

in

Lernaeidae. Caligoida.

Lernaeenicus.

Le Sueur, 1824.

L. radiatus ^(E).

- Syn. Lernaea (pars) Sowerby, Turton, Cuvier.
Lernaeocera (pars) Blainville, 1822, p. 376.
Lernaeenicus (pars) Le Sueur, 1824, p. 289.
Lerneonema (pars) M-Edwards, 1840, p. 524.
Foroculum Thompson, 1843.
Lernaeenicus Wilson, 1917, p. 56.
Lernaeenicus T. & A. Scott, 1913, p. 156.

Head rounded or obliquely pointed, with short, horn-like processes. Neck not segmented, long, passing gradually into the gen. segt. in the same straight line. Abdomen without processes. Legs close together, just behind the head, the first two pairs biramose, the last two uniramose all the rami 2-jointed. Second antennae sub-cheliform. Abdomen cylindrical, swollen posteriorly. Egg tubes slender, elongate, uniseriate.

Pennellidae: Siphonostomatoidea 2

Lernaeenicus Le Sueur

Kabata, 1972, p. 321, key to genera of lernaeoceridae

--, Cressey & Collette, 1970, p. 391

-- Pillai, 1967, p. 1644

-- Kabata 1979: 289

-- LÜNING 1953: 15-

-- OLDEWAGE 1989: 319-

Lernaeenicus LE JUEUR, 1824

- , Kabata, 1967, p. 866
- , Kabata, 1968, p. 110
- , Kabata, 1969, p. 925

Pennellidae: Siphonostomatoida³

- KABATA 1992: 103, DIAGNOSIS, KEY
- SEBASTIAN 1966: 114-, KEY TO INDIAN SPECIES.
- OLDEWAGE [NO DATE]:

Lernaeenicus abdominalis, M. Edwards, ♀. Lernaeidae.

- Lernaeonema a—, M. Edwards, 1840, p. 525 (no figure).
— —. Steenstrup & Tütken, 1861, p. 398.
Lernaeenicus a—, B. Smith, 1899, p. 484,
— —, Richiardi, 1877^c, p. 202.

Host. An unknown fish—

Valparaiso.

Has never been figured or described except
the brief description of M. Edwards, which is
not sufficient to establish the species.

Ternaeonema abdominalis, Schmeltz, 1876,
p. 160 - on Boreogadus productus, Coast of Peru.

Lernaeidae - Caligoida

Lernaeenicus abdominalis Milne Edwards ♀

Lernaeonema — Milne Edwards, 1840, p. 525

Lernaeenicus — Wilson, 1917, p. 58.

Host. Flesh of unknown fish, Valparaiso, Chili.

Loernaeus affixus New Species ♀ Lernaeidae.

— — Wilson, 1917, a. p. 64: pl. 6, fig. 48-63.

— — Wilson, 1932, p. 482: fig. 289

Host, Toucod, Microgadus toucod;
Fundulus heteroclitus; Morone
americana; Pomolobus aestivalis

Woods Hole - Mass

Lernaeenicus alatus Rangnekar, 1961

n. sp. Rangnekar, 1961, pp. 198-200, fig. 3, a-i, INDIA

-- SEBASTIAN 1966:114 --

Lernaeenicus anchoviellae Sebastian
and George 1964

--, Pillai, 1967, p. 1648, fig. 207

-- KENSLEY & GRINDLEY 1973: 108

-- SEBASTIAN 1966: 114-

Lernaeenicus ater Shiino

1958---pp. 88-92, figs. 8 & 9.

-- KAPATA 1988 b: 5

Lernaeenicus bataviensis Sebastian, 1966

-- Sebastian 1966: 114-118, figs. 1-7, n. sp. female
only; ex Anchoviella bataviensis, Palk Bay, se India

Lernaeenicus cerberus Leigh-Sharpe, 1927

-- Kensley & Grindley 1973: 108

-- OLDEWAGE 1989: 320

Lernaeidae, Caligoida

Lernaeenicus encrasicholi (Turton), ♀.

Lernaea — Turton, 1807, p. 137, no. 108.

Loerneonema encrasicholi Baird, 1850, p. 341: pl. 35, f. 11.

