

Redescription of *Hoplophrys oatesii* (Decapoda: Majoidea: Pisidae) from Korea

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ABSTRACT

A taxonomic study on *Hoplophrys oatesii* Henderson, 1893 was conducted with materials collected from Jeju Island of Korea by SCUBA diving. *H. oatesii* is redescribed with some remarks on variations of dactylus and the number of segments of abdomen. The Korean Pisid fauna now consists of seven species of five genera.

Key words: Redescription, *Hoplophrys oatesii*, Decapoda, Pisidae

INTRODUCTION

Hoplophrys oatesii has been reported in Indo-West Pacific, Western Indian Ocean, Japan, Indonesia, Philippine Islands (Sulu Archipelago), Fiji, and eastern Australia (Griffin and Tranter, 1986). They occur on a coral reef and are typically associated with Alcyonarians, especially *Dendronephthya* (Davie, 2002).

H. oatesii is redescribed with illustration herein. Now, the Korean Pisid fauna consists of seven species of five genera: *Hyasternus diacanthus*, *H. elongates*, *H. pleione*, *Oxypleurodon stimpsoni*, *Pisoides bidentatus*, *Scyra compressipes* (Miers, 1879; Sakai, 1938; Kamita, 1941; Kim, 1970; Kim and Park, 1972; Kim, 1973), *Hoplophrys oatesii* (present study).

Materials examined in this study are deposited in the Invertebrate Resources Bank of Korea (IRBK), Seoul National University. All the specimens are preserved in 80% ethyl alcohol. The abbreviation "cl" refers to carapace length from the tip of rostrum to the posterior dorsal margin of the carapace. Drawings were made with the aid of camera lucida. Terminology mostly follows Griffin (1966).

SYSTEMATIC ACCOUNTS

Superfamily Majoidea Samouelle, 1819

Family Pisidae Dana, 1851

¹*Genus *Hoplophrys* Henderson, 1893

²**Hoplophrys oatesii* Henderson, 1893 (Figs. 1, 2)

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Hoplophrys oatesii Henderson, 1893, p. 347; Sakai, 1938, p. 294; Griffin and Tranter, 1974, p. 168; Griffin and Tranter, 1986, p. 119, fig. 37a; Muraoka, 1998, p. 27. *Hoplophrys ogilbyi* McCulloch, 1908, p. 51; Balss, 1938, p. 22; Sakai, 1976, p. 233, pl. 81, fig. 1. *Parazewa palauensis* Miyake, 1939, p. 195, figs. 12, 13.

Material examined. 1♂ (cl 9.3 mm), Beomseom (Jeju Is.), 6 Jun. 2001, coll. S.H. Kim; 1♂ (cl 12.2 mm), 1♀ (cl 16.9 mm), Udo (Jeju Is.), 1996, coll. S.H. Kim; 1♂ (cl 6.44 mm), Beomseom (Jeju Is.), 22 Oct. 1991, coll. S.H. Kim.

Description. Carapace (Fig. 1A) subpyriform, proportion of length of carapace to breadth as 1.4 to 1; rostrum very deflexed downwards, rostral spines divergent; preorbital spine long, laminate, directed obliquely forward; supraor-

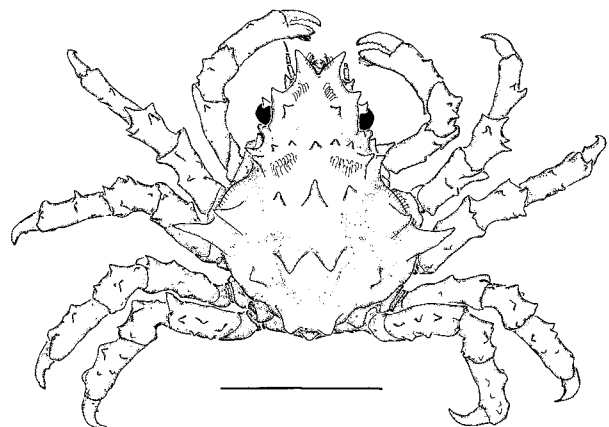


Fig. 1. *Hoplophrys oatesii*, male. Whole animal, dorsal view. Scale bar=5 mm.

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bital cave not dilated; postocular spine not dilated, divided into two knobs at tips; no intercalated spine; eyestalk short, armed with small, acute spine on anterior border near cornea; gastric and cardiac regions elevated; branchial region with two long, stout teeth, of which one project on lateral margin; epibranchial lobes on each side of cervical suture, with large dentiform tubercle; spines in gastric region, two spines in median line; cardiac region rising into two small blunt tubercles; intestinal region with two large tubercles

transversely, directed obliquely backwards.

Antenna with basal segment (Fig. 2A) elongated, broadened basally, having acuminate spine at antero-lateral angle; visible from above.

Third maxilliped (Fig. 2A) with ischium denticulated on inner margin; merus with extero-lateral border concave and with antero-lateral angle little produced; furnished exopodite with an acute tooth on inner margin near distal end.

