Records of the genus Lotophila Lioy from the Oriental region, with the description of a new subspecies of L. pallida Hayashi (Diptera, Sphaeroceridae)**

Toshihiko HAYASHI***

Department of Medical Zoology, Saitama Medical School, Moroyama-machi, Iruma-gun, Saitama 350-04, Japan

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**Abstract:** Three species of the genus Lotophila Lioy and a new subspecies of L. pallida Hayashi, 1985, are recorded from the Oriental region.

Up to the present, the genus Lotophila Lioy consists of 5 species: L. atra (Meigen, 1830); L. bicolor Norrbom et Marshall, 1988; L. confusa Norrbom et Marshall, 1988; L. norrbomi (Papp, 1988); and L. pallida Hayashi, 1985. Of these, 3 species, L. atra, L. bicolor and L. norrbomi, are recorded from the Oriental region. L. bicolor and L. norrbomi are known only from the Oriental region and were described basing on only a few specimens. L. atra is distributed widely in the Holarctic region, but in the Oriental region only 3 specimens have been known from the northern part of Pakistan (Papp, 1988).

I had a chance to examine Oriental materials of the genus and found all the 3 species hitherto recorded among them, so I give here additional data of these 3 species. Besides these, I describe in this paper a new subspecies of L. pallida new to the region. It is different from the typical form from Japan in male genitalia.

Specimens used in this study are based on the sphaerocerid fly collection made by Kyushu University Scientific Expedition to the Nepal Himalaya in 1971-1972 and the expedition to Pakistan supported by the Grant-in-Aid for Monbusho International Scientific Research Program.

**Lotophila atra** (Meigen, 1830)


**Distribution.** Europe, Soviet Union, Af-
Figs. 1–4 *Lotophila bicolor* Norrbom et Marshall.

1: thorax, lateral view. Scale: 0.5 mm. 2: aedeagus and associated parts, lateral view. Scale: 0.2 mm. 3: male terminalia, caudal view. 4: *ditto*, lateral view. Scale: 0.2 mm.
ghanistan, Pakistan, Mongolia, China, Japan and North America.

Remarks. Papp (1988) first recorded this species from Pakistan. I captured all individuals in the mountainous areas over the elevation of 2,200 m in the northern part of Pakistan, where the Palaeartic species were commonly found. It is widely distributed in the Holarctic region.

Adults are found on cattle dung abundantly, and a few individuals were captured also on human excrement.

**Lotophila bicolor Norrbom et Marshall, 1988** (Figs. 1–4)


Specimens examined. NEPAL: 1 δ, Dobang Kharka, 2,400 m, 28°36'N, 83°24'E, 19–20 x, 1971, A. Nakanishi, Malaise trap; 19, Topke Gola, 3,700 m, 27°38'N, 87°35'E–Thurukpa, 2,600 m, 27°36'N, 87°36'E, 9 vii, 1972, Pemba Norbu.


Remarks. Though Norrbom and Marshall (1988) did not mention the criteria, this species is easily distinguishable by the strong 1+2 dc (Fig. 1). Microtrichial pattern of anepisternum, yellowish legs and male genitalia are also characteristic (Figs. 1–4).

*L. bicolor* is one of little known species and was described based on only 3 male specimens, and known only from Nepal. The female of this species is recorded here for the first time.

**Lotophila norrbomi** (Papp, 1988)

*Copromyza norrbomi* Papp, 1988, Revue suisse zool., 95: 467.

Specimen examined. NEPAL: 19, Dobang Kharka, 2,400 m, 28°36’N, 83°24’E, 20–22 x, 1971, A. Nakanishi, Malaise Trap.

Distribution. India and Nepal.

**Lotophila pallida nepalensis n. ssp.** (Figs. 5–7)

The specimens examined here are similar to those of *L. pallida* from Japan externally except for weakened setae, especially in interfrontal setae and additional ones on orbit.

But there are several distinct differences in male genitalia: Surstylus (Fig. 5) slender and longer; distiphallus (Fig. 7) less sclerotized; paramere (Fig. 6) more rounded and strongly curved apically.

Holotype. δ, NEPAL: Dobang Kharka, 2,400 m, 28°36’N, 83°24’E, 23 x, 1971, A. Nakanishi.

Paratypes. NEPAL: 1 δ, Basantapur, 2,300 m, 27°06’N, 87°23’E–27°08’N, 87°26’E, 15 vi, 1972, H. Makihara; 19, Dobang Kharka, 2,400 m, 28°36’N, 83°24’E, 28 x, 1971, A. Nakanishi.

The holotype and 19 paratype are in the Biological Laboratory, College of General Education, Kyushu University, Fukuoka. One δ paratype is in the author's collection.


Remarks. The new subspecies is clearly distinguished from the nominal subspecies by the shape of paramere (Figs. 6 and 9). *L. pallida* was formerly recorded only from Japan (Hayashi, 1985; Norrbom and Marshall, 1988). This is the first record from Nepal and the Oriental region. These records suggest that the distribution of *L. pallida* is widespread in Asia.

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References


Figs. 5–9