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Binder 047, Dicrocoelidae *Lypersomum* [Trematoda Taxon Notebooks]

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Key to genera of Lypersomini

Ceca terminating at posterior extremity; suckers weakly developed, close to each other ..... *Corrigia*
Ceca terminating at some distance from posterior extremity; suckers well developed, not so close to each other ..... *Lyperosomum*

Lyperosomum Looss, 1899

Oswaldoia Travassos, 1919, *Dicrocoelioides* Dollfus, 1954, merged

Generic diagnosis. — Dicrocoeliidae, Dicrocoeliinae, Lyperosomini: Body more or less slender or lanceolate. Oral sucker subterminal, well developed, esophagus short, ceca terminating some distance short of posterior extremity. Acetabulum subequal to oral sucker, often definitely larger, situated within anterior third of body, occasionally at its posterior end. Testes rounded, diagonal or tandem, postacetabular. Cirrus pouch pre-acetabular. Genital pore at level of posterior end of pharynx or esophagus. Ovary spherical, submedian, posttesticular, usually in middle third of body. Receptaculum seminis and Laurer's canal present. Uterine coils occupying most of hindbody; eggs small, brown when mature. Vitellaria variable in extent, commencing at level of testes or behind it. Excretory vesicle tubular, long, bifurcating into wide arms; flame cell formula of $2\times6\times3$ type in *L. corvi* (Yamaguti, 1930). Parasitic in biliary duct or bladder of birds, exceptionally of mammals.

Genotype: *L. longicaule* (Rud., 1809) Looss, 1899 (Pl. 61, Fig. 787), in *Corvus cornix;* Europe. Also in *Trypanocorax rugilegus, Corvus corone, C. cornix, Garrulus glandarius, Luscinia luscinia, Sturnus vulgaris, Turdus merula, T. philomelos, Pica pica, Anthus arboreus, Lanius collurio, Aquila clanga;* Europe.

Other species:

L. alagesi Skrjabin et Udinzew, 1930 in *Pica pica;* Armenia, Kirgizia.

L. alaudae Shtrom et Sondak, 1935, in *Alauda arvensis cantarella;* Transcaucasia.

L. clathratum (Deslongchamps, 1824) Bhalerao, 1926, in *Apus apus;* Europe.

L. collurionis Skrjabin et Issaitschik., 1927, in *Lanius collurio;* Russia.

L. corvi (Yamaguti, 1939) in *Corvus corone*, Japan.

L. direptum Nicoll, 1914, in *Crax nigra* (= *C. alector*), Guiana, S. America.

L. dujardini Shtrom et Sondak, 1935, in *Prunella modularis obscura;* Transcaucasia.

L. fringillae Layman, 1923, in *Fringilla coelebes;* Russia.

L. kalmikense (Skrjabin et Issaitschikoff, 1927) in *Chelidon urbica;* Russia. Skrjabin and Evranova (1952) transferred this species to *Skrjabinus*.

L. oswaldoi (Travassos, 1917) in *Rhamphocoelus brasilicus, Trachyphonus coronatus, Molothrus bonariensis bonariensis, Cacicus haemorrhous, Myiospiza humeralis humeralis, Odontophorus capueira capueira;* Brazil. Type of subg. *Oswaldoia*.

L. pawlowskyi (Strom, 1928) in *Crex crex, Dendrocopus leuconotus* (= *Dendromas l.*) and *Porzana porzana;* Russia.

L. petrovi Kassimov, 1952, in *Francolinus francolinus;* Russia.

L. rossicum (Skrj. et Issaitsch., 1927) in *Coturnix communis;* Russia.

L. schikhobalovi Kassimov, 1952, in *Alectoris graeca caucasica;* Russia.

L. scitulum Nicoll, 1914, in *Lorius domicella;* Moluccas.

L. sinuosum Travassos, 1917, in *Nyctanassa violacea cayennensis;* Brazil.

L. skrjabini (Solowiow, 1913) in *Corone corone* and *Trypanocorax frugilegus;* Russian Turkestan. Also in *Corvus cornix;* Germany—Korkhaus (1935).

Dollfus (1954) proposed a new genus *Dicrocoelioides* with this species as type, but I prefer to relegate his genus to subgeneric rank and to merge it along with the subg. *Oswaldoia* Travassos, 1919, in the genus *Lyperosomum*.

L. turdia Ku, 1938,[1]) syn. *Oswaldoia turdi* Yamaguti, 1939, in *Turdus merula mandarinus* and *Turdus cardis cardis;* China and Japan.

L. urocissae Yamaguti, 1939, in *Urocissa caerulea;* Formosa.

[1]) The ending of the specific name should have been inflected *turdi*.

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Lyperosomum Looss, 1899

Generic diagnosis. — See p. 762.

Representatives from mammals:

L. armenicum Shcherbakova, 1942 (Pl. 83, Fig. 1004), in gall bladder and intestine of *Dryomys nitidula* (sylvan dormouse); Armenia.

LYPEROSOMUM LOOSS, 1899

Generic diagnosis emended :—

Dicrocoeliidae, Dicrocoeliinae. Body slender or lanceolate ; caeca present, rarely rudimentary or degenerate ; caeca, when present, do not reach posterior end ; oesophagus present, rarely degenerate ; acetabulum usually larger than oral sucker and located within anterior third of body ; testes diagonal or tandem, post-acetabular pre-ovarian and pre-equatorial ; cirrus pouch present, rarely degenerate ; genital pore at anterior or posterior end of pharynx, or shortly behind it ; ovary sub-median, post-testicular ; uterine coils mostly in hind body, its coils usually separate the gonads ; vitellaria commence at or shortly behind testicular level and distributed laterally to variable extent ; excretory bladder long. Parasites of bile passages or gall bladder of birds, rarely of mammals.

DISCUSSION

Genus *Lyperosamum* comprises large number of species. Out of various species referred so far to this genus, as many as 22 species have been transferred to the genus *Brachylecithum*, 4 species to the genus *Lutztrema*. 3 species to the genus *Corrigia* and 2 species to the genus *Brachydistomum* Travassos, 1944. Skrjabin and Evranova (1952) included 30 species under the genus *Lyperosomum*. Yamaguti (1958) included 20 species out of which two species, namely, *L. fringillae* Layman, 1923 and *L. kalmikense* (Skrjabin and Issaitschskoff, 1927) have been wrongly retained under this genus. Skrjabin and Evranova (1952) have rightly transferred the former species to *Brachylecithum* and latter to *Skrjabinus* (Bhalerao, 1936) Strom, 1940. While Yamaguti (1958) rightly places the species *L. amurensis* Stscherbowitsch, 1946, *L. emberizae* Yamaguti, 1941, *L. gorbunovi* Strom, 1935, *L. mosquensis* (Skr. & Issaitschikoff, 1927), *L. strigis* Yamaguti, 1939 and *B. platynosomoides* Potechina, 1948 under *Brachylecithum*, the writers find no justification in placing *L. lari* Travassos, 1917 also under this genus. The writers further propose to transfer *L. mosquensis* (Skr. & Issaitschikoff, 1927) *cineli* Oschmarin, 1952 to the genus *Brachylecithum*. As regards *L. olssoni* (Railliet, 1900) Looss, 1907, Strom (1940) rightly placed it under the genus *Brachylecithum*. The writers are of the opinion that those species of *Lyperosomum* having genital pore at or behind intestinal bifurcation and vitellaria commencing behind ovary and extending only for a short distance should be placed under the genus *Brachylecithum*.

From all the species assigned so far to the genus *Lyperosomum*, only four appear to be closer to the present form. These are : *L. amurensis* Stscherbowitsch, 1946, *L. alaudae* (Strom and Sondak, 1935) Strom, 1940, *L. alagesi* (Skrjabin & Udinzev, 1930) Travassos, 1944 and *L. turdia* (Ku, 1938) Travassos, 1944.

L. amurensis, which is considered here as a member of the genus *Brachylecithum*, is somewhat nearer the present form in having rudimentary caeca but differs from it widely in the nature and distribution of vitelline follicles, size ratio of gonads and position of genital pore. In *L. alagesi* the caeca although present, appear to be rudimentary. The present form differs from this species in the relative position of two suckers, size ratio of gonads, position of genital pore and level of commencement of vitellaria. *L. alaudae* and *L. turdia* resemble the present form in having a forward position of genital pore, being placed at the

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level of pharynx. The present form differs from both these species in having degenerate caeca and cirrus pouch, testes smaller than ovary and relatively longer pre-acetabular region.

Besides the present form, three other species of *Lyperosomum*, *L. corvi* (Yamaguti, 1939) Travassos, 1944, *L. skrjabini* (Solowiow, 1911) Strom, 1940 and *L. longicauda* (Rudolphi, 1809) Looss, 1899, have been reported from *Corvus*. All the three species differ from the present form in the size ratio of gonads, position of genital pore and in having well developed caeca.

L. kakea Bhalerao, 1926, placed under the genus *Brachylecithum* by Skrjabin & Evranova (1952) and earlier under *Lutztrema* by Travassos (1944), has also been reported from *Corvus*. Present form resembles this species in having degenerate caeca but differs widely in the topography of gonads, position of genital pore and nature and distribution of vitelline follicles. It has been rightly placed under *Brachylecithum*.

Other species reported from India and originally assigned to *Lyperosomum* are *L. colorosum* Patwardhan, 1935, *L. bhattacharyai* Pande, 1939 and *L. stunkardi* Pande, 1939. *L. colorosum* and *L. bhattacharyai* both have been recovered from *Sturnopaster contra* (*S. capensis*) and *Temenchus pagodarum*. Skrjabin and Evranova (1952) assigned the former species to the genus *Brachylecithum*, and the latter species as its synonym. Travassos (1944) referred these species to *Lutztrema*. Yamaguti (1958) also includes *L. colorosum* in *Lutztrema* and places *L. bhattacharyai* as its synonym. Both these species have degenerate caeca but differ from the present form in the position of genital pore, size ratio of gonads and nature and distribution of vitelline follicles. *L. stunkardi*, reported from *Garrullus lanceolatus*, has rightly been placed under *Brachylecithum* by Skrjabin and Evranova (1952) and Yamaguti (1958). When compared to the present form, this species shows differences similar to those noted for the first two species.

Recently, Agrawal (1964) described a new species, *Lyperosomum stunkardi*, recovered from *Acridotheres tristis* in Varanasi (India). Agrawal unfortunately chose the same specific name as was proposed by Pande (1939) for his species of *Lyperosomum* which is now a member of the genus *Brachylecithum*, as stated above. The present form differs from *L. stunkardi* of Agrawal in body shape, size ratio of gonads and suckers, shape of ovary, position of genital pore and nature and distribution of vitelline follicles. Agrawal's description of the species, based on a single specimen available to her, shows that the genital pore is located immediately behind the pharynx. While the total length of cirrus pouch is recorded as 0.39 mm., individual lengths of vesicula seminis, pars prostatica and ejaculatory duct are recorded 0.15, 0.05 and 0.25 mm respectively. This makes the total length with ejaculatory duct 0.45 mm. and without ejaculatory duct 0.2 mm. The mistake is quite evident. The ejaculatory duct is shown to be exceptionally long, being more than the total length of the remaining portion of cirrus pouch. The writers are of the opinion that the genital pore in this species is somewhere near the intestinal bifurcation, the tubular structure running in front of the bifurcation being oesophagus only. If the writers' conclusion is found correct this species will have to be transferred to *Brachylecithum* and placed as a synonym of *B. stunkardi* (Pande, 1939) from which it shows no major difference except the doubtful position of genital pore.

FOTEDAR AND RAINA, 1965
INDIAN J. HELMINTHOL. 17(1): 54-62

LYPEROSOMUM Looss,1899

Dicrocoeliinae. Body ribbon-like elongate. Cross-section more or less circular. Testes tandem, behind the acetabulum. Ovary behind the testes.

In liver and intestine of birds and mammals.

Type species: L. longicauda (Rud.,1809)

Species: ✓L. longicauda (Rud.)
✓L. corrigia Braun,1901
L. filiforme Skrj.,1913
L. fringillae Laiman,1923
✓L. lobatum (Railliet,1900)
L. olssoni (Railliet,1900)
✓L. salebrosum Braun,1901
L. strigosum (Looss,1899)
✓L. vitta (Dujardin,1845)
✓L, kakea Bhalerao,1926
✓L. microscelis Yamaguti,1933

✓L. scitulum Nicoll,1914
L. direptum Nicoll,1914 to Oswaldoia q.v.

L. squamatum Linstow,1906
L. harvisoni Johnston,1917
L. megastomum Johnston,1917
L. parvum Johnston,1917
L. donicum Isaitshikow,1919
L. transversogenitalis Layman,1922
L. magnitestium Layman,1922
L. vanellicola Layman,1926 ? 1922 ?
L. loossii Layman,1926
L. asovi Layman,1926
L. transversogenitalis donicum Layman,1926
L. alaudae Layman,1926
L. laniicola Layman,1926
L. transversogenitalis sylvestris Semenow,1927
L. filiforme biologica Semenow,1927
L. lobatum glandarii Semenow,1927
✓L. papabejani Skrj.& Udinezew,1930
L. attenuatum Duj.1845 ?
L. colorasum Patwardlian,1935
L. rudectum to Athesmia q.v.
L. porrectum (Braun,1899)
L. strongylosum Looss,1899
L. plesiostomum (Linstow,1883)
L. lari Travassos,1917
L. obliquum Trav.,1917
L. transversum Trav.
L. transversogenitalis turkestanicum Layman,1922- 1926 ?
L. sinuosum Trav.,1917
L. rarum Trav.,1917
L. monenteron Price & McIntosh, 1935 to ~~Monenteron~~ Lutztrema by Denton
L. stunkardi Pande, 1939
L. bhattacharyai Pande, 1939

History of the genus Lyperosomum Looss, 1899
(from Skrjabin and Udinzew, 1930)

Looss, 1899, included the following:
L. borrectum (Braun, 1899)
L. longicauda (Rud. 1899)
L. strongylosum Looss, 1899
L. plesiostomum (Linstow, 1883)

Later Looss added:
L. lobatum (Raill. 1900)
L. Olssoni (Raill. 1900)
L. clathratum (Deslongchamps, 1824)

L. clathratum however was moved to the genus Platynosomum in 1907. (Looss made this change, not Trav.)

Braun (1901) added:
L. corrigia
L. salebrasum, but Skrjabin showed in 1913 that these two species do not belong in this genus.

Skrjabin (1913) added:
L. filiforme

Nicoll (1914) added:
L. scipitulum
L. direptum (Removed by Trava. to the genus Oswaldoia Trav.(1919)

Dicrocoeliidae

Key to species of LYPERSOMUM Looss
(from Skrjabin and Udinzew 1930) Skrj. & Udinzew 1930 J.P. 16:

1 (4,13) Vitellaria begin anterior to ovary.....2
2 (3) Vitellaria begin at anterior testes...L. longicauda (Rud.)
Host: Corvus corone, Corvus cornix)
3(2) Vitellaria begin at posterior testes.....L. lari Trav.1917
4(1,13) Vitellaria begin at level of ovary.....5
5(6) Ovary lobed.....L. plesiostomum (v. Linstow)
6(5) Ovary entire.....7
7(10) Vitellaria asymmetric.....8
8(9) Body length 10 to 13 mm., testes elliptic.....L. corrigia Braun 1901
Host: Tetrao tetrix, Caccabis chukar
9 (8) Body length 6.5 mm., testes irregular.....L papabejani S/& U.
10(7) Vitellaria symmetric.....11
11(12) Length of body 3.55 mm. Ovary round.....L. obliquum Trav.1917
Host: Turdus amauro-chalinus
12(11) Length of body 6.8 to 7.2 mm. Ovary transversely oval.....L. scitulum Nicoll
Host: Lorius domicella
13 (1,4) Vitellaria begin posterior to ovary.....14
14(20) Ovary larger than testes.....15
15(16,17,18,19) All genital glands transversely oval...L. fringillae
Host: Fringillae coelebs
16(15,17,18,19) Ovary nearly round, testes elongated, longitudinally oval.....L. filiforme Sk.
18(15,16,18,19) Ovary transversely oval; one testis nearly round, the other oval.....L. filiforme biologic
19 Host: Pyrrhula pyrrhula pyrrhula
17(15,16,17,18) Ovary rounded and triangular; testes longitudinally oval.....L. lobatum glandarii Semenow

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16(15,16,18,19) Ovary longitudinally oval; testes transversely oval.....L. strigosum Looss
Host: Merops apiastor

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20 (14) Ovary smaller than testes.....21
21(53,54) Both testes behind ventral sucker.....22
22(23) Both testes removed from ventral sucker, far to middle of body.....L. porrectum Braun 1899
Host: Saurophagus sp.
23(22) Testes directly behind ventral sucker or at some distance posterior to it 24
24(34) Testes very near ventral sucker.....25
25(28) Anterior testis adjoins ventral sucker directly.....26
26(27) Testes nearly round.....L. lamicola Layman 1926
27(26) Testes transversely oval.....L. transversum Trav.
Host: Tyrannys melanonolicus, Megarhynchus pitangua
28(25) Anterior testis separated from ventral sucker by coils of uterus.....29
29(33). Testes and ovary transversely oval.....30
30(31,32) Vitellaria in form of a condensed mass..:L transverogenitalis sub.sp. donicum Layman 1926
Host: Cotyle riparia
31(30,32) Vitellaria in two rows of follicles..L. transversogenitalis sub.sp. turkestanicum Layman 1922 and 1926
Host: Cotyle riparia
32(30,31) Vitellaria in form of triangle..L. transversogenitalis sub.sp. sylvestris Semenow
Host: Caprimulgus europeus.

LYPEROSOMUM

The writer agrees with the principle of dividing the genus *Lyperosomum* into 5 groups, but he is not in favour of raising the groups to generic rank as the characters separating them from one another are not sharply marked off. It is therefore suggested that they may be regarded as Subgenera, which could be differentiated by the following key:

1. Genital pore in the pharyngeal or subpharyngeal zone . . *Lyperosomum*.
   Genital pore not in the pharyngeal or subpharyngeal zone . . . . . 2.
2. Vitellaria merge anteriorly . . . . . *Lyperosomum* (*Brachydistomum*).
   Vitellaria do not merge anteriorly. . . . . 3.
3. Genital pore below the pharynx . . . . . *Lyperosomum* (*Lutztrema*).
   Genital pore behind intestinal fork . . . . . *Lyperosomum* (*Corrigia*).
   Genital pore at about the level of the intestinal fork. . *Lyperosomum* (*Brachylecithum*).

The above key is based on that given by SKRJABIN for differentiating the various genera proposed by him.

The above subgenera of the genus *Lyperosomum* can further be distinguished from one another by the following characters:

1. Subgenus *Lyperosomum* (Looss 1899)

Body elongate, narrow and ribbon-shaped; acetabulum well developed, larger than the oral sucker; genital pore prebifurcal, opening near pharynx or somewhat posteriorly; testes obliquely placed; vitelline follicles small, occupying an elongated narrow area, in a majority of species extending forwards into the testicular zone.

2. Subgenus *Brachydistomum* (TRAVASSOS 1944)

Body small; acetabulum more developed and larger than the oral sucker; genital pore nearer to oral sucker than to ventral sucker; testes close together, rounded in shape, placed obliquely; vitellaria restricted behind the ovarian zone and merge anteriorly.

3. Subgenus *Lutztrema* (TRAVASSOS 1941)

Body elongate and narrow; acetabulum more developed than the oral sucker; genital pore below the pharynx and distinctly anterior to acetabular zone; testes one behind the other closely applied together or approximated; vitellaria consist of voluminous follicles, few in number and restricted behind the ovary.

4. Subgenus *Corrigia* (STROM 1940)

Body narrow and ribbon-like; suckers close together and almost equal; genital pore behind the intestinal fork; testes rounded or oval, placed in tandem and widely apart, lying far posterior to acetabulum; vitelline follicles small and numerous, arranged asymmetrically along the lateral margins of the body and extending forwards into the region of the ovary.

