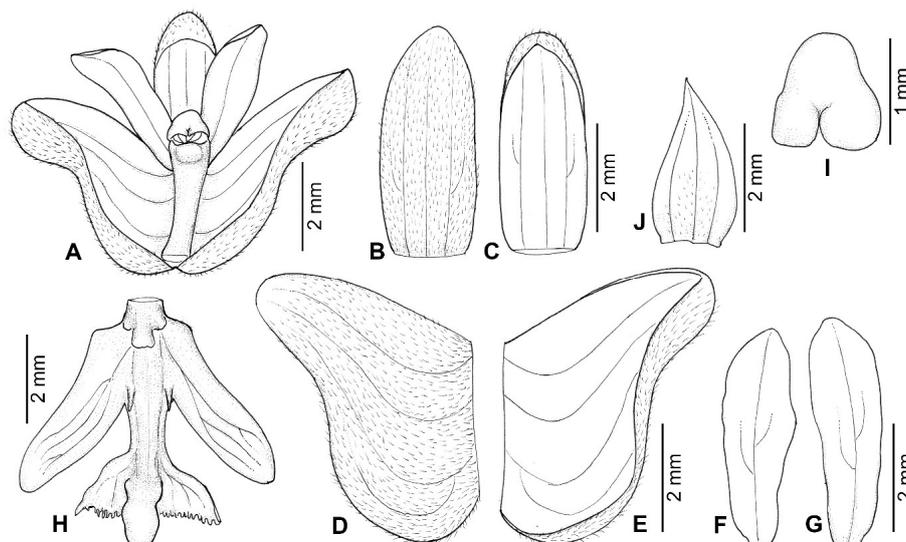


Fig. 2. *Mycaranthes clemensiae*: A: Flower (labellum removed). B–C: Dorsal sepal. D–E: Lateral sepals. F–G: Petals. H: Labellum. I: Anther. J: Floral bract. All drawn by S. Chantanaorrapint.

Thailand and Peninsular Malaysia with similar climatic conditions and vegetation type.

Additional specimen examined: THAILAND. Nakhon Si Thammarat, Khao Luang National Park, Khao Luang, 1600 m, 30 Apr. 1928, *Kerr 591* (BK, K); 18 March 2010, *Chamchumroon et al. 3668* (BKF); Khao Luang summit, ca. 1700 m, 18 Mar. 2013, *Chantanaorrapint et al. 8* (PSU); ca. 1400 m, 23 Apr. 2014, *Rojchanaumpawan 151* (PSU).

Notes: *Mycaranthes brevicaulis* was first described as *Eria brevicaulis* by Seidenfaden (1982) based on only two collections from Khao Luang, Nakhon Si Thammarat province. Based on morphological characters and molecular results, it was transferred to *Mycaranthes* by Ng et al. (2018). Seidenfaden noted that this species closely resembles *Eria paniculata* (= *M. floribunda*). An examination of the type specimens and several other collections of both species, however, confirmed that *M. brevicaulis* is quite different from *M. floribunda* in having very short stems, an oblong dorsal sepal, slightly narrower petals and a shorter mid-lobe to the labellum.

2. *Mycaranthes clemensiae* (Leav.) Cootes & W. Suarez, Austral. Orchid Rev. 73(3): 23. 2008. ≡ *Eria clemensiae* Leav., Philipp. J. Sci., C 4: 220, 238. fig. 19. 1909. **Type:** Philippines. Mindanao Island, Lake Lanao, Camp Keithley, June 1906, *M. S. Clemens 602* (**lectotype:** AMES00099170 selected here; **isolectotype:** K000827443, US00093958 image!). **Fig. 2 & 6C–D.**

Epiphytic herb. *Stems* elongate, to 50 cm long, 5–7 mm in diameter, internodes 2.5–4 cm long. *Foliage leaves* many, sheaths longer than internodes; laminae linear-lanceolate, acuminate, 14–20 by 1.7–2.5 cm, herbaceous. *Inflorescences* 1–3, 15–25 cm long, with dense white stellate hairs, many-flowered; rachis 8–15 cm long; floral bracts ovate-lanceolate to subtriangular, acute to acuminate, 3–5 by 1.4–1.7 mm, erect-spreading to reflexed. *Flowers* yellowish to pale brown. *Sepals* covered with whitish hairs; dorsal sepal oblong, obtuse,

3.8–4.5 by 1.8–2 mm, cucullate; lateral sepals more or less obliquely triangular, falcate, obtuse, 5.5–6.7 mm long, 3.8–4.5 mm wide at base. *Petals* oblong, obtuse, 3.5–4.1 by 1–1.3 mm, glabrous. *Labellum* 3-lobed, obovate in overall outline when flattened, 4.5–5 by 4.8–5.5 mm, yellowish with dark purple spots, bearing two smooth keels and a median powdery ridge in between with a globular powdery callus at the base of labellum and a larger one on mid-lobe; side lobes lingulate, obtuse, 2.5–3 by 1–1.2 mm; mid-lobe obtriangular, truncate, margin deeply incised, 2.3–2.7 mm long, 2.8–3.3 mm wide near apex, claw c. 1.2 mm long. *Column* light purple, 0.4–0.6 mm long; column-foot purple, 1.7–2 mm long; anther purple, conical, c. 0.9 mm high; pollinia c. 0.5 mm long. *Ovary* (including pedicel) 8–10 mm long, light purple, densely covered with white hairs. *Capsule* not seen.

Habitat and Ecology: Epiphytic on tree trunks and branches in hill evergreen forest; ca. 1000 m elevation. Flowering: March–May.

Distribution: Peninsular Malaysia and Philippines.

Additional specimen examined: THAILAND. Yala, Betong, Ban Piyamit, ca. 1000 m, 17 April 2010, *Wai 1895* (PSU); 21 April 2013, *Wai 2274* (PSU).

Notes: *Mycaranthes clemensiae* resembles *M. oblitterata* in the labellum mid-lobe forming a narrow claw. However, *M. clemensiae* differs from *M. oblitterata* by the larger flower size, the wider labellum mid-lobe with incised margin and the conical anther. This species is a new national record for Thailand. *Mycaranthes clemensiae* was originated described as *Eria clemensiae* by Leavitt (1909) based on *Clemens 602* from Mindanao, the Philippines. In the protologue, Leavitt did not cite a holotype, therefore, it became necessary to designate a lectotype. We here designate Clemens's collection (*Clemens 602*) in AMES (AMES00099170) as the lectotype of *M. clemensiae* (≡ *Eria clemensiae*).

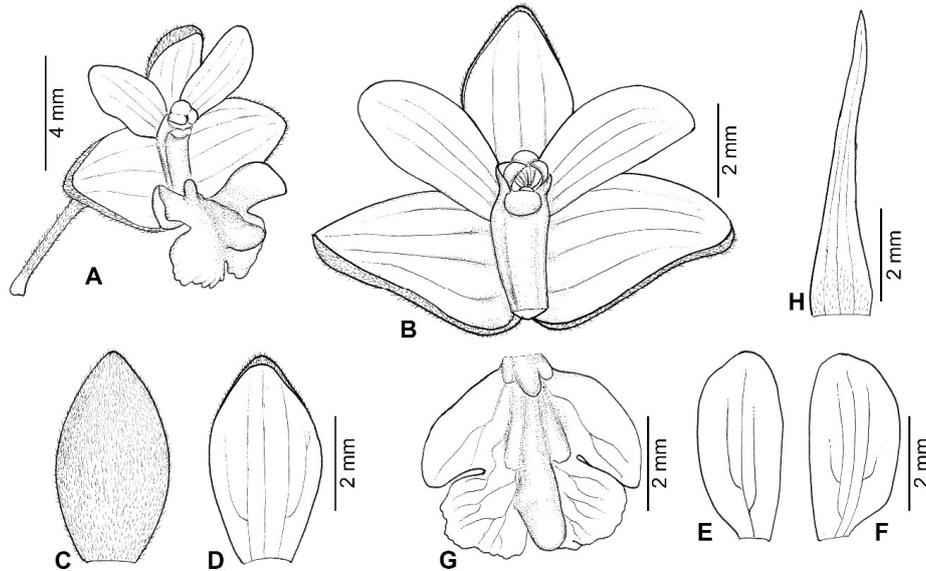


Fig. 3. *Mycaranthes floribunda*: A: Flower. B: Flower (labellum removed). C–D: Dorsal sepal. E–F: Petals. G: Labellum. H: Floral bract. All drawn by S. Chantanaorrapint.

3. *Mycaranthes floribunda* (D. Don) S.C. Chen & J.J. Wood in Z. Wu et al. (eds.), Fl. China 25: 348. 2009. = *Dendrobium floribundum* D. Don, Prodr. Fl. Nepal. 34. 1825. **Type:** Nepal. Without locality, *Wallich s.n.* (not located, probably in CAL).

Figs. 3 & 6F–G.

= *Eria paniculata* Lindl. in Wallich, Pl. As. Rar. 1: 32. 1830. *Mycaranthes paniculata* (Lindl.) Schuit., Y.P. Ng & H.A. Pedersen, Bot. J. Linn. Soc. 186(2): 196. 2018. **Type:** INDIA. Pundua, *Wallich 1971* (**holotype:** probably in CAL, **isotypes:** E, K, P image!) For additional synonyms see Chen *et al.* (2009).

Epiphytic herb. *Stems* elongate, to 40 cm long, 5–7 mm in diameter, internodes 2.5–4 cm long. *Foliage leaves* many, sheaths longer than internodes; laminas linear to narrowly lanceolate, acuminate, 12–20 by 0.6–1.2 cm, herbaceous. *Inflorescences* 1–2, 13–20 cm long, with dense white cottony hairs, many-flowered; rachis 10–15 cm long; floral bracts narrowly lanceolate to subtriangular, acuminate, 4–8 by 0.9–1.4 mm, reflexed. *Flowers* pale green. *Sepals* covered with whitish hairs; dorsal sepal ovate-elliptic, subacute, 4.4–4.8 by 2.2–2.4 mm, concave; lateral sepals obliquely ovate to triangular, subacute, 4.5–4.8 mm long, 2.8–3.1 mm wide at base. *Petals* obliquely oblong, obtuse, 3.7–4 by 1.8–2.0 mm, glabrous. *Labellum* 3-lobed, fan-shaped in overall outline when flattened, 4.2–4.6 by 4.5–4.8 mm, yellowish-green with purple spots, bearing two smooth to dentate keels and a median powdery ridge in between with a globular powdery callus at the base of labellum and a larger one on mid-lobe; side lobes obliquely ovate-triangular, obtuse; mid-lobe reniform, emarginate, 2.2–2.5 by 4.1–4.5 mm, deflexed, margins erose to irregularly fimbriate. *Column* light green, less than 1 mm long; column-foot pale green with purple to reddish sides, 2.7–3 mm long; anther dark purple, suborbicular, ca. 1 mm in diameter; pollinia ca. 0.3 mm long. *Ovary* (including

pedicel) 8–12 mm long, greenish, densely covered with white hairs. *Capsule* greenish-white, 12–16 by 2.5–3.5 mm.

Habitat and Ecology: Epiphytic on tree trunks and branches from lowland to hill evergreen forests; 600–1400 m elevation. Flowering: December–June.

Distribution: Nepal, NE India, Bhutan, Myanmar, China, Laos, Cambodia and Vietnam.

Additional specimen examined: THAILAND. Chiang Mai, 9 June 2016, *C. Glamwaewwong 179/60* (QBG). Loei, 29 March 1983, *Menzies & Du Puy 394* (K); Phu Kradueng National Park, 1200 m, 13 March 1924, *Kerr 144* (BK); 10 February 1931, *Kerr 903* (BK); 7 April 1994, *Thaithong s.n.* (BCU); 8 March 2015, *Jang 20* (BKF); Phu Luang, 1400 m, 20 February 2016, *Chantanaorrapint & He s.n.* (PSU). Dan Sai, 900 m, 7 April 1922, *Kerr 446* (BK, K). Chaiyaphum, Thung Kamung, Phu Khieo, 23 February 1931, *Kerr 919* (BK, C); 21 March 1989, *Songkakul 53* (BKF). Trat, Khao Kuap, 600–700 m, 24 December 1929, *Kerr 772* (BK, C).

