

赤眼鲮和黄魮的粘孢子虫两新种

龚小宁 谢杏人

(中国科学院水生生物研究所, 武汉 430072)

关键词: 淡水鱼类; 足孢子虫; 碘泡虫; 新种。

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自 1982 年以来, 作者在长江中下游进行类寄生虫区系调查时, 收集了一定数量的粘孢子虫标本。在鉴定这些标本时发现, 寄生在赤眼鲮 *Squaliobarbus curriculus* (Richardson) 和黄魮 *Hypseleotris swinhonis* (Günther) 的两种粘孢子虫, 均系科学上的新物种。现报道如下。所有度量大小均以 μm 为单位。模式标本保存在中国科学院水生生物研究所鱼病学研究室。

1 宜都足孢子虫 新种 *Podospora yiduensis* sp. nov. (图 1)

寄生: 赤眼鲮 *Squaliobarbus curriculus* (Richardson)

寄生部位: 胆、肾

采集地点: 湖北省宜都市 ($30^{\circ}31' \text{N}$, 111°E), 长江中游江段

采集日期: 1982 年 10 月 14 日

营养型: 营养体和胞囊未发现

孢子: 缝面观呈扁卵形。壳面观近似球形, 前端尖突, 后端圆形。缝脊粗而直。壳片表面光滑无纹, 后端两侧各长出圆柱状的透明薄膜突出物, 两侧对称、形状相同, 圆柱状膜离孢子近端较厚, 远端较薄, 末端有些缺刻, 呈“八”字形向外伸出。两个大小相等的圆形极囊, 分别在孢子前端的缝面两侧。极囊核圆形, 位于极囊的侧边。孢质均匀, 具有嗜碘泡和两个胚核。孢子长 $6.2(5.9-6.5)$, 宽 $7.7(7.6-7.8)$, 孢子厚 $5.6(5.2-6.0)$; 极囊直径

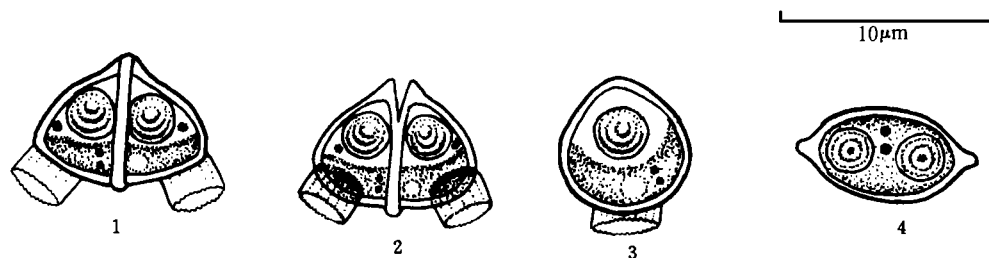


图1 宜都足孢子虫, 新种 Fig.1 *Podospora yiduensis* sp. nov.

1—2. 缝面观 (Sutural view); 3. 壳面观 (Thecal view); 4. 顶面观 (Top side view)。

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作者简介: 龚小宁 (1960—), 女, 湖北人, 主要从事鱼类寄生原生动物研究。

2.3(2.2—2.5), 圆柱膜长 3.0, 宽 3.6。

本种与斜颌鲷足孢虫 *Podospora plagiognathopis* Chen et Hsieh, 1984 外形稍相似, 但孢子小于斜颌鲷足孢虫, 缝面观呈扁卵形; 斜颌鲷足孢虫缝面呈钟状, 两片突出物近似长方形, 本种孢子后端的两个突出物呈圆柱状。本种特征明显不同于斜颌鲷足孢虫, 故定为新种。命名为宜都足孢虫, 新种 *Podospora yiduensis* sp. nov. 主要特征见表 1。

表1 两种足孢虫的主要特征

Tab.1 Main characters of <i>Podospora yiduensis</i> and <i>P. plagiognathopis</i>		
特征 Characters	<i>P. yiduensis</i> sp. nov	<i>P. plagiognathopis</i>
孢子长 Length of spore	6.2(5.9—6.5)	7.2(6.2—7.7)
孢子宽 Width of spore	7.7(7.6—7.8)	6.2(6.1—6.3)
孢子厚 Thickness of capsules	5.6(5.2—6)	7.6(7.3—8.1)
极囊长 Length of polar capsules	2.3(2.2—2.4)	2.4—2.5
极囊宽 Breadth of polar capsules	2.3(2.2—2.4)	2.4—2.5
突出物 Protrusion	圆柱形薄膜	长方形薄膜

2 中国碘泡虫 *Myxobolus chinensis* sp. nov. (图 2)

寄主: 黄魮*Hypseleotris swinhonis*(Günther)
寄生部位: 背部头胸交接处皮下肌肉组织, 1—2 胞囊
采集地点: 湖北省武汉市东湖(30°31′ N, 114°20′ E)
采集日期: 1993 年 8 月 7 日
营养型: 胞囊长椭圆形, 乳白色。胞囊长 0.5cm、宽 0.3cm、厚 0.4cm。

孢子: 壳面观梨形, 从孢子后部 2 / 3 处向前变窄, 形成尖形, 后端宽圆。缝面观纺锤形, 缝脊直而粗。壳片表面光滑, 后端稍厚有 5—6 个“V”形褶皱, 囊间突起明显。两个长棒状极囊, 大小相同, 对称或前后错位排列于孢子前方。极囊长度约占孢子的 2/3 至 3/5, 极丝明显, 12—14 圈, 极丝长可达 88.10—100。极囊核三角形或卵形, 位于极囊底部, 孢质