5. Subgenus *Brachylecithum* (STROM 1940)

Body elongate, narrow and flattened or cylindrical; suckers equal or subequal; genital pore median, placed at about the level of the intestinal fork, midway between the suckers; testes one behind the other; vitellaria restricted in extent and consist of a few large follicles lying behind the ovary and arranged either laterally or spread across the entire width of the body.

Subgenus *Brachylecithum* comprises the following 44 species, of which 43 were listed by SKRJABIN (1952) and one more was included in this group by DOLLFUS (1954):

Type species: *Lyperosomum (Brachylecithum) filum* (DUJARDIN 1845)
from *Passer hispaniolensis hispaniolensis*.
Lyperosomum (Brachylecithum) attenuatum (DUJARDIN 1845)
from *Turdus (Merula) merula*.
Lyperosomum (Brachylecithum) strigosum (Looss 1899)
from *Merops apiaster*.

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Lyperosomum (Brachylecithum) lobatum (Railliet 1900)
from *Accipiter nisus.*
Lyperosomum (Brachylecithum) filiforme (Skrjabin 1913)
from *Circus cinereus.*
Lyperosomum (Brachylecithum) harrisoni (Johnston 1916)
from *Ninox boobook.*
Lyperosomum (Brachylecithum) parvum (Johnston 1916)
from *Strepera versicolor.*
Lyperosomum (Brachylecithum) megastomum (Johnston 1916)
from *Sterna bergii.*
Lyperosomum (Brachylecithum) rarum (Travassos 1917)
from *Celeus flavescens flavescens.*
Lyperosomum (Brachylecithum) donicum (Issaitschikoff 1919)
from *Delichon (Chelidon) urbica.*
Lyperosomum (Brachylecithum) magnitestium (Layman 1922)
from *Merops apiaster.*
Lyperosomum (Brachylecithum) transversogenitalis (Layman 1922)
from *Riparia (Cotyle) riparia.*
Lyperosomum (Brachylecithum) vanellicola (Layman 1922)
from *Chellusia (Venellus) leucura.*

Lyperosomum (Brachylecithum) fringillae (Layman 1923)
from *Fringilla coelebs.*
Lyperosomum (Brachylecithum) alaudae (Layman 1926)
from *[illegible] arvensis.*
Lyperosomum (Brachylecithum) asoti (Layman 1926)
from *Lanius minor.*
Lyperosomum (Brachylecithum) laniicola (Layman 1926)
from *Lanius (Enneoctonus) collurio & upupa epops*
Lyperosomum (Brachylecithum) loossi (Layman 1926)
from *Riparia ([illegible]) riparia.*
Lyperosomum (Brachylecithum) kakea (Bhalerao 1926)
from *Corvus insolens.*
Lyperosomum (Brachylecithum) baskakowi (Iwanitzky 1927)
from *Muscicappa striata (grisola).*
Lyperosomum (Brachylecithum) filiforme biologica (Semenov [illegible])
from *Pyrrhula pyrrhula.*
Lyperosomum (Brachylecithum) lobatum glandarii (Semenov [illegible])
from *Garrulus glandarius.*
Lyperosomum (Brachylecithum) transversogenitalis sylvestris (Semenov 1927)
from *Caprimulgus europaeus.*
Lyperosomum (Brachylecithum) papabejani (Skrjabin & Udinzev [illegible])
from *Alectoris graeca (= Caccabis chukar).*
Lyperosomum (Brachylecithum) colorosum (Patwardhan 1935)
from *Temenchus pagadorum & Sturnopastor contra*
Lyperosomum (Brachylecithum) stunkardi (Pande 1939)
from *Garrulus lanceolatus.*
Lyperosomum (Brachylecithum) marinholutzi (Travassos 1941)
from *Progne chalybea domestica.*
Lyperosomum (Brachylecithum) halcyonis (Yamaguti 1941)
from *Halcyon coromanda [illegible]*
Lyperosomum (Brachylecithum) [illegible] (Yamaguti 1941)
from *Eophona personata personata.*
Lyperosomum (Brachylecithum) laymani (Travassos 1944)
from *Riparia (Cotyle) riparia*
Lyperosomum (Brachylecithum) americanum Denton 1945
from *Cassidix mexicanus pros[illegible]dicola.*
Lyperosomum (Brachylecithum) bur[illegible]golicum Oschmarin [illegible]
from *Tetrastes bonasia.*
Lyperosomum (Brachylecithum) eug[illegible] Oschmarin 1947
from *Nucifraga caryocatact[illegible]*
Lyperosomum (Brachylecithum) chi[illegible] (Pratt & Cutress, [illegible])
from *Hesperiophona vespertina brooksi.*
Lyperosomum (Brachylecithum) kirghisensis Evranova 1952
from *Montifringilla alpicola prosvirowi.*
Lyperosomum (Brachylecithum) uigurica Evranova 1952
from *Eremophila penicillata albigula.*
Lyperosomum (Brachylecithum) coturnix Oschmarin 1952
from *Coturnix coturnix.*
Lyperosomum (Brachylecithum) cuculi Oschmarin 1952
from *Cuculus canorus.*
Lyperosomum (Brachylecithum) attenuatum parinum Oschmarin [illegible]
from *Parus palustris.*
Lyperosomum (Brachylecithum) lobatum strixi Oschmarin 1952
from *Strix uralensis.*
Lyperosomum (Brachylecithum) pici Oschmarin 1952
from *Picus canus.*
Lyperosomum (Brachylecithum) praetenuis Oschmarin 1952
from *Apus pacificus.*
Lyperosomum (Brachylecithum) capilliformis Oschmarin 1952
from *Turdus dauma.*
Lyperosomum (Brachylecithum) alfortense (Reilliet 1900) Doll[illegible] [illegible]54
(Syn: *Dicrocoelium lobatum* Railliet 1900)
from *Pica pica mauritanica.*

From: Jaiswal, 1957

Lyperosomum africanum n.sp. Baer, 1957

Matériel: Cinq exemplaires dans la vésicule biliaire de *Praomys tullbergi* Thomas, récolté à Adiopodoumé (12.1.57).

Fréquence: Un seul exemplaire parasité sur deux examinés.

Les Vers ont 5 à 7 mm de long et 800 à 900 μ de large. La ventouse ventrale mesure 251 à 274 μ sur 229 à 274 μ; elle est donc circulaire à ovalaire. La ventouse buccale, ovalaire, mesure 183 à 228 μ sur 160 à 202 μ. Le rapport entre les deux ventouses étant de 1: 1,2.

Le pharynx a 100 à 114 μ de long et 87 à 91 μ de diamètre. On observe un assez long œsophage, les diverticules intestinaux atteignant l'extrémité postérieure du Ver.

L'ovaire est situé en avant du milieu du corps et se trouve séparé du testicule postérieur par au moins trois boucles de l'utérus. Il existe un assez gros réceptacle séminal, situé en arrière de l'ovaire. Les deux testicules sont séparés l'un de l'autre par quelques boucles utérines; ils sont plus gros que l'ovaire et le testicule postérieur est lobé tandis que l'antérieur est assez régulièrement arrondi. On trouve plusieurs boucles de l'utérus entre le testicule antérieur et le bord postérieur de la ventouse ventrale. La poche du cirre, longue de 227 à 260 μ, mesure 68 μ de diamètre. Lorsque le cirre est évaginé, la poche ne mesure plus que 206 μ de long et 82 μ de diamètre, le cirre ayant 183 μ de long. Le pore sexuel se trouve à mi-distance entre le bord postérieur du pharynx et la bifurcation

de l'intestin. L'utérus est compris, en entier, entre les deux branches intestinales et présente l'aspect caractéristique pour le genre. Les œufs ont 34 μ sur 16 μ là où la coque est brun foncé, c'est-à-dire, dans la dernière portion de l'utérus. Les glandes vitellogènes s'étendent latéralement depuis le bord postérieur de l'ovaire jusque dans le dernier quart du corps.

Travassos (1944) a procédé à une révision de la famille *Dicrocoeliidae* Odhner, 1910 et, plus particulièrement, de la sous-famille *Dicrocoeliinae* Looss, 1899. Cette dernière sous-famille reçoit vingt et un genres et six sous-genres. Nous reconnaissons qu'il est très difficile de déterminer de façon précise la limite des genres dans un groupe comme celui-ci, surtout lorsqu'ils ont été établis sur un petit nombre d'individus ou sur quelques espèces seulement. Le résultat est, inévitablement, arbitraire, et par conséquent, sujet à être modifié dans le sens d'une simplification lorsque un nombre suffisant d'espèces aura été étudié. La variabilité individuelle paraît beaucoup plus étendue chez les *Dicrocoeliidae* que chez les autres familles de Trématodes. A titre d'exemple, nous reproduisons quelques « types » de *Platynosomum soricis* (Diesing, 1850) [1] provenant d'une seule vésicule biliaire de Musaraigne. Nous avions, en effet, récolté une cinquantaine d'exemplaires dans une vésicule biliaire de *Crocidura russula* Herm. et, suivant l'état de contraction des Vers, la taille et l'âge de l'infestation (il y en avait au moins deux successives), ces spécimens pourraient être groupés dans les genres *Platynosomum Zonorchis* et *Lyperosomum* (fig. 3).

C'est pour cette raison que nous jugeons qu'il est nécessaire de réduire en synonymie un certain nombre de genres et de sous-genres admis par TRAVASSOS, tout en reconnaissant que le résultat est encore loin d'être satisfaisant.

Nous proposons, par conséquent, de conserver les genres suivants: *Dicrocoelium* Dujardin, 1845 (avec les sous-genres *Dicrocoelium* (= *Pseudathesmia* Travassos, 1942) [2], *Controrchis* Price, 1929,

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[1] Cette espèce avait été placée dans le genre *Dicrocoelium* par DOLLFUS, CALLOT et DESPORTES (1934) et nous l'avons redécrite et figurée sous ce nom (JOYEUX et BAER, 1936). Un nouvel examen de matériaux récents vient confirmer l'hypothèse émise par TRAVASSOS (*loc. cit.*: 40) à savoir que cette espèce doit rentrer dans le genre *Platynosomum* à cause de la longueur des diverticules de l'intestin et la position du pore sexuel.

[2] *Pseudathesmia* est manifestement une anomalie de *Dicrocoelium*, les vitellogènes étant atrophiés d'un côté du corps.

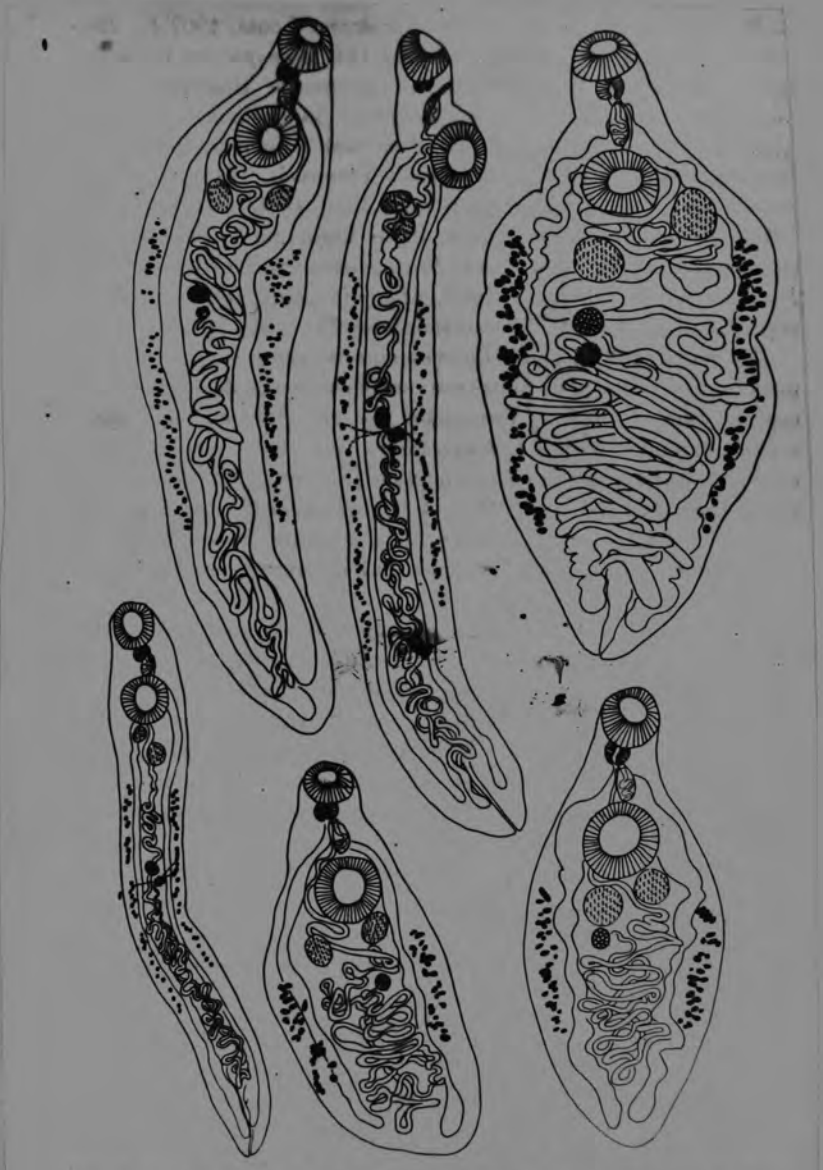

FIG. 3. — *Platynosomum soricis* (Diesing, 1850) de *Crocidura russula* Herm.

Six exemplaires trouvés dans une même vésicule biliaire, dessinés à la même échelle. La variation des rapports des organes est visible et l'on peut y reconnaître les caractères attribués aux genres *Pl...* et *Lyperosomum*.

et *Metadelphis* Travassos, 1944); ***Eurytrema*** **Looss, 1907** (= ***Brodenia*** Gedoelst, 1913, *Lubens* **Travassos, 1919,** ***Conspicuum*** **Bhalerao,** 1926, *Skrjabinus* Bhalerao, 1926, ***Concinnum*** **Bhalerao, 1936,** *Canaania* Travassos, 1944); *Leipertrema* [1] **Sandosham, 1951;** ***Platynotrema*** Nicoll, 1915 (= ***Euparadistomum*** **Tubangui, 1931);** ***Platynosomum*** Looss, 1907 (= ***Zonorchis*** **Travassos, 1944);** ***Lyperosomum*** Looss, 1899 (= *Corriga* Strom, 1940, ***Orthorchis*** **Travassos,** 1944); *Proacetabulorchis* Gogate, 1940; ***Lutztrema*** **Travassos, 1941** (= *Olssoniella* Travassos, 1944, ***Brachydistomum*** **Travassos, 1944);** *Dictyonograptus* Travassos, 1919; *Athesmia* **Looss, 1899;** ***Paradistomum*** Kossack, 1910 (= ***Paradistomoides*** **Travassos, 1944).**

En réunissant au genre *Lyperosomum* le genre *Corriga*, comme nous le proposons, nous nous trouvons en présence de vingt-quatre espèces. Sur ce nombre, Travassos (*loc. cit.*: 129) en fait tomber sept en synonymie avec *L. longicauda* (Rud. 1809). Nous pensons, en outre, que les espèces *L. petiolatum* (Railliet, 1901), *L. kalminkensis* (Skrjabin et Issait., 1927) et *L. clathratum* (Deslongschamps, 1824) devraient être transférées dans le genre *Platynosomum*, à cause de la position des testicules qui se trouve presque sur le même plan horizontal.

Il reste donc quatorze espèces parmi lesquelles on constate une très grande similitude, sinon une identité, entre *L. pleistosomum* (v. Linst. 1883) et *L. papabejani* Skrjabin et Udinzer, 1930, toutes deux hébergées par des Perdrix, l'une en Arménie et l'autre au Turkestan russe. *L. lari* Travassos, 1917, et *L. oswaldoi* (Travassos, 1919) nous paraissent identiques, malgré que la première de ces espèces provienne d'une Mouette [2] et que la seconde habite les voies biliaires d'un grand nombre de Passereaux.

Sur les douze espèces qui demeurent ainsi dans le genre *Lyperosomum*, une seule, *L. vitta* (Dujardin, 1845) a été signalée chez les Mammifères et, en particulier, chez *Apodemus* et chez *Cleithronomys*, en Europe. Aucune espèce ne semble avoir été signalée, jusqu'ici,

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[1] Ce genre, parasite de l'Orang-Outan, ne diffère d'*Eurytrema* que par le groupement des vitellogènes en arrière de l'ovaire.

[2] Il peut paraître curieux que des Trématodes dont le cycle paraît aussi adapté à la vie terrestre que celui des *Dicrocoeliidae*, puissent se rencontrer chez des Oiseaux marins. Il s'agit, sans doute, d'une infestation fortuite contractée sur terre. Si l'identité des deux espèces vient à être prouvée, il vaut la peine de faire remarquer que ces parasites habitent les voies pancréatiques chez les Mouettes et les voies biliaires de nombreuses espèces de Passereaux.

en Afrique et, au demeurant, toutes les autres espèces sont des parasites d'Oiseaux. Ce sont:

En Eurasie:

L. longicauda (Rudolphi, 1809) chez les Corvidés et Passeres.
L. fringillae Layman, 1923, chez le Pinson en Russie.
L. corriga (Braun, 1901) et *L. plesiostomum* (v. Linstow, 1883) chez les Galliformes au Turkestan.
L. pawlowskyi (Strom, 1928) chez *Crex crex* et *Dendrocopus* (?) en Russie.

En Amérique du Sud:

L. sinuosum Travassos, 1917, chez un Ardéidé au Brésil.
L. oswaldoi (Travassos, 1919) chez des Passeres au Brésil.
L. direptum Nicoll, 1914, chez *Crax alector* en Guyane britannique.

En Nouvelle Guinée:

L. porrectum (Braun, 1899) chez un Alcédinidé.

A Formose:

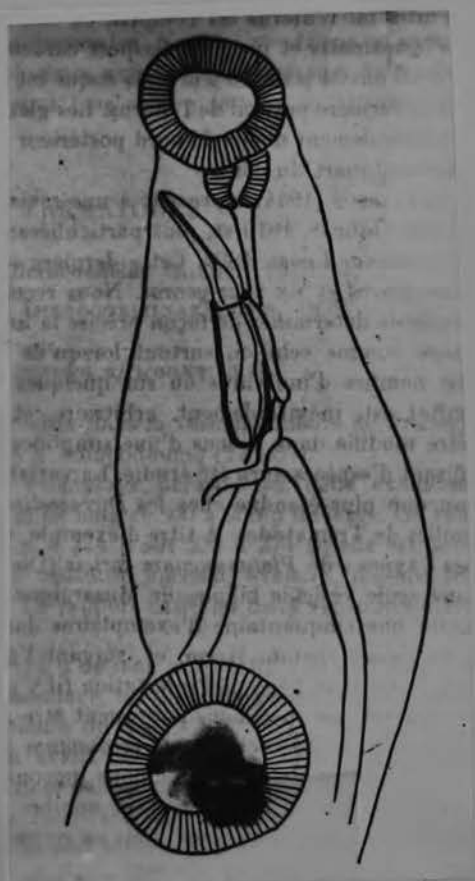
L. urocissae Yamaguti, 1939, chez *Urocissa*.

Iles de la Sonde:

L. scitulum Nicoll, 1914, chez un Perroquet mort au jardin zoologique de Londres.

Il n'y a aucun doute que *L. africanum* n. sp. se rapproche le plus de *L. vitta*. Ce sont les deux seules espèces observées chez les Rongeurs. *L. vitta* est cependant plus grand (10-15 mm) et les ventouses sont également plus grandes; leur rapport étant de 1: 1,13. Chez *L. vitta*, l'ovaire est séparé du testicule postérieur par au moins sept boucles utérines tandis qu'il n'y en a pas plus de quatre chez *L. africanum* n.sp. Enfin, les œufs de notre nouvelle espèce sont plus petits que ceux de *L. vitta* (38 μ/23 μ).

