

The Raffles Bulletin of Zoology

INSTRUCTIONS TO AUTHORS ON FORMAT OF REVISED MANUSCRIPT

Special requirements for corrected manuscripts

Once the manuscript is provisionally accepted, it is returned to the author with the referees' and Associate Editor's recommendations. The author is required to respond to each of the comments and incorporate the necessary changes into the manuscript. The author should also provide justification for any disagreement with the recommendations.

The electronic version of the corrected manuscript must be submitted to the Associate Editor. All original images must be submitted separately from the corrected manuscript, i.e. do not embed any digital images with the correct manuscript.

The format of the journal should be complied with strictly. Deviation from the format will cause delays in the publication, as it will be returned for corrections.

Manuscripts created from commonly used word processing programs are acceptable, but the RBZ prefers documents created using Microsoft® Word® (.doc).

General guidelines

Page size: **A4** (210 mm x 297 mm), portrait orientation; all margins to be 25 mm.

Font: **Times New Roman; font size 10**. Line spacing single. Use: **metric measurements; 24 hour designation** (e.g. 2300 hours instead of 11PM); appropriate regional authority for names of geographical locations should be followed with equivalent names in square brackets (e.g. Ampang [= District], Pulau [= Island], Teluk [= Bay]). Do not substitute upper case alphabet "I" or lower case alphabet "L" for the Arabic numeral "1". Remove all line numbers. All paragraphs should be **left aligned** and **not** justified. Do not indent paragraphs. Page numbers should be centred below the text.

The words, "*THE RAFFLES BULLETIN OF ZOOLOGY* 200X **XX**(X): XX–XX" followed by three blank lines and a short running title of no longer than 35 characters must appear before the title.

All numbers less than 10 should be spelt in full, except in the MATERIALS AND METHODS section of taxonomic papers. All scientific names must be used in accordance with the 4th Edition of the International Commission of Zoological Nomenclature (1999), which came into effect on 1 Jan.2000. All species and genus names are to be italicised. All other words are NOT to be italicised (e.g. sensu stricto, fide, et al.). Names of vessels should be capitalised.

The manuscript should be arranged into sections such as – INTRODUCTION, MATERIALS AND METHODS, TAXONOMY or SYSTEMATICS, RESULTS, DISCUSSION, ACKNOWLEDGMENTS and LITERATURE CITED. All headings should be centred, and in upper case and in bold. Subheadings should begin paragraphs and appear italicised and bold, followed by an En dash.

Title and Abstract

The title should be centred, bold and capitalised. The higher classification of any taxa in the title must be included in brackets separated by **colons**, in descending order. Two lines should be left before listing the authors' names in bold, followed by three blank lines, and the abstract.

The Abstract should not be more than 500 words and should clearly state the results and conclusions of the paper. The names of all newly described taxa should be mentioned. No citations should be made. Key words (4–6 words) should be listed following the abstract.

Citations in the text

References in the text are to be cited by the author's surname and year of publication as follows: for a single author: (Chan, 1985); for two authors: (Polhemus & Polhemus, 1988); for three or more authors: (Harrison et al., 1950).

Citations of direct quotations in the text should include the page numbers. Citations should take the following form: Both Cantor (1846: 195) and Blanford (1888: 187) concur that ...Lekagul & McNeely (1988) considered it ...In Singapore, recent sightings were all in or near mangroves (Yang et al., 1990).... general accounts (Kloss, 1908; Chasen, 1924, 1940; Harrison, 1966) did not include ...Only a taxonomic authority should appear in parentheses immediately following a binomial name, e. g. *Lutra sumatrana* (Gray, 1865).

The Raffles Bulletin of Zoology

If any other reference is cited, there should be a clear indication that it is not a taxonomic authority, either by modification, e. g. “In Asia, there is intraspecific variation of *L. lutra* (see Harris, 1968)”, or by rearrangement, “There is intraspecific variation of *L. lutra* in Asia (Harris, 1968)”. More than one citation in a sentence should be listed in chronological order, e.g. “In series of papers, Bott (1966, 1968, 1970) revised...”

