

Cyclopoid and calanoid copepod biodiversity in Indonesia.

ABSTRACT

Recent limnological investigations conducted on the large lakes of Indonesia provide valuable physical and ecological data for future environmental and developmental programmes, yet few studies have focused on zooplankton taxonomy. Here we describe *Eucyclops trosperratus* Alekseev et Yusoff n. sp. from a pond in Sumatra, and *Mesocyclops jakartensis* Alekseev n. sp. from a city pond in Jakarta, Java. In the pelagic zone of the lakes of Sulawesi we found only few copepod species. For the endemic cyclopoid *Tropocyclops matanoensis* Defaye, 2007, we propose a new subgenus, *Defayeicyclops* n. subg., and provide more data on the morphology as well as scanning electron microscopy and confocal laser scanning images of *Tropocyclops* (*Defayeicyclops*) *matanoensis*. Two other cyclopoid species were possibly introduced to Sulawesi: *Mesocyclops aequatorialis similis* Van de Velde, 1984 from Africa and *Thermocyclops crassus* (Fischer, 1853) from Eurasia. A new subspecies, *Phyllodiaptomus praedictus sulawesensis* Alekseev et Vaillant n. ssp. (Calanoida, Diaptomidae), is described from the plankton of lake Tondano, North Sulawesi, Indonesia. The new subspecies resembles *P. blanci* (de Guerne et Richard, 1896) and *P. wellekensae* Dumont et Reddy, 1992. *Phyllodiaptomus praedictus sulawesensis* appears to be endemic to Sulawesi island. The form *matanensis* formerly treated as a subspecies of *Eodiaptomus wolterecki* Brehm, 1933 is here elevated to species rank, *E. matanensis* Brehm, 1933. A preliminary list of the copepod species found in Sulawesi and other large islands of Indonesia now includes more than 60 species. An updated key to the Southeast Asian species of the genus *Eucyclops* is provided.

Keyword: Copepoda; Indonesia; New species; Subgenus *Defayeicyclops*.