A new genus and species of cirolanid isopod (Crustacea) from Zanzibar, Tanzania, western Indian Ocean

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Abstract: Baharilana gen. nov. is diagnosed and described. The genus contains two species and is distributed from the Red Sea to Tanzania, Western Indian Ocean from the shallow sub-tidal to a recorded depth of 1850 metres. The species included are the type species Baharilana richmondi sp. nov., which is here described and Baharilana bisulcata comb. nov. The genus is characterized by having a ventrally flat, pentagonal clypeus; pereopods 1–3 with the superior distal margin of the ischium moderately produced and setose, the merus anterodistal margin also moderately produced and setose but not overriding the propodus; paired flattened and articulating penial processes; pleopod 1 endopod narrow, half as wide as the sub-circular exopod; pleopod 2 appendix masculina sub-medially inserted, curving laterally around the ramus; and the uropod peduncle lateral margin with a row of plumose setae.

Résumé: Un nouveau genre et une nouvelle espèce d’Isopode Cirolanidé (Crustacea) de la côte de Zanzibar, Ouest de l’Océan Indien. La diagnose et la description du nouveau genre Baharilana gen. nov sont données. Le genre contient deux espèces et sa répartition géographique s’étend de la Mer Rouge à la Tanzanie, Océan Indien Occidental, des régions infra-littorales peu profondes jusqu’à 1850 mètres de profondeur. Les espèces du genre sont l’espèce type Baharilana richmondi sp. nov. qui est ici décrite et Baharilana bisulcata comb. nov. Le genre est caractérisé par un clypeus ventral plat et pentagonal; les péréiopodes 1–3 ont le bord distal supérieur de l’ischium modérément saillant et couvert de soies, le bord antéro-distal du merus également modérément saillant et couvert de soies, mais ne recouvrant pas le propodus ; des processus péniens pairs, aplatis et articulés ; l’endopodite du pléopode 1 étroit , la moitié de la largeur de l’exopode sub-circulaire; l’appendix masculina du pléopode 2 inséré sub-médialement, courbé latéralement autour de la rame; et le bord latéral du pédoncule de l’uropode avec une rangée de soies plumeuses.

Keywords: Isopoda, Cirolanidae, Indian Ocean, taxonomy, coral reef, East Africa, Crustacea.

Introduction

The marine Cirolanidae of East Africa and the Western Indian Ocean have received sporadic attention over time, with contributions in the twentieth century principally from Monod (1968), Jones (1971, 1976, 1983), Jones and Icely (1981), Bruce (1981a), Messana (1984), Hobbins and Jones (1993) and Kensley and Schotte (1994). Kensley (2001) lists all cirolanids known from the Indian Ocean. Recent collections from the coral reefs of Unguja Island (Zanzibar) made in 1995 and 1997 obtained many cirolanid species,
several of which are undescribed. The use of baited traps was particularly successful in capturing large numbers of cirolanids.

This contribution describes one species collected at Matemwe and Mnemba Island in the north-eastern part of Unguja Island that was obtained solely by the use of baited traps. It is apparent that this species and three other Western Indian Ocean species (two of which are being described by Kensley and Schotte, personal communication) are united by several characters that we consider to be of generic merit, characters which also preclude the inclusion of these species in any other cirolanid genus. We therefore establish a new genus for these species.

Specimens have been deposited at the Zoologisk Museum, University of Copenhagen (ZMUC), the Australian Museum, Sydney (AM), with voucher specimens retained at Te Papa National Museum of New Zealand, Wellington (NMNV) and the Icelandic Museum of Natural History, Reykjavik (IMNH).

**Abbreviations:** CP—circumplumose; PMS—plumose marginal setae; RS—robust seta/setae.

**Taxonomy**

**Family CIROLANIDAE Dana**

*Baharilana* gen. nov.

Type species: *Baharilana richmondi* sp. nov., here designated.

**Species included**

In addition to the type species, *Baharilana bisulcata* (Hobbins and Jones, 1993) comb. nov., Red Sea, 748–1850 m; two further species from Moçambique and Somalia are being described by Brian Kensley and Marilyn Schotte (personal communication).

**Diagnosis**

Head without rostral point. Clypeus pentagonal, ventrally flat, not blade-like, not projecting. Pereopods 1–3 with ischium superior distal margins moderately produced, setose; merus anterodistal margin moderately produced, setose, not overriding propodus; pereopods 5–7 basis without long PMS, ischium and merus distally with long setae. Paired flattened articulating penial processes present on sternite 7. Pereopod 1 endopod narrow, half as wide as exopod; exopod sub-circular. Pereopod 2 appendix masculina sub-medially inserted, curving laterally around the ramus; apex bluntly rounded to sub-acute. Uropod peduncle lateral margin lacking acute RS, ventrolateral margin with row of plumose setae.

