Rec. zool. Surv. India: Vol. 121(1)/01–09, 2021
DOI: 10.26515/rzsi/v121/i1/2021/153202

ISSN (Online) : 2581-8686
ISSN (Print) : 0375-1511

A new species of freshwater crab, *Teretamon kapota* sp. nov. (Decapoda: Brachyura: Potamidae) and a new record from Arunachal Pradesh, North-Eastern India

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Abstract

A new species of the potamid freshwater crab, *Teretamon kapota* sp. nov., is described from the East Siang and Lower Dibang Valley districts of the Arunachal Pradesh state, north-eastern India. *Teretamon kapota* sp. nov. can be distinguished from the congeners mainly by the relatively small eye as compared to the orbital space, the gently concave lateral margins of the male telson, and the very high, strongly convex, semicircular dorsal flap on the terminal segment of the male first gonopod that somewhat resembles a pigeon's head. The potamid genus, *Teretamon* Yeo and Ng, 2007, is now known by five species, including the present new species. An identification key is provided for the genus. Another potamine crab, *Acanthopotamon fungosum* (Alcock, 1909), constitutes a new record to Arunachal Pradesh also reported. Arunachal Pradesh is now known to have 17 species of freshwater crabs (13 potamid and 4 gecarcinucid species), including the present new species and the new record.

Keywords: *Acanthopotamon fungosum*, Crustacea, New Record, Potamiscinae, Taxonomy

Introduction

The potamid crab genus *Teretamon* Yeo and Ng, 2007, is previously known by only four species: *T. adiatretum* (Alcock, 1909) (type species) from India (Dafla Hills on the border of western Arunachal Pradesh and Assam) and Myanmar; *T. indicum* Mitra, 2017 from India (Mizoram); *T. kempi* Mitra, Payra and Chandra, 2018 from India (Arunachal Pradesh); and *T. spelaeum* Absar, Mitra and Kharkongor, 2017 from India (Meghalaya) (Mitra *et al.*, 2018). The genus is easily distinguished from all other potamiscine genera by the following suite of characters: the carapace is smooth, glabrous, with the regions indistinct; the external orbital angle is indistinct or low; the epibranchial tooth is indiscernible to visible; the epigastric cristae are slightly anterior to the postorbital cristae; the cornea of the eye is relatively small to almost reduced; the male sternopleonal cavity is reaching or extending beyond the imaginary line joining the anterior part of the cheliped coxae; and the male first gonopod has a distinct dorsal flap on the terminal segment (Yeo and Ng, 2007; Absar *et al.*, 2017).

Some specimens were collected from the East Siang and Lower Dibang Valley districts of Arunachal Pradesh, north-eastern India. These specimens possess all the generic characters of *Teretamon* and here described as a new species, *Teretamon kapota* sp. nov. One example of *Acanthopotmon fungosum* (Alcock, 1909) was collected from the same habitat where the new species found reveals as a new record to the state of Arunachal Pradesh, a short diagnosis and distribution are provided here for this species.

Material and Methods

The material and comparative material are located in the following collections: Crustacea Division, Zoological Survey of India, Kolkata, India (ZSIK); North Eastern Regional Centre, Zoological Survey of India, Shillong, Meghalaya, India (ZSI-NERC); and Western Regional

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Article Received on: 17.06.2020 Accepted on: 11.10.2020

Centre, Zoological Survey of India, Pune, Maharashtra, India (ZSI-WRC).

The measurement methods of carapace essentially follow Ng (1988). The terminologies are mainly after Ng (1988), with some modifications as suggested by Davie *et al* (2015). The following abbreviations are used: CW = maximum carapace width; CL = medial carapace length; CH = maximum carapace height; FW = frontal width; ASL = Above Sea Level; coll. = collected by; P2–P5 = second to fifth pereiopods or first to fourth ambulatory legs; S1–S8 = first to eighth thoracic sternites; G1 = male first gonopod; G2 = male second gonopod; VD = minimum distance between female vulvae; SE = maximum width of sternum.

Results

Taxonomy

Superfamily POTAMOIDEA Ortmann, 1896
Family POTAMIDAE Ortmann, 1896
Subfamily POTAMISCINAE Bott, 1970 (*sensu* Yeo and Ng, 2004)
Genus ***Teretamon*** Yeo and Ng, 2007

Teretamon kapota sp. nov. (Figures 1-6)

LSID: urn:lsid:zoobank.org:act:5D200789-BFB2-4CB3-944A-AFA6D6B34DD3

Material examined: Holotype: adult male (CW 26.50 mm, CL 18.40 mm, CH 12.20 mm, FW 8.30 mm): India, Arunachal Pradesh, East Siang district, small hill stream connected to Sibyia River, near Siluk village, ca. 30 km north east of Pasighat (28.175°N, 95.470°E), altitude 336 mASL,4-xi-2019, coll. S. Mitra (ZSIK C.8541/2).

Paratype: Subadult male (CW 15.88 mm, CL 11.83 mm, CH7.90 mm, FW 5.31 mm): India, Arunachal Pradesh, Lower Dibang Valley district, Mehao Wildlife Sanctuary, drainage between Injino River and Koronu (28.058°N, 95.935°E), altitude 290 mASL, 29-viii-2016, coll. S.D. Gurumayum and Party (ZSI-WRC C.1981).

Additional material: INDIA, Arunachal Pradesh, Lower Dibang Valley district, Mehao Wildlife Sanctuary: juvenile male (CW 12.35 mm, CL 9.15 mm, CH5.23 mm, FW 4.48 mm), stream ca. 8 km north west of Roing on Roing-Anini road (28.206°N, 95.816°E), altitude 808 mASL, 16-iii-2014, coll. B. Sinha and Party (ZSI-WRC C.1905); adult female (CW 23.12 mm, CL 16.83 mm, CH10.79 mm, FW 7.08 mm), Tiwarigaon, Roing (28.224°N, 95.833°E), altitude 1424 mASL, 08-v-2015, coll. L. Tamang (ZSI-WRC C.1906); juvenile female (CW 13.88 mm, CL 10.16 mm, CH6.75 mm, FW 4.59 mm), small drain at 16 km from Roing on Anini road (28.206°N, 95.811°E), altitude 871 mASL, 09-iv-2016, coll. S.D. Gurumayum and Party (ZSI-WRC C.1907); juvenile male (CW 12.90mm, CL 10.01 mm, CH6.17 mm, FW 4.53 mm) and subadult female (CW 14.77 mm, CL 10.58 mm, CH6.22 mm, FW 4.88 mm), same collection data as paratype (ZSI-WRC C.1908).

Comparative material: ***Teretamon adiatretum*** (Alcock, 1910): ♂, Myanmar, Kakhyen hills, coll. H.H. Godwin-Austen (ZSIK C.4071/4).

Teretamon indicum Mitra, 2017: holotype ♂, India, Mizoram, Saiha district, hill stream on Saiha-Zero road, ca. 23 km from Saiha town (22.465°N, 92.956°E), altitude 578 mASL, 9-iii-2015, coll. S. Mitra (ZSIK C.6462/2); paratype ♂ (ZSIK C.6463/2) and paratype ♀ (ZSIK C.6470/2), same collection data as holotype.

Teretamon kempi Mitra, Payra and Chandra, 2018: India, Arunachal Pradesh, Changlang district, Namdapha Tiger Reserve, coll. J. Saini and Party: holotype ♂, Hornbill Camp (27.540°N, 96.440°E), altitude 657 m ASL., 10-iii-2017 (ZSIK C.7128/2); paratype ♂, Deban (27.480°N, 96.400°E), altitude 345 mASL, 24-vi-2017 (ZSIK C.7129/2); paratype ♀, 19 mile (27.480°N, 96.400°E), altitude 466 m ASL., 27-vi-2017 (ZSIK C.7130/2); 1 ♂, Deban, altitude 345 m ASL., 3-iii-2017 (ZSIK C.7131/2); 3 ♂, Lankhai Nala (27.500°N, 96.390°E), altitude 375 mASL, 6-iii-2017 (ZSIK C.7132/2); 1 ♂, Deban (27.480°N, 96.400°E), altitude 345 m ASL., 27-vi-2017 (ZSIK C.7133/2); 1 ♂, Deban (27.480°N, 96.400°E), altitude 345 mASL, 1-iii-2017 (ZSIK C.7134/2); 4 ♂ and 3 ♀, same collection data as holotype (ZSIK C.7135/2).

Teretamon spelaeum Absar, Mitra and Kharkongor, 2017: holotype ♂, India, Meghalaya, East Jaintia Hills district, Krem Khung Cave, Larket village (25.389°N, 92.580°E), altitude 871 m ASL,29-iii-2017, coll. P.F. Absar (ZSI-NERCIV/CRU/312); paratype ♀ (19.40 × 15.00 mm), same collection data as holotype (ZSI-NERC IV/CRU/313).

Diagnosis: Carapace transversely ovate (CW/CL = 1.3–1.4), dorsal surface strongly convex in frontal view, glabrous, pitted; epigastric cristae visible as 2 low, broad protuberances; postorbital cristae visible, rugose; external orbital angle indistinct, low; epibranchial tooth only

Figure 1. *Teretamon kapota* sp. nov., holotype male (26.50 × 18.42 mm) (ZSIK C.8541/2): colouration of freshly preserved specimen.

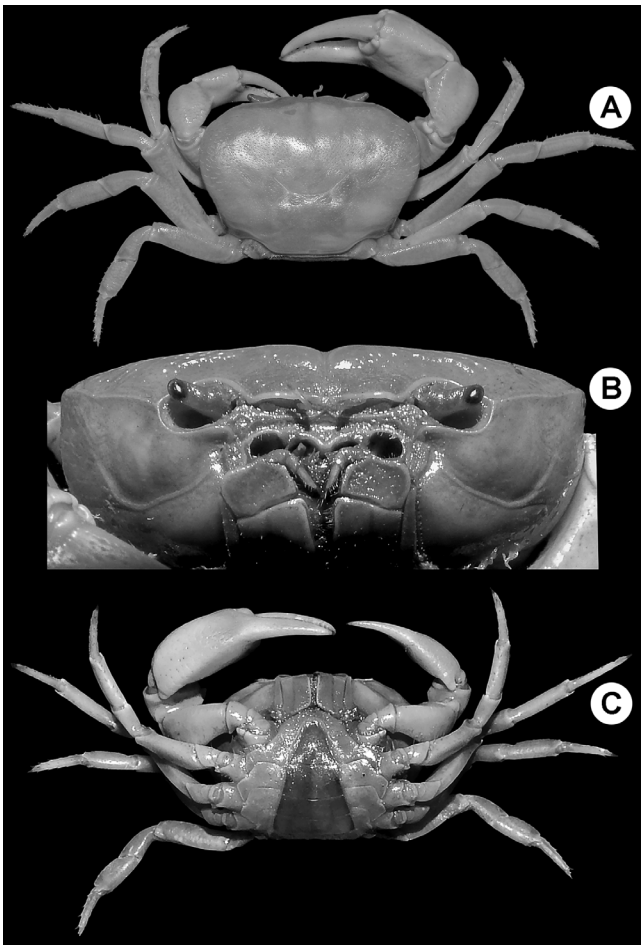

Figure 2. *Teretamon kapota* sp. nov., holotype male (26.50 × 18.42 mm) (ZSIK C.8541/2): **A.** Overall dorsal view; **B.** Frontal view of cephalothorax; **C.** Overall ventral view.

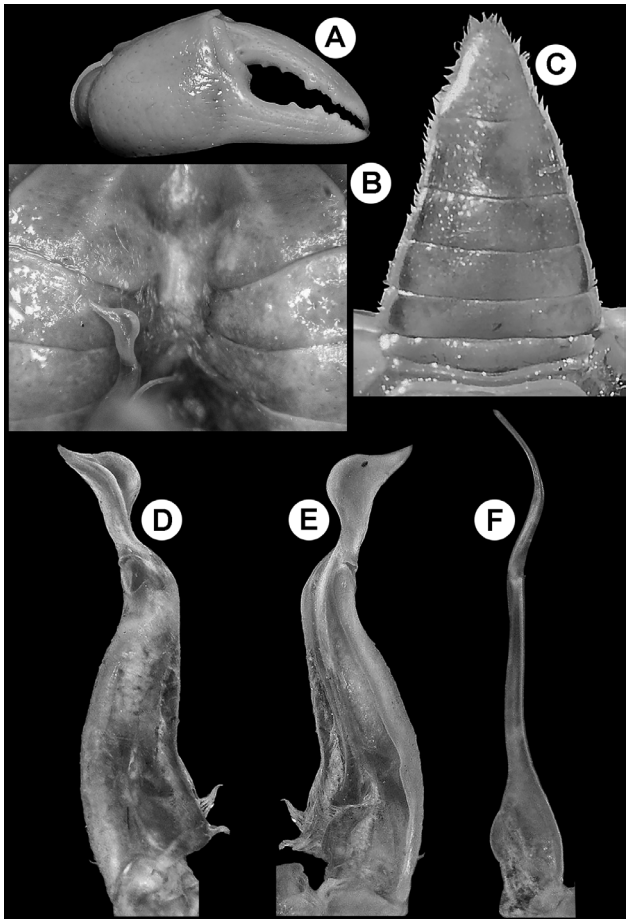

Figure 3. *Teretamon kapota* sp. nov., holotype male (26.50 × 18.42 mm) (ZSIK C.8541/2): **A.** Outer view of right or major chela; **B.** Right G1 terminal segment *in situ*; **C.** Pleon and telson; **D.** Dorsal view of left G1; **E.** Ventral view of left G1; **F.** Left G2.

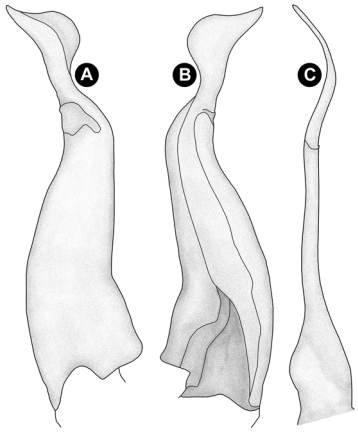

Figure 4. *Teretamon kapota* sp. nov., holotype male (26.50 × 18.42 mm) (ZSIK C.8541/2): **A.** Dorsal view of left G1; **B.** Ventral view of left G1; **C.** Left G2.

