



Nematodes of amphibians from Java, Indonesia, with a description of new species, *Meteterakis wonosoboensis* n. sp. (Nematoda : Heterakoidea)

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Abstract

During a survey on the parasites of amphibians of Indonesia, toads (30 *Bufo melanostictus*) and 246 frogs (213 *Fejervarya cancrivora*, 11 *F. limnocharis*, 22 *Rana macrodon* from West Java and 68 *F. cancrivora* from Central Java) were examined for parasitic nematodes. Three species of nematodes were found and described, i.e. *Meteterakis wonosoboensis* n. sp. from *Fejervarya cancrivora*; *Meteterakis japonica* from *Bufo melanostictus*, *F. cancrivora* and *F. limnocharis*; and *Chabaudus* sp. from *F. cancrivora*, *F. limnocharis* and *Rana macrodon*. *Meteterakis wonosoboensis* n. sp. is distinguished from other species of the genus by the length and shape of spicules, the number of caudal papillae, the presence of gubernaculum in male and the presence of vulval flap in female. *Bufo melanostictus* and Java are recorded as new host and locality for *M. japonica*, respectively.

Key words: amphibians, nematodes, new species, *Meteterakis*, *Chabaudus*, Indonesia

Introduction

Information about helminth parasites of amphibians from Indonesia is still very limited, particularly from Java Island. To date, helminth parasites of amphibians of Java had been reported only from Depok and Bogor (Sunityoso *et al.*, 1979; Purwaningsih & Aziz, 1992; Suzana *et al.*, 2006). During research on helminth parasites of amphibians in West and Central Java we found three species of nematodes: a new species of the genus *Meteterakis* along with *M. japonica* (Wilkie, 1930) and *Chabaudus* sp. The new species is described herein. Moreover, we also present new morphological and metrical data for *M. japonica* from Indonesian specimens.

Meteterakis was established by Karve (1930) with *M. govindi* Karve as type species. The genus was then revised by Inglis (1958), who transferred some species to the genus *Spinicauda* Travassos and *Africana* Travassos, while the remaining eight species were retained in genus of *Meteterakis*. Currently, 23 species are known from amphibians and reptiles (Zhang & Zhang, 2011). The only species hitherto reported from Indonesia is *M. longispiculata* (Baylis, 1929) found from *Gecko gecko* (Linnaeus) in Central Java (Baylis, 1929).

Chabaudus was first described by Inglis and Ogden (1965) with type species *C. chabaudi*, from a fish, *Heterobranchus bidorsalis* Geoffroy et Saint-Hilaire, in Sierra Leone (West Africa). Then, a second species, *C. thysi* was reported from yet another species of fish, *Auchenoglanis punctatus* Boulenger in Africa (Puylaert, 1970). Four species have been hitherto reported from amphibians, i.e. *C. leberrei* (Bain et Philippon) from *Bufo regularis* Reuss of Africa; *C. williamsi* (Puylaert) from *Petropedetes natator* Boulenger in Sierra Leone; *C. rauschi* (Le Van Hoa & Pham Ngoc Khue) from *Rana tigrina* (Daudin) in Vietnam; and *C. alaini* Roque from an unidentified frog in East Timor (Roque, 1981).