

南海糠虾类一新属——拟窄糠虾属*

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窄糠虾属 *Leptomysis* G. O. Sars 建立于1869年。当时只有两种: *Leptomysis gracilis* (G. O. Sars) 和 *L. linguura* (G. O. Sars), 产于地中海和北海水域。迄今共记录12种和亚种:

1. *Leptomysis gracilis* (G. O. Sars, 1864) 北海, 地中海, 亚德里亚海;
2. *L. linguura* (G. O. Sars, 1866) 北海, 地中海;
3. *L. mediterraneus* G. O. Sars, 1877 地中海, 亚德里亚海;
4. *L. capensis* Illig, 1906 南非;
5. *L. megalops* Zimmer, 1915 地中海, 亚德里亚海, 西非;
6. *L. sardica* G. O. Sars 1877 地中海, 亚德里亚海;
7. *L. australiensis* Tattersall, 1927 澳大利亚;
8. *L. peresi* Bacescu, 1966 地中海;
9. *L. burgii* Bacescu, 1966 地中海;
10. *L. apiops* G. O. Sars 1877 地中海, 亚德里亚海, 非洲, 印度洋;
11. *L. apiops banyulensis* Bacescu, 1966 地中海, 西非;
12. *L. xenops* Tattersall, 1922 印度洋。

上列12种显然可分为两组。第一组包括模式种在内共有9种, 其眼大, 角膜正常; 尾节窄舌形, 侧缘多刺, 常大小相间排列, 但基部最宽处无侧刺, 其后稍窄, 向后又渐宽, 都有侧刺, 尾节末端较窄, 钝尖或圆形, 有2或3对稍大刺, 这些端刺不特殊粗大; 尾肢内肢内缘全长有刺, 且数很多。另一组包括最后2种和1亚种, 其角膜发达, 分为两部分, 前部眼正常而较小, 后部少数个眼较大而延长, 向后突出成一球状团, 实际上等于两个眼; 尾节为宽舌形, 末端宽圆或略平截, 具两对特别粗大的强刺; 侧缘基部最宽处有一孤立小刺, 刺后两缘收敛趋窄, 无侧刺, 其后渐宽或两缘平行, 侧刺数不太多(约10多个), 自前向后渐大, 两刺间有时夹一较小刺; 尾肢内肢内缘仅基半有刺, 刺自前向后增大。

整理南海糠虾类标本时, 我们发现除有属于后一组的 *L. xenops* 外, 还有一个与后一组3种相似但又不同的种, 这显然是一个新种。从上述形态特征来看, 两个组间的区别显著, 尤其是复眼的构造十分不同。尽管两组在形态上有许多共同处, 但后一组独特的复眼和尾节形态都显示出与前一组应是彼此独立的两个类群。过去文献中一直将两组置于同一属内显然并不适宜, 因此我们将后一组的2个种和1个亚种自 *Leptomysis* 属内分出,

* 中国科学院海洋研究所调查研究报告第836号。

本刊编辑部收到稿件日期: 1982年4月7日。

另建一新属,命名为拟窄糠虾属 *Paraleptomysis* gen. nov.。其中包括在南海中国沿岸发现的两种,即 *P. xenops* (Tattersall) 和新种 *P. sinensis* sp. nov., 另一种和一亚种 *P. apiops* (Sars), *P. apiops banyulensis* (Bacescu), 产于大西洋和地中海,本文为这一新属和新种的描述。新种模式标本保存于中国科学院海洋研究所(青岛)。

拟窄糠虾属(新属) *Paraleptomysis* gen. nov.

头胸甲短而宽,前端有短三角形额板,末端宽圆。眼大、宽短,角膜发达,后部个眼显著大而延长。第2触角鳞片披针形,周围有刚毛,由两节构成。大颚臼齿突发达。第2小颚内肢(触须)2节。第3—8对胸肢掌节由3小节构成;指节纤细,刺状。雌性育卵板3对。腹肢雄性发达,双枝;雌性锥形,不分节。尾节宽舌形,无缺刻。基部很宽,向左右伸出一小侧突,上具有1对侧刺,刺后侧缘急剧缢缩,无刺;向后两侧缘平行,或中部稍凸,末端宽圆,具两对粗大的刺和1对中央小刺;侧缘具许多刺,向后趋大,中部两大刺间可能有1小刺。尾肢内肢内缘一列刺,2—3个到10个上下。

模式种 *Paraleptomysis sinensis* sp. nov. 采自南海北部。

讨论 本新属的眼角膜和尾节刺与近似属窄糠虾属 *Leptomysis* G. O. Sars 显著不同。新属角膜后面的个眼较大而延长;尾节基部向左右两侧突出,各有1小活刺,刺后侧缘急剧缢缩、变窄,其后一段无刺、侧缘后部3/4有刺,不超过20个,自前向后渐大,中部的两刺之间常有1较小刺;尾节末端很宽,具两粗大刺及1对中央小刺。内侧大刺长度约为尾节的1/3—1/4。而窄糠虾属者侧缘基部无刺,向后渐窄,中部又变宽,末端1对大刺内侧之间常有1—2对中央小刺,外侧2—3对小刺;侧缘刺数目很多,常超过30或40个,两较大刺间常有较小刺2,3个,侧缘及末端大刺之大小远远小于本新属者。尾肢内肢内缘刺2—3个至12—13个,常占内缘大部。窄糠虾属 *Leptomysis* 的定义应作修改,它仅包括复眼角膜正常,尾节刺数较多且末端大刺较小的那些种。本属与 *Mysidopsis* 属也近似,但后者第1胸肢内肢第3,4节愈合,不分节,而本新属与 *Leptomysis* 属一样,两节间有清楚的关节。

本新属共有3种和1亚种,中国近海发现两种,即 *Paraleptomysis xenops* (Tattersall) 和 *P. sinensis* sp. nov.。

中国拟窄糠虾(新种) *Paraleptomysis sinensis* sp. nov. (图1)

正模标本 成体雄性,体长5.9mm,标本号 R23p-1b,北部湾 18°30'N, 110°15'E,水深46米,1959年7月9日采获。

副模标本 成体雄性,体长5.5mm,标本号 R23p-1c;成体雌性,体长5.7mm,标本号 R23p-1a; 2♂♂, 2♀♀,体长4.8—5.9mm,标本号 R23p-1d—g,采集时间和地点同正模。

其他材料 6♂♂, 16♀♀,南海中国近岸水域,水深42—73.5米,17°30'—21°15'N, 107°00'—113°30'E, 1959年2月20日至1960年2月9日采。成体最大体长: 雄性7.0mm, 雌性6.4mm。

体适度长而粗壮,甲壳光滑。头胸甲宽而短,长约为其宽的7/4倍,为体长的1/4。额板略呈三角形,前端圆,侧缘稍覆盖眼柄的基部。头胸甲前侧角圆。

眼大,角膜稍宽于眼柄,前部正常,个眼较小,后部球形凸出,个眼稍大而延长。

第 1 触角柄雄性者稍粗而长，长略等于头胸甲宽，第 1 节稍超过眼末；雌性者细而短，第 1 节不超过眼末，长略小于头胸甲宽；第 3 节细，与第 1 节略等长。

第 2 触角鳞片，长约为宽的 5 倍，周围都具刚毛；末节短小，长约为宽的 2 倍。

上唇略呈菱形，宽稍大于长，前端圆，无中央刺。大颚有明显的臼齿突、活动片和刺列。

第 3—8 胸肢内肢纤细，掌节由 3 小节构成，关节垂直；指节细长，细刺状。雌性第 6—8 胸肢内侧基部各具 1 育卵板，第 1 对小、不明显，后两对显著较大，边缘具纤细刚毛。