Il est probable que la recherche méthodique d'helminthes chez les petits Mammifères d'Afrique réservera encore bien des découvertes intéressantes. Mais il est essentiel que le matériel soit aussi frais que possible et fixé dans de bonnes conditions. De telles recherches ne sauraient être livrées au hasard, comme c'est le plus souvent le cas, mais devraient faire l'objet de recherches à la fois du point de vue statistique et du point de vue écologique.



Lyperosomum longicauda (Rudolphi, 1809).

Синоним: *Distoma longicauda* Rudolphi, 1809

(Рис. 132)

Хозяева: ворона (*Corvus cornix*), сорокопут [*Lanius collurio, Collurio (= Lanius) erythronatus jakarlensis*].

Локализация: печень, желчный пузырь.

Места обнаружения: Западная Европа, СССР (Киргизия).

Описание вида (по Брауну, 1902). Тело удлиненно вытянутое, достигает 8,0—11,0 мм длины, наибольшая ширина на уровне брюшной присоски. Позади выступающей брюшной присоски тело постепенно суживается. Ротовая присоска субтерминальная, 0,396—0,406 × 0,417 мм в диаметре. Диаметр брюшной присоски 0,75—0,8 мм. Префаринкс слабо выражен. Фаринкс достигает 0,23 мм ширины и 0,177—0,187 мм длины. Пищевод короткий. Кишечные стволы, повидимому, доходят до заднего конца тела, но ясно они заметны в своей передней части на коротком расстоянии позади желточников; в заднем конце тела они прикрываются петлями матки.

Семенники расположены слегка позади брюшной присоски наискось один за другим. Диаметр круглых семенников составляет более половины поперечника брюшной присоски. На той же стороне тела, на которой лежит задний семенник, находится маленький кругловатый яичник, удаленный от заднего семенника приблизительно на столько, на сколько семенники отстоят друг от друга. Узкие, состоящие из плотно прилегающих фолликулов желточники начинаются на уровне заднего края переднего семенника и тянутся кзади на протяжении 4 мм. Часть тела, лежащая позади семенников, заполнена петлями матки. Половое отверстие находится тотчас позади фаринкса, медианно. Продольно вытянутая овальная половая

Dicrocoeliidae

Lyperosomum longicauda (Rud.)

Length: 8. to 11., greatest width near acetabulum

Width:

Oral sucker: 0.396 to 0.417

Acetabulum: (size:) 0.75 to 0.8
(position):

Sucker ratio: almost ~~equal~~ 1:2

Esophagus: short ; ceca to hind end, but inconspicuous
Pharynx: 0.23 wide, 0.177 to 0.187 wide

Genital pore (location):

Testes, shape: round, more than ½ size of acetabulum

location: close to acetabulum, diagonally behind one another
Cirrus sac (extent): 0.5 to 0.6 by 0.25 to 0.29
Ovary, shape: round

location:

Vitellaria: from posterior edge of anterior testis a length of 4 mm. (in 11. specimens), more than middle third of body.
Eggs: 23 by 19 μ
Other features:

Host: Corvus cornix ; Corvus corone

Locality:

Reference:

Comparisons: Dist. macrourum

Life cycle:

Lyperosomum sp.
from Corvus corone
see Braun

f3568plb

Lyperosomum alagesi (Skrjabin et Udinzev, 1930)
Синоним: *Oswaldoia alagesi* (Skrj. et Udinzev, 1930)
(Рис. 133)

Хозяин: сорока (*Pica pica*).
Локализация: желчный пузырь.
Место обнаружения: СССР (Армения).

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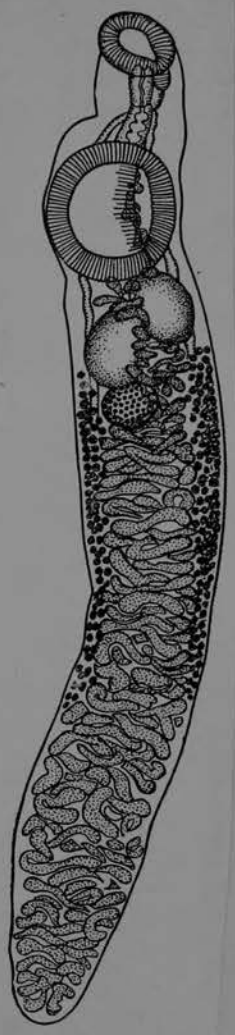
Lyperosomum alaudae (Strom & Sondak,1935)

Syn.: Oswaldoia alaudae Strom & Sondak,1935

Host: Alauda arvensis cantarella



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Lyperosomum alectoris (Nöller et Enigk, 1933)

Синоним: *Platynosomum alectoris* Nöller et Enigk, 1933

(Рис. 134а)

Хозяин: каменная куропатка (*Alectoris graeca saxatilis*).

Локализация: желчный пузырь.

Место обнаружения: Европа (Балканы).

Описание вида (по Неллеру и Энигу, 1933). Тело достигает 6,75—7,24 мм длины при максимальной ширине 1,7 мм в области семенников. Ротовая присоска 0,48 мм в диаметре, брюшная 0,74—0,77 мм. Расстояние между ними 1,5—1,86 мм. Диаметр фаринкса 0,2 мм. Пищевод немного искривлен. Развилок кишечника располагается несколько впереди от середины расстояния между обеими присосками. Кишечные стволы узкие; позади желточников на них многократно налегают петли матки. Один кишечный ствол обычно длиннее другого. Семенники располагаются симметрично позади брюшной присоски. Они почти круглой формы. Левый семенник обычно несколько крупнее правого; размер правого — 0,40×0,37 мм, левого — 0,40×0,41 мм. Овальный яичник лежит позади левого семенника и достигает 0,16×0,22 мм в диаметре. Желточники начинаются на уровне заднего края семенников и достигают 1,6—1,8 мм длины. Желточные протоки располагаются несколько позади заднего края яичника. Тельце Мелиса лежит кнутри и позади яичника. Матка, состоящая из поперечно расположенных петель, занимает пространство позади семенников. Позади желточников петли матки простираются до самых краев тела. Половое отверстие располагается позади фаринкса, на середине расстояния между последним и развилком кишечника, на расстоянии 0,4 мм позади ротовой присоски. Половая бурса 0,38 мм длины и 0,175 мм ширины. Красновато-коричневые яйца, снабженные толстой оболочкой, имеют [ч]иненно-овальную форму и достигают 0,045 мм длины и 0,038 мм [ши]ны.

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Lyperosomum amurensis Stscherbowitsch, 1946
(Рис. 135)

Хозяин: жулан (*Lanius cristatus*).
Локализация: печень.
Место обнаружения: СССР (Дальний Восток).

Описание вида (по Щербовичу, 1946). Тело достигает 2,876 мм длины при максимальной ширине 0,38 мм на уровне брюшной присоски. Ротовая присоска располагается терминально и достигает 0,181 мм длины при ширине 0,171 мм. Брюшная присоска меньше семенников, достигает 0,217 мм в диаметре. Фаринкс очень небольшой, длиною 0,072 мм при ширине 0,09 мм. Центр брюшной присоски находится на расстоянии 0,7 мм от переднего конца. Семенники почти круглые, достигают 0,253 мм в диаметре, располагаются наискось друг в отношении друга. Передний семенник лежит в левой половине тела, позади брюшной присоски, отделяясь от последней и от заднего семенника петлями матки. Половая бурса лежит впереди от брюшной присоски. Округлый яичник достигает 0,108 мм в диаметре, располагается медианно, непосредственно позади заднего семенника, соприкасаясь с ним. Желточники слабо развиты, расположены в задней половине тела. Начинаются они позади яичника на расстоянии 0,126 мм

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Lyperosomum anatis Belogurov et Leonov, 1963

Host: Anas acuta

see reprint

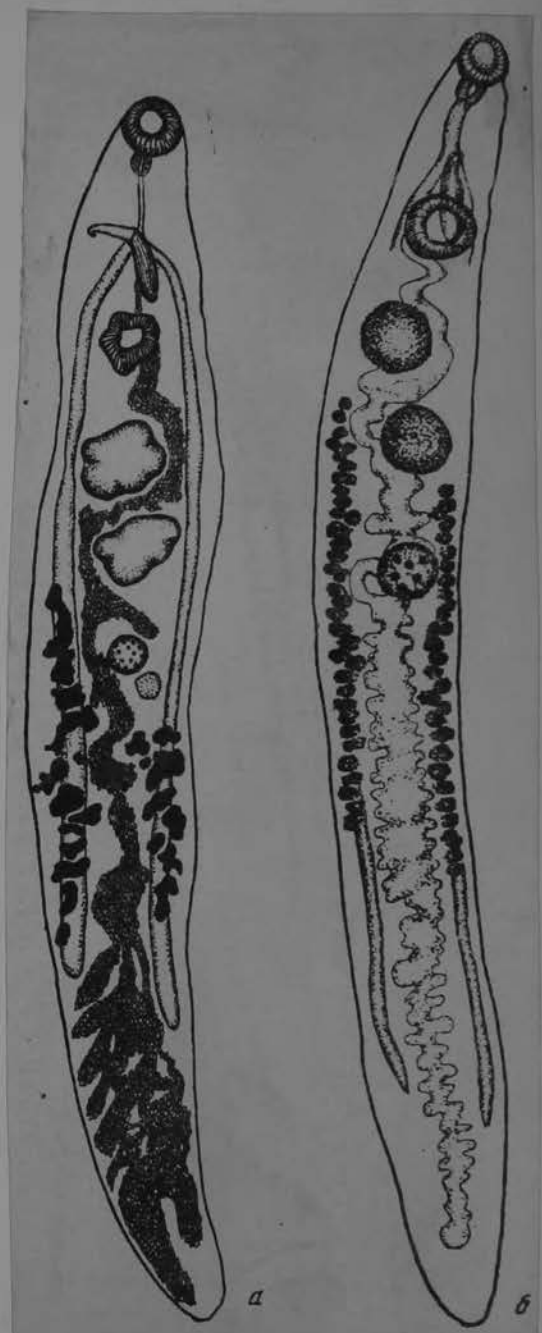

Рис. 2. *Lyperosomum anatis*, sp. nov.
а — от *Anas acuta*, *б* — от *Anas falcata*

Lyperosomum armenicum Stscherbakova, 1942

Host: Dyromus nitedula

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136. *Lyperosomum armenicum* Stscherbakova, 1942 (по Щербаковой, 1942)

Lyperosomum charadrii Belopolskaja, 1963

Host: Numenius madagascariensis

See reprint

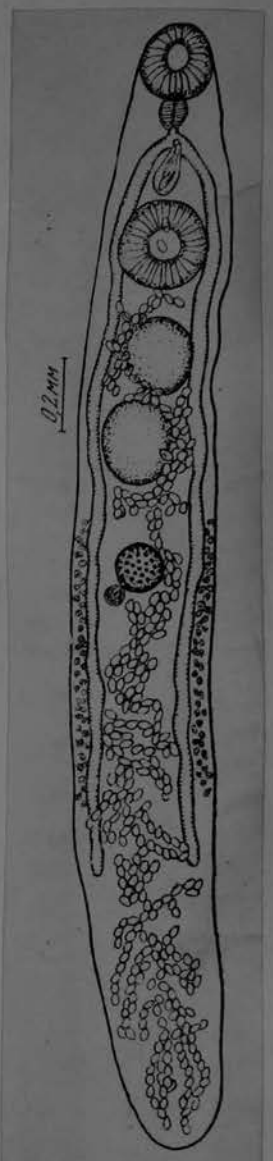


Рис. 5. *Lyperosomum charadrii* nov. sp. от *Numenius madagascariensis*, типовой экземпляр

Lyperosomum clathratum (Deslongchamps, 1824)

Синоним: *Platynosoma clathratum* Deslongchamps, 1824

(Рис. 137)

Хозяин: черный стриж (*Apus apus* = *Cypselus apus*).

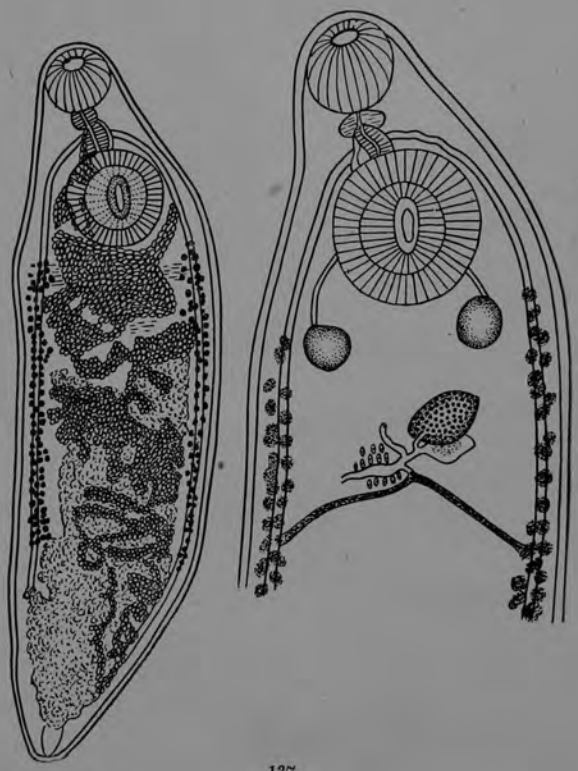
Локализация: печень и желчный пузырь.

Место обнаружения: СССР (Ростовская область, Узбекская ССР, Свердловская область и Московская область).

Описание вида (по Рыбалтовскому). Длина тела 3,06×5,1 мм при максимальной ширине 0,816—1,275 мм. Ротовая присоска круглая, 0,225—0,340 мм в диаметре. Диаметр брюшной присоски 0,425—0,680 мм. Одна присоска от другой находится на расстоянии 0,340—0,460 мм. Фаринкс круглый, 0,136—0,170 мм в диаметре. Пищевод 0,240—0,255 мм длины, бифурцирует над брюшной присоской. Кишечные стволы хорошо видны только в передней части.

Семенники с гладкими краями, 0,221—0,510 мм и 0,221—0,442 мм, прилегают к заднему краю брюшной присоски. Половая бурса мешкообразная, расположена между фаринксом и бифуркацией кишечника; она достигает 0,221—0,340 мм длины и 0,136—0,170 мм ширины. Яичник круглый, с гладкими краями, 0,204—0,238 мм в диаметре, располагается у заднего края одного из семенников. Тельце Мелиса позади и медиально от яичника, 0,170 мм в диаметре. Желточники 1,05—1,241 мм длины, начинаются у заднего края семенников и оканчиваются на расстоянии 0,7—0,9 мм от заднего конца тела паразита. Матка образует нисходящие и восходящие петли. Заполняя всю заднюю часть паразита, петли ее проходят между яичником, семенниками и брюшной присоской. Половые отверстия открываются на уровне фаринкса. Яйца овальные, 0,036—0,042 мм длины и 0,024—0,027 мм ширины.

Литература: Deslongchamps, 1824.



7. *Zonorchis clathratum* (DESLONGCHAMPS, 1824)

Synonym: *Distomum refertum* MÜHLING, 1898.

Wirt/Herkunft: *Cypselus a. apus* L., Mauersegler (Apodiformes, Apodidae), Tierpark Berlin, Sektion am 28. 6. 1962.

Lokalisation: Gallenblase.

Präparat-Nr. kT 12/67—68 (3 Exemplare).

Beschreibung (vgl. Abb. 8 und Tabelle 4).

Cuticula mit vereinzelten Papillen; Körper gedrungen bis länglich lanzettförmig, 4,2—5 mm lang, maximale Breite im Vorderkörper in der Gonadenregion, 1,2 bis 2 mm; Bauchsaugnapf größer als Mundsaugnapf, Saugnäpfe einander genähert, Bauchsaugnapf innerhalb des ersten Körperdrittels gelegen; Pharynx kräftig; Oesophagus nur wenig länger als Pharynx; Darmgabelung in der Mitte der Entfernung zwischen Bauchsaugnapf-Vorderrand und Pharynx oder dahinter; die Darmschenkel sind bis zur Mitte der Entfernung zwischen hinterer Grenze der Dotterstöcke und Körperhinterende zu erkennen; Genitalporus auf der Höhe des Pharynx; Cirrusbeutel-Basis höchstens bis zur Mitte zwischen Darmgabelung und Bauchsaugnapf-Vorderrand reichend; Dotterstöcke überwiegend extracaecal, aus zahlreichen kleinen Follikeln bestehend, unmittelbar hinter den Testes oder auf der Höhe des Ovariums

Tabelle 4. Zonorchis clathratum, Maße der 3 Exemplare in mm

Körperlänge	4,2	5	4,7
Maximale Körperbreite	2	1,2	1,5
Mundsaugnapf			
Länge	0,375	0,330	—
Breite	0,433	0,382	—
Bauchsaugnapf			
Länge	0,624	0,521	0,631
Breite	0,705	0,624	0,697
Pharynx			
Länge	0,139	0,147	
Breite	0,184	0,154	
Oesophagus-Länge	0,161	0,117	
Testes			
Länge	0,198 bis 0,220	0,191 bis 0,198	0,191 bis 0,213
Breite	0,257 bis 0,264	0,147 bis 0,191	0,161 bis 0,206
Ovarium			
Länge	0,264	0,176	0,169
Breite	0,330	0,228	0,286
Dotterstöcke, Länge	1,285 bis 2,275	1,908 bis 2,092	1,468 bis 1,505
Cirrusbeutel, Länge	0,264	0,316	0,316

beginnend und etwa ein Drittel oder mehr der Körperlänge einnehmend; Testes parallel zueinander kurz hinter dem Bauchsaugnapf bzw. seitlich von dessen hinterem Bereich gelegen, rundlich bis oval oder tropfenförmig, glattrandig oder leicht unregelmäßig gestaltet, in der gleichen Größenordnung wie das Ovarium oder etwas kleiner als dieses; Ovarium queroval, glattrandig, submedian gelegen; Eigröße 0,033—0,040 × 0,025—0,030 mm.

Bemerkungen.

DOLLFUS (1957) schrieb, daß ihm von dieser Art lediglich die beiden Abbildungen von MÜHLING (1898) (übernommen von SKRJABIN et EVRANOVA 1952) bekannt seien. BYCHOVSKAJA-PAVLOVSKAJA (1962) führt eine Reihe sowjetischer Funde auf. Die von mir gefundenen Exemplare stimmen recht gut mit der von SKRJABIN et EVRANOVA anhand sowjetischen Materials gegebenen Beschreibung überein.

From Odening, 1964

Lyperosomum collurionis (Skrjabin et Issaitschikoff, 1927)

Синоним: *Oswaldoia collurionis* Skrjabin et Issaitschikoff, 1927

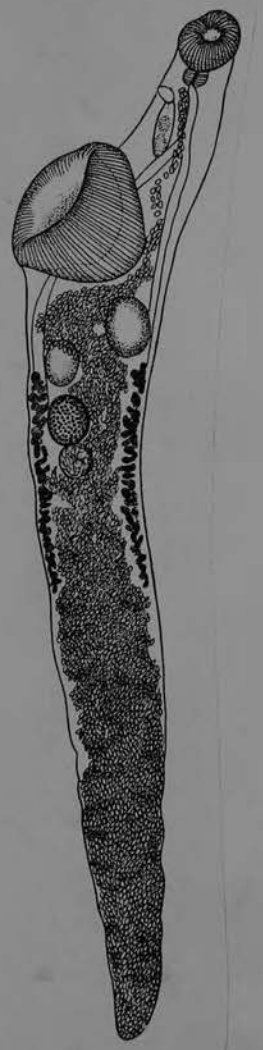
(Рис. 138)

Хозяева: птицы — *Lanius collurio* (по Скрябину и Исайчикову, 1927), и *Iduna* sp. (по Штрому, 1935).