Taxonomic papers

All scientific names proposed must be in accordance with the 4th Edition of the International Commission of Zoological Nomenclature (1999). Descriptions of new taxa by one author in a paper under another’s name are discouraged (eg. Lim, in Tan & Ong, 1986). **New taxa with more than three authors will not be accepted.** New taxa must carry the appropriate indications, e.g. *Palapedia*, new genus; *Palapedia valentini*, new species (do not use ‘sp. nov.’, ‘gen. nov.’, ‘n. sp.’ or ‘n. gen.’). In previously described species, a comma must be inserted after the author’s name, e. g. *Garthasia americana* (Garth, 1939). Relevant figure numbers should be listed under the heading, in normal text, within brackets. Suprageneric taxa that appear as headings should be capitalised only. Genus and species names that appear as headings should be bold, and accompanied by the author and the year. Synonymies must be cited in the short form (taxon, author, year, page), but the full reference must be provided in the Literature Cited. A telegraphic style is required for descriptions, diagnoses and keys. The origins of all new names must be briefly explained in a paragraph of its own, Etymology. In the case of new genera, the gender must be stated. The use of keys is encouraged. Keys should not be indented. Only the first line of each couplet is numbered with Arabic numerals; the second couplet must start with an En dash. Insert a blank line after each couplet.

Materials and Methods

Methodology should be clearly and concisely stated. Lists of abbreviations should appear here. Any deviation from the standard format of the RAFFLES BULLETIN OF ZOOLOGY that has been approved by the Editors must be explained in this section.

Material examined

The depositories where type specimens are kept or distributed must be clearly stated, including catalogue numbers, especially for type specimens. These depositories should be responsible public institutions. Abbreviations of depository names should be official ones and should be listed in the Materials and Methods section. The holotype and paratype data must be clearly designated in separate paragraphs. The gender of specimens must be spelt in full; symbols are not acceptable. If the sex is not known, the abbreviation of the word example, ‘ex.’ will be used. Repetitious localities should be given locality or station numbers particularly with expedition material. Dates are to be written as 5 Feb.1994, with period in between month (represented by a three-letter abbreviation) and year (except for May 2008). If a different format is necessary, authors are required to seek the prior approval of the editor.

The material should be listed as follows: number of specimens and sex (remarks about specimen’s condition or measurements) (depository catalogue number), locality, collector’s name preceded by ‘coll.’, date of collection. Specimen lots are to be separated by semi-colons.

Literature Cited

All authors cited, including authorship of taxa, must be listed at the end of the manuscript under the section Literature Cited. The full citations are listed in alphabetical and chronological order.

The first author’s surname appears first, followed by his initials; those of junior authors are listed in reverse. Journal references should include the paper’s title, the journal name **in full** (italicized), volume (bold), issue (bracketed) and page numbers.

Book references should include title of book, editor, publisher, city of publication and the page numbers of the chapter or the book. All references are to be complete; a period after author’s initials should be followed by a single space; the word ‘pages’ is abbreviated to ‘pp.’ and ‘page’ to ‘p.’. The references should follow the formats of the examples listed below precisely, including the punctuation, style and spacing:

King, B., M. Woodcock & E. C. Dickinson, 1975. *A Field Guide to the Birds of South-East Asia*. Collins, London. 480 pp.

Murphy, D. H., 1990. The natural history of insect herbivory on mangrove trees in and near Singapore. *Raffles Bulletin of Zoology*, **38**(2): 119–204.

Nakasone, Y. & M. Agena, 1984. Role of crabs as degrader of mangrove litters in the Okinawan mangals, and food habits of some estuarine fishes. In: Ikehara, S. & N. Ikehara (eds.), *Ecology and Physiology of the Mangrove Ecosystem*. College of Science, University of Ryukyus. Pp. 153–167.

It is the author’s responsibility to verify that all citations in the text are listed in the Literature Cited and vice versa.

The Raffles Bulletin of Zoology

Tables

Tables must be presented on separate pages. They should be organised to fit the page format. All tables must have their own headings, be self-explanatory, and not require reference to the text. Lengthy headings are to be avoided, but supplementary notes are allowed. Tables should be numbered with Arabic numbers, e.g. Table 1, Tables 2–4. Table should be formatted with horizontal lines (usually three: two to separate the heading, and a single line at the bottom) and no vertical lines.

Illustrations

The complete manuscript must be submitted via email inclusive of all figures in digital format. If the digital files are very large (ca. more than 5 MB each), please email the Associate or Managing Editor to arrange for transfer of the illustrations. All line drawings, photographs (print or slide transparency), maps or graphs are referred to as 'Figure(s)', abbreviated as 'Fig.' or 'Figs.'. All figures must fit within the A4 page size format (including legends) either directly, or after reduction. Figures must be numbered in a single series throughout with Arabic numerals, in a sequence that follows some order. Each part of a composite figure should be numbered alphabetically and in some order (e.g. in the sequence of its arrangement). Legends for all figures must be provided on a separate sheet, self-explanatory, and not require reference to the text. Annotations should be made in the text of the manuscript as to where the figures should be inserted. In providing an indication of size, scale bars are preferred, and must be inserted close to the relevant figure. Measurements referring to identifiable parts of the figure (e.g. SL) may be included in the legend. Magnification numbers are not allowed, except in electron micrographs, but the exact value must be inserted by the author in the final proofs.

For final submission, the profile of the original digital black & white photographs should be in greyscale, and CMYK for colour ones. Photographic images should be at least 300 dpi and image size should be at least 1800 × 1200 pixels (about 150 × 100 mm) and in TIFF format (.tif). Black and white photographic images should have high contrast and show fine detail. All scanned colour transparencies (35 mm slides) must be scanned at a minimum resolution of 2000 dpi if no cropping of the image is desired in the final publication.

Original line drawings should be at 1200 dpi scanned as a black and white image and saved in TIFF format. Author must remember that figures should be arranged for reduction and not enlargement when published.

Graphs are treated in the same manner as line drawings. Symbols used on maps should preferably be easily available for reproduction in the legend by the typesetter. A symbol should not be used in different sizes to represent different items.

RBZ editors reserve the right to request for unmodified or original images and failure to provide these images could result in the rejection of a manuscript.

Each colour page will be charged at S\$200.

Long manuscripts

A table of contents should be provided for long manuscripts. This will be placed between the abstract and the introduction. An index of species and genera should be provided in taxonomic papers, if the arrangement of taxa has not been alphabetical, as in a phylogenetic arrangement. This is placed at the end of the manuscript, after Literature Cited.

Reprints

Authors will receive an electronic reprint in a protected PDF format for personal use (note that copyright remains with the publisher). Reprints may be purchased at S\$1.00 per black and white page, and S\$2.00 per page for pages with colour plates. Reprints are normally available from the printer only two weeks after the Journal is published. Authors are charged for postage and may choose surface mail or airmail delivery. The reprint order forms (Forms 3A & 3B) will be emailed to the corresponding authors with the final PDF proofs.

The Raffles Bulletin of Zoology

Dear author,

Below is a summary of some of the key instructions pertaining to the presentation format of your revised manuscript. **Please take special care to adhere closely to these, as your cooperation would help us to expedite to the publication of your paper. Revised manuscripts not following these guidelines will be sent back to the author.** Please use the EXAMPLE provided as a guide.

Editor

1. Title

- Should be in capital letters, bold and centred
- Use colons instead of commas to separate higher taxa of different ranks
- 3 spaces above: *RAFFLES BULLETIN OF ZOOLOGY* 200X **XX**(X): XX–XX

2. Author(s)

- 2 lines below Title
- Name(s) in bold and initial capital letters and address in italics

3. Headings

- Main headings (e.g. **INTRODUCTION, MATERIALS AND METHODS, TAXONOMY, ACKNOWLEDGEMENTS, LITERATURE CITED**) should be in capital letters, bold and centred
- Sub-headings (e.g. *Material examined.* – , *Diagnosis.* – , *Description.* – , *Remarks.* – , *Etymology.* –) should be in initial capital letters, bold, italics, be at the beginning of the first paragraph, and be separated from the first word by a hyphen.

4. Paragraphs

- No indents (except with hanging indent in synonymies and Literature Cited)
- Single spaced
- Leave a space between paragraphs
- Left aligned

5. Figures and Tables

- Label all illustrations as ‘Fig.’ or ‘Figs.’ Do not use ‘Figure’, ‘Figures’ or ‘Plate’.
- Use Arabic numbers, i.e. Fig. 1, Table 2.
- Table format with horizontal lines (usually three: two to separate the heading, and a single line at the bottom) and **no vertical lines**.

6. Citations

- For two authors: use ‘&’ instead of ‘and’; for three or more authors: use ‘et al.’ (**do not italicise**).

7. Synonymy

- Use hanging indent
- Separate references with semi-colon
- If a name was cited more than once by the same author, write name only once.
E.g. Dang, 1975: 75, 1980: 432.

8. Material examined

- Always begin with sub-heading, “*Material examined.* – ”
- Separate paragraphs for holotype, paratypes and others
- Use semi-colons only to separate specimen lots
- Use ‘male’, ‘males’, ‘female’, ‘females’ or ‘ex.’ Instead of symbols to indicate specimens
- ‘coll.’ to precede collector’s name. **Do not use ‘leg.’**
- Date in following format: **DD Mmm.YYYY** (e.g. 20 Sep.2001, except 1 May 1999)

9. Literature Cited

- Hanging indent and no space between entries
- Type author name for every entry. Do not use ‘—’
- Volume number in bold and include issue number in brackets where available
- Arrange in alphabetical order by the first author’s surname first, then chronological order
- **Journal or book title spelt out in full and italicised.**
- Author to verify that all citations in the text are listed in the Literature Cited and vice versa.

10. Others

- Use ‘new species’ or ‘, new genus’ and not ‘sp. nov.’ or ‘n. sp’
- Begin sentences with a numbers or genus names spelt out in full. Do not begin with roman numerals or abbreviated genus names except in descriptions/diagnoses using telegraphic style

The Raffles Bulletin of Zoology

EXAMPLE of format for corrected manuscript for publication in *Raffles Bulletin of Zoology*:

.....

THE RAFFLES BULLETIN OF ZOOLOGY 200X XX(X): XX–XX

Date of publication: 28 Feb.2007

© National University of Singapore

Running head – Crabeater et al.: *Potamon tannanti* group from northern Indochina

FRESHWATER CRABS OF THE *POTAMON TANNANTI* SPECIES GROUP (CRUSTACEA: DECAPODA: BRACHYURA: POTAMIDAE) FROM NORTHERN INDOCHINA

John D. Crabeater and Ketam B. Kepiting

*Department of Crabby Studies, The Good Old National University, Overtmoon Crescent,
Singapore 100002, Republic of Singapore.*

Email: johndc@cdnhoj.sg (JDC); kbkepiting@kbbk.sg (KBK)

A. K. Tan

*Department of Biodiversity Research, The Virtual University, Nowhereinsingapore Road,
Singapore 000001, Republic of Singapore*

Email: akt@akt.sg (Corresponding author)

ABSTRACT. – Several species of potamid crabs with aquatic habits have been confused with *Potamon tannanti* Rathbun, 1904. The present study separates *P. tannanti* sensu stricto, from its congeners.

KEY WORDS. – Indochina, Crustacea, Brachyura, Potamidae, new species, taxonomy.

INTRODUCTION

Freshwater potamid crab species are medically important... possible species specificity in infection (V. D. Nguyen, pers. comm.). It is thus critical to be able to properly identify the various crab species.

The most recent studies on Vietnamese freshwater crabs were by Dang (1975, 1980), in which seven species of Potamidae were recognized... The present paper...

MATERIALS AND METHODS

The following abbreviations are used: G1 for male first pleopod, G2 for male second pleopod. Measurements are of carapace width and length respectively. Terminology used essentially follows Ng (1988). All measurements are in millimetres. Specimens are deposited in the Zoological Reference Collection (ZRC) of the Raffles Museum, National University of Singapore; Muséum National d'Histoire Naturelle (MNHN), Paris, France; and Chulalongkorn University Natural History Museum (CUMZ), Bangkok, Thailand.

TAXONOMY

POTAMIDAE Ortmann, 1896

Potamon Savigny, 1816

Potamon Savigny, 1816: 107; Rathbun, 1904: 247; Alcock, 1910: 18 (part); Bott, 1970: 134; Naiyanetr & Ng, 1990: 121; Ng & Naiyanetr, 1993: 6.

Type species. – *Cancer fluviatilis* Herbst, 1785, by monotypy.

The Raffles Bulletin of Zoology

Remarks. – Alcock's (1910) generic classification of the Potamidae (as Potamonidae), in which *Potamon* is distinguished by the presence of a well-developed flagellum (versus vestigial or absent) on the third maxilliped exopod, is followed here (see also Naiyanetr & Ng, 1990; Ng & Naiyanetr, 1993).

Members of the *Potamon tannanti* species group differ from the six other potamid species reported by Dang (1980) significantly in external morphology as well as in male first pleopod structure.

***Potamon tannanti* Rathbun, 1904**

(Figs. 1, 2A–G, 6A)

Potamon (Potamon) tannanti Rathbun, 1904: 279, Fig. 17, Pl. 11 Fig. 8.

Potamiscus (Potamiscus) tannanti – Bott, 1966: 480 (part).

Potamiscus tannanti – Bott, 1970: 160 (part), ?Pl. 47, Fig. 28; Dang, 1975: 75; 1980: 432 (part).

Potamon hokuoense Dai, Song, He, Cao, Xu & Zhong, 1975: 258, Pl. 2 Fig. 2, Fig. 2.

Material examined. – Holotype: female (35.5 × 27.7 mm)(MNHN-B 5313), “Tonkin, montagnes du Yunnan (via Lao Koi)”, coll. Tannant, no date.

Others: 1 male (56.1 × 42.6 mm)(ZRC 1998.264), Hekou, southern China, coll. A.-Y. Dai., 29 Nov.1995.

Description. – Carapace broader than long, low...Epistome anterior margin with median triangle; posterior margin with median triangular tooth (Fig. 1B).

G1 broad; terminal segment clearly separated from subterminal segment. G2 with distal segment tapered (Fig. 2G).

Remarks. – The redescription of the present species has been based on the male specimen (ZRC 1998.264) from China. *Potamon tannanti* is closest to *Potamon cua*, new species, from northern Vietnam. The differences between the two species are in the branchial region, male telson and G1 (see Tables 1, 2).

Distribution. – Hekou, Yunnan Province, southern China (Dai et al., 1975; present study); “Tonkin, montagnes du Yunnan (via Lao Koi)”, northern Vietnam (Rathbun, 1904).

***Potamon orleansi* Rathbun, 1904**

(Figs. 2H–L, 6B)

Potamon (Potamon) orleansi Rathbun, 1904: 282, Fig. 20, Pl. 11 Fig. 7.

Potamiscus (Potamiscus) tannanti – Bott, 1966: 480 (part), ?Fig. 14 (not *Potamon (Potamon) tannanti* Rathbun, 1904).

Potamiscus tannanti – Bott, 1970: 160 (part); Dang, 1975: 75; 1980: 432 (part)(not *Potamon (Potamon) tannanti* Rathbun, 1904).

Material examined. – Holotype: male (42.4 × 32.3 mm)(MNHN-B 5262), “Tonkin, rivière Noire”(river Song Da), coll. Prince Henri d'Orleans, no date.

Diagnosis. – ...

Remarks. – The information in the diagnosis on the telson of the male abdomen is based on Rathbun's (1904: Fig. 20) illustration of the distal abdominal segments of the male type specimen...