— — White, 1850, p. 131; 1857, p. 332.

— — Steenstrup & Lütken, 1861, p. 399.

Host. Clupea encrasicholus & C. spratta

Clupea pilchardus [Dollfus, 1948]

British Seas.

- Lernaeenicus* — Olsson, 1869, p. 46.
 — — B. Smith, 1899, p. 484: Richiardi, 1877, c, p. 201.
Lernaeonema encrasicola B. Smith, 1896, a, p. 160.
Lernaeonema encrasicoli Richters, 1903, p. 267.
Lernaeenicus — Cligny, 1905, p. 165.
Lernaeenicus sprattae Baudouin, 1904, p. 998.
 — — Baudouin, 1905, a, p. 326: 1905, b, p. 299.
L — *encrasicoli* A. Scott, 1907, p. 93: pl. 2, f. 6-9
L — *encrasicola* T. & A. Scott, 1913, p. 158: pl. 46, f. 6-9
L — *encrasicoli* - Doffus, 1948: epizoic algae

- To. encrasicholi* (2)
- *encrasicoli* Pearson, 1906, p. 27.
 - *encrasicholi* Wilson, 1917, a. p. 57 (key).
 - *encrasicola*, Harding + Wheeler, 1958. River Crouch, in back of sprat.
 - , Kabata, 1970, p. 81, 84
 - , Boer, 1970-2, pp. 6, 10, tbl. 1
 - RAIBAUT ET AL. 1986: 31-36, POSSIBLE SYN. OF L.
- SPRATTAE

Lernaeenicus encrasicoli

card 3

- Schram & Anstensrud, 1985: 128, 133 Norway
- Schram, 1987: 279-288 tabs 1,3,5,6 Norway

L. ENCRASICOLI, LÜHINA 1953: 15-

- KABATA 1992: 104, FIG. 248, SYNONYMY, HOST LIST

- OLDEWAGE 1989: 320

Loernaenicus cristatiformis, Brian ♀ Loernaenidae

Loernaenicus, Brian, 1908, p. 13, figs. 5, A + B, (text),

Loernaenicus, Brian, 1912, p. 20: pl. 2, fig. 4: pl. 4, figs. 1 + 2: pl. 8, fig. 2: pls. 9 and 10

Referred to Jungersen's genus Sarcotretes.

- CARLI + BRUZZONE 1973b: 131

Host, Bathypterois dubius an abyssal fish.

Deep Atlantic

Lernaeenicus gempyli, Horst, ♀, Caligoida-Lernaeidae.

— —, Horst, 1878, p. 51; pl. III, figs. 1-4.

(Referred to Jungersen's genus Sarcotretes)
(Wilson, 1917, a, p. 58).

Host, Gempylus serpens.

Atlantici.

Lernaeidae - Caligoida

Lernaeenicus gnathonicus Leigh-Sharpe ♀,

— — Leigh-Sharpe, 1934, p. 34: fig. 30

Host. Flesh of Pomacanthus imperator
Makassar.

Lernaeidae - Caligoida

Lernaeenicus gnarus Leigh Sharpe

— Leigh-Sharpe, 1934, p. 34: fig. 31.

Host, Flesh of Polyipnus spinosus
Madura Sea.

Lernaeeniscus gonostomae Kensley & Grindley 1973

-- Kensley & Grindley 1973: 106-108, fig. 27a-h, n. sp.

♀, from Gonostoma elongatum, S. Africa; p. 126.

-- OLDEWAGE 1989: 319

Lernaeenicus gracilis, Heller ♀.

Lernaeidae.

Lernaeonema g—, Heller, 1865, p. 249; pl. xxv, fig. 5.
—, —, 1866, p. 758.

Lernaeenicus g—, B-Smitk, 1899, p. 485.
—, Richiardi, 1877^c, p. 8 [202].

Host, Loichia amia.

Adriatic

- Termaenicus g-*, *Canis*, 1885, p. 372.
—, *Valle*, 1880, p. 69.
—, *Stössich*, 1880, p. 265.
—, *Wilson*, 1917, a, p. 58 (key).
— *SEBASTIAN* 1966: 116

Lernaeus nicus hemirhamphi Kirtisinghe

(1)

— —, Kirtisