

## Naupliar Development of *Eucyclops* cf. *serrulatus tropicalis*, *Euc.* cf. *spatulatus*, and *Ectocyclops medius* Kiefer, 1930 (Copepoda: Cyclopidae)

Supawadee Chullasorn<sup>1</sup>, Wan-Xi Yang<sup>2</sup>, Hans-Uwe Dahms<sup>3</sup>, Pawana Kangtia<sup>1</sup>, Maria Holynska<sup>4</sup>, Wongpiya Anansatitporn<sup>1</sup>, La Orsri Sanoamuang<sup>5</sup>, and Jiang-Shiou Hwang<sup>3,\*</sup>

<sup>1</sup>Department of Biology, Faculty of Science, Ramkhamhaeng University, Bangkok 10240, Thailand. E-mail: csupawadee@yahoo.com

<sup>2</sup>College of Life Sciences, Zhejiang University, Zi Jin Gang Campus, 388 Yu Hang Tang Road, Hangzhou, Zhejiang 310058, China  
E-mail: wxyang@spermlab.org

<sup>3</sup>National Taiwan Ocean University, Keelung 202, Taiwan. E-mail: hansd@mail.ntou.edu.tw

<sup>4</sup>Museum and Institute of Zoology, Polish Academy of Science, Wilcza 64, Warsaw, Poland. E-mail: mariahol@miiz.waw.pl

<sup>5</sup>Department of Biology, Faculty of Science, Khon Kaen University, Khon Kaen 40002, Thailand. E-mail: la\_orsri@kku.ac.th

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**Supawadee Chullasorn, Wan-Xi Yang, Hans-Uwe Dahms, Pawana Kangtia, Maria Holynska, Wongpiya Anansatitporn, La-Orsri Sanoamuang, and Jiang-Shiou Hwang (2009)** Naupliar development of *Eucyclops* cf. *serrulatus tropicalis*, *Euc.* cf. *spatulatus*, and *Ectocyclops medius* Kiefer, 1930 (Copepoda: Cyclopidae). *Zoological Studies* 48(1): 12-32. All 6 naupliar stages of *Eucyclops* cf. *serrulatus tropicalis* Dussart and Fernando, 1985, *Euc.* cf. *spatulatus* Morton, 1990, and *Ectocyclops medius* Kiefer, 1930 are described from Bangkok, Thailand. Naupliar differences at the genus level were more pronounced than those at the species level in *Eucyclops* and *Ectocyclops* (*Ectocyclops* having a particularly large, round-shaped labrum, and strong spinules on the anterior surface of the coxa, basis, and endopod). Species-specific naupliar characters allow interspecific discrimination (*Euc.* cf. *serrulatus tropicalis* differs from *Euc.* cf. *spatulatus* particularly in its smaller size, in the relative length of the distal antennal exopod segment, and in showing a transverse row of small spinules along the caudal rim). <http://zoolstud.sinica.edu.tw/Journals/48.1/12.pdf>

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Cyclopoid copepods develop naupliar larvae as their early postembryonic stages (Dahms 2000, Alekseev 2002). As most free-living Copepoda, the Cyclopoida go through 6 naupliar and 6 copepodid stages (Elgmork and Langeland 1970, Ferrari and Dahms 2007). The naupliar phenotype is quite unlike that of adults, and it is difficult to tell which nauplii belong to which adults, unless the development of isolated females is observed in the laboratory. Naupliar instars have been exposed to different selection pressures, and nauplii therefore have experienced a remarkable adaptive radiation,

leading to a diversity of structures, behavioral characteristics, and distribution patterns (Dahms et al. 2007a). Due to their great abundances and variety, nauplii likely also play important ecological roles (Dukina 1956). Life-history studies in the field and investigations of stage-specific phenomena in the laboratory are hampered by a lack of descriptive information and missing keys for identification that are the basis for all work on stage-specific phenomena in the laboratory, heterogeneous assemblages in the field, and behavioral research (Wong et al. 1998, Hwang and

\*To whom correspondence and print requests should be addressed. Supawadee Chullasorn and Wan-Xi Yang contribute equally to this work. Tel: 886-935289642. Fax: 886-2-24629464. E-mail: Jshwang@mail.ntou.edu.tw