· DaizNg, 1994

J. Martin

RAFFLES BULLETIN OF ZOOLOGY 1994 42(3): 657-661

ESTABLISHMENT OF A NEW GENUS OF FRESHWATER CRAB, HUANANPOTAMON (CRUSTACEA: DECAPODA: BRACHYURA: POTAMIDAE) FROM SOUTHERN CHINA

Ai-Yun Dai and Peter K. L. Ng

ABSTRACT. A new genus of potamid freshwater crab, *Huananpotamon*, is established for four species - *Nanhaipotamon angulatum et al.*, 1979, *N. obtusum* Dai & Chen, 1979, *N. planopodum* Dai & Chen, 1987, and *N. ramipodum* Dai & Chen, 1987, all from southern China. These species differ from species in *Nanhaipotamon* Bott, 1968, s. str. in having a flatter, less swollen carapace with more cristate anterolateral margins, a more slender third maxilliped ischium, proportionately broader male abdomen, a more slender and elongate male first pleopod and a different female genital pore structure.

INTRODUCTION

While involved in a revision of the potamid freshwater crab genus Nanhaipotamon Bott, 1968 (type species, Geothelphusa formosanum Parisi, 1916, by original designation), the authors re-assessed the taxonomic positions of all the species which had previously been classified in it. Of the six species currently recognised as belonging to Nanhaipotamon (Dai & Chen, 1987; Ng & Dudgeon, 1992), four species, N. angulatum et al., 1979, N. obtusum Dai & Chen, 1979, N. planopodum Dai & Chen, 1987, and N. ramipodum Dai & Chen, 1987, possess several diagnostic characters which suggested that they should be classified in a separate genus.

We subsequently examined a series of specimens allied to *N. angulatum* from the Wuyi Mountains in Jiangxi Province, China, which reinforced our suspicions that the above mentioned four species did not belong to *Nanhaipotamon* s. str. (fide Ng & Dudgeon, 1992). There was also a distinct discontinuity in the distribution of the two groups of *Nanhaipotamon*. On the basis of these observations, the authors propose that a new genus, *Huananpotamon*, be established for *N. angulatum*, *N. obtusum*, *N. planopodum* and *N. ramipodum*.

Dai, A.-Y. - Institute of Zoology, Academia Sinica, 7 Zhongguancum Lu, Haitien, Beijing 100080, People's Republic of China. P. K. L. Ng - Department of Zoology, National University of Singapore, Kent Ridge, Singapore 0511, Republic of Singapore.

ъ

MATERIAL AND METHODS

We have examined all the original material of N. angulatum, N. obtusum, N. planopodum and N. ramipodum, as well as topotypic material of N. formosense and N. hongkongense. Topotypic specimens of N. yaeyamense Minei, 1973, and N. balssi Bott, 1968 (both species were assigned to Nanhaipotamon by Bott, 1970; Minei, 1973) have also been examined. Specimens examined are currently deposited in the Academia Sinica, Beijing, China; and the Zoological Reference Collection, Department of Zoology, National University of Singapore.

Material examined. - [*Nanhaipotamon angulatum*, specimens in Academia Sinica, Beijing] - 3 males, 1 female (FJ 757902-1), Fujian Province, coll. v.1975 (types). - 2 males, 1 female (FJ 757902-2), Jian'ou, Fujian Province, coll. 1979. - 1 male, 2 females (1 ovigerous) (FJ 757902-3), Jian'ou, Fujian Province, coll. 1979. - 3 males (FJ 757902-4), Jian'ou, Fujian Province, coll. vi.1978. - 1 male (FJ 757902-5), Jian'ou, Fujian Province, coll. vi.1979. All localities in southern China.

TAXONOMY

FAMILY POTAMIDAE ORTMANN, 1896

Huananpotamon, new genus

Diagnosis. - Caraptice slightly convex fore and aft, dorsal surface with fine rugae on epibranchial regions; branchial regions not distinctly swollen. Anterolateral border cristate, lined with distinct granules. Ischium of third maxilliped rectangular; exopod with short flagellum. Male abdomen relatively narrow, acutely triangular in shape. Male first pleopod relatively long, slender, distal part of subterminal segment slender, neck-like, terminal segment relatively elongated, distinctly longer than subterminal segment, dorsal fold with distal part expanded to form lobe, flap or similar projection. Distal segment of male second pleopod subsequal to length of basal segment. Outer lateral border of female genital pore arched.

Etymology. - The name is derived from the Chinese for "southern China" in combination with the name "Potamon". Gender neuter.

