NOTE

Liparis ferruginea Lindley (Orchidaceae) – a New Record for Flora of Nepal

Bhakta Bahadur Raskoti[1*] and Rita Ale[1]

1. Pokharathok 9 Arghakhanchi, PO Box 24968, Kathmandu, Nepal.
** Corresponding author. Email: bbraskoti@gmail.com*

(Manuscript received 20 Febuary 2012; accepted 26 March 2012)

ABSTRACT: *Liparis ferruginea* Lindley (Orchidaceae) is first time reported in Nepal. Detailed description, illustration and relevant notes are provided.

KEY WORDS: Distribution, *Liparis ferruginea,* Nepal Himalaya, taxonomy.

INTRODUCTION

Liparis L.C. Richard comprises about 470 species widely distributed in tropical to temperate Asia, New Guinea, Australia, SW Pacific islands, and the subtropical and tropical America, Europe and North America (Pearce and Cribb, 2002; Chen et al., 2009).

In Nepal, *Liparis* is represented by 17 species (Press et al., 2000; Rajbhandari and Dahal, 2004; Rajbhandari and Baral, 2010). An unidentified species of *Liparis* was collected by the first author during an orchid survey in Hetauda in Makawanpur District, Central Nepal. The characters of this species did not match with any other reported species of *Liparis* from Nepal and is identified as *Liparis ferruginea* Lindley by the literatures like Chen et al. (2009) and Gloria et al. (2011). *Liparis ferruginea* is not previously reported from the Nepal (Hara et al., 1978; Banerji and Pradhan, 1984; Press et al., 2000; Department of Plant Resources, 2001; Rajbhandari and Dahal, 2004; Rajbhandari and Baral, 2010). There is no record of this specimen in the National Herbarium, Kathmandu (KATH) and Tribhuvan University Central Herbarium (TUCH).

TAXONOMIC TREATMENT

Liparis ferruginea Lindley, Gard. Chron. 1848: 55. 1848. (Figs. 1, 2 & 3).

Empusa ferruginea (Lindley) M. A. Clements & D. L. Jones. Orchadian 15:41 (2005).
Leptorkis ferruginea (Lindley) Kuntze, Revis. Gen. Pl. 2:671 (1891).

Herbs, terrestrial, whole plant 30-55 cm tall. Roots 3-6 cm long. Pseudobulbs narrowly ovoid, 1-2 cm long. Leaves 2-4, linear to lanceolate, 10-15 × 0.7-1.5 cm, plicate, base slightly contracted, apex acute or shortly acuminate. Inflorescence 25-40 cm long, stout; peduncle ridged, rachis 6-20 cm with 10 to several flowers; floral bracts 5 mm long, lanceolate, apex acute. Pedicel and ovary 1 cm long, ridged and grooved. Flowers 1 cm across, yellow, lip pale yellowish brown slightly tinged with pale purple. Dorsal sepal linear, 5-6 × 1 mm, 3-veined, margin revolute, apex obtuse; lateral sepals reflexed, obliquely ovate-oblong, 4-6 × 2-2.5 mm, 5-veined, pushed close to the underside of the lip, strongly curved above the middle, their inner margins closely aligned and apparently connate. Petals nearly linear, 5 × ca 1 mm, 1-veined, margin revolute, apex slightly broader than the base, obtuse. Lip recurved, obovate-oblong, 3-4 × 3 mm, apex truncated and apiculate, base narrower with a pair of basal auricles backward spreading and 2 calli near base. Column 3-4 mm, apical portion with narrow wings on both sides.

Flowering time: July-August

Distribution: Central Nepal, Cambodia, China, Indonesia, Malaysia, Thailand, Vietnam.

Habit and habitat: Terrestrial in alluvial soil, growing in full shade on moist humus-rich slopes near river banks in *Shorea robusta* forest.

Species examined: Central Nepal, Narayani Zone, Makawanpur District, Hetauda at 400 meter, July 12, 2008, *Raskoti Bhakta. B.* 215 (KATH).

