

东海鱼类的复殖吸虫

I. 后唇科、鳞肉科、隐殖科的种类*

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作者采自东海的鱼类吸虫标本, 经整理鉴定有 8 种, 分隶于后唇科 Opistholebetidae Fukui, 1929、鳞肉科 Lepocreadiidae (Odhner, 1905) Nicoll, 1935 和隐殖科 Cryptogonimidae (Ward, 1917) Ciurea, 1933, 其中 5 种系新种, 3 种为我国新记录, 分别记述于后。

虫体器官量度均为 mm, 卵子为 μm , 虫体各部位与器官测量值见表 1。模式标本保存在中国科学院海洋研究所。

后唇科 Opistholebetidae Fukui, 1929

1. 短鳍鱼斑点吸虫(新种) *Maculifer aprionis* sp. nov. (图 1)

宿主: 绿短鳍鱼 *Aprion virescens* Val.

寄生部位: 肠。

采集地点、日期: 浙江省宁波, 1980 年 5 月 8 日。

感染: 解剖 1 尾鱼, 找到虫 1 个。

描述 虫体小, 菱形。口吸盘在虫体前端腹面, 长方形, 下面接有口后环, 大小为 0.085×0.391 。腹吸盘圆形, 位于虫体中线处, 距体前 1.190, 距体后 1.445。口腹吸盘比为 1:1.4。

前咽很短, 咽发达, 扁圆形, 食道短, 两肠管向体后伸到体末。

睾丸 1 对, 椭圆形, 在体后 $1/4$ 处, 前后排列。阴茎囊大, 长棒状, 位于肠叉后腹吸盘前面。贮精囊包于阴茎囊内, 长卵形, 生殖孔开口在口吸盘后面。

卵巢近圆形, 在睾丸前, 与睾丸成一直线排列。受精囊靠近卵巢后右侧, 前睾丸上方, 长椭圆形。卵黄腺滤泡自肠叉前水平起, 沿虫体两侧向后, 在生殖腺周围最密集。子宫在受精囊一侧上行, 经卵巢后缘折向上, 越过腹吸盘, 成子宫末段, 通至生殖孔。卵子大, 呈豆形。

排泄管只在体后两肠管末见到一段, 其余皆被生殖腺遮盖, 看不清。

讨论 本种体形大小似与 *M. pacificus* Yamaguti, 1938 和 *M. japonicus* Layman, 1930 相近, 区别是本种睾丸前后排列, 与卵巢成一直线; 阴茎囊大, 生殖孔开口在口吸盘后; 卵子小, 宿主非圆鲀属 *Spheroideus*, 而是短鳍鱼属 *Aprion* 种类。

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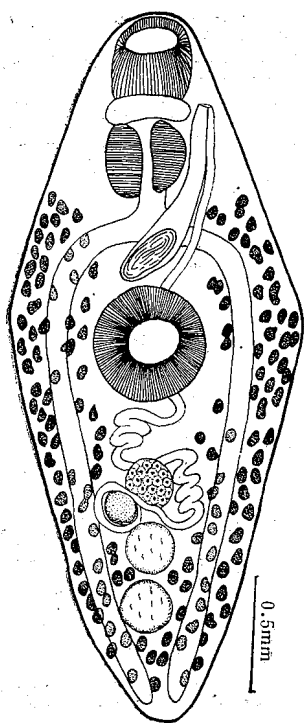


图1 短鳍鱼斑点吸虫(新种)
Maculifer aprionis sp. nov.

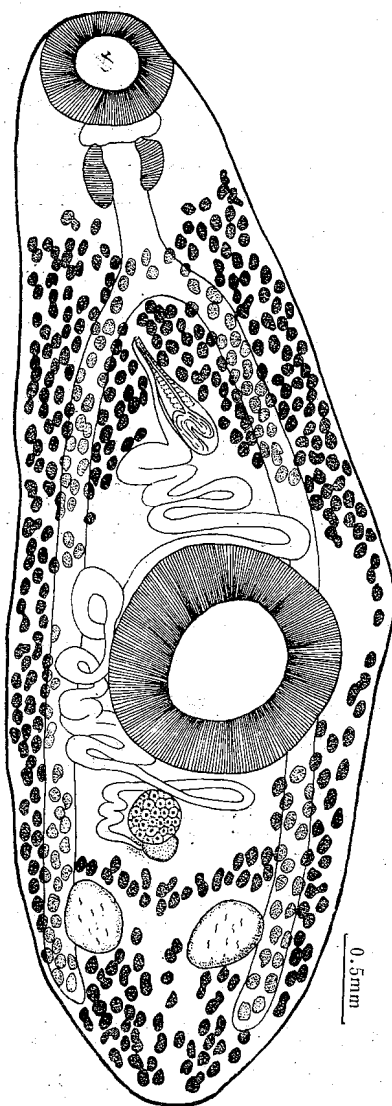


图2 舟山斑点吸虫(新种) *Maculifer zhoushanensis* sp. nov.