**Description**

Head wide, approximately 67–70% as wide as pereonite 1, anterior margin evenly rounded, not medially indented, without rostral point. Body about 2.4–2.6 times as long as greatest width, pereonites unornamented; pereonite 1 about 1.7 times as long as pereonite 2. Pleon unornamented, with 5 unfused segments, pleonite 1 largely concealed by pereonite 7; pleonite 3 epimera not enlarged, not extending posteriorly to pleonite 4; pleonite 5 laterally overlapped by pleonite 4. Pleotelson usually with longitudinal carinae or ridges, with or without tubercles; posterior margin with PMS and robust setae.

Antennule peduncle articles collinear, not fused; peduncular article 2 not at right angles to article 1; article 3 well developed, subequal in length to articles 1 and 2; flagellum shorter than peduncle; without callynophore. Antenna peduncle comprised of 5 articles, peduncular articles 1–3 shortest, articles 4 and 5 subequal in length, longest; flagellum as long or longer than peduncle.

Frontal lamina pentagonal or rectangular, ventrally flat, approximately 3 times as long as basal width, not projecting anteroventrally from posterior. Clypeus ventral surface not projecting relative to frontal lamina. Mandible incisors wide, right incisor tricuspidate; spine row with 7–9 RS. Maxillule medial lobe with 4 CP robust setae. Maxilliped palp articles 3 and 4 each with medial margin weakly lobed; lateral margins of articles 2–5 with long simple setae; articles 3 and 4 distal margin width greater than proximal margin of article 4 and 5 respectively; endite with 1 (type species) or 2 coupling hooks.

Pereopods 1–7 dactylus with secondary unguis present. Pereopods 1 and 2 with ischium anterodistal angle moderately produced, not overriding merus; pereopod 1 merus anterodistal angle overriding carpus, pereopod 2 merus with anterodistal angle produced, extending to midpoint of carpus; dactylus shorter than propodus. Pereopod 7 basis not noticeably broader in distal half compared to proximal half; margins with few discontinuous setae; medial carina with setae; superior distal angle with cluster of long and short setae; ischium and merus not flattened, distal margin moderately expanded, inferior margins with long and short simple setae and acute robust setae.

Paired, flattened articulated penial process present at posterior margin of sternite 7.

Pleopod 1 rami lamellar, exopod large, sub-circular, 1.0–1.4 times as long as wide, endopod 0.20–0.25 as wide as exopod, 0.80–0.95 as long as exopod; peduncle quadrate 0.75 times as long as wide. Pleopod 2 appendix masculina slender, arising sub-medially, longer than endopod, curving laterally around endopodal distal margin. Pleopods 1–5 with PMS present on all rami except endopod of pleopod 5. Uropod peduncle medial margin strongly produced, lateral margin with row of plumose setae (type species); rami extending beyond pleotelson; endopod and exopod margins with PMS; exopod lateral margin not excised.
Females
No ovigerous females present in the material at hand. Non-

ovigerous females similar to males but slightly larger.

Remarks
There are several characters that exclude the type species
and the other species here placed in Baharilana gen. nov.
from Cirolana Leach, 1818 as diagnosed by Bruce (1986),
Brusca et al. (1995) and other cirolanid genera. These
characters are pereopods 1–3 with the superior distal margin
of the ischium and merus being moderately produced and
provided with numerous slender and robust setae (in Cirolana these margins are not produced and are weakly
setose [see figures in Bruce 1986; 1995; Bruce and Ellis,
1983; Brusca et al., 1995]), pleopod 1 with a slender
endopod and sub-circular exopod, pleopod 1 peduncle about
three quarter as wide as long, pleopod 2 with the appendix
masculina arising in a sub-medial position, and the uropod
peduncle with a row of plumose setae along the lateral and
ventral margins. Additionally all species being placed in the
new genus have articulated flat penial processes and lack a
rostral point, although both these characters are polymorphic in Cirolana as presently constituted.