Conservation status: Restricted within a small area and threatened due to overgrazing.

Notes: *Liparis ferruginea* is similar to *L. odorata* (Willdenow) Lindley, with which it shares almost floral characters (Chen et al., 2009). It is distinguished from *L. odorata* by the lateral sepals pushed close to the underside of the lip, strongly curved above the middle, their inner margins closely aligned and apparently connate. In *L. odorata* lateral sepals pendent below the lip, curving downwards, the inner margins parallel but not closely aligned (Gloria et al., 2011).

臺灣大學學術期刊資料庫

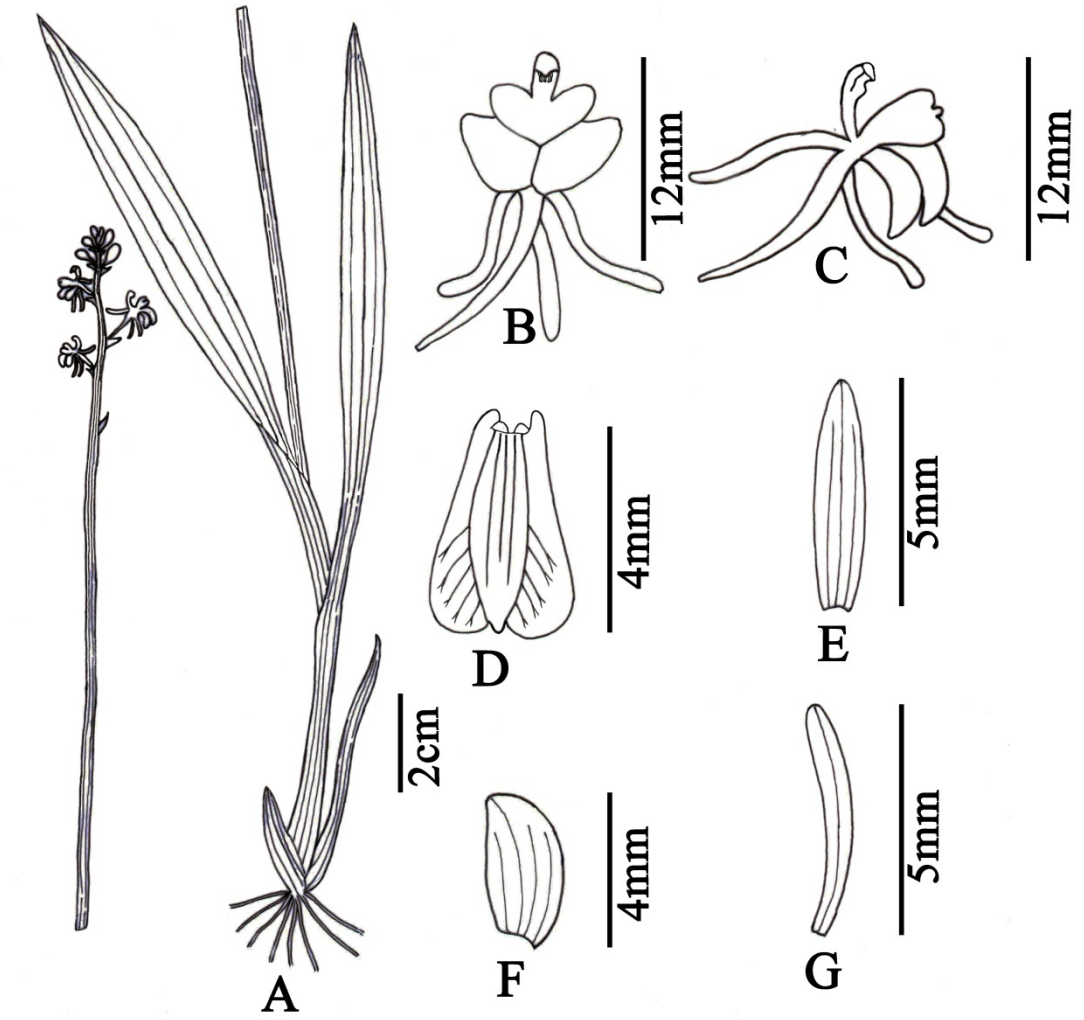


Fig. 1: *Liparis ferruginea* Lindley. A: Flowering plant. B: Flower (front view). C: Flower (side view). D: Lip. E: Dorsal sepal. F: Lateral sepal. G: Petal. (All drawn by first author).

ACKNOWLEDGEMENTS

We are grateful to the Curators of the National Herbarium and Plant Laboratories, Godawari, Lalitpur (KATH) and Tribhuvan University Central Herbarium, Kirtipur, Kathmandu (TUCH) for allowing us to study herbarium specimens.

LITERATURE CITED

Banerji, M. L. and P. Pradhan. 1984. The Orchids of Nepal Himalaya. J. Cramer. In der A.R. Gantner Verlag. FL-9490VADUZ. Germany. pp. 270-290.

Department of Plant Resources. 2001. Flowering Plants of Nepal (Phanerogams). Bulletin Department of Plant Resources No. 18, Ministry of Forest and Soil Conservation, His Majesty Government of Nepal. 205 pp.

Hara H., W. T. Stearn and L. H. Williams. 1978. An Enumeration of the Flowering Plants of Nepal. Vol. 1. Natural History Museum, London. pp. 47-48.

