OPECOSILIDAE Ozaki, 1925

Syn. Coitococidae Ozaki, 1929

Podocotylidae Bellfus, 1960

Plagioporinae Mantel, 1947

Cucreadium Dayal, 1942

Cucreadium yeshodeni n. sp.

Three specimens were collected from the intestine of poonfish, *Stromateus niloticus*, at Bombay, during the course of investigation of helminth fauna of vertebrates.

The fluke is elongated, round at both the extremities, 0.50 to 0.70 long and 0.17 broad in the region of ventral sucker. The cuticle is covered with minute spines reaching upto the posterior extremity. The oral sucker is round and subterminal, measuring 0.04 to 0.05 in diameter while the acetabulum has a diameter of 0.05 to 0.06 and lies at 0.16 from the anterior extremity. The pharynx is muscular, 0.02 in length and 0.025 in width. The oesophagus is short cylindrical about 0.025 in length and 0.06 in width. The intestinal caecae simple, narrow not close to the lateral margins of the body, which run upto the posterior end.

Testes are tandem, round, intercaecal and post-equatorial. The anterior testis measures 0.051 in
Lucraudiu yaahodaal n. sp.

Figs. A Entire fluke, ventral view
    B Egg.
diagnosis and posterior testis 0.059 in diameter. The cirrus sac is lying at left side of ventral sucker. It is flask-shaped and slightly curved at the anterior of ventral sucker, measures 0.078 in length and 0.017 in width. It encloses the bilobed seminal vesicle. The genital pore is median and posterior to the bifurcation of oesoeae.

The ovary is round, median, protesticular and measures 0.042 to 0.051 in diameter at the distance of 0.11 from acetabulum. The oviduct arises from the median side of ovary and uniting with ootype. A Laurer's canal is indistinct. The vitelline follicles are large, numerous extending from the level of genital opening to the posterior extremity and overlapping the ooeae. Two transverse vitelline ducts unite in front of the anterior testis forming yolk reservoir. The uterine coils are few restricted between ovary and acetabulum. The excretory pore is terminal. The eggs are few operculculated and oval to elliptical measuring 0.071 to 0.079 by 0.059 to 0.062.

DISCUSSION

In possessing cirrus pouch more or less well developed and extensive vitellaria, the present fluke belongs to the subfamily Plagioporinac Rante, 1947 of the family Podocotyliidea Dollfus, 1960. In not
having filamented eggs, genital pore, cirrus pouch preacetabular and ovary halfway between acetabulum and anterior testis, the present form belongs to the genus *Eucrasidiun* Dayal, 1942.

The species described above differs from all the known species in the genus *Eucrasidiun* Dayal, 1942.

In type species, *E. eucrasidiun* Dayal, 1942, the body is devoid of spines, the intestinal caeca are extending up to the hinder end of the posterior testis, testes are lobed, vitellaria starting from the pharynx and eggs are oval, operculated with shell pointed at the opercular end. In contrast to these characters, in the present species, the testes are not lobed and the ovary is entire, the body is covered with minute spines, the caeca are extending up to the hinder end of the body, the vitellaria are starting from the level of the genital opening and the eggs are almost oval and not pointed at the opercular end. The ovary is penta-lobed.

In *E. shinonani* Srivastava et al., 1967 and the present form, the caeca terminate in the caudal region, but differences are in topography of gonads, in the body measurements, in the host and its environment and locality.

It differs from *E. gupta* Gupta et al., 1970 in not having oblique testes, in the structure and shape of
circrus sac and from \textit{E. cameronii} Gupta, 1963 in the extension of vitellaria, which start from the middle of the oral sucker in \textit{E. cameronii} whereas, in the present form from the genital pore, in the structure of cirrus sac and in the extension of the intestinal caecae.

All the four known species are reported from the freshwater fish and the present form from the marine water fish for the first time.

Considering all these characters a new species is established and named it as \textit{Eucrassidium vishnudassii} n.sp.

<table>
<thead>
<tr>
<th>Host</th>
<th>\textit{Stromateus niger} (marine-water fish, Pomfret)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Habitat</td>
<td>Intestine</td>
</tr>
<tr>
<td>Locality</td>
<td>Bombay, West Coast of India.</td>
</tr>
</tbody>
</table>
In possessing hermaphroditic eggs, ovary tubular, vitellaria tubular dendritic, the present fluke belongs to the family Isoparorchidae (Travassos, 1922) Poche, 1926. Yamaguti, 1971 included under this family three genera namely, *Elongoparorchia*, *Isoparorchia* and *Cladolecithotrama*. Out of these three genera, only one genus, *Isoparorchia* found in fresh water fish. Some three more species are added to this genus all over the world. Yamaguti, 1971 did not recognised *I. tandani* Johnston, 1927 as valid species. Sinha, 1975 considered *I. pakistani* Bilquees et al., 1972 as synonym of *I. hypsaelobaeri* (Billet, 1898) Eisman, 1952. Thus, there is only one species i.e. type species as recognised by Yamaguti, 1971 and Sinha et al., 1975. The author agrees with the views of Yamaguti, 1971 and Sinha, 1975. In all essential features this fluke resembles *I. hypsaelobaeri* (Billet, 1898, Eisman, 1932. Principal measurements are noticed below. For the first time this fluke is recovered in this region.
*Lecanorchis hypacalobeari*

(Billet, 1896) Ejmont, 1932

Microphotograph  Entire Fluke

Ventral view.
While collecting the Helminth parasites from the fresh water fish, *Myxus acanthoides*, is found infected with larvae and adult flukes. The survey is made at Jalna.

Body large, foliate and ashy colour. Length 30 to 35, breadth at oral sucker 5, at ventral sucker 15 and at posterior extremity 20. The oral sucker is terminal, 1.15 in diameter, prepharynx absent, pharynx small 0.69 in length and 0.69 in breadth; oesophagus very short 0.27 long, "aeoes with stomach" portion at commencement, running zig-zag to posterior extremity, 0.69 in width at anterior extremity and 0.27 at posterior extremity. Acetabula 1.95 in diameter; testes symmetrical, round and measuring 1.27 in diameter; hermaphrodic sex preacetabular and genital pore medium. Ovary unbranched, tubular, 3.10 in length and 0.27 in breadth. Vitellaria dendritic and are in the posterior region. Eggs 0.048 to 0.051 by 0.024 to 0.028.

