

PARATHALESTRIS JEJUENSIS SP. NOV. (COPEPODA, HARPACTICOIDA,
THALESTRIDAE) FROM MACROALGAL BEDS FROM KOREA

BY

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ABSTRACT

Some thalestrid harpacticoid copepods were found in samples collected with a light trap from Jeju Island, Korea. Taxonomic analysis of the specimens revealed that they belong to a new species of the genus *Parathalestris* Brady & Robertson, 1873. The new species, *P. jejuensis* sp. nov. is characterized by the short caudal ramus without bulbous seta at the base in both sexes, the shape of the male antennule with a strong and densely plumose seta on the first segment and numerous setae on the third segment, the minute seta on the innermost margin of the transformed P2 endopod in the male, and the setal formula of the male P5.

RÉSUMÉ

Des copépodes harpacticoïdes Thalestridae ont été trouvés dans des échantillons collectés à l'aide d'un piège lumineux à l'île de Jeju, Corée. L'analyse taxonomique des spécimens a révélé qu'ils appartiennent à une nouvelle espèce du genre *Parathalestris* Brady & Robertson, 1873. La nouvelle espèce, *P. jejuensis* sp. nov. est caractérisée par les rames furcales courtes sans soie renflée à la base dans les deux sexes, la forme de l'antennule mâle avec une forte soie densément plumeuse sur le premier segment et de nombreuses soies sur le troisième segment, la très petite soie au bord interne de l'endopodite modifié de P2 chez le mâle et la formule des soies de la P5 mâle.

INTRODUCTION

Members of the harpacticoid copepod family Thalestridae G. O. Sars, 1905 occur in the marine and shallow water epibenthos, sometimes in association with macroalgae (Boxshall & Halsey, 2004). So far, only 10 species of 4 genera have been recorded from Korean waters: *Amenophia orientalis* Ho & Hong, 1988; *Eudactylopus spectabilis* (Brian, 1923); *E. andrewi* Sewell, 1940; *Parathalestris bulbiseta* Lang, 1965; *P. verrucosa* Itô, 1970; *P. pacificus* Chislenko, 1971; *P.*

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areolata Itô, 1972; *P. infestus* Ho & Hong, 1988; *P. parviseta* Chang & Song, 1997; and *Phyllothalestris sarsi* Sewell, 1940 (cf. Ho & Hong, 1988; Chang & Song, 1995, 1997; and Song et al., 2001). Members of this family are reported mainly from macroalgae, *A. orientalis* and *P. infestus* both collected from farms of *Undaria pinnatifida* (Harvey) Suringar (locally known as “miyok” or “wakame”) is known to negatively affect miyok. The genus *Parathalestris* is the most speciose within the family and is characterized by having a 2-segmented antennary exopod and the enp-2 of P2-P4 bearing 2, 1, and 1 setae, respectively (Lang, 1965). According to Wells (2007), 26 species have currently been included within the genus *Parathalestris*. During the course of a comprehensive study on the marine harpacticoid community of Korea, a new species belonging to *Parathalestris* was identified and is herein described as *Parathalestris jejuensis* sp. nov. It becomes to be the seventh member of the Korean *Parathalestris*.

MATERIAL AND METHODS

Material was obtained from the macroalgal beds on sandy bottoms in Jeju Island, Korea. Specimens were collected using a light trap and fixed in 95% ethanol. Specimens were cleared and dissected in lactic acid, and the dissected parts were mounted on slides in lactophenol as a mounting medium. Preparations were sealed with transparent nail varnish. All drawings were prepared using a camera lucida on a Leica DM2500 differential interference contrast microscope with Nomarski optics. Type specimens are deposited in the collections of the Natural Institute of Biological Resources (NIBR), Korea. Scale bars in all figures are indicated in μm .

Abbreviations and descriptive terminology used herein are adopted from Huys et al. (1996). Abbreviations used in the text are: ae, aesthetasc; exp, exopod; enp, endopod; benp, baseopod; A1, antennule; A2, antenna; P1-P5, first to fifth swimming legs; P6, sixth leg; exp (enp)-1 (2, 3), proximal (middle, distal) segment of a ramus. The term acrothek is used to denote the conjoined setae (two) and aesthetasc found apically on the distal antennular segment.

DESCRIPTIVE PART

***Parathalestris jejuensis* sp. nov. (figs. 1-6)**

Material examined. — Holotype, undissected ovigerous female in ethanol (reg. no. NIBRIV0000169316), collector B. J. Kang, 20 April 1995. Allotype undissected adult male in ethanol (reg. no. NIBRIV0000189768), sampling data as in holotype. Paratypes: 4 ovigerous females and 1 adult male (reg. no. NIBRIV0000169317), 1 female (reg. no. SACOP3018), and 1 adult male