Chelipeds (Fig. 1A) almost equal, not so stout; merus and

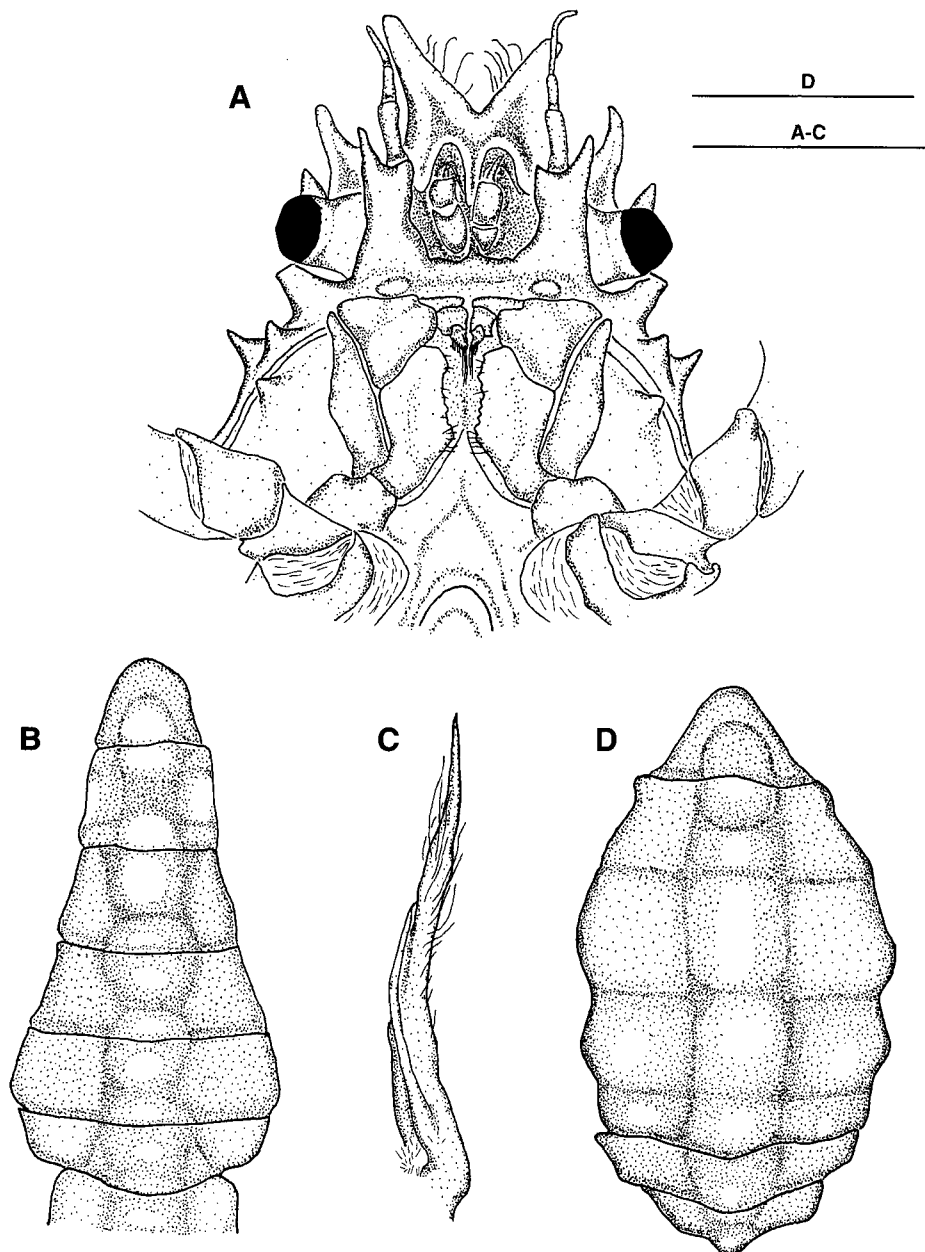


Fig. 2. *Hoplophrys oatesii*, male. A, front of carapace and orbit, ventral view; B, male abdomen; C, left first pleopod; D, female abdomen. Scale bars=1 mm (A-C), 5 mm (D).

carpus bearing crest-like teeth irregularly in upper borders; denticulated fingers on inner margin; immovable finger with fringed long hairs on lower surface.

Walking leg (Fig. 1A) rather stout, bearing carinate teeth irregularly as in merus and carpus of chelipeds; dactylus hooked at tip; first walking leg bearing two spines on dactylus, one proximally and the other midway along.

Abdomen of male (Fig. 2B) seven-jointed, female (Fig. 2D) four-jointed.

Male gonopod (Fig. 2C) slender, gradually narrowing distally ornamented with long hairs; distal portion curved slightly outward.

Habitat. Soft Coral (*Dendronephthya* sp.).

Remarks. Griffin and Tranter (1986) mentioned that the original description and figures of *H. ogilbyi* by McCulloch (1908) were extremely accurate and detailed: each of dactyli of the posterior walking legs has several small spines proximally on the ventral surface, and each of dactyli of the first walking legs of the male from Bundaberg have two spines ventrally, one proximally and one midway along. In Korean specimens, each of dactyli of the walking legs has a spine on ventral middle surface. Rarely, the dactyls of the specimens have two spines proximally on the ventral surface. Griffin and Tranter (1986) described that the abdomen of female consists five segments, but the number of segments of the female from Korea is four. It is not very distinct between segments three and four, four and five, and five and six.

Distribution. Indo-West Pacific, Western Indian Ocean: Providence and Amirante, Red Sea. Off Indian Coasts to Gulf of Martaban. Pacific Ocean: Korea, Japan, Indonesia, Philippine Islands (Sulu Archipelago), Fiji, eastern Australia.

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