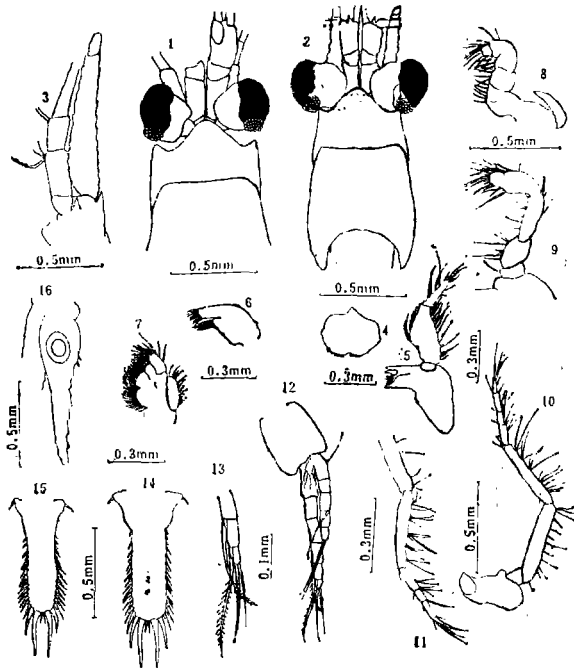


图 1 中国拟窄糠虾(新种) *Paraleptomysis sinensis* sp. nov.

1. 雄性头部背面; 2. 雌性头部背面; 3. 第 2 触角; 4. 上唇; 5. 大颚; 6. 第 1 小颚; 7. 第 2 小颚; 8. 第 1 胸肢内肢; 9. 第 2 胸肢内肢; 10. 第 3 胸肢内肢; 11. 第 4 胸肢内肢; 12. 雄性第 4 腹肢; 13. 雄性第 4 腹肢末部; 14. 雄性尾节; 15. 雌性尾节; 16. 尾肢内肢。

雄性腹肢发达，全为双枝型，基节宽大，外肢显著长于内肢。第 1 对特别短小，仅为 2—3 节。其余各对都较长，分 4 或 5 节；雌性腹肢锥形、不分节。

尾节略呈舌状，长约为基部宽的两倍左右，基部两侧突出，各具 1 显著的尖刺，刺后两侧内凹，急剧趋窄，无刺，此后一段侧缘平行，到 1/4 处再度收敛趋窄，以后 3/4 两侧缘平行，各有尖刺 15—20 个，自前向后依次增大，前部的刺有时 1 大 1 小相间；尾节末端宽，略平截，具 2 对大刺和 1 对中央小刺，内侧大刺特别粗大，约为尾节长的 2/5，外刺较短，等于或略长于内刺的 1/2，但大于侧缘末刺。中央小刺很短，约为内侧大刺长度的 1/4。

尾肢内肢内缘平衡囊下具小刺 1—3 个，多数 2—3 个。

本新种与 *P. apiops* G. O. Sars 和 *P. xenops* (Tattersall) 极为相似，但有显著的区别：

	<i>P. apiops</i> G. O. Sars	<i>P. xenops</i> (Tattersall)	<i>P. sinensis</i> sp. nov.
额板	顶端很尖。	顶端窄钝尖。	顶端宽圆。
尾节	长舌形,长超过基部宽的2倍,侧缘基刺后趋窄,自2/5处开始略宽,向后部稍趋窄,末端平截,较宽。	舌形,长不到基部宽的2倍,侧缘基刺后趋窄,自1/5处向后开始略宽,后部较中部宽,末端平截,很宽。	长舌形,长约为基部宽的2倍左右,侧缘基刺后趋窄,后部2/3侧缘略平行,具15—20刺,末端宽圆。
尾肢内肢	内缘腹面具11—14较大刺,自前向后逐渐增大。	内缘腹面具6—11大刺,多数8—10个,自前向后逐渐增大。	内缘腹面具1—3小刺,多数为2—3个,刺较小。

异形拟窄糠虾 *Paraleptomysis xenops* (Tattersall, 1922) (图2)

Leptomysis xenops Tattersall, 1922: 470, fig. 14. —Illig, 1930: 582 (in key). —Delsman, 1939: 167. —Bacescu, 1966: 136 (in key). —Pillai, 1965: 1712, fig. 69.