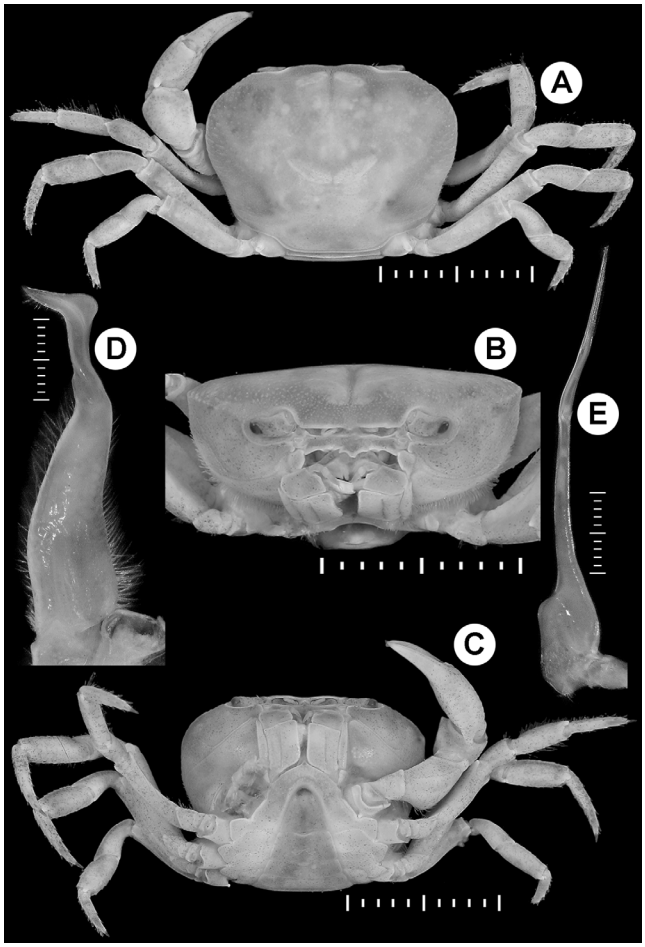

Figure 5. *Teretamon kapota* sp. nov., paratype male (15.88 × 11.83 mm) (ZSI-WRC C.1981): **A.** Overall dorsal view; **B.** Frontal view of cephalothorax; **C.** Overall ventral view; **D.** Dorsal view of left G1; **E.** Left G2. Scale bars = 10 mm (A–C), 1 mm (D, E).

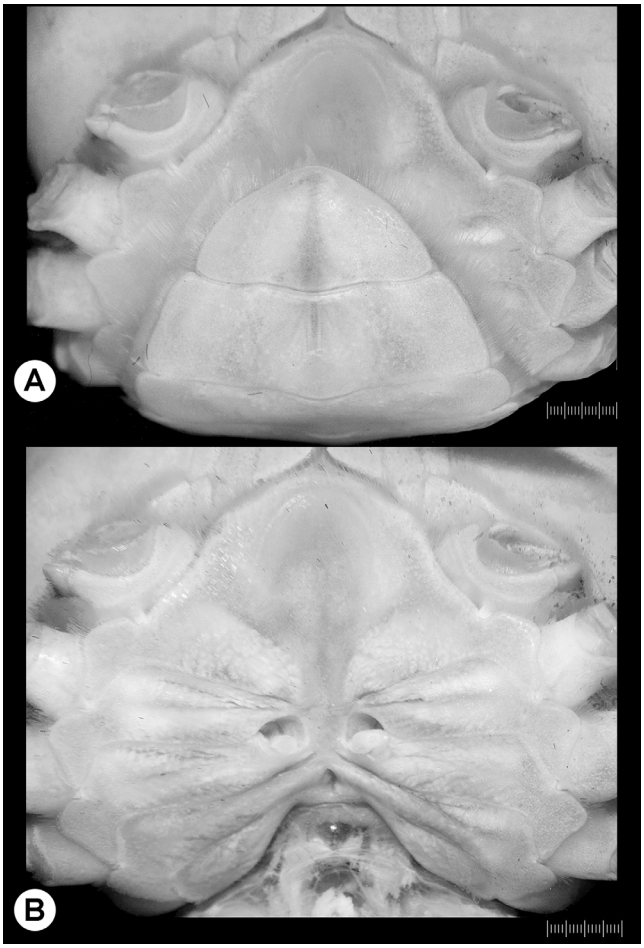

Figure 6. *Teretamon kapota* sp. nov., female (23.13 × 16.83 mm) (ZSI-WRC C.1906): **A.** Pleonal somites 4–6 and telson; **B.** Thoracic sternites showing vulvae. Scale bar = 2 mm.

slightly visible; cervical grooves narrow, very shallow; eyes relatively small as compared to orbital space, with cylindrical eyestalk and relatively large cornea; chelipeds with relatively broad subdistal spine on carpus; male telson relatively narrow, proximal width ca. 1.1 times medial length, with gently concave lateral margins; G1 with acute and upcurved tip; terminal segment distinctly curved, short, ca. 0.5 times length of subterminal segment, distal part distinctly narrow, proximal part constricted, with overall structure resembling head of pigeon due to presence of very high, strongly convex, semicircular dorsal flap; vulvae on S6 closely located, transversely ovate, very large, touching and pushing suture S5/S6 anteriorly.