Notes: In Thailand, *Mycaranthes floribunda* was previously reported as *Eria paniculata* Lindl. (Seidenfaden, 1982). Chen *et al.* (2009) treated the latter as a synonym of *M. floribunda*, a common species in the Himalayan and Indochina regions. It is easily recognized by its slender, elongate stem, its leaves with linear to narrowly lanceolate laminas and its reniform labellum mid-lobe.

4. *Mycaranthes latifolia* Blume, Bijdr. Fl. Ned. Ind.: 352. 1825. **Type:** Indonesia. Java, Salak, *Blume s.n.* (not located).

Figs. 4 & 4E.

For synonyms see Seidenfaden & Wood (1992).

Epiphytic herb. *Stems* stout, to 30 cm long, internodes short. *Foliage leaves* many, close together and overlapping at their base; laminas linear, acute, 20–45 by 2.2–3.5 cm, coriaceous. *Inflorescences* 2–4, 25–40 cm long, pubescent with dense greyish-white hairs; floral bracts ovate to ovate-triangular, acute, 2.5–3.2 by 1.8–2.2 mm, deflexed. *Flowers* yellowish-green with dark purple to reddish-brown spots. *Sepals* yellowish-

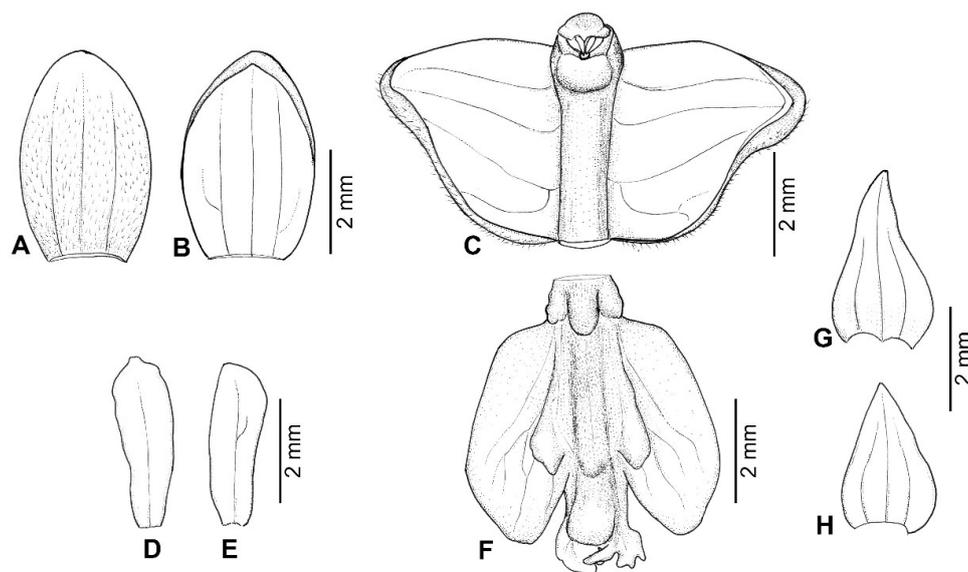


Fig. 4. *Mycaranthes latifolia*: A–B: Dorsal sepal. C: Column and lateral sepals. D–E: Petals. F: Labellum. G–H: Floral bracts. All drawn by S. Chantanaorrapint.

green at base, more or less red-spotted, dark purple to reddish-brown at apex, densely covered with yellowish-brown hairs; dorsal sepal ovate-elliptic, obtuse, 3.9–4.2 by 2.4–2.6 mm, hood-like; lateral sepals obliquely triangular, subacute, 3.8–4 mm long, ca. 4 mm wide at base, concave. *Petals* yellowish-green with reddish spots, narrowly oblong, obtuse, 2.6–3 by 1.1–1.3 mm, glabrous. *Labellum* 3-lobed, obovate in overall outline when flattened, 4.6–5.2 by 4.1–4.6 mm, bearing two smooth to dentate keels and a median powdery ridge in between with a 3-lobed globular powdery callus at the base of labellum and a larger one on mid-lobe; side lobes oblong-falcate, obtuse to rounded; mid-lobe small, deflexed, c. 2 mm long, margins deeply incised. *Column* reddish, ca. 0.5 mm long; column-foot c. 4 mm long, pale yellow with purple to reddish sides; anther dark purple, suborbicular, c. 1 mm in diameter; pollinia c. 0.3 mm long. *Ovary* (including pedicel) 7–10 mm long, yellowish green, densely covered with white hairs. *Capsule* not seen.

