

Mycaranthes latifolia (Orchidaceae), a new record for Vietnam

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Abstract: *Mycaranthes latifolia* Blume, distributed from Peninsular Malaysia, Borneo, Sumatra to Java is now reported for the first time in Vietnam. A morphological description, colour plate and line drawings, information on habitat and phenology are provided. An identification key to the species of *Mycaranthes* in Vietnam is also provided.

Keywords: Orchid, *Mycaranthes*, Plant diversity, Plant taxonomy.

Introduction

Mycaranthes Blume (Orchidaceae) was established by Blume (1825) and includes around 40 species, distributed from Nepal to Papua New Guinea (Ormerod *et al.*, 2019). The genus mostly comprises epiphytes lacking pseudobulbs, terete stems and more-or-less long narrowly distichous leaves. The racemes are terminal, covered by stellate hairs, carrying numerous small flowers, abaxially pubescent sepals, distinctly 3-lobed lip, with a farinose mid-ridge connecting calli at base and a large callus on the midlobe of the lip (Pridgeon *et al.*, 2005).

Interesting specimens of *Mycaranthes* were collected from Lam Dong province of Vietnam in 2014 and 2019. The specimen is identified as *Mycaranthes latifolia* Blume based on digital herbarium records

(K, P) and literature (Seidenfaden & Wood, 1992; Comber, 2001; Chantanaorrapint *et al.*, 2020). It forms a new record for Vietnam. The species was wrongly identified previously as *M. oblitterata* Blume (BV484 [VNM00023887!, LE01070241 photo]). The genus is represented by three species in Vietnam, namely, *M. floribunda* (D.Don) S.C.Chen & J.J.Wood, *M. oblitterata* Blume (Seidenfaden, 1992; Averyanov & Averyanova, 2003) and *M. latifolia*. A key for their identification is provided.

Taxonomic Treatment

Mycaranthes latifolia Blume, Bijdr. Fl. Ned. Ind. 7: 352. 1825; Chantanaorr., A.Chantanaorr. & J.Wai, Taiwania 65(3): 361. 2020. *Eria latifolia* (Blume) Rchb.f., Bonplandia (Hannover) 5: 55. 1857, *nom. illeg.*, non Blume 1856; *Pinalia latifolia* (Blume) Kuntze, Revis. Gen. Pl. 2: 678. 1891. Type: INDONESIA, Java, Mt. Salak, *Blume s.n.* (Holo L?).

Eria iridifolia Hook.f., Fl. Brit. India 5: 790. 1890. *Pinalia iridifolia* (Hook.f.) Kuntze, Revis. Gen. Pl. 2: 679. 1891.

Eria bidens Ridl., J. Linn. Soc., Bot. 32: 289. 1896.

Eria longispica Rolfe, Bot. Mag. 133: t. 8171. 1907.

Eria validissima Kraenzl., Beibl. Bot. Jahrb. Syst. 101: 27. 1910.

Figs. 1 & 2

Epiphytic herbs, stem stout 15–35 cm long; leaves 4–6, bases overlapping, linear, 10–40 × 2–3 cm, apex acute, unequally 2-lobed. Inflorescences 1–2,

terminal, 27–45 cm long, peduncle and rachis white hairy; floral bracts yellow, deflexed, oblong, *c.* 2 × 1.5 mm, abaxially pubescent, apex rounded with small mucro. Flowers many, opening starting from base, *c.* 7 mm in diam., greenish-yellow, with dark purple marks along midrib of sepals and petals; lip greenish-yellow with dark purple blotches; pedicels yellowish-green, *c.* 4 mm long, densely brownish-white hairy. Dorsal sepal ovate, *c.* 2.5 mm × 2 mm, apex sub-acute, concave, densely yellowish stellate hairy abaxially; lateral sepals broadly ovate, oblique, *c.* 3.5 × 3 mm, apex sub-acute, concave, densely yellowish stellate hairy abaxially. Petals narrowly oblong, glabrous, *c.* 2.5 × 1 mm, apex acute to sub-acute. Lip 3-lobed, obovate (when flattened), *c.* 4 × 4 mm (across side lobes); mid lobe 2 × 1 mm, apex emarginate, margins deeply erose, deflexed or not; side lobes ovate-triangular to falcate, apex rounded, *c.* 2.5 × 1.5 mm; base of lip with 3-lobed yellowish powdery hairy callus, with middle lobe distinctly larger, powdery hairy median keel, rounded glabrous lateral keels running from base to raised, sub-globose, yellowish powdery callus on mid-lobe (lateral keels end at base of mid-lobe). Column reddish-yellow, *c.* 0.7 mm long, column-foot red, pointing straight downwards, *c.* 2 mm long; densely yellowish hairy; abaxially; anther-cap yellow, *c.* 1 mm in diameter; pollinia 8. Ovary yellowish-green. Capsules not seen.