2. 舟山斑点吸虫(新种) *Maculifer zhoushanensis* sp. nov. (图2)

宿主: 条纹东方鲀 *Fugu xanthopterus* (Temminck et Schlegel)。

寄生部位: 肠。

采集地点、日期: 浙江省舟山(蚂蚁岛), 1960年4月10日。

感染: 解剖2尾鱼, 只在1尾鱼体内找到虫1个。

描述 虫扁平, 长椭圆形, 口吸盘在虫体前端腹面, 扁圆形。后面有口后环 0.119×0.578 。腹吸盘大, 椭圆形, 位于体前 $1/2$ 稍后, 距体后 2.263。口腹吸盘比为 1:1.7。

前咽短, 咽大。食道粗。肠管直, 伸向体后。

睾丸1对, 椭圆形, 左右并列于虫体后缘。阴茎囊棒状, 在腹吸盘前, 里面包有弯曲的

贮精囊, 前面为前列腺部, 周围有前列腺细胞。生殖孔开口在肠叉后。

卵巢圆形, 在睾丸前面, 与两睾丸呈三角形排列。受精囊小, 在卵巢后。卵黄腺颗粒状, 自咽后水平开始, 沿虫体两侧直到体末。子宫简单, 起始沿卵巢一侧向前, 经腹吸盘向上, 接近阴茎囊成子宫末段, 通到生殖孔。卵子豆形。

讨论 本种与 *M. pacificus* Yamaguti, 1938 相似, 区别是本种个体大, 内部器官均大, 两睾丸非斜列或前后排列, 而是并列, 与卵巢呈三角形排列。卵子小。

鳞肉科 *Lepocreadiidae* (Odhner, 1905) Nicoll, 1935

3. 马面鲷鳞肉吸虫(新种) *Lepocreadium navodoni* sp. nov. (图3)

宿主: 绿鳍马面鲷 *Navodon modestus* (Gunther)。

寄生部位: 肠。

采集地点、日期: 浙江省宁波, 1980年5月19日。

感染: 剖检4尾鱼, 在1尾体内找到虫5个。

描述(根据5个标本) 虫体小, 扁平如瓜子状, 体表具密棘, 生活时虫体苍白。口吸盘椭圆形, 在虫体近顶端。腹吸盘小, 圆形, 位于体后1/2的中线上。口腹吸盘比为1:0.41(—0.71)。

前咽短, 咽发达, 食道短。肠粗, 略呈弧形, 伸达体末。

睾丸1对, 斜列, 形状不规则, 边缘有缺刻或凹陷, 通常左睾丸在前, 两睾丸在体后1/2中间。贮精囊分内外两部分, 外贮精囊钩状, 内贮精囊包在阴茎囊内。阴茎囊瓶状, 位于腹吸盘右侧, 生殖孔开口在肠叉后。

卵巢3叶, 在睾丸前或在左睾丸一侧, 受精囊椭圆形。卵黄腺滤泡起于咽后, 沿肠管向下, 占满整个后体。子宫盘曲于卵巢与腹吸盘间, 经腹吸盘到生殖孔。子宫内卵子稠密。

讨论 本种与 *L. clavatum* (Ozaki, 1932) Yamaguti, 1938 及 *L. xanthichthydis* Yamaguti, 1970 相近, 且宿主均为鲷形目种类, 区别是本种体形大, 内部各器官也大, 卵子大于前者而小于后者。

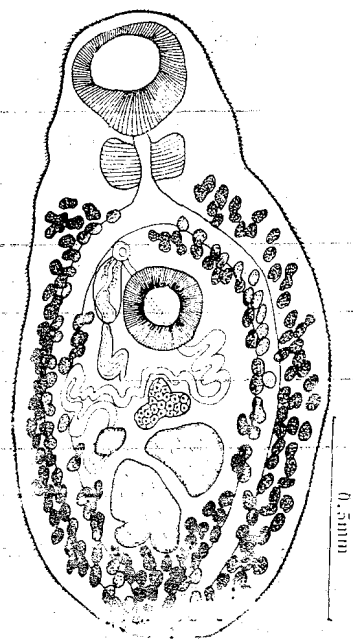


图3 马面鲷鳞肉吸虫(新种) *Lepocreadium navodoni* sp. nov.

