



## ***Diaphanosoma senegal* Gauthier, 1951 (Crustacea: Cladocera: Sididae) in South-East Asia**

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### **Abstract**

Representatives of a rare species, *Diaphanosoma senegal* Gauthier, 1951, are recorded for the first time from seven localities in Northeast Thailand and in one locality in the south of Vietnam. The known species range is thereby much expanded to the east, from West Africa to South-East Asia. Close comparative examination of specimens from the latter region has revealed morphological differences from all other representatives of the species, inhabiting the vast area from West Africa to India and Bangladesh, thus substantiating their attribution to a new subspecies, *D. senegal isanensis*. The description of the new taxon is supplemented by notes on biology and zoogeography of the species.

**Key words:** Cladocera, Sididae, *Diaphanosoma senegal*, new subspecies, Thailand, Vietnam

### **Introduction**

The rare species *Diaphanosoma senegal* was described by Gauthier (1951) from Senegal, and was later reported from India and Bangladesh (Brehm 1952, 1953; Venkataraman & Krishnaswamy 1984; Korovchinsky 1993) and from a few other sites in West Africa (Korovchinsky 1991; Jeje 1993). Interpopulation comparisons were facilitated by detailed morphological comparison of some of these widely separated populations.

The investigation of the extensive zooplankton collections of the Applied Taxonomic Research Centre of the Khon Kaen University (Thailand) has revealed *D. senegal* in a few samples collected in the north-east of the country. Additionally, this species has been found in two samples from the south of Vietnam. This new material enabled a comparative intra- and interpopulational study of South-East Asian specimens which revealed discrete characters of a new subspecies and defined the species range in the paleotropics more precisely.

### **Materials and methods**

Abbreviations: ad—adult parthenogenetic female, juv—juvenile female.

*In toto*, 371 samples from 337 localities in Northeast and East Thailand have been examined. Specimens of *D. senegal* were found only in seven samples, which are as follows:

Thailand: 1) NE 244: rice field, Muang dt., Maha Sarakham Province, 08.05.1999, 2 ad; 2) NE 245: temporary pond at Ban Eiat, Muang dt., Maha Sarakham Province, 08.05.1999, 22 ad, two of them deformed; 3) NE 246: temporary pond at Ban Thatoom, Muang dt., Maha Sarakham Province, 2 ad; 4) NE 250: temporary