

**PUDAENGON, A NEW GENUS OF TERRESTRIAL CRABS  
(CRUSTACEA: DECAPODA: BRACHYURA: POTAMIDAE)  
FROM THAILAND AND LAOS, WITH  
DESCRIPTIONS OF SEVEN NEW SPECIES**

**Peter K. L. Ng and Phaibul Naiyanetr**

**ABSTRACT.** - The taxonomic status of the poorly known terrestrial potamid crab *Potamon inornatus* Rathbun, 1904, from Indo-China is clarified, and a new genus, *Pudaengon*, is established for it. Seven new species of *Pudaengon* from Thailand and Laos, viz. *P. mukdahan*, *P. wanonniwat*, *P. sakonnakorn*, *P. thatphanom*, *P. khammouan*, *P. hinpoon* and *P. arnamicai* are also described.

---

**INTRODUCTION**

Five genera of terrestrial and semiterrestrial potamid crabs, with 13 species, are known at present from Thailand, viz. *Dromothelphusa* Naiyanetr, 1992, *Kanpotamon* Ng & Naiyanetr, 1993, *Phaibulamon* Ng, 1992, *Thaiphusa* Ng & Naiyanetr, 1993, and *Thaipotamon* Ng & Naiyanetr, 1993 (see Ng, 1992; Ng & Naiyanetr, 1993; Naiyanetr, 1992, 1993, 1994). Because of their similar habitat requirements, their external appearances are superficially similar, with high and/or inflated carapaces and relatively long ambulatory dactyli.

The authors, while revising the species described by Rathbun (1904, 1905, 1906) from Indo-China, checked many of the types now in the Muséum national d'Histoire naturelle (MP) in Paris. One of the specimens examined was the poorly known *Potamon (Potamon) inornatus* Rathbun, 1904. A study of this species showed that it was closely related to a number of related taxa in the second author's collection which had been obtained from various parts of Thailand and Laos, all of which are undescribed. While these taxa were most closely resembled species of *Thaipotamon*, they differed in several key characters which we felt justified generic distinction.

The present paper redescribes *Potamon inornatus*, as well as describes the new genus, *Pudaengon*, and seven new species.

---

**P. K. L. Ng** - Department of Zoology, National University of Singapore, Kent Ridge, Singapore 0511, Republic of Singapore. **P. Naiyanetr** - Department of Biology, Chulalongkorn University, Bangkok, Thailand.

## MATERIALS AND METHODS

The abbreviations G1 and G2 are for the male first and second pleopods respectively. Measurements are of the carapace width and length respectively. The measurements of the G1 terminal and subterminal segments, as well as the G2 basal segment are made along the longest straight line. The terminology used here essentially follows that of Ng (1988). The Thai terms Changwat and Amphoe refer to the province and district respectively.

Specimens examined are deposited in the Nationaal Naturhistorisch Museum [previously the Rijksmuseum van Natuurlijke Historie (RMNH)], Leiden; Chulalongkorn University Natural History Museum (CUMZ), Bangkok; Muséum national d'Histoire naturelle (MP), Paris; Senckenbergischen Forschung Institut (SMF), Frankfurt am Main; and the Zoological Reference Collection (ZRC), Department of Zoology, National University of Singapore.

### DESCRIPTIVE PART

#### FAMILY POTAMIDAE

#### *Pudaengon*, new genus

*Type species.* - *Pudaengon mukdahan*, new species, by present designation.

*Diagnosis.* - Carapace appears rounded, inflated, dorsal surfaces distinctly convex transversely and longitudinally, anterolateral regions mildly or distinctly rugose, or covered with flattened granules, epigastric and postorbital cristae distinct, rounded, rugose, not sharp, close to frontal and supraorbital margins; postorbital regions narrow; frontal margin distinctly deflexed downwards, appears narrow from dorsal view; anterolateral margin with distinct crest which is lined by very small, rounded granules; epibranchial tooth very small but discernible, not clearly visible from dorsal view; external orbital angle acutely triangular. Ischium of third maxilliped appears swollen; exopod distinctly curved, outer margin distinctly convex; short, distal part not reaching, sub-equal to or slightly over-reaching distal inner edge of merus; without trace of a flagellum. Ambulatory dactyli very long. Male abdomen broadly triangular. G1 with distal part of subterminal segment narrow, neck-like; terminal segment with well developed dorsal fold which is longer than half length of segment (from ventral view). G2 with well developed distal segment, longer than half length of basal segment.

*Etymology.* - The name is derived from the Thai name for these crabs, "Pu Daeng", in arbitrary combination with a common ending for Asiatic potamids (from the genus name *Potamon*). Gender neuter.

*Remarks.* - Superficially, *Pudaengon*, new genus, bears a close resemblance to *Thaipotamon* Ng & Naiyanetr, 1993 (type species *Thaipotamon lomkao* Ng & Naiyanetr, 1993), both in the general shape of the carapace and physiognomy as well as in the structure of the G1. *Pudaengon* however, differs from *Thaipotamon* in having the carapace more rounded (vs. distinctly transverse and egg-shaped); the anterolateral regions mildly to distinctly rugose (vs. smooth); anterolateral margin distinctly cristate (vs. rounded, smooth); a proportionately shorter exopod of the third maxilliped, with the tip not reaching, subequal or slightly over-reaching the inner distal edge of the merus (vs. extending upwards to one-

quarter to one-third the length of the merus); and the exopod of the third maxilliped completely lacks a flagellum (vs. presence of a short but distinct flagellum). Also distinct (but perhaps less significant when more species of both genera are known) is that although thoracic sternites 3 and 4 are completely fused in both genera, a broad but distinct groove on each side demarcates these two segments in *Thaipotamon*. In *Pudaengon*, no such grooves are visible at all. Also, the postorbital cristae are not as swollen as those in *Thaipotamon*, and as a result the postorbital regions are more distinct. The differences observed between *Thaipotamon* and *Pudaengon* are quite distinct, and easily allow members of the two genera to be separated.

The short third maxilliped exopod which lacks a flagellum allies *Pudaengon* with the monotypic genus *Phaibulamon*. *Phaibulamon* however, differs from *Pudaengon* in having a flatter and more strongly rugose carapace, a strongly cristate anterolateral margin, a well developed epibranchial tooth, proportionately much longer ambulatory legs and chelipeds, and a very different G1 (see Ng, 1992).

***Pudaengon inornatum* (Rathbun, 1904)**

(Figs. 1, 16A, 17A)

*Potamon* (*Potamon*) *inornatus* Rathbun, 1904: 311, pl. 14 fig. 6.

*Ranguna* (*Ranguna*) *inornatus* ? - Bott, 1970: 170.

**Material examined.** - Lectotype: male (48.7 by 38.8 mm) (MP-BP 192), Cochinchine (?), coll. Harmand, 1878.

**Diagnosis.** - Anterolateral regions rugose, covered with flattened granules. Exopod of third maxilliped does not reach distal edge of merus. Proximal lateral margins of male telson distinctly convex, broadly triangular in shape. G1 terminal segment 0.42 times length of subterminal segment, dorsal fold 0.32 times length of terminal segment (from ventral view). G2 not known.

**Taxonomic remarks.** - As the gender of *Pudaengon* is neuter, the specific name of the species should be amended to "inornatum".

Bott (1970) in his treatment of Potamidae, was uncertain about the validity of *Potamon inornatus*, tentatively synonymising it under *Potamon laosensis* Rathbun, 1904, and transferring the species to the genus *Ranguna* Bott, 1966. *Ranguna* is now regarded as a junior synonym of *Potamiscus* Alcock, 1909, and many of its species (including *R. laosensis*) have been referred to *Dromothelphusa* Naiyanetr, 1992 (see Naiyanetr, 1992; Ng & Naiyanetr, 1993).

We have not been able to examine fresh specimens of *P. inornatum*, and we are uncertain as to where the precise type locality is. There is also some uncertainty as to where the specimens had been collected from. Rathbun (1904: 342) listed the type locality as "Siam; aux environs de La-Khon, près de la rivière Mékong", but the label in the jar of the holotype only named "Cochinchine (?)" as the locality. As all the known *Pudaengon* species are found in northeastern and eastern Thailand, and Laos, the type locality of *P. inornatum* is probably somewhere in this region. It is important to note that the name "La-Khon" refers to what is now Nakon Phanom province in northeastern Thailand, but the species which has been collected there is *P. thatphanom*, which is quite different from *P. inornatum* (see Table 1). In old Thai maps, there is also a place named "La-Khon" in northern Thailand, in Lampang

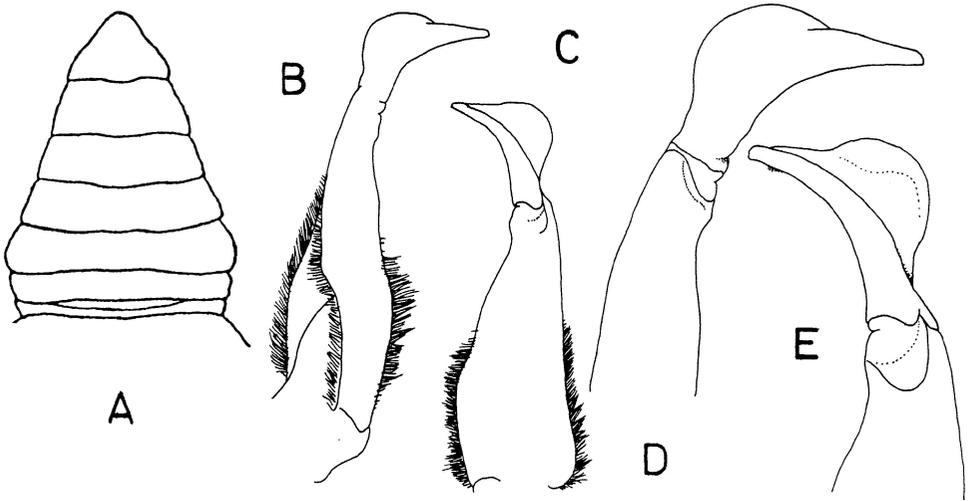


Fig. 1. *Pudaengon inornatum* (Rathbun, 1904). Lectotype male (48.7 by 38.8 mm) (MP-BP 192). A, male abdomen; B, C, left G1; D, E, G1 terminal segment; F, male abdomen. B, D, ventral view; C, E, dorsal view. A after Rathbun (1904).

Province in Amphoe Chiangmai, but no members of *Pudaengon* are known from this locality. It is also unlikely that the specimens of *P. inornatum* collected by Harmand came from the Chiangmai area because (as far as is known), he obtained his specimens only from the northeastern and eastern parts of Thailand.

Rathbun (1904) examined three male specimens and one brooding female but did not clearly indicate which was to be the holotype. In the caption to her figure of the third maxilliped and abdomen, she noted that it was from the male type, but from the scales given, one cannot be sure that the specimen for which dimensions are given (48.5 by 39.0 mm) is the holotype. We have been able to find only one specimen in the Paris Museum, and the its dimensions agree very well with that of the specimen she measured. It is here designated as the lectotype.

***Pudaengon mukdahan*, new species**  
(Figs. 2, 3, 16B, 17B)

**Material examined.** - Holotype: male (44.1 by 35.0 mm) (ZRC 1995. 288), Ban Na Sinuan, Amphoe Muang, Changwat Mukdahan, northeastern Thailand, coll. P. Naiyanetr, 29 Oct.1991.

Paratypes: male (43.5 by 35.0 mm), female (42.2 by 33.6 mm) (ZRC 1995. 289), 1 male, 1 female (RMNH), 1 male, 1 female (SMF), 16 males (CUMZ), same data as holotype.

**Diagnosis.** - Anterolateral regions rugose, covered with flattened granules. Exopod of third maxilliped slightly over-reaches distal edge of merus. Proximal lateral margins of male telson gently convex, triangular in shape. G1 terminal segment 0.46 times length of subterminal segment, dorsal fold 0.29 times length of terminal segment (from ventral view). G2 with distal segment 0.60 times length of basal segment.

**Etymology.** - The name is derived from the type locality. It is used as a noun in apposition.

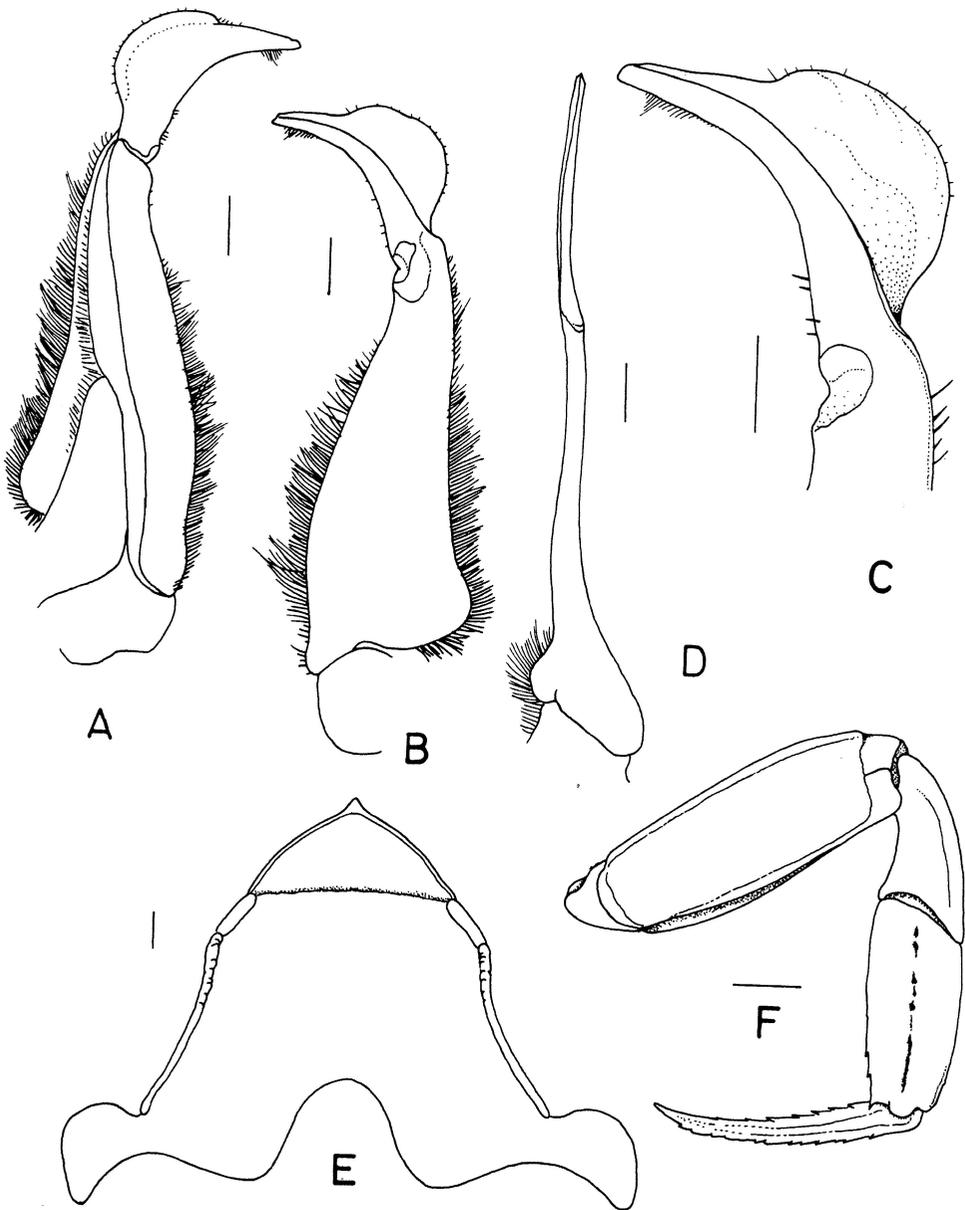
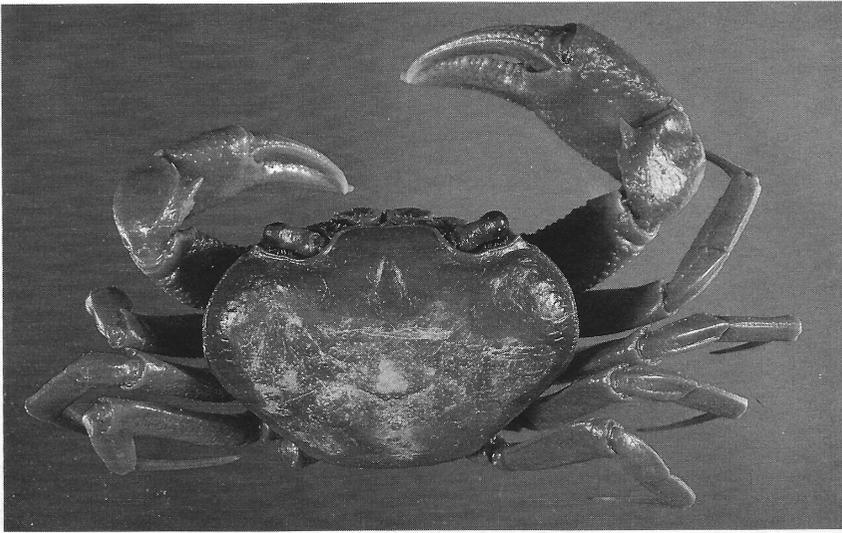
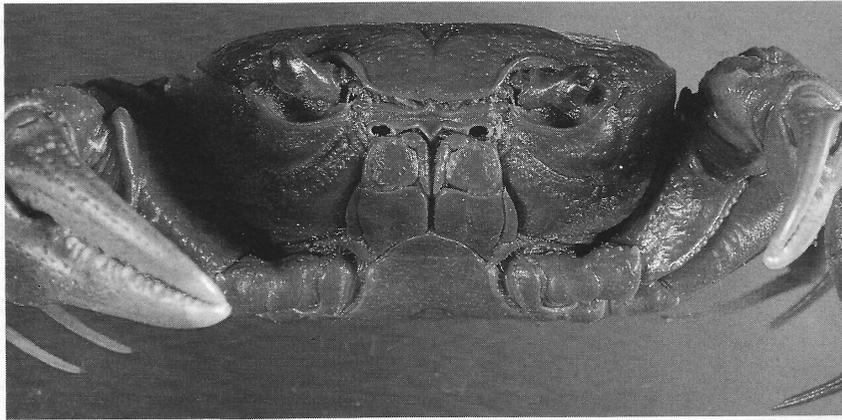


Fig. 2. *Pudaengon mukdahan*, new species. Holotype male (44.1 by 35.0 mm) (ZRC 1995.288). A, B, left G1; C, left G1 terminal segment; D, left G2; E, anterior thoracic sternum; F, right fourth ambulatory leg. A, ventral view; B, C, dorsal view. Scales = 1.0 mm.

A



B



C

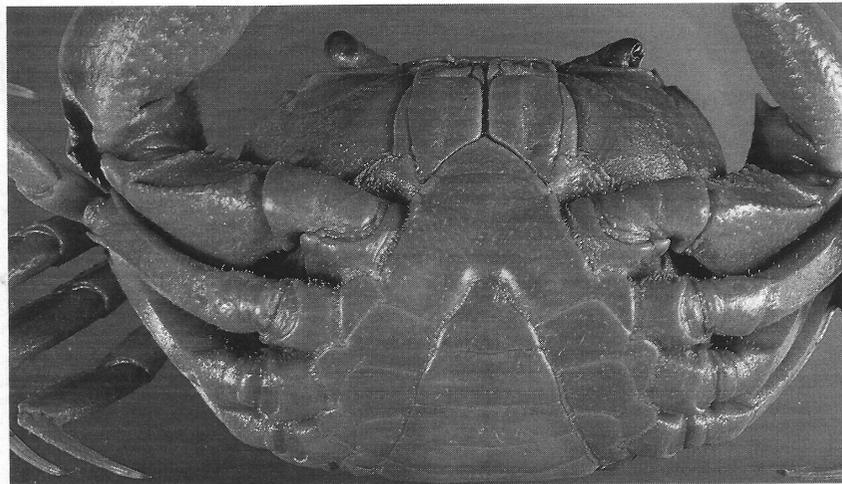


Fig. 3. *Pudaengon mukdahan*, new species. Holotype male (44.1 by 35.0 mm) (ZRC 1995.288). A, dorsal view; B, frontal view; C, ventral view.

*Pudaengon wanonniwat*, new species

(Figs. 4, 5, 16C, 17C)

**Material examined.** - Holotype: male (44.8 by 36.7 mm) (ZRC 1995.290), Amphoe Wanon Niwat, Changwat Sakon Nakhon, northeastern Thailand, coll. P. Naiyanetr, 19 Oct.1984.

Paratypes: 1 female (46.8 by 37.3 mm), 1 male (ZRC 1995.291), 1 male, 1 female (RMNH), 1 male, 1 female (SMF), 4 males, 6 females (CUMZ), same data as holotype.

**Diagnosis.** - Anterolateral regions rugose, covered with flattened granules. Exopod of third maxilliped slightly over-reaches distal edge of merus. Proximal lateral margins of male telson distinctly convex, broadly triangular in shape. G1 terminal segment 0.47 times length of subterminal segment, dorsal fold 0.28 times length of terminal segment (from ventral view). G2 with distal segment 0.61 times length of basal segment.

