

THE CHARACTERISTICS OF RANGUNA (DEMANIETTA)
SIAMENSIS (A. MILNE-EDWARDS, 1869), AND RANGUNA
(DEMANIETTA) TENASSERIMENSIS CHANTABURIENSIS,
A NEW SUBSPECIES.
(CRUSTACEAN : DECAPODA)

by

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Observation of freshwater crabs in the collection of the Museum of Fisheries, Kasetsart University (KUMF), Bangkok, Thailand revealed that the changing from *Ranguna* (*Ranguna*) *siamensis*, (BOTT, 1970) to *Ranguna* (*Demanietta*) *siamensis* is taxonomically logical. A new subspecies of *Ranguna* (*Demanietta*) *tenasserimensis* from Thailand was also described.

RANGUNA (DEMANIETTA) SIAMENSIS (A. MILNE-EDWARDS, 1869)

Fig. 1 a-g.

- 1869 *Thelphusa siamensis* A. MILNE-EDWARDS, Nouv. Arch. Mus., 5: 173, pl. 8, fig. 5-5a.
1898 *Potamon siamense*, DE MAN, Ann. Mus. civ. Stor. nat. Genova, (2) 19: 438.
1904 *Potamon* (*Potamon*) *siamensis*, RATHBUN, Nouv. Arch. Mus., (4) 6: 306, pl. 13, fig. 1.
1970 *Ranguna* (*Ranguna*) *siamensis*, BOTT, Abh. senckenb. naturforsch. Ges., 526: 171-172, pl. 49, fig. 41.

Diagnosis: On the first gonopod; ventral portion of distal segment lobe-shaped extremely overlapped, acute apex pointed toward the exorbital corner, distal end of predistal segment and proximal end of distal segment reduced to neck shape. Post-orbital crests associated with antero-lateral border. Carapace strongly arched, especially the deep front border invisible from the top view. Large freshwater crab.

Description: Carapace very strongly arched, smooth, especially the front border which falls down so that it is invisible from the top view. Front two lobes. Epigastric crests a little high, slightly forward and separated by a fissure which is the beginning of a long fork-shaped middle groove. Epigastric crests separated from post-orbital crests by a comma notch. Post-orbital crest very near to the upper orbit, divided into two-parts, the long inner one reaching the narrow and distinct cervical

groove, and the short one reaching the indistinct antero-lateral border. Cervical groove very narrow, almost a fissure, complete and associated with semi-circular groove. H-groove recognizable on the dry specimen, but on the wet one barely unrecognizable. Third maxilliped with distinct, little oblique longitudinal groove in the middle of ischium, exopodite with flagellum. Chelipeds slightly unequal; dactylus slender weakly gaped, low but distinct teeth; carpus puffed margin with acute inner spine pointed anteriorly and with a little spine just under it; merus with coarse lower edges and without predistal spine. Walking legs short and with almost parallel margins on meri.

Measurements :

CHARACTERISTICS	USNM 102772 mm	KUMF 2-001 mm	KUMF 2-002 mm	KUMF 2-002 mm
CARAPACE:				
Breadth	52.5	43.3	41.4	38.8
Length	40.5	31.6	31.6	30.3
Depth	30.7	22.4	25.6	24.0
Front breadth	14.5	12.5	12.0	10.8
Exorbital to epibranchial tooth	2.2	2.6	2.3	2.0
RIGHT CHELIPED:				
Dactylus length	27.3	25.5	19.9	17.0
Propodus length	41.2	36.2	32.0	28.0
Propodus width	21.1	18.1	15.6	13.0
Propodus thick	12.8	11.4	10.2	8.2
LEFT CHELIPED:				
Dactylus length	22.0	18.9	—	15.0
Propodus length	35.0	30.0	—	24.5
Propodus width	15.1	12.4	—	10.2
Propodus thick	9.2	7.8	—	6.5
SEX	♀	♂	♀	♀

The female of 41.4 mm carapace breadth carried 50 eggs averaging 4.1 mm in diameter.

Local Type : In the vicinity of Bangkok.

Materials : Kan Suri (1 ♀ USNM 102772); Pong Nam Ron, Chantaburi Province (1 ♂ KUMF 2-001); Pa Khau Lam, Kanjanaburi (2 ♀ KUMF 2-002).

Remarks : The identification was based on BOTT's (1970) work. According to the gonopod character, this crab belongs to the subgenus *Demanietta*. The reports of specimens from Bangkok and Chantaburi Provinces are doubtful. In my opinion, the specimens would be all collected from Kanjanaburi where the two females were found. The bottle of specimen from Chantaburi contained also *Ranguna* (*Demanietta*) *tenasserimensis chantaburiensis*. The specimen was probably packed by mistake, because all *R. chantaburiensis* found were only from Chantaburi Province. The figure of *Potamon* (*Potamon*) *siamensis* in KEMP's (1923) report is not identical to the author's specimens.

The local name of *Ranguna* (*Demanietta*) *siamensis* is Pu Pa (= crab-forest). They lived in holes at the edges of the dry forest.

RANGUNA (DEMANIETTA) TENASSERIMENSIS CHANTABURIENSIS,
NEW SUBSPECIES.

Fig. 2 a-g.

Diagnosis : On the first gonopod: ventral portion of the distal segment little lobe-shaped overlap approximately 1/4 of the proximal end; acute apex, distal segment suddenly turned at the middle of the segment out to lateral side; distal end of predistal segment and proximal end of distal segment reduced to neck-shape. Epigastric and post-orbital crests fused together as one ridge. Post-orbital ridges gradually sharper outwardly and jointed with antero-lateral ridges. Carapace slight arched. Large freshwater crab.