Description of male (Holotype): Carapace transversely ovate, distinctly broader long (CW/CL = 1.4), deep (CH/CW = 0.5), glabrous, smooth except for few oblique striae on branchial regions; dorsal surface strongly convex in frontal view, glabrous, pitted; anterolateral margins convex, with very low granules, distinctly shorter than posterolateral margins; posterolateral margins long, medially gently concave, distinctly convergent, joining straight posterior margin; front sloping downwards, with sinuous, broad frontal margin (FW/CW = 0.3); epigastric cristae visible as 2 low, broad, rugose, protuberances, located slightly anterior to postorbital cristae; postorbital cristae visible, rugose; external orbital angle indistinct,

low; epibranchial tooth only slightly visible; postorbital region shallow; mesogastric groove deep, long, bifurcated posteriorly; cervical grooves narrow, very shallow; H-shaped groove distinct; branchial regions gently inflated; frontal median triangle incomplete; epistome posterior margin with well-developed, broadly triangular medial lobe, outer parts gently sloping downwards (Figures 2A, B).Orbits narrow as compared to carapace size, longitudinally broad, subovate; supraorbital margin smooth; suborbital margin strongly concave, joining with supraorbital margin (Figures 2A, B). Eyes relatively small as compared to orbital space with cylindrical eyestalk and moderately large cornea (Figures 2B).

Antennules long, folded in longitudinally broad fossae; antennae very short, reaching slightly beyond base of eye stalk (Figures 1B). Mandibular palp 3-segmented; terminal segment simple, undivided. Third maxillipeds cover most of buccal cavity when closed; ischium rhomboidal, ca. 1.5 times as long as broad, with narrow, deep, oblique medial groove; merus subrectangular, slightly broader than long; exopod longer than ischium, reaching proximal half length of merus, with long flagellum, subequal to merus width (Figures 2B, C).

Chelipeds unequal, right chela larger (Figures 2A, C). Major chela with 2 or 3 large teeth on each finger, remaining teeth small, conical, distinct gape when fingers closed; dactylus gently curved, slender, longer than upper margin of palm; palm longer than high, with rugose outer surface; carpus rugose, with relatively broad, blunt subdistal spine; merus lacking subterminal spine (Figures 2A, C, 3A).

Ambulatory legs slender, long, P3 longest, slight shorter than major cheliped, P5 shortest, subequal to carapace width, generally glabrous; merus (P2–P5) elongated; propodus (P3) ca. 2.8 times long as broad; dactylus (P2–P5) gently recurved, slightly longer than propodus, with fine setae and sharp chitinous spines on margins (Figures 2A, C).

Thoracic sternites smooth, pitted; suture S2/S3 distinct as narrow groove, reaching lateral margins; suture S3/S4 only visible as2 short, shallow lateral grooves; sutures S4/S5,S5/S6, S6/S7 narrow, shallow, medially interrupted; suture between S7/S8 shallow, narrow, interrupted by longitudinal medial groove, lacking transverse ridge (Figures 2C, 3B). Pleonal locking mechanism with prominent tubercle on submedial part of S5 (Figures 3B). Sternopleonal cavity deep, long, reaching to imaginary line joining bases of third maxillipeds (Figures 2C).

Pleon smooth, narrowly triangular, with gently concave, setose lateral margins; pleonal somite 1 shortest, narrowest; pleonal somites 2–5 progressively longer; pleonal somite 6 trapezoidal, relatively broad (medial length nearly two thirds of proximal width), distinctly longer than preceding somites, equal in length to telson, with straight, strongly converging lateral margins (Figures 2C, 3C). Telson triangular, narrow, proximal width ca. 1.1 times medial length narrow, with gently concave lateral margins and rounded apex (Figures 2C, 3C).

G1 strongly sinuous, moderately stout, with acute and upcurved tip, reaching beyond pleonal locking tubercle *in situ*; terminal segment medially curved outwards at angle of 45°, slender, short, ca. 0.5 times length of subterminal segment, distal part distinctly narrow, proximal part constricted, with overall structure resembling head of pigeon due to medially located, very high, strongly convex, semicircular dorsal flap; groove for G2 marginal; subterminal segment stout, strongly sinuous (Figures 3B, D, E, 4A, B). G2 slightly longer than G1, ca. 1.1 times G1 length; distal segmentextremely long, ca. 0.7 times length of basal segment; basal segment moderately stout at proximal third (Figures 3F, 4C).

Colour in life: The crab has a reddish-brown colouration (Figure 1) except for the dark brown pleon.

Paratype: The male paratype (ZSI-WRC C.1981) is a subadult male, but resembles the holotype in most of the carapace features and gonopod structure, including the diagnostic characters (Figures 5A–E).

Female: The examined female specimens include a juvenile, a subadult, and an adult crab. The adult female (ZSI-WRC C.1906) possesses most of the non-sexual character states as in the males. Its pleon is ovate in outline and covers the thoracic sternum except for S1–S3, lateral edges when closed (Figure 6A). The pleonal somite 1 is the shortest; the pleonal somites 2–5 are progressively longer; and the pleonal somite 6 is the longest, much broader than long, slightly shorter the telson, with the gently convex lateral margins (Figure 6A). The telson of the adult female is broadly ovate, broader than long, with gently convex lateral margins and round apex (Figure 6A). The vulvae on S6 of the adult female are very closely located (VD/SW = ca. 0.1), open laterally, transversely

ovate, very large, occupying ca. 0.8 times the length of S6, deep, touching and pushing suture S5/S6 anteriorly, and partially covered by a soft operculum (Figure 6B).
Etymology: The species epithet used here as a Latin noun in apposition, 'kapota', the name in Sanskrit for pigeon. The terminal segment of the male first gonopod of species most resembles a pigeon's head.