**Etymology.** - The name is derived from the type locality. It is used as a noun in apposition.

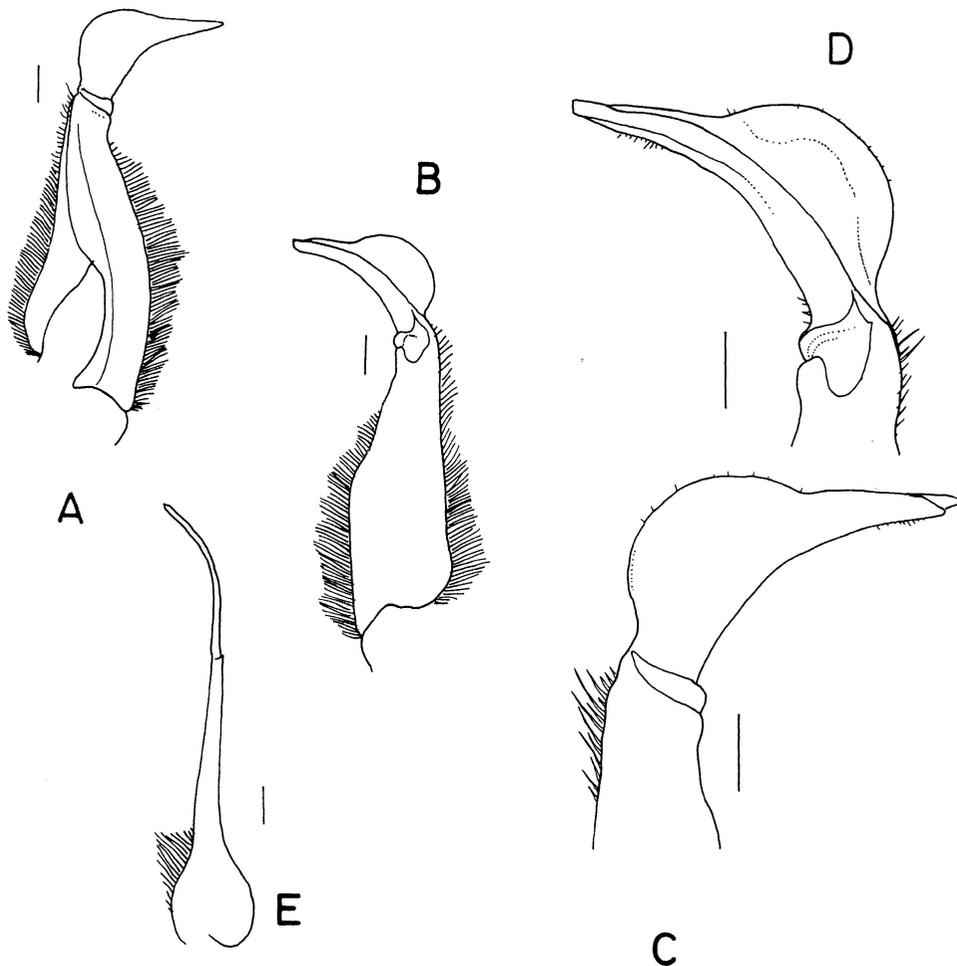
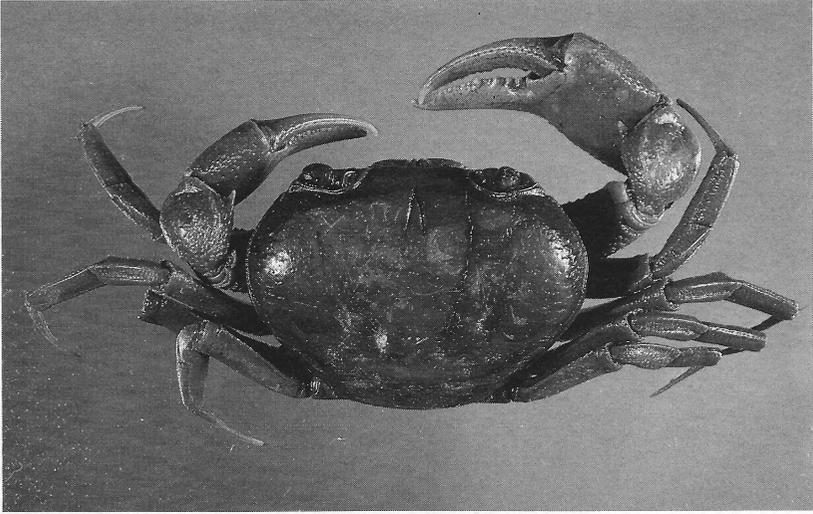
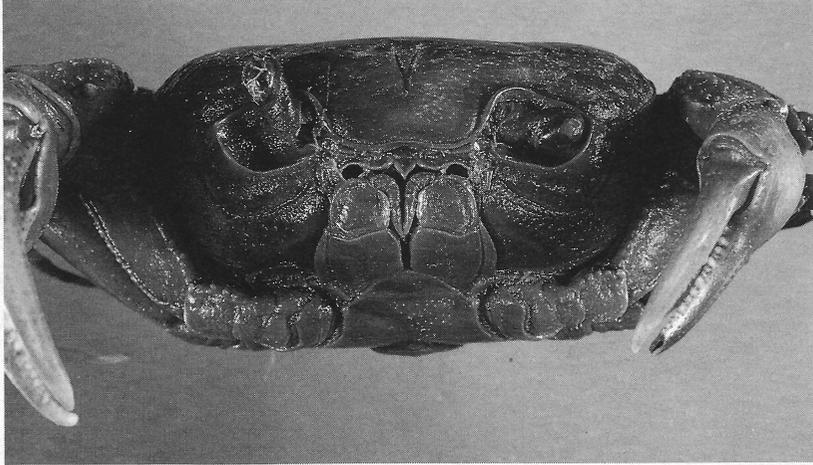


Fig. 4. *Pudaengon wanonniwat*, new species. Holotype male (44.8 by 36.7 mm) (ZRC 1995.290). A, B, left G1; C, D, left G1 terminal segment; E, right G2. A, C, ventral view; B, D, dorsal view. Scales = 1.0 mm.

A



B



C

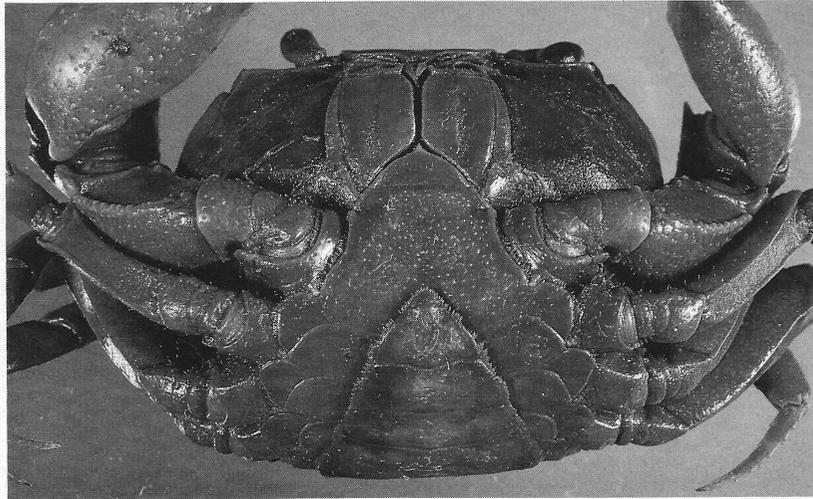


Fig. 5. *Pudaengon wanonniwat*, new species. Holotype male (44.8 by 36.7 mm) (ZRC 1995.290). A, dorsal view; B, frontal view; C, ventral view.

*Pudaengon sakonnakorn*, new species

(Figs. 6, 7, 16D, 17D)

**Material examined.** - Holotype: male (48.2 by 37.5 mm) (ZRC 1995.292), Ban Chiang Khua, Amphoe Muang, Changwat Sakon Nakon, northeastern Thailand, coll. P. Naiyanetr, 21 Oct.1983.

Paratypes: 1 female (48.4 by 37.3 mm), 2 males (ZRC 1995.293), 1 male, 1 female (RMNH), 1 male, 1 female (SMF), 19 males, 27 females (CUMZ), same data as holotype.

**Diagnosis.** - Anterolateral regions strongly rugose, flattened granules prominent. Exopod of third maxilliped just reaches distal edge of merus. Proximal lateral margins of male telson gently convex, triangular in shape. G1 terminal segment 0.44 times length of subterminal segment, dorsal fold 0.30 times length of terminal segment (from ventral view). G2 with distal segment 0.52 times length of basal segment.

