

南海异糠虾属两新种*

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异糠虾 *Anisomysis* 是糠虾亚科 Mysinae 中体形较小的一属，一般体长 3—5mm，因此不易被人们发现。本属迄今已知共 28 种及亚种。本文为南海异糠虾属两新种的描述，根据的材料是中国科学院南海海洋研究所 1975 年西沙群岛调查在珊瑚岛南的近岸浅水区和 1982 年陈清潮教授在海南岛三亚市鹿回头沿岸水域所采的标本。两新种分别命名为四刺异糠虾 *Anisomysis quadrispinosa* sp. nov. 和短尾异糠虾 *A. brevicauda* sp. nov.。新种的正模标本保存在中国科学院海洋研究所(青岛)，副模标本保存在中国科学院南海海洋研究所(广州)。

1. 四刺异糠虾(新种) *Anisomysis quadrispinosa* sp. nov. (图 1)

正模标本 成体雌性，体长 4.5mm。标本号 XZ-定-75011b，1975 年 3 月 26 日采自西沙群岛珊瑚岛南， $15^{\circ}31'5''N$, $111^{\circ}35'1''E$ ，水深 50m，底质为珊瑚礁。

副模标本(解剖) 成体雌性，体长 4mm。标本号 XZ-定-75011a，采集地点、日期同正模。成体雌性，体长 4mm，标本号 XZ-定-75010，采集地点、日期同正模。

身体较小，头胸甲长而宽，表面不光滑，具微小的凹点，腹部显著窄。

额板宽三角形，顶端钝圆，约伸至第 1 触角柄第 1 节的中部，侧缘稍覆盖眼柄的基部。头胸甲前侧角圆形。颈沟显著。

眼很大，宽大于长，角膜球形；柄显著窄而短，且向基部显著趋窄。

雌性第 1 触角柄纤细，基节显著长于末 2 节，外末角突出，约具 2—3 根羽状刚毛；第 2 节略短于第 3 节；第 3 节长而宽于第 2 节，内末缘约具 3 根长短不等的羽状刚毛。第 2 触角鳞片窄长，呈长披针形，长约为宽的 7 倍，末节显著，长约为宽的 $1\frac{3}{4}$ 倍，周围具粗长的羽状刚毛，但数目较少。

上唇长宽略等，前缘钝圆，底部具小的缺刻。大颚具显著的门齿突，活动片、刺列和臼齿突。触须第 1 节显著短小，略呈方形；第 2 节相当粗大，内缘和外缘分别具 7 根粗壮的刚毛；第 3 节宽短，内缘具 7—8 根刚毛，末端具 1 根粗短刚毛和 1 根细长的羽状刚毛。第 1 小颚内叶圆而宽短，上具两根带刺的粗壮长刚毛和 1—2 根羽状短刚毛；外叶窄长，末端约具 8 根粗壮的刺。第 2 小颚内叶末节较长，长为宽的 2 倍以上，上具 8 根粗壮的羽状刚毛，2 根带刺刚毛和 1 根光裸刚毛；外叶窄长，具 8 根羽状刚毛。

