



Odontochilus nandae (Orchidaceae; Cranichideae; Goodyerinae), a new species from Nepal

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Introduction

Odontochilus Blume (1859: 79) comprises about 40 species distributed from the Himalayas and China through Southeast Asia eastwards to the southwestern Pacific islands (Chen *et al.* 2009, Pearce & Cribb 2002, Pridgeon *et al.* 2003). Most species are restricted to tropical and warm-temperate regions. The genus is closely related with *Anoectochilus* Blume (1825: 411) and most of species were in the past included in that genus because both genera have flowers with pectinate or dentate (rarely smooth) lip flanges. However, *Odontochilus* is separated from *Anoectochilus* based on the saccate non-exserted spur that is largely enclosed by the bases of the lateral sepals, whereas *Anoectochilus* has an exerted conical or cylindrical spur (Pridgeon *et al.* 2003).

Two species of *Odontochilus* are currently known in Nepal, namely *O. crispus* (Lindley 1857: 180) Hooker (1890: 99) and *O. lanceolatus* (Lindley 1840: 499) Blume (1859: 80) (Banerji 1978, Banerji & Pradhan 1984, Department of Plant Resources 2001, Hara *et al.* 1978, Press *et al.* 2000, Rajbhandari & Dahal, 2004, 2010, Raskoti 2009, Rokaya *et al.* 2013). *Odontochilus crispus* occurs in central Nepal and *O. lanceolatus* in the central and eastern parts of the country. Both species are found in tropical to temperate lower montane forests. In addition, *O. asraoa* (Joseph & Abbareddy 1985: 232) Ormerod (2005: 7) has also been listed as occurring in Nepal (Govaerts *et al.* 2015, Pearce & Cribb 2002 [as *Chamaegastrodia asraoa* (J. Joseph & Abbar.) Seidenfaden & Rao 1994: 299], but this is questionable as most of the authors involved in the floristics of Nepal (Hara *et al.* 1978; Press *et al.* 2000; Rajbhandari & Dahal 2004, 2010; Rokaya *et al.* 2013) have not cited it as occurring in that country. During fieldwork in Kaski District, Western Development Region of Nepal in 2008, a species of *Odontochilus* was discovered by the first author, in which the morphological characters do not match any previously described species. This new species is described below.

Odontochilus nandae Raskoti & H. Kurzweil *sp. nov.* (figs 1–3)

Type:—NEPAL. Western Development Region: Kaski District, Panchase forest, 2400 m, 20 August 2008, *Bhakta B. Raskoti 119* (holotype KATH).

Diagnosis: This new species is close to the mycotrophic *Odontochilus saprophyticus* (Averyanov 2003: 141) Ormerod (2003: 141) with which it shares the lip shape but differs in having rudimentary leaves, secund inflorescences and petals with large anterior lobes.

Autotrophic herbs, 8–10 cm tall. Rhizome coralloid, 15 mm long, 3–4 mm in diameter. Stems erect, 4–5 cm long, lower part 3–4-noded, pinkish brown, with a single or occasionally 2–3 tiny leaves and a sterile bract above the leaves. Leaves dark green dorsally and greyish ventrally, ovate, acute, 4–7 × 4–5 mm, base shortly sheathing, brownish. Inflorescences 4–5 cm long; peduncle cylindric, 3 cm long, densely pubescent; rachis 2–3 cm long, with 3–4 secund flowers, pubescent; floral bracts elliptic-ovate, acute, concave, 4.0–5.0 × 2.5–3.0 mm, outer surface pubescent. Flowers resupinate; ovary and pedicel cylindric, slightly beaked, 7–10 mm long, pubescent. Sepals olive pinkish brown, pubescent on the outer surface; dorsal sepal connivent with the petals, forming a joint hood, ovate, cymbiform, obtuse, 4.0–5.0 × ca. 2.5 mm, 1-veined, outer surface hairy; lateral sepals spreading, oblong, oblique, obtuse, ca. 5 × 2 mm, 1-veined. Petals oblique, oblong, unequally lobed with large anterior lobes, obtuse, 4.0–5.0 × 1.5–2.0 mm, 1-veined. Lip white, T-shaped, 7–9 mm long; hypochile 2–3 mm long, 2 mm wide, with spur like ca. 2 mm deep saccate