**Etymology.** - The name is derived from the type locality. It is used as a noun in apposition.

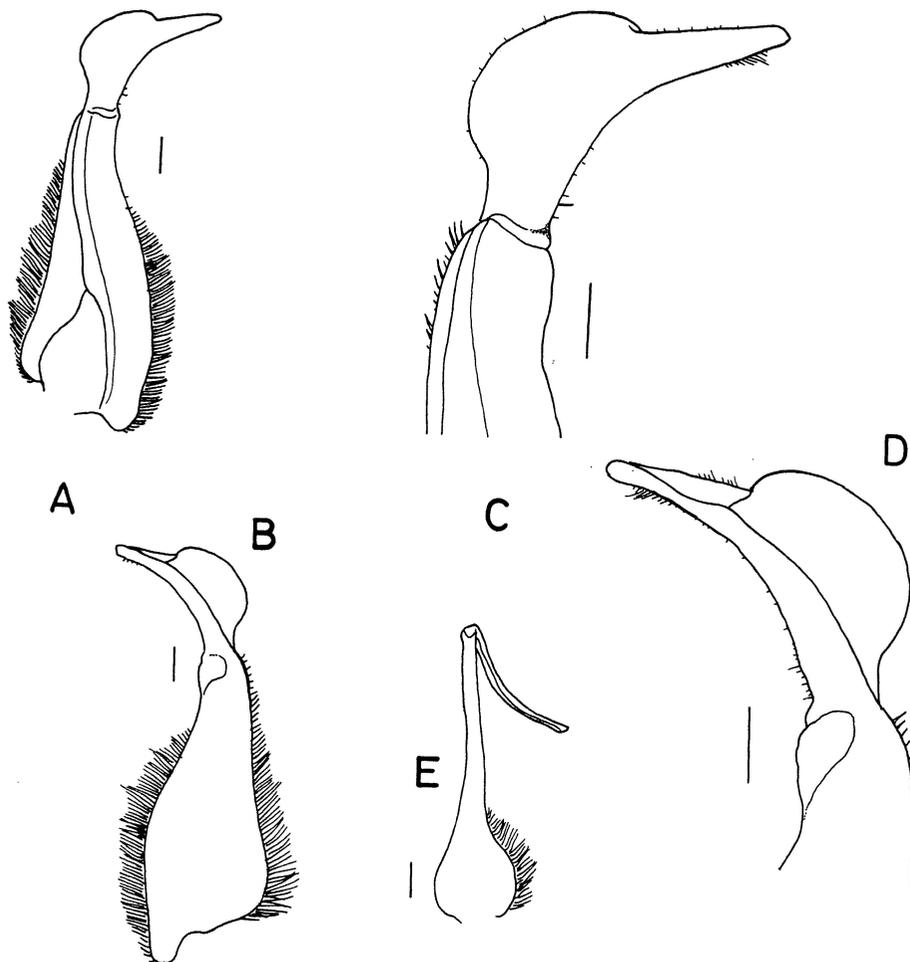
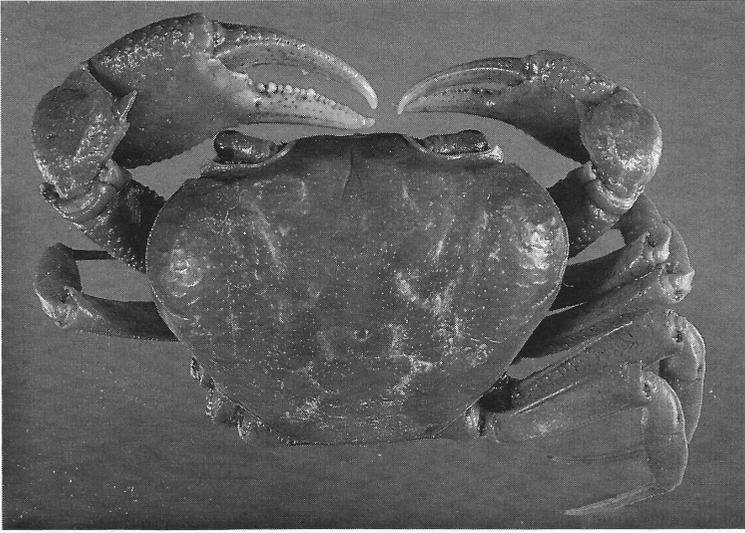
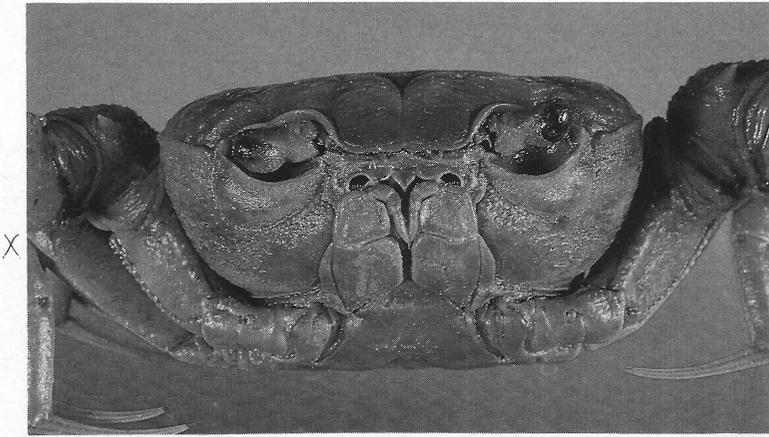


Fig. 6. *Pudaengon sakonnakorn*, new species. Holotype male (48.2 by 37.5 mm) (ZRC 1995.292). A, B, left G1; C, D, left G1 terminal segment; E, left G2. A, C, ventral view; B, D, dorsal view. Scales = 1.0 mm.

A



B



C

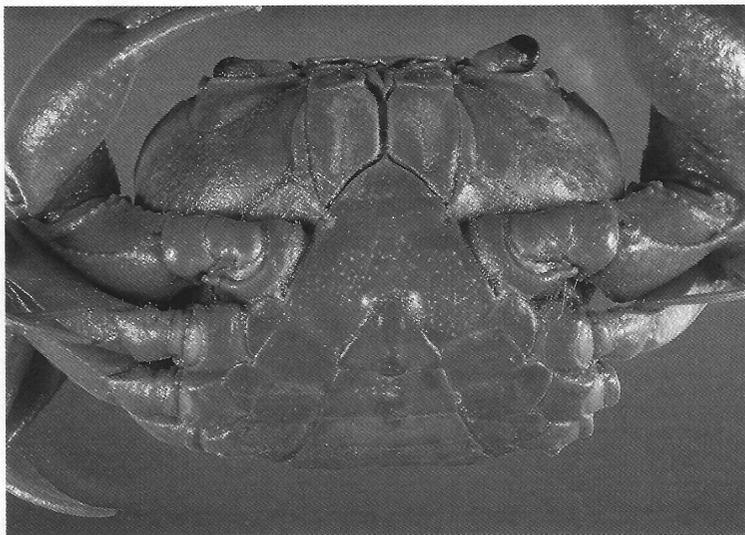


Fig. 7. *Pudaengon sakonnakorn*, new species. Holotype male (48.2 by 37.5 mm) (ZRC 1995.292). A, dorsal view; B, frontal view; C, ventral view.

*Pudaengon thatphanom*, new species

(Figs. 8, 9, 16E, 17E)

**Material examined.** - Holotype: male (56.1 by 44.5 mm) (ZRC 1995.294), Ban Fung Daeng, Amphoe That Phanom, Changwat Nakhon Phanom, northeastern Thailand, coll. P. Naiyanetr, 31 Jul.1985.

Paratypes: 1 female (56.2 by 45.1 mm), 1 male (ZRC 1995.295), 1 male, 1 female (RMNH), 1 male, 1 female (SMF), 15 males, 22 females (CUMZ), same data as holotype.

**Diagnosis.** - Anterolateral regions rugose, covered with flattened granules. Exopod of third maxilliped slightly over-reaches distal edge of merus. Proximal lateral margins of male telson distinctly convex, broadly triangular in shape. G1 terminal segment 0.39 times length of subterminal segment, dorsal fold 0.28 times length of terminal segment (from ventral view). G2 with distal segment 0.70 times length of basal segment.

**Etymology.** - The name is derived from the type locality. It is used as a noun in apposition.

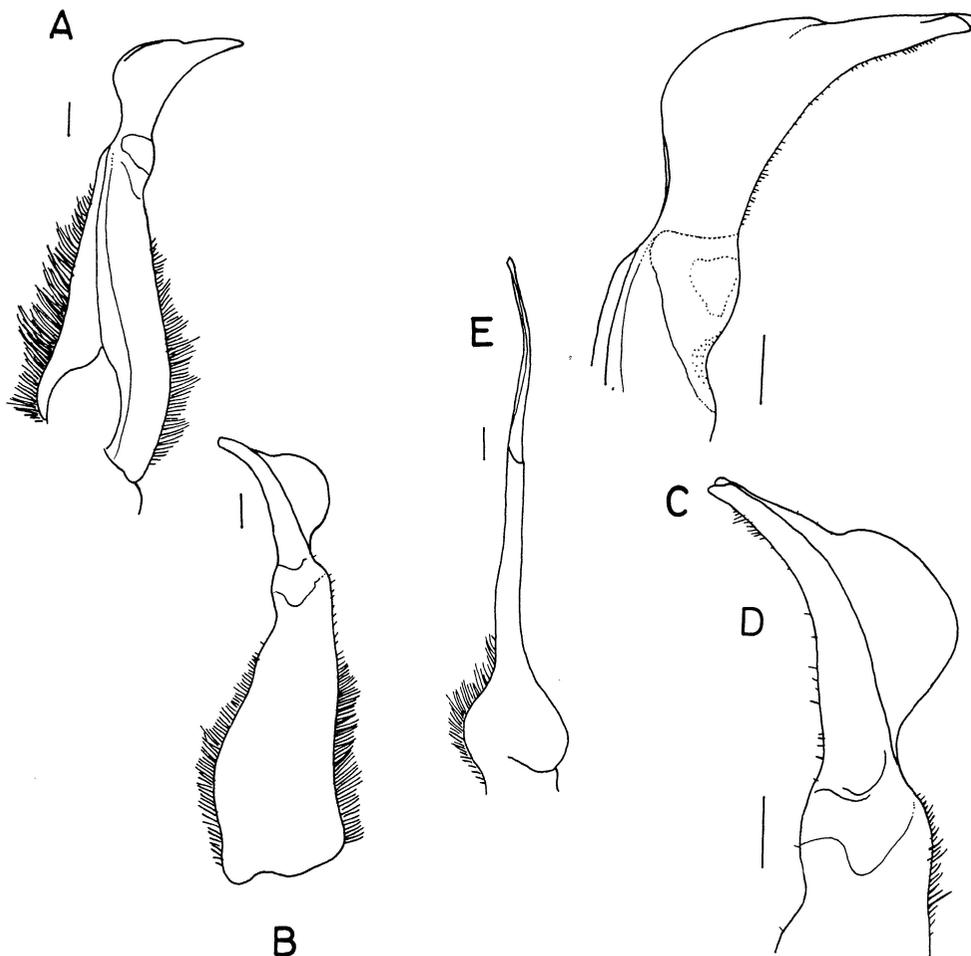
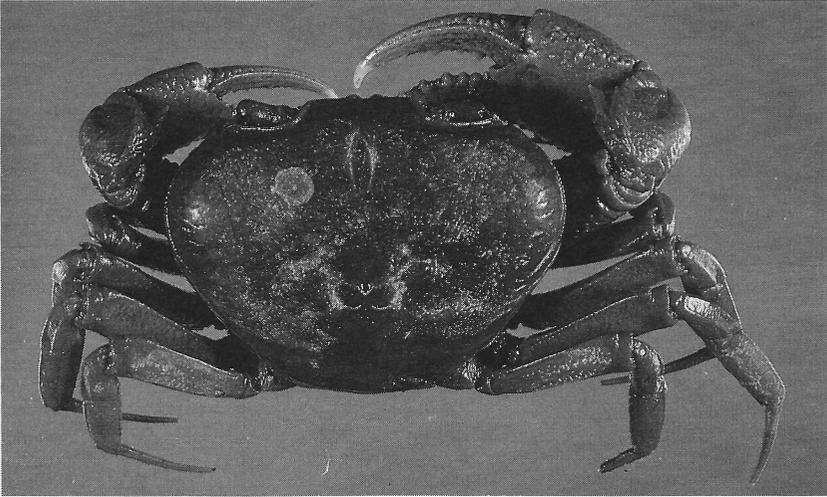
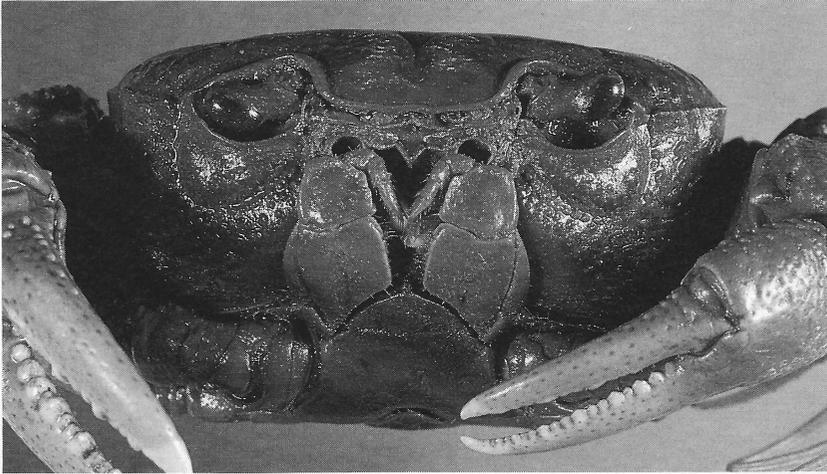


Fig. 8. *Pudaengon thatphanom*, new species. Holotype male (56.1 by 44.5 mm) (ZRC 1995.294). A, B, left G1; C, D, left G1 terminal segment; E, left G2. A, C, ventral view; B, D, dorsal view. Scales = 1.0 mm.