Локализация: желчный пузырь.

Место обнаружения: СССР (Ростовская область и Таджикистан).

Описание вида (по Скрябину и Исайчикову, 1927). Тело достигает 3,0 мм длины при максимальной ширине 0,5 мм в области брюшной присоски. Ротовая присоска 0,18×0,15 мм. Центр брюшной присоски



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-OVER-

LYPERSOMUM COLLURIONIS (SKRJABIN AND ISAITSCHIKOFF, 1927)

SYN. III. *OSWALDOIA COLLURIONIS* ~~n. sp.~~ SKRJABIN AND ISAITSCHIKOFF, 1927

(Plate XXI, fig. 3)

Host :—*Lanius collurio*.

Habitat :—Biliary bladder.

Locality : Found 2.7.19 on the North Coast of the Sea of Azoff by the first Russian Helminthological Expedition.

Frequency of discovery of the Parasite. The parasite has been found only once when three specimens were collected, notwithstanding the numerous dissections of *Lanius collurio* (about 150) in different parts of Russia.

Description of the species. The narrow, well-formed body reaches a length of 3·0 mm. and a maximum breadth of 0·5 mm. in the region of the ventral sucker. The oral sucker is 0·18 by 0·15 mm. The centre of the ventral sucker is 0·7 mm. distant from the cephalic end. It is characterised by its size and especially its depth : its length reaches 0·42 mm. and its depth 0·44 mm. It was impossible to measure the breadth of the ventral sucker, as owing to its large size the sucker bends to the side and it cannot be fixed into a dorso-ventral plane. The round testes reach a size of 0·16 by 0·14 mm. being situated obliquely to one another, while the anterior testis lies in the left half of the body behind the ventral sucker, separated by the coils of the uterus. The posterior testis and the ovary, which is situated behind the former, are slightly to the right of the mid-line of the body. The ovary is rounder than the testes and is 0·17 mm. in diameter. All three genital glands are in the cephalic half of the body. Distinctly seen behind the ovary and adjacent to it is the receptaculum seminis. The yolk-glands are but slightly developed ; they begin at the level of the posterior testis, i.e., at a distance of 1·1 mm. from the anterior end of the body. Their length is 0·67 to 0·72 mm., and they are 0·13 mm. distant from the caudal end. The breadth of the yolk-glands is 0·04 to 0·06 mm. The genital pore is at the level of the posterior end of the pharynx. It was impossible to detect the cirrus pouch in the total mounts. The uterus forms a somewhat dense knot of coils behind the genital glands, these coils separating the testes from each other and the posterior testis from the ovary. In some parts the uterus consists of spirally-wound coils, occupying the whole body. The eggs are 0·03 mm. in length and 0·02 mm. in breadth.

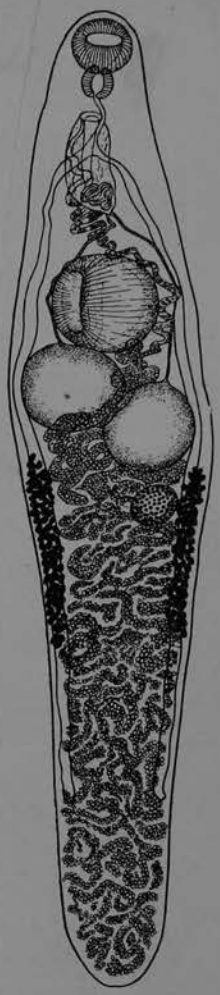
The most typical peculiarity of *Oswaldoia collurionis* is the ventral sucker's great size and considerable depth, so that but a small dorsal space is left for the passage of the uterine coils to the genital pore.

FIG. 3.

Lyperosomum corvi (Yamaguti,1939)

Syn.: Oswaldoia corvi Yamaguti,1939

Host: Corvus corone corone



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Dicrocoelidae

Lyperosomum corrigia Braun, 1901

Length: 10.-13. by 1. - flattened, spindle-shaped

Width:

Oral sucker:

Acetabulum: (size:)
(position): near oral sucker

Sucker ratio: 1:1

Esophagus:
Pharynx:

Genital pore (location):

Testes, shape: elongated, small
location: separated from one another & from acet.

Cirrus sac (extent):
Ovary, shape: round, small

location:

Vitellaria: beginning at level of ovary & extending into the posterior third of body

Eggs: 32 by 22.8 μ

Other features:

Host: Tetrao tetrix

Locality:

Reference: Centralb. Bakt., 29, p. 946

Comparisons: related to Dist. plesiostomum v. Lenz. 1883

Life cycle:

f3568plb

Lyperosomum direptum Nicoll,1914

Host: Crax alector

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Lyperosomum duculae ~~sp. n.~~ Fischthal and Kuntz, 1973
(Figs. 9, 10)

HOST: *Ducula aenea palawanensis* (Blasius), green imperial pigeon (Columbiformes: Columbidae).

HABITAT: Small intestine (?).

LOCALITY: Tarabanan Concepción.

DATE: 15 May 1962.

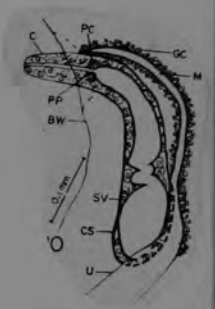
SPECIMEN DEPOSITED: No. 72173 (holotype).

DIAGNOSIS (based on one complete adult worm with body from just postacetabular anteriorly in sinistrolateral view and remainder in dorsal view, and another with body missing anterior to middle of posterior testis; both measured): Body elongate, narrow, extremities rounded, 5,815 long by 565 wide. Forebody 875 long; hindbody 4,630 long; forebody–hindbody length ratio 1:5.3. Oral sucker subterminal ventral, with compact muscle layer just within posterior, posterodorsal, and posteroventral margins, 280 long by 265 deep; preoral space 17 long; acetabulum 310 long by 345 deep; sucker length ratio 1:1.11. Prepharynx absent; pharynx 84 in diameter; esophagus 255 long; cecal bifurcation 435 preacetabular; ceca conspicuously cell-lined, terminating about 1,175 from posterior extremity in partial worm with 3,010 long postvitellarian space.

Testes two, slightly lobed, pyriform, tandem–diagonal; anterior testis sinistromedian, 365 by 180, lying 180 postacetabular; posterior testis dextromedian, 365 by 225, lying 215 posterior to anterior testis. Cirrus sac elongate, thick-walled, muscular, 305 long by 73 deep, commencing 60 preacetabular. Seminal vesicle sinuous, thick-walled, muscular, 290 long by 65 deep. Pars prostatica very short, tubular, surrounded by few prostate cells. Cirrus muscular, protrusible, opening into posterior part of shallow genital atrium. Genital pore at level of posterior part of esophagus.

Ovary smooth to slightly lobed, median, diagonally oriented, 240–275 by 215–243, lying 150–210 posterior to posterior testis. Seminal receptacle posterolateral to ovary, 205 by 90. Mehlis' gland well developed, postovarian. Vitellaria follicular to dendritic, in lateral fields, anteriormost level of fields nearly equal and lying 120–125 preovarian, posterior level subequal with right field extending 620–825 postovarian and left field 840–1,100, right field 920–1,225 long, left 1,125–1,500 long; vitelline reservoir small; postvitellarian space 2,460–3,010 long. Uterus filling most of hindbody, separating gonads. Metraterm thick-walled, muscular, slightly shorter than cirrus sac, entering genital atrium anterior to male opening. Eggs numerous, operculate, 20 measuring 26–32 (29.8) by 19–21 (20.2).

DISCUSSION: Our form keyed to *Lyperosomum* Looss, 1899, in the keys given by Odening (1964) and Yamaguti (1971). It differs from all others in the genus in having pyriform testes, and from all but *L. turdia* (Ku, 1938) Travassos, 1944, and *L. anatis* Belogurov and Leonov, 1963, in having lobed testes. *L. turdia* differs further from our species in having a much wider body, vitellaria commencing at the testicular level, and a much shorter posttesticular space. *L. anatis* differs further from our species in having the vitellaria commencing at the testicular level and a much shorter posttesticular space.



Lyperosomum dujardini (Strom et Sondak, 1935)

Синоним: *Oswaldoia dujardini* Strom et Sondak, 1935

(Рис. 141)

Хозяин: завирушка лесная (*Prunella modularis obscura*)

Локализация: желчный пузырь.

Место обнаружения: СССР (Азербайджан).

Описание вида (по Штрому и Сондак, 1935). Небольшая трематода с невооруженным телом, постепенно суживающимся к обоим концам. Длина тела 5,6 мм, максимальная ширина в области брюшной присоски 0,72 мм. Субтерминальная ротовая присоска несколько угловатой формы; ее размер 0,31 мм. На расстоянии 0,165 мм от переднего конца тела и 0,135 мм от заднего края ротовой присоски находится передний край значительно большей круглой брюшной присоски (0,57×0,53 мм). Ее центр делит длину тела в отношении 1 : 2,8; подобное соотношение не встречается у других видов этого рода: у них передний отдел тела значительно меньше заднего. Размер фаринкса 0,146×0,163 мм. От короткого пищевода отходят два кишечных ствола, задние концы которых теряются за густыми петлями матки. Непосредственно позади брюшной присоски, отделенные друг от друга передним отделом матки, располагаются два небольших неправильной формы семенника. Размер переднего левого семенника 0,21×0,17 мм и заднего правого 0,26×0,11 мм.

Дно крупной половой бурсы, заключающей сильно извитой семенной пузырек, находится на 0,4 мм кпереди от брюшной присоски. Длина половой бурсы 0,73 мм, максимальная ширина — 0,17 мм. Позади семенников, на расстоянии 0,64 мм от брюшной присоски и 0,27 мм от заднего семенника находится продольно-овальный яичник; его размер 0,26×0,18 мм. Желточники в виде двух узких полей, состоящих из мелких фолликулов, тянутся вдоль боков тела, позади семенников. Начало правого — по середине расстояния между задним семенником и яичником, левого — на уровне переднего края яичника. Длина их соответственно 1,6 и 1,1 мм. Матка доходит почти до заднего конца тела, откуда поднимается кпереди, переходя в метратерм. Половое отверстие находится между развилком кишечника и фаринксом, позади последнего, несколько влево от срединной линии тела. Яйца средних размеров, молодые — желтые, зрелые — темно-коричневые; размеры их: 0,034—0,041×0,018—0,027 мм.

Литература: Штром и Сондак, 1935; Штром, 1940.

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Lyperosomum emberizae Yamaguti, 1941

Синоним: *Olssoniella emberizae* (Yamaguti, 1941) Travassos, 1944

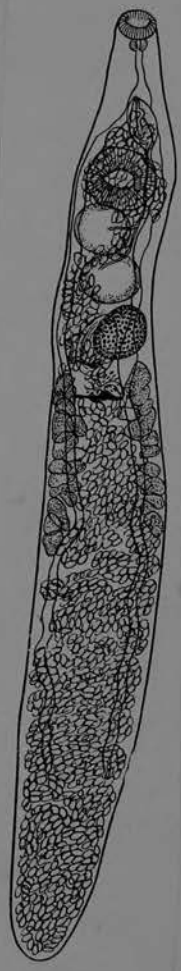
(Рис. 142)

Хозяин: овсянка (*Emberiza variabilis*).

Локализация: желчные протоки печени.

Место обнаружения: Япония.

Описание вида (по Ямагути, 1941). Тело довольно тонкое, 3,85—4,03 мм длины. Максимальной ширины — 0,47 мм — паразит достигает приблизительно на середине своей длины. Кутикула тонкая и гладкая. Ротовая присоска субтерминальная, 0,15 мм в диаметре. Фаринкс 0,045×0,051 мм в диаметре. Пищевод 0,24 мм длины, расширен сзади. Кишечные стволы оканчиваются у передней части задней трети длины тела. Брюшная присоска 0,24 мм в диаметре, расположена приблизительно на середине передней трети тела. Семенники цельнокрайные,



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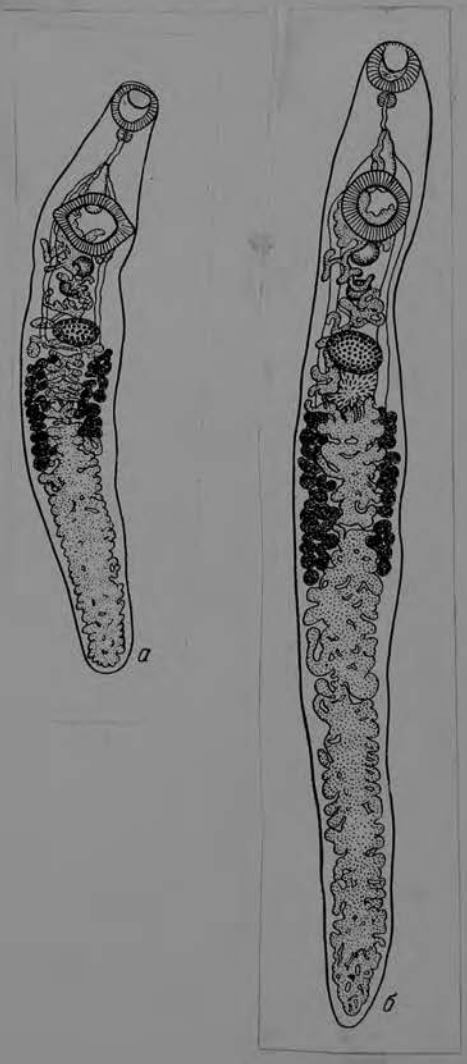
Lyperosomum gorbunovi Strom, 1935
(Рис. 143)

Хозяин: береговая ласточка (*Cotyle riparia* = *Riparia riparia*).
Локализация: желчные ходы печени.
Место обнаружения: СССР (Таджикистан).

Описание вида (по Штрому, 1935). Средней величины трематода с толстым невооруженным телом, длиной 5,4 мм; максимальная ширина (0,63 мм) в задней половине, несколько позади желточников. Боковые контуры тела почти параллельны, но в общем оно суживается кзади. Передний конец занят круглой субтерминальной ротовой присоской (0,384 мм). На расстоянии 0,86 мм от переднего конца тела находится передний край более крупной плоской брюшной присоски (0,471×0,514 мм), занимающей почти всю ширину тела. Ее боковые края несколько выдаются в стороны в виде ушкообразных придатков. Префаринкса нет. Диаметр фаринкса 0,097×0,11 мм. За ним следует короткий пищевод, несколько изогнутый вследствие сокращения. Два кишечных ствола образуют местами большие вздутия; их слепые концы не видны, так как в задней части тела они прикрыты густыми петлями матки. Два небольших неправильно овальной формы семенника (0,17×0,22 мм и 0,13×0,16 мм) лежат позади брюшной



Dicrocoeliidae

Lyperosomum intermedium ~~sp. n.~~
(Figs. 1–3) ~~Madhavi 1972~~ Denton & Kinsella, 1972

Description (12 mature worms measured): Body elongate, with almost parallel sides and rounded ends, semitransparent, flattened dorsoventrally, 1,650 to 4,200 long by 335 to 420 wide, usually widest in ovarian zone or just posterior to it. Tegument aspinose, with small retractile sensory papillae on margin of body in region of oral sucker. Oral sucker slightly oval, muscular, subterminal to to a dorsal liplike projection, 132 to 150 long by 125 to 145 wide. Acetabulum 160 to 215 in diameter, muscular, cup-shaped with deep lumen, located within anterior fourth of body. Ratio of width of oral sucker to acetabulum 1:1.3 to 1.5. Prepharynx absent. Pharynx globular, 60 to 74 in diameter. Esophagus straight to slightly sinuous, approximately 60 long, bifurcating ⅓ distance from oral sucker to acetabulum; ceca slender to wide and voluminous, sinuous, passing dorsal to margins of acetabulum, lateral to gonads, dorsal to vitellaria, to terminate at same or slightly different levels near posterior end of body. Excretory pore terminal. Excretory vesicle thin-walled, tubular, extending anteriad almost to seminal receptacle where it receives a common collecting tubule from each side of body. Common collecting tubules passing anterolaterally to ovarian zone where each branches into an anterior and posterior main collecting tubule. Genital pore median, ventral to caudal margin of intestinal bifurcation. Testes round to oval with smooth margins, 111 to 240 in diameter, oblique in position, located in second body fourth. Anterior testis located either to right or left side of body. Cirrus pouch club-shaped, 111 to 150 long by 50 to 65 wide, lying mostly anterior to acetabulum, containing coiled seminal vesicle, ejaculatory duct surrounded by prostatic gland cells, and eversible cirrus. Ovary round to to transversely oval, 63 to 145 long by 70 to 150 wide, situated at or just posterior to equator on same side as posterior testis. Seminal receptacle globular, located just posteromedial to ovary. Vitellaria composed of medium-sized follicles, mainly extracecal, beginning midway between posterior testis and ovary or in ovarian zone, extending posteriorly 468 to 668 and terminating ½ to ⅗ distance from ovary to caudal end of body. Uterus greatly convoluted, filling most of body behind ovary, passing anteriorly on right or left side of ovary and posterior testis, between testes, dorsal to acetabulum and cirrus pouch, terminating in a weakly muscular metraterm. Mature eggs few, light tan in color, thin-shelled, 46 to 51 long by 23 to 27 wide in living specimens. Miracidium

~~Waltair Coast, Bay of Bengal~~

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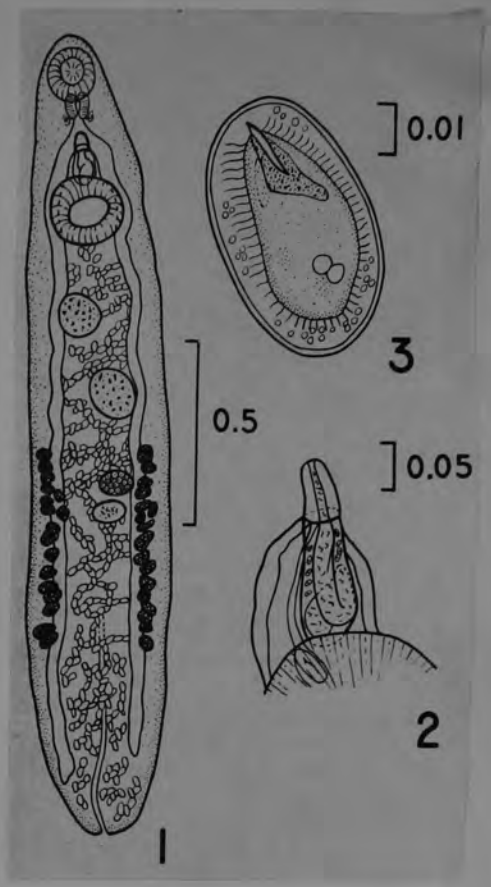


(over)

ciliated and possessing a stylet but without the refractile granules in the large posteriorly situated vesicles described for other species of Dicrocoeliinae.

Host: Rice rat (*Oryzomys palustris*).

Site: Pancreas.

Localities: Cedar Key, Levy County, Florida (type) and Sapelo Island, Georgia.

Holotype: USNM Helm. Coll. No. 63238; paratypes: USNM Helm. Coll. No. 63239 (2 specimens).

DISCUSSION

The genus *Lyperosomum* Looss, 1899 (*sensu stricto*) presently contains 18 species, 17 described from birds and one from a mammal. Of these, *L. intermedium* shows a close relationship only to *L. sinuosum* Travassos, 1917 (Travassos, 1944), a somewhat atypical species of the genus, described from the pancreas of yellow-crowned night herons in Brazil and recently reported from the pancreases of clapper rails (Heard, 1970) and raccoons (Harkema and Miller, 1962) from salt marshes in the southeastern United States. In comparing the two species, 10 mature specimens of *L. sonuosum* from clapper rails collected in Louisiana, Florida, and Georgia were examined. No specimens suspected of being this species from raccoons were available for study.

