



A revision of the *Thyropygus allevatus* group. Part 4: the *T. cuisinieri* subgroup (Diplopoda: Spirostreptida: Harpagophoridae)

PIYATIDA PIMVICHAI¹, HENRIK ENGHOFF^{2,3} & SOMSAK PANHA^{1,3}

¹Animal Systematics Research Unit, Department of Biology, Faculty of Science, Chulalongkorn University, Bangkok 10330, Thailand.
E-mail: somsakp@sc.chula.ac.th and piyatida_pimvichai@yahoo.com

²Natural History Museum of Denmark, University of Copenhagen, Universitetsparken 15, DK-2100 Copenhagen Ø, Denmark.
E-mail: henghoff@snm.ku.dk

³Corresponding author

Abstract

The *Thyropygus cuisinieri* subgroup of the *T. allevatus* group is revised. A new species is described from Thailand: *T. jarukchusri* n. sp. The following species are re-described: *T. cuisinieri* Carl, 1917, *T. carli* Attems, 1938, and *T. foliaceus* (Demange, 1961), **new status** (elevated from subspecies status under *T. cuisinieri*).

Key words: millipede, taxonomy, new species, Thailand

Introduction

After our revisions of the *opinatus*, *bifurcus* and *induratus* subgroups of the *Thyropygus allevatus* group (Pimvichai *et al.* 2009a, 2009b; 2011), the genus *Thyropygus* Pocock, 1894 currently includes 53 named species. In the present study we revise a fourth subgroup, *viz.*, the *cuisinieri* subgroup as defined by Pimvichai *et al.* 2009a.

The *cuisinieri* subgroup is distributed in continental SE Asia: Thailand, Vietnam and Cambodia (Fig. 6).

Material and methods

Newly collected specimens were hand-collected and partly preserved in 70% ethanol, partly placed in a freezer at -20 °C for subsequent molecular studies. Specimens were examined from the following collections:

CUMZ	Museum of Zoology, Chulalongkorn University, Bangkok, Thailand
MHNG	Muséum d'Histoire Naturelle, Geneva, Switzerland
NMW	Naturhistorisches Museum, Vienna, Austria
USNM	Smithsonian Institution National Museum of Natural History, Washington, United States of America
ZMUC	Natural History Museum of Denmark (Zoological Museum), University of Copenhagen, Denmark

Drawings were based on photographs and examination of specimens under a stereo microscope. Pimvichai *et al.* (2009a: 21, figs 1–3, 2009b) defined a number of terms for gonopods of the *T. allevatus* group. Most of these are used in the following descriptions, *viz.*, (terms not in Pimvichai *et al.* 2009a, b; 2011 in **bold**)

- Anterior coxal fold (*ac*): The main part of gonopod in anterior view. Confusingly called *posterior* coxal fold by Demange (1961) and Hoffman (1975).
- **Projecting lobe on the anterior coxal fold** (*apl*): A prominent projecting lobe on the lateral surface of the anterior coxal fold.