A



B



C

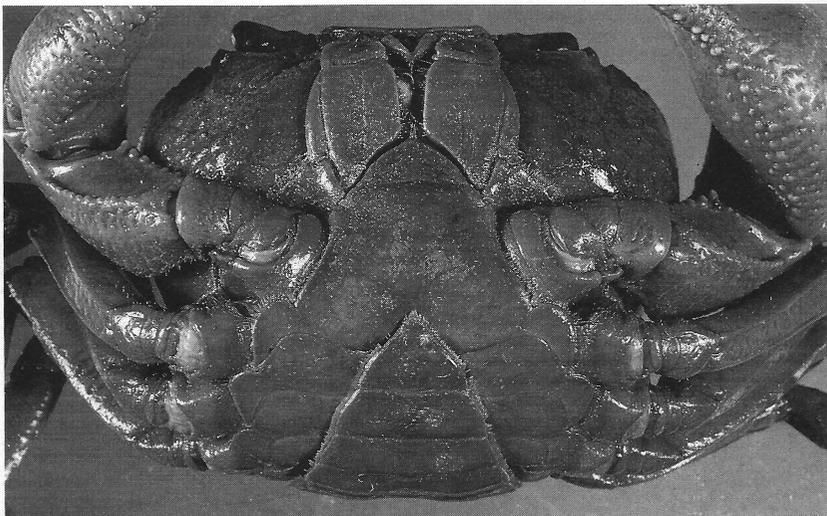


Fig. 9. *Pudaengon thatphanom*, new species. Holotype male (56.1 by 44.5 mm) (ZRC 1995.294). A, dorsal view; B, frontal view; C, ventral view.

*Pudaengon khammouan*, new species

(Figs. 10, 11, 16F, 17F)

**Material examined.** - Holotype: male (41.1 by 31.7 mm) (ZRC 1995.296), Thakhek, Muang Khammouan, Laos, coll. Somchai Tangphunphon, 15 Aug.1975.

Paratype: female (44.3 by 34.2 mm) (ZRC 1995.297), same data as holotype.

**Diagnosis.** - Anterolateral regions mildly rugose, with weak and very flattened granules, surface appears uneven but not rough. Exopod of third maxilliped does not reach distal edge of merus. Proximal lateral margins of male telson gently convex, triangular in shape. G1 terminal segment 0.48 times length of subterminal segment, dorsal fold 0.27 times length of terminal segment (from ventral view). G2 with distal segment 0.57 times length of basal segment.

**Etymology.** - The name is derived from the type locality. It is used as a noun in apposition.

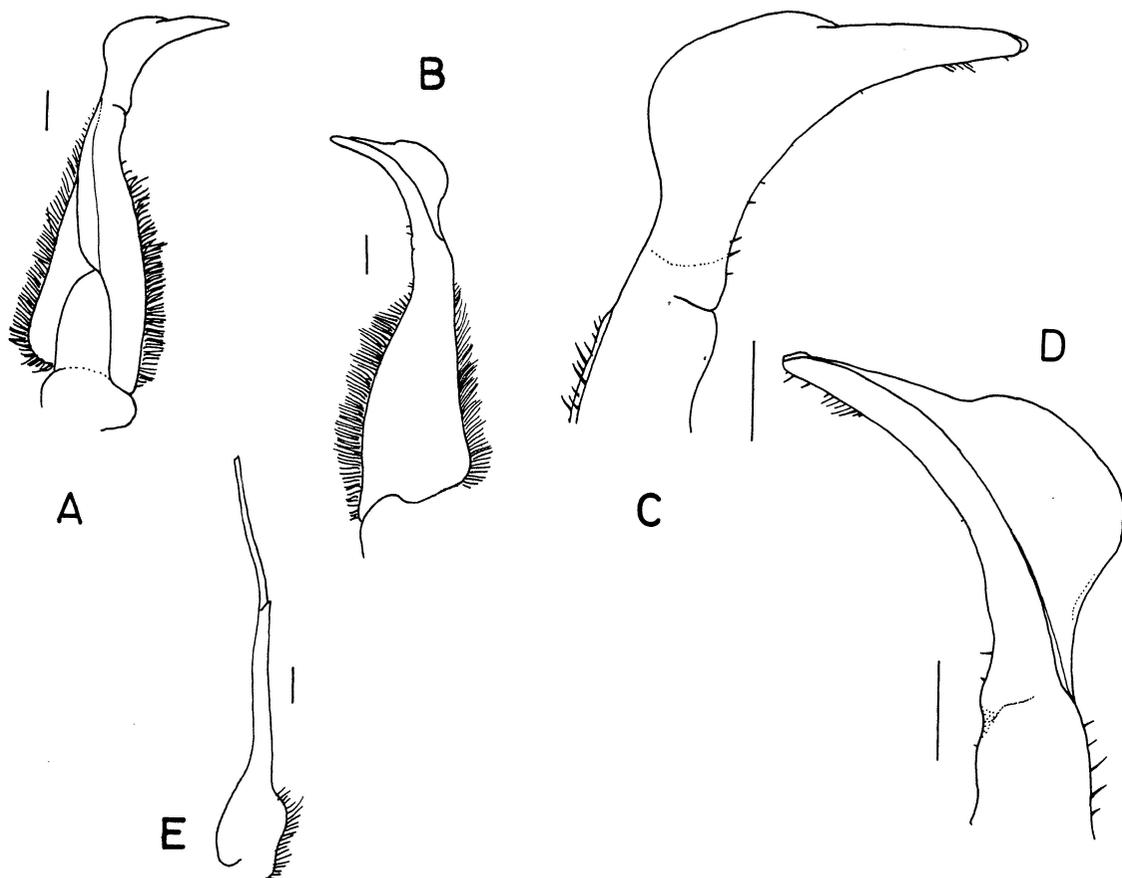
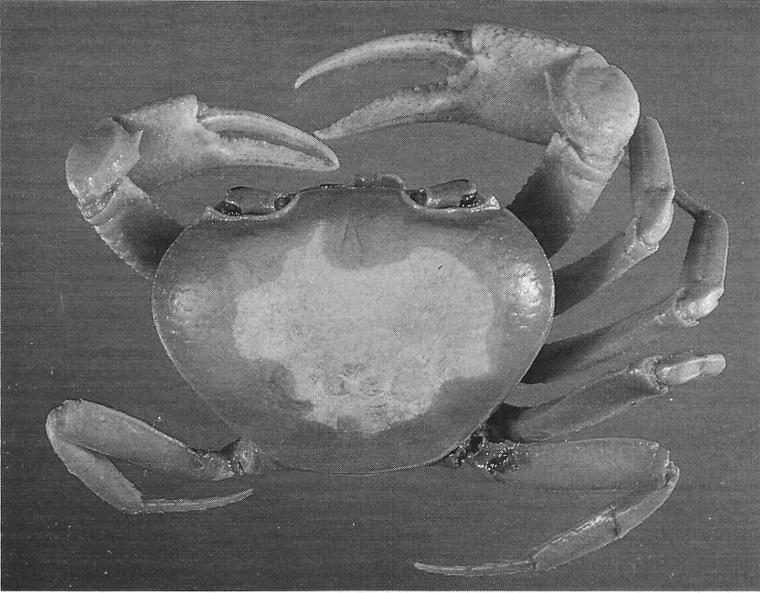
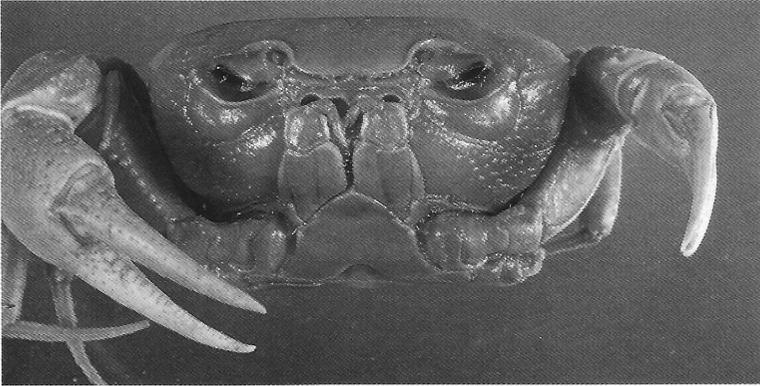


Fig. 10. *Pudaengon khammouan*, new species. Holotype male (41.1 by 31.7 mm) (ZRC 1995.296). A, B, left G1; C, D, left G1 terminal segment; E, left G2. A, C, ventral view; B, D, dorsal view. Scales = 1.0 mm.

A



B



C

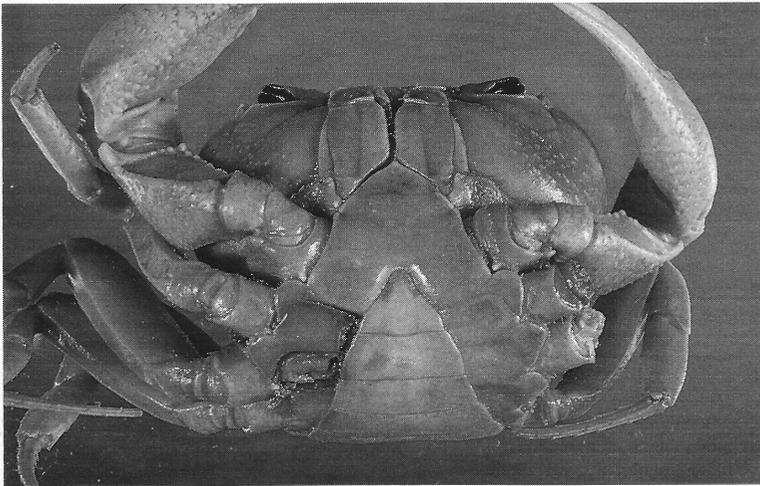


Fig. 11. *Pudaengon khammouan*, new species. Holotype male (41.1 by 31.7 mm) (ZRC 1995.296). A, dorsal view; B, frontal view; C, ventral view.