Flowering & fruiting: Flowering from May to September; fruiting not seen.

Habitat: Grow epiphytically on tree trunks or on small branches in broad-leaved forests in Vietnam. Not common.

Distribution: Vietnam, Thailand, Peninsular Malaysia, Borneo, Sulawesi, Sumatra and Java.

Specimens examined: PENINSULAR MALAYSIA, **Perak**, Tea gardens, 1892, *H.N. Ridley* 2883 (K000827341 digital image!); Lower camp Gunong, Batu Pateh, *L.Jr. Wray* 1173 (K000364362 digital image!). VIETNAM, **Khanh Hoa province**, Hon Ba Nature Reserve, 25.06.2014, *Truong Ba Vuong & Mang Van Lam* BV171 (PSU);

Lam Dong province, Bao Loc district, B'La commune, 15.05.2019, *Truong Ba Vuong & Truong Quang Tam* BV484 (VNM).

Notes: Plants recorded from Vietnam differ from Thai specimens in the shape of the floral bract (oblong, apex rounded, with a small mucro in the middle *vs.* ovate to ovate-triangular, apex acute), broader dorsal sepals and petals (Chantanaorrapint *et al.*, 2020), stellate hairs on sepals (*vs.* simple hairs) (Chantanaorrapint pers. comm., 2020). *M. latifolia* can be easily distinguished from *M. oblitterata* by the presence of a claw between epichile and hypochile of the latter. Its discovery in Vietnam extends its geographic range from the Malesian region to South of Thailand (Narathiwat and Yala) and Vietnam.

All the specimens of this species housed at L (L1529972, L1529971, L1529975, L1529969, L1529968, L1529970, L1529974, L1529973, L1529976) have been wrongly determined as *Trichotosia latifolia* (Blume) Seidenf. (a” *Eria latifolia* Blume not *Eria latifolia* (Blume) Rchb.f.)

Key to the species of *Mycaranthes* in Vietnam

1. Lip with a claw at base of mid lobe
..... *M. oblitterata*
1. Lip without claw at base of mid lobe 2
2. Sepals deep yellow with yellowish brown hairs, dark purple marks in middle, side lobes of lip oblong, falcate *M. latifolia*
2. Sepals light green with white hairs, without any mark, side lobes of lip triangular, oblique
..... *M. floribunda*

