

## Short Communication

### ***HEMICLEPSIS MARGINATA ASIATICA* THE HIGHEST EGG-LAYING AQUATIC LEECH IN THE WORLD**

#### ABSTRACT

One of a terrestrial leech has the record of laying 300 eggs in the world. The aquatic leech *Hemiclepsis marginata asiatica* has the record of laying eggs is 38 and 39 in *Hemiclepsis marginata marginata*. Now the author has the opportunity to record highest 101 eggs laying leech *Hemiclepsis marginata asiatica* in the world.

#### INTRODUCTION

Many Indian authors have worked on the breeding behavior of leeches. Chandra (1983), Harding, and Moore (1927), Ghosh (1998) worked on taxonomy and also about the brood of leeches. Bandyopadhyay and Mandal (2005) noted the egg number of five aquatic leeches. Raut and Saha (1986a and 1987) worked on parental care and biology of leech; it was observed that *Hemiclepsis marginata marginata* lays 39 eggs and *Glossiphonia weberi* lays 37 eggs. Mandal (1996, 2000) recorded 38 eggs bearing aquatic leech *Hemiclepsis marginata asiatica* and 37 eggs bearing *placobdella emydae*. In 2007, three leech specimens were collected from a pond (nearer to the paddy field) of a village Polempur, under Burdwan district West Bengal, as a part of survey the specimens were deposited in ZSI. Registration Number of the leech specimens is "An 3622/1". These leeches were observed in living and also in preserved state. It was observed that out of three specimen's one mature leech bears 101 number of eggs. Photo of eggs bearing leech shows the same (Fig. 1).

#### MATERIALS AND METHODS

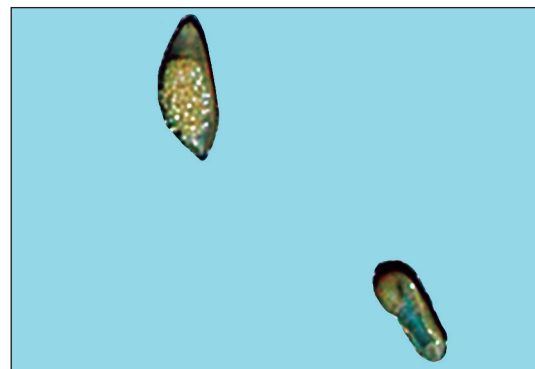
The leeches were collected from different parts of West Bengal and after collection, the leeches were sorted out. Then they were cleaned. The cleaned leeches were placed in a tray with a small quantity of water and slowly killed by alcohol. Leeches usually die in an extended condition by the process. Just after death, the leeches were kept in 70% alcohol for permanent preservation. 4% formalin may be used as fixation.

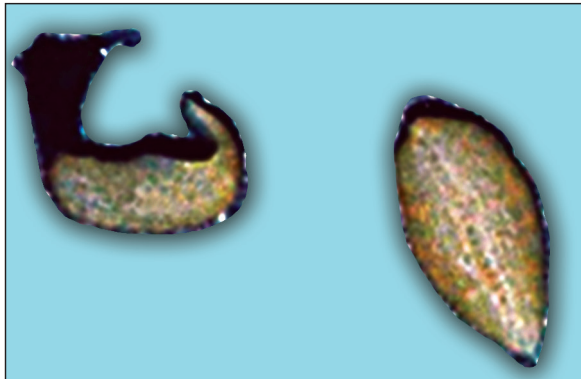
#### RESULT AND DISCUSSION

Three examples of leeches have been collected from a survey. The leeches were identified as *Hemiclepsis marginata asiatica*. One of them bears 101 eggs. Details about it is discussed below.

*Hemiclepsis marginata asiatica* Moore, 1924  
(Fig. 1)

*Material:* Three specimens were collected from Burdwan. The specimens have been deposited in the national collection of Z.S.I. Calcutta. Registration number is An 3622/1.





**Fig. 1.** Photograph of *Hemiclepsis marginata asiatica* (Highest egg bearing aquatic leech)  
 A. *Hemiclepsis marginata asiatica* (Ventral view)  
 B. *Hemiclepsis marginata asiatica* (Dorsal view)

**Diagnostic characters:** The common name is disproportioned eyed leech. Translucent body attains a length of about 16 mm. and the greatest width about 6 mm; head region dilated and distinct from rest of the body. Reddish brown in

colour but generally white in preserved condition; transverse stripes broken, pale-yellow in colour found on the dorsal surface; eyes two pairs on rings 3 and 4 but the anterior pair very minute; male and female pores open between rings 29/30 and 31/32 respectively; crop with eleven pairs of lateral diverticula's.

**Distribution:** India: Sirmour (Himachal Pradesh); Srinagar (Jammu and Kashmir); Meghalaya; Uttar Pradesh; Howrah, Hooghly, Birbhum, Purulia, Malda, Coochbehar, Burdwan, Calcutta, Jalpaiguri, South 24 Parganas (West Bengal).

**Outside India:** Canada; U.S.A; Paraguay; Andes; and Western Asia.

**Remarks:** Number of egg 101. The number is highest amongst the aquatic leeches recorded so far.

Table 1. Comparison of breeding season and number of eggs of *Hemiclepsis marginata asiatica* with some leeches of the same family Glossiphonidae.

Name of leech	Breeding season	Brood size
<i>Glossiphonia annandalei</i> Oka, 1921	July- August	9-14
<i>Glossiphonia heteroclita</i> (Linnaeus, 1761)	June -July	13-23
<i>Glossiphonia weberi</i> Blanchard, 1897	January -September	15-37
<i>Helobdella nociva</i> Harding, 1924	May- July	13-17
<i>Hemiclepsis marginata asiatica</i> Moore, 1924	March -July	15-101
<i>Hemiclepsis marginata marginata</i> Muller, 1774	April- August	21-39
<i>Paraclepsis praedatrix</i> Harding, 1924	May-July	21-27
<i>Paraclepsis gardensi</i> Mandal, 2004	April- August	5-7
<i>Placobdella emydae</i> Harding, 1920	May-July	23-37
<i>Placobdella fulva</i> Harding, 1924	June -July	15-23
<i>Placobdella harasundarai</i> Mandal, 2004	June -July	7-9
<i>Placobdella horai</i> Baugh, 1960	June -July	12-15
<i>Placobdella undulata</i> Harding, 1924	May-July	37-47

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