

盘管虫属两新种记述(多毛纲:龙介虫科)*

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龙介虫科(Serpulidae)具钙质栖管,常附着在牡蛎的贝壳上,俗称龙介或石灰虫。除少数种外,均营固着生活。海港设施、船舰、浮标和经济贝类是它们的附着基,是附着生物的主要种类之一。最近我们对中国近海龙介虫科进行了比较系统的研究,在南海采集到的大量标本中,发现了盘管虫属 *Hydroides* 的两个新种,现描述如下:

中刺盘管虫(新种) *Hydroides centrospina* sp. nov. (图1:a-i)

正模式标本 (A-72), 海南岛榆林, 1960年6月。

副模式标本 (A-73), 海南岛榆林, 1960年6月。

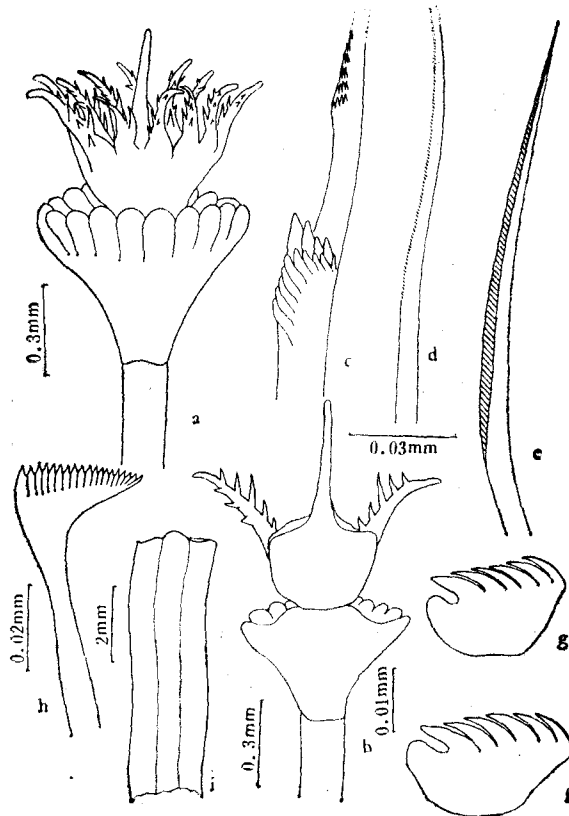


图1 中刺盘管虫 *Hydroides centrospina* sp. nov.

a. 壳盖; b. 同上(剖面观); c. 襟部枪刺状刚毛; d. 襟部毛状刚毛; e. 胸部毛状刚毛;
f. 胸部齿片状刚毛; g. 腹部齿片状刚毛; h. 腹部喇叭状刚毛; i. 栖管。

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正模标本体长 12 毫米, 宽 0.8 毫米, 具 38 个刚毛节, 其中包括 7 个胸节。鳃丝 10 对。

壳盖由上、下两层构成, 上层较肥厚, 周围有 11—14 个淡黄色几丁质刺状突起, 每个突起末端尖细, 突起的两侧具 3—4 对排列不对称的刺, 内侧具 4—5 个内刺, 中间的 2—3 个刺特别发达, 刺尖向上。壳盖上层的正中央有一个粗大的中央刺, 上不具任何侧刺, 表面光滑, 它的长度较周围长突起为长(图 1:a,b)。

壳盖的下层为肌肉质, 周围具 18 个末端很钝的突起。

襟刚毛为枪刺状和毛状两种, 枪刺状刚毛的基部有 1 个较大的锥形突起, 周围有 2—3 个稍小的突起, 端片部一侧具较粗的锯齿。毛状刚毛一侧具很细的齿(图 1:c,d)。胸部的毛状刚毛一侧具翅, 齿片刚毛有 7 个小齿(图 1:e,f)。腹部齿片刚毛具 6—7 个齿, 喇叭状刚毛约具 20 个齿(图 1:g,h)。

本种栖息于低潮线下, 附着在岩石、码头和浮标上, 常同藤壶 *Balanus*、苔藓虫 *Bryozoa* 以及本属的其它盘管虫混栖, 我们还在附着生物的试板上采到过。栖管白色, 上具 2 条纵脊(图 1:i)。

本种和今島实 (M. Imajima, 1976) 建立的长刺盘管虫 *H. longispinosa* 主要区别是前者壳盖上层的中央突起表面光滑, 不具任何小刺, 而后者的中央突起周围则有很多不规则小刺。此外, 襟部枪刺状刚毛也有明显区别。

新种的襟刚毛和秀丽盘管虫 *H. elegans* (Haswell) 比较近似, 但是它们的壳盖形状有明显的不同, 前者的上层中央具表面光滑粗大的中央刺, 而后者不具中央大刺。

南海盘管虫(新种) *Hydroides nanhaiensis* sp. nov. (图 2:a-g)

正模式标本 (A-74), 南海, 水深 72 米, 附着在复瓦牡蛎 *Ostrea imbricata* Lamarck 上面, 1959 年 4 月 29 日。

副模式标本 (A-75), 南海, 水深 33 米, 1960 年 4 月 9 日。

正模标本体长 11 毫米, 宽 0.7 毫米, 具 42 个刚毛节。鳃丝 10 对, 壳盖上层有 10 个刺状长突起, 突起的末端尖细, 每个突起有 6—8 对侧刺, 在突起的内侧也有 5—6 个内刺, 基部中央圆盘状, 上面光滑不具任何小刺。下层的突起钝, 共有 22 个。壳盖的上层为几丁质, 呈淡黄色, 下层为肌肉质(图 2:a,b)。

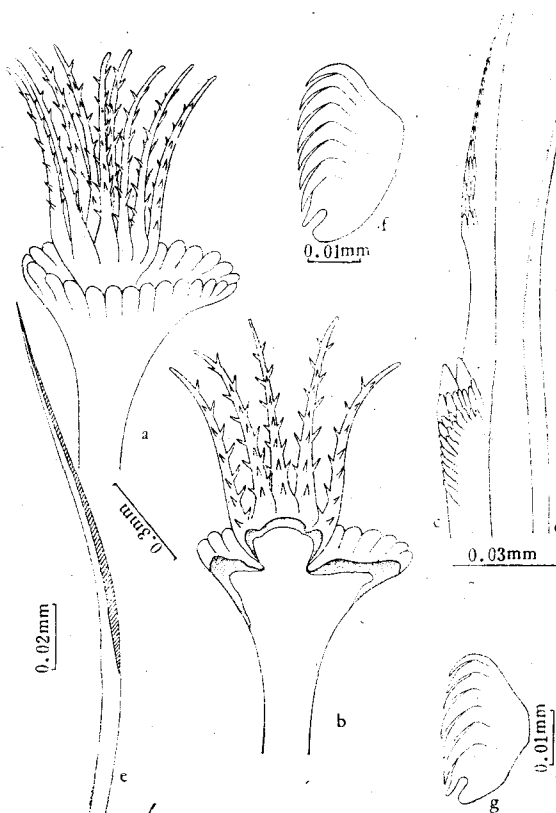


图 2 南海盘管虫 *Hydroides nanhaiensis* sp. nov.
a. 壳盖; b. 同上(剖面观); c. 襟部枪刺状刚毛;
d. 襟部毛状刚毛; e. 胸部毛状刚毛; f. 胸部齿片状刚毛;
g. 腹部齿片状刚毛。

襟部刚毛有两种：一种是枪刺状刚毛，在端片的基部有两个圆锥形突起，其下缘尚有数目较多的小齿，端片一侧小齿比较明显；另一种为具细齿的毛状刚毛（图 2:c, d）。胸部背刚毛毛状，一侧具翅，齿片刚毛具 8 个小齿，上下齿几乎等大（图 2:f）。腹部齿片刚毛与胸部的同形（图 2:g）。

本种栖息于潮下带，附着在岩礁石块和软体动物的贝壳上。

新种与长刺盘管虫 *H. longispinosa* Imajima 以及多刺盘管虫 *H. multispinosa* Marenzeller 壳盖的外形很相似，但在壳盖上层基部有明显区别，新种壳盖上层基部的中央不具大的刺状突起或任何小刺，此外壳盖长突起的特别长并具数目较多的侧刺。

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TWO NEW SPECIES OF *HYDROIDES* (POLYCHAETA: SERPULIDAE) FROM SOUTH CHINA SEA*

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ABSTRACT

Two new species of Serpulidae herein described were collected from South China Sea. The holotypes are deposited in the Institute of Oceanology, Academia Sinica. The

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descriptions of the two new species are given below.

Hydroides centrospina sp. nov. (Fig. 1: a-i)

Collected from Yulin Harbor, Hainan Island, Guangdong Province, in littoral and sublittoral zones, this new species is associated with Bryozoa, *Balanus* spp., *Hydroides longispinosa* and *Hydroides nanhaiensis*.

Holotype 12 mm long by 0.8 mm wide in the region of the thorax. Branchial plume of about 20 pinnate filaments.

The opercular funnel is whitish; it has 18 fleshy marginal radii with obtuse distal tips. The opercular crown has a circle of 11—14 spines. Each spine is curved outwards distally; it has 4 pairs of lateral processes and 2 to 3 inner, medial accessory teeth. There is a very long central, smooth spine.

The collar setae are of two types: bayonet-shaped setae with 3 to 4 small teeth and a large subapical denticulate zone, and capillaries with minutely serrated margin. The remaining thoracic setae are limbate capillaries; the thoracic uncini have 5—6 teeth. The abdominal uncini are smaller than those of the thorax, with 5—6 teeth. The abdominal setae are trumpet-shaped distally, with about 19 minute teeth in one row.

The tube is white, subcylindrical in cross section, with many transverse wrinkles.

This new species is similar to *Hydroides multispinosa* Marenzeller in the form of the collar setae. However, *Hydroides centrospina* can be distinguished from *Hydroides multispinosa* by the long central smooth spine of the opercular crown. *Hydroides centrospina* also resembles *Hydroides longispinosa* Imajima in the form of the operculum. However, the bayonet-shaped collar setae have two large conical teeth in the latter, which are absent in the former.

Hydroides nanhaiensis sp. nov. (Fig. 2: a-g)

Material examined. South China Sea, 33—72 m. The tube is adherent to the shell of oyster, *Ostrea imbricata* Lamarek.

Holotype 11 mm long by 0.7 mm wide in the region of the thorax. Branchial plume of about 20 pinnate filaments.

The opercular funnel is fleshy and has 20 marginal radii with distal tips. The opercular crown has a circle of spines. The spines from the circle are curved outwards, and have 6 to 8 pairs lateral processes. All spines also have 5 to 6 accessory teeth arranged in a single row on the inner side.

Bayonet-shaped setae with a pair of large conical teeth and a small subapical denticulate zone, which is much larger than in *Hydroides multispinosa*. Second type of collar setae hair like. Thoracic uncini with 8 teeth. Abdominal uncini with 7 teeth.

Hydroides nanhaiensis resembles *Hydroides multispinosa* and *Hydroides longispinosa* in the form of the operculum. However, the two later have a conspicuous, long central spine in their crown, which is absent in *Hydroides nanhaiensis*.