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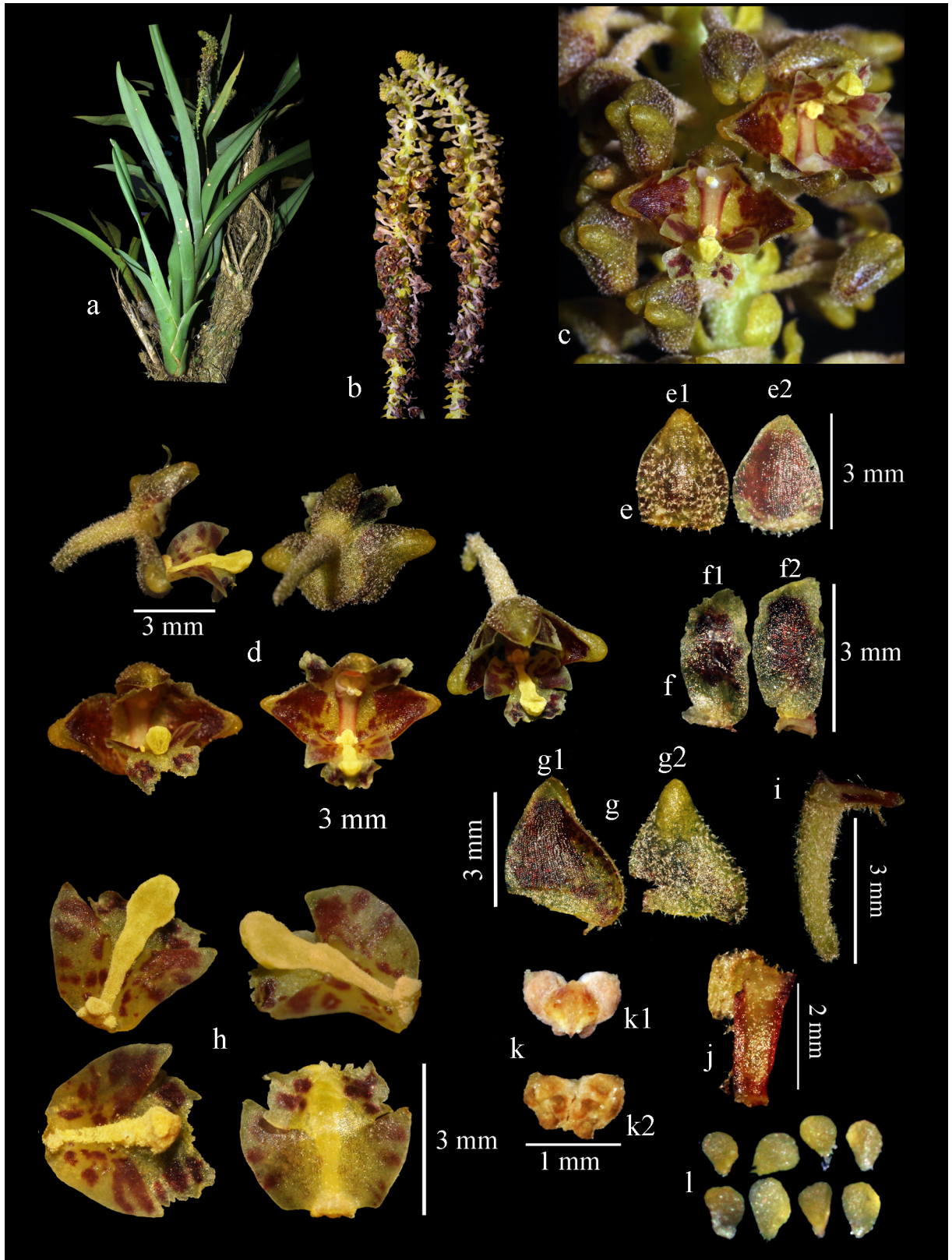


Fig.1. *Mycaranthes latifolia* Blume: **a.** Habit; **b.** Inflorescences; **c.** Close up of flowers; **d.** Different views of flowers; **e.** Dorsal sepal: e1 - abaxial view, e2 - adaxial view; **f.** Petals: f1 - adaxial view, f2 - abaxial view; **g.** Lateral sepals: g1 - adaxial view, g2 - abaxial view; **h.** Lip different views; **i.** Pedicel, ovary and column; **j.** Front view of column; **k.** Anther cap: k1 - abaxial view, k2 - adaxial; **l.** Pollinia (from *Truong Ba Vuong & Truong Quang Tam, BV 484 (VNM 00023887)*; photos by Truong Ba Vuong).

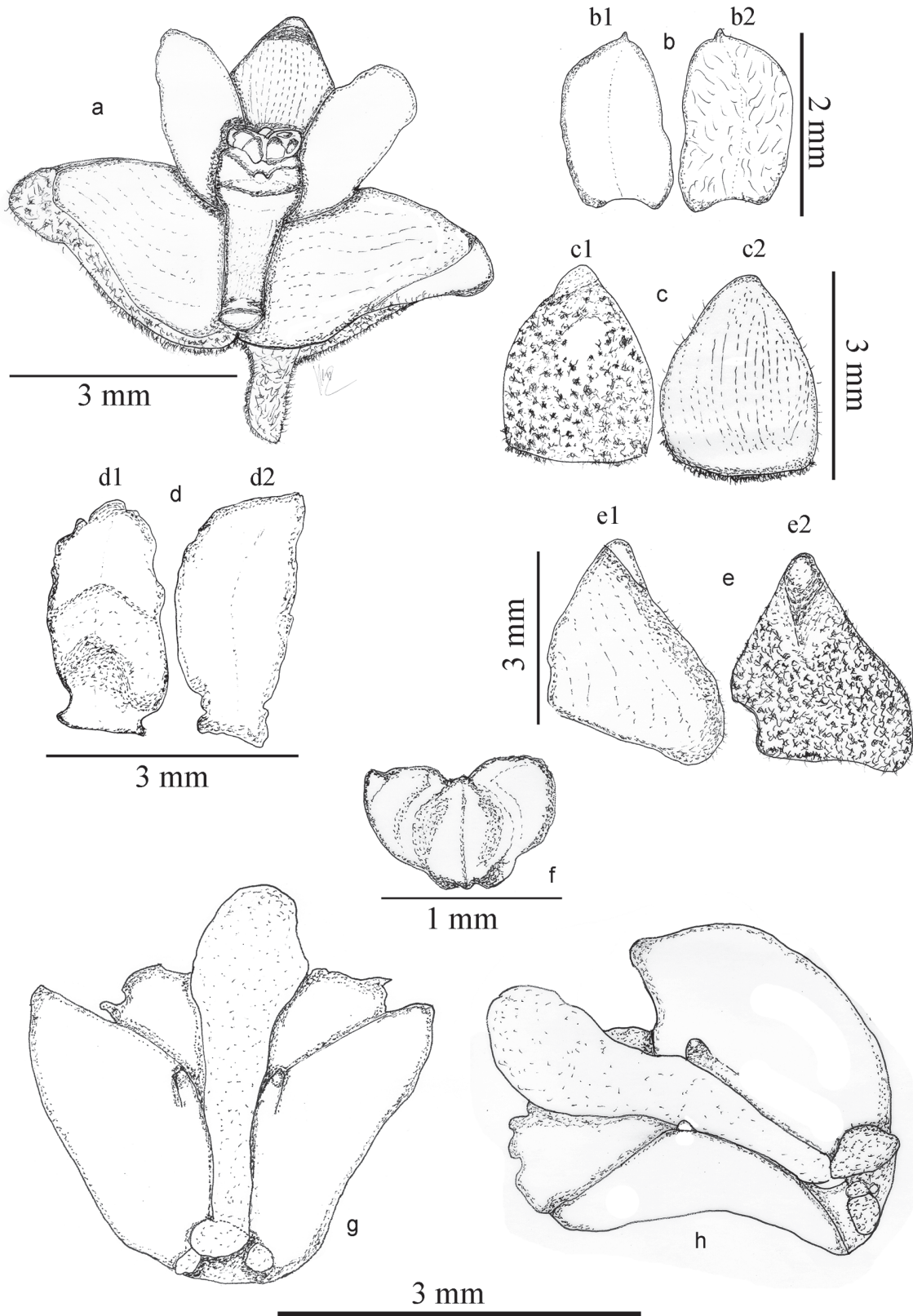


Fig.2. *Mycaranthes latifolia* Blume: **a.** Flower with lip removed; **b.** Floral bract: b1 - adaxial view, b2 - abaxial view; **c.** Dorsal sepal: c1 - abaxial view, c2 - adaxial view; **d.** Petals: d1 - adaxial view, d2 - abaxial view; **e.** Lateral sepals: e1 - adaxial view, e2 - abaxial view; **f.** Anther cap; **g.** Lip - top view; **h.** Lip - side view (from *Truong Ba Vuong & Truong Quang Tam, BV 484 (VNM 00023887)*; drawn by Truong Ba Vuong).

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