Taiwania, 59(3): 206–209, 2014
DOI: 10.6165/tai.2014.59.206

RESEARCH ARTICLE

A New Species of *Eria* (Orchidaceae) from India under the Section *Cylindrolobus*

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(Manuscript received 24 December 2013; accepted 28 April 2014)

ABSTRACT: *Eria gloensis* (section *Cylindrolobus*) from Arunachal Pradesh, India, is described and illustrated. Discussion is provided on its distinguishing characters and the taxa it is allied to.

KEY WORDS: Arunachal Pradesh, *Eria*, *Eria gloensis* sp. nov, Orchidaceae.

INTRODUCTION

Eria Lindl. (s.l.) is a genus generally considered to have about 500 species [Pridgeon (1992), or c. 420 species if one removes the 80 taxa now referred to *Trichotosia* Blume] distributed from Sri Lanka to Tahiti. The plants are usually epiphytic, rarely terrestrial, and occasionally lithophytic. The leaf bearing axes vary from tiny discoid pseudobulbs to pendulous stems more than two metres long. Inflorescences are usually axillary, or less often pseudoterminal, bearing one to many flowers. The flowers are often pubescent, occasionally glabrous. The column always has a foot (or basal extension) to which the labellum is either movably attached, or less commonly forms an almost seamless continuation of the foot. The pollinia are usually eight, clavate to globular, and sometimes unequal in size.

Section *Cylindrolobus* (Blume) Lindl. is a diverse group of about 70 species (Ormerod, ined.) distributed from Sri Lanka to New Guinea. Malesia (Peninsular Malaysia to New Guinea) has about 50 species and is the centre of diversity for the section, whilst the area including Sri Lanka, India and south-east Asia has about 20 taxa. Section *Cylindrolobus* is loosely defined within *Eria* by its caulescent habit, glabrous leaves either spread along the stem or gathered near its apex, axillary (rarely pseudoterminal), short inflorescences of one to few flowers (never in elongate racemes), and often spreading, coloured, relatively large floral bracts.

While preparing a synopsis of the Malesian taxa of section *Cylindrolobus,* the second author found an intriguing unidentified *Eria* among material kept at AMES. The specimen was collected from the Mishmi Hills of Arunachal Pradesh, India by Frank Kingdon Ward in 1949. Upon critical observation and perusal of the relevant literature (Seidenfaden, 1982, 1992; Seidenfaden and Wood, 1992; Chowdhery, 1998; Agrawala, 2009), the specimen was recognised to be an undescribed species of *Eria* section *Cylindrolobus*. The new species is described here and supplemented with an illustration and comparative discussion with allied taxa.

MATERIALS AND METHODS

Eria gloensis Ormerod & Agrawala, *sp. nov.*
Fig. 1 & 3

Type: India, Arunachal Pradesh, Mishmi Hills, Kamlang Valley, Glo, 1220 m, 25 March 1949, *F. Kingdon Ward 18451* (Holotype: AMES!; Isotype: NY [image !]).

Affinis E. arunachalensis A.N. Rao *sed labello bicarinatis (vs. tricarinatis), villi epichilo elongatis et capitatis (vs. brevioribus et ecapitatis) differt.*

Epiphytic herb. Rhizome not seen. Roots terete, pubescent, to 0.5 mm thick. Stem terete, slightly clavately thickened apically, slender, 4 leaved apically, with up to 7 internodes, covered by close-fitting sheaths, 24 cm long, 0.25 cm thick near base, 0.30–0.35 cm thick near apex. Leaves ligulate-lanceolate, acute, thin, slightly stiff, 10–12 cm long, 1.25–1.40 cm wide. Inflorescences axillary, pubescent, borne on the apical 3 cm of the stem, 2 flowered, 1.4–1.6 cm long; peduncle 1.2–1.3 cm long; rachis 0.2–0.3 cm long; floral bracts oblong-lanceolate, acute, patent to deflexed, to 12 mm long, 5 mm wide. Flowers cream