4. 夏威夷新鳞肢吸虫 *Neoallopepidapedon hawaiiense* Yamaguti, 1965

宿主: 鳞烟管鱼 *Fistularia petimba* Lacepede。

寄生部位: 胃、肠。

本种吸虫和 Yamaguti(1965)^[9] 在夏威夷所采到的标本在虫体形态、器官排列及大小等方面均基本相符, 且宿主相同。

5. 叉尾鲷鳞肢吸虫(新种) *Lepidapedon (Lepidapedoides) apharei* sp. nov. (图4)

表 1 虫体各部位与器官测量表

器官 \ 虫名	短鳍鱼斑点吸虫 <i>Maculifer apronis</i>	舟山斑点吸虫 <i>Maculifer zhoushanensis</i>	马面鲷鳞片吸虫 <i>Lepocreadium navodonii</i>
体 长	3.196	7.031	1.411—1.751
体 宽	1.292	2.363	0.612—0.799
口吸盘	0.408×0.391	0.680×0.782	0.170—0.323× 0.272—0.323
腹吸盘	0.544 (直径)	1.479×1.326	0.204—0.255 (直径)
前 咽	很 短	短	0.017—0.034× 0.034—0.051
咽	0.306×0.374	0.374×0.544	0.085—0.153× 0.187—0.272
食 道	0.136×0.119		0.034—0.068× 0.051—0.085
睾 丸	前 0.221×0.255	左 0.476×0.306	左 0.170—0.255× 0.187—0.204
	后 0.238×0.221	右 0.425×0.340	右 0.153—0.289× 0.136—0.289
贮精囊	0.238×0.119	0.459 (长)	外 0.068—0.135× 0.085—0.102
			内 0.085×0.034
阴茎囊	0.884×0.153	0.765×0.187	0.221—0.323× 0.068—0.085
卵 巢	0.204×0.255	0.272 (直径)	0.102—0.238× 0.153—0.204
受精囊	0.187×0.136	0.119×0.221	0.034—0.041× 0.051—0.068
卵 子	48—51×21—27	51—53×30—33	48—54×24—27

宿主: 叉尾鲷 *Aphareus furcatus* (Lacepede)

寄生部位: 肠。

采集地点、日期: 浙江省宁波, 1980年5月5日。

感染: 解剖2尾鱼, 只在1尾体内找到虫1个。

描述 虫体扁平呈梭形, 皮下具硬棘, 生活时白色。口吸盘在虫体近顶端, 椭圆形, 在后缘两侧有1对眼点。腹吸盘小, 与口吸盘约相等, 圆形, 位于体前1/2近中间处。

前咽明显, 咽发达, 长方形。食道中等, 肠管直, 伸达近体末。

睾丸1对, 椭圆形, 左右对称排列, 右睾稍大, 位于体后半部前方。贮精囊长筒状, 周围有前列腺细胞。阴茎囊袋状, 前端稍膨大, 生殖孔位于肠叉与腹吸盘之间。

卵巢形状不规则, 在右睾前面。受精囊近三角形, 在卵巢左侧, 劳氏管在受精囊左上方。卵黄腺滤泡自食道末肠叉处起, 沿两肠管向后, 于睾丸后汇合。子宫简单, 自体左侧向上, 在卵巢前形成盘曲, 向前成子宫末段, 通于生殖孔。卵子壳薄, 黄色。

(量度均为 mm; 卵子 μm)