标本采集地 49 ♂♂, 42 ♀♀, 未成熟个体14个, 南海北部中国沿岸水域 19°45′—21°15′N, 108°—109°30′E, 1959年1月23日至1960年11月13日采收。

最大标本体长: 雄性7.3mm, 雌性6.8mm。

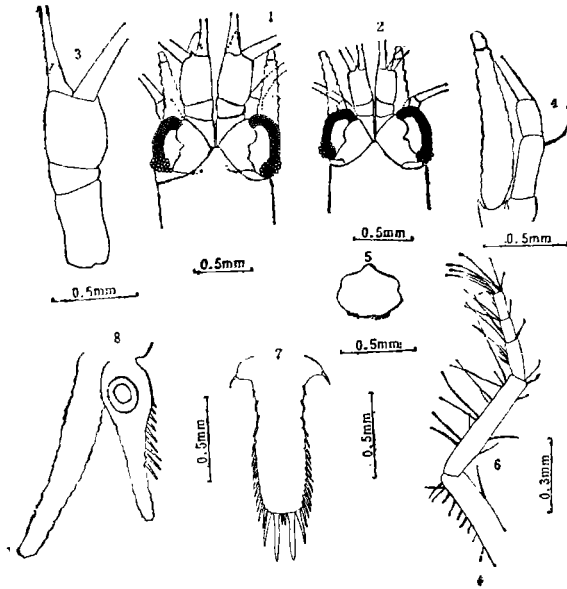


图2 异形拟窄糠虾 *Paraleptomysis xenops* (Tattersall, 1922)

1. 雄性头部背面; 2. 雌性头部背面; 3. 第1触角柄; 4. 第2触角; 5. 上唇; 6. 第3胸肢内肢末部; 7. 尾节; 8. 尾肢内肢。

身体较粗,体表光滑。额板宽三角形,末端钝尖,覆盖眼柄基部。

眼较宽扁,长略大于宽。角膜宽而短于眼柄,前部个眼较小,正常,后部者显著较大,向后延长突出,形成一小球面,与前种相同。

第1触角柄粗壮,第1节较长,第3节较粗,短于第1节,雄性突起较小。第2触角鳞片细长,为窄披针形,长约为宽的6倍,末节小,长显著大于宽;基节外末角有一尖刺,在鳞片与柄的基部之间另具一粗刺。上唇宽显著大于长,前缘中央无刺突。

第3—8胸肢内肢掌节分为3小节;指节长而尖,呈刺状。

雄性第 4 腹肢外肢略长于内肢,末第 2 节的末部有一根带小刺的粗刚毛。

尾节舌状,较宽而短,长度接近基部宽度的 2 倍,基部两缘突出各具一小尖刺,刺后侧缘内凹急剧趋窄,光滑无刺,再向后又稍加宽,延伸至末端,有 12—21 刺(多数为 15—20),基半侧刺小而稀疏,末半侧刺向末端依次增大,排列紧密。尾节末端平截,具两对粗的大刺(内侧 1 对更粗大)和 1 对细小的中央刺。

尾肢内肢内缘具 6—11 尖刺(多数为 8—11 刺)。刺自前向后依次逐渐增大。

我们的标本与 Tattersall (1922) 原始描述和图(安达曼群岛)基本上相同,但尾节刺数目和内肢腹面内缘刺数稍有变化。

地理分布 安达曼群岛,南海只发现于北部湾近岸水域。

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ON A NEW GENUS OF MYSIDACEA, *PARALEPTOMYSIS* GEN. NOV. FROM THE SOUTH CHINA SEA*