<table>
<thead>
<tr>
<th>Host</th>
<th><em>Myxus acanthoides</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Habitat</td>
<td>Suii bladder</td>
</tr>
<tr>
<td>Locality</td>
<td>Jalna, Maharashtra, India</td>
</tr>
</tbody>
</table>
CLINOSTORIDAE Luhe, 1901
Clinostominae Pratt, 1902
Clinostomum Leidy, 1856
Clinostomum macrostomum Jaiswal, 1957

Several specimens of this form are recovered from the cyst in the buccal cavity of fish, Puntius sarana at Trivandrum, Kerala, India.

They are elongated, slender with both extremities, bluntly round. The cuticle is covered with minute spines. The body is slightly constricted in between the oral sucker and acetabulum. They measure 3.3 to 3.6 in length and 0.92 to 1.13 in maximum breadth. The oral sucker is subterminal measures 0.028 to 0.035 in diameter. The acetabulum lying at the distance of 0.18 to 0.20 from the oral sucker. The acetabulum measures 0.49 to 0.59 in diameter. The ratio of the diameter of oral sucker and acetabulum is 1:1.5. The mouth is surrounded by oral sucker and the prepharynx and pharynx are absent. The long intestinal caecae are corrugated from the mid end of acetabulum upto the caudal end. The caecae open into the tubular excretory bladder.

The gonade are situated slightly anterior to middle of the body. The testes are tandem, slightly lobed, more or less triangular and midial in position.
Clinostoma macroacum Jaiswal, 1957

Fig. A Entire fluke, ventral view.
The anterior testis measures 0.21 in length, 0.32 in breadth and posterior testis 0.19 in length, 0.34 in breadth. The cirrus sac is ovoid, situated on the left side of the anterior testis and the ovary. It is just above the anterior of ovary and placed in between these two and intestinal caecum. It contains coiled seminal vesicle, well developed pros prostate and long ductus ejaculatorius which opens into a genital atrium. The genital atrium is circular and lies between the cirrus sac and at the base of uterine sac. The genital pore is bilobed, muscular and surrounded by cells. It lies on left side of the middle of the anterior testis.

The ovary is irregular, lies between two testes, slightly on the right side of the median line. The immature thin walled eggs are present in the ovary. It measures 0.14 in length, 0.33 in breadth. The oviduct arises from the inner side of ovary and runs transversely to the posterior border of anterior testis, then curves on right side of the testis and opens in the uterine sac just in front of the anterior testis. The uterine sac is long, tubular structure and measures 0.60 in length, 0.15 in breadth at posterior end, 0.07 at anterior end. It terminates near the posterior end of acetabulum. The metraterm is well developed. The vitelline follicles start from the mid level of acetabulum up to caudal end.
The excretory pore is subterminal and leads inside into excretory bladder which bears a short stem and two excretory cornua. Each of the cornua divides immediately behind the posterior end of intestinal caeca into two branches, the outer one being continued to excretory tube and the inner one connected with intestinal caeca.

COMMENTS

First key for metacercarial species of *Clinostomum* was given by (Laidy, 1858) Skrjabin, 1945 namely *Clinostomum dyctylum* (Monticelli, 1893); *C. chrysaichthys* Dubois, 1929 and *C. pircidium* Southwell and Prashad, 1918. Kay, 1950 erected a new species of metacercarial *C. galliaichthys* and given a key for ten metacercarial species. In 1957 Jaisal described many trematodes along with a new metacercarial species of *Clinostomum* and also gave a revised key for nine metacercarial species. Ukoli, 1956 discussed in greater detail of the systematics of the genus *Clinostomum* and gave synonymy of *C. cosmopolitanum* (Rudolphi, 1833) with *C. chrysaichthys* Dubois, 1930; *C. delani* Tubangui, 1930; *C. desai* Bhalaria, 1942; *C. gidea* Bhalaria, 1942; *C. indicum* Bhalaria, 1940; *C. pircidium* Southwell and Prashad, 1918; *C. prashadi* Bhalaria, 1942; *C. argenforme* Jaisal, 1957. Feizullay, 1961 proposed a synonymy of *C. cosmopolitanum* with
*C. lucbitum* Braun, 1899 and *C. microsomus* Jaiswal, 1957 with the *C. maestacanthi* Jaiswal, 1957 and *C. ophiocephali* Tubangui and Rasulingan, 1944. Yamaguti, 1971 in his work included eleven metacercarial species. Author agrees with Ukoli and Yamaguti in accepting the metacercarial species as proposed by them.

The present form resembles *C. microsomus* Jaiswal, 1957 in some respects and differs in the points, as shown in table.

Thus the present form is considered to be the same and is described for the first time from new host.

<table>
<thead>
<tr>
<th>Host</th>
<th><em>Puntius sarana</em> (Hamilton-Buchan)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Habitat</td>
<td>Cyst in the buccal cavity</td>
</tr>
<tr>
<td>Locality</td>
<td>Trivandrum, Kerala, India.</td>
</tr>
<tr>
<td></td>
<td><em>C. sacrococca</em></td>
</tr>
<tr>
<td>----------------</td>
<td>------------------</td>
</tr>
<tr>
<td></td>
<td>Jaiswal, 1957</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Body</td>
<td>spinose</td>
</tr>
<tr>
<td>Length</td>
<td>22-43</td>
</tr>
<tr>
<td>Width</td>
<td>6.01</td>
</tr>
<tr>
<td>Oral sucker</td>
<td>1.06 by 0.60</td>
</tr>
<tr>
<td>Ventral sucker</td>
<td>1.66</td>
</tr>
<tr>
<td>Genital pore</td>
<td>immediately</td>
</tr>
<tr>
<td></td>
<td>posterior to the</td>
</tr>
<tr>
<td></td>
<td>middle of post-</td>
</tr>
<tr>
<td></td>
<td>acetabular</td>
</tr>
<tr>
<td></td>
<td>portion</td>
</tr>
<tr>
<td>Genital pore</td>
<td>posterior to</td>
</tr>
<tr>
<td></td>
<td>the caudal of</td>
</tr>
<tr>
<td></td>
<td>the anterior</td>
</tr>
<tr>
<td></td>
<td>testis</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Vitellaria</td>
<td>extend from the</td>
</tr>
<tr>
<td></td>
<td>hind border of</td>
</tr>
<tr>
<td></td>
<td>the acetabulum</td>
</tr>
<tr>
<td></td>
<td>upto caudal end</td>
</tr>
<tr>
<td>Host</td>
<td>Channa</td>
</tr>
<tr>
<td></td>
<td>(Ophiocophalus</td>
</tr>
<tr>
<td></td>
<td>striatus)</td>
</tr>
<tr>
<td>Locality</td>
<td>Hyderabad</td>
</tr>
</tbody>
</table>
DICROCOELIIDAE  Odnner, 1910
DICROCOELINAE  Loose, 1899
PARDIATOMINI  Yamaguti, 1959
PARDIATOMIDAE  Travassos, 1944
PARDIATOMIDAE  roundae  n. sp.

Several specimens of this parasite were obtained from the gall bladder of the Calotropis versicolor at Aurangabad. The specimens were studied in live condition.

The body of the fluke is almost round in shape with dorsoventrally flattened. The body is smooth. It measures 4.1 to 5.29 in length and maximum width 3.99 to 5.18 at posterior region. The oral sucker is terminal in position and the mouth opening is slightly subterminal. The oral sucker measures 0.72 in length and 0.42 in width. The ventral sucker is slightly larger than oral sucker. It lies at distance of 0.35 to 0.79 from the oral suckers. The diameter of ventral sucker is 0.57 to 0.62. The mouth opens into globular pharynx with a diameter of 0.12 to 0.13. The oesophagus is absent. The caeca are much elongated, wide and sea like. They are reaching upto 3.35 to 3.54 from the bifurcation with a maximum width 0.30 at posterior region.
Paradiatocidae roundae n. sp.

Fig. A Entire fluke, ventral view.
B Eggs.
The testes are nearly round, ventral to caeca and are acetabular in position, lying on either side of the ventral sucker. The right testis is in the mid-line of acetabulum. It measures 0.73 in length and 0.40 in width. The left testis lies posterolateral to acetabulum and measures 0.69 in length, 0.35 in width. The cirrus sac is small and lies on the left caecum at bifurcation. It measures 0.41 in length, 0.06 in width. The seminal vesicle is very much coiled, the pars prostatica is comparatively larger. The cirrus is long, muscular and extended, 0.24 in length, 0.06 in width. The genital pore is submedian.

The ovary is postacetabular, submedian, lying near the right testis. It is nearly rounded with a diameter of 0.54 to 0.57. The receptaculum seminis lies at the level of ovary and measures 0.23 in diameter. The shell gland is prominent, 0.10 in diameter. The Laurer's canal is well developed, 0.09 in length, 0.02 in width. The vitellaria are thick, well developed and are arranged in a single row on either side of the body, starting from the acetabular level and extending back up to slightly anterior to caecum. The uterine coils reach up to the tip of the posterior end. The eggs are oval, brown and measure 0.035 to 0.038 by 0.011 to 0.019.
DISCUSSION

Travassos, 1944 created the genus *Paradiatomoidea* with *P. oregarium* as the type species. At present some 15 species are described under this genus: *P. ceratophora* (Bellfus, 1923) Travassos, 1944; *P. Coutaleni* Debloed et al., 1962; *P. excalota* (Tubangui, et al., 1935) Travassos, 1944; *P. neckorum* (Chalero, 1929) Travassos, 1944; *P. indicus* Narain et al., 1929; *P. intestinalis* Sinha, 1958; *P. malayanus* Salasing, 1964; *P. agheki* (Chalero, 1936) Travassos, 1944; *P. orientalia* (Narain et al., 1929) Travassos, 1944; *P. otoxinogusa* (Chalero, 1929, Travassos, 1944; *P. salgana* (Tubangui, 1933) Travassos, 1944; *P. apatulata* Sinha, 1958; *P. lanceolata* Sinha, 1958; *P. suliba* Kaikabad, 1972.

Odenning, 1964 placed this genus in the subfamily Leipertrermatinae without taking into consideration the marked differences in the body shape and different host parasite relationships. But author agrees with Yamaguti, 1971 in retaining the genus *Paradiatomoidea* in the subfamily Dicrocoeliinae and tribe *Paradiatomini*.

It resembles *P. otoxinogusa*, *P. orientalia* and *P. suliba* in certain characters. But, it differs from *P. otoxinogusa* in the length and
broadth ratio (1:1 against 1:2.5) and in other characters. In the present form the oesophagus is practically absent, but it is present in *P. orientalis*. The fluke under discussion and *P. orientalis* differ in the position of genital pore, i-n the position of cirrus sac and in the topography of gonade. It also differs from *P. sulibii* in the topography of gonade, in the sucker ratio (1:1.4 against 1:0.24) and the position of the genital pore.

In addition to these characters the length and breadth ratio study also differs from all the known species in having almost rounded shape of the body.

In view of the distinctive features exhibited, the fluke under study is considered to be new to science. It is proposed to name it *Paradistomacidae rundae* n.sp.

<table>
<thead>
<tr>
<th>Host</th>
<th>Calotus versicolor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Habitat</td>
<td>Gall bladder</td>
</tr>
<tr>
<td>Locality</td>
<td>Aurangabad, Maharaashtra, India.</td>
</tr>
</tbody>
</table>
ANCHITREMATIDAE (Mehra, 1935) Status and Spelling amended Yamaguti, 1977

Anchitrematinae Ogata, 1954

Anchitrema Looss, 1899

Syn. Exorchococlius Thaper, 1931

Anchitrema sanguineus (Sonsino, 1904) Looss, 1899

Two specimens were collected from the intestine of Chamaeleon sp. at Aurangabad

The fluke is elongated with round ends. It measures 4.7 to 5.2 in length and 1.30 maximum width attained in the acetabular region. The cuticle is spinous from the anterior level of the oral sucker up to the anterior level of testes. The oral sucker is subterminal and measures 0.36 to 0.37 in diameter. The mouth opens into a globular pharynx measuring 0.34 by 0.18 in size. The oesophagus is absent. The intestinal caeca are broad in the anterior third of the body, measuring 0.11 in width and simple in the remaining part, extending to the posterior end. The ventral sucker is slightly smaller than the oral, situated in the anterior third of the body and measures 0.34 to 0.36 in diameter.