The pereopod morphology, with the superior distal
margins of the merus of pereopods 1–3 not produced and
not overriding the carpus and proximal part of the propodus,
excludes the species here placed in Baharilana gen. nov.
from Conilera Leach, 1818 (see Brusca et al., 1995),
Conilorpheus Stebbing, 1905 (see Bruce and Olesen, 2002),
Natatolana Bruce, 1981b (see Bruce, 1986; Keable and
Bruce, 1997), Oncilorpheus Paul and Menzies, 1971 (see
Brusca et al., 1995), Odyssealana Malynuta, 1995,
Parilcirolana Yu and Li, 2001 and Politolana Bruce, 1981b.
Conilera and Oncilorpheus have an operculate pleopod 1.
The recently described Parilcirolana is further
distinguished by the rami of pleopod 1 being of similar
proportions (the exopod is ovate rather than nearly circular)
and the appendix masculina being basally attached.

Two character states are shared with other genera:
the lack of a rostral point together and the uropod peduncle
having a row of setae on the ventrolateral margin, those
genera being Aatolana Bruce, 1993, Eurydice Leach, 1814
(see Bruce, 1986; Bruce and Soares, 1996; Brusca et al.,
1995) and Plakolana Bruce, 1993. Eurydice is abundantly
distinct from Baharilana, while Aatolana can be
distinguished by having expanded and posteriorly acute
epimeron on pleonite 3 which, in addition, has a ventrolateral
row of setae (Keable, 1998). Furthermore, these genera have
the anterior medial margin of the head weakly to moderately
indented, The genus Plakolana Bruce, 1993, known from
northern Papua New Guinea and tropical and eastern
Australia (Bruce, 1993; Keable, 1999), appears to be most
similar. However Plakolana has pleopod 1 with rami of
similar size and width, the appendix masculina is sub-
basally attached and is straight, and the epimera of pleonite
3 are posteriorly produced and wide with a distinct
postero medial point whereas in Baharilana the epimera are
not posteriorly produced and converge evenly to terminate
in a simple point.

Distribution
The genus appears restricted to the Western Indian Ocean,
with records from the Red Sea (Hobbs and Jones, 1993),
Somalia and Moçambique (Kensley and Schotte, personal
communication) and Tanzania. All species are subtidal.

Etymology
The genus name uses the Kiswaheli word ‘bahari’ (meaning
sea) and the ending -lana to indicate family affinity (gender
female).

Baharilana richmondi sp. nov.

Figures 1–5

Material
All material is from the north-eastern end of Unguja Island
(= Zanzibar), Tanzania.

Holotype: ♀ (6.5 mm), ZNZ-97/18, off Matemwe, 05°51.20’S, 39°22.08’E, 8–11 March 1997, off reef on rubble-covered, gentle slope, 25–40 metres, baited trap,
coll. N.L. Bruce & T. Jansen (ZMUC CRU3720).

Paratypes: 6 ♂♂ (5.6 broken[part dissected], 5.8, 5.9, 5.9,
6.0 (specimen C part dissected), 6.2 [dissected] mm), 9 ♀
(ovig. 7.5, non-ovig. 6.9[?], 7.0, 7.0, 7.4, 7.5, 7.6, 7.6, 7.7
dissected, 8.2 mm), 4 mancas (3.2-4.4 mm), 36 unmeasured,
same data as holotype (ZMUC CRU3721, AM P61505).

Additional material: 87 ♂♂, ♀♀ and mancas, Stn ZNZ-97/19.
Matemwe, 5°51.21’S, 39°21.96’E, 8-11 March 1997, reef
edge onto rubble, 20–25 metres, baited trap, coll. N.L.
Bruce & T. Jansen (NMNZ Cr9845, IMNH 2002.01.10). 73
♂♂, o+ and mancas, Stn ZNZ-97/21. Mnemba Island reef,
5°50.40’S, 39°23.31’E, 9-10 March 1997, reef edge, ca.
30-40 metres, baited trap, coll. N.L. Bruce & T. Jansen (AM
P61506).

Type locality: Matemwe, Unguja Island, Tanzania,
5°51.21’S, 39°21.96’E.

Description
Body (Fig. 1A) about 2.6 times as long as greatest width;
widest at pereonite 5. Pereonite 1 2.3 times as long as
pereonite 2, pereonite 2=3<4<5<6<7; pereonite 2 shortest;
all pereonites with weak transverse furrow, indistinct
over dorsum, pereonite 4 epimera with 2 longitudinal
curving lateral furrows. Coxae (Fig. 1B) all with entire oblique
suture and fine ventral submarginal suture; posterior
margins of coxae 2–3 posteriorly truncate, 4–6 posteriorly
narrowly rounded, coxae of pereonite 6 weakly produced,
coaex of pereonite 7 produced posteriorly beyond pereonite.