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ABSTRACT

Among the specimens of Leptomysini (Crustacea, Mysidacea) collected from the northern part of the South China Sea by the Institute of Oceanology, Academia Sinica, *Leptomysis xenops* Tattersall and a closely related form were found by the authors. While studying on the morphological characteristics of these two species and their allies in the Tribe Leptomysini, we found that there are two natural groups of species previously ascribed to the genus *Leptomysis* G. O. Sars. The first group includes the type species of the genus and other 8 known species, viz. *Leptomysis gracilis* (G. O. Sars. 1864), *L. lingvura* (G. O. Sars, 1866), *L. sardica* G. O. Sars, 1877, *L. mediterranea* G. O. Sars, 1877, *L. capensis* Illig, 1906, *L. megalops* Zimmer, 1915, *L. australiensis* Tattersall, 1927, *L. peresi* Bacescu, 1966, and *L. burgii* Bacescu, 1966, of which the cornea of the compound eye is normal — with numerous small facelets of equal size, the telson is usually armed with 2 or 3 pairs of larger apical spines; while in species of the second group, in which *L. apiops apiops* G. O. Sars, 1877, *L. apiops banyulensis* Bacescu, 1966, *L. xenops* Tattersall, 1922 and the new species described in this paper are included, the cornea consists of two parts, the anterior part with small and normal facelets, but of the posterior part, the facelets are very unique, being larger and much elongated to form a “bauquet”-shaped process. These differences showed that the two groups are heterogenous and belongs actually to two distinct genera. In order to receive the last 4 forms, a new genus, *Paraleptomysis* gen. nov. is established, and an account of the new genus and Chinese species is given in this paper. The type materials of the new species, *P. sinensis* sp. nov. are kept in the Institute of Oceanology, Academia Sinica (Qingdao).

Paraleptomysis gen. nov.

Body moderate thick.

Carapace short and broad, frontal margin produced into a short triangular rostral plate. Eyes well developed, short and broad, cornea unique in shape and structure, divided into two different parts, facelets on posterior part larger and elongated, those on anterior part normal and small, not specialized at all. Antennal scale lanceolate, long and narrow, with setae all round its borders, two-articulated; distal article short, its apex being not pointed. Mandible with molar process well developed. Maxilla 1 with 2-articulated palp. Propodus of 3—8 thoracic limbs 3-jointed, dactylus slender and thin, spine-shaped. Female with 3 pairs of oostegites. Telson broad linguiform, distal

*Contribution No. 836 from the Institute of Oceanology, Academia Sinica.

end broad, truncated or rounded, without incision; basal portion broadest, with a single lateral spine on each side; after which the lateral margins are abruptly convergent (deeply concave) and unarmed; lateral margins slightly broadened at middle, armed with numerous movable spines, increasing in size posteriorly. Distal of margin telson with 1 median pair of small spines between 2 pairs of stout apical spines, the length of which is much greater than the breadth of distal end of telson.

Type species *Paraleptomysis sinensis* sp. nov. South China Sea.

List of species

Paraleptomysis apiops apiops (G. O. Sars, 1877)

P. apiops banyulensis (Bacescu, 1966)

P. xenops (Tattersall, 1922)

P. sinensis Liu et Wang, sp. nov.

This new genus is closely related to *Mysidopsis* and *Leptomysis*. In *Mysidopsis* the third and fourth segments of the first thoracic endopod are fused, with no trace of a dividing suture, but in the present new genus, they are distinctly articulated. The new genus can easily be distinguished from *Leptomysis* by the structure of the cornea, and the shape and armature of the telson and the uropodal endopod.

***Paraleptomysis sinensis* sp. nov. (Fig. 1)**

Holotype ♂, R23p-1b Body length 5.9 mm. Beibu Bay (Gulf of Tonkin), 18°30'N, 110°15'E. Depth 46 m. 1959. 7. 9.