*Pudaengon hinpoon*, new species

(Figs. 12, 13, 16G, 17G)

**Material examined.** - Holotype: male (43.6 by 34.5 mm) (ZRC 1995.298), Ban Hinpoon, Laos, coll. Manoon Sawatdee, 25 Nov.1974.

Paratypes: 1 female (46.9 by 35.7 mm), 1 male (ZRC 1995.299), same data as holotype.

**Diagnosis.** - Anterolateral regions mildly rugose, with weak and very flattened granules, surface appears uneven but not rough. Exopod of third maxilliped just reaches distal edge of merus. Proximal lateral margins of male telson gently convex, triangular in shape. G1 terminal segment 0.49 times length of subterminal segment, dorsal fold 0.30 times length of terminal segment (from ventral view). G2 with long distal segment (proportions not known as distal segment broken).

**Etymology.** - The name is derived from the type locality. It is used as a noun in apposition.

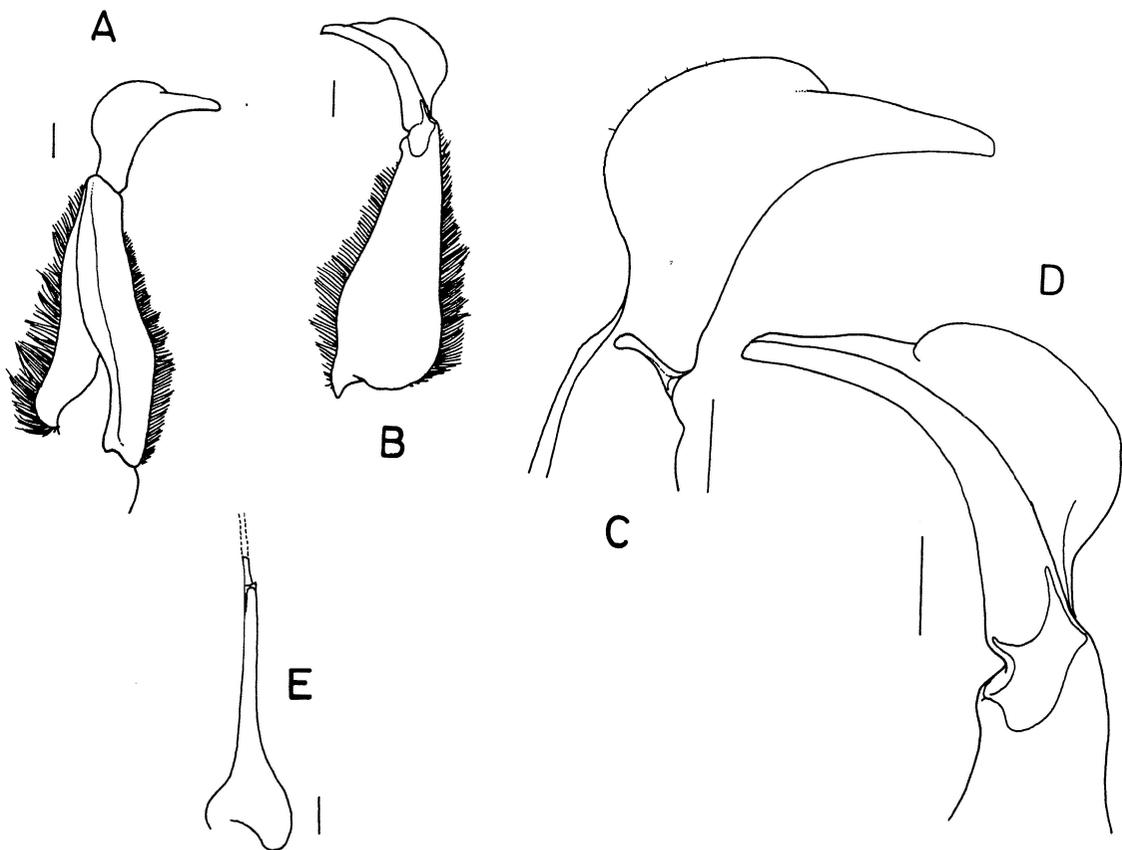
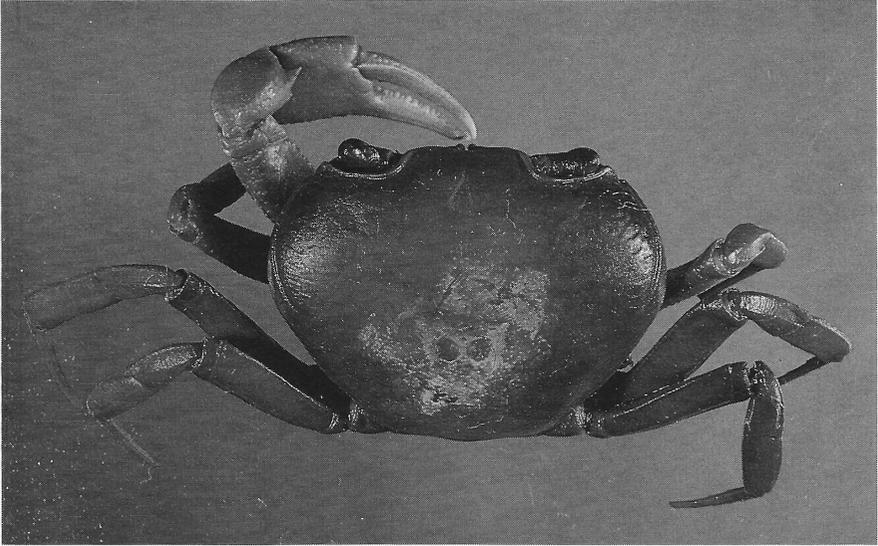
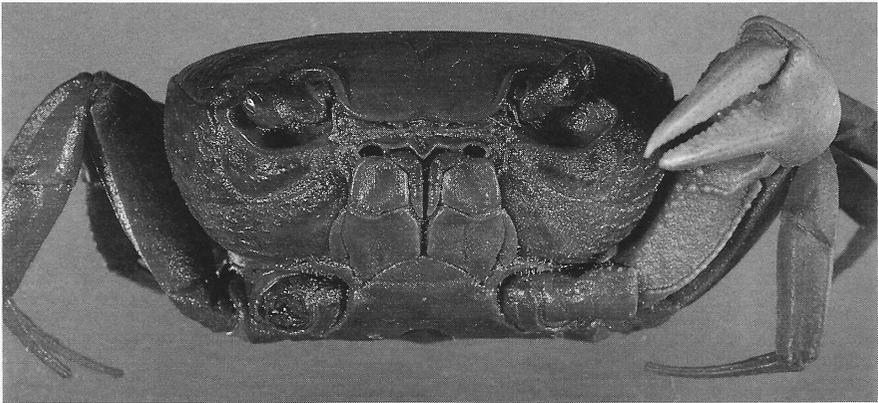


Fig. 12. *Pudaengon hinpoon*, new species. Holotype male (43.6 by 34.5 mm) (ZRC 1995.298): A, B, left G1; C, D, left G1 terminal segment; E, left G2 (distal segment broken). A, C, ventral view; B, D, dorsal view. Scales = 1.0 mm.

A



B



C

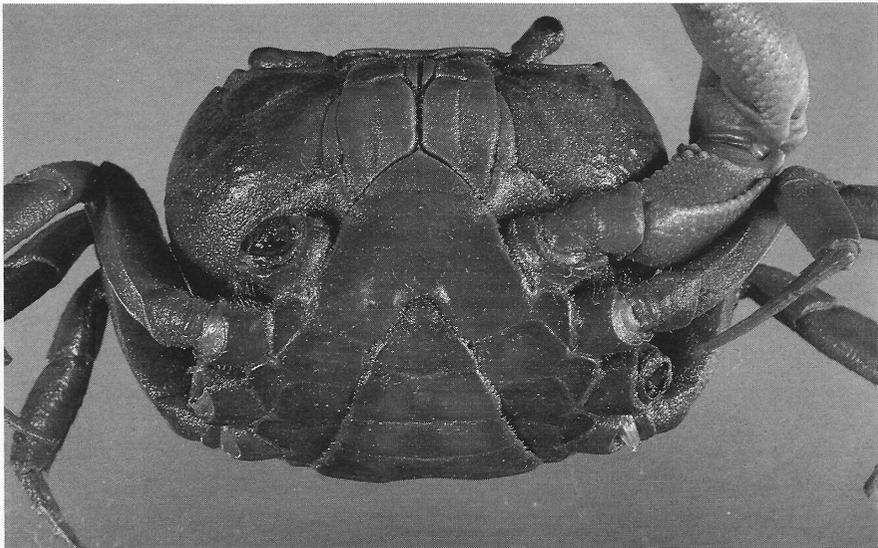


Fig. 13. *Pudaengon hinpoon*, new species. Holotype male (43.6 by 34.5 mm) (ZRC 1995.298). A, dorsal view; B, frontal view; C, ventral view.

*Pudaengon arnamicai*, new species

(Figs. 14, 15, 16H-J, 17H)

**Material examined.** - Holotype: male (42.8 by 33.6 mm) (ZRC 1995.300), Pakxe, Laos, coll. Pongsakorn Arnamica.

Paratype: female (46.8 by 36.6 mm) (ZRC 1995.301), same data as holotype.

**Diagnosis.** - Anterolateral regions mildly rugose, with weak and very flattened granules, surface appears uneven but not rough. Exopod of third maxilliped slightly over-reaches distal edge of merus. Proximal lateral margins of male telson distinctly convex, broadly triangular in shape. G1 terminal segment 0.46 times length of subterminal segment, dorsal fold 0.31 times length of terminal segment (from ventral view). G2 with distal segment 0.60 times length of basal segment.

**Etymology.** - The species is named after the collector, Mr. P. Arnamica.

**Taxonomic remarks.** - The exopods of both left and right third maxillipeds of the holotype male are abnormal in that they are very short, but the tip is rounded, and both have clearly been damaged recently (Fig. 16H, I). In the female paratype, the exopod is more typical (Fig. 16J). The distal segments of the G2s of both male type specimens are damaged.

