

NOTES ON THE COLLECTION AND TRANSPORTATION OF LIVE *EPIOPHLEBIA LAIDLAWI* TILLYARD LARVAE (ANISOZYGOPTERA: EPIOPHLEBIIDAE)

I arrived in Nepal 27th May 1996 for a very limited stay of one week, the main aim of the visit was to search for *E. laidlawi* around Phelpling near the Tibetan border following information that it had been found in that area (G. Vick and S. Sharma, pers. comm.).

The Bhotekosi river itself did not appear suitable, being wide, rather deep and swollen with glacial melt water. Having discovered larvae of *E. superstes* in Japan and surveyed for *E. laidlawi* on a previous occasion, I chose to investigate a 5 m wide tributary flowing eastwards into the Bhotekosi just N of the bridge at Phelpling. This looked torrential enough to be suitable and after several minutes my taxi driver caught a very dark larva of the species (probably F-2). I then obtained a very small, brightly coloured but dead larva, almost certainly newly moulted and unable to withstand the trauma of being collected in this manner. Despite a further four hours of careful searching no other speci-

mens were obtained from this stream and I returned to Kathmandu.

Four other larvae of *E. laidlawi* were found on the south slope of Shivapuri in a much smaller stream (approximately 2 m wide), these were all of the typical mid-brown colour that I had seen in other collected specimens. No exuviae or ovipositing females were seen, but larvae of *Davidius zallorensis delineatus*, *Megalestes major*, *Chlorogomphus* sp. and *Cephalaeschna* sp. were collected from the same site. The substrate consisted of a coarse sandy bottom with a mixture of rocks, stones and pebbles. Larvae of *E. laidlawi* were found by disturbing rocks of less than 30 cm diameter.

All the above species, plus larvae of *Macromia moorei* and some unidentified euphaeids were kept alive in my hotel room for four days before being transported back to UK. Plastic boxes 10×10 cm wide ×4 cm depth were used, a small amount of water was placed in each, plus either plant material or paper tissue. These latter were included to reduce the effects of violent movement during transport, or to separate individuals kept in the same container. The plastic boxes were then placed in a "cool box" and surrounded by ice from the hotel freezer, which was renewed daily. Larvae of *Davidius zallorensis delineatus*, *Anisogomphus occipitalis* and some libellulids being close to ecdysis were not kept at such a cold temperature and later hatched successfully in the room.

For the journey back to UK the larvae were packed in a similar way and all survived. *E. laidlawi* larvae were placed in a running water system and survived until mid November, when a series of power cuts disabled the aerator and water pumping system. Following this the larvae were found in the end section containing the pump and were probably sucked into the pump filter when electric power eventually reactivated the system. Up till then larvae were observed monthly, appeared to be feeding regularly on Ephemeroptera, Trichoptera and mosquito larvae and one had successfully moulted.

After returning home I discovered that larvae of *E. laidlawi* had been found in still water on the margins of the Bhotekosi itself near to an area where the sewage from the village of Phelping entered the river (SHARMA, S. & R. OFENBÖCK, 1996, *Opusc. zool. flumin.* 150: pp. 1-

-11; - and S. Sharma, pers. comm.). This is of great interest, being in total contrast to the normal habitat for epiophlebiid larvae, i.e. torrential sections of rivers or streams. Larvae of the two species are known to migrate to the margins of their habitat prior to emergence, but the discovery of a larva in such an area as early as November would appear to provide a fascinating area for future study.

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