The testes are extracapsual, oval and situated symmetrically near ventral sucker. The right testis measures 0.57 by 0.37 and the left 0.55 by 0.36 in
Anchitrama parvina (Sensino, 1894) Looss, 1899

Figs. A Entire fluke, ventral view
     B Egg
dimensions. The seminal vesicle is situated just behind the intestinal bifurcation and preacetabular. It is round, bilobed and covered with thin wall, 0.35 by 0.23 in size. It opens into the genital atrium near anterior margin of the acetabulum.

The ovary is postacetabular, spherical, intercascal and situated slightly in between posterior end of testes measuring 0.32 by 0.35 in diameter. The seminal receptacle is larger, pear shaped and behind the ovary. The small gland cells are not observed. The uterus is intercascal occupying more of the space in the intestinal caecae and extending to the posterior end of the body.

The vitellaria consists of long follicles are reticulate type; extending laterally from posterior margin of testes into the posterior third of the body and are extracascal but overlapping the caecae. The eggs are oval, small and numerous brown in colour measuring 0.020 to 0.025 by 0.010 to 0.012 in size.

The excretory vesicle is 'Y' shaped and the excretory pore is terminal forming the bulb.

COMMENTS

In having ovary posttesticular and testes extracascal, and vitellaria in posttesticular lateral
lateral fields, the present fluke belongs to the genus *Anchitrama* Looss, 1899. Thaper, 1934 erected a new genus *Exarchococciuim*. But, Panda (1935) synonymised the genus *Exarchococciuim* with *Anchitrama* Looss, 1899 described the genus *Anchitrama* and transferred *Diamon* *sanguineum* Sensine, 1894, to the genus *Anchitrama*. Schnee, 1910 reported these forms from Chamaeleones and the bats. Panda, 1936; Sisra, 1958; Guvedar and Chauhan, 1969 and Ruly, 1972 reported their parasites from bats and chamaeleons from India.

So far, seven species of this genus described from reptiles and mammals. The species are as follows:

1. *Anchitrama sanguineum* Sensine, 1894
2. *A. latum* Gedoelst, 1919
4. *A. complanata* (Sanground, 1931) Yamaguti, 1950
5. *A. indicum* (Thaper, 1934) Panda, 1936

In all essential features the present fluke resembles *A. sanguineum* Sensine, 1894 except in having an exceptionally broad intestinal caecae in the anterior part of the body and in the body measurements. The vitellaria are round in *A. sanguineum* but follicular in
present form. Therefore, these differences are considered as intraspecific and the fluke is reported as *A. anguineus* Sensine, 1994.

<table>
<thead>
<tr>
<th>Host</th>
<th><em>Chamaeleon</em> sp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Habitat</td>
<td>Rectum</td>
</tr>
<tr>
<td>Locality</td>
<td>Aurangabad, Maharashtra, India</td>
</tr>
</tbody>
</table>
ACANTHOSTORIDAE Poche, 1926
Acanthostominace Nicoll, 1914
Acanthostoma Loose, 1899
Syn. Gymatremes Morozov in Skrjabin, 1955; Proctoecaemen Scuh, 1957
Acanthostoma aluearskii Kalyankar, 1977

The several flukes of this species were collected from the intestine of Crocodile, *Crocodylus palustris* at Bandar during the survey of helminth parasites of which two of the specimens are found to be abnormal.

The body is elongated, cylindrical, transparent and measures 9.6 to 11.5 in length and 0.48 in width at oral sucker, 0.80 at acetabular and 0.80 in width in the region of testis. The cuticle is smooth. The oral sucker is terminal and measures 0.71 by 0.41 in size being broader anteroposteriorly. It is devoid of spines. The ventral sucker is situated at 2.1 from the anterior end. It is round in shape and measures 0.26 in diameter, being smaller than the oral sucker. The ratio of the two suckers is 3:1. The oral sucker is followed by a long prepharynx, 0.52 in length, 0.10 in width. The pharynx is large and more or less globular in shape, measuring 0.37 by 0.22. The oesophagus is very short and immediately divides in the intestinal caeca. The
Acanthostegaum alusarskii Kalyankar, 1977

Figs. A. Entire fluke, ventral view
B. Eggs.
point of the bifurcation is little away in front of the ventral sucker. The caeca are broad at the level of bifurcation and narrower to the posterior extremity. The caeca extend posteriorly to a short distance from the posterior end and open to the outside by anal pores.

Testis is intercaecal, median, spherical with entire margin and is situated at the posterior part of the body, a small distance from the posterior extremity, measuring 0.90 to 0.94 by 0.45 to 0.48. The seminal vesicle is large behind the ventral sucker. It is loosely coiled and continued into a small spinous ductus ejaculatorius, that opens at the genital pore anterior to ventral sucker. The ductus ejaculatorius is spinous. A cirrus or cirrus sac is absent.

The ovary is spherical in shape, 0.30 to 0.32 in diameter and lies to the right of the median line in front of the testis. The ovudct arises from the middle of the ovary and opens into the ootype situated slightly between left margin of the ovary and surrounded by shell gland cells, opening into the ootype from the posterior side is the duct of the seminal receptacle, which is situated behind the ovary. The Laurer's canal is not observed. The vitellaria are strongly developed and consist of small rounded compact follicles. They
are situated on the lateral sides of the body, mostly covering the intestinal caeca and extending from just above the middle of the body to the midlevel of the ovary. The uterus arises from the ostype and passes anteriorly, describing small transverse coils between the ovary and the basal sac-like portion of the seminal vesicle. Anteriorly it runs more or less parallel to the latter and opens at the genital pore. The eggs are small, oval, operculated with yellowish brown shells, measuring 0.032 to 0.035 by 0.014 to 0.015. The excretory pore lies at the posterior end of the body and leads into an elongated excretory bladder extending as far forward as the anterior end of the ovary where it divides into two cornua. The lateral excretory ducts extend anteriorly along the sides of the body up to the pharynx.

COMMENTS

Lancee, 1899 erected the genus, *Acanthostomum* for the fluke he collected, *A. spinicera* and *A. coronaria*. A year later (1900) the same author changed the generic name to *Acanthocheilum* on the ground of preoccupation of the name *Acanthostoma* by a genus of an insect, subsequently Braun, 1899 added another species, *A. acyphocaphalus*, while Odhner, 1902 described two species, *A. productus* and *A. vicinia* respectively. Pocha, 1925 pointed out that since the name *Acanthostoma* and not *Acanthostomum*
was preoccupied proposed by Loose was against the rules of zoological nomenclature and therefore on the grounds of priority the name Acanthocotylyx was retained. So far, the 15 species are described from the reptilian hosts. The present author deals with the abnormality of the form of i.e. A. aluarkerii Kalyankar, 1977 from the intestine of a Crocodile, Crocodylus palustris at Nanded.

