

白虾属二新种 (十足目:长臂虾科)

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摘要 报道白虾属二新种,即新疆白虾 *Exopalaemon xinjiangensis* Liang, sp. nov. 和海南白虾 *Exopalaemon hainanensis* Liang, sp. nov.。

关键词 十足目,长臂虾科,白虾属,新种。

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白虾属是长臂虾科的重要组成之一,生活于淡水、河口的半咸水或沿岸海域。在我国是重要经济虾类。据 1990 年刘瑞玉等研究,中国共有 4 种。近年来作者收集中国内陆和沿海标本,经鉴定,又发现 2 新种,报道如下。

新疆白虾,新种 *Exopalaemon xinjiangensis* Liang, sp. nov. (图 1~10)

额角与头胸甲约等长,上缘基部的鸡冠状隆起稍低平,末端清楚地向上扬起;上缘具 10~13 齿,其分布多变,通常分布于额角基部 2/3,末端 1/3 无齿,或在额角末端有几个附加齿,有的个体锯齿分布于整个额角上缘,通常基部 2 齿位于头胸甲上;下缘具 3~6 齿,由中部一直分布到末端,但多分布于末半的基半部。触角刺非常小,鳃甲刺显著大,两者均伸出头胸甲的前缘。鳃甲沟清楚,在鳃甲刺上方略呈弧形弯曲。

腹部各节背面圆,无纵脊。尾节背面后半具 2 对背侧刺;末端尖锐,后侧角具 2 对大刺,内侧刺粗长,外侧刺短小;两内侧刺间具一对长刚毛。

第 1 触角上鞭内枝不足头胸甲长度一半,愈合部为 8~9 节,游离的短鞭为 12~19 节,游离部约为愈合部的 2 倍。第 2 触角鳞片狭长,长为宽的 3.2~3.5 倍,叶片超出前侧刺。

第 1 步足指节长于掌部,腕节约为指节长的 3.3 倍,长节短于腕节。第 2 步足粗于第 1 对,指节稍长于掌部,两指切缘基部未见有小齿突,掌部稍稍膨胖,腕节约为螯长的 1.1 倍。第 3 步足掌节约为指节的 1.7 倍。第 5 步足掌节约为指节的 2.6 倍,腹缘末半刺毛列约 15 个。腕节稍长于掌节的 1/2,清楚地长于指节。

体色 全身透明,未见有色素点,抱卵雌虾腹节侧甲上也未见有蓝黑色大斑。

产地 新疆塔里木河。

模式标本 正模 ♀(89-20-1),体长 28 mm。副模 10 ♂♂,10 ♀♀,体长为 24~28 mm,最大抱卵雌虾体长为 28 mm。卵小,卵径为 (0.76~0.82) mm × (0.94~1.01) mm。1989 年 7 月,李卫新采。

比较 新种与秀丽白虾 *E. modestus* 相似,但前者:1) 个体小;2) 额角的隆起部较低平且额

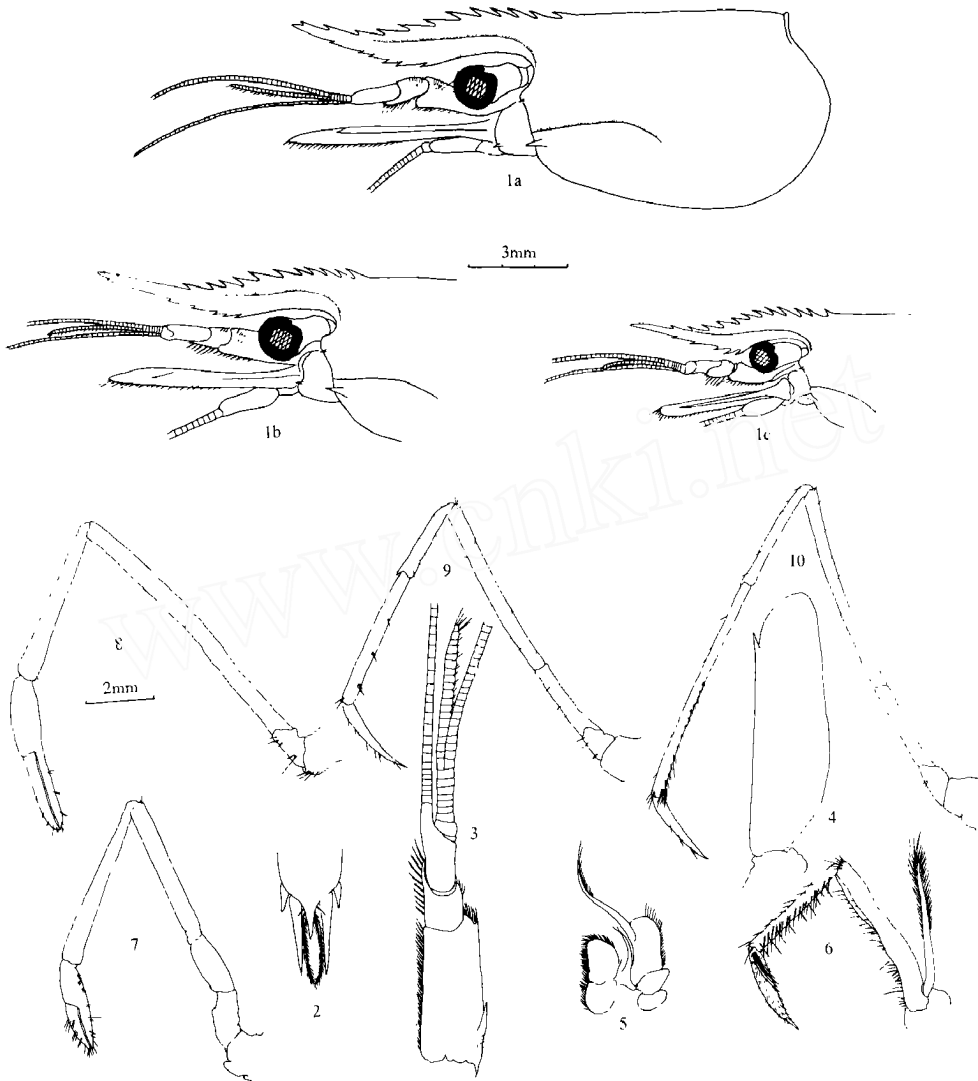


图1~10 新疆白虾,新种 *Exopalaemon xinjiangensis* Liang, sp. nov.

1. 头胸甲(cephalothorax) 1a-c. 示不同个体的额角齿(showing dentation of rostrum in different individuals) 2. 尾节末端(terminal part of the telson) 3. 第1触角(1st antennule) 4. 第2触角鳞片(2nd scaphocerite) 5. 第1颚足(1st maxilliped) 6. 第3颚足(3rd maxilliped) 7. 第1步足(1st pereopod) 8. 第2步足(2nd pereopod) 9. 第3步足(3rd pereopod) 10. 第5步足(5th pereopod)

齿分布多变;3)第1触角上鞭的愈合部长,节多;4)第2触角鳞片狭长;5)第2步足腕节长于螯,长节短于座节;6)第5步足指节短于座节;7)卵径较小等特征均和后者有明显不同。

海南白虾,新种 *Exopalaemon hainanensis* Liang, sp. nov. (图11~19)

额角短而宽阔,短于头胸甲的长度,其末端约1/4超出第1触角柄末缘,基部的鸡冠状隆起部长于末端的细尖部,上缘具7齿,基部的1齿很小,位于头胸甲上,末端约一小半无齿,略

向上扬;下缘具 2 齿,位于末半的基部。头胸甲的触角刺小,鳃甲刺大,两者均伸出头胸甲的前缘。鳃甲沟清楚。

腹部各节背面圆滑,无纵脊;尾节背面后半具 2 对活动刺,末端尖锐,呈尖刺状,后侧角具 2 对刺,内侧刺大,约伸至末端刺的中部,外侧刺小,位于内侧刺的前方。

第 1 触角上鞭的愈合部共 6 节,游离的短鞭为 18 节,游离部约为愈合部的 4 倍。第 2 触角鳞片呈矩形,长约为宽的 2.5 倍,前侧刺约伸至叶片末缘。

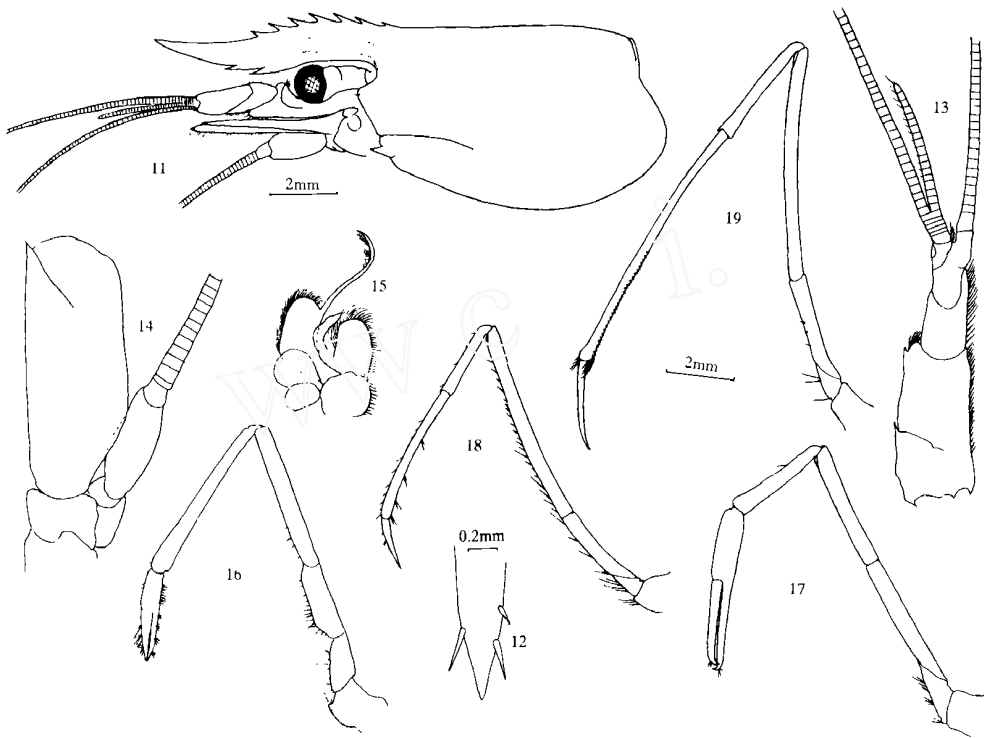


图 11~19 海南白虾,新种 *Exopalaemon hainanensis* Liang, sp. nov.