No ovigerous females present to males but slightly larger.

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Figure 1. Baharilana richmondi sp. nov. A–D, holotype, remainder ♂ paratype (6.2 mm). A. dorsal view; B. lateral view; C. frons; D. pleonites, lateral detail; E. pleotelson apex; F. pleotelson; G. pleotelson apex; H. antennule; I. antenna. Scale bar = 2.0 mm.

Figure 1. Baharilana richmondi sp. nov. A–D, holotype, paratype ♂ restant (6.2 mm). A. Vue dorsale ; B. vue latérale ; C. vue antérieure ; D. pléonites, détail latéral ; E. extrémité du pléotelson ; F. pléotelson ; G. extrémité du pléotelson ; H. antennule ; I. antenne. Echelle = 2.0 mm.
Figure 2. Baharilana richmondi sp. nov. All figs of ♂ paratype (6.2 mm). A. right mandible; B. spine row and molar process, left mandible; C. left mandible, incisor in oblique view; D. mandible palp; E. maxillule; F. maxilla; G. maxilliped; H. maxilliped endite.

Figure 2. Baharilana richmondi sp. nov. A–H sont du paratype ♂ (6.2 mm). A. mandibule droite ; B. rangée d’épines et processus molaire mandibule gauche ; C. mandibule gauche partie incisive en vue oblique ; D. palpe mandibulaire ; E. maxillule ; F. maxille ; G. maxillipède ; H. endite du maxillipède.
Pleonite 1 (Fig. 1A) largely concealed in dorsal and lateral view, visible only laterally at point of junction between pereonite 7 and coxae; pleonite 4 epimera (Fig 1D) posteriorly rounded, with longitudinal suture, extending posterior to pleonite 5.

Pleotelson (Fig 1F) about as long as greatest width, lateral margins evenly convex, converging to rounded apex, posterior margin (Figs 1E-G) with about 34 long PMS and 6 robust setae.

Antennule (Fig 1H) peduncle article 3 0.78 times as long as combined lengths of articles 1 and 2; flagellum 0.82 length of peduncle, extending to anterior margin of pereonite 1, with 9 articles, article 1 of which is longest, articles 1–8 with aesthetascas.

Antenna (Fig 1I) peduncle article 3 with 1 long and 1 short simple setae at superior distal angle; article 4 1.7 times as long as wide, inferodistal angle with 2 groups of 2 slender simple setae, superior distal angle with 2 short simple setae; article 5 slightly longer than article 4, 2.4 times as long as wide, inferior distal angle with single palmate seta, superior distal angle with 4 simple and 2 plumose setae; flagellum 1.4 times as long as peduncle, extending to posterior of pereonite 1, 15-articled, each article with anterodistal cluster of 4–6 short simple setae, inferodistal angle with 1–3 short simple setae.

Frontal lamina (Fig 1C) 2.3 times as long as basal width, lateral margin converging towards posterior.

Mandible (Figs 2A–D) spine row (Figs 2A, 2B) with 8 RS surrounded by numerous setae of varying length; molar process (Fig. 2B) with abundant microtrichs and plumose setae, with about 20 stout spines along anterior margin; palp (Fig. 2D) article 2 lateral margin with 14 biserrate and weakly serrate acute RS, article 3 with 13 biserrate RS, distal 3 of which are longest.

Maxillule (Fig. 2E) lateral lobe with 12 stout RS on gnathal surface, medial lobe with 3 large and 1 small CP robust setae.

Maxilla (Fig. 2F) lateral lobe with 5 slender simple setae, middle lobe with 9 long simple setae and CPS, medial lobe with about 14 CPS.

Maxilliped (Fig. 2G) palp articles 2–5 with both margins setose, those of lateral margins being longer than and less close-set those of medial margins; articles 2–5 lateral margins with 2, 13, 8 and 4 slender simple setae respectively; articles 2–4 medial margins with 11, 22 and 21 slender simple setae respectively; article 5 distal margin with about 13 simple setae; endite (Fig. 2H) with minute acute distal lobe, with one coupling hook and 6 large CPS.