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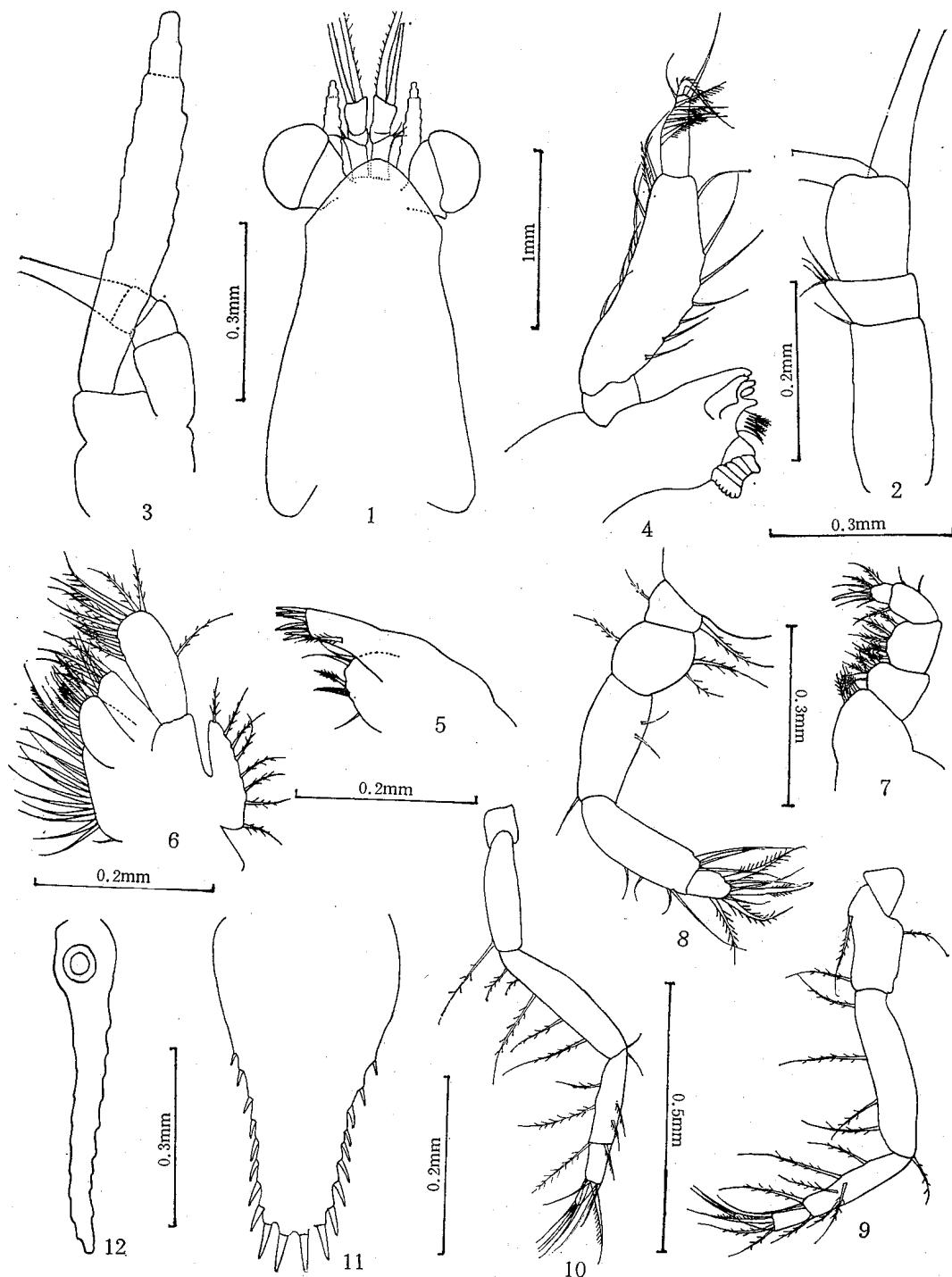


图1 四刺异糠虾(新种) *Anisomysis quadrispinosa* sp. nov.

1. 雌性头部背面； 2. 雌性第1触角； 3. 第2触角； 4. 大颚； 5. 第1小颚； 6. 第2小颚； 7. 第1胸肢内肢； 8. 第2胸肢内肢； 9. 第3胸肢内肢； 10. 第6胸肢内肢； 11. 尾节； 12. 尾肢内肢

第1胸肢内肢粗壮，腕节内缘略呈弧形，上具4根粗壮的刚毛和3根较纤细的刚毛，外缘光滑，末节的末端具1光裸粗刺和6根羽状刚毛；外肢基板外缘宽圆而光滑，鞭部由7节构成。第2胸肢内肢掌节末部具3根粗壮刚毛，末节末端具1显著粗壮带毛的粗刺和3根粗壮的羽状刚毛；外肢基板与前肢相似，鞭部8节。

第3—8胸肢内肢掌节由基、末两节构成，前节约为后节的 $2\frac{1}{2}$ 倍，指节小，末端呈刚毛状；外肢基板宽圆，外缘未角光滑，鞭部由7—9节构成。雌性育卵囊由两对育卵板构成，前对较小，其形状由后向前逐渐趋尖，约伸至第3胸肢内肢的基部附近；后对大而宽圆，凹形，边缘具羽状刚毛。育卵囊内怀卵或幼体的数目较少，但个体较大，我们的标本仅4—5个。

腹部第6节显著窄长，腹面各节间具显著的横沟，腹肢很小，不分节，上具显著的羽状刚毛。

尾节完全，向末部趋窄，侧缘末部 $\frac{2}{3}$ 具7—8个较粗壮、向后逐渐增大的刺、末缘具4个大刺。

尾肢内肢细长，其长约为尾节的 $1\frac{1}{2}$ 倍，平衡囊较大，内缘腹面无刺；尾肢外肢略长于内肢，末端宽圆，内缘刚毛长大，外缘刚毛短小。

本新种在外形上与*Anisomysis bipartoculata* Li, 1964 和 *A. tattersallae* Pillai, 1973 十分近似，但在额板形状，眼的构造，尾节末端刺数目等主要特征上有显著差异，主要区别见表1。

表1 三种异糠虾的形态差异比较

	<i>Anisomysis bipartoculata</i>	<i>A. tattersallae</i>	<i>A. quadrispinosa</i> sp. nov.
额板	较窄，顶端较尖	较窄，顶端较尖	较宽，顶端圆
眼	角膜分两部分，前眼较小，后眼较大	角膜分两部分，前眼较大，后眼较小	角膜半球形，不分前眼和后眼
尾节末刺	具6刺	具2刺	具4刺

我们仅采到三个雌性标本，尚未发现雄性标本。本种生活在西沙群岛珊瑚礁底的近岸浅水区。

2. 短尾异糠虾(新种) *Anisomysis brevicauda* sp. nov. (图2)

正模标本 成体雄性，体长4.1mm。标本号820425-e，1982年4月25日采自海南岛三亚市鹿回头沿岸水域。

副模标本 成体雌性，体长4.1mm。标本号820425-j，采集地点、日期同正模标本；成体雄性，体长3.6mm，标本号820425-i，采集地点、日期同正模标本。

其它材料 雌雄两性标本共2016个。

身体较小，雌雄两性最大体长皆为4.1mm，一般体长为3.2—4.1mm。

额板三角形，较宽短，顶端钝圆，前缘覆盖第1触角柄第1节的基部，侧缘稍覆盖眼柄的基部。头胸甲较短，前侧角圆形。

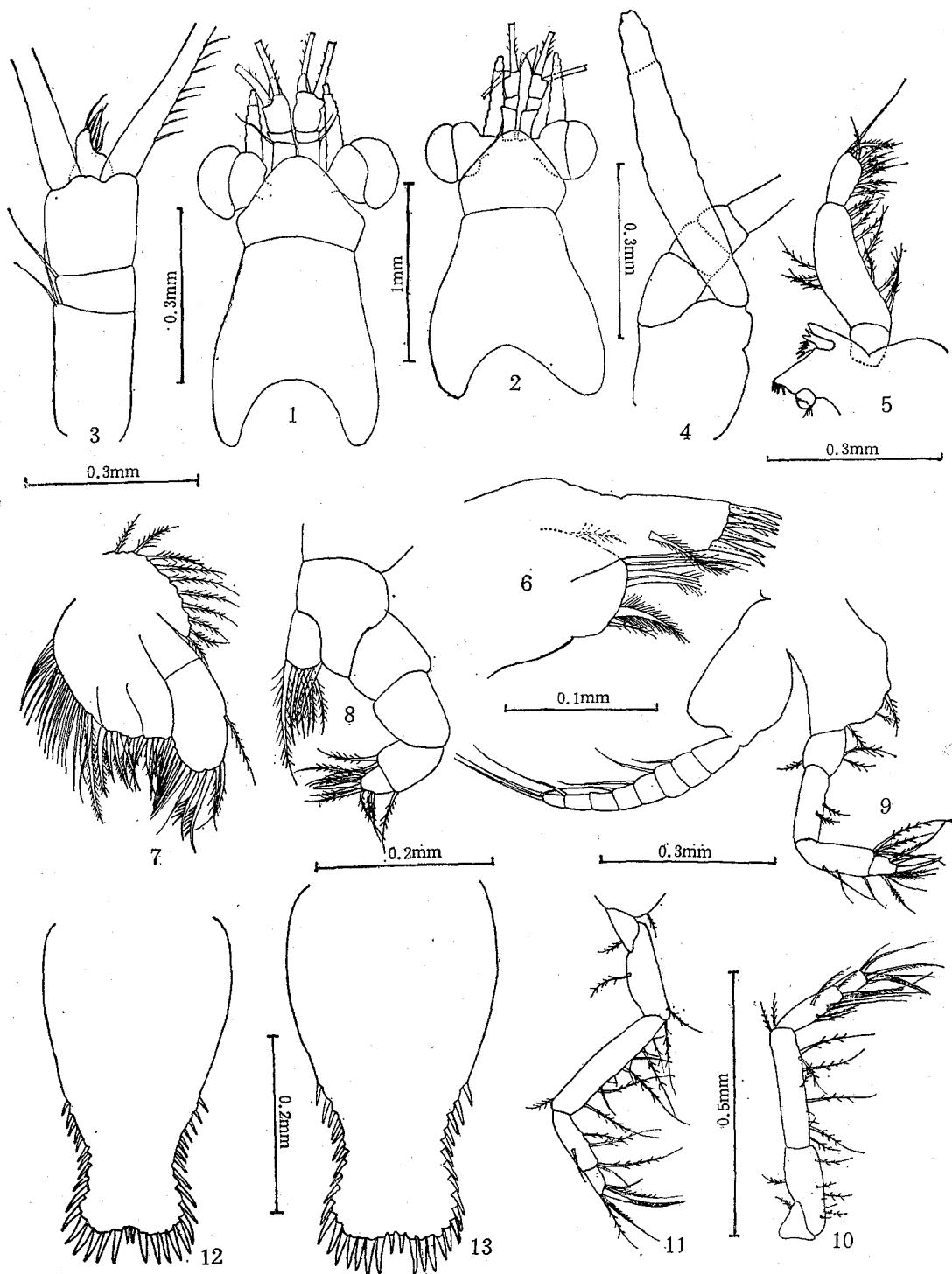


图 2 短尾异糠虾(新种) *Anisomysis brevicauda* sp. nov.

1.雄性头部背面；2.雌性头部背面；3.雄性第1触角；4.第2触角；5.大颚；6.第1小颚；7.第2小颚；
8.第1胸肢内肢；9.第2胸肢；10.第3胸肢内肢；11.第6胸肢内肢；12.雄性尾节；13.雌性尾节

眼大，长宽略等，角膜呈半球形，较眼柄短而宽；眼柄向基部趋窄。

雄性第1触角柄粗壮，第1节显著长，约等于末两节之和，外末角具2—4根纤细的刚毛；第2节很短，宽与第1节略等，窄于第3节；第3节约为第1节长的 $\frac{2}{3}$ ，为第2节的2倍。雄性突略呈蹄形，上具稀疏的刚毛。雌性第1触角柄比雄性纤细。第2触角鳞片呈长披针形，周围羽状刚毛较少而粗壮，长约为宽的 $6\frac{1}{2}$ 倍，顶缘超过第1触角柄，雌性尤其显著；第2触角柄短而纤细，第1节略长于两个末节之和，约为第2节的2倍，第3节稍短于第2节，且窄于第1、2节。

上唇略呈心脏形，宽略大于长，前缘较窄，向后缘趋宽，底部具1缺刻，两侧有短小的刚毛。

大颚发育完全，具正常的门齿突、活动片和臼齿突；触须第1节短，长稍大于宽，略呈长方形；第2节长而粗大，长约为第1节的 $3\frac{1}{2}$ 倍；第3节略长于第1节，末缘平截，具较粗壮的刚毛。第1小颚内叶圆形，边缘约具6根带刺刚毛和羽状刚毛。外叶窄长，其外缘光滑，末端约具8—10根光裸的粗刺。第2小颚内肢末节具粗壮的带刺刚毛和羽状刚毛；外肢小，不发达，边缘约具10根羽状刚毛。

第1胸肢内肢略为粗壮，各节皆粗短，末节末端除具粗而光滑的刺外，还具羽状刚毛；外肢基板宽圆，外缘末角无齿，鞭部由7节构成，上具粗壮发达的羽状刚毛。第2胸肢内肢腕掌节显著长；外肢与第1胸肢相近似。

第3—8胸肢内肢比较纤细而短，内肢掌节由两节构成，基节显著长，末节短，基节长约为末节的2倍；外肢基板宽大而圆，外缘末角无刺，鞭部由7—9节构成，上具羽状刚毛。

雄性第3腹肢内肢小而不分节，呈叶片状；外肢很长，末端伸至第6腹节的末部，由3节构成，基节特长，其长约与末两节的和相等；第2节显著短于第3节。第1—2和第4—5腹肢简单不分节，呈小叶片状，与雌性者相似。