11. 头胸甲(cephalothorax) 12. 尾节末端(terminal part of the telson) 13. 第 1 触角(1st antennule) 14. 第 2 触角鳞片(2nd scaphocerite) 15. 第 1 颚足(1st maxilliped) 16. 第 1 步足(1st pereopod) 17. 第 2 步足(2nd pereopod) 18. 第 3 步足(3rd pereopod) 19. 第 5 步足(5th pereopod)

第 1 步足指节长于掌部,腕节约为螯长的 2 倍,约为指节的 3.5 倍。第 2 步足短,稍粗于第 1 对,可动指短于不动指,但二者都清楚地长于掌部,掌部稍膨,腕节约为掌长的 1.5 倍,约为螯长的 0.6,短于长节,长节稍短于座节。第 3 步足掌节约为指节的 2.7 倍,后缘有 4 枚活动细刺,腕节长于指节。第 5 步足掌节约为指节长的 3 倍,腹缘末半约具 29 排刺毛列,腕节短于掌节长的 1/2,长于指节和座节。

产地 海南岛海口市,标本采自于菜市场,混杂于脊尾白虾中。

正模 ♀(90-1-1),体长 42 mm,全长 55 mm。1990 年 12 月 15 日,梁象秋采。

比较 新种的额角形状,第 3~6 腹节圆而无纵脊,和具短而宽的鳞片等特征均与秀丽白虾相似。但前者的额角宽阔,隆起部明显地长于末端的细尖部。尾节的末端尖细,外侧刺位内侧刺的前方,内侧刺短于中央端刺,又无羽状刚毛。第 2 步足各节的比例,如螯长于腕节、腕节

短于长节、长节短于座节等特征均不同于后者。

致谢 新种鉴定的过程中,得到刘瑞玉院士的指导,特此致谢。

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ON TWO NEW SPECIES OF EXOPALAEEMON FROM CHINA (DECAPODA: PALAEMONIDAE)

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Abstract

Species of the white shrimp, genus *Exopalaemon*, are widely distributed in brackish and freshwater areas, and are generally economic importance in China. The present paper reports two new species of the genus *Exopalaemon* from China. The type specimens are preserved in Shanghai Fisheries University.

Exopalaemon xinjiangensis Liang, sp. nov. (Figs. 1-10)

The dorsal border of the rostrum bearing 10-13 teeth, variously distributed on basal crest, in some individuals they distributed continuously to the terminal portion, with 3-6 teeth on the ventral border.

The scaphocerite about 3.2 times as long as broad.

The carpus of the second leg longer than the chela, and the merus distinctly shorter than the ischium. The carpus of the third leg longer than the dactylus.

Remarks. The present new species is similar to the *Exopalaemon modestus*, but it different from the latter in: 1) the body is smaller; 2) with more teeth of rostrum on dorsal and ventral borders, the teeth on dorsal border variously distributed; 3) the fused part of the upper antennular flagellum is longer, and the number of articles are more; 4) the scaphocerite is narrow; 5) the carpus of the second leg is slightly longer than the chela, and the merus is shorter than the ischium; 6) the dactylus of the fifth leg is shorter than or equal in length to the ischium; 7) the body and the eggs are smaller in size.

Type locality. Talimu River, Xinjiang, China.

Exopalaemon hainanensis Liang, sp. nov. (Figs. 11-19)

Rostrum shorter and wider, extending beyond the extremity of the antennular peduncle. The dorsal border armed with 7 teeth; the ventral border armed with 2 teeth. The telson bearing 2 pairs of dorsal movable spinules. The posterior end of telson sharply pointed and surpassing the inner lateral spinules.

The scaphocerite rectangular in shape, and about 2.5 times as long as broad.

The second leg rather smaller, the carpus shorter than the merus and chela, and about 1.5 times as long as the palm. The merus shorter than the ischium.

Remarks. The present new species is similar to *Exopalaemon modestus*, but it different from

the latter in the follows: 1) the rostrum is rather wider, and the crest portion is longer than the sharp-pointed portion; 2) the posterior end of the telson is slender and pointed, without plumose setae, reaching beyond the end of inner spines; 3) the proportion of each segments of 2nd leg is different, the chela is longer than the carpus, and the carpus is shorter than the merus, the merus is shorter than the ischium.

Type locality Haikou City Hainan, China. Found in fish market together with *E. carinicauda*.

Key words Decapoda, Palaemonidae, *Exopalaemon*, new species.

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