Ng & Naiyanetr (1993: 20) also mentioned Bott's actions. The G1 figured by Bott (1966: Fig. 14) superficially resembles that of the *P. orleansi* holotype but...

Distribution. – ...

***Potamon villosum*, new species**

(Figs. 5H–O, 7D)

The Raffles Bulletin of Zoology

Material examined. – Holotype: male (44.8 × 34.3 mm)(ZRC 1998.276), Tributaries of Nam Tha River ca. 800 m asl., Luang Nam Tha Province, northern Laos, coll. H. Morioka, 13 Nov. 1997.

Paratypes – 7 males, 4 females (largest male 55.9 × 41.4 mm)(ZRC 1998.277–288), same data as holotype; 2 females (larger 32.9 × 24.5 mm)(ZRC 1998.286–287) Nam Luang, Laos, coll. M. Kottelat, 22 May 1997.

Diagnosis. – ...

Etymology. – ...

Remarks. – *Potamon villosum*, new species, is closest to *P. ou*, new species. It is separated from this by its distinctly setose carapace (versus glabrous to very sparsely setose)(see Figs. 5H–J, Table 1).

Distribution. – Luang Nam Tha Province, northern Laos (present study).

ACKNOWLEDGMENTS

We are grateful to...

LITERATURE CITED

- 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 biologica*, **47**: 469–509.
- Bott, R., 1970. Die Süßwasserkrabben von Europa, Asien, Australien und ihre Stammesgeschichte. Eine Revision der Potamoidea und Parathelphusoidea (Crustacea, Decapoda). *Abhandlungen der Senckenbergischen Naturforschenden Gesellschaft*, Frankfurt, **526**: 1–338, Pls. 1–58.
- Dai, A. Y., Y. Z. Song, L. Y. He, W. J. Cao, Z. B. Xu & W. L. Zhong, 1975. Description of several new species of freshwater crabs belonging to the intermediate hosts of lung flukes. *Acta Zootaxonomica Sinica*, **21**(3): 257–264.
- Dang, N. T., 1975. Phan loai tom cua nuoc ngot mien bac Viet Nam. *Tap san Sinh Vat - Dia Hoc*, **13**(3): 65–78. (In Vietnamese, with French summary).
- Dang, N. T., 1980. *Dinh Loai Dong Vat Khong Xuong Song Nuoc Noot Bac Vit Nam.* Ha Noi: Nha Xuat Ban Khoa Hoc Va Ky Thuat. 464 pp. (In Vietnamese).
- Naiyanetr, P. & P. K. L. Ng, 1990. Two new species of *Potamon* Savigny, 1816 s. l. from Chiangmai Province, north-western Thailand, with a note on *Potamon (Potamon) cochinchinense* De Man, 1898 (Crustacea, Decapoda, Brachyura, Potamidae). *Spixiana*, **13**: 121–130.
- 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. & P. Naiyanetr, 1993. New and recently described freshwater crabs (Crustacea: Decapoda: Brachyura: Potamidae, Gecarcinucidae and Parathelphusidae) from Thailand. *Zoologische Verhandelingen*, Leiden, **284**: 1–117.
- Rathbun, M. J., 1904. Les crabes d'eau douce. *Nouvelles Archives du Muséum d'Histoire naturelle*, Paris, (4)**6**: 225–312.
- Savigny, J. C., 1816. *Mémoires sur les Animaux sans Vertèbres.* I Partie, Paris: 107, Pl. III, Fig. 1.

The Raffles Bulletin of Zoology

EXAMPLE of format for Tables in *Raffles Bulletin of Zoology*:

Table 1. Comparison of diagnostic characters of invertebrates in this paper.

Character	Body shape	Number of spines on head	Wings	Eye colour
Invertebrate sp. 1	Cylindrical	10–15	1 pair	Green
Invertebrate sp. 2	Round	2–3	1 pair	Red
Invertebrate sp. 3	Square	None	2 pairs	Yellow
Invertebrate sp. 4	Star-shaped	30–40	None	Blue
Invertebrate sp. 5	Triangular	More than 100	2 pairs	Black