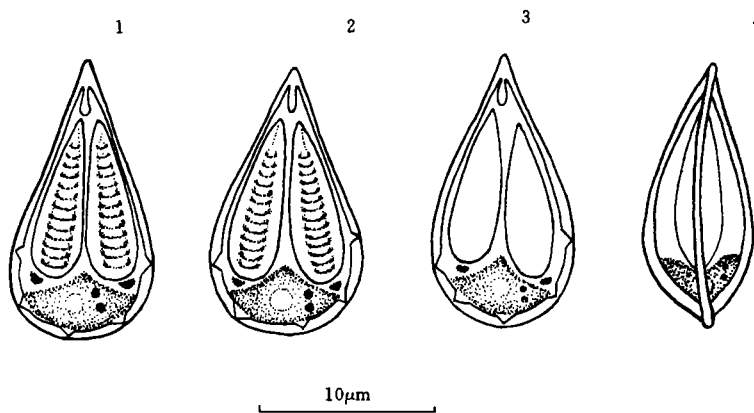


图2 中国碘泡虫, 新种 Fig2 *Myxobolus chinensis* sp. nov.
1—3. 壳面观(Thecal view); 4. 缝面观(Sutural view)

少,有嗜碘泡和两个圆形胚核。孢子长 14.1(14.2—15),宽 8.0(7.8—8.2),孢子厚 6.5(6.4—6.6),极囊长 9.0(8.5—9.5),宽 2.4(2.3—2.5)。

本种与厚唇巴碘泡虫 *Myxobolus catlae* Chakravarty 1943. 相似,但有显著的差别,前者孢子的大小与后者孢子大小不同,极囊长度又小于后者。显然是两个不同的种。故定为新种。二者的特征见表 2。

表2 两种碘泡虫的主要特征
Tab.2 Main characters of *Myxobolus chinensis* and *M. catlae*

特征 Characters	<i>Myxobolus chinensis</i> sp.nov.	<i>M. catlae</i>
孢子长 Length of spore	14.1(14.2—15)	16(15—17.5)
孢子宽 Width of spore	8(7.8—8.2)	7.3(6.8—8.2)
孢子厚 Thickness of spore	6.5(6.4—6.6)	6.6(6—7.2)
极囊长 Length of polar capsules	9(8.5—9.5)	10.5(9.8—11.2)
极囊宽 Breadth of polar capsules	2.4(2.3—2.5)	3.3(3.2—3.5)
“V”形褶皱 V-shaped fold	5—6	—
极囊与孢子长度之比1:L*	2/3—3/5	3/5

* 1: length of polar capsule; L: length of spore.

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TWO NEW SPECIES OF MYXOSPORIDIA OF THE FISH,
SQUALIOBARBUS CURRICULUS AND *HYPSELEOTRIS SWINHONIS*

GONG Xiao-ning and XIE Xing-ren

(Institute of Hydrobiology, The Chinese Academy of Sciences, Wuhan 430072)

Abstract: The present paper reports two new species of Myxosporida in *Squaliobarbus curriculus* from Changjiang River and *Hypseleotris swinhonis* from Donghu Lake, Wuhan. The type specimens were deposited in the Laboratory of Fish

Diseases, Institute of Hydrobiology, The Chinese Academy of Sciences, Wuhan, China.

1. *Podospora yiduensis* sp. nov. (Fig.1)

Host: *Squaliobarbus curriculus* (Richardson).

Location: Gall bladder, Kidney.

Locality: Yidu city, Hubei province. (30°31' N, 111°E)

Date of collection: October 14, 1982.

Vegetative form: Cyst and trophozoite not observed.

Spore: Flat ovoid in sutural view, nearly spherical in thecal view, sharp at anterior end, round at posterior end, sutural ridge straight and rough; shell valve smooth, cylinder lucid and membrane-like protrusions present on two lateral sides of posterior end. Two polar capsules situated at the anterior end of the spore, being equal in size and nearly spherical. Sporoplasm with an iodophilous vacuole and two nuclei.

Dimension of spore: length 6.2(5.9—6.5) μm , width 7.7(7.6—7.8) μm , thickness 5.6(5.2—6) μm , diameter of polar capsules 2.3(2.2—2.4) μm . outgrowth $3 \times 3.6 \mu\text{m}$.

This new species is similar to *Podospora plagiognathopsis* Chen et Hsieh, 1984, but differs from the latter by being smaller in size, and having two cylinder lucid and membrane-like protrusions present on two lateral sides of posterior end.

2. *Myxobolus chinensis* sp. nov. (Fig.2)

Host: *Hypseleotris swinhonis* (Günther).

Location: The muscle of pack, between head and chest.

Locality: Wuhan, Donghu Lake. (30°31' N, 114°20' E)

Date of collection: August 7, 1993.

Cyst: Ellipsoid, white, size 0.5—0.3cm.

Spore: Pyriform in front view, spindle in sutural view, spore shell smooth. Sutural ridge straight and sturdy; intercapsular process distinct; two long rod-like polar capsules equal in size, polar filament distinct and coiled 12—14 circles. Sporoplasm with an iodophilous vacuole and two nuclei. Two ovoid or triangular polar capsules nuclei situated under the polar capsules, with 4 to 5 “V” shaped fold in the posterior; Dimensions of spores: length 14.1(14.2—15) μm , width 8 (7.8—8.2) μm , thickness 6.5(6.4—6.6) μm , polar capsule 8.8(8.5—9.5) μm by 2.4(2.3—2.5) μm .

This new species is similar to *Myxobolus catlae* Chakravarty 1943 but differs from the latter in size and shape of spores.

Key words: Freshwater fishes, *Podospora*, *Myxobolus*, New species