L. intermedium, while resembling *L. sinuosum* in the location of the genital pore ventral to the intestinal bifurcation, in the location of the vitellaria in the third fourth of the body and the termination of the ceca near the posterior end of the body, differs from it in several significant characters. *L. intermedium* is a smaller and relatively broader worm than *L. sinuosum* (length 6.5 to 9.0 mm in our specimens) and shows no tendency to assume a sinuous body shape on fixation as does *L. sinuosum*. The acetabulum of *L. sinuosum* is located relatively closer to the oral sucker and is situated within the anterior ⅛ or ⅙ of the body; in *L. intermedium* it lies within the anterior ¼ of the body. The vitellaria in *L. intermedium* are composed of fewer and larger follicles than in *L. sinuosum* and begin more anteriorly at a level midway between the posterior testis and ovary or in the ovarian zone; in *L. sinuosum* they begin posterior to the ovary, usually at the posterior level of the seminal receptacle, and extend for a greater distance. Also, *L. intermedium* has smaller suckers than *L. sinuosum*, more obliquely situated testes, and a smaller cirrus pouch with a short stout cirrus.

ACKNOWLEDGMENTS

We are indebted to Richard W. Heard for allowing us to study specimens of *L. intermedium* from rice rats collected on Sapelo Island, Georgia, and specimens of *L. sinuosum* from clapper rails collected at Savannah, Georgia, St. Petersburg, Florida, and Grand Terre Island, Louisiana. Also, much appreciation is expressed to Patricia Hobson for preparing the illustrations.

Dicrocoeliidae

Lyperosomum kakea Bhalerao, 1926

Length: In a well extended specimen, 3.36 mm.

Width: " " " " 0.33 mm.

Oral sucker: Terminal, 0.13 X 0.15 mm.

Acetabulum: (size:) 0.2 mm. in diameter.
(position): One-fifth the distance from the anterior end of the body.

Sucker ratio:

Esophagus: Moderately long.
Pharynx: Immediately behind the oral sucker and is globular, measuring 0.6 mm in diameter.
Genital pore (location): Some distance behind the pharynx.

Testes, shape: Oval

location: Tandem, some distance behind the ventral sucker.
Cirrus sac (extent): Consumes middle 2/4 ths. of distance between
Ovary, shape: Ovoid. oral sucker and acetabulum.

location: Behind the testes in the central line.

Vitellaria: Small, and consist of a few follicles extending to a short distance, 0.33-0.43 mm., behind to the ovary.

Eggs: Oval, operculated, measuring 0.028-0.03 X 0.016-0.018.

Other features:

Host: Corvus insolens

Locality: Rangoon

Reference: Parasitology, Vol. 18, No. 4, p.394-395.

Comparisons: Lyperosomum lobatum (Railliet 1900)

Life cycle:

Lyperosomum kakea n.sp.: Sixteen specimens of this species were obtained on one occasion from the liver. Its specific diagnosis is as given below: Body elongated, tapering at both ends, broadest at the level of ventral sucker. Ventral larger than oral sucker. Testes oval, one behind the other, somewhat posterior to ventral sucker, their long axis being oblique to the length of the body. Ovary behind testes, its long axis being transverse. Cirrus-sac ends some distance anterior to testes. Genital pore near pharynx. Vitellaria a short distance behind ovary. Eggs 0·028—0·03 x 0·016—0·018 mm.

from Bhalerao, 1927

f3568plb

LYPEROSOMUM KAVINI ~~n. sp.~~ FOTEDAR AND RAINA, 1965

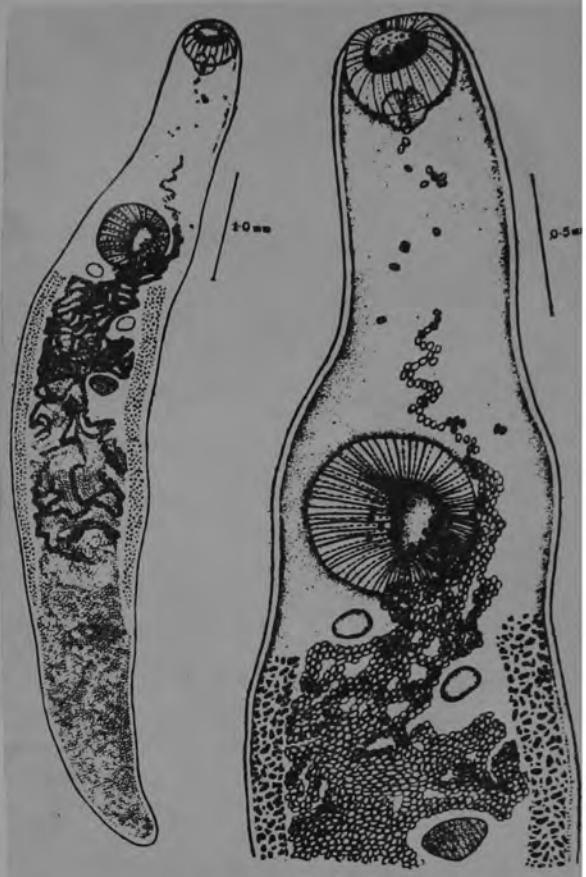
The specimens are elongated, more or less lanceolate in outline with both ends blunt. Living specimens are whitish in colour and most of the anatomy can be studied. The hind region is, however, dark brown due to the uterine coils campactly filled with eggs.

The cuticle is smooth. Maximum width is in the ovarian region. The pre-acetabular region is fairly long and uniformly narrow. It represents roughly one fourth of the body length. The oral sucker is sub-terminal and smaller than the acetabulum. The acetabulum is large, pre-testicular and pre-equatorial. The size ratio of two suckers is 1 : 1.5. The pharynx is well developed, being one third of the diameter of the oral sucker. The oesophagus and intestinal caeca are degenerate in all the specimens.

The gonads are post-acetabular and lie in the second quarter of the body. The testes are smaller than the ovary and are obliquely placed. The uterine coils always pass between the two testes. The shape of testes is slightly variable, being spherical, sub-spherical or broadly oval. The cirrus pouch is not clearly seen in the specimens although all are fully mature. The ovary is sub-median and post-testicular, located immediately in front of the equatorial level. It is always separated from the testes by uterine coils. The outline of the ovary is roughly triangular and is always larger than the testes. The uterus is well developed. Its coils are compactly filled with eggs and occupy entire hind body and the region between ovary and acetabulum. The ascending limb of uterus is clearly seen passing along the left side of acetabulum. It opens into the genital pore, located at the anterior level of pharynx. The vitellaria are lateral. Their follicles extend anteriorly to the level of testes and posteriorly to the end of third quarter of body length. The eggs are small, oval and operculate. Mature eggs are dark brown in colour.

MEASUREMENTS : (average, in mm.)

Length 7.95 ; width at acetabular level 1.08 ; maximum width at ovarian level 1.23 ; oral sucker dia. 0.42; acetabulum dia. 0.63; pharynx 0.15 × 0.165 ; anterior testis dia. 0.15 ; posterior testis dia. 0.18 ; ovary 0.2 × 0.24 ; eggs 0.042 × 0.0.35.



LYPEROSOMUM KAVINI sp. nov.

HOST: CORVUS MENEDULA SUEMMERINGII, COMMON JACKDAW

HABITAT: BILE PASSAGES

LOC.: SRINAGER, KASHMIR

-OVER-

SYSTEMATIC POSITION

Yamaguti (1958) places avian Dicrocoeliids under two sub-families, namely, Dicrocoeliinae Looss, 1899 and Stromitrematinae Yamaguti, 1958, the latter sub-family differing from the former mainly in having no definite acetabulum. Yamaguti further divides Dicrocoeliinae into nine tribes, placing genus *Lyperosomum* in the tribe Lyperosomini. The present form agrees with the distinguishing features of the tribe Lyperosomini and the genus *Lyperosomum* as given by Yamaguti (1958) in the following main points :—

Acetabulum larger than oral sucker; diagonal testes; posttesticular ovary; gonads separated by uterine coils; genital pore nearer pharnyx (pharyngeal in present form) ; vitellaria commence at level of testes.

The present form, however, has degenerate oesophagus, caeca and cirrus pouch. Rudimentary caeca is recorded in several species of *Lyperosomum*, like *L. amurensis* Stscherbowitsch, 1946 and *L. alagesi* (Skrjabin and Udinzev, 1930) Strom, 1940 Yamaguti makes no mention of this variable character in his generic diagnosis of *Lyperosomum*.

The only other genus included by Yamaguti in his tribe Lyperosomini is *Corrigia* Strom, 1940, from which *Lyperosomum* and the present form differ in body shape, musculature of suckers, position of testes, posterior extent of caeca, position of acetabulum in relation to oral sucker and position of genital pore. These differences are sufficient to regard *Corrigia* a valid genus. Bear (1957), however, considers this genus a synonym of *Lyperosomum*. In *Corrigia* the vitellaria commence at ovarian or post-ovarian level but in *Lyperosomum* this character appears to be variable. While in the majority of *Lyperosomum* species vitellaria commence at testicular level or immediately behind, some species have their vitellaria from ovarian or post-ovarian level. These are: *L. emberizae* Yamaguti, 1941, *L. gorbunovi* Strom, 1935, *L. amurensis* Stscherbowitsch, 1946, *L. mosquensis* (Skrjabin & Issaitschikoff, 1927) Skr. & Evranova, 1952, *L. olssoni* (Railliet, 1900) Looss, 1907 and *L. strigis* Yamaguti, 1939

Genus *Lutztrema* Travassos, 1941, placed by Yamaguti (1958) in the sub-family Dicrocoeliinae and his tribe Lutztrematini, has a long single zizzag caecum or rudimentary double caeca. Present form, having degenerate caeca, cannot be placed under this genus in view of the wide differences in the position of genital pore, nature and distribution of vitelline follicles and in the absence of any pre-oral lobes.

Brachylecithum Strom, 1940, placed by Yamaguti (1958) under the sub-family Dicrocoeliinae and his tribe Brachylecithini, is yet another genus allied to *Lyperosomum*. Although some species of *Brachylecithum* have degenerate caeca, present form cannot be accommodated in this genus in view of the wide differences in the relative position of genital pore and gonads, distribution and nature of vitelline follicles.

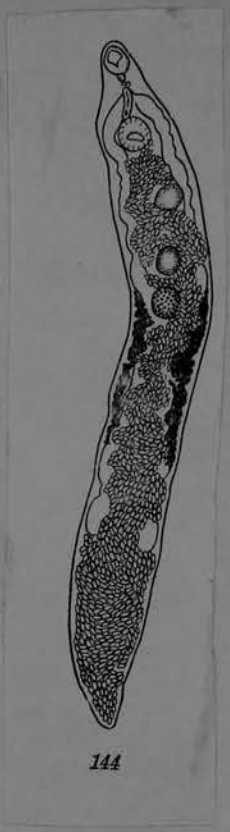
Inspite of the degenerate oesophagus, caeca and cirrus pouch, writers do not consider it necessary to raise a new genus for the present form. As is clear from the foresaid account, it can be conveniently placed under the genus *Lyperosomum*, the generic diagnosis of which requires slight amendment.

INDIAN J. HELMINTHOL. 17 (1): 54-62

Lyperosomum lari Travassos,1917

Syn.: Orthorchis lari (Trav.,1917) Trav.,1944

Host: Larus dominicanus



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Dicrocoeliidae

Lyperosomum lobatum (Railliet,1900) Braun ?

Lyperosomum mosquensis (Skrjabin et Issaitschikoff, 1927)

Синонимы: *Oswaldoia mosquensis* Skrjabin et Issaitschikoff, 1927; *Olsoniella mosquensis* (Skrjabin et Issaitschikoff, 1927) Travassos, 1944

(Рис. 145)

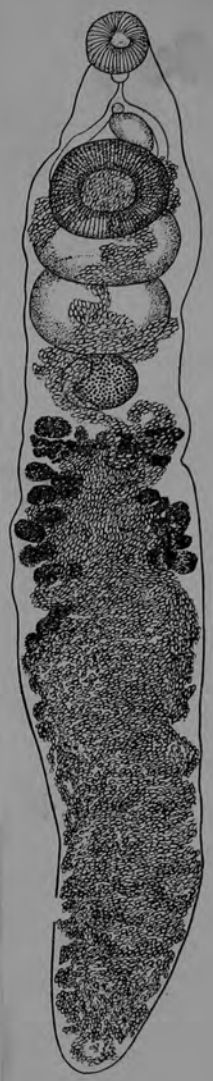
Хозяева: зяблик (*Fringilla coelebs*), трясогузка (*Emberiza variabilis*).

Локализация: желчные протоки печени и желчный пузырь.

Место обнаружения: СССР (Московская область).

Экстенсивность инвазии: у одной птицы из 70 вскрытых.

Описание вида (по Скрябину и Исайчикову, 1927). Тело удлиненное, достигает 6,8 мм длины при максимальной ширине 0,96 мм в области расположения семенников. Ротовая присоска 0,28 мм длины, 0,34 мм ширины. Фаринкс 0,09 мм в диаметре. Брюшная присоска крупнее ротовой, около 0,45 мм в диаметре. Центр брюшной присоски отстоит от переднего конца тела на расстоянии 1,1 мм. Семенники крупные, поперечно-овальные, 0,49 мм длины и 0,57 мм ширины. Передняя половина переднего семенника прикрыта задней половиной присоски. Задний семенник частично лежит дорзально от переднего семенника. Яичник меньше семенников, поперечно-овальной формы, достигает 0,43 мм длины и 0,46 мм ширины. Непосредственно позади яичника начинаются желточники, состоящие из небольшого числа крупных фолликулов. Задняя граница желточников приблизительно совпадает с серединой длины тела. Матка занимает всю заднюю половину тела; в области половых желез она тянется в виде небольшой ветви, которая дорзально от брюшной



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-OVER-

Lypersomum mosquensis (Skrjabin and Isaitschikoff, 1927)

syn. **IV. OSWALDOIA MOSQUENSIS** ~~n. sp.~~ Skrjabin and Isaitschikoff, 1927

(Plate XXII)

Host :—*Fringilla coelebs.*

Habitat :—Biliary ducts of the liver and the biliary bladder.

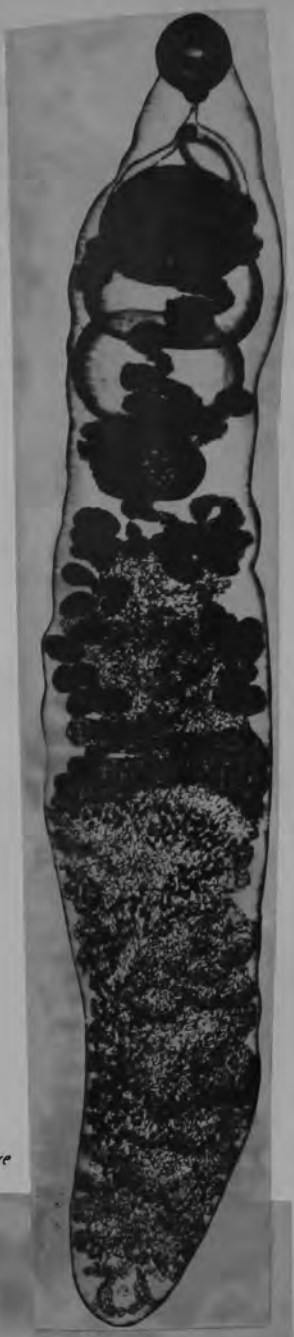
Locality :—The Government of Moscow (neighbourhood of Moscow ; Kouzminky and Petrowsky Park).

Frequency of discovery of the Parasite. In 70 specimens of *Fringilla coelebs* this parasite was found only once.

Description of the species. The elongated body reaches a length of 6·8 mm. and a maximum breadth of 0·96 mm. at the anterior part of the body. The oral sucker is 0·28 by 0·34 mm. ; the pharynx 0·09 mm. ; the diameter of the ventral sucker 0·45 mm. ; the testes 0·49 by 0·57 mm. ; the ovary 0·43 by 0·46 mm. ; the centre of the ventral sucker is displaced considerably forward (1·1 mm.). The yolk-glands begin at the level of the posterior margin of the ovary. The posterior limit of the yolk-glands is exactly at the middle of the body. The yolk-glands cover a space of 1·0 to 1·1 mm. The topography of the genital glands is very unusual : the ovary is larger than the ventral sucker and is so far forward that the anterior testis and the anterior rim of the posterior testis are situated dorsally to the ventral sucker. The uterus occupies the bulk of the body posterior to the ovary ; its ascending trunk, leading to the genital pore, which is situated at the level of the posterior end of the pharynx, forms some very dense coils anterior and dorsally to the ventral sucker. The eggs are 0·045 mm. in length and 0·022 mm. in breadth. The most characteristic features of *O. mosquensis*, which differentiate it from all other specimens of *Oswaldoia*, are :—

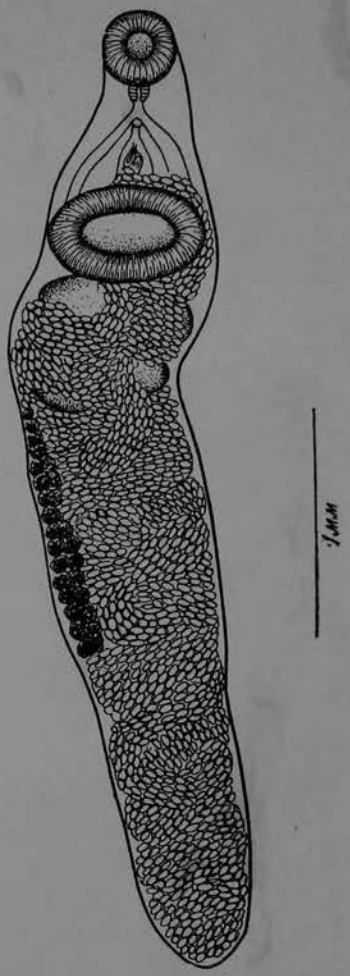
1. The grouping of all three genital glands in the anterior third of the body.
2. The situation of the anterior, aswell as the posterior, testis, dorsally to the ventral sucker.
3. Except for its ascending terminal portion leading to the genital pore, the uterus consists of a dense knot of coils.

It is necessary to add that the testes of some specimens of this species are situated one after another as in Lypersomum, whilst on the other hand, in some specimens they acquire a lobed appearance.



Lyperosomum mosquensis (Skrjabin & Issaitschikoff,1927)
cineli Oschmarin,1952

Host: Circlus pallasi



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Lyperosomum olssoni (Railliet, 1900) Looss, 1907

Синонимы: *Distomum clathratum* Deslongchamps, 1824 в понимании Олссона, 1876; *Dicrocoelium olssoni* Railliet, 1900; *Olssoniella olssoni* (Railliet, 1900) Travassos, 1944; *Brachylecithum olssoni* (Railliet, 1900) Strom, 1940

(Рис. 147)

Хозяин: стриж (*Apus apus*).
Локализация: желчный пузырь.
Места обнаружения: Западная Европа, СССР.

Историческая справка. Этот вид, описанный Олссоном (1876) и переописанный Мюлингом (1898) под именем *Distomum clathratum* Deslongchamps, 1824 из желчного пузыря стрижа *Apus apus*, является, по мнению Райе, самостоятельным видом, а не тем, который описан Деленгшамп (Deslongchamps) в 1824 г. Поэтому Райе наименовал его *Dicrocoelium olssoni*. В последующие годы он был Лооссом перенесен в род *Lyperosomum*. Штром в 1940 г. поместил его в род *Brachylecithum*, а Травассос (1944), не зная работы Штрома, обосновал для этой трематоды новый род *Olssoniella*. Мы относим его к роду *Lyperosomum*.