臺灣大學學術期刊資料庫



Fig. 2: Inflorescence of *Liparis ferruginea*

Gloria, B., P. Cribb and S. Gale. 2011. The Wild Orchids of Hong Kong. Natural History Publications (Borneo) and Kadoorie Farm and Botanical Garden, Hong Kong. pp. 297-300.

Pearce, N. R. and P. Cribb. 2002. The Orchids of Bhutan (Flora of Bhutan Volume 3 Part 3). Royal Botanic Garden, Edinburgh, Scotland. pp. 47.

Press, J. R., K. K. Shrestha, and D. A. Sutton. 2000. Annotated Checklist of Flowering Plants of Nepal. The Natural History Museum, London. pp. 219.

Rajbhandari, K. R. and S. Dahal. 2004. Orchids of Nepal: A checklist. Botanica Orientalis. **4:** 89-106.

Rajbhandari, K. R. and S. R. Baral. 2010. Catalogue of Nepalese flowering plants-Gymnosperms and Monocotyledons-1. Department of Plant Resources, National Herbarium and Plant Laboratories/Government of Nepal. pp. 63-64.

Chen, X., P. Ormerod and J. J. Wood. 2009. *Liparis*. In Wu, Z.G. P. Raven, and & Hong, D.Y. Hong (eds.), Flora of China Volume 25. Science Press Science (Beijing) & Missouri Botanical Garden (St. Louis): Available from: http://www.eflora.org/flora of China/ accessed 17 Feb, 2012. pp. 219-220.

鏽色羊耳蒜（蘭科）在尼泊爾的新紀錄分佈

Bhakta Bahadur Raskoti[1*] and Rita Ale[1]

1. Pokharathok 9 Arghakhanchi, PO Box 24968, Kathmandu, Nepal.
* 通信作者。*Email: bbraskoti@gmail.com*

(收稿日期：2012 年 2 月 20 日；接受日期：2012 年 3 月 26 日)

摘要：本文報導首次在尼泊爾發現的鏽色羊耳蒜，同時並提供物種描述、手繪圖以及物種資訊。

關鍵詞：分佈、鏽色羊耳蒜、尼泊爾喜馬拉雅、分類。

臺灣大學學術期刊資料庫



Fig. 3: Herbarium specimen of the *Liparis ferruginea* Lindley for the Figure 2.

臺灣大學學術期刊資料庫