After detail examination of the collection the author found some abnormal characters in the fluke which are as follows:

1. Sucker ratio is 3:1
2. devoid of spines on the body
3. Spines are absent on the oral suckers
4. Ejaculatorius ductus spinose
5. Two anal openings open outside the body
6. Single testis

But in all other essential characters it resembles the species A. aluarkerii Kalyankar, 1977 and hence, it is considered the same species.

<table>
<thead>
<tr>
<th>Host</th>
<th>Crocodylus palustris</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>Intestine</td>
</tr>
<tr>
<td>Locality</td>
<td>Nanded, Maharashtra, India</td>
</tr>
</tbody>
</table>
ECHINOSTOMATIDAE (Looss, 1902) Poche, 1926
Singhiatrematinae (Sinha, 1962) Spelling
Emended Yamaguti, 1971
Singhiatremus Sinha, 1954
Singhiatremus alii n.sp.

The flukes were collected from the intestine of Dhama. *Trochidionotus dissipatus*, at Aurangabad during the survey of helminth parasites of vertebrates in year 1973.

The fluke is elliptical in shape measuring 1.63 to 1.89 in length and width 0.84 being broadest in the acetal- bular region. The cuticle is smooth. The oral sucker is round and terminal measuring 0.33 in diameter. The head crown is surrounding the oral sucker, carries 14 to 16 spines arranged into two groups, 7 to 8 in each group and interrupted dorsally. The anterior spines measuring 0.024 in length and posterior ones 0.011 in length. The prepharynx is absent. The pharynx is globular and measures 0.19 in length and 0.09 in width. The oesophagus is broad and smooth measuring 0.15 mm. in length and 0.08 in width. The caeca narrow than oesophagus, reaching upto the anterior end of testes. The caeca measuring 0.75 in length from the bifurcation, 0.045 in width at posterior extremity. The acetabulum is large measuring 0.67 in diameter and placed at the distance 0.71 from the oral sucker. The ratio between the oral sucker and acetabulum is 1 : 2.5.
Sinothoracinae siliii n. sp.

Figs.  
A Entire fluke, ventral view  
B Head collar with spines  
C Egg.
The genital opening situated in between and anterior level of acetabulum. The excretory pore is subcaudal, the excretory bladder elongated, placed in between the testes. The median stoma ramify into two limbs which reaches to the pharyngeal region.

The testes are lobed, posteriorly placed, and longer than broad. The right testis is slightly longer than the left one and measures 0.38 in length, 0.11 in width and 0.36 in length, 0.14 in width respectively. The cirrus sac is thin walled, placed between the bifurcation of oesophagus and acetabulum transversely. It contains bilobed seminal vesicle and sucker like structure at the common genital opening.

The ovary is kidney shaped, lies in front of the right testis at the submedian line, measures 0.29 in length, 0.04 in width. The vitellaria are follicular, starts from behind the middle of acetabulum and extends beyond the caecal ends. The uterine coils are confined in between acetabular and testicular region. The eggs contain fully developed miracidia with large eye spot, and measures 0.073 to 0.076 by 0.035 to 0.036.

DISCUSSION

The collar spines in single row interrupted dorsally and having caeca short and vitellaria postoesoacal
and limited, it belongs to the subfamily Sinchiatriomatinae Sinha, 1962. Sinha, 1954 erected a new genus Sinchiatria with S. singhia as type species for the flukes collected from the rectum of Ptyas (zamonia) mucosa in Hyderabad. Seven species are added to this genus all from India. Other species are as follows:

1. S. hyderabadensis Sinha, 1958
2. S. lalit Chakrabarti, 1967
3. S. longifurca Sinha, 1958
4. S. najae Chattopadhyaya, 1967
5. S. nicotera Duvedi, 1969
6. S. trachodonota Sinha et al., 1970

Sinha, 1954 included his new genus Sinchiatria in the family Echinostomatidae (Looss, 1902) Pecht, 1926. Dubois and Mohan, 1959 erected a subfamily Comatobranchiinae and included the genus Comatobranchus and Sinchiatria in this new subfamily. Sinha et al., 1966 and Yamaguti, 1971 do not agree to include Sinchiatria in the subfamily Comatobranchiinae as suggested by Dubois and Mohan, 1959. The author also agrees with the view expressed by Yamaguti, 1971 for the very reason that the collar spines present in Sinchiatria and totally absent in the genus Comatobranchus.
Chattopadhyay, 1966 considered *S. hyderabadense* as a synonym of *S. longifurca*. The fluke under discussion resembles *S. elongotesticulata* in having sucker ratio 1:2.5, in host and locality. But it differs from *S. elongotesticulata* in number of collar spines (i.e. 14 to 16 in the present form against 22). It also differs in not having tubercles on the body and the testes tubular. The present form differs from all other species in having 16 collar spines.

Therefore, a new species is erected to accommodate the present form and it named as *S. alii* n. sp.

**Host**  
*Trepaidonotus piscator*

**Habitat**  
Intestine

**Locality**  
Aurangabad, Maharashtra, India.
ECHINOSTORATIDAE Pocha, 1926

Echinostomatinae (Loose, 1899) Faut, 1929

Syn. Echinostominae Loose, 1899

Nephrorhynchus Dietz, 1909

Nephrorhynchus nasirae n.sp.

Two flukes were recovered from the intestine of Ardeola gravis during the survey of helminth parasites of vertebrates.

The body of the fluke is cylindrical, elongate and round at both the ends. The body of the fluke is reddish coloured when alive. The cuticle is smooth. It measures 0.62 to 10.75 in length, width at the collar region 0.8, at the ventral sucker, 1.38 and 1.72 being the broadest in the posterior region. The head collar is reinforced with a shallow dorsal incision and single dorsally interrupted row of 55 to 59 spines which are very small dorsally and become larger towards the sides. The dorsal spines measure 0.019 in length, 0.009 in width. The middle spines measure 0.033 in length, 0.024 in width and the ventral spines measure 0.057 in length, 0.033 in width. The oral sucker is ventral and measures 0.13 to 0.19 in dimension. The acetabulum is situated in the first quarter of the body. It is produced backwards and measures 1.6 in average length and 1.15 in
Nephrostoma nasirae n. sp.

Fig. A  Enterofluke, ventral view.
B  Eggs.
average width. It has a depth of 1.4. The prepharynx is absent. The mouth leads in a muscular pharynx measuring 0.37 in length, 0.22 in width. The oesophagus slender, 0.22 in length, 0.09 in width. The caeca are serpentine and terminate at a distance of 0.35 from the posterior end of the body.

The testes are tandem, nearly rounded and located in the postequatorial region of the body. The anterior testis measures 0.50 in diameter while posterior 0.52 in diameter. The cirrus sac is situated dorsal to the acetabulum and not superposed by the anterior margin of the ventral sucker. It measures 0.45 in length, 0.18 in width. It encloses bilobed seminal vesicle, 0.30 in length, 0.15 in width. The cirrus is small. The genital pore opens just below the anterior margin of acetabulum and directed laterally.

The ovary is pre-equatorial nearly trilobed and measures 0.41 in length, 0.18 in width. Shell gland cells are diffused and posterosilateral to the ovary. The vitellean follicles are round, extending from the middle region of the acetabulum up to the posterior region of the body. The uterus is long strongly winding and contains small eggs. The eggs measure 0.09 to 0.011 by 0.045 to 0.047. The excretory pore is terminal which bears a small stem and bifurcates into branches.
DISCUSSION

In possessing undivided body, unembryonated eggs, single row of collar spines not interrupted dorsally, it belongs to the subfamily Echinostomatinae (Loose, 1899) Faust, 1929 and to the family Echinostomatidae Pocas, 1926. In having vitellaria more or less up to ovary level, uterus long, acetabulum very close to anterior extremity, the fluke under discussion belongs to the genus Nephrostomum Dietz, 1909.

So far eleven following species are added to the Nephrostomum Dietz, 1909.

1 N. ranunci (Sons., 1899) Dietz, 1909 (Type species).
2 N. nicolai Tubangui, 1933
3 N. gerzatiae (MacCallum, 1904) Odhner, 1910
4 N. leconum Ukeli, 1967
5 N. linea Travassos, 1922
6 N. robustum Perez Viguera, 1944
7 N. sinchirooai Ibanez, 1966
8 N. skrjabini Kasimov et al., 1959
9 N. reticulatum Karyakarta, 1969
10 N. chandiigraensis Gupta, 1971

The present fluke differs from all the known species in having certain peculiar characters.
Skrjabin, 1928 considered the number of collar spines as a specific character for separating the species and gave the key of four valid species. The author also agrees with Skrjabin considering collar spines as a specific character.

The present form under discussion differs from all the known species in having 56 collar spines. However, in some characters the present fluke resembles to *M. dubashi*, *M. reticulatum* and *M. ramosum*. But, it differs from *M. dubashi* in the topography of gonad and the extension of vitellaria, from *M. reticulatum* in not having spines on the body surface, size and shape of the testes and in the extension of vitellaria and from *M. ramosum* in the shape of the intestinal caeca, in the extension of vitellaria and in the size and shape of the testes.

Considering these specific characters a new species is erected and named as *M. nasirae* n. sp.

<table>
<thead>
<tr>
<th>Host</th>
<th>Ardea gravis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Habitat</td>
<td>Intestine</td>
</tr>
<tr>
<td>Locality</td>
<td>Aurangabad, Maharashtra, India.</td>
</tr>
</tbody>
</table>
ECHINOSTOMATIDAE Poche, 1920

Echinocochasinae Odhner, 1910

Syn. Allechinostomatinae Sudarkov, 1950

Echinocochasus Dietz, 1909

Syn. Monilifer Dietz, 1909

Heterocochasus Odhner, 1910

Valasenthorus Mandheira, 1940

Echinocochasus andersoni n.sp.

Fifteen paddy birds were examined in the month of December, 1976 to collect the helminth parasites out of them one bird was infected with the above flukes. Ten mature specimens were recovered from the intestine of the host. They are delicate, milky in colour and difficult to mount ventrally.

The body of the fluke is elongated and minute. It measures 1.09 to 1.74 in length and the breadth at the collar region is 0.8, at the ventral sucker 0.13 and 0.38 at posterior extremity. Body is covered with two rows of spines reaching upto the anterior level of the acetabulum. The spines of the first row measuring 0.016 and inner row of spines 0.009 in length. The head collar is provided with 22 dorsally interrupted spines, measuring 0.026 in length. The oral sucker is subterminal measuring 0.18 in diameter. It leads into a prophyxynx, 0.05 in length and 0.02 in width. The pharynx is round with
Echinocotylus anderssoni n. sp.

Fig.  A  Entire fluke, ventral view
    B  Head collar with spines
    C  Eggs.
diameter of 0.23. The pharynx Leads into a broad oesophagus measuring 0.14 in length and 0.07 in width. The oesophagus bifurcates at one fourth of the body length, into two intestinal caecae which run posteriorly, just behind to the posterior testes of the fluke. The ventral sucker is round measuring 0.41 in diameter.

Testes are median and situated in the posterior part of the body. They are close to each other. The anterior testis is somewhat oval measuring 0.31 to 0.14 and posterior testis is globular measuring 0.38 to 0.21. The cirrus pouch elliptical, overlapping to acetabulum and placed in between the bifurcation of the intestinal caecae and ac-estabulum. It measures 0.22 in length and 0.09 in breadth. The seminal vesicle constricted into two parts of which posterior is larger than the anterior. The paraprostatica is not differentiated. The genital opening is somewhat submedian.

The ovary is round, postequatorial placed between the anterior testis and acetabulum. It measures 0.14 in diameter. The vitellaria consist of small follicules measuring 0.09 and extending anteriorly up to the posterior level of the acetabulum while posteriorly they are distributed all along the available space. The uterine coils are few and restricted in between the anterior testis and acetabulum. The eggs are 12 to 15 in number,
operculated and embryonated, measuring 0.065 to 0.070
by 0.035 to 0.038.