Описание вида (по Мюлингу, 1898 из Травассоса, 1944). Тело достигает 2,6 мм длины при ширине 0,66 мм. Передний отдел тела почти треугольной формы; тело субцилиндрическое, удлиненное. Желточники состоят из малочисленных фолликулов и располагаются от уровня яичника до середины длины тела. Яичник лежит позади семенников, характеризуется удлиненной формой и имеет меньший размер, чем семенники. Матка мощно развита. Яйца бурого цвета, достигают 0,036 мм длины при ширине 0,021 мм.

Литература: Olsson, 1876, стр. 24; Mühling, 1898, стр. 22; Railliet, 1900, стр. 339; Looss, 1907; Штром, 1940; Travassos, 1944, стр. 205—206.

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LYPEROSOMUM OSWALDOI (Travassos, 1919)

FIGURE 35, *a–c*

Oswaldoia oswaldoi TRAVASSOS, Arch. Esc. Sup. Agr., vol. 3 (1919), pp. 15–17, fig. 6, 1920.

Lyperosomum oswaldoi TRAVASSOS, Monogr. Inst. Oswaldo Cruz, No. 2, pp. 141–145, est. 47, figs. 1–5; est. 48, figs. 1–5; est. 49, fig. 1, 1944.

Description.—Body of sexually mature specimens (fig. 35, *a*, *b*) elongated, slender, 4.35 to 10.65 mm. long by 0.39 to 0.77 mm. wide in testicular zone, semitransparent, slightly flattened dorsoventrally; preacetabular region short, narrowing abruptly to blunt anterior extremity; postacetabular segment extremely elongated, gradually tapering to rounded posterior end. Cuticle aspinose, with fine transverse striations and small retractile sensory papillae, which are usually more clearly visible along margins of body of living specimens. Oral sucker subterminal, 0.15 to 0.30 mm. long by 0.16 to 0.31 mm. wide, preceded dorsally by a short liplike projection. Acetabulum large, 0.37 to 0.66 mm. in diameter, strongly muscular, cup-shaped with a deep lumen (fig. 35, *b*), located within anterior seventh of body. Ratio of width of oral sucker to acetabulum about 1:2. Pharynx globular, relatively small, 0.06 to 0.15 mm. in diameter. Length of esophagus approximately equal to diameter of pharynx. Ceca slender, slightly sinuous, unequal in length, terminating one-half to two-thirds distance from vitellaria to caudal extremity of body. Excretory pore terminal. Excretory vesicle thin-walled, tubular, extending anteriad almost to seminal receptacle, where it receives a common collecting tubule from each side of body. Common collecting tubules passing anteriad laterally to gonads to zone of posterior third of acetabulum, where each branches into an anterior and posterior main collecting tubule. Genital pore approximately median, at level of posterior limits of pharynx. Testes round to oval, 0.11 to 0.30 mm. long by 0.13 to 0.36 mm. wide, oblique in position, located close behind acetabulum, in anterior fourth of body. Anterior testis may be on right or left side of body midline. Cirrus sac club-shaped, small, 0.07 to 0.19 mm. long by 0.04 to 0.10 mm. wide, usually lying entirely in front of acetabulum, containing convoluted seminal vesicle, ejaculatory duct surrounded by prostatic gland cells and eversible cirrus. Ovary round to transversely oval, 0.07 to 0.27 mm. long by 0.13 to 0.31 mm. wide, situated from 0.10 to 0.35 mm. behind caudal testis and on same side of body as that organ. Seminal receptacle globular, located just posterior to ovary. Mehlis' gland at posteromedial margin of seminal receptacle. Vitellaria lateral in position, composed of numerous small follicles, beginning anteriorly at a level within zone of anterior testis and extending posteriorly for a distance of 1.85 to 4.34 mm., terminating

at a level approximately midway between acetabulum and posterior end of body. Vitelline ducts emerging from yolk glands at a level one-third to one-half their length from anterior limits, uniting in median plane of body to form common vitelline duct. Uterus greatly convoluted, filling most of body behind ovary, passing anteriorly on right or left side of ovary and posterior testis, between testes, dorsal to acetabulum and cirrus sac, terminating in a weakly muscular metraterm. Metraterm equal in length in cirrus sac. Ova numerous, dark brown when mature, measuring 26μ to 33μ long by 18μ to 22μ wide. Ciliated miracidium possessing a stylet and two large oval, oppositely situated vesicles which are filled with refractile granules.

Additional hosts.— *Toxostoma rufum* (Linnaeus) and *Cyanocitta cristata* (Linnaeus).

Habitat.—Liver and gall bladder.

Localities.—GEORGIA: Augusta and Athens; MISSISSIPPI: State College; TEXAS: Houston and Eagle Lake.

Material.—Specimens No. 36749, 36750, 36751, and 36794 have been deposited in the helminthological collection of the United States National Museum.

From Denton & Byrd 1951

Remarks.—Lyperosomum oswaldoi is described here from numerous specimens from the liver and gall bladder of the brown thrasher, *Toxostoma rufum*, and two specimens from the gall bladder of the blue jay, *Cyanocitta cristata*, from the southern United States. The parasite is common in the brown thrasher, being recorded from 20 (48.8 percent) of 41 specimens of this species examined to date. The blue jay, on the other hand, must be considered as a rare or accidental host for the species, since only a single specimen (3.8 percent) of 26 birds proved to carry the form in its gall bladder. However, the parasite in the blue jay was normal in every way and was fully gravid. The specimens from the blue jay were indistinguishable from those in the brown thrasher.

Lyperosomum oswaldoi apparently represents the New World counterpart of *L. longicauda* (Rudolphi, 1809), from birds of the Old World. In Europe *L. longicauda* appears to be confined to birds of the family Corvidae (crows and jays), while *L. oswaldoi* has been recorded from birds of the families Thraupidae (tanagers), Icteridae (blackbirds), Phasianidae (partridges), and Fringillidae (sparrows) in South America and from species of Mimidae (thrashers) and Corvidae in North America (present paper). The two species, *L. longicauda* and *L. oswaldoi*, have the same general body appearance and internal organization but show certain minor differences. The body and internal organs, with the exception of the ova which are considerably larger, are smaller in *L. oswaldoi* than in *L. longicauda*. Very probably *L. oswaldoi* will fall as a synonym of *L. longicauda* (*sensu*

stricto) when the latter is more completely described. At the present time, however, we feel justified in regarding the two forms as distinct.

While comparing *L. oswaldoi* with other closely related forms of the genus *Lyperosomum*, it has been made clear to us that *L. skrjabini* (Solowiow, 1911), described from the same hosts as *L. longicauda*, must be considered a direct synonym of the latter. Further, it is our opinion that *L. urocissae* Yamaguti, 1939, is a synonym of *L. oswaldoi*.

Lyperosomum oswaldoi (Travassos, 1919) Travassos, 1944

Синоним: *Oswaldoia oswaldoi* Travassos, 1919

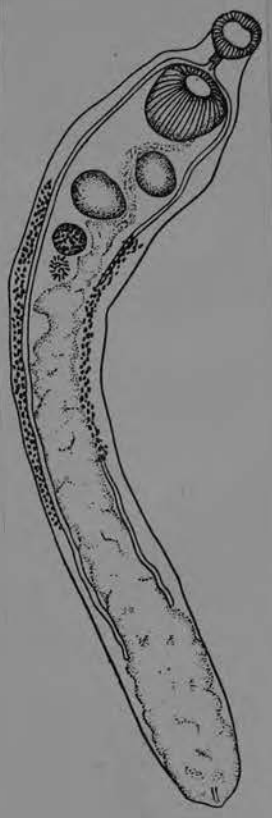
(Рис. 148 и 149)

Хозяева: птицы — *Ramphocelus brasilius brasilius* (L.), *Tachyphonus coronatus* (Vieill.), *Molothrus bonariensis bonariensis* (Gm.), *Cacicus haemorrhous haemorrhous* (L.), *Myiospiza humeralis humeralis* (Bosch.) *Odontophorus capueira capueira* (Spix.).

Локализация: желчные протоки и желчный пузырь.

Место обнаружения: Бразилия.

Описание вида (по Травассосу, 1944). Длина тела достигает 5—6,2 мм при максимальной ширине 0,7—1,0 мм на уровне брюшной



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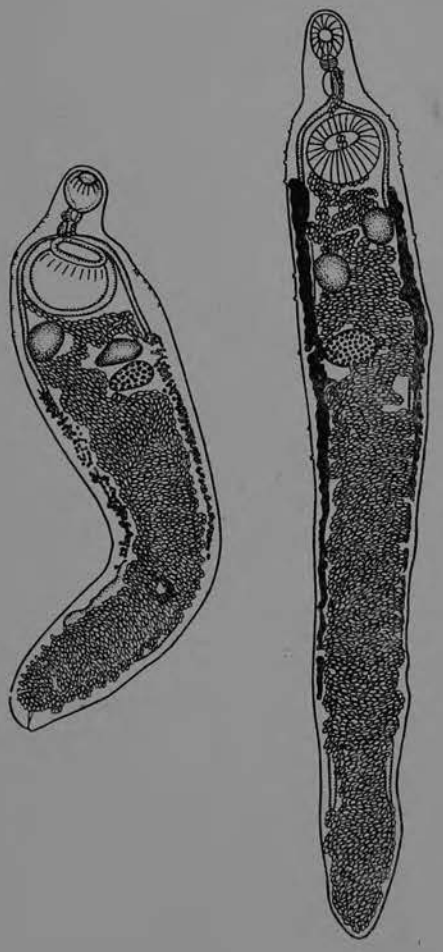

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From Byrd,1951

Genus LYPEROSOMUM Looss, 1899

LYPEROSOMUM OSWALDOI (Travassos, 1919)

FIGURE 35, *a–c*

Oswaldoia oswaldoi TRAVASSOS, Arch. Esc. Sup. Agr., vol. 3 (1919), pp. 15–17, fig. 6, 1920.

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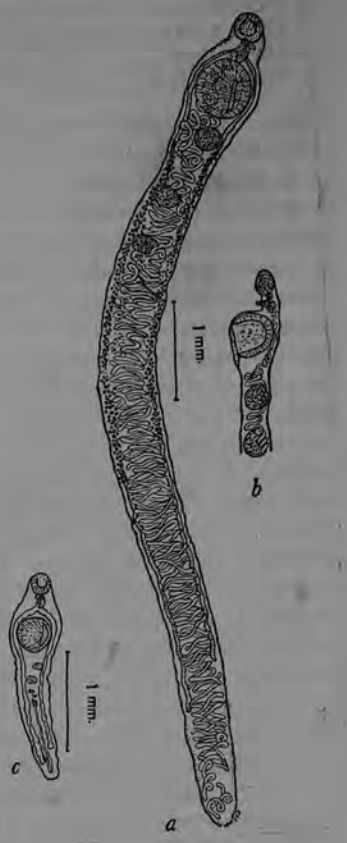

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Material.—Specimens No. 36749, 36750, 36751, and 36794 have been deposited in the helminthological collection of the United States National Museum.

Remarks.—Lyperosomum oswaldoi is described here from numerous specimens from the liver and gall bladder of the brown thrasher, *Toxostoma rufum*, and two specimens from the gall bladder of the blue jay, *Cyanocitta cristata*, from the southern United States. The parasite is common in the brown thrasher, being recorded from 20 (48.8 percent) of 41 specimens of this species examined to date. The blue jay, on the other hand, must be considered as a rare or accidental host for the species, since only a single specimen (3.8 percent) of 26 birds proved to carry the form in its gall bladder. However, the parasite in the blue jay was normal in every way and was fully gravid. The specimens from the blue jay were indistinguishable from those in the brown thrasher.

Lyperosomum oswaldoi apparently represents the New World counterpart of *L. longicauda* (Rudolphi, 1809), from birds of the Old World. In Europe *L. longicauda* appears to be confined to birds of the family Corvidae (crows and jays), while *L. oswaldoi* has been recorded from birds of the families Thraupidae (tanagers), Icteridae (blackbirds), Phasianidae (partridges), and Fringillidae (sparrows) in South America and from species of Mimidae (thrashers) and Corvidae in North America (present paper). The two species, *L. longicauda* and *L. oswaldoi*, have the same general body appearance and internal organization but show certain minor differences. The body and internal organs, with the exception of the ova which are considerably larger, are smaller in *L. oswaldoi* than in *L. longicauda*. Very probably *L. oswaldoi* will fall as a synonym of *L. longicauda* (*sensu*

stricto) when the latter is more completely described. At the present time, however, we feel justified in regarding the two forms as distinct.

While comparing *L. oswaldoi* with other closely related forms of the genus *Lyperosomum*, it has been made clear to us that *L. skrjabini* (Solowiow, 1911), described from the same hosts as *L. longicauda*, must be considered a direct synonym of the latter. Further, it is our opinion that *L. urocissae* Yamaguti, 1939, is a synonym of *L. oswaldoi*.

Lyperosomum palawanense ~~sp. n.~~ Fischthal and Kuntz, 1973
(Figs. 11, 12)

HOST: *Dinopium javanense everetti* (Tweeddale), golden-backed three-toed woodpecker (Piciformes: Picidae).

HABITAT: Small intestine (?).

LOCALITY: Tarabanan Concepción.

DATE: 14 May 1962.

SPECIMEN DEPOSITED: No. 72174 (holotype).

DIAGNOSIS (based on one worm): Body elongate, lancet-shaped, extremities rounded, 3,740 long by 1,305 wide at level between ovary and posterior testis. Forebody 605 long; hindbody 2,540 long; forebody–hindbody length ratio 1:4.2. Oral sucker subterminal ventral, 290 by 295; preoral space 47 long; acetabulum 595 by 670, center at anterior one-fourth of body length, at posterior part of anterior third of body; sucker length ratio 1:2.05, width ratio 1:2.27. Prepharynx absent; pharynx 140 by 170; esophagus thick-walled, muscular; cecal bifurcation somewhat closer to acetabulum than pharynx; ceca thick-walled, cell-lined; postcecal space 710 long.

Testes two, diagonal, well separated by uterus, intercecal, smooth, transversely elongate; anterior testis dextral, 100 by 150, lying 75 postacetabular; posterior testis sinistral, 120 by 185, lying 410 postacetabular. Cirrus sac thin-walled, slightly muscular, elongate, somewhat pyriform, 205 by 150, commencing 8 preacetabular, terminating ventral to posterior part of pharynx, occupying 5.5% of body length. Seminal vesicle bipartite, sinuous, saccular, walls cellular internally; posterior chamber 85 by 97; anterior chamber 97 by 94. Pars prostatica very short, tubular. Cirrus elongate, muscular. Prostate cells few, surrounding pars prostatica, anterior part of seminal vesicle, and posterior part of cirrus. Genital atrium small. Genital pore median, ventral to posterior part of pharynx.

Ovary smooth, 236 by 245, lying 750 postacetabular and 225 posterior to posterior testis. Seminal receptacle posterior to ovary. Laurer's canal present. Mehlis' gland well developed, posteromedian to ovary. Vitellaria follicular, in extracecal fields up to 960 long, may overlap ceca, commencing 455 postacetabular at level of posterior testis, extending 285 postovarian, in middle third of body; postvitellarian space 1,225 long. Uterus filling most of hindbody intercecally but may overlap ceca, descending postcecally to near posterior extremity, ascending median to ovary and between testes. Metraterm thick-walled, muscular, shorter than cirrus sac, lying sinistral to latter, surrounded by gland cells. Eggs many, operculate, 10 measuring 32–39 (36.1) by 22–26 (23.5).

Excretory bladder tubular where visible posteriorly; pore terminal.

DISCUSSION: This species appears close to *L. turdia* (Ku, 1938) Travassos, 1944, and *L. indosinense* (Odening, 1964) Yamaguti, 1971. *L. turdia* differs by having testes larger than the ovary, the ovary located immediately or only slightly posterior to the posterior testis, and the cirrus sac relatively longer (occupying 9.5–14% of body length). *L. indosinense* differs in having the cecal bifurcation at the anterior margin of the acetabulum, the gonads of about equal size, the cirrus sac entirely prebifurcal, the genital pore lateral to the pharynx, the vitellaria commencing at the anterior testis level, and smaller eggs (28–32 by 16–21).

Lyperosomum papabejani Skrjabin and Udinzew, 1930

Length: 6.561 mm.

Width: 0.5854 to 0.6118 mm.

Oral sucker: Subterminal; 0.354 by 0.3458 mm in diameter.

Acetabulum: (size:) 0.2730 by 0.2912 mm in diameter.
(position): At posterior limit of anterior sixth of body.

Sucker ratio:

Esophagus: Rather long (0.1920 mm.)
Pharynx: 0.0992 mm long by 0.0896 mm wide.
Genital pore (location): At/About 1/2 distance between oral and ventral suckers.
Testes, shape: Are of a rather irregularly elongated lobular form
location: Situated obliquely, at distance of from 36 to 40 μ from each other in the long axis of the body.
Cirrus sac (extent): Passes slt. post. to margin of ventral sucker.
Ovary, shape: Pyriform.

location: Directly behind the posterior testis, near the side of the body.
Vitellaria: Extent of 0.1456 to 0.1647 mm. and are situated above the median portion of the uterus. Left vitellaria take origin at level of ovary, the right posterior to receptaculum seminis
Eggs: Oval, 16 by 28.8 μ.

Other features:

Host: Caccabis chukar N 4313 and 4314

Locality: District of Erivan (Armenia)

Reference: Jour. of Parasitology, Vol. 16, No. 4, p.214-215.

Comparisons: L. corrigia

Life cycle:

Lyperosomum pawlowskyi Strom, 1928

(Рис. 150)

Хозяин: коростель (*Crex crex* L.), погоныш (*Porzana porzana*).

Локализация: желчные ходы печени.

Место обнаружения: СССР (Новгородская область, Азербайджан).

Описание вида (по Штрому, 1928, от коростеля). Тело прозрачное, плоское, сильно вытянутое в длину и лишенное шипиков. Длина его 9,63 мм. Максимальной ширины, 1,06 мм, оно достигает на уровне середины расстояния между задним семенником и яичником. Кпереди от этого уровня тело суживается круто, а кзади постепенно. Субтерминальная ротовая присоска имеет диаметр 0,422×0,439 мм. Брюшная присоска, занимающая почти всю ширину тела, крупнее ротовой, 0,488×0,623 мм в диаметре. Центр ее отстоит на 0,867 мм от переднего конца тела. За ротовым отверстием следует фаринкс; его размер 0,128×0,156 мм. Пищевода ни на одном из экземпляров обнаружить не удалось. Кишечные стволы не достигают заднего конца тела; на своем протяжении, в особенности в задней части тела, они прикрыты местами петлями матки. У одного

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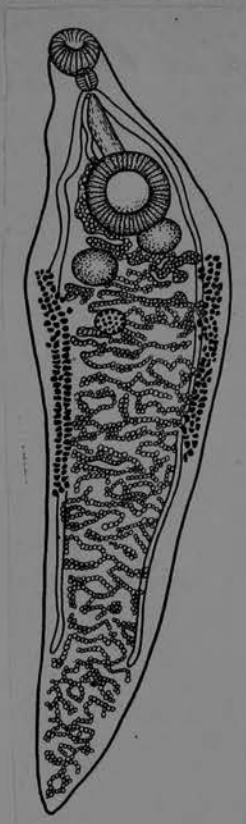
Lyperosomum petiolatum Railliet, 1900

Синоним: *Dicrocoelium petiolatum* (Railliet, 1900) Strom, 1940

(Рис. 151)

Хозяин: синица (*Garrulus glandarius*).
Локализация: печень.
Место обнаружения: Франция.



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Lyperosomum petrovi Kassimov, 1952[1]

(Рис. 151а)

Хозяин: кавказский турач (*Francolinus francolinus* Lin.).

Локализация: печень.

Место обнаружения: Азербайджанская ССР.

Описание вида (по Касимову, 1952). Длина тела достигает 5,8—6,0 мм, при максимальной ширине 0,5—0,7 мм в области брюшной присоски. От уровня брюшной присоски тело резко суживается к переднему концу. Ротовая присоска круглая, диаметром 0,21×0,25 мм; брюшная присоска крупная, шаровидная, достигает 0,64—0,77 мм в диаметре; соотношение их размеров 1 : 3. Расстояние между присосками 0,34—0,51 мм.

За ротовой присоской следует фаринкс диаметром около 0,16—0,17 мм. Кишечные стволы прямые, почти одинаковой длины, оканчиваются вблизи заднего конца тела.

Половое отверстие открывается на уровне бифуркации кишечника. Половая бурса достигает 0,172 мм длины, при ширине 0,129 мм; она располагается непосредственно впереди брюшной присоски. Круглые и

[1] Публикуется впервые.

151а

151а. *Lyperosomum petrovi* Kassimov, 1952 (по Касимову).

Lyperosomum platynosomoides (Potechina, 1948)

Синоним: *Brachylecithum platynosomoides* Potechina, 1948

(Рис. 152)

Хозяева: синицы (*Parus cyanus tianschanicus, Parus major ferganensis*).
Локализация: желчные ходы печени.
Место обнаружения: СССР (Киргизия).

Описание вида (по Потехиной, 1948). Мелкие трематоды с овальным телом, лишенным шипов. Длина тела 2,975 мм; начиная от ротовой присоски, тело постепенно расширяется, достигая максимальной ширины 0,36 мм в области брюшной присоски. Эта ширина сохраняется примерно до третьей четверти всей длины тела. Задний конец трематоды постепенно суживается. Диаметр ротовой присоски 0,253 мм; за ней следует маленький фаринкс, 0,052 мм в диаметре. Короткий пищевод, разветвляясь, дает начало кишечным стволам. Диаметр брюшной присоски 0,346 мм. Расстояние между присосками 0,328 мм. Два неправильно овальной формы семенника располагаются на уровне задней границы брюшной присоски, наклонно один к другому, сближаясь задними полюсами. Длина левого семенника 0,190 мм и ширина 0,121 мм. Правый семенник 0,173 мм длины и 0,121 мм ширины. Поперечно-овальный яичник, равный 0,138 мм длины и 0,190 мм ширины, находится в правом поле тела, на расстоянии 0,052 мм от семенников. Позади яичника располагается ясно заметный семяприемник. Желточники, располагаясь в третьей четверти длины тела трематоды, состоят из мелких фолликулов и занимают латеральные поля тела, не заходя за кишечные стволы. Начинаются желточники на расстоянии 0,029 мм от яичника и заканчиваются на расстоянии 1,115 мм от заднего конца тела. Длина желточников 0,398 мм. Матка, образуя густые петли в задней части тела, направляется вверх, проходит между семенниками и заканчивается половым отверстием, расположенным впереди брюшной присоски. Овальной формы половая бурса, 0,138 мм длины и 0,086 мм ширины, дном своим заходит за передний край брюшной присоски. Яйца овальной формы, золотисто-желтого цвета, 0,048 мм в длину и 0,030 мм в ширину.

Литература: Потехина, 1948.

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Lyperosomum rossicum (Skrjabin et Issaitschikoff, 1927)

Синоним: *Dicrocoelium rossicum* (Skrjabin et Issaitschikoff, 1927)

(Рис. 153)

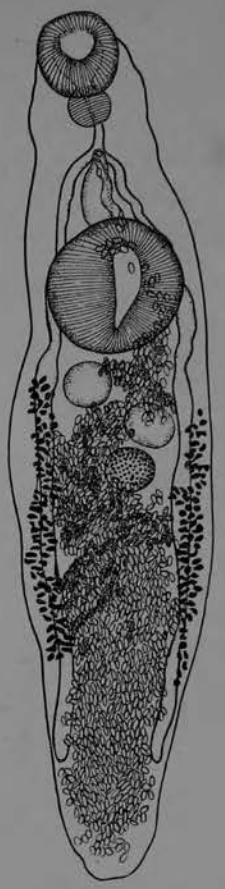
Хозяин: перепел (*Coturnix coturnix*).

Локализация: желчный пузырь.

Место обнаружения: СССР (Ростовская область).

Описание вида (по Скрябину и Исайчикову, 1927). Нежное, прозрачное тело достигает 2,91 мм длины при ширине 0,708 мм. Начиная от головного конца, тело постепенно расширяется, достигая максимальной ширины приблизительно в области расположения половых желез (чаще яичника), лежащих во второй трети длины паразита; затем оно постепенно суживается по направлению к заднему концу.

Почти круглой формы ротовая присоска достигает 0,246 мм длины при ширине 0,277 мм; брюшная присоска располагается на расстоянии 0,678 мм от переднего конца тела. Она также почти круглой формы и достигает 0,462 мм длины и 0,441 мм ширины. Своими боковыми краями она никогда не доходит до краев тела.



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(OVER)

Lyperosomum rossicum (Skrjabin and Isaitschikoff, 1927)

SYN. **1. DICROCOELIUM ROSSICUM** n. sp. Skrjabin and Isaitschikoff, 1927

(Plate XXI, fig. 1)

Host :—*Coturnix communis*.

Habitat :—Biliary bladder.

Locality :—Detected 3.11.18 by Professor K. I. Skrjabin and his **Assistant, N. P. Zakharow, in Nowotscherkassk** (Don District).

Frequency of discovery of the Parasite. This parasite is a very rare form and has been found only once, notwithstanding that **in the period 1918 to 1925 more than 100 specimens of quails were examined in different parts of Russia.**

Description of the Species. Body flat, elongated, with a maximum length of 29 mm. and a maximum breadth of 0·07 mm. in the region of the genital glands. The oral sucker is 0·246 mm. in length and 0·277 mm. in breadth. A round ventral sucker, placed at a distance of 0·677 mm. from the anterior end of the body, is 0·46 mm. in length and 0·44 mm. in breadth. The pharynx is 0·13 mm. in length and 0·15 mm. in breadth. The oesophagus is very short. The intestinal trunks do not reach quite to the posterior end of the body. The testes, of a roundly-oval form, are placed in the middle area of the parasite, behind the ventral sucker, obliquely to one another. They are slightly rounded and are 0·15 to 0·17 mm. in length and 0·16 to 0·17 mm. in breadth. The posterior margin of the posterior testis is exactly in the middle of the length of the body. The space between the testes is filled by considerable coils of the uterus. The round ovary is situated on the median line behind the posterior testis. The diameter of the ovary is 0·155 to 0·162 mm. : in other words, *the ovary is of the same size as the testes.* The interval between the posterior testis and the ovary is not covered by the coils of the uterus. The genital pore is placed at the level of the oesophagus, directly behind the pharynx. The uterine coils occupy the whole of the posterior end of the body ; they are so densely intertwined that they differ markedly from the regular coils so characteristic of some species of *Dicrocoelium* (*D. lanceatum*). At the level of the posterior margin of the ventral sucker the ascending coils of the uterus become looser, and proceed as a narrow, winding trunk towards the genital pore. The yolk-glands are situate at the level of the middle of the testes, the right yolk-gland beginning some distance anteriorly to the left one. The length of the yolk-glands is about 0·95 to 1·0 mm., and consequently they end some distance anteriorly to the blind ends of the intestines, which are 0·0375 to 0·041 mm. in length and 0·0225 mm. in breadth.

FIG. 1.

Lyperosomum (*Brachylecithum*) *sayeedi* n. sp. JAISWAL, 1957

In all 105 specimens of this species were obtained for study in January, 1950, from the liver of the Southern Painted Partridge, *Francolinus pictus pictus*. The worm appears to be of rare occurrence, since out of 50 partridges examined only one was found to harbour the parasites.

The flukes have an elongate ribbon-shaped body with bluntly rounded anterior and posterior ends. The cuticle is thin and smooth. The worms measure 2.02—4.30 mm. in length and 0.26—0.38 mm. in maximum width, attained in the region of the testes.

The oral and the ventral suckers are subequal in size, the former measuring 0.14—0.16 mm. in diameter and the latter 0.14—0.21 by 0.14—0.16 mm. The oral sucker is rounded and terminal in position, whilst the ventral sucker is transversely oval and lies posterior to the intestinal bifurcation, at about 1/5th to 1/7th of the body length from the anterior end. The mouth is surrounded by the oral sucker and leads into a small globular pharynx, which in turn communicates with a short oesophagus. The latter immediately bifurcates into a pair of simple intestinal caeca which run through the entire length of the body, terminating blindly at the caudal end. In gravid worms the blind ends of the caeca remain obscure due to the dense coils of the uterus filling up the posterior portion of the body.

A long and tubular excretory bladder is present which opens to the exterior at the median and terminal excretory pore situated at the posterior end.

The testes are very prominent structures lying behind the acetabulum. They are transversely oval in shape, extending on the sides almost to the lateral margins of the body. They are placed one behind the other, separated by a narrow gap. The anterior one measures 0.11—0.28 by 0.11—0.22 mm. and the posterior one 0.12—0.31 by 0.12—0.22 mm. An elongated cirrus sac extends from the anterior border of the acetabulum to the intestinal fork. It encloses the seminal vesicle, pars prostatica and the cirrus, and opens to the exterior at about the level of the intestinal fork, midway between the suckers.

The ovary, measuring 0.1—0.21 by 0.13—0.2 mm., is subspherical in shape and smaller than testes. It is situated a little behind the posterior testis and is sublateral in position. A small receptaculum seminis and Mehli's gland are discernible, the former lying quite close to the posterolateral border of the ovary, whilst the latter is somewhat removed from its hind border. The vitellaria are well developed, comprising of a few, about 11, large rounded, or somewhat oval follicles arranged in a single row on either side of the body and occupying a restricted area behind the ovary. The uterus has both descending and ascending limbs and in mature worms it is distended with eggs. It is thrown into tightly coiled loops which fill up most of the post-ovarian space of the body. The ascending limb extends forwards beyond the testes and the acetabulum forming pretesticular and pre-acetabular coils and opens to the exterior at the female genital pore which lies close to the male genital aperture.

Fully developed eggs measure 42—54 μ in length by 16—25 μ in width. They are dark brown in colour and operculated, containing miracidia having eye-spots.

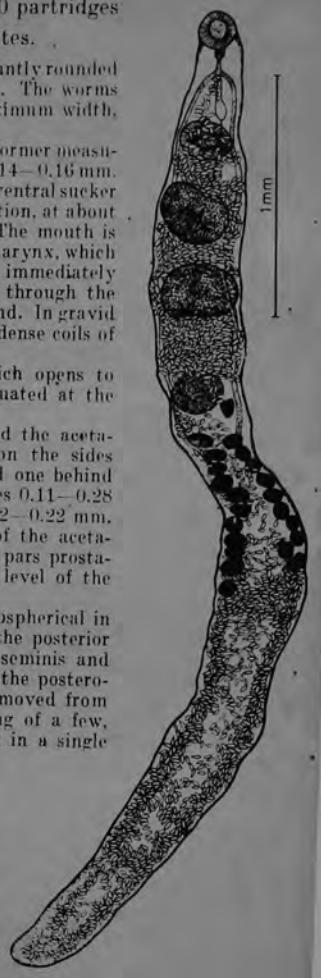


Fig. 1. *Lyperosomum* (*Brachylecithum*) *sayeedi* n. sp. Ventral View.

Discussion: In the position of the gonads and the structure and distribution of the vitellaria the form described above closely resembles *Lyperosomum* (*Brachylecithum*) *halcyonis* (YAMAGUTI 1941), parasitic in *Halcyon coromanda major* in Japan. But it can be differentiated from this species in the following features: (1) The testes in *Lyperosomum* (*Brachylecithum*) *halcyonis* are rounded in shape, whilst in the new species they are comparatively larger and oval in outline; they also differ in their location in the two species, being more posteriorly situated in the former. (2) The acetabulum is only slightly larger than oral sucker in the new parasite, whilst it is about one and a half times as large as the oral sucker in *Lyperosomum* (*Brachylecithum*) *halcyonis*. (3) The ratio between the breadth and the length of the body is 1 : 11 in the new species whilst it is 1 : 15 in *Lyperosomum* (*Brachylecithum*) *halcyonis*. (4) In various body measurements also the two species are found to differ from each other.

It is therefore, concluded that the form under discussion is a new species. It is proposed to name it *Lyperosomum* (*Brachylecithum*) *sayeedi* after Professor M. SAYEEDUDDIN, Principal and Dean of the Faculty of Science, Osmania University.

OVER

Specific diagnosis: Body elongate narrow and ribbon-shaped, 2.92—4.30 by 0.26—0.38 mm.; suckers subequal, oral sucker 0.14—0.16 mm. in diameter; acetabulum 0.14—0.21 by 0.14—0.16 mm.; testes transversely oval and very prominent, lying behind the acetabulum, anterior testis 0.11—0.28 by 0.11—0.22 mm. and posterior testis 0.12—0.31 by 0.12—0.22 mm.; genital pore at about the level of intestinal fork, midway between suckers; ovary 0.1—0.21 by 0.13—0.2 mm., subspherical and smaller than testes; vitellaria consist of about 11 large rounded or oval follicles arranged in a single row laterally, confined to a short area behind the ovary; eggs operculated, 42—54 μ by 16—25 μ, contain miracidia having eye-spots.

Host: *Francolinus pictus pictus.*

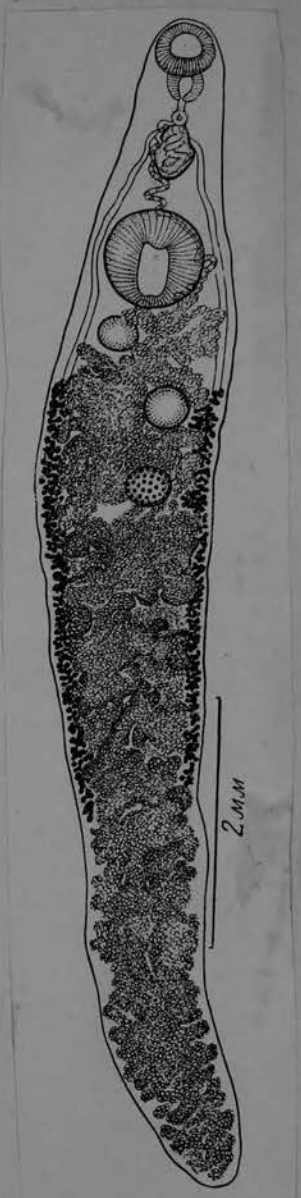
Habitat: Liver.

Locality: Hyderabad Deccan (India).

From: JAISWAL, 1957

Lyperosomum schikhobalovi Kassimov, 1952

Host: Alectoris graeca caucasica



155a

Dicrocoeliidae

Lyperosomum scitulum Nicoll,1914

Length: 6.8 to 7.2

Width: 0.8

Oral sucker: 0.45

Acetabulum: (size:) 0.42
(position): 1.33 mm. from anterior end

Sucker ratio: almost equal

Esophagus: about same length as pharynx
Pharynx: 0.14 in diameter
CECA: to a distance about 2 mm. from posterior end, unequal
Genital pore (location): over bifurcation

Testes, shape: oval

location: ant. testis 0.33 from acetabulum
Cirrus sac (extent): to anterior border of acetabulum
Ovary, shape: transversely oval

location:

Vitellaria: anterior limit usually on level with 2nd testis
posterior limit half as far again beyond the ovary,
usually more extensive on one slade than the other.

Eggs: 29 by 19 μ

Other features:

Host: Lorius domicella, purple-capped lory, in liver

Locality: London zoo

Reference: Proc. Zool. Soc. London, 1914, p.146

Comparisons:

Life cycle:

f3568p1b

Lyperosomum scitulum Nicoll,1914

Host: Lorinus domicella

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Литература: Nicoll, 1914, стр. 146; Travassos, 1944.

Lyperosomum sinuosam Travassos, 1917

(Рис. 155)

Хозяин: птица — *Nyctanassa violacea cayennensis* (Gm.).
Локализация: протоки поджелудочной железы.
Место обнаружения: Бразилия (Рио-де-Жанейро).

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Lyperosomum (*Brachylecithum*) *skrjabini* n. sp. JAISWAL, 1957

In September, 1954, the writer collected 8 specimens of this parasite from the liver of the Indian House Crow, *Corvus splendens*. A detailed study of the flukes revealed the fact that they constitute a new species.

The body of the fluke is narrow, elongate, and subcylindrical with broadly rounded anterior and a bluntly pointed posterior end. It measures 2.81—4.0 mm. in length and 0.14—0.24 mm. in its maximum transverse diameter which is attained in the region of the vitellaria. The cuticle is thin and devoid of any armature. The terminal oral sucker is oval in shape measuring 0.09—0.16 by 0.10—0.19 mm. The acetabulum which is roughly of the same size as the oral sucker, measures 0.09—0.18 by 0.11—0.19 mm. and is placed at about 1/6th of the body length from the anterior end. The mouth is surrounded by the oral sucker, posterior to which is seen the small pharynx. The oesophagus is a slender tube, about double the size of the pharynx, bifurcating into two long and simple caeca, the blind ends of which are rendered indistinct owing to the development of dense uterine coils. An elongated narrow tubular excretory bladder is present, which opens terminally at the excretory pore located at the caudal end.

The testes are elongate oval in structure, lying distinctly separated from the acetabulum. The anterior testis is somewhat smaller than the posterior one, the two measuring 0.10—0.17 by 0.17—0.20 mm. and 0.12—0.19 by 0.11—0.21 mm. respectively. They are placed one behind the other and the narrow space between them is occupied by one or two coils of the uterus. The [illegible] which extends from the point of bifurcation of caeca to the anterior border of the acetabulum encloses within it a well defined seminal vesicle, pars prostatica and the cirrus, and opens at the genital pore which is placed at about the level of the intestinal fork, midway between the acetabulum and the oral sucker.

The ovary, which is somewhat smaller than the testes, is transversely oval in outline, measuring 0.08—0.17 by 0.07—0.12 mm. It is placed behind the posterior testis, extending laterally almost to the margins of the body. The vitellaria consist of a limited number of large follicles occupying the total width of the body behind the ovary, they are restricted to a distance of 0.41—0.52 mm. from the hind border of ovary. In the gravid worms the coils of the uterus fill up all the available post-ovarian space of the body. Anteriorly the coils push in between the gonads, beyond which they open into a longitudinal tube lying parallel to the cirrus sac. The mature eggs in the uterus measure 30—39 μ long by 15—25 μ wide and are dark brown in colour. At the time of laying the egg-shell splits longitudinally, liberating the enclosed miracidia.

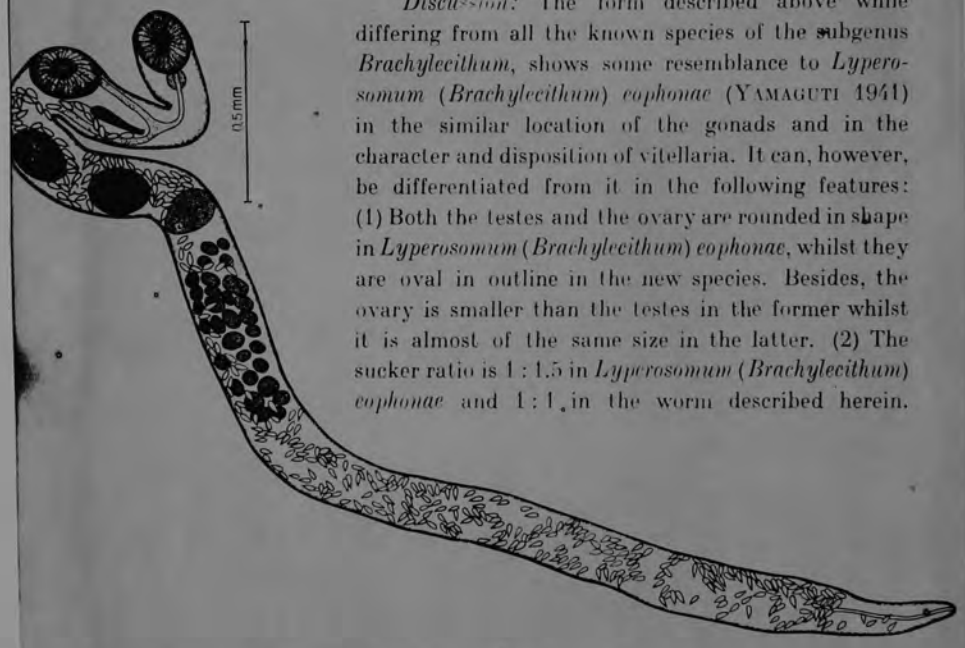


Fig. 2. *Lyperosomum* (*Brachylecithum*) *skrjabini* n. sp. Ventral View.

