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Two new records of Eria Lindl. (Orchidaceae) for Nepal

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Eria concolor Par. & Rchb.f. and *Eria obesa* Lindl. are newly recorded from Nepal Himalaya. Detailed description and illustration are provided.

Key words: Eria, new records, orchidaceae, Nepal

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The genus *Eria* Lindl. is one of the larger polymorphic genera of the family Orchidaceae. It has about 404 species in the world (Royal Botanic Gardens, Kew 2003) which are divided into 13 to 17 sections according to the nature of pseudobulbs and leaf characters (Seidenfaden 1982, Pearce and Cribb 2002).

During the revisionary work on Himalayan genus Eria Lindl., several deposited specimens in national (National Herbarium, Department of Plant Resources, KATH and Tribhuvan University Central Herbarium, TUCH) and international (Central National Herbarium, Botanical Survey of India, CAL, The Natural History Museum London, BM, Royal Botanical Gardens, K and Royal Botanical Garden Edinburgh, E) herbaria and collected specimens from East Nepal were examined thoroughly. Eria concolor Par. & Rchb. f. and Eria obesa Lindl. were found to be new records for Nepal. King and Pantling (1898), Hara et al. (1978), Banerji and Pradhan (1984), Press et al. (2000) and Bajracharya (2001) did not mention the presence of these species in Nepal. These specimens were crosschecked with the protologue texts of Eria concolor Par. & Rchb.f. (1874), Tran. Linn. Soc. 30:148, and Eria obesa Lindl. (1830), Gen & Sp. Orch. 68. Both type specimens were collected from Burma and deposited at Orchid Herbarium, Royal Botanic Gardens, Kew. Both species are distributed in East Nepal, North East India, Burma, and Thailand.

Eria concolor Par. & Rchb.f. (1874), *Tran. Linn. Soc.* **30**:148; Hooker f. (1890), *Fl. Brit. Ind.* **5**:798; Kranzlin in Engler A. (eds.) (1911), *Das Pflanzenreicn Hfl.* **50**:102; Seidenfaden (1982), *Opera Botanica* **62**:103.

Pinalia concolor (Par. & Rchb.f.) Kuntze (1891), Revisio Gen. Pl. 2:679.

Epiphytic orchid 15-20 cm high. *Pseudobulbs* cylindrical, green, fusiform usually 3-5 cm high, with 4-5 internodes, often swelling between nodes, covered with bright green leaf sheath when young; older pseudobulbs with white line from the vein of old sheath. *Leaves* at top, 14 x 1.3-2 cm, linear-lanceolate, acute, very narrow membranous. *Inflorescence* raceme, sub-erect, pubescent, few flowered (2-6). *Floral bract* ovate-lanceolate, acute 5 mm, small; *pedicel plus ovary* longer than saccate mentum, more or less hairy. *Flowers* 1.5-2 mm in diameter, greenish yellow and shade of dull pink claret, membranous, glabrous. *Sepals* ovate-lanceolate, acute, 5-6.5 mm glabrous; *lateral sepals* 3-veined, ovate-lanceolate, acuminate, falcate; *mentum* obtusely triangular. *Petals*

linear, acute, ca. 5.5 mm, glabrous, 3-5 veined; *labellum* obscurely tri-lobed, small indentation in an obtuse angle between hypochile and epichile, 6-7 mm long, nearly 4 mm in width when flattened at hypochile oblong, base narrow cuneate, side lobed very narrow, disk with a thick keels merging at apex of epichile between two half-moon shaped cushion, median keel with distinct swelling at base, terminal lobe retuse, apiculate. *Column* ca. 2-3 mm, glabrous, curved, foot 5-6 mm long, distinct joint between labellum and foot; *operculum* ca. 1 mm, pea shaped; *clinandrium* collar like; *rostellum* minute and ligulate. *Pollinia* 8, obovoid, attached to caudicle; *viscidium* simple. *Stigma cavity* ca. 1-1.5 mm long laterally and two small lobed inside the cavity.

Type specimens: Burma: Moulmein, Parish 128 (K!)

Distribution: Nepal, Burma

Ecology: Epiphyte on Sal tree

Flowering: June

Specimens examined: East Nepal: Bhogatini, Raja Rani Village, Letang, Morang, 500 m., *D. M. Bajracharya, L. R. Shakya* and *A. Subedi* 424; 6 Nov 2001 (TUCH); Burma: Moulmein, *Parish* 128 (K!)

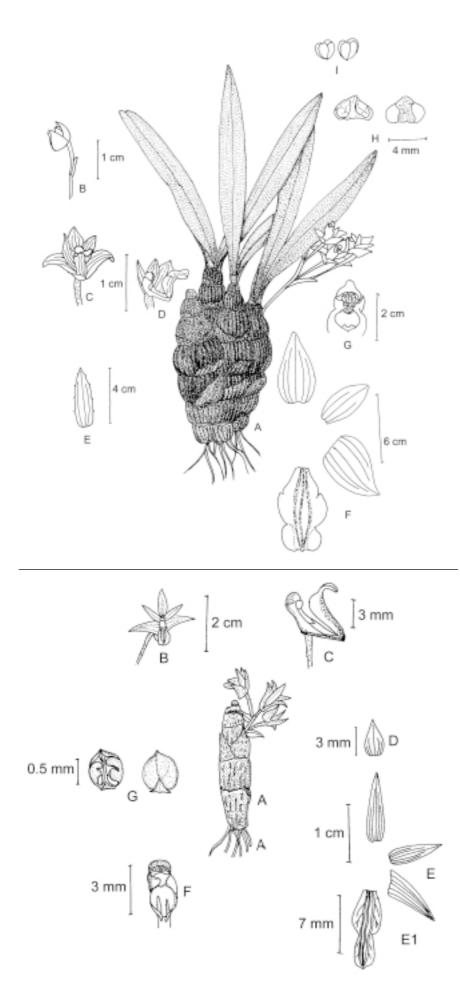
Etymology: Concolor refers to uniform in colour.