Habitat: The holotype specimen was collected from a shallow hill stream following through a secondary forest (Figure 7). The hill stream joins with the Sibyia River. The crab was found under a large boulder in the stream bed. Two other potamid crabs viz., *Acanthopotamon fungosum* (Alcock, 1909) and *A. horai* Pati, Mitra and Yeo, 2019 also dwell in the same stream bed.

Geographic distribution: *Teretamon kapota* sp. nov. is currently known from the East Siang and Lower Dibang Valley districts of Arunachal Pradesh state in the north-eastern India.

New State Record

Acanthopotamon fungosum (Alcock, 1909)

1909. *Potamon (Paratelphusa) fungosum* Alcock, *Rec. Indian Mus.*, **3**(3): 250.
2019. *Acathopotamon fungosum*: Pati and Thackeray, *Zootaxa,* **4440**(1): 9.

Material examined: 1♂ (CW 21.6 mm, CL 16.6 mm, CH 9.6 mm, FW 7.6 mm), Arunachal Pradesh, East Siang district, small hill stream connected to Sibyia River, near Siluk village, ca. 30 km north east of Pasighat (28.175°N, 95.470°E), altitude 336 mASL, 4-xi-2019, coll. S. Mitra (ZSI-C. 8252/2).

Figure 7. View of the type locality of *Teretamon kapota* sp. nov.

Material compared: *Acathopotamon fungosum*: Lectotype ♂ (ZSIK 6611-6624/9), India: Assam, Cachar, Darband pass, coll. J. Wood-Mason; Paralectotype 1 ♂ and 1 ♀ (ZSIC 6611-6624/9), data same as Lectotype; 1 ♂ and 2 ♀ (ZSIC 5540/10), India: Assam, Cachar, coll. E.B. Baker.

Diagnosis: Carapace sub-hexagonal, slightly broader than long, convex, covered by short spongy fur, carapace dorsal surface broadly corrugated and lumpy, much pitted when denuded; cervical groove only demarcated in mesogastric area, otherwise its superficial; epigastric cristae broad, blunt; well advance of postorbital cristae; post orbital cristae short, not confluent with first epibranchial tooth; external orbital tooth broadly triangular; anterolateral margin gently convex, with 4 epibranchial teeth, first epibranchial tooth broadly triangular, rests are sharp (Figure 8A); third maxilliped ischium elongately rectangular with distinct longitudinal median sulcus; exopod not distally tapered, with well developed flagellum, longer than merus width; carpus and merus of cheliped with distinct subdistal and subterminal spine; ambulatory legs covered with short and long velvety setae; suture between thoracic sternites 2 and 3 distinct, eighth thoracic sternites possesses a transverse ridge at the suture between thoracic sternites 7 and 8 interrupting the longitudinal median line; Sterno-pleonal cavity reaching imaginary line joining beyond the anterior edge of cheliped bases; male pleon broadly triangular; G1 terminal article outwardly curved, long, slender, sub cylindrical, tapering towards tip, covered by short setae (Figure 8B, C); G2 distal part is distinctly longer than half of the basal part (Figure 8 D); female vulvae located on the middle of 6th sternites, opening large, longitudinally oval.

Distribution: INDIA: Arunachal Pradesh (Present record), Assam and Mizoram (Pati *et al*., 2019).

Remarks: *Acanthopotamon fungosum* was descried from Cachar, Assam (Alcock, 1909), having a patchy distribution range in Northeast India. Shallow streams or a Rocky River bed is the suitable habitat for this species. The present report forms its first record from Arunachal Pradesh and extension of its distributional range further northeast.

