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A NEW SPECIES OF CARASSOTREMA PARK, 1938 (DIGENEA: WARETREMATIDAE)

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Abstract: The paper deals with a new species of *Carassotrema* Park, 1938 obtained from the intestine of *Clupanodon punctatus* (Temminck et Schlegel). Type specimens are deposited in Parasitology Research Laboratory, School of Life Sciences, Xiamen University. Measurements are given in millimeters, as the ranges followed by the mean in parentheses, unless otherwise stated.

Key words: Digenea; Waretrematidae; *Carassotrema*; *Carassotrema clupanodonae*; New species; *Clupanodon punctatus*
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Carassotrema clupanodonae sp. **nov.** (Figs. 1—3)

Type host: *Mugil engeli* (Bleeker).

Site of infection: Intestine.

Type locality: Xiamen (118°03′58″—11′48″E, 24°25′24″—33′14″N), Fujian Province, China.

Date: May, 31, 2000.

Prevalence: 4 specimens from 1 of 3 hosts.

Description: (based on 4 mounted specimens) Body fusiform, 0.556—0.768 ×0.212—0.296 (0.644 × 0.255); anterior and posterior ends of body rounded; tegumental spines extending full length of body, decreasing in density posteriorly. Pigment granules scattered at pharyngeal level. Oral sucker subterminal, 0.062—0.074 ×0.068—0.084 (0.068 ×0.076). Acetabulum rounded, 0.072—0.104 × 0.078—0.112 (0.083 × 0.129). Sucker ratio 1∶1.12—1.37 (1∶1.22). Prepharynx 0.016—0.026 (0.020) long.

pharynx spherical, 0.046—0.052 ×0.050—0.060 (0.049 ×0.056); esophagus 0.100—0.160 (0.118) long. Intestinal bifurcation middle or posterior to acetabulum. Forebody 30.0%—34.5% (32.7%) of body length.

Posttesticular space 0.090—0.150 (0.119) long; testis single, elongated elliptical, with entire surface, 0.180—0.242 ×0.060—0.084 (0.199 ×0.074), external seminal elongated gourd, rather sinuous, 0.104—0.184 ×0.046—0.056 (0.135 ×0.051), extending posterior to acetabulum. Hermaphroditic sac ovoid, 0.070—0.084 ×0.050—0.070 (0.078 ×0.056), overlapping anterior border of acetabulum, containing tubular internal seminal vesicle; pars prostatica; metraterm and hermaphroditic duct. Genital pore anterior to acetabulum, surrounded by about 25 short diverticula.

Ovary gourd, 0.070—0.084 × 0.050—0.070 (0.078 ×0.056), immediately antero-sinistral to testis. Laurer's canal 0.134 long (type species). Vitellaria consisting of simple round or tubular follicles, extending in lateral field of hindbody. Uterua confined to space between acetabulum and ovary with one egg. Eggs yellowish, oval in shape, 0.060—0.065 ×0.036—0.039, unembryonated.

Excretory vesicle Y-shaped.

12 distinct species in *Carassotrema* have been described to data. They are *C. koreanum* Park, 1938, type species; *C. kui* Tang & Lin, 1963; *C. wui* Tang & Lin, 1963; *C. mugilicola* Shireman, 1964; *C. megapharyngus* Wang, 1973; *C. pterorchis* Wang, 1973;