夏威夷新鳞肢吸虫 <i>Neoallopeidapedon</i> <i>hawaiiense</i>	叉尾鲷鳞肢吸虫 <i>Lepidapedon</i> (<i>Lepidapedoides</i>) <i>aphareti</i>	鲇头鳞吸虫 <i>Cephalolepidapedon</i> <i>seba</i>	日本括口吸虫 <i>Sphincterostoma</i> <i>japonicus</i>	圆巢伪管皮吸虫 <i>Pseudosiphodero-</i> <i>ides</i> <i>rotivarijera</i>
5.644—12.614	2.652	3.213—3.895	2.944	2.907—4.097
1.411—2.295	0.782	0.595—0.697	0.969	1.054—1.326
0.153—0.561× 0.170—0.697	0.153×0.170	0.119—0.136×0.102	0.306×0.459	0.187—0.221× 0.255—0.306
0.255—0.680(直径)	0.153 (直径)	0.170—0.187(直径)	0.221 (直径)	0.204—0.221(直径)
0.170—0.510× 0.034—0.119	0.021×0.060	0.136—0.221× 0.051—0.068	0.034×0.051	0.034—0.136× 0.051—0.068
0.170—0.251× 0.119—0.442	0.078×0.075	0.085 (直径)	0.153×0.187	0.119—0.170(直径)
0.085—0.255× 0.034—0.119	0.187×0.068	0.119—0.323× 0.051—0.085		
前 0.340—1.343× 0.663—1.241	左 0.272×0.204	前 0.238—0.357× 0.306—0.391	前 0.221×0.442	左 0.391—0.459× 0.306—0.425
后 0.340—1.343× 0.612—1.411	右 0.340×0.187	后 0.323—0.374× 0.272—0.442	后 0.391×0.340	右 0.391—0.510× 0.340—0.476
0.068—0.119 (管径)	0.527×0.051	外 0.221—0.390× 0.068—0.102 内 0.119—0.255× 0.119—0.204	0.187×0.527	0.170—0.425× 0.068—0.187
0.187—0.629× 0.187—0.714	0.238×0.119	0.561—0.663× 0.170—0.204	无	无
0.238—0.663× 0.119—0.357	0.204×0.153	0.153—0.204× 0.204—0.255	0.221×0.221	0.170—0.340× 0.255—0.493
0.136—0.425× 0.119—0.476	0.102×0.102	0.119—0.153× 0.204—0.289	0.187×0.136	0.153—0.374× 0.085—0.170
45—63×27—36	57—63×30—33	60—63×30—45	72—75×42—45	16—18×9—10

排泄管长筒状, 可达肠叉处, 排泄孔在体末突出。

讨论 Yamaguti, 1971^[11] 以排泄管长短把 *Lepidapedon* 属分为二个亚属: *L. (Lepidapedon)* 亚属排泄管长度不超过腹吸盘; *L. (Lepidapedoides)* 亚属排泄管可长达肠叉处。东海标本应归 *L. (Lepidapedoides)* 亚属, 与 *L. ghanensis* Fischthal et Thomas, 1970 及 *L. (Lepidapedoides) kalikali* Yamaguti, 1970 相近, 但前者两睾前后排列, 卵黄腺在腹吸盘前, 卵子大; 后者体形小, 各器官及卵子均小。

6. 鲇头鳞吸虫 *Cephalolepidapedon seba* Yamaguti, 1970

宿主: 鲇 *Penumatophorus japonicus* (Houttuyn)。

寄生部位: 胃。

Yamaguti (1970)^[10] 建立 *Cephalolepidapedon* 属, 并报道了 *C. seba* 吸虫。此次在东海采到的标本体形较大, 器官及卵子均大, 但宿主相同。

7. 日本括口吸虫 *Sphincterostoma japonicus* Yamaguti, 1937

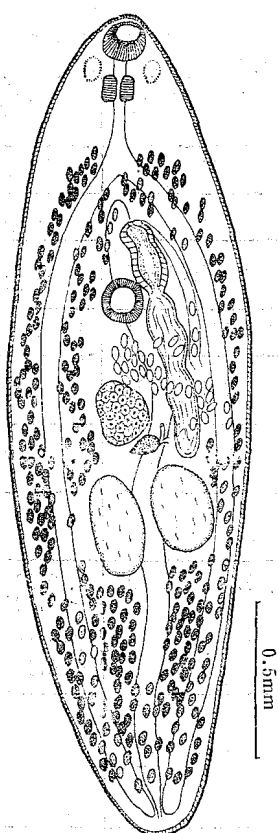


图4 叉尾鲷鳞肢吸虫(新种) *Lepidapedon*
(*Lepidapedoides*) *apharei* sp. nov.

