



## ***Heleodromia* Haliday newly found in Tibet with description of one new species (Diptera: Empidoidea: Trichopezinae)**

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### **Abstract**

*Heleodromia* Haliday is recorded from Tibet for the first time with the following three species belonging to the subgenus *Heleodromia*: *Heleodromia* (*Heleodromia*) *ausobskyi* Wagner, *Heleodromia* (*Heleodromia*) *basiflava* sp. nov. and *H. (H.) immaculata* Haliday. This finding extends the distribution of *Heleodromia* in China from Northwest China to Southwest China. A key to the known species of *Heleodromia* from the Himalayas is presented.

**Key words:** Diptera, Empidoidea, *Heleodromia*, new species, Tibet

### **Introduction**

The genus *Heleodromia* Haliday, 1833 is a small genus in the subfamily Trichopezinae with 25 known species distributed in the Holarctic and Oriental regions (Yang *et al.* 2007; Sinclair *et al.* 2011; Liu *et al.* 2012). It is characterized by the following features: first flagellomere with uniformly very thin apex; proboscis long and thickened; R<sub>4+5</sub> not forked, anal cell with acutely pointed postero-distal corner; male genitalia strongly swollen and elongated like some Hemerodromiinae (Saigusa 1963; Wagner 1985; Liu *et al.* 2012). It contains two subgenera, *Heleodromia* and *Neoillesiella* (Wagner 1985; Wagner & Özdikmen 2006). The major references dealing with species of *Heleodromia* are Collin (1961), Liu *et al.* (2012), Saigusa (1963), Sinclair *et al.* (2011), Wagner (1985, 2003) and Wagner *et al.* (2004).

Only three Chinese species were reported by Liu *et al.* (2012) from Northwest China. In the present paper, the genus *Heleodromia* is recorded from Tibet for the first time with three species including one new species based on the specimens collected from South Tibet. This finding extends the distribution of *Heleodromia* in China from Northwest China to Southwest China. A key to the known species of *Heleodromia* from the Himalayas is presented.

### **Material and methods**

The type specimens are deposited in the Entomological Museum of China Agricultural University, Beijing. Terms used for adult structures and male genitalia follow those of McAlpine (1981) and Sinclair & Cumming (2006), respectively. The following abbreviations are used: acr = acrostichal seta(e), av = anteroventral seta(e), dc = dorsocentral seta(e), h = humeral seta(e), npl = notopleural seta(e), oc = ocellar seta(e), psa = postalar seta(e).

posterior process finger-like in lateral view. Epandrium and hypandrium much elongated and rather large; epandrium distinctly shorter than hypandrium in lateral view; epandrial lobe basally wide with 2 thick bristles, apically thin finger-like with 1 thick bristle at tip; surstylus rather small, apically nearly acute with very short denticle.

**Female.** Unknown.

**Type material.** **HOLOTYPE** ♂, CHINA, Tibet, Linzhi, Sejlilashankouxi (N29°33'65", E94°33'81"), 3789 m, 2012.VIII.15–18 (Malaise trap, Zeqing Niu, Huanxi Cao & Qingtao Wu, leg.). **PARATYPE:** 1 ♂, CHINA, Tibet, Linzhi (N29°38'18" E94°21'46"), 2012.IX.2–12 (Malaise trap, Zeqing Niu, Huanxi Cao & Qingtao Wu, leg.).

**Distribution.** China (Tibet).

**Etymology.** The specific name refers to the antenna dark brownish yellow basally.

**Remarks.** This new species is similar to *Heleodromia (Heleodromia) ausobskyi* Wagner, but can be easily separated from it by the following features: epandrial lobe relatively large, basally wide with long finger-like apex, surstylus apically nearly straight, not hook-like; in *H. (H.) ausobskyi*, epandrial lobe very small, short finger-like, surstylus apically strongly curved forwards, hook-like (Wagner 1983).

### *Heleodromia (Heleodromia) immaculata* Haliday

*Heleodromia immaculata* Haliday, 1833: 159. Type-locality: Ireland: Holywood, Downshire.

*Microcera rostrata* Zetterstedt, 1838: 572. Type-locality: "in Scandinavia præsertum borealis".

*Hemerodromia fuscipennis* Roser, 1840: 53. Type-locality: not given [Germany: Württemberg].

**Diagnosis.** Epandrial lobe bifurcated with short thick anterior process and long finger-like posterior process; surstylus strongly curved forward. Legs black except extreme tips of all femora brownish. Fore femur with distinct av shorter than femur thickness.

**Material examined.** **CHINA. Tibet:** 1 ♂, Linzhi, Sejlilashankouxi (N29°33'65", E94°33'81"), 3789 m, 2012.VIII.15–18 (Malaise trap, Zeqing Niu, Huanxi Cao & Qingtao Wu, leg.).

**Distribution.** China (Neimenggu, Tibet); Europe, Russia (Sinclair *et al.* 2011).

**Remarks.** For descriptions and illustrations of this species, see Engel (1939), Collin (1961), Wagner (1985), and Liu *et al.* (2012).

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