Paratypes ♂(5.5mm), ♀(5.7 mm), 2♂♂, 2♀♀(4.8—5.9 mm).

R23P-1c R23P-1a R23P-1b, e, f, g locality and date of collection, same as holotype.

Other materials 6♂♂, 16♀♀, South China Sea: 19°30'—21°15'N, 109°00'—113°30'E. Depth 42—74 m. 1959. 2. 20—1960. 2. 9. Max. B. L. 6.4—7.0 mm.

Body moderately stout. Shell smooth. Carapace broad and short, 7/4 as long as broad, 1/4 the body length.

Rostral plate triangulate, short and rounded apically, its lateral margin covered the basal portion of eye stalks. Antero-lateral angle of carapace rounded. Eyes thick, cornea broader than eyestalk, its anterior portion normal, with small facelets, posterior portion "bouquet"-shaped, with larger and elongated facelets. Antennule stout and longer in male, its length equals to breadth of carapace; thin and short in female, its length less than breadth of carapace; 1st and 3rd joint subequal in length. Antennal scale slender and long, 5 times as long as broad, with setae all round its borders, distal article subquadrate, twice as long as broad.

Labrum with anterior end rounded, without spine-shaped process.

3rd—8th thoracic limbs long and slender, propodus subdivided into 3 subjoints; articulation perpendicular, dactylus spine-shaped, long and slender. Female with 3 pairs of oostegites, 1st very small and indistinct. Male pleopods well developed, biramous, basal joint broad and stout, exopods larger. Pl. 1 endopod small and short, 2 or 3 segmented, the rest longer, 4 or 5 segmented. Female pleopods rudimentary, not segmented.

Telson broad linguiform, broadest at base, with 1 single spine on lateral margin of basal part, lateral margins posterior to the basal spine convergent at first and then parallel, unarmed; posterior 3/4 of lateral margins armed with 15—20 movable

spines, increasing in size posteriorly; 1 smaller spine may be present between two larger ones on anterior portion; distal end of telson broad and truncated, with 2 pairs of stout spines and 1 pair of very small median spinules between them; the inner pair of strong apical spines very long and stout, about $2/5$ as long as telson, outer pair about $1/4$ as long as inner pair, conspicuously stouter than last lateral spine; median spinules about $1/4$ as long as inner pair of strong apical spines. Inner margin of uropodal endopod with 1—3 small spines (mostly 2 or 3) near the statocysts, quite different with those of other species in the genus.

The present new species resembles *P. apiops* and *P. xenops* in general feature, they can be distinguished as follows:

	<i>P. apiops</i>	<i>P. xenops</i>	<i>P. sinensis</i> sp. nov.
frontal plate	acutely pointed	narrow, bluntly pointed	broadly rounded
telson	elongate, linguiform, more than 2 times as long as broad at base, broaden posteriorly from $2/5$ of lateral margin, and narrowed posteriorly, distal end broader, truncated.	linguiform, less than twice as long as broad at base, broaden posteriorly from $1/5$ of lateral margin, which are broader posteriorly, distal end broad & truncated.	elongate, linguiform, about twice as long as broad at base, with 15—20 spines on posterior $2/3$ of lateral margins which are parallel to each other, rounded at posterior end.
uropodal endopod	with 11—14 stout spines on inner margin, increasing in size posteriorly.	with 6—11 stout spines on inner margin (mostly 8—10), increasing in size posteriorly.	with 1—3 small spines on inner margin (mostly 2 or 3).

***Paraleptomysis xenops* Tattersall, 1922 (Fig. 2)**

49♂♂, 42♀♀, 14 immature juveniles, northern South China Sea, 19°45'—21°15'N, 108°00'—109°30'E, 1959. I. 23—1960. II. 13. Max B. L. 6.8—7.3 mm.

Specimens collected from the northern South China Sea same as those from the Indian waters (Andamans Is.) in main Characteristics.

This species distributed only in the Beibu Bay in the northern South China Sea.