

**A REPORT ON THE OCCURRENCE OF THE SEA SKATER,
HALOBATES GALATEA HERRING (INSECTA : HEMIPTERA :
GERRIDAE) IN A MANGROVE HABITAT AT DHARMADAM,
KANNUR DISTRICT, KERALA, INDIA**

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INTRODUCTION

The Sea skater *Halobates galatea* Herring (Insecta : Hemiptera : Gerridae) was described in 1961 by Herring based on the material procured from an unspecified locality somewhere along the west coast of India. The allotype of the species designated by Herring (1961), collected from Mumbai, India, according to Andersen and Foster (1992) belongs to *H. formidabilis* (Distant) and not *H. galatea* Herring. Based on the material collected at Chorao Island, near Paniji, Goa, India, Andersen and Foster *op. cit.* redefined and redescribed *H. galatea* Herring. The specimens studied by them were collected from the surface of channels and pools amongst mangroves (*Rhizophora*) close to the shore.

During a recent faunistic survey in the Kannur district of Kerala, 7 specimens of *H. galatea* (Plate-I) were collected from a group of 18 specimens observed in a mangrove habitat at Dharmadam, the details of which are presented below. In addition, a check-list of the species of *Halobates* Eschscholtz known so far from the Indian marine habitats is also provided.

MATERIAL EXAMINED

3 males, 4 females (all apterous), Mangroves, Thalassery river mouth 200 m inshore near Koduvally, Dharmadam, Kannur district, Kerala, India, 28-ii-2002. Coll. P. M. Sureshan and Party.

Size : Male : Length 5.2–5.5 mm, width 2.0 mm; Female : Length 5.0 mm, width 2.2–2.5 mm.

Diagnosis : Body blackish with grayish pubescence and yellow markings; head with 2 triangular yellow markings meeting in the midline; ventral part of body in male with yellow markings, not extensive but conspicuous; lateral margin of proctiger of male roundly produced but not pointed;

right styliform process curved outward; in female, the yellow colouration on the ventral part of body more extensive than in male.

Distribution : Arabian Sea along the west coast of India at Chorao Island, near Paniji, Goa; Dharmadam, Kannur district, Kerala (Present record).

Habitat : The present collection has been made from the surface of high tide waters amongst the aerial roots (Pneumatophores) of the mangrove plants, *Avicennia officianalis*, *A. marina* and *Sonneratia alba*.

A checklist of the species of *Halobates* Eschscholtz reported from India

1. *Halobates elephanta* Andersen & Foster, 1992
Halobates elephanta Andersen & Foster, 1992. *J. nat. Hist.*, **26** : 537.
Distribution : (1) Andaman Sea
(2) Arabian Sea : Maharashtra : Mumbai : Elephanta Island.
2. *Halobates flaviventris* Eschscholtz, 1822
Halobates flaviventris Eschscholtz, 1822. *Entomographien.*, **1** : 109.
Distribution : (1) Bay of Bengal : Tamil Nadu : Pamban Pass.
3. *Halobates formidabilis* (Distant, 1910)
Eurates formidabilis Distant, 1910a. *Ann. Mag. nat. Hist.*, **5**(8) : 146.
Halobates formidabilis (Distant) : Esaki, 1929. *Ann. Mag. nat. Hist.*, **4**(10) : 417.
Fabatus servus Distant, 1910b. *Fauna British India*, **5** : 155.
Halobates galatea Herring, 1961 : Andersen & Foster, 1992. *J. nat. Hist.*, **26** : 542 (Female allotype).
Distribution : (1) Andaman Sea : Andaman Nicobar : Ross Island.
(2) Bay of Bengal : Andhra Pradesh; Orissa (Chilika Lake)
(3) Arabian Sea : Maharashtra : Mumbai.
4. *Halobates galatea* Herring, 1961
Halobates galatea Herring, 1961. *Pacif. Insects*, **3**(2-3) : 294.
Distribution : (1) Arabian Sea : Goa : Paniji ; Kerala : Dharmadam.
5. *Halobates germanus* White, 1883
Halobates germanus White, 1883. *Voy. Challenger Rept. Zool.*, **7**(19) : 50.
Distribution : (1) Arabian Sea
(2) Bay of Bengal.

6. *Halobates hayanus* White, 1883
Halobates hayanus White, 1883. *Voy. Challenger Rept. Zool.*, 7(19) : 52.
 Distribution : (1) Andaman Sea.
7. *Halobates micans* Eschscholtz, 1822
Halobates micans Eschscholtz, 1822. *Entomographien.*, 1 : 107.
 Distribution : (1) Andaman Sea
 (2) Bay of Bengal : Tamil Nadu : Gulf of Mannar
 (3) Indian Ocean.
8. *Halobates proavus* White, 1883
Halobates proavus White, 1883. *Voy. Challenger Rept. Zool.*, 7(19) : 54.
 Distribution : (1) Andaman Sea : Nicobar Island : Nancovry Harbour.
9. *Halobates trynae* Herring, 1964
Halobates trynae Herring, 1964. *Proc. ent. Soc. Wash.*, 66 : 85.
 Distribution : (1) Bay of Bengal : Andaman and Nicobar

DISCUSSION

Sea skaters of the genus *Halobates* Eschscholtz comprise the only known true oceanic insects. The genus comprises of 43 species, of which 5 are distributed in all tropical oceans and the remaining 38 have been recorded from the near-shore, sheltered coastal waters of the tropical Indo-Pacific (Andersen and Foster, 1992). Of these, 9 species viz., *Halobates galatea* Herring, *H. flaviventris* Eschscholtz, *H. formidabilis* (Distant), *H. elephanta* Andersen & Foster, *H. germanus* White, *H. hayanus* White, *H. proavus* White, *H. trynae* Herring and *H. micans* Eschscholtz are known to occur in the Indian marine habitats. But for *H. germanus* and *H. micans* which are open ocean species, the remaining species of *Halobates* known from India are apparently near-shore species preferring habitats that are sheltered from winds and wave action.

The present report forms the first record of *Halobates galatea* from the coastal waters of Kerala. It further confirms the observation made by Andersen and Foster (1992) that *H. galatea* inhabits near-shore mangrove habitats. Besides, a recent report on the distribution of *Halobates* in the open oceans around India (Pathak *et al.*, 1998) does not include *H. galatea*, a pointer to the fact that the species in all probability is not an open ocean inhabitant.

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