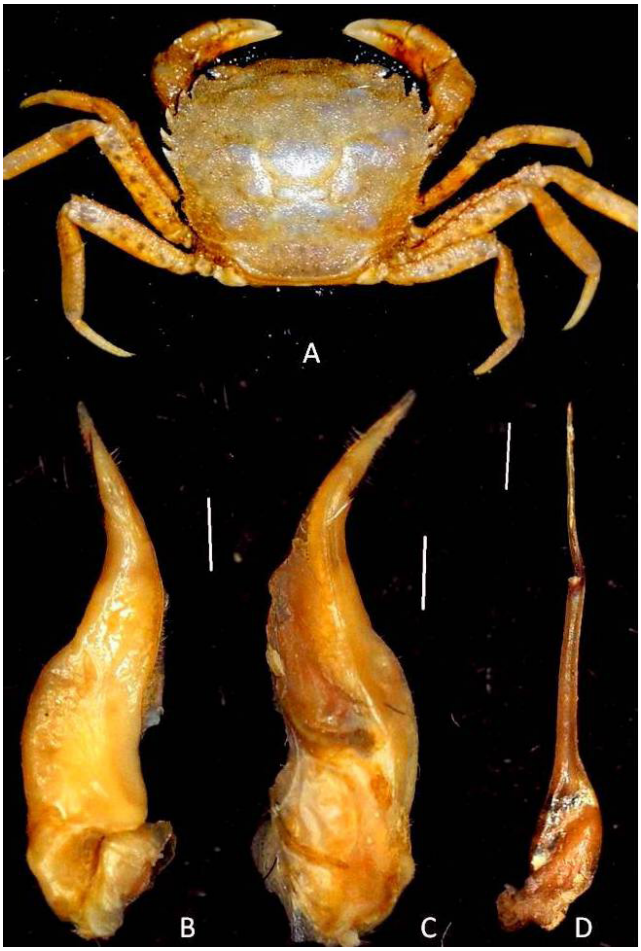

Figure 8. *Acanthopotamon fungosum* (Alcock, 1909) (21.6 × 16.6 mm) (ZSIK-C. 8252/2): **A.** Overall dorsal view; **B.** Dorsal view of left G1; **C.** Ventral view of left G1; **D.** Left G2.

Discussion

Teretamon kapota sp. nov. can be easily distinguished from all the congeners mainly by the relatively small eye as compared to the orbital space (Figures 2B, 5B), the gently concave lateral margins of the male telson (Figures 2C, 3C, 5C), and the very high, strongly convex, semicircular dorsal flap on the G1 terminal segment, which most resembles a pigeon's head (Figures 3D, E, 4A, B, 5D). In contrary, the congeners have a relatively large eye (see Yeo and Ng, 2007: Figure 13B; Absar *et al*., 2017: Figure 2B; Mitra, 2017: Figure 59; Mitra *et al*., 2018: Figure 2B), the straight lateral margins of the male telson (see Yeo and Ng, 2007: Figure 13C; Absar *et al*., 2017: Figure 2C; Mitra, 2017: Figure 60; Mitra *et al*., 2018: Figure 2C), and the relatively low, gently convex to triangular dorsal flap on the G1 terminal segment (Yeo and Ng, 2007: Figure 13D; Absar *et al*., 2017: Figure 3A; Mitra, 2017: Figure 116; Mitra *et al*., 2018: Figure 4A).

The new species, *T. kapota* sp. nov., is less likely to be confused with *T. indicum* and *T. spelaeum*, especially due to its cylindrical eyestalk (Figures 2B, 5B) (vs. subconical or conical eyestalk; see Absar *et al*., 2017: Figure 2B; Mitra, 2017: Figure 59), the upcurved G1 tip (Figures 3D, E, 4A, B, 5D) (vs. straight G1 tip; see Absar *et al*., 2017: Figure 3A; Mitra, 2017: Figure 116), and the very high dorsal flap on the G1 terminal segment (Figures 3D, E, 4A, B, 5D) (vs. low dorsal flap; see Absar *et al*., 2017: Figure 3A; Mitra, 2017: Figure 116).

Although *T. kapota* sp. nov. is quite distinct among the congeners, it still resembles *T. adiatretum* and *T. kempi* (both also dwell in Arunachal Pradesh) in having a cylindrical eyestalk, relatively large cornea (Figures 2B, 5B; see Yeo and Ng, 2007: Figure 13B; Mitra *et al*., 2018: Figure 2B), broad subdistal spine on the cheliped carpus (Figures 2A, 5A; see Yeo and Ng, 2007: Figure 13A; Mitra *et al*., 2018: Figure 2A), the trapezoidal male pleonal somite 6 (Figures 2C, 3C, 5C; see Yeo and Ng, 2007: Figure 13C; Mitra *et al*., 2018: Figure 2C), an acute G1 tip, the distinctly narrow distal portion of the G1 terminal segment, and the relatively higher dorsal flap on the G1 terminal segment (Figures 3D, E, 4A, B, 5D; see Yeo and Ng, 2007: Figure 13D; Mitra *et al*., 2018: Figure 4A). *Teretamon kapota* sp. nov. is nevertheless distinguished from *T. adiatretum* and *T. kempi* mainly by its strongly convex and semicircular dorsal flap on the G1 terminal segment (Figures 3D, E, 4A, B, 5D) (vs. triangular to broadly triangular dorsal flap (see Yeo and Ng, 2007: Figure 13D; Mitra *et al*., 2018: Figure 4A).

