

南海鱼类寄生粘孢子虫四囊科 一新属, 新种*

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提要 本文对粘孢子虫四囊科一新属, 新种进行了描述, 这种粘孢子虫 1982年4月发现于南海北部湾蓝圆鲹的肌肉中, 其孢子的背面观呈十字形, 具有4块长度不等的棘状壳瓣和4个不同大小的极囊, 本新属, 新种被定名为四棘虫新属 *Tetraspina* gen. nov., 鲹四棘虫新种 *Tetraspina decapterus* sp. nov.。

关于海洋鱼类寄生粘孢子虫, 我国尚未有报道。1982年4月, 从南海北部湾捕捞的一种常见食用鱼蓝圆鲹胸肌中, 发现一种粘孢子虫, 经过仔细观察研究, 认为该虫的形态结构比较特殊, 不仅是文献中未报道过的新种, 而且应是一新属的代表。

模式标本保存于中国科学院水生生物研究所。

四棘虫属(新属) *Tetraspina* gen. nov.

孢子背面观呈十字形, 由4块长度不等的棘状壳瓣和4个大小不一(一个大极囊和3个等大的小极囊)的梨形极囊组成。寄生于海产鱼组织内。

本新属的孢子由4块壳瓣和4个极囊组成, 应属于四囊科(Tetracapsulidae)。据文献报道^[1,3,4], 这一科只有一属, 即 *Kudoa* Meglitsch, 1947。但本新属与 *Kudoa* 属有明显差别: *Kudoa* 属的孢子背面观呈正方形, 具有4个等大、形状一致的极囊; 本新属背面观呈十字形, 系由4块长短不同的棘状壳瓣和4个大小不一的长梨形极囊组成(见图1: 1)。

模式种 鲹四棘虫(新种) *Tetraspina decapterus* sp. nov. 本新属共有一种, 即鲹四棘虫(新种) *Tetraspina decapterus* sp. nov. (图1: 1)。

正模标本 SCS8204 于1982年4月采自南海北部湾(20°N, 108°32'E)。

寄主与部位 寄生于蓝圆鲹 *Decapterus maruadsi* 胸肌内。

营养型 未发现。

图1: 1—7 系成熟孢子背面观, 呈十字形, 由4块不等长的棘状壳瓣组成; 前壳瓣稍短, 后壳瓣较长, 左和右壳瓣长度大致等长。十字形交叉区为一近椭圆形孢子腔, 内有4个长梨形极囊, 其中一个特别大, 其余3个大小大致相同。大极囊长度约为小极囊的两倍; 极丝粗而明显, 成螺旋状盘卷。3个小极囊的极丝纤细, 一般不大显著。侧面观背部

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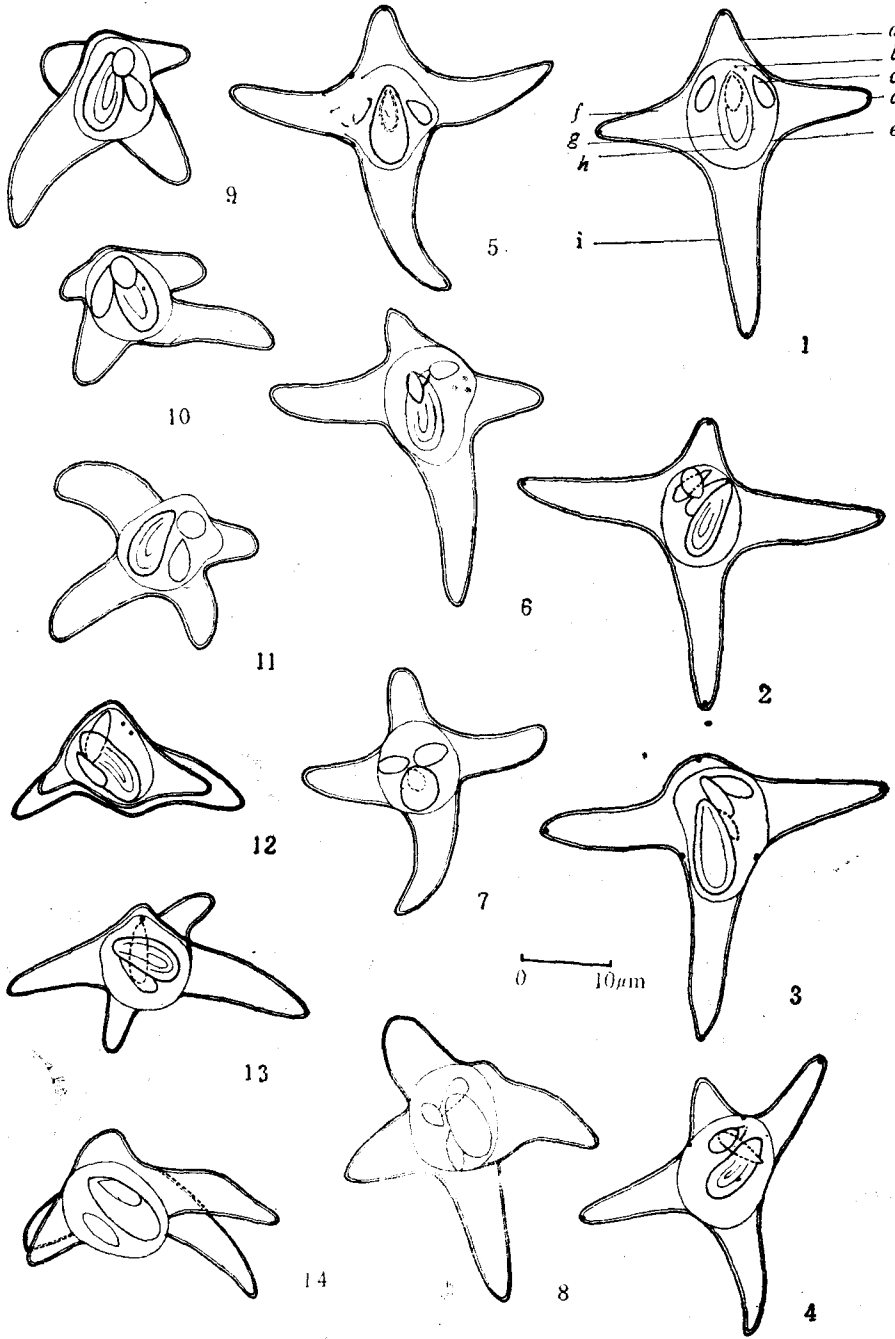