雌性具两对育卵板，其边缘具纤细的羽状刚毛，怀卵或幼体的数目与前种相似，一般仅3—5个。

腹部窄，第6腹节较体前各节显著窄长。

尾节宽短，长约为基部宽的 $1\frac{2}{3}-1\frac{4}{5}$ 倍，其侧缘和末部具较浅的凹陷。尾节侧缘后部 $\frac{2}{5}-\frac{3}{7}$ ，约具15—19粗短的刺，末部缺刻具1对短小的刺，长约为侧刺的 $\frac{1}{2}$ 。尾肢内肢约为尾节的 $1\frac{1}{2}$ 倍；外肢略长于内肢，末端圆形，内缘和末部具长的羽状刚毛；外缘具短而纤细的羽状刚毛13—16根。

本新种与 *Anisomysis gracilis* Panampunayil, 1984 十分近似，但其额板、第2触角鳞片、大颚触须和尾节都有显著区别(表2)。

本种为沿岸性种，生活在沿岸清洁的砂底水域中。

表2 两种异糠虾的形态差异比较

	<i>Anisomysis gracilis</i> Panampunnayil	<i>A. brevicauda</i> sp. nov.
额板	窄三角形,顶端稍尖	宽三角形,顶端钝圆
第2触角鳞片形状	窄长,长约为宽的10倍	宽短,长约为宽的6 $\frac{1}{2}$ 倍
大颚触须第2节	具显著的齿	光裸,不具齿
尾节侧凹和末凹	大而深	小而浅

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ON TWO NEW SPECIES OF GENUS ANISOMYSIS (CRUSTACEA MYSIDACEA) FROM THE SOUTH CHINA SEA*

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ABSTRACT

The present paper deals with two new species of Mysidacea collected from coastal waters of

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Hainan Island and Xisha Islands. The type materials are deposited in the Institute of Oceanology, Academia Sinica (Qingdao), and the South China Sea Institute of Oceanology, Academia Sinica (Guangzhou).

Anisomysis quadrispinosa sp. nov. (Fig. 1)

Holotype: Adult ♀, BL. 4.5 mm, No. XZ-DING-75011b, Xisha Islands, 15°31'5'' N, 111°35'1'' E, Mar. 26, 1975.

Paratype: Adult ♀, BL. 4.0 mm, No. XZ-DING-75011a, locality same as holotype; Adult ♀, BL. 4.0 mm, No. XZ-DING-75010, locality same as holotype.

Body small. Carapace long and broad, surface not smooth, with small pitts. Abdomen narrow.

Rostral plate broad triangular, with bluntly rounded apex reaching to middle of first joint of antennular peduncle, lateral margin covering the base of eyestalks. Antero-lateral corners of carapace rounded.

Eyes large, broader than long, cornea globose; eyestalks narrower and shorter than cornea, proximal part narrower.

Female antennular peduncle slender, basal joint longer than 2 distal joints, outer-distal corners with 2—3 plumose setae. Antennal scale narrow and long, about 7 times as long as broad, distal joint about 1 3/4 times as long as broad.

Labrum as broad as long, bluntly rounded anteriorly. Mandible with distinct incisor and molar processes and lacinia mobilis. 1st joint of mandibular palp short, quadrangular; 2nd joint very thick, with 7 stout setae on both inner and outer margins; 3rd joint broad and short, inner margin with 7—8 setae, distal margin with 1 short seta and 1 long plumose seta. Endite of Maxilla I: broadly rounded, with a stout spinous setae and 1—2 plumose setae; outer lobe narrow and long, with 8 stout spines on distal margin. Distal joint of endite of maxilla II longer, much more than twice as long as broad, with 8 stout plumose setae, 2 spinous setae and 1 plumose seta; exite narrow and long, with 8 plumose setae.

Endopod of first and second thoracic limbs thicker than others. Propodus of 3rd—8th thoracic limbs with 2 subjoinrs, proximal joint about 2 1/2 times as long as distal joint, dactyl small, with distal setae. Exopod of thoracic limbs consisting of 7—9 joints with basal plate rounded at outer distal angle. Two pairs of oostegites present in female.

