

Two New Species of *Geothelphusa* (Decapoda: Brachyura: Potamidae) from Taiwan

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Swee-Hee Tan and Hung-Chang Liu (1998) Two new species of *Geothelphusa* (Decapoda: Brachyura: Potamidae) from Taiwan. *Zoological Studies* 37(4): 286-290. Two new species of freshwater potamids, *Geothelphusa pingtung* and *G. hirsuta* are described from Taiwan with notes on their ecology. *G. pingtung* is found in Pingtung County and *G. hirsuta* is found in Miaoli and Hsinchu Counties. These 2 species can be differentiated from all the other 28 species of *Geothelphusa* in Taiwan mainly by the shape of their male 1st pleopods.

Key words: Taiwan, Crab, *Geothelphusa*, Taxonomy, New species.

The freshwater potamid crab genus *Geothelphusa* was erected by Stimpson (1858) for *G. dehaani* (White, 1847) and *G. obtusipes* Stimpson, 1858. Stimpson (1858), however, did not designate a type species. Rathbun (1898) subsequently designated *G. obtusipes* as the type species. Both species are, thus far, found in Japan but not in Taiwan (see Shy et al. 1994: 785). Wu et al. (1962) reported *Potamon (Geothelphusa) dehaani* from Inho-ton, U-lai, Pa-tu and Chi-tu. Shy et al. (1994) revised the *Geothelphusa* of Taiwan but did not discuss the identity of the specimens reported by Wu et al. (1962). They also did not discuss the previously reported presence of *G. dehaani* in Taiwan, although they listed it as being found only in Japan (Shy et al. 1994: 785). It is difficult to ascertain the identity of the specimens reported by Wu et al. (1962) from their brief description. They did not provide any figures and the whereabouts of the their specimens cannot be presently located (C.-H. Wang pers. comm.). Considering the superficial similarity of most *Geothelphusa* species and the fact that the taxonomy of the genus was quite unstable until the study by Shy et al. (1994), the presence of *G. dehaani* in Taiwan is suspected.

The identity of *G. chiui* Minei, 1974 remains

unsatisfactory (see Shy et al. 1994: 792). Some crabs were collected by the 2nd author on a recent trip to Hsinchu, Taiwan, to obtain topotypic material of *G. chiui*. However, the specimens obtained were of a smaller size, the carapace was more rugose, and the ambulatory legs were longer than in *G. chiui*. Close examination of the specimens revealed that they are not *G. chiui* as we had hoped and neither do they fit the description of the *Geothelphusa* species recorded by Shy et al. (1994). Another series of specimens of *Geothelphusa* from Taiwu Village and Machia Village, Pingtung County, was also found to be new. This report serves to describe the 2 new species.

MATERIALS AND METHODS

Terminology essentially follows Ng (1988). Measurements, by use of dial calipers, of the crabs are those of the carapace breadth and length, respectively. The abbreviations G1 and G2 are used for the 1st and 2nd pair of male pleopods, respectively. All specimens are deposited in the Taiwan Museum (TMCD), Taipei, Taiwan and the Zoological Reference Collection (ZRC), National University

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