Eria obesa Lindl. (1830), *Gen & Sp. Orch.* 68; Lindl. (1844), *Bot. Reg.* 30 Sub. T. 29, 53; Hooker f. (1890), *Fl. Brit. Ind.* 5:793; Grant (1895), *Orchids of Burma* 143; Kranzlin in Engler A. (eds.) *Das Pflanzenreicn Hfl.* (1911), **50**:82; Seidenfaden (1982), *Opera Botanica* **62**:105.

Eria lindleyana Griff. (1851), Not. 3:300.

Eria prainii Briquet (1900), Ann. Cons. Et. Jard. Bot. Geneve. 4:210. Epiphytic herbs, 15-17 cm high. Pseudobulbsstoutly, clavate-

ovate, 4-7 cm long, green with scarious sheath; *leaf sheath* 1-1.5 cm long, brown, scarious. *Leaves* shed before the flowering, develop in autumn, about 5-6 leaves and 12 x 1 cm appear before the pseudobulbs started swelling, lanceolate or ovate-lanceolate or glabrous (Griff. 1851); *rachis* 1 cm long. *Inflorescence* raceme, lateral sub-corymbose, 2-4 in numbers, puberulous. *Floral bract* 3 mm large, ovate, thin, entire, reflexed at the junction of the stalks, acute; *pedicel plus ovary* 1.4-2 mm long, pubescent. *Flowers* white, 2 cm across in diameter, glabrous. *Sepals* unequal, 1.0-12 cm long; *dorsal sepal* lanceolate, acuminate, entire, 1-1.2 cm x 2 mm, glabrous with 5 veins, *lateral sepals* lanceolate, slightly oblique, falcate acuminate 12 x 1.5-3 mm, entire, white, glabrous, thin, 5-veins; *mentum* 1 mm, round, curved, subcoric. *Petals*



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oblong-lanceolate, obtuse, 10-12 x 2 mm, thin, glabrous, and 3 veins; labellum nearly as long as sepals and petals, linear-oblong, 0.8-12 mm long, 3 mm broad, entire, obscurely uniformed, thin, 3 thickened keels with lateral lobe veins, edges of lobed somewhat thin. Column 3-4 mm long, 2 mm in diameter, white, glabrous, curved, foot 4-5 mm long, concave; operculum 1 mm, sub-orbicular, thick, pappus at the upper surface, two lobed within 8 chambered; clinandrium collar-like, erect posterior acute, 1 dentate; rostellum minute and ligulate. Pollinia 8, obovoid, laterally compressed in appendiculate, attached to glandular caudicle; viscidium simple. Stigmatic cavity 1.5-3 mm long, curved, low stigma obscured furrow or groove, two long lobes inside the cavity. Type specimen: Burma: Altran, Martabon, Wall. 1976, (K!) Distribution: Nepal, North East India, Burma, Thailand Ecology: Epiphyte on Sal tree Flowering: August Specimen examined: East Nepal: Bhogatini, Raja Rani Village, Letang, Morang, 500 m. D. M. Bajracharya, L. R. Shakya and A. Subedi 394, 14 Jan 2001 (TUCH); North East India: Palak, Lushi Hills, Parry (K!); Lorrame s.n. (K 9461!); Burma: Altran, Martabon, Wall 1976, (holotype K!); Moulmein, Griff. drawing (K!); Mergui, Griff. 374 (Herb. Lindl. K!); Mergui 554 type of the E. lindleyana, Parish 24 (K!); Amherest, Lace 4495 (K!); Amherest, Parkinson 5288 (K!); Moulmein, Peches.n. 29 Dec. 1896 (CAL!); Kadanigh, Meebold 17045, 1912 (CAL!); Puge to Thagahta, Lace 5595, 21 Jan. 1912 (CAL!); Jaraj, Mokim 219, Dec. 1900 (CAL!); Paphi, Meebold 17044, 1912 (CAL!); Nabule valley, Mokim 160, Dec. 1900 (CAL!).

Etymology: Obesus refers to fat/stunt pseudobulb.

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FIGURE 1 (top). *Eria concolor* Par. & Rcbh.f. A, habit; B, flower; C, lateral view of flower; D, bract; E, spreading of sepal, petal and labellum; F, column; G, operculum; H, pollinia.

FIGURE 2 (bottom). *Eria obesa* Lindl. A, habit; B, flower; C, lateral view of column with labellum; D, bract; E, spreading of sepal, petal; E₁, labellum; F, column; G, operculum.

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