Pereopod 1 (Figs 3A, 3B) basis twice as long as wide, superior proximal margin with 2 small simple setae, superior distal margin with 2 long simple and 1 palmate distal setae, inferior distal angle with 1 acute RS and ~11 long slender simple setae; ischium 0.64 as long as basis, distal half of inferior margin with 4 acute and 1 molariform RS, superior distal angle with 5 long slender simple setae, mediiodistal margin with 4 long and 1 short simple slender setae; merus about half as long as ischium, superior distal angle with about ~6 long slender simple setae and 1 robust seta, distomedial angle with 1 acute robust seta, inferior margin with 6 molariform robust setae between which are set 3 bifid RS each with prominent accessory flagellum and 2 simple acute RS; carpus inferodistal angle with 3 robust set, mediiodistal margin with 3 short slender setae; propodus about 2.3 times as long as wide, 0.9 times as long as ischium, inferior margin with 2 RS on palm, each with prominent accessory flagellum, distally with 1 large robust seta and 2 slender setae opposing dactylus (Fig. 3B) superior distal angle with 2 slender setae; dactylus about 60% length of propodus.

Pereopod 2 (Fig. 3C) proportions similar to that of pereopod 1, slightly longer, carpus proportionally longer; basis superior proximal margin with 3 small palamate setae, superior distal margin with 2 long simple setae, inferior distal angle with ~10 long slender simple setae; ischium 0.76 as long as basis, distal half of inferior margin with 4 long acute, 2 long molariform RS and 3 short acute RS, superior distal angle with ~6 long slender simple setae, mediiodistal margin with 2 long and 3 short simple slender setae; merus superior distal angle with about 5 long slender simple setae and 1 large and 1 short blunt RS, distomedial margin with 1 slender seta, inferior margin with 6 blunt long molariform setae which increase in size distally and 4 slender simple setae; carpus inferior margin with 1 stout robust setae and 3 small slender setae, mediolateral margin with 3 slender setae; propodus about 2.6 times as long as wide, 0.52 as long as ischium, inferior margin with 3 robust setae and stout RS opposing dactylus; dactylus about 61% length of propodus.

Pereopod 3 similar to pereopod 2.

Pereopod 4 (Fig. 3D) intermediate in form between pereopods 1–3 and 5–7.

Figure 3. Baharilana richmondi sp. nov. All figs of ♂ paratype (6.2 mm). A. pereopod 1; B. pereopod 1, dactylus; C. pereopod 2; D. pereopod 4.

Figure 3. Baharilana richmondi sp. nov. A-D sont du paratype ♂ (6.2 mm). A. périopode 1 ; B. dactyle du périopode 1 ; C. périopode 2 ; D. périopode 4.
A NEW CIROLANID GENUS FROM ZANZIBAR
Pereopod 6 (Fig. 4A) basis 2.1 times as long as wide, superior margin distinctly convex, inferior margin straight, inferior margin with 15 evenly-spaced long slender simple and plumose setae, superior margin with 4 small widely-spaced setae, superior distal angle with ~9 long slender simple setae, medial carina distally with 4 long simple setae; ischium superior distal angle with 3 long simple setae and 5 large acute RS, mediiodistal margin with 1 acute RS, inferior margin with 3 clusters of 2, 3 and 3 acute RS, inferodistal angle with 3 large RS and 3 simple setae; merus superior distal angle with 8 long simple and 2 biserrate RS, inferior margin with 2 clusters of 1 and 4 acute RS, inferodistal angle with 2 long and 4 short large RS; carpus superior distal angle with 5 long simple and 2 biserrate RS inferior margin with one cluster of 2 robust setae, inferior distal angle with about 6 simple and 1 biserrate setae; propodus superior angle with 1 slender seta, 1 acute RS and 1 palmate seta, posterior margin cluster of 1 RS and 2 slender seta, inferodistal angle with 2 blunt RS and 2 slender finely biserrate setae.

Pereopod 7 (Figs 4B–D) is largely similar to pereopod 6, but is slightly shorter and more slender; merus and carpus has abundant long biserrate RS.

Penes (Fig. 5A) separated by 0.8 basal width of penial process, 2.6 times as long as basal width, with sub-basal constriction; lateral margin weakly concave, medial margin convex giving appearance of each process curving weakly laterally; distally rounded.

Pleopod 1 (Fig. 5B) endopod 0.42 times as wide as exopod, medial margin very weakly concave, with ~24 PMS; exopod sub-circular in shape, with ~37 PMS, lateral and medial margins evenly rounded; peduncle with 5 coupling hooks.

Pleopod 2 (Fig. 5C) exopod and endopod with ~51 and 31 PMS respectively; peduncle with 4 coupling hooks; appendix masculina (Fig. 5C) distally acute, about 15 times as long as basal width. Pleopods 3–5 with exopod suture distinct and entire.