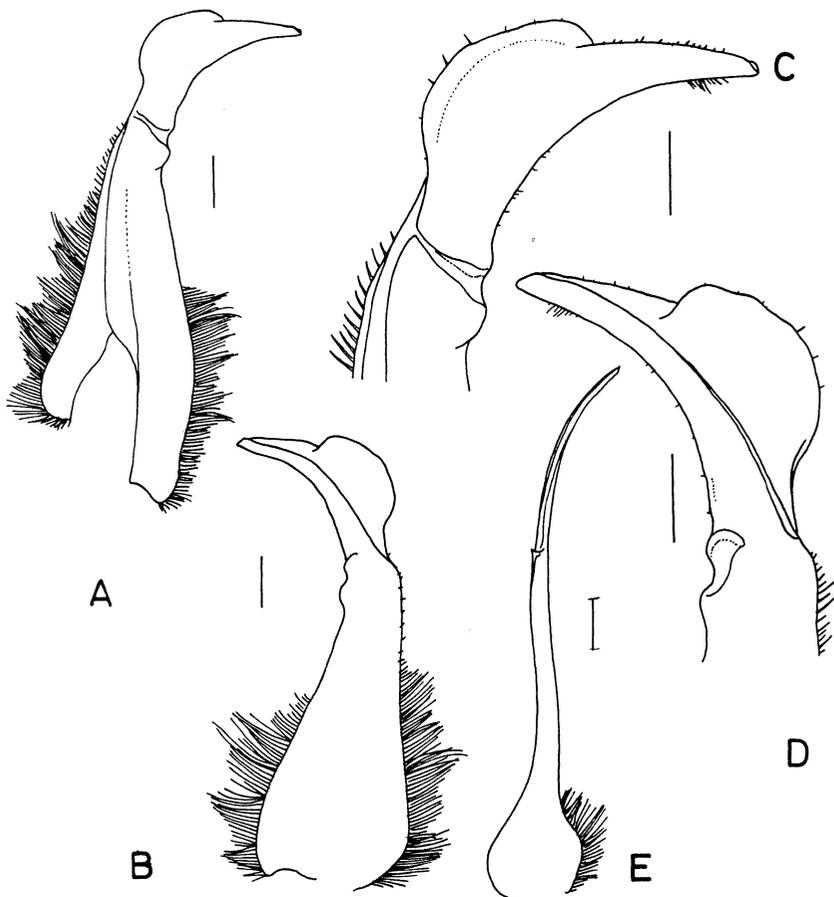
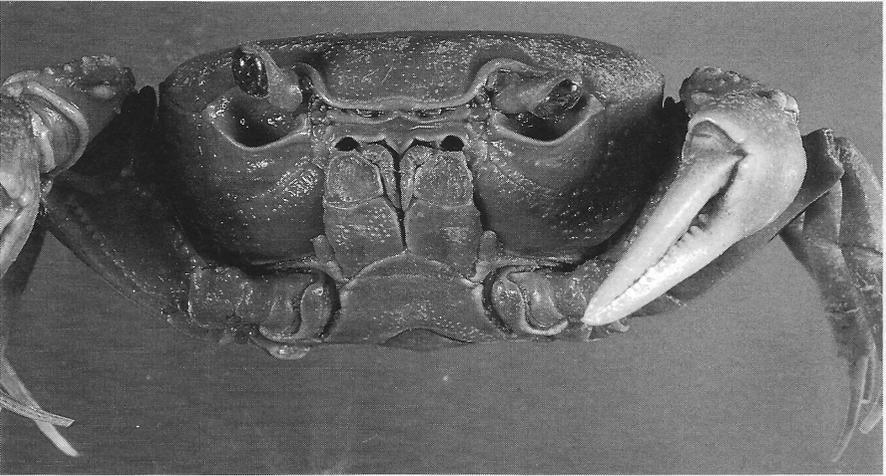


Fig. 14. *Pudaengon arnamicai*, new species. Holotype male (42.8 by 33.6 mm) (ZRC 1995.300). A, B, left G1; C, D, left G1 terminal segment; E, left G2. A, C, ventral view; B, D, dorsal view. Scales = 1.0 mm.

A



B



C

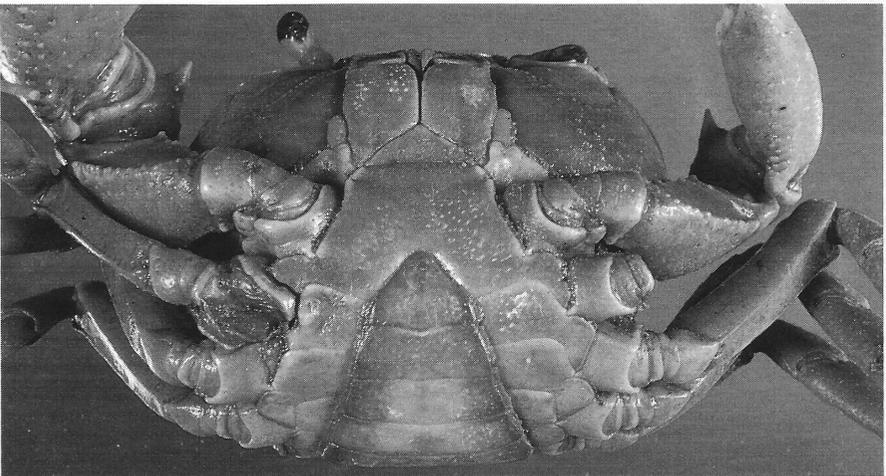


Fig. 15. *Pudaengon arnamicai*, new species. Holotype male (42.8 by 33.6 mm) (ZRC 1995.300). A, dorsal view; B, frontal view; C, ventral view.

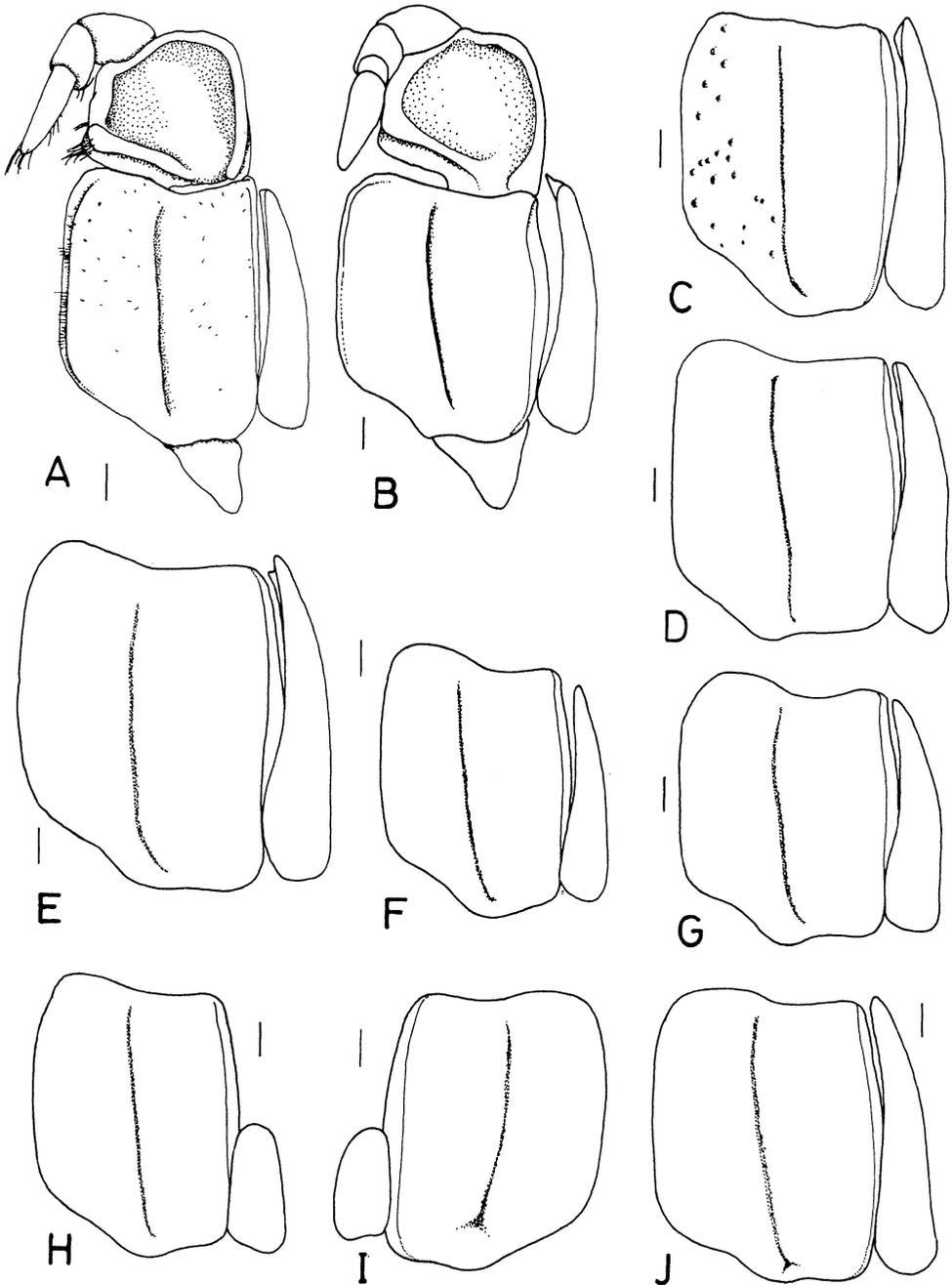


Fig. 16. Third maxillipeds of *Pudaengon* species. A, *P. inornatum* (Rathbun, 1904), lectotype male (48.7 by 38.8 mm) (MP-BP 192); B, *P. mukdahan*, new species, holotype male (44.1 by 35.0 mm) (ZRC 1995.288); C, *P. wanonniwat*, new species, holotype male (44.8 by 36.7 mm) (ZRC 1995.290); D, *P. sakonnakorn*, new species, holotype male (48.2 by 37.5 mm) (ZRC 1995.292); E, *P. thatphanom*, new species, holotype male (56.1 by 44.5 mm) (ZRC 1995.294); F, *P. khammouan*, new species, holotype male (41.1 by 31.7 mm) (ZRC 1995.296); G, *P. hinpoon*, new species, holotype male (43.6 by 34.5 mm) (ZRC 1995.298); H-J, *P. arnamicai*, new species, H, I, holotype male (42.8 by 33.6 mm) (ZRC 1995.300), J, paratype female (46.8 by 36.6 mm) (ZRC 1995.301). A-H, J, left maxillipeds; I, right maxillipeds; A, B, whole appendage; C-J, ischium and exopod. Scales = 1.0 mm.