Habitat and Ecology: Epiphytic on tree trunks and branches in hill evergreen forest; 800–1000 m elevation. Flowering: January–September.

Distribution: Peninsular Malaysia, Borneo, Sumatra and Java.

Additional specimen examined: THAILAND. Narathiwat, Hala-Bala, Khao Leepae, 800–970 m, 28 September 2006, Rattanabunno 32 (BKF); 18 January 2008, Niyomdham 8130 (BKF). Yala, Betong, Ban Piyamit, ca. 1000 m, 7 May 2008, Wai 1069 (PSU); 31 January 2010, Wai 1774 (PSU).

Notes: *Mycaranthes latifolia* is easily distinguished from the other species of *Mycaranthes* in Thailand by the sepals bearing reddish-brown spots and the very small mid-lobe of labellum (constituting less than 1/3 of the total labellum length). This species is reported here as new to Thailand.

5. *Mycaranthes obliterata* Blume, Bijdr. Fl. Ned. Ind.: 353. 1825. \equiv *Eria obliterata* (Blume) Rchb.f., Bonplandia 5: 55. 1857. **Type:** Indonesia. Java, Salak, September 1822, Blume s.n. (**lectotype:** L0059927 image! selected here).

Figs. 5 & 6H.

= *Eria kingii* Hook.f., Fl. Brit. India 5: 790. 1898 (non F. Muell. 1882).—*E. scortechinii* Stapf, Trans. Linn. Soc. London, Bot. 4: 237. 1894 (non Hook.f. 1890).—*E. major* Ridl., J. Linn. Soc., Bot. 32: 288. 1896.—*E. ridleyi* Rolfe, J. Linn. Soc., Bot. 42: 150. 1914. **Type:** Malaysia. Peninsular Malaysia, Perak, August 1885, King 8133 (**lectotype:** K000827347 image! selected here).

For synonyms see Seidenfaden & Wood (1992).

Epiphytic herb. *Stems* elongate, to 40 cm long, 5–7 mm in diameter, internodes 2.5–4 cm long. *Foliage leaves* many, sheaths longer than internodes; lamina linear-lanceolate, acuminate, 14–20 by 1.7–2.5 cm, herbaceous. *Inflorescences* 1–3, 15–25 cm long, with dense white stellate hairs, many-flowered; rachis 8–15 cm long; floral bracts ovate-lanceolate or subtriangular, acute to acuminate, 3–5 by 1.4–1.7 mm, erect-spreading to reflexed. *Flowers* yellowish-green. *Sepals* covered with whitish hairs; dorsal sepal ovate-elliptic, obtuse, 2.7–3 by 1.5–1.8 mm, concave, obtuse; lateral sepals \pm obliquely triangular, 2.7–3.1 mm long, 2.2–2.5 mm wide at base, subacute. *Petals* oblong, acute, 1.7–2 by 0.8–1.1 mm, glabrous. *Labellum* 3-lobed, obovate in overall outline when flattened, 3.3–3.6 by 2.7–3 mm, yellowish green with dark purple spots, bearing two low, smooth keels and a median powdery ridge in between with a globular powdery callus at the base of labellum and a larger one on mid-lobe; side lobes obliquely ovate-triangular, obtuse; mid-lobe obovate, acute to apiculate, 1.6–1.7 mm long, 1.1–1.3 mm wide near apex, clawed, margins nearly entire. *Column* light purple, 0.4–0.6 mm