Discussion: The form described above while differing from all the known species of the subgenus *Brachylecithum*, shows some resemblance to *Lyperosomum* (*Brachylecithum*) *cophonae* (YAMAGUTI 1941) in the similar location of the gonads and in the character and disposition of vitellaria. It can, however, be differentiated from it in the following features: (1) Both the testes and the ovary are rounded in shape in *Lyperosomum* (*Brachylecithum*) *cophonae*, whilst they are oval in outline in the new species. Besides, the ovary is smaller than the testes in the former whilst it is almost of the same size in the latter. (2) The sucker ratio is 1 : 1.5 in *Lyperosomum* (*Brachylecithum*) *cophonae* and 1 : 1 in the worm described herein. (3) In the new species the vitellaria consist of larger follicles than those of *Lyperosomum* (*Brachylecithum*) *cophonae*. They occupy about 1/7th of the body length in the former, whereas about 1/9th in the latter. In addition to the above differences, they vary also in body measurements. As a result of these differences the writer feels justified in creating a new species for the reception of this fluke from the Indian House Crow, *Corvus splendens* in Hyderabad. It is proposed to name it *Lyperosomum* (*Brachylecithum*) *skrjabini* after Academician K. I. SKRJABIN of U.S.S.R. Academy of Sciences.

OVER

Specific diagnosis: Body elongate, narrow and subcylindrical, measuring 2.81—4.0 mm. in length and 0.14—0.24 mm. in maximum transverse diameter; oral sucker 0.09—0.16 by 0.10—0.19 mm; acetabulum 0.09—0.18 by 0.11—0.19 mm.; testes distinctly separated from acetabulum, anterior testis measuring 0.10—0.17 by 0.11—0.20 mm. and the posterior 0.12—0.19 by 0.11—0.21 mm.; ovary 0.08—0.17 by 0.07—0.12 mm., transversely oval, extending almost to lateral margins of body; vitellaria consist of a limited number of large follicles occupying total width of body behind ovary, being restricted to 0.41—0.52 mm. of body length; eggs 30—39 μ by 15—25 μ.

Host: *Corvus splendens.*

Habitat: Liver.

Locality: Hyderabad Deccan (India).

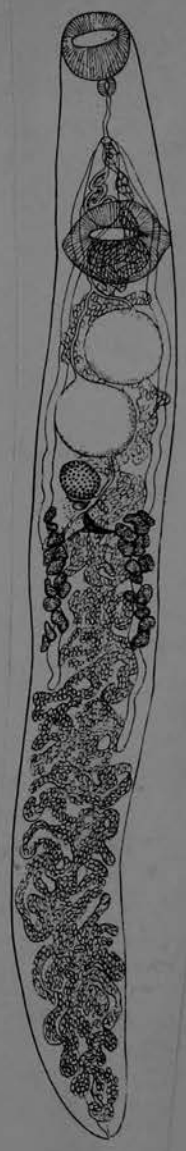
The type specimens of the above two species are deposited in the Zoological Museum of the Osmania University, Hyderabad Deccan.

From: Jaiswal, 1957

Lyperosomum strigis Yamaguti, 1939

Syn: Olssoniella strigis (Yam., 1939) Travassos, 1944

Host: Strix uralensis hondoensis
Milvus migran lineatus



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Lyperosomum skrjabini (Solowiow, 1911) Strom, 1940

Синоним: *Dicrocoelium skrjabini* Solowiow, 1911

(Рис. 156)

Хозяин: серая ворона (*Corvus cornix*).

Локализация: желчный пузырь.

Место обнаружения: СССР (Казахстан, г. Джамбул).

Описание вида (по Соловьеву, 1911). Вытянутое в длину тело суживается на переднем и заднем концах. Кутикула без шипов; подкожная мускулатура развита чрезвычайно сильно. Общая длина тела 7—8 мм, наибольшая ширина 1,5—2 мм на уровне заднего семенника. Впереди от брюшной присоски тело цилиндрическое, 0,634 мм ширины. Задняя половина тела к концу постепенно суживается (1,88; 0,99; 0,49 мм).

Ротовая присоска 0,424×0,475 мм в диаметре. Диаметры брюшной присоски 0,657×0,624 мм. К ротовой присоске примыкает кругловато-овальный фаринкс 0,233 мм в диаметре. Имеется короткий, но явственный пищевод, длиною около 0,186 мм. От пищевода отходят два простых кишечных ствола 0,0233 мм в диаметре, спускающиеся по бокам тела кнутри от желточников. Позади ротовой присоски на уровне фаринкса открываются половые отверстия. Отверстие матки лежит несколько кпереди и влево от отверстия цирруса. Половая бурса достигает 0,6—0,7 мм длины и 0,21—0,25 мм ширины; она доходит до брюшной присоски.

Передний правый семенник лежит на расстоянии 0,116 мм позади брюшной присоски, а иногда почти к ней прилегает. Размеры переднего семенника 0,312×0,209 мм и 0,36×0,14 мм. Форма его поперечно-овальная. Задний, левый семенник находится на расстоянии 0,26 мм позади брюшной присоски; его размеры 0,419×0,326 мм и 0,419×0,210 мм; форма поперечно-овальная. На расстоянии 0,19 мм от заднего семенника по прямой линии лежит поперечно-овальный яичник, 0,40×0,27 мм. Зрелые яйца коричневого цвета, достигают 0,037—0,040 мм длины и 0,023—0,024 мм ширины. Сзади к яичнику примыкает тельце Мелиса. Желточники, начи-

FROM SKRJABIN, 1913
LIVER, CORVUS CARONE
RUSSIAN TURKESTAN
(SEE REPRINT)

Lyperosomum stunkardi Agrawal, 1964

Host — *Acridotheres tristis* Linn. (Myna).
Location — Rectum.
Locality — Varanasi.

A single specimen of the trematode from the intestine of a bird, *Acridotheres tristis* (Myna) from Varanasi, was made available through the courtesy of Dr. S. P. Gupta.

Body elongated, slender, cylindrical, aspinose, 4.735×0.425 mm. in size. Oral sucker subterminal and spherical, 0.125 mm. in diameter. Pharynx broader than long, 0.04×0.06 mm. in size; oesophagus slender and short, 0.075 mm. long, bifurcating into two intestinal caeca, posterior extension of caeca not visible due to numerous eggs. Ventral sucker subspherical, 0.24×0.25 mm. in size at 0.625 mm., i.e. about 1/7th of body length from the anterior end. The ratio of the oral to ventral sucker is 1:2.

Excretory pore situated on the dorsal side of the posterior end of the body. Excretory bladder not visible.

Genital pore median, lying at level of posterior end of pharynx, 0.185 mm. from anterior extremity. Testes oval, subequal, pre-equatorial, obliquely tandem, slightly apart from each other with uterine coils between them. Anterior testis smaller than posterior, 0.23×0.21 mm. in size, at 1.115 mm. from anterior extremity. Posterior testis, 0.26×0.22 mm. in size, 0.15 mm. behind anterior testis. Cirrus pouch elongated, claviform, 0.39×0.075 mm. in size, in front of ventral sucker. Vesicula seminalis U-shaped with 4 lobes, 0.150×0.04 mm. in size, lying basally, occupying nearly 1/4th the length of the cirrus pouch. It continues into a small pars prostatica, 0.05×0.035 mm. in size. Anteriorly it continues into a narrow long ejaculatory duct, 0.25 mm. long. Cirrus muscular and non-spiny. A large number of prostate gland cells fill up the entire space in the cirrus pouch around the vesicula seminalis and pars prostatica.

Ovary sub-spherical, post-testicular, pre-equatorial, smaller than testes and separated from the posterior testis by a few uterine coils. It measures 0.19×0.23 mm. in size and lies at 1.56 mm. from anterior extremity. A subspherical receptaculum seminis, 0.055×0.045 mm. in size, lies just behind the ovary. The oviduct arises from the median side of the ovary and opens at the ōotype. Vitellaria are well developed lying in posterior half of body, extending for a short distance behind receptaculum seminis, 2.08 mm. in front of the hind end of body. They are mainly lateral in position but also extend medially. The vitelline follicles are large, few in number and are symmetrical in position. Two transverse vitelline ducts unite medially before opening at the ōotype. The uterus arises from the ōotype runs posteriorly filling up the hind part of the body, then it passes anteriorly coiling round the ovary and testes to open at the genital pore. Eggs oval, non-operculated, 0.025-0.030 ×0.02-0.025 mm. in size.

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DISCUSSION

The new form belongs to the genus Lyperosomum Looss, 1899. Of the various species of the genus *Lyperosomum* Looss, 1899 described so far, the present form resembles *L. alaudae Strom et Sondak* 1935; *L. clathratum* (Deslongchamps, 1824) *Bhalerao*, 1926; *L. direptum* Nicoll, 1914; *L. lari* Travassos, 1917; *L. oswaldoi* (Travassos, 1917) *Travassos* 1944; *L. pawlowskyi* Strom., 1928; *L. sinuosum* Travassos, 1917; *L. skrjabini* (Solowiow, 1911) Strom 1940 and *L. turdia* (Ku, 1938) *Travassos*, 1944 in having genital pore at the posterior end of Pharynx. However, it differs from all except *L. lari* and *L. sinuosum* in the extension of vitellaria from hind end of ovary instead commencing at level of testes or behind it. The new form stands closer to *L. lari* and *L. sinuosum* on account of ratio of suckers, position of cirrus pouch and relative size and position of gonads. It differs from both the forms in the extension of vitellaria from hind end of ovary instead post equatorial. These differences are sufficient to create a new species with the specific name *Lyperosomum stunkardi* sp. nov. created in honour of Dr. H.W. Stunkard of New York.

FROM AGRAWAL, 1964

Lyperosomum turdia (Ku, 1938) Travassos, 1944

Синонимы: *Oswaldoia turdia* Ku, 1938; *Oswaldoia turdi* Yamaguti, 1939

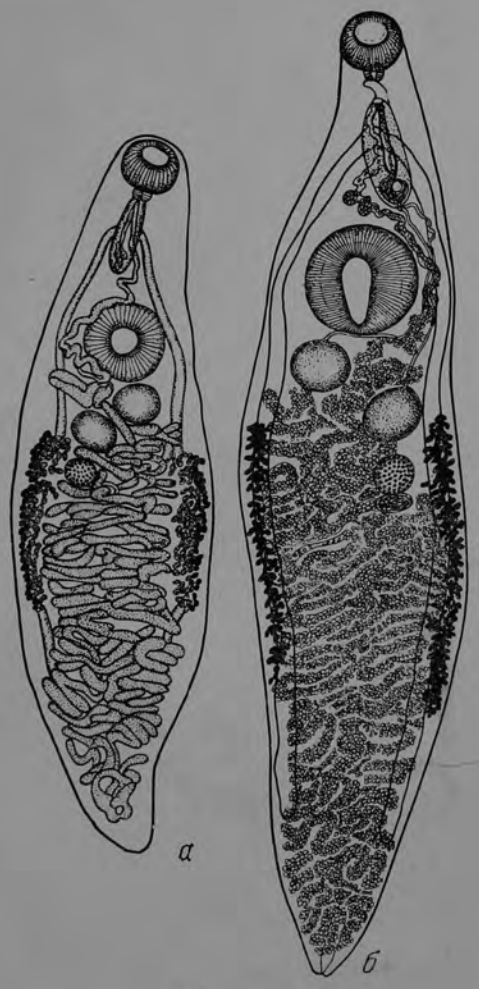
(Рис. 158)

Хозяева: дрозды (*Turdus cardis cardis* Temm.; *Merula mandarina* = *Turdus merula mandarina*).

Локализация: желчный пузырь.

Место обнаружения: Япония.

Описание вида (по Ку, 1938). Длина тела 5,5 мм, при максимальной ширине на уровне яичника 1,6 мм. Тело веретеновидное. Кутикула тонкая и гладкая. Брюшная присоска круглая и расположена на расстоянии около 1,7 мм от переднего конца. Ротовая присоска субтерминальная, немного удлиненная, 0,45—0,47 мм в диаметре. Соотношение размеров присосок 1 : 1,5. Фаринкс шаровидный, 0,19 мм в диаметре. Пищевод узкий, изогнутый, 0,20 мм длины, разделяется на уровне середины половой бурсы. Половое отверстие в зоне фаринкса. Половая бурса удлиненная, занимает пространство между фаринксом и брюшной присоской, достигая 0,77×0,20 мм. Она содержит семенной пузырек. Яйцевидные семенники расположены наискось позади брюшной присоски. Передний семенник соприкасается с брюшной присоской; его размер 0,30×0,44 мм; задний семенник отстоит на 0,17 мм от брюшной присоски;



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Lyperosomum urocissae Yamaguti, 1939

(Рис. 159)

Хозяин: птица — *Urocissa caerulea* Gould.

Локализация: тонкие кишки.

Место обнаружения: Япония.

Описание вида (по Ямагути, 1939). Тело тонкое, 5,6—6,5 мм длины при ширине 0,55—0,6 мм в области семенников; передняя часть тела очень короткая и заметно суженная; задняя половина почти цилиндрическая или слегка суживающаяся сзади, с несколько заостренным концом. Ротовая присоска 0,11—0,16 мм в диаметре. Фаринкс 0,045—0,084 мм в диаметре. Пищевод короткий. Кишечные стволы проходят в заднюю шестую часть длины тела. Брюшная присоска 0,25—0,38 мм в диаметре, граничит с первой шестой частью длины тела. Семенники круглые, 0,17—0,28 мм в диаметре, расположены наискось друг к другу, немного

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Lyperosomum vitta (Dujardin)

Hosts: Apodemus sylvaticus in France
in England

Description (from Baylis, 1927)

Length of complete specimen unknown. The longest fragment available-an anterior portion including more important organs- measures about 6 mm. The maximum width, usually occuring just behind the ovary, is 1.1-1.3 mm. The diameter of the oral sucker is 0.3-0.31 mm., that of the ventral sucker 0.4-0.45 mm. There is a small pharynx, measuring 0.15-0.17 mm. in diameter. A short oesophagus is present, the bifurcation of the intestine occuring about midway between the two suckers, at about the same level as the genital pore. The cirrus-sac measures about 0.3-0.35mm. x 0.1-0.14mm. The testes and ovary are oval, with their longest diameter transverse to the longitudinal axis of the body. They are all median in position. The testes measure 0.3-0.47 mm.x0.23-0.3 mm., while the ovary measures about 0.32x0.25 mm. There is a large receptaculum seminis immediatly behind the ovary and to the right of the median line. The vittelline glands are composed of numerous follicles, situated laterally to the intestinal branches. The anterior ends are a little behind the level of the ovary, and their ducts cross the body at this point. The coils of the uteru s run back to within about 2 mm. of the posterior end of the body, and return thence to the genital pore, keeping almost entirely to the inner side of the intestinal branches. The uterus apparently extends posteriorly for a considerable distance beyond the vitelline glands, but the extent of the latter is not known. The eggs have relatively thick, brown shells, and measure, on an average, about 0.045x0.0225-0.025 mm.

Lyperosomum vitta (Dujardin, 1845)

Nous avons trouvé ce Trématode chez *Apodemus flavicollis*, *A. sylvaticus* et *Clethrionomys glareolus*; 25 Mulots sur 190 étaient parasités (13,2%), et 5 Campagnols sur 36 (13,8%): ainsi le pourcentage d'animaux parasités chez ces 2 genres de Rongeurs est pratiquement identique; le tableau ci-dessous, dans lequel Mulots et Campagnols sont groupés, donne une idée de l'ubiquité de *L. vitta* dans le val de l'Allondon:

Emplacements	Mulots + Campagnols piégés	Campagnols parasités par *L. vitta*	Pourcentages
1	34	2	5,9%
4	2	1	50 %
5	37	5	13,5%
6	48	7	14,6%
7	25	1	4 %
8	21	5	23,8%
9	51	9	17,6%

Seuls les emplacements 2 et 3, dans lesquels 8 Mulots seulement, dont un seul parasité, ont été trouvés, ne comptent aucun parasite de ce genre. Le cycle de *L. vitta* comporte par analogie deux hôtes intermédiaires: le premier est un Gastropode terrestre, le second un Insecte (Fourmi ?); il peut donc s'accomplir au sein de biotopes

- OVER -

Plagiorchidae

variés, où l'élément aquatique n'intervient pas: en fait, tous nos sites réunissent les conditions favorables au développement du Trématode, y compris les emplacements 4 et 8, seuls à être éloignés de l'Allondon (voir pp. 131 et 133), et dans lesquels le pourcentage d'animaux parasités est même un peu plus élevé qu'ailleurs — le site 4 ne peut réellement entrer en considération, vu le nombre très restreint d'animaux qui y ont été capturés —. De même BAER (1932) a obtenu quelques exemplaires de *L. vitta* dans une région boisée, à savoir Vessy au S.-S.E. de Genève.

Description.

Tous les Vers étaient localisés dans les canaux pancréatiques, à raison de un à une dizaine par Rongeur. *L. vitta* mesure de 10 à 15 mm. sur 0,4 à 0,6 mm. Le diamètre de la ventouse orale est en moyenne de 222 μ, celui de la ventouse ventrale de 260 μ; le rapport entre les 2 ventouses est 1:1, 17; la distance entre le centre des 2 ventouses est de 560 μ environ. Le pharynx est sphérique et mesure 118 μ de diamètre; l'œsophage, assez long, se divise en 2 branches intestinales se terminant à l'extrémité du Ver.

La poche du cirre mesure de 250 à 346 μ sur 100 μ et renferme une vésicule séminale; le cirre est gros. Les 2 testicules sont situés entre la ventouse ventrale et l'ovaire et mesurent en moyenne 327 246 μ. L'ovaire est à peu près sphérique et son diamètre varie de 200 à 340 μ; il est situé en deçà de la première moitié du Ver. L'utérus, très long, gagne l'extrémité postérieure du Ver en décrivant des boucles transversales, puis remonte à la face ventrale, toujours en formant de nombreuses sinuosités; ces dernières ne s'atténuent qu'à proximité du pore génital, situé derrière la bifurcation de l'œsophage. Les glandes vitellogènes s'étendent de chaque côté à partir de l'ovaire, dans le deuxième tiers du Ver. Les œufs, fortement colorés en brun, ont 37 à 40,3 μ sur 21,3 à 23,5 μ.

Discussion.

Parmi les quelque 12 espèces du genre *Lyperosomum*, une seule, *L. vitta*, a été signalée chez les Mammifères, en particulier chez *Apodemus* et *Clethrionomys*, en Europe. Ainsi l'identification de notre espèce ne fait aucun doute, tant à cause des hôtes qui l'abritent que par ses mensurations qui concordent de façon satisfaisante avec celles de la littérature. Notre espèce apparaît légèrement moins large que les exemplaires décrits par BAYLIS (1927) et BAER (1932); ainsi le diamètre des ventouses et la largeur du pharynx, en rapport avec la largeur du corps, sont-ils également un peu plus petits. Les œufs ont une longueur intermédiaire (40,3 μ) entre celles obtenues par les auteurs précités, BAYLIS mentionnant une longueur de 45 μ, et BAER une longueur maxima de 38 μ.

From WAHL, 1967

LYPEROSOMUM