DISCUSSION

The present form under discussion resembles with
the following species in having 22 collar spines, namely
Echinochaeta (Echinochaeta) schwartzi Price, 1931;
E. (E.) geraski Yamaguti, 1939; E. (E.) milvi Yamaguti,
1939; E. (E.) mirue Mandheim, 1940; E. (E.) suryacoma
(Loose, 1896) Baschkirova, 1941; E. (E.) oehansi Rao,
1951; E. (E.) macroacetabula Leonov, 1958; E. (E.)
microacetabula Gratien et Morin, 1961; E. (E.)
minutus Karyakarta, 1973; E. (E.) vindhianae Vasudev et T.
it differs from all above mentioned species in having the
rows of spines on the body unto the anterior level of
acetabulum starting from the anterior or collar head
region. It also differs from the following species in
sucker ratio E. (E.) geraski 1:3; E. (E.) oehansi 1:3;
E. (E.) minutus 1:4; E. (E.) vindhianae 1:4; E. (E.)
zubadakhanam 1:1.4 but, in the present form sucker
ratio is 1:2.3. It comes closer to E. (E.) schwartzi in
sucker ratio 1:1.7 to 1:2.5 and body measurement. But it
differs in having the cuticular spines scale like in
diagonal rows on right side of the anterior part of the
body in E. (E.) schwartzi but not in the present form.
It also differs in extension of vitellaria upto the near the level of ovary but in present form upto the posterior level of the acetabulum. Its \( L. (E. ) \) kubadakhanam Nasir et Diaz, 1968 the vitellaria extend forward to anterior border of acetabulum whereas, in the present form vitellaria extend upto the posterior level of the acetabulum. It also differs in the body dimensions even the host and locality from the present form.

It also differs from \( L. (E. ) \) minutus in extension of caeca, in sucker ratio, body measurement and dimension of the eggs i.e. 0.068 to 0.075 by 0.039 to 0.043 against 0.086 to 0.095 by 0.029 to 0.031 and the host. It also differs from \( L. (E. ) \) vindhianae in the extension of vitellaria upto the middle of acetabulum against upto the posterior level of acetabulum and in deposition of the gonads.

These differences are sufficient to justify the erection of a new species and hence named as \( L. (E. ) \) andersoni n.s.p.

<table>
<thead>
<tr>
<th>Host</th>
<th>Ardeola gravii</th>
</tr>
</thead>
<tbody>
<tr>
<td>Habitat</td>
<td>Intestine</td>
</tr>
<tr>
<td>Locality</td>
<td>Aurangabad, Maharashtra, India.</td>
</tr>
</tbody>
</table>

The type specimens are deposited in the Zoological Museum of the Marathwada University, Aurangabad, Maharashtra, India.
DICROCOELIIDAE (Looss, 1899) Odhner, 1910

Dicrocoeliinae Looss, 1899

Lutztromatini Yamaguti, 1958

Lutztrome Travassos, 1941

Lutztrome monanterson (Price et McIntosh, 1935)

Travassos, 1941

The flukes were collected from the gall bladder of the host. The host is unidentified bird but the local name for the bird is Bardi at Shandara district (Pimpri), Maharashtra, India.

The fluke is fusiform, rounded at the extremities, 2.93 to 3.51 long and 0.35 in width being broadest in the region of testes. The cuticle is thin and smooth. The oral sucker is subterminal and measures 0.11 to 0.12 in diameter, while the acetabulum has a diameter of 0.27 to 0.32. The ratio of diameters of the oral sucker to acetabulum 1:2.9. The prepharynx is absent. Pharynx globular or subglobular, 0.05 to 0.06 in diameter. The oesophagus leads straight into a single intestinal cecum which passes dorsal to ventral sucker, to the side of anterior testis, between the two testes, and between the posterior testis and the ovary. It runs in a sinuous course, terminating nearer to posterior extremity of the body.
Lutjstrama monenteron (Price et McIntosh, 1935)
Travassos, 1941

Fig. A  Entire fluke, ventral view
Fig. B  Eggs.
Testes are tandem, postacetabular, pre-equatorial and ovoid. The anterior testis measures 0.24 to 0.27 in diameter. The posterior testis is slightly smaller than the anterior and measures 0.24 to 0.26, in diameter. The cirrus sac is preacetabular and flask-shaped. It measures 0.22 in length and 0.07 in breadth. It encloses the folded seminal vesicle, with short cirrus. The genital pore is submedian on the right side of the oesophagus.

The ovary is round and smaller than testes. It is post-testicular and located on the equatorial place. It measures 0.16 to 0.17 in diameter. The seminal receptacle and shell gland is well developed and located slightly posterior to the ovary. The vitellaria consisting of large follicles overlapping at the posterior margin of the ovary, due to this condition, the vitellaria form the horseshoe shaped structure. The uterus is with greatly convoluted descending and ascending limbs, fills all the posterior part of the body. The coils of the uterus separate the two testes from each other. The eggs are dark brown with thick shell. It measures 0.033 to 0.041 in length and 0.017 to 0.019 in breadth.

COMMENTS

The genus Lutzthera was created by Trausas in 1941 for the species with an elongate body, ventral
sucker considerably larger than the oral sucker; a simple fairly long caecum, testes quite close to each other and nearly in tandem, vitellaria composed of a few large follicles beyond the ovary and tending to meet in the midline and a cirrus opening behind the pharynx.

*Lutztrama mononteron* was described by Price and McIntosh, 1935 from *Eristaque rudicule* in 1940 it was transferred by Stora to the genus *Brachylichi* Then in 1941 to Travassos newly created genus *Lutztrama*. The present form resembles in all essential characters to *L. mononteron*. Some of the variations in the size, shape and in position of various organs are given in the Table 1.

However, these differences do not warrant the creation of a new species and are considered as intraspecific variations of the same species. This species is reported for the first time from India.

