

## Freshwater leech brooding behaviour

**Subjects:** Freshwater leech, unidentified (Annelida: Clitellata: Hirudinidae).

**Subjects identified by:** Contributors.

**Location, date and time:** Singapore Island, Mandai west, off Mandai Lake Road; 18 June 2015; 1030 hrs.

**Habitat:** Fresh water. Open-country stream with earth banks, riparian vegetation and clear flowing water.

**Observers:** Contributors.

**Observation:** Two large and one smaller freshwater leeches were collected from the stream. The largest of the two (about 10-12cm) was found stuck on the footwear of one of the observers. In the laboratory, close observation of the largest leech revealed numerous small lumps of different sizes on its body. These appear to be juvenile conspecific leeches (Figs. 1 & 2).

**Remarks:** Large aquatic leeches in Singapore and Malay Peninsula had been identified as *Limnatis dissimulata* or *Hirudinaria manillensis* (Moore, 1938), but they are morphologically very similar. A large example was recently recorded from the Mandai area by Serin et al. (2015).

Leeches lay eggs and do not give birth to live young. The present observation appears to be an illustration of brood care where the newly hatched leeches cling onto the caretaker's body until a suitable host is located (Kutschera & Wirtz, 2001).



Fig. 1. Leech with young on its body. End with sucker is on the left. Photograph by Tan Heok Hui

### References:

- Kutschera, U. & P. Wirtz, 2001. The evolution of parental care in freshwater leeches. *Theory Bioscience*. 120: 115-137.
- Moore, J. P., 1938. Leeches (Hirudinea) principally from the Malay Peninsula, with descriptions of new species. *Bulletin of the Raffles Museum, Singapore*. 14: 64-80.
- Serin, S., I. S. Law & A. Sankar, 2015. Freshwater leech at Mandai. *Singapore Biodiversity Records* 2015: 67.



Fig. 2. Close-up of a section of the leech, with young of different sizes attached to its body. Photograph by Tan Heok Hui

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