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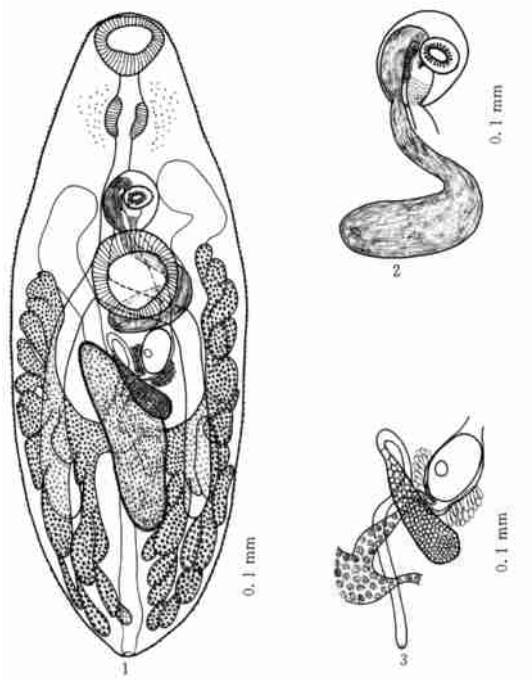

图 1—3 鲻鲫吸虫,新种
1. **成虫腹面观**; 2. **末端生殖器**; 3. **卵巢复合体**
Fig. 1—3 *Carassotrema clupanodonae* sp. nov.
1. Ventral view of whole mount; 2. Terminal genitalia; 3. Ovarian complex

C. tilapiae Nasir & Gomez, 1976; *C. estuarinum* Tang & Lin, 1979; *C. heterorchis* Wang & Pan, 1984; *C. schistorchis* Wang & Pan, 1984; *C. bengalense* Rekharani & Madhavi, 1985; and *C. philippinense* Machida, 1996.

Carassotrema clupanodonae sp. nov. is most closely related in general morphology to *Carassotrema bengalense* Rekharani & Madhavi, 1985, but differs from the latter in the position of the intestinal bifurcation and ceca, in the testis with entire, and in the esophagus which in the former species is about 5—6 times the length of the prepharynx.

The new species differs from *C. koreanum* Park, 1938 in having elongated elliptical testis rather than triangular testis; in having shorter uterus with one egg rather than longer uterus with more eggs; in its ceca terminating at the posterior level of testis rather than to near posterior end of body and in having about 25 short diverticula surrounding the genital pore.

Carassotrema clupanodonae sp. nov. is diffderentiated from *C. kui* Tang & Lin, 1963; *C. wui* Tang & Lin, 1963; *C. pterorchis* Wang, 1973; *C. heterorchis* Wang & Pan, 1984 and *C. schistorchis* Wang & Pan, 1984 by its simple testis without lobes.

The new species is distinguished from *C. mugilicola* Shireman, 1964 by the distribution of vitellaria; by the ratio of prepharynx to esophargus and by the body size.

The new species differs from *C. megapharyngus* Wang, 1973 in the pharynx which in the latter species is bigger than oral sucker and in the prepharynx which in the latter is very shorter or absence.

Features of *Carassotrema clupanodonae* distinguishing it from *C. tilapiae* Nasir & Gomez, 1976 include the longer ceca, the extent of the vitellaria and the position of the testis.

The new species differs from *C. estuarinum* Tang & Lin, 1979 in its acetabulum being larger than oral sucker rather than smaller than oral sucker; and its ceca ending at the posterior level of testis rather than terminating a short distance posterior to the testis.

The new species differs from *C. philippinense* Machida, 1996 in the pharynx which in the latter species is bigger than oral sucker, in the sucker ratio which in the latter species is larger and ceca ending the posterior level of the testis in the new species rather than anterior lever of the testis in *C. philippinense*.

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鲫吸虫属一新种

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摘要:鲫吸虫,新种 *Carassotrema clupanodonae* sp. nov. 检获于福建省厦门海域斑鰶 *Clupanodon punctatus* (Temminck et Schlegel)的消化道。新种同该属已知种中的孟加拉鲫吸虫 *Carassotrema bengalense* Rekharani & Madhavi, 1985 最为相似,但可以与后者相区别的地方在于肠叉位于腹吸盘后部而非腹吸盘前部;肠管止于睾丸后缘水平而非止于近体末端;睾丸边缘光滑而非不规则。

关键词:吸虫纲;叉盘科;鲫吸虫属;鲫吸虫;新种;斑鰶