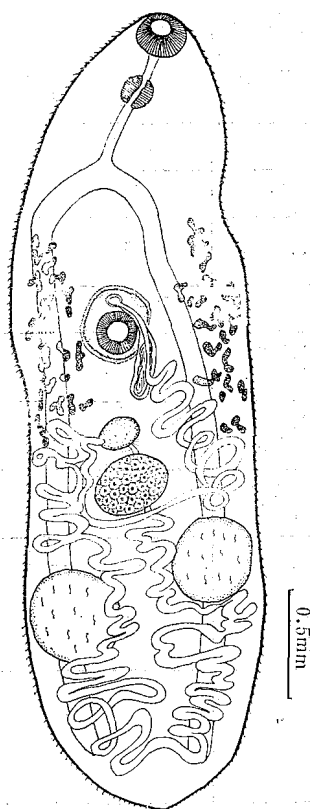


图5 圆巢伪管皮吸虫(新种) *Pseudosiphodero-*
ides rotivarijera sp. nov

宿主: 银方头鱼 *Branchiostegus japonicus* (Houttuyn)。

寄生部位: 肠。

此次所采标本在虫体形状、内部各器官排列及宿主等方面均与 Yamaguti (1937)^[5] 于日本海首次发现的标本一致, 惟卵子稍小。

隐殖科 Cryptogonimidae (Ward, 1917) Ciurea, 1933

8. 圆巢伪管皮吸虫(新种) *Pseudosiphoderoides rotivarijera* sp. nov. (图5)

宿主: 绿短鳍鱼 *Aprion virescens* Val。

寄生部位: 肠。

采集地点、日期: 浙江宁波, 1980年4月26日。

感染: 解剖1尾鱼, 在体内找到虫5个。

描述(根据5个标本) 虫体小, 如舌状, 体表密布小棘, 易脱落。咽附近有眼点一对。口吸盘椭圆形, 亚腹位。腹吸盘小, 圆形, 位于体1/3中间, 腹吸盘周围有一圈皮褶包围。

前咽短, 咽球状。食道直, 肠管可伸达体后缘。

睾丸 1 对, 位于体后 1/2 中间, 左右斜列, 一般左睾稍前, 右睾比左睾略大。贮精囊棒形, 在腹吸盘一侧, 向前接很短的两性管, 生殖孔在腹吸盘前, 围有发达的肌肉束, 成生殖窦。

卵巢椭圆形, 不分叶。受精囊在卵巢前, 近椭圆形。卵黄腺滤泡分为二组, 分布在虫体两侧, 自肠叉以后起, 到卵巢前缘止。子宫分布很有规律, 起始先下行, 沿左睾内侧平行盘曲, 到近体末又折向上, 沿右睾一侧向前, 经卵巢到两性管。卵子豆形, 成熟后显茶褐色。

排泄管 Y 形, 两臂伸向体前, 不相连。

讨论 本属种类不多, 本种与 *P. opakapaka* Yamaguti, 1970 相近, 区别是本种体小, 器官也小, 卵巢椭圆不分叶, 卵黄腺分布在肠叉及卵巢前, 卵子小。

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**DIGENETIC TREMATODES OF FISHES FROM THE EAST
CHINA SEA I. SPECIES OF THE FAMILIES
OPISTHOLEBETIDAE, LEPOCREADIIDAE
AND CRYPTOOGONIMIDAE***

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Abstract

This paper deals with eight species of digenetic trematodes from fishes collected along the coast of the East China Sea. The eight species belong to three different families, namely: Opistholebetidae, Lepocreadiidae, and Cryptogonimidae. Three species, *Neallolepidapedon hawaiiense* Yamaguti, 1965, *Cephalolepidapedon seba* Yamaguti, 1970, and *Sphincterostoma japonicus* Yamaguti, 1937 are new records for China, and five species are new to science. The type specimens are deposited in the Institute of Oceanology, Academia Sinica. All the measurements are in millimeters, except those of the ova which are in micrometers.

Fam. Opistholebetidae Fukui, 1929

***Maculifer aprionis* sp. nov. (fig. 1)**

Host: *Aprion virescens* Val.

Location: intestine.

Locality: Ningbo, Zhejiang Province.

Date: May 8, 1980.

Infection: 1 specimen from 1 host.

Description: Body small, rhomboidal, 3.196 long by 1.292 broad at level of acetabulum. Oral sucker ventroterminal, 0.408×0.391 with a post-ring 0.085×0.391 . Acetabulum 0.544 in diameter, situated 1.190 from anterior end of body and 1.445 from posterior end. Sucker ratio 1:1.4.

Prepharynx very short, pharynx well-developed, 0.306×0.374 ; esophagus short, 0.136×0.119 ; ceca terminating at posterior extremity.

Testes paired, elliptical, anterior testis, 0.221×0.225 posterior testis, 0.238×0.221 . Cirrus pouch claviform, 0.884×0.153 , situated between intestinal bifurcation and acetabulum containing oval seminal vesicle, 0.238×0.119 . Genital pore at posterior end of oral sucker.

Ovary nearly subspherical round, 0.204×0.255 , situated in line with and in front of the receptaculum seminis, elongate elliptical, 0.187×0.136 , located near the posterior rightside of the ovary. Vitelline follicles extending from anterior end of intestinal bi-

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furcation to both confluent in genital gland. Uterus winding between ovary and acetabulum, finally entering genital pore. Eggs reniform 48—51×21—27.

Discussion: This species resembles *M. pacificus* Yamaguti, 1938 and *M. japonicus* Layman, 1930 but differs from the two species in that the testes are placed in tandem, with the ovary arranged in a row, the cirrus pouch being larger, the genital pore opening posterior to the oral sucker, the eggs being smaller, and being parasitic to *Aprion* and not to *Spheroides*.

***Maculifer Zhoushanensis* sp. nov. (fig. 2)**

Host: *Fugu xanthopterus* (Temminck et Schlegel).

Location: intestine.

Locality: Zhoushan Islands, Zhejiang Province.

Date: April 10, 1960.

Infection: 1 specimen from 1 of 2 hosts.

Description: Body elliptical, 7.031 long 2.363 wide. Oral sucker ventroterminal, 0.680×0.782, with a post-oral ring, 0.119×0.578. Acetabulum large, elliptical, 1.479×1.326 at posterior end of anterior half of body, sucker ratio 1:1.7.

Prepharynx short, pharynx 0.374×0.544, esophagus wide, ceca terminating near posterior extremity.

Testes symmetrical, ellipsoid, left testis 0.476×0.306, right testis 0.452×0.340; cirrus claviform, 0.765×0.187 enclosing saccular seminal vesicle, 0.459 long. Genital pore behind intestinal bifurcation.

Ovary round, 0.272 in diameter, immediately in front of testes, receptaculum seminis small, 0.119×0.221, situated posterior to ovary. The vitellaria grain-shaped at the level of posterior end of the pharynx. Uterus simple consisting of ascending loop only. Eggs bean shaped, 51—53×30—33.

Discussion: This species is similar to *M. pacificus* Yamaguti, 1938 but differs from it in the larger size of the body, the internal organs in the testes being symmetrically and not obliquely tandem, having triangular, smaller sized eggs.

Fam. Lepocreadiidae (Odhner, 1905) Nicoll, 1935

***Lepocreadium navodoni* sp. nov. (fig. 3)**

Host: *Navodon modestus* (Gunther).

Location: intestine.

Locality: Ningbo, Zhejiang Province.

Date: May 15, 1980.

Infection: 5 specimens from 1 of 4 hosts.

Description: Body small, flattened melon-shaped, with densely set spinules white when live, 1.411—1.751 long, 0.612—0.799 wide, at level of acetabulum. Oral sucker terminal 0.170—0.323×0.272—0.323. Acetabulum small, round 0.204—0.255 in diameter, situated in middle of body. Sucker ratio 1:0.41—0.71.

Prepharynx short 0.071—0.034×0.034—0.051, pharynx well-developed 0.085—0.153×0.187—0.272, esophagus short, 0.034—0.068×0.051—0.085, ceca wide, more or less curve, terminating at posterior extremity.

Testes irregular in shape, diagonal, left testis 0.170—0.255×0.187—0.204, right tes-

tis $0.153-0.289 \times 0.136-0.289$, in the middle of posterior half of body. Vesicula seminalis divided into two parts, external seminal vesicle hook-shaped, $0.068-0.136 \times 0.068-0.102$, internal seminal vesicula, 0.085×0.034 enclosed in bottle-shaped cirrus pouch, $0.221-0.323 \times 0.068-0.085$ and just at right side of acetabulum. Genital pore behind intestinal bifurcation.

Ovary trilobate, $0.102-0.238 \times 0.153-0.204$ immediately in front of testes or left testis. Receptaculum seminis elliptical, $0.034-0.041 \times 0.051-0.068$, vitelline follicles begin at posterior of pharynx and occupying posterior end of body. The uterus winding between ovary and acetabulum. The eggs $48-54 \times 24-27$.

Discussion: This species resembles both *L. clavatum* (Ozaki, 1932) Yamaguti, 1938 and *L. xanthichthydis* Yamaguti, 1970 in having the same host belonging to Tetraodontiformes but differs from the two species in the larger size of the body and internal organs. The eggs are larger than those of the former and smaller than those of the latter.

***Lepidapedon (Lepidapedoides) apharei* sp. nov. (fig. 4)**

Host: *Aphareus furcatus* (Lacepede)

Location: intestine.

Locality: Ningbo, Zhejiang Province.

Date: May, 5, 1980.

Infection: specimen from 1 of 2 hosts.

Description: Body flattened shuttle-shaped, 2.652 long, widest at level of acetabulum, 0.782. Oral sucker subterminal, 0.153×0.170 . A pair of eye spots at posterior of oral sucker. Acetabulum small, 0.153 in diameter, at anterior part of middle half of body.

Prepharynx distinct, 0.021×0.060 , pharynx rectangle, well-developed, 0.075×0.075 , esophagus, 0.187×0.068 , ceca terminating at posterior extremity.

Testes elliptical and symmetrical, left testis 0.272×0.204 , right testis 0.340×0.187 at near anterior end of posterior half of body. Seminal vesicle tubular, 0.527×0.051 surrounded by prostate cells. Cirrus pouch sack-shaped, 0.238×0.119 . Genital pore situated between acetabulum and intestinal bifurcation.

Ovary irregular in shape, 0.204×0.153 , in front of right testis. Receptaculum seminis subtriangular, 0.102×0.102 at left posterior end of ovary. Laurer's canal at anterior of receptaculum seminis, vitelline follicles begin at the intestinal bifurcation and converge posterior of the testes. Uterus coiled anterior to ovary. Eggs $57-60 \times 30-33$.

Discussion: This species resembles closely *L. ghanensis* Fischthal et Thomas, 1970 and *L. (Lepidapedoides) Kalikali* Yamaguti, 1970 but the former differs from the new species in the tandemly placed testes and the larger size of the eggs. It differs from the latter in the smaller size of the body, the internal organs, and the eggs.

Fam. Cryptogonimidae (Ward, 1917) Ciurea, 1933

***Pseudosiphoderoides rotivarijera* sp. nov. (fig. 5)**

Host: *Aprion virescens* (Cuvier et Valenciennes).

Location: intestine.

Locality: Ningbo, Zhejiang Province.

Date: April 26, 1980

Infection: 5 specimens from 1 host.

Description: Body small, tongue-shaped, densely spinose, $2.907-4.097 \times 1.054-1.326$, eye-spot situated at each side of pharynx. Oral sucker elliptical subventral, $0.187-0.221 \times 0.255-0.306$. Acetabulum small, $0.204-0.221$ in diameter.

Prepharynx $0.034-0.136 \times 0.051-0.068$, pharynx $0.119-0.170$ in diameter. Ceca terminating at posterior extremity.

Testes paired obliquely, situated at the middle of posterior half of body, left testis $0.391-0.459 \times 0.306-0.425$, right testis $0.391-0.510 \times 0.340-0.476$. Seminal vesicle $0.170-0.425 \times 0.068-0.187$, hermaphroditic duct tubular, short, genital pore anterior to acetabulum, round developed muscle fibers from genital atrium.

Ovary elliptical, $0.170-0.340 \times 0.255-0.493$, receptaculum seminis $0.153-0.374 \times 0.085-0.170$ situated in front of ovary. Vitelline follicles divided into two group, extending from posterior of intestinal bifurcation to level of anterior ovary. Uterus regularly coiled in usual descending and ascending pattern. Eggs bean-shaped, $16-18 \times 9-10$.

Discussion: This species is similar to *P. opakapaka* Yamaguti, 1970 but differs from it in the smaller size of the body and internal organs, the ovary being elliptical and without lobes, the vitelline gland occupying greater ventral part of intestinal bifurcation and ovary, and the smaller size of eggs.