Type species. - Nanhaipotamon angulatum Dai, Chen, Song, Fan, Lin & Zeng, 1979, by present designation (see Dai *et al.*, 1979: 122-124, Pl. 1: 1, Fig. 1). The species was published as "Nanhapotamon angulatum "Dai et Lin" (Dai *et al.*, 1979: 122), but the rest of the text made no indication as to who prepared the descriptions. According to Article 50a of the International Code of Zoological Nomenclature (1985), the authorship of N. angulatum should be cited as Dai, Chen, Song, Fan, Lin & Zeng, 1979 (see also Ng, 1992).

RAFFLES BULLETIN OF ZOOLOGY 1994 42(3)

DISCUSSION

Huananpotamon, new genus, resembles *Nanhaipotamon* externally, but differs in several key aspects (Table 1). Also, all the known species of *Huananpotamon* are distinctly smaller in size (adult carapace breadth 16.5-23.0 mm) compared to *Nanhaipotamon* (adult carapace breadth 21.1-35.1 mm).

The genus Nanhaipotamon Bott, 1968, is now restricted to only two species, N. formosanum (Parisi, 1916) and N. hongkongense (Shen, 1940). Nanhaipotamon balssi Bott, 1968, was recently referred to a new genus, Mindoron, by Ng & Takeda (1992). Nanhaipotamon yaeyamense Minei, 1973, will be referred to a new genus at a later date (P. K. L. Ng & S. Shokita, unpublished data) (see Ng & Dudgeon, 1992).

	······································	Nanhaipotamon	Huananpotamon
1.	Carapace	distinctly convex fore and aft, appears domed	slightly convex fore and aft, not domed
2.	Dorsal surface of carapace	almost smooth	with fine rugae
3.	Branchial region	distinctly swollen	not obviously swollen
4.	Anterolateral border	slightly cristate, almost rounded	distinctly cristate, lined with granules
5.	Third maxilliped	ischium very broad, appears squarish, inner margin distinctly dilated	ischium more slender, appears rectangular, inner margin not dilated
6.	Male abdomen	proximal segments very broad, segment 6 and telson elongate relatively broad	proximal segments comparatively narrow, segment 6 and telson
7.	Male first pleopod	stout, terminal segment relatively short; distal half of subterminal segment stout, gently tapering	slender, terminal segment relatively long; distal half of subterminal segment slender, neck-like
8.	Female genital pore	outer lateral border angulated	outer lateral border arched

Table 1. Differences between Nanhaipotamon Bott, 1968, and Huananpotamon, new genus



Fig. 1. Huananpotamon angulatum (Dai et al., 1979), new combination. Holotype male, carapace width 18.5 mm, carapace length 15.6 mm, Jian'ou, Fujian Province (FJ 757902-1).

LITERATURE CITED

Bott, R., 1968. Potamide aus Süd-Asien (Crustacea, Decapoda). Senckenbergiana biol., 49: 119-130, 5 Pls.

Dai, A. Y., G. X. Chen, Y. Z. Song, P. F. Fan, Y. G. Lin & Y. Q. Zeng, 1979. On new species of freshwater crabs harbouring metacercariae of lung flukes. Acta Zootax. Sinica, 4(2): 122-131, Pl. 1.

Dai, A. Y. & G. X. Chen, 1979. On the freshwater crabs of Fujian province. Acta Zool. Sinica, 25(3): 243-249, Pl. 1.

Dai, A. Y. & G. X. Chen, 1987. A study on the genus Nanhaipotamon (Decapoda: Isolapotamidae). Acta Zootax. Sinica, 12(1): 30-35

Minei, H., 1973. Potamoid crabs of the Ryukyu islands, with description of five new species (Crustacea, Decapoda, Potamoidea). J. Fac. Agric., Kyushu Univ., 17: 203-226.

International Commission of Zoological Nomenclature, 1985. International Code of Zoological Nomenclature. Third Edition. Adopted by the XX General Assembly of the International Union of Biological Sciences. International Trust for Zoological Nomenclature, in association with the British Museum (Natural History), London, 338 pp.

Ng, P. K. L., 1992. Review of: Crabs of the China Seas, by Dai Aiyun and Yang Siliang, 1991. Crustaceana, 63(1): 101-106.

Ng, P. K. L. & D. Dudgeon, 1992. The Potamidae and Parathelphusidae (Crustacea: Decapoda: Brachyura) of Hong Kong. *Invert. Tax.*, 6: 741-768.

Parisi, B., 1916. I Decapodi Giapponesi del Museuo di Milano. IV. Cyclometopa. Att. Soc. ital. Sci. nat., 55: 153-90, Pls. 7-11.

Shen, C. J., 1940. Four new species of Brachyura from Chinese seas. J. H. K. Fish. Res. Stn., 1(2): 255-62.

Ng, P. K. L. & M. Takeda, 1992. The freshwater crab fauna (Crustacea, Brachyura) of the Philippines. I. The family Potamidae Ortmann, 1896. Bull. Natn. Sci. Mus., Tokyo, (A) 18 (4): 149-166.