Teretamon kapota sp. nov. can be further distinguished from *T. adiatretum* by the upcurved G1 tip (Figures 3D, E, 4A, B, 5D) (vs. straight G1 tip; see Yeo and Ng, 2007: Figure 13D); from *T. kempi* by the trapezoidal male pleonal somite 6 (Figures 2C, 3C, 5C) (vs. almost rectangular male pleonal somite 6; see Mitra *et al*., 2018: Figure 2C) and the vulvae pushing the suture S5/S6 anteriorly (Figure 6B) (vs. vulvae not pushing the suture S5/S6 anteriorly; see Mitra *et al*., 2018: Figure 3D); from *T. indicum* by the narrow male telson (Figures 2C, 3C, 5C) (vs. broad male telson; see Mitra, 2017: fig. 60) and the upcurved G1 tip (Figures 3D, E, 4A, B, 5D) (vs. straight G1 tip; see Mitra, 2017: Figure 116); and from *T. spelaeum* by the large

cornea (Figures 2B, 5B) (vs. relatively small cornea; see Absar *et al*., 2017: Figure 2B), the broad subdistal spine on the cheliped carpus (Figures 2A, 5A) (vs. relatively narrow subdistal spine on the cheliped carpus; see Absar *et al*., 2017: Figure 2A), the glabrous pereiopods (Figures 2A, C, 3A, 5A, C) (vs. setose pereiopods; Absar *et al*., 2017: Figure 2A), the acute G1 tip (Figures 3D, E, 4A, B, 5D) (vs. blunt G1 tip; see Absar *et al*., 2017: Figure 3A), the distinctly narrow distal portion of the G1 terminal segment (Figures 3D, E, 4A, B, 5D) (vs. gradually narrow distal portion of the G1 terminal segment; see Absar *et al*., 2017: Figure 3A), and the vulvae pushing the suture S5/S6 anteriorly (Figure 6B) (vs. vulvae not pushing the suture S5/S6 anteriorly; see Absar *et al*., 2017: Figure 4C).

The state of Arunachal Pradesh (India) was represented by 15 species of freshwater crabs (Mitra *et al*., 2018; Pati and Thackeray, 2018; Pati *et al*., 2019; Mitra, 2020). A potamid crab, *A. fungosum* of the subfamily Potaminae Ortmann, 1896, is found in the same locality where the present new species inhabits (see habitat for the new species).

Counting the present new species and the new record, Arunachal Pradesh state is now known to have 17 species of freshwater crabs (13 potamid species and 4 gecarcinucid species) (Mitra *et al*., 2018; Pati and Thackeray, 2018; Pati *et al*., 2019; Mitra, 2020; present study). *Teretamon* currently possesses five species, three from Arunachal Pradesh alone (Yeo and Ng, 2007; Absar *et al*., 2017; Mitra, 2017; Mitra *et al*., 2018; present study). A working key to identification of all five *Teretamon* species is provided.

Key to the species of ***Teretamon*** Yeo and Ng, 2007

1. Eyestalk subconical or conical; G1 terminal segment with relatively low dorsal flap …..... **2**
– Eyestalk cylindrical; G1 terminal segment with relatively high dorsal flap …..... **3**
2. Cornea relatively large; carpal subdistal spine on chelipeds relatively broad; male telson relatively broad, proximal width ca. 1.5 times medial length; G1 terminal segment distinctly narrow distally, with acute tip …..... ***T. indicum*** (INDIA: Mizoram)
– Cornea relatively small; carpal subdistal spine on chelipeds relatively narrow; male telson relatively narrow, proximal width ca. 1.1 times medial length; G1 terminal segment gradually narrow distally, with blunt tip …..... ***T. spelaeum*** (INDIA: Meghalaya)
3. Eye relatively small as compared to orbital space; male telson with gently concave lateral margins G1 terminal segment with strongly convex, semicircular dorsal flap ....…..... ***T. kapota* sp. nov.** (INDIA: Arunachal Pradesh)
– Eye relatively large as compared to orbital space; male telson with straight lateral margins; G1 terminal segment with triangular to broadly triangular dorsal flap …..... **4**
4. Male pleonal somite 6 trapezoidal, with strongly converging lateral margins; G1 terminal segment with triangular dorsal flap, tip straight ..... ***T. adiatretum*** (INDIA: Dafla Hills bordering western Arunachal Pradesh and Assam; MYANMAR)
– Male pleonal somite 6 almost rectangular, with gently converging lateral margins; G1 terminal segment with broadly triangular dorsal flap, tip gently upcurved …. ..... ***T. kempi*** (INDIA: Arunachal Pradesh)

Acknowledgements

The authors are grateful to Dr. Kailash Chandra, Director (Zoological Survey of India, Kolkata) for research facilities and continuous support. The first author (SM) expresses his gratitude to the scientists, Dr. K. Valarmathi and Dr. L. Kosygin Singh (Zoological Survey of India, Kolkata), for providing the logistic support during the field survey. The second author (SKP) is thankful to the scientists, Dr. B. Sinha and Dr. S.D. Gurumayum (Zoological Survey of India, Arunachal Pradesh Regional Centre, Itanagar) for kindly collecting and passing the material for study. The authors are deeply indebted to Dr. Peter K.L. Ng and Dr. Darren C.J. Yeo (Lee Kong Chian Natural History Museum, National University of Singapore) for their valuable advice and providing some important literature. We thank Dr. S.S. Mishra, Scientist (Zoological Survey of India, Kolkata) for critically going through the initial draft of the manuscript. We gratefully acknowledge the reviewers for their constructive comments.

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