



## A new species of *Gastrochilus* and new records for the orchids of Nepal

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### Abstract

*Gastrochilus nepalensis*, a new species of orchids from central Nepal is described. A key to its allied species is provided. Thirteen species are reported as new records for Nepal: *Epipogium japonicum*, *Goodyera nankoensis*, *Habenaria davidii*, *Habenaria wolongensis*, *Herminium chloranthum*, *Herminium kamengense*, *Herminium longilobatum*, *Herminium pusillum*, *Liparis campylostalix*, *Peristylus calcaratus*, *Platanthera stenochila*, *Platanthera roseotincta*, *Platanthera yadongensis*.

**Key words:** *Habenaria*, *Herminium*, *Liparis*, *Peristylus*, *Platanthera*, Flora

### Introduction

*Gastrochilus* Don (32: 1825) is a genus of about 60 species (Govaerts *et al.* 2015) restricted to East Asia, Southeast Asia and South Asia with its centre in southern China and northeast India (Tsi 1999, Pridgeon *et al.* 2003). It is distributed in the tropical, subtropical as well as temperate zone (Pearce & Cribb 2002, Pridgeon *et al.* 2003, Chen *et al.* 2009). This is a distinct genus which is characterized by a monopodial stem, its immobile lip firmly adnate to the column, saccate hypochile, short bifid rostellum, and porate pollinia (Tsi 1999, Pearce & Cribb 2002). Seven species of *Gastrochilus* are currently known from Nepal, with most of the species occurring in the subtropical to temperate zone and a few species in the tropical zone (Hara *et al.* 1978, Banerji & Pradhan 1984, Press *et al.* 2000, Department of Plant Resources 2001, Rajbhandari & Dahal 2004, Rajbhandari & Baral 2010).

During fieldwork in the Nepal Himalayas in 2007, a remarkable species of *Gastrochilus* was collected. The morphological characters of this species do not match any of the previously described species in the genus. Therefore, this species is described here as a new taxon. In floristic surveys during 2007 to 2011 in different part of Nepal, thirteen new records of orchids for the flora of Nepal were also reported.

### Material and methods

Specimens were collected according to the standard procedures during floristic surveys carried out in the different part of Nepal Himalayas in the period between 2007 to 2011. The specimens were dried and deposited in the National Herbarium and Plant Laboratories (KATH), Godawari, Lalitpur, Nepal. General features such as vegetative and floral characters of species were carefully examined from the preserved plant under a stereomicroscope. The new species was described after carefully examination of herbarium specimens. Comparisons with related species were made based on literature sources (Banerji & Pradhan 1984, Hooker 1890, King & Pantling 1898, Tsi 1999, Pearce & Cribb 2002, Chen *et al.* 2009).

New records were confirmed after consulting the literature sources (Hara *et al.* 1978, Banerji & Pradhan 1984, Press *et al.* 2000, Department of Plant Resources 2001, Rajbhandari & Dahal 2004, Rajbhandari & Baral 2010, Rokaya *et al.* 2013).