Description : Carapace smooth, arch, the front border is invisible by the top view. Front with two sharp outer corners straight borders which are joined together at the middle. Epigastric crests a little advanced joined with post-orbital crests. Distinct antero-lateral borders. Cervical groove shallow and broad, indistinct boundary associated with semi-circular groove. H-groove recognizable. Third maxilliped with distinct longitudinal groove in the middle of ischium, exopodite with flagellum. Chelipeds slightly unequal; dactylus slender weakly gapped, distinct teeth; carpus normal margin with acute inner spine pointed forward and with a small spine under the inner spine; merus with two coarse lower edges and without predistal spine. Walking legs slender.

Measurements :

CHARACTERISTICS	KUMF 2—003 mm	KUMF 2—003 mm	KUMF 2—004 mm
CARAPACE:			
Breadth	35.8	42.8	37.3
Length	27.6	32.7	26.7
Depth	20.2	25.2	17.7
Front breadth	8.9	10.0	9.8
Exorbital to epibranchial tooth	3.2	3.2	4.0
RIGHT CHELIPED:			
Dactylus length	22.7	24.2	15.5
Propodus length	29.3	35.4	22.8
Propodus width	15.4	17.5	10.0
Propodus thick	9.8	11.3	5.5
LEFT CHELIPED:			
Dactylus length	14.4	16.5	17.5
Propodus length	21.3	24.5	26.7
Propodus width	9.4	10.0	12.4
Propodus thick	5.7	5.9	7.0
SEX	♂	♀	♀

Local Type : Pong Nam Ron, Chantaburi Province, Thailand.

Materials : Pong Nam Ron, Chantaburi Province, Thailand (1 ♂, ♀ KUMF 2-003; 1 ♀ KUMF 2-004).

Remarks : The figure of *Potamon (Potamon) siamensis* in KEMP's (1923) report looked similar to this species. Unfortunately, KEMP did not characterize the first gonopod which made it impossible to identify his specimen. In addition, the collecting site was far away from that of the type-specimen.

The specimens were collected by Mr. T. SMITINAND in November 1956 and preserved in 70 per cent alcohol. The local name is Pu Pang (= crab—flour).

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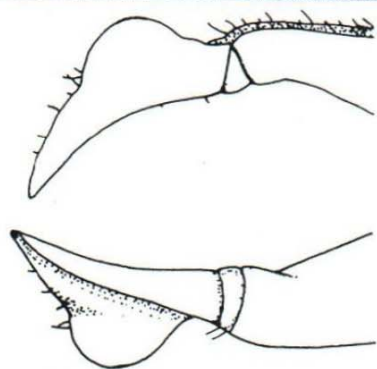
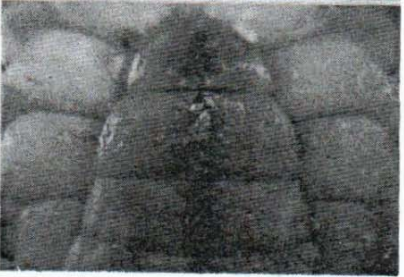
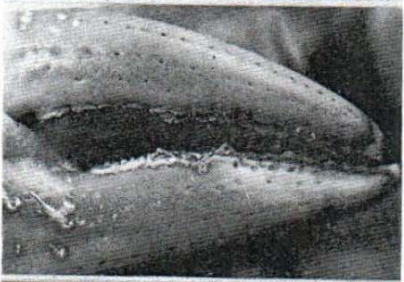
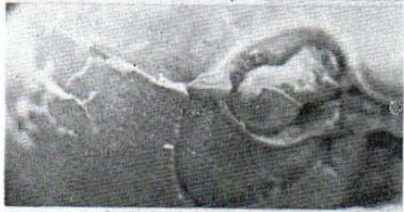
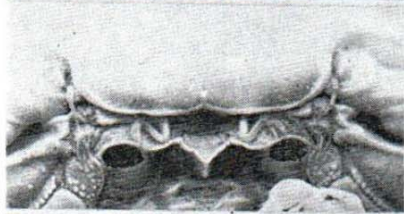
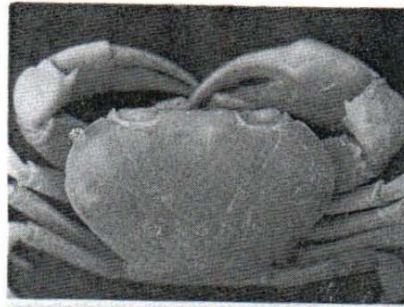


FIGURE 1

a

b

c

d

e

f

g

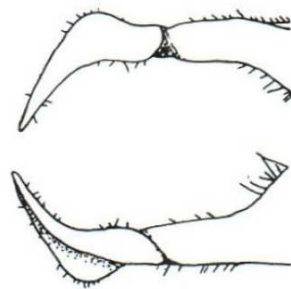
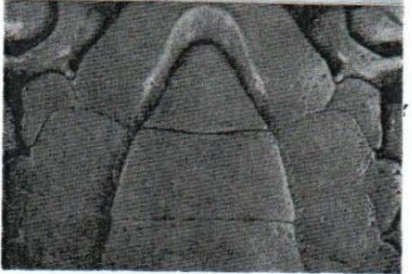
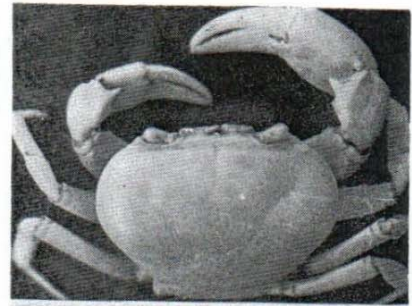


FIGURE 2