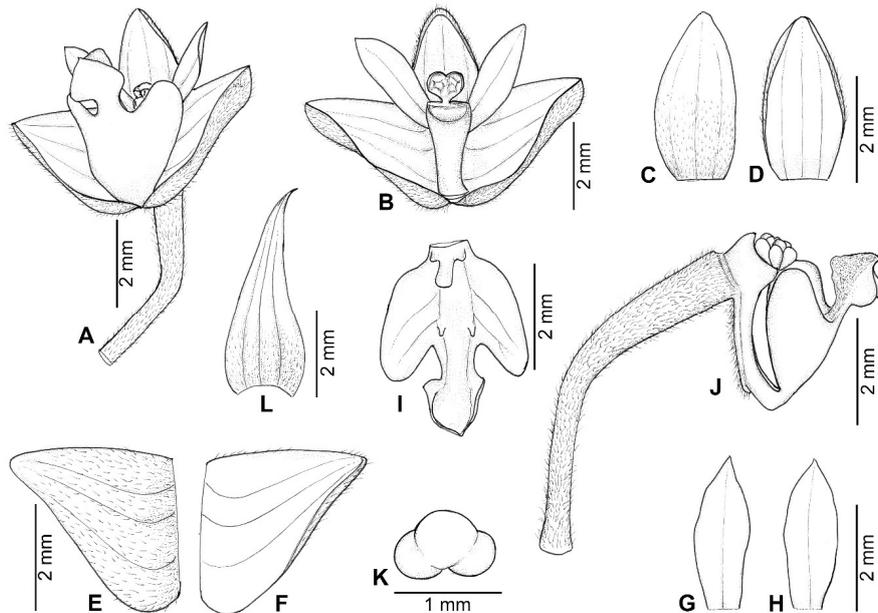


Fig. 5. *Mycaranthes oblitterata*: A: Flower. B: Flower (labellum removed). C–D: Dorsal sepal. E–F: Lateral sepals. G–H: Petals. I: Labellum. J: Column and labellum, side view. K: Anther. L: Floral bract. All drawn by S. Chantanaorrapint.

long; column-foot purple, 1.7–2 mm long; anther purple, suborbicular, ca. 0.9 mm in diameter, nearly flat; pollinia ca. 0.3 mm long. *Ovary* (including pedicel) 5–7 mm long, greenish or purple, densely covered with white hairs. *Capsule* greenish, 6–8 by 1–1.3 mm.

Habitat and Ecology: In Thailand found on tree trunks and branches in hill evergreen forest; 900–1300 m elevation. Flowering: April–August.

Distribution: Cambodia, Vietnam, Peninsular Malaysia, Borneo, Sumatra and Java.

Additional specimen examined: THAILAND. **Trat**, Khao Kuap, 15 June 1930, *Kerr 876* (K). **Krabi**, Khao Phranom Bencha, 1 June 2006, *William 1960* (BKF). **Nakhon Si Thammarat**, Khao Ramrom, ca. 950 m, 29 June 2003, *Sridith et al. 738* (PSU); 13 May 2007, *Chantanaorrapint et al. 04* (PSU). **Phatthalung**, Khao Bantad Wildlife Sanctuary, Khao Samphu, 1300 m, 1 July 2016, *Chantanaorrapint & Suwanmala s.n.* (PSU). **Songkhla**, Khao Keo, 700 m, 27 July 1928, *Kerr s.n.* (K); Ton Nga Chang, ca. 900 m, May 2016, *Rojchanaumpawan 174* (BKF, PSU). **Pattani**, Khao Kalakiri, 900 m, 1 April 1928, *Kerr 556* (BK, K). **Yala**, Betong, Gunong Ina, 1200 m, 12 August 1923, *Kerr 83* (BK, K).

Notes: In Thailand *Mycaranthes oblitterata* was previously reported as *Eria ridleyi* Rolfe (Seidenfaden & Smitinand, 1960; Seidenfaden, 1982). Currently, it is synonymized with *Mycaranthes oblitterata*. The species is easily recognized by its obovate labellum mid-lobe with a narrow claw at its base.

