First Record of a Minute Mud-loving Beetle of the Family Georissidae (Insecta: Coleoptera: Hydrophiloidea) in Thailand

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The family Georissidae (minute mud-loving beetles) is represented by a single genus, *Georissus*, which occurs on all continents except Antarctica. However, country records of species of *Georissus* are scattered. The genus comprises three subgenera (*Georissus* [*Georissus*], *Georissus*], *Georissus*], and *Georissus* [*Nipponogeorissus*]), 80 species, and 2 subspecies (HANSEN, 1999; LITOVKIN & FIKÁČEK, 2011). Various authors have considered the family as a subfamily within Hydrophilidae; however, current opinion retains family status (SHORT & FIKÁČEK, 2013). Larval, pupal, and adult *Georissus* are found on damp, sandy shores of lakes and rivers (SHEPARD, 2003). Some adults camouflage themselves with a covering of sand grains glued to their dorsum (BAMEUL, 1989). Most descriptions of adults are of the external morphology and only a few included a description or illustration of the aedeagus. Larvae have been described by VAN EMDEN (1956), BERTRAND (1972), SPANGLER (1991) and ARCHANGELSKY (1997); pupae have been described by BERTRAND (1972) and SHEPARD (2003). The chromosomal karyotype of *Georissus crenulatus* (Rossi) has been described and illustrated by SHAARAWI & ANGUS (1992), and the life cycle of *Georissus californicus* LeConte) has been described by SHEPARD (2003).

This family is little known because of their small size (many less than 2 mm) and the adults of some taxa conceal themselves with sand and remain still upon disturbance. Although most species are described from a limited number of adults, if a collector takes the time to closely examine sandy shores, the adults can be found. Very little has been reported on how specimens have been collected; the few reports include manually collecting individuals from damp, sandy shores of water bodies or light trapping on those shores. Some adults also have been caught in Malaise traps.

Collection in Thailand.—Eight specimens of *Georissus (Neogeorissus)* sp. (Figs. 1, 2) were collected using a blacklight pan trap (Fig. 3) and are deposited at the Essig Museum of Entomology, Berkeley (EMEC) and the University of Missouri (UMC). The specimens were collected at the following localities: THAILAND: Mae Hong Son Province, Amphoe Pang Mapha, Soppong River behind resort, 19°31.159'N 98°14.844'E, 648 m, 18 April 2009, colls. R.W. Sites, A. Vitheepradit, T.-O. Prommi, UV pan trap, L-1047 (3 EMEC, 2 UMC); THAILAND: Mae Hong Son Province, Namtok Mae Surin National Park, Mae Nam Pai, 19°21'N 97°59'E, 310 m, 14–15 × 2002, UV pan trap (2 EMEC, 1 UMC). At the first locality, the pan trap was placed on the sandy soil among rocks on the shoreline of the Soppong River (Fig. 4). The UV fluorescent bulb was powered with a battery and rested on the rim of the

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white pan containing water with detergent and was allowed to run overnight. On the following morning, the contents of the pan were strained from the water and placed in 80% ethyl alcohol.

The two species of *Georissus* geographically closest to this locality are *G. birmanicus* Arrow 1940, described from Kachin State in northern Burma (now Myanmar), and *G. insolitus* Delève 1974, described from peninsular Malaysia. Our specimens were collected in far northern Thailand and match the description of *G. birmanicus*, but not that of *G. insolitus*. Comparison with photographs of co-type specimens of *G. birmanicus* in the British Museum shows the dorsal morphology of the Thai specimens match that of *G. birmanicus*. However, because undescribed species are known from the Oriental region and the fauna has not been revised, we recognize the Thai specimens only as *Georissus* (*Neogeorissus*) sp.

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Figures 1–4. Dorsal (1) and lateral (2) habitus of *Georissus* sp; (3) Light trap for collecting aquatic insects at river's edge; (4) Collection site for *Georissus* along the shoreline of the Soppong River.