	<i>Anisomysis bipartoculata</i> Li	<i>A. tattersallae</i> Pillai	<i>A. quadrispinosa</i> sp. nov.
Rostral	narrower, with apex slightly pointed	narrower with apex slightly pointed	broader, with apex rounded
Eye	cornea with two portions, anterior portion smaller, posterior portion larger	cornea with two portions, anterior portion larger, posterior portion smaller	cornea subglobular
Telson	with 6 distal spines	with 2 distal spines	with 4 distal spines

Telson entire, distal end narrower, distal 2/3 of lateral margin with 7—8 stout spines increasing in size posteriorly, distal margin with 4 large spines.

Inner uropod elongate and thin about 1 1/2 times as long as telson, without spinules on inner border under statocyst; outer uropod longer than inner one, distal part broadly rounded.

The present new species is similar to *Anisomysis bipartoculata* Li and *A. tattersallae* Pillai. The differences are listed of 3 species in the table above.

Only females are found.

Anisomysis brevicauda sp. nov. (Fig. 2)

Holotype: Adult ♂, BL. 4.1 mm, No. 820425-e, littoral waters of Luhuitou, Hainan Island, Apr. 25, 1982.

Paratype: Adult ♀, BL. 4.1 mm, No. 820425-J, locality same as holotype; Adult ♂, BL. 3.6 mm, No. 820425-i, locality same as holotype.

Other materials. 2016 specimens locality same as holotype.

Body smaller. Body length of adult males and females, 3.2—4.1 mm.

Rostral plate triangular, broad and short, with bluntly rounded apex; anterior margin covering the base of 1st joint of antennular peduncle, lateral margin covering the base of eyestalks. Carapace shorter, with rounded antero-lateral angle.

Eye large, about as long as broad, cornea hemispherical, broader and shorter than eyestalk. Antennular peduncle thick in male, first joint as long as second and third joints combined with 2—4 setae at outer distal corner; second joint very short, about as broad as first joint, but narrower than third joint which is about 2/3 as long as first, and twice as long as second joint. Male process well developed. Antennal scale lanceolate, 6 1/2 times as long as broad apex beyond the antennular peduncle; Antennal peduncle shorter and slender, first joints longer than both distal joints combined.

Labrum cordiform, broader than long, anterior margin narrower, posterior margin broader. Mandible well developed, with distinct, incisor and molar processes and lacinia mobilis, mandibular palp with short 1st joint; 2nd joint very thick, about 3 1/2 times as long as 1st joint; 3rd joint longer than 1st, distal margin truncate, with thick setae. Maxilla I: endite rounded, with 6 spinous setae and plumose setae. outer lobe narrow and long, outer margin smooth, distal end with about 8—10 thick spines. Maxilla II: distal joint of endite with spinous setae and plumose setae; exite small, with about 10 plumose setae.

First and second thoracic limbs with endopod more thick than those of the other ones. Endopod of 3rd—8th thoracic limbs slender and shorter, with propodus divided into 2 subjoints, the basal joint about 2 times as long as the distal; outer corner of basal plate of exopod without spinule, exopod with 7—9 joints, with plumose setae.

Endopod of male pleopod 1—5, simple, unjointed, being a small lobe exopod of male pleopod 3 very long, extending to distal part of 6th abdominal somite, 3 jointed.

Telson broad and short, about 1 2/3—1 4/5 times as long as broad at base. Lateral margin and distal part with shallow depression, distal part 2/5—3/7 with 15—19 short thick spine. Inner uropod about 1 1/2 times as long as telson; outer uropod slightly longer than inner one, with 13—16 plumose setae on outer margin.

The present new species is closely related to *Anisomysis gracilis* Panampaunayil 1984, but they are different in the rostrum, antennal scale, anennular palp and telson.

	<i>Anisomysis gracilis</i> Panampunnayil	<i>A. brevicauda</i> sp. nov.
Rostral plate	narrow triangular in shape, apex slightly pointed	broad triangular in shape, apex bluntly rounded
Shape of antennal scale	narrow and long, about 10 times as long as broad	broad and short, about 6 1/2 times as long as broad
Mandibular	2nd Segment with teeth	without teeth
Distal and lateral incision of telson.	greater and deeper	smaller and shallower