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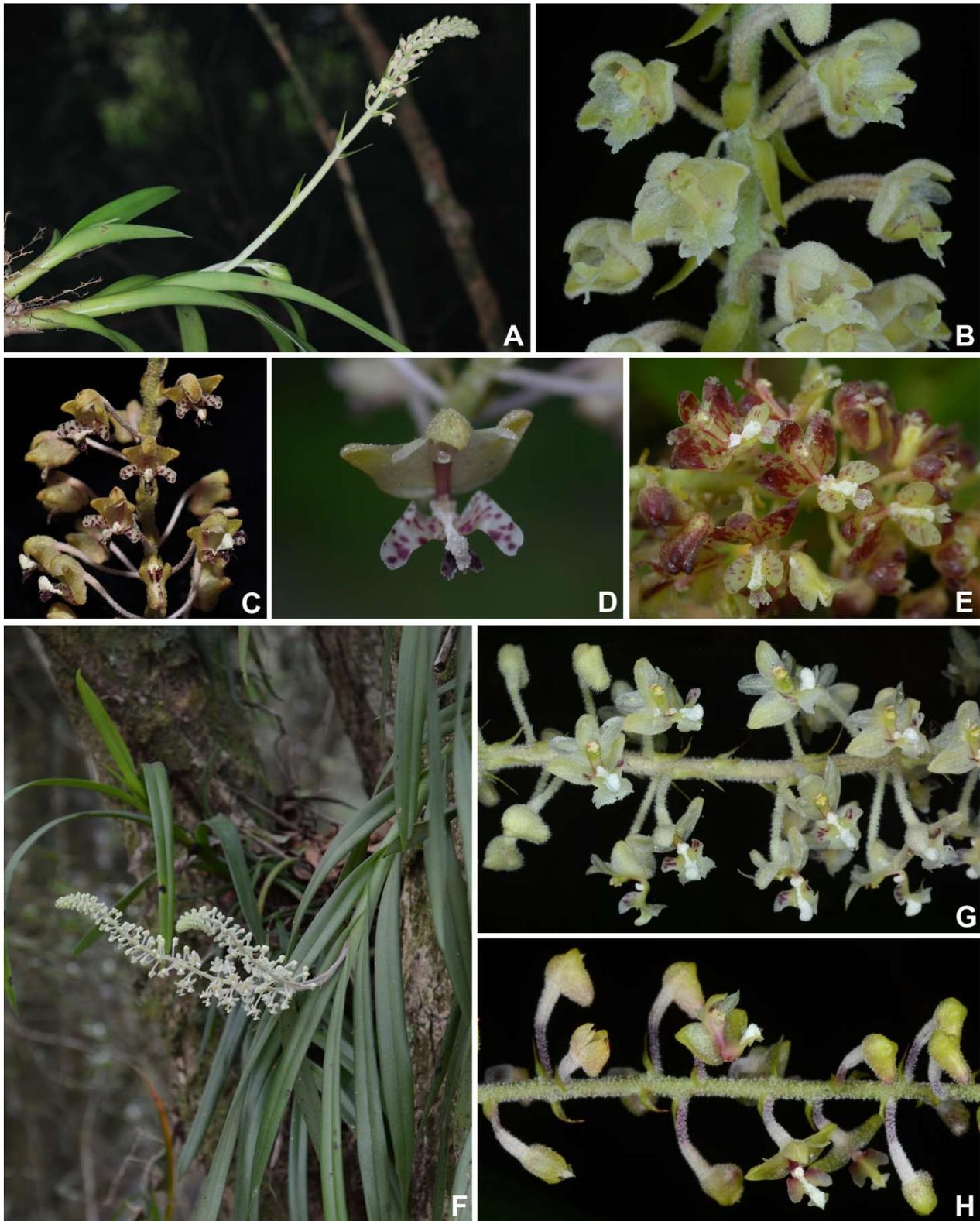


Fig. 6. *Mycaranthes brevicaulis* (A–B): A: Habit. B: Portion of inflorescence. *M. clemensiae* (C–D): C: Portion of inflorescence. D: Close-up of flower. *M. latifolia* (E): E: Flowers. *M. floribunda* (F–G): F: Habit. G: Portion of inflorescence. *M. oblitterata* (H): H: Portion of inflorescence. Photos A–B & F–H by S. Chantanaorrapint; C–E by J. Sae Wai.