图1 蓼四棘虫(新种) *Tetraspina decapterus* sp. nov.

1.模式图: a. 前壳瓣, b. 核, c. 小极囊, d. 左壳瓣, e. 孢子腔, f. 右壳瓣, g. 极丝, h. 大极囊, i. 后壳瓣; 2-7. 蓼四棘虫孢子背面观; 8-10. 蓼四棘虫孢子微侧背面观; 11. 蓼四棘虫孢子腹面观; 12-14. 蓼四棘虫孢子侧面观。

稍微隆起,似山峰状,四个壳瓣往往两两重叠(见图1:12-14)。胞质均匀透明。有时可见两个发亮的胚核。用福尔马林保存的标本,其孢子的测量结果为:虫体长 36.65 (28.76—

43.27) μm , 宽 41.13(30.55—50.71) μm 。前壳瓣长 11.05(6.1—21.1) μm , 宽 6.95(5.33—10.94) μm ; 后壳瓣长 20.64(18.1—50.9) μm , 宽 7.65(5.3—12.2) μm ; 左和右两边的壳瓣长均为 15.4(7.65—22.9) μm , 宽均为 7.4(5.6—8.4) μm 。大极囊长 12.3(10.7—13.23) μm , 宽 6.0(5.1—7.89) μm ; 小极囊长 7.1(5.34—7.9) μm , 宽 3.13(2.55—3.3) μm 。

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**A NEW GENUS AND SPECIES OF FAMILY TETRACAPSULIDAE FROM MARINE FISHES IN SOUTH CHINA SEA
(MYXOSPOREA: MULTIVALVULIDA)**

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ABSTRACT

The Present paper reports a new species of the family *Tetracapsulidae* from marine fishes *Decapterus maruadsi* collected from Beibu Bay of South China Sea. Examination reveals that this Myxosporidian represents a new genus. Diagnosis of this Myxosporidian is as follows:

Tetraspina gen. nov.

Spore cross-like in dorsal view, with four spinal shell valves unequal in length, and four pyriform polar capsules different in size. Histozoic in marine fish.

The present genus should be classified under the family *Tetracapsulidae* because of the shell number and the capsule number of the spore. But the spore of this genus differs from that of the only known genus *Kudoa* of *Tetracapsulidae* in three ways: 1) Disparity of polar capsules; 2) dorsal view of spore cross-like and 3) spinal shell valves.

Type Species: *Tetraspina decapterus* sp. nov

Tetraspina decapterus sp. nov. (Fig. 1: 2—14)

Host: *Decapterus maruadsi*

Location in host: muscle

Locality: Beibu Bay of South China Sea (21°N, 108°32'E)

Date of collection: April, 1982.

The spore of this species is cross-like in dorsal view with four spinal shell valves unequal in length. The anterior shellvalve is shorter than the posterior one. The left and right shell valves are equal in length. Four polar capsules are pyriform and one of them is larger than the others. Their coiled filaments are distinct in larger capsule but indistinct in three small capsules. Sporoplasm contains two small nuclei.

Measurements of the specimens (formalin preserved): Spore 36.65 (28.76—43.27) $\mu\text{m} \times 41.13$ (30.55—50.71) μm ; anterior shell valve 11.05 (6.1—21.1) $\mu\text{m} \times 6.95$ (5.33—10.94) μm ; posterior shell valve 20.64 (18.1—50.9) $\mu\text{m} \times 7.65$ (5.3—12.2) μm ; left and right shell valves 15.4 (7.65—22.9) $\mu\text{m} \times 7.4$ (5.6—8.4) μm respectively; larger polar capsule 12.3 (10.7—13.23) $\mu\text{m} \times 6.0$ (5.1—7.89) μm ; small polar capsules 7.1 (5.34—7.9) $\mu\text{m} \times 3.13$ (2.55—3.3) μm .

Specimens of the type species are preserved in Institute of Hydrobiology, Academia Sinica, Wuhan.