Pleopod 3 (Fig. 5D) exopod and endopod with ~53 and 13 PMS respectively, peduncle with 4 coupling hooks.

Pleopod 4 (Fig. 5E) exopod and endopod with ~53 and 10 PMS respectively, peduncle with 3 coupling hooks.

Pleopod 5 (Fig. 5F) exopod with about ~49 PMS.

Uropod peduncle lateral margin (Fig. 6A) with 7 plumose and 1 simple long slender setae, ventrodistal margin (Fig. 6D) with 1 large RS and 9 plumose and 1 simple long slender setae, distomedial margin with 4 PMS; exopod 4.2 times as long as greatest width, about as long as endopod, lateral margin with 4 acute RS and continuous row of short PMS, medial margin with 3 RS, both margins weakly convex proximally, appearing nearly straight, apex (Fig. 6C) weakly and widely bifid; endopod about as long as wide, lateral margin convex with 5 RS and 12 PMS, lateral margin with 3 RS and ~10 PMS, apex (Fig. 6B) weakly and widely bifid.

Variation
Robust setae: males (n=7) pleotelson RS 3+3 (100%), uropod exopod medial margin 3 (80%, 4 and 2 each occurring once), lateral margin 4 (50%) or 5 (50%); uropod endopod medial margin 5 (71%) or 6 (29%), lateral margin 3 (100%); females (n=10) pleotelson RS 3+3 (100%), uropod exopod medial margin 3 (79%), 4 and 2 (each 10.5%), lateral margin 4 (61%) or 5 (39%); uropod endopod medial margin 5 (75%) or 6 (25%), lateral margin 3 (95%) or 4 (5%). The proximal robust seta on the exopod lateral and medial margin is minute, and not readily observed by stereoscopic transmitted light microscopy. It is quite probable that the exopod in fact has 5 RS on the lateral margin and 4 RS on the medial.

In immature males the appendix masculina is shorter and not obviously laterally curved as well as being more distally attached. Otherwise adult specimens appear similar.

The posterior margin of the pleotelson shows a slight variation in some specimens being slightly flattened or indented in others appearing evenly rounded.

Colour
Specimens are translucent when alive or freshly captured, changing to opaque white on preservation. Some specimens, usually the smaller ones, have a few minute chromatophores on the lateral body margins adjacent to the join with the coxae.

Size
Males 5.6–6.1 mm, one immature male at 6.0 mm; females 6.9–8.2 mm, mancas measured at 3.2–4.4 mm. It is not possible to determine the sex of specimens of a size less than 6 mm in the absence of evident penial processes or appendix masculina.

Remarks
Baharilana richmondi sp. nov. is best separated from the other species in the genus by the evenly rounded pleotelson.
with smoothly convex margins, the dorsal surface of which has two weakly-defined longitudinal sub-median ridges.

**Distribution**

Known only from north-eastern Unguja Island at Matemwe and off the nearby Mnemba Island reef, at depths of approximately 20–40 metres, on sand and mixed sand and rubble bottoms, close to but not on the hard reef.

**Etymology**

We take pleasure in naming this species for Dr Matt Richmond (formerly of the Institute of Marine Sciences,

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**Figure 5.** *Baharilana richmondi* sp. nov. All figs of ♂ paratype (6.2 mm). A, penes; B–F, pleopods 1–5 respectively.

**Figure 5.** *Baharilana richmondi* sp. nov. A–F sont du paratype ♂ (6.2 mm). A, pénis ; B–F, pléopodes 1–5 respectivement.
University of Dar es Salaam at Zanzibar) in recognition of his contribution to the marine sciences in the Western Indian Ocean both directly and through generous assistance to visiting taxonomists such as ourselves.

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We are grateful to Brian Kensley and Marilyn Schotte (National Museum of Natural History, Smithsonian Institution) for access to drawings of the new cirolanid species that they are describing, the data therein influential in our decision to establish a new genus for these species.

Figure 6. Baharilana richmondi sp. nov. All figs of ♂ paratype (6.2 mm). A. uropod; B. uropod endopod apex; C. uropod exopod apex; D. uropod peduncle ventrolateral margin.

Figure 6. Baharilana richmondi sp. nov. A–D sont du paratype ♂ (6.2 mm). A. uropode; B. sommet de l’endopodite de l’uropode; C. sommet de l’exopodite de l’uropode; D. bord ventro-latéral du pédoncule de l’uropode.
References