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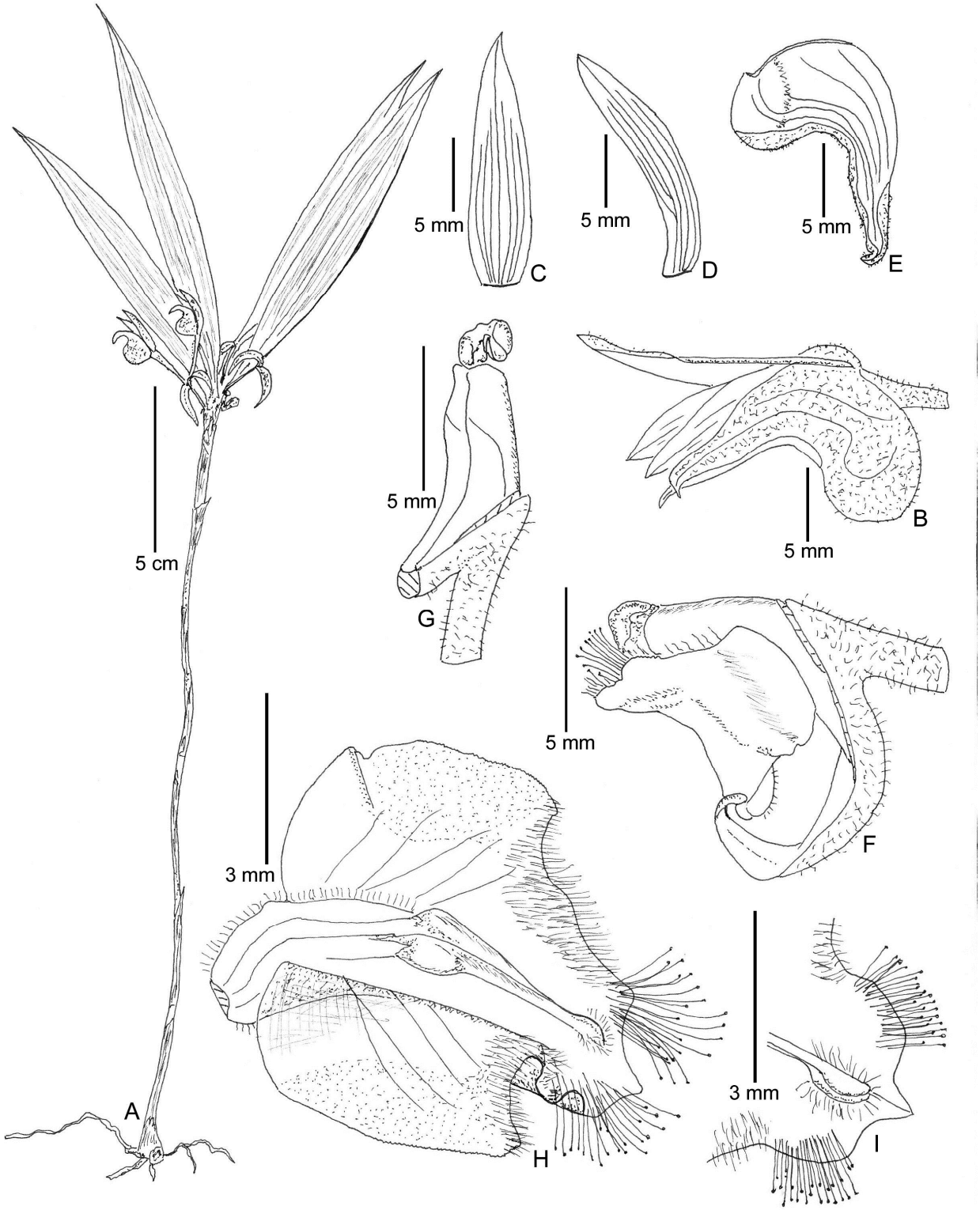


Fig. 1. *Eria gloensis* Ormerod & Agrawala sp.nov. A: Plant. B: Flower. C: Dorsal sepal. D: Petal. E: Lateral sepal. F: Flower minus tepals. G: Column. H: Labellum. I: Epichile. Drawn from the holotype.

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coloured, externally pubescent. Dorsal sepal lanceolate, acute, 7 veined, 15.9 mm long, 4 mm wide. Lateral sepals obliquely lanceolate from a widely ovate and dilated base, acute, 7 veined, 15.5 mm long, 9 mm wide, joined to the column foot for 6.0–6.5 mm to form a subglobose, obtuse, 7 mm long, 6 mm wide (laterally) mentum. Petals ligulate, acute, 3–4 veined with branched lateral veins, 15.2 mm long, 3 mm wide. Labellum trilobed, probably elastically hinged to the apex of the column foot, *c.* 7 mm long, 6.5 mm wide; hypochile subquadrate, sidelobes obliquely truncate, base with a short cuneate claw that is laxly pubescent at the margins, the hairs continuing along the sides of the midline to near the callus, upper lateral inside margins of sidelobes shortly and finely pubescent in a broad band, inner subapical margins of sidelobes long pubescent in a broad band down onto basal half of epichile, 5 mm long, 6.5 mm wide; epichile transversely elliptic, medially with a triangular apiculus, inside lateral margins with a patch of long, capitate hairs each side, 2 mm long, 3 mm wide; callus beginning on middle of hypochile, bicarinate throughout, lanceolate, apex shortly raised, semidiscoid, and pubescent on epichile. Column semiterete, 4.8 mm long (minus anther cap); column foot incurved, joined to the lateral sepals for 6.0–6.5 mm, the apex free or naked for 3.0–3.5 mm, in total 9–10 mm long.

Distribution: India (Arunachal Pradesh).

Habitat: “Jungle”, 1220 m.

Etymology: Named after the type locality, the location Glo in the Kamlang Valley.

DISCUSSION

Eria gloensis is most closely related to *E. arunachalensis* A.N. Rao (Fig. 2) and appears indistinguishable from it externally. Both taxa share similar features such as slenderly clavate stems topped by a few leaves, biflorous inflorescences with relatively large floral bracts, pubescent flowers with a prominent subglobose mentum, and a more or less subquadrate lip. However *E. gloensis* differs in the flowers having a single bicarinate callus on the labellum (vs. two lateral calli, and a median pubescent ridge), and two groups of long, capitate hairs on the midlobe (epichile).

Another species similar to *E. gloensis* is *E. foetida* Aver. from Vietnam. The latter differs in having two separate keels on the lower half of the lip.



Fig. 2. *Eria arunachalensis* A. N. Rao. A: Habit. B: Inflorescence. C: Floral bract, pedicel, ovary, column, foot and tepals. D: Lip (flattened). [*D.K. Agrawala* 32518 (CAL)]. Fig. A is not to scale.

ACKNOWLEDGEMENTS

We wish to thank Julie Shapiro (Global Plants Initiative, HUH) for images of the holotype, and Tom Zanoni (NY) for images of the NY isotype. The first author wishes to thank Director of the Botanical Survey of India, Kolkata for facilities and encouragement. The second author also wishes to thank herbarium and library staff at the Harvard University Herbaria (HUH) for their help and hospitality during his visits.

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Fig. 3. *Eria gloensis* Ormerod & Agrawala sp.nov.: Image of Isotype at NY.

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