Table 1. Differences between *Pudaengon* species

Character	<i>P. inornatum</i>	<i>P. mukdahan</i>	<i>P. wanonniwat</i>	<i>P. sakonnakorn</i>	<i>P. thatphanom</i>	<i>P. khammouan</i>	<i>P. hinpoon</i>	<i>P. arnamicai</i>
Antero-lateral region	rugose, covered with flattened granules	rugose, covered with flattened granules	rugose, covered with flattened granules	strongly rugose, flattened granules prominent	rugose, covered with flattened granules	mildly rugose, with weak, very flattened granules, surface appears uneven but not rough	mildly rugose, with weak, very flattened granules, surface appears uneven but not rough	mildly rugose, with weak, very flattened granules, surface appears uneven but not rough
Exopod of third maxilliped	does not reach distal edge of merus	slightly over-reaches distal edge of merus	slightly over-reaches distal edge of merus	just reaches distal edge of merus	slightly over-reaches distal edge of merus	does not reach distal edge of merus	slightly over-reaches distal edge of merus	just reaches distal edge of merus
Male telson	broadly triangular, proximal lateral margins distinctly convex	triangular, proximal lateral margins gently convex	broadly triangular, proximal lateral margins distinctly convex	triangular, proximal lateral margins gently convex	broadly triangular, proximal lateral margins distinctly convex	triangular, proximal lateral margins gently convex	broadly triangular, proximal lateral margins distinctly convex	triangular, proximal lateral margins gently convex
G1 terminal segment	0.42 times length of subterminal segment	0.46 times length of subterminal segment	0.47 times length of subterminal segment	0.44 times length of subterminal segment	0.39 times length of subterminal segment	0.48 times length of subterminal segment	0.46 times length of subterminal segment	0.49 times length of subterminal segment
G1 terminal segment: dorsal fold	0.32 times length of terminal segment	0.29 times length of terminal segment	0.28 times length of terminal segment	0.30 times length of terminal segment	0.28 times length of terminal segment	0.27 times length of terminal segment	0.31 times length of terminal segment	0.30 times length of terminal segment
G1 sub-terminal segment	relatively slender, distal part distinctly neck-like	relatively stout, with distal part tapering but not distinctly neck-like	relatively stout, with distal part tapering but not distinctly neck-like	relatively stout, distal part neck-like	relatively stout, with distal part tapering but not distinctly neck-like	relatively slender, distal part distinctly neck-like	relatively stout, with distal part tapering but not distinctly neck-like	relatively stout, with distal part tapering but not distinctly neck-like
G2 distal segment	not known length of	0.60 times length of basal segment	0.61 times length of basal segment	0.52 times length of basal segment	0.70 times length of basal segment	0.57 times length of basal segment	0.60 times length of basal segment	not known

### GENERAL DISCUSSION

The various species of *Pudaengon* recognised here are, as many potamids are, primarily distinguished by the structure of their G1s. The differences are particularly in the shape and proportions of the terminal and subterminal segments, shape, height and extent of the dorsal fold, and shape and proportions of the distal part of the terminal segment. These structures appear to be consistent for each species, even between specimens of differing sizes. These differences are also supported by the distinct distributions of the various species. There are also minor, but apparently consistent differences in the length of the exopod of the third maxilliped and the shape of the male telson (see Table 1). The minor differences in the roughness of the anterolateral regions seem to be less reliable, and might well be shown to be variable once more species are examined.

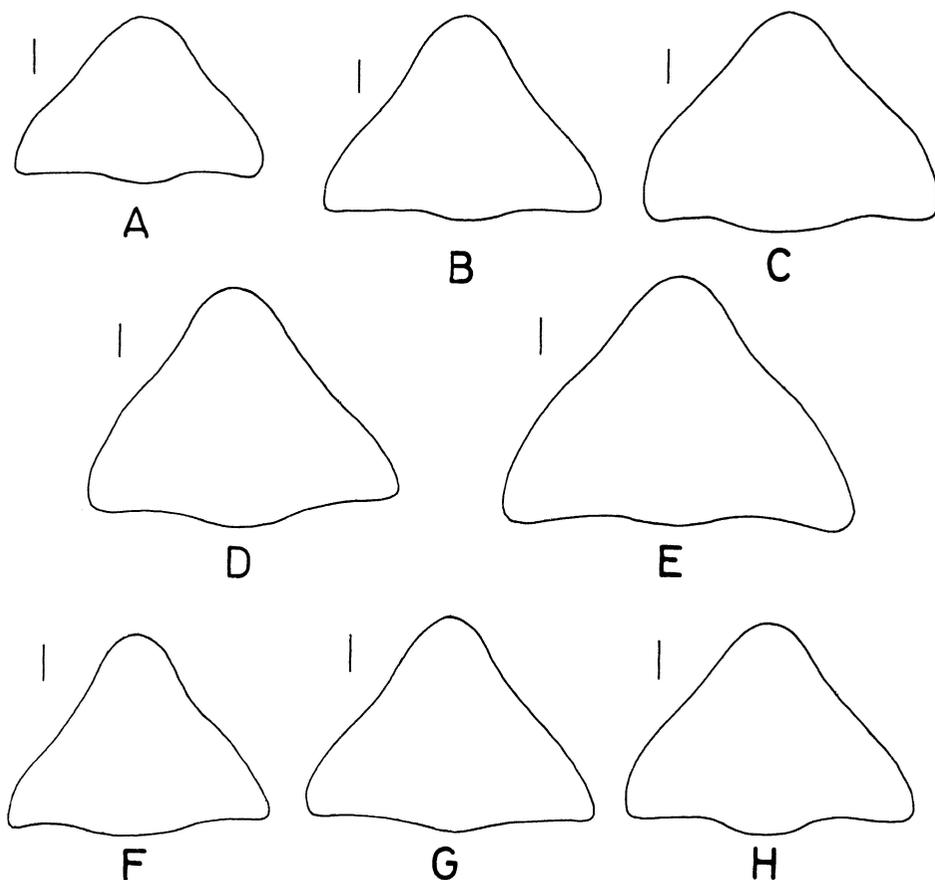


Fig. 17. Telsons of *Pudaengon* species. A, *P. inornatum* (Rathbun, 1904), lectotype male (48.7 by 38.8 mm) (MP-BP 192); B, *P. mukdahan*, new species, holotype male (44.1 by 35.0 mm) (ZRC 1995.288); C, *P. wanonniwat*, new species, holotype male (44.8 by 36.7 mm) (ZRC 1995.290); D, *P. sakonnakorn*, new species, holotype male (48.2 by 37.5 mm) (ZRC 1995.292); E, *P. thatphanom*, new species, holotype male (56.1 by 44.5 mm) (ZRC 1995.294); F, *P. khammouan*, new species, holotype male (41.1 by 31.7 mm) (ZRC 1995.296); G, *P. hinphoon*, new species, holotype male (43.6 by 34.5 mm) (ZRC 1995.298); H, *P. arnamicai*, new species, holotype male (42.8 by 33.6 mm) (ZRC 1995.300). A after Rathbun (1904). Scales = 1.0 mm.

On the basis of the male telson, the recognised *Pudaengon* species can be divided into two main groups. One group, with a broadly triangular male telson has the proximal lateral margins distinctly convex, and includes *P. inornatum*, *P. wanonniwat*, *P. thatphanom* and *P. hinphoon*. The second group have triangular telsons, with the proximal lateral margins gently convex, and includes *P. mukdahan*, *P. sakonnakorn*, *P. khammouan* and *P. arnamicai*. With regards to the length of the exopod of the third maxilliped, the species with the shortest exopods are *P. inornatum* and *P. khammouan*, in which it does not reach the edge of the merus; whilst those with the exopod slightly over-reaching the merus are *P. mukdahan*, *P. wanonniwat*, *P. thatphanom* and *P. hinphoon*. In *P. sakonnakorn* and *P. arnamicai*, the exopod just reaches the merus.

All members of *Pudaengon* are terrestrial crabs which dig burrows on the forest floor. They are collected for food by the local populace.

## ACKNOWLEDGEMENTS

The authors are grateful to Dr Danièle Guinot (MP) for her kind help with Rathbun's type material.

## LITERATURE CITED

- Alcock, A., 1909. Diagnoses of new species and varieties of freshwater crabs. Nos. 1-4. *Rec. Ind. Mus.*, **3**: 243-252, 375-381.
- Alcock, A., 1910. Brachyura I. Fasc. II. The Indian Freshwater Crabs - Potamonidae. *Catalogue of the Indian Decapod Crustacea in the collection of the Indian Museum*. Calcutta, pp. 1-135, Pls. 1-14.
- Bott, R., 1966. Potamiden aus Asien (*Potamon* Savigny und *Potamiscus* Alcock) (Crustacea, Decapoda). *Senckenbergiana biol.*, Frankfurt, **47**: 469-509, Pls. 16-21.
- Bott, R., 1970. Die Süßwasserkrabben von Europa, Asien, Australien und ihre Stammesgeschichte. Eine Revision der Potamoidea und Parathelphusoidea (Crustacea, Decapoda). *Abhand. Sencken. Naturf. Ges.*, Frankfurt, **526**: 1-338, Pls. 1-58.
- Bott, R. & M. Türkay, 1977. 1. Nachtrag zur revision der Süßwasserkrabben von Europa, Asien und Australien. Die verwandtschaftlichen Beziehungen von *Ranguna longipes* (A. Milne-Edwards 1869) (Crustacea: Decapoda: Potamidae). *Senckenbergiana biol.*, Frankfurt, **58**(1/2): 93-96.
- Naiyanetr, P., 1992. *Demanietta sirikit* n. sp., a new freshwater crab from Thailand (Decapoda, Brachyura, Potamidae). *Crustaceana*, Leiden, **62**(2): 113-120, Pl. 1.
- Naiyanetr, P., 1993. *Thaipotamon chulabhorn* n. sp., a new freshwater crab from Thailand (Decapoda, Brachyura, Potamidae). *Crustaceana*, **65**(1): 1-7.
- Naiyanetr, P., 1994. On two species of terrestrial crabs of the genus *Dromothelphusa* Naiyanetr, 1992 (Crustacea: Decapoda: Brachyura: Potamidae) from Thailand. *Raffles Bull. Zool.*, **42**(3): 689-694.
- Ng, P. K. L., 1988. *The Freshwater Crabs of Peninsular Malaysia and Singapore*. Department of Zoology, National University of Singapore, Shinglee Press, Singapore, pp. i-viii, 1-156, Figs. 1-63, 4 colour plates.
- Ng, P. K. L., 1992. A new genus and species of cavernicolous crab (Brachyura: Potamidae) from Kanchanaburi, Thailand, with comments on the genera *Tiwaripotamon* Bott, 1970 and *Larnaudia* Bott, 1966. *Mém. Biospéol.*, Paris, **19**: 159-167.
- Ng, P. K. L. & P. Naiyanetr, 1993. New and recently described freshwater crabs (Crustacea: Decapoda: Brachyura: Potamidae, Gecarcinucidae and Parathelphusidae) from Thailand. *Zool. Verh.*, Leiden, **284**: 1-117, figs. 1-68.
- Rathbun, M. J., 1904. Les crabes d'eau douce. *Nouv. Arch. Mus. Hist. nat.*, Paris, (4)**6**: 225-312, Pls. 9-18.
- Rathbun, M. J., 1905. Les crabes d'eau douce. *Nouv. Arch. Mus. Hist. nat.*, Paris, (4)**7**: 159-323, Pls. 13-22.
- Rathbun, M. J., 1906. Les crabes d'eau douce. *Nouv. Arch. Mus. Hist. nat.*, Paris, (4)**8**: 33-122.
- Savigny, J. C., 1816. *Mémoires sur les Animaux sans Vertèbres*. I Partie, Paris.

Received 12 May 1995  
Accepted 25 Aug 1995