<table>
<thead>
<tr>
<th>Host</th>
<th>Unidentified bird</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Local name)</td>
<td>Baddi, Shandara district, India</td>
</tr>
<tr>
<td>Location</td>
<td>Gall bladder</td>
</tr>
<tr>
<td>Locality</td>
<td>Shandara, Maharashtra, India</td>
</tr>
<tr>
<td></td>
<td>L. monenteron Price and McIntosh, 1935</td>
</tr>
<tr>
<td>-----------------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td>Length</td>
<td>1.2-5.2</td>
</tr>
<tr>
<td>Breadth</td>
<td>0.63-0.67</td>
</tr>
<tr>
<td>Oral sucker</td>
<td>0.12-0.17</td>
</tr>
<tr>
<td>Ventral sucker</td>
<td>0.17-0.32 x</td>
</tr>
<tr>
<td></td>
<td>0.2-0.3</td>
</tr>
<tr>
<td>Anterior testis</td>
<td>0.14-0.26 x</td>
</tr>
<tr>
<td></td>
<td>0.25-0.36</td>
</tr>
<tr>
<td>Posterior testis</td>
<td>0.14-0.26 x</td>
</tr>
<tr>
<td></td>
<td>0.25-0.46</td>
</tr>
<tr>
<td>Ovary</td>
<td>0.09-0.13 x</td>
</tr>
<tr>
<td></td>
<td>0.1-0.22</td>
</tr>
<tr>
<td>Eggs</td>
<td>0.032 x 0.016</td>
</tr>
<tr>
<td></td>
<td>0.016-0.024</td>
</tr>
<tr>
<td>Locality</td>
<td>North America</td>
</tr>
</tbody>
</table>

All measurements are in mm.
PARAPHRISTOMIDAE Fischoeder, 1901
Paraphristominae Fischoeder, 1901
Cotylephoron Stiles et Goldberger, 1910
Cotylephoron ovia n. sp.

The amphistomes were collected from the rumen and reticulum of Ovia bharal at Aurangabad in the month of January 1976, during the survey of helminth parasites of vertebrates. The colour of the flukes were light red in living condition.

The body of the fluke is elongated, with anterior and somewhat tapering dorsally. It measures 9.56 to 13.46 in length and 3.22 maximum breadth in the testicular region. The oral sucker is terminal, without diverticles. It measures 0.85 in length, 0.87 in breadth. The mouth opens into a long oesophagus is simple and smooth. It measures 0.65 to 0.94 in length and 0.15 to 0.22 in width. The intestinal caeca are sinus and reaching to the caudal end. The acetabulum is large than the oral sucker and situated at the posterior extremity. It is almost rounded and measures 2.1 to 2.3 in diameter. The ratio of oral sucker to acetabulum is 1:2.2. The genital sucker is well developed and situated behind the bifurcation of the intestinal caeca. It measures 0.55 to 0.62 in diameter. The ratio of genital sucker with the oral sucker is 1:1.5 to 1:2.1.
Cotylophoron ovig n. sp.

Figs. A Entire fluke, Ventral view
B Eggs.
The testes are lobed, tend to and close to each other. They are situated nearly in the middle of the body. The anterior testis measures 1.49 to 1.71 by 0.79 to 0.79 and posterior testis measures 1.04 to 2.59 by 0.55 to 0.91. The seminal vesicle is coiled. The parimusculosa, genital papillae are well developed. The genital pores lie midventral to genital sucker.

The ovary is round, median, situated in between posterior testis and acetabulum. It measures 0.55 to 0.57 by 0.34 to 0.41. The uterus is coiled, mainly is between the genital sucker and anterior testis. It contains with eggs. The eggs measure 0.14 to 0.16 by 0.05 to 0.06. The vitellaria consist of large follicles, extending from the posterior part of the oral sucker up to the anterior region of acetabulum and surpass the caecal ends.

The vitelline ducts unite to form the vitelline reservoir posterior to ovary. The Laurer's canal is long and crossing the excretory vesicle. The excretory vesicle is tubular. The excretory arms reaching up to the oral sucker.

DISCUSSION

Yamaguti, 1971 included under the subfamily Paramphistominae from mammals, four genera, namely,
Ugandocotyle, Calicophoron, Cetylophoron and Paramphistomum. Stiles and Goldberger, 1910 erected the genus Cetylophoron to accommodate Paramphistomum cetylophorum Fischeider, 1901. They have separated the genus Cetylophoron from the genus Paramphistomum on the basis of the presence of genital sucker in the former. Fukui, 1929 did not recognised the importance of genital sucker and proposed a new subgenus Cetylo-
phorus to a genus Cetylophoron. Maplastora, 1923, Stunkard, 1925 and Yasaguti, 1971 rightly recognised the Cetylophoron as a valid genus.

Some 13 species are added to this genus until now. Price and McIntosh, 1953 removed Cetyphon celynum species from Cetylophoron because, in this species the Laurer’s canal does not cross the excretory vesicle.

It differs from all the known species except C. jakeesi Nassaurk, 1937 in the body length, ratio of the oral sucker and ventral sucker ratio of the body with ventral sucker and ratio of ventral sucker with genital sucker.

The present fluke resembles C. jakeesi Nassaurk, 1937 in body length and oesophagus smooth and long, but it differs markedly from the C. jakeesi, in the absence
of pharynx and in the ratio of oral sucker to the
genital sucker (1 : 1 in \textit{C. jakschi} whereas, 1 : 1.5
1 : 2.1 in the present form). The ratio of oral sucker
to ventral sucker also differ in the two (1 : 1.5
against 1 : 2.2 in the present form).

In view of the characters mentioned above and in
view of the fact that the East African species is
reported from \textit{Alcalaphysia geesi}, and the present form
from \textit{Ovia bharal} from India, it is regarded as new
and named as \textit{C. ovia} n. sp.

\begin{tabular}{ll}
Host & \textit{Ovia bharal} \\
Habitat & Stomach \\
Locality & Aurangabad, Maharashtra, India. \\
\end{tabular}

The type specimens are deposited in the Parasitology Section, Department of Zoology, Marathwada University, Aurangabad, India.
PART I

SUMMARY

1. *Euceradua yashoda* n. sp. is described from *Marina water fish* *Stromatopus niger*.

2. *Lepeophtheirus hypselobaeri* (Billett, 1898) Ejsmont, 1932 is reported first time from Marathwada region.

3. *Clinostomum speciosum*, is reported from a new host with some morphological variations in the characters.

4. A new species of the genus *Paradistomoidae* is recovered from *Calotes versicolor*.

5. *Anchitrema sanguineum* is redescribed from *Chamaeleon* sp. with some variations in the morphological characters.

6. *Acanthotrema alskii* is described for the first time with abnormal characters.

7. *Sinclastotrema alii* is recovered from *Tresidionotrema piecator*.

8. *Nephrostomum nasirae* is described from *Ardea gravis*.

9. A new fluke of the genus *Echinochasmus* is recovered from *Ardea gravis*.

10. *Lutztrema monenteron* is described for the first time from India.

11. A new species of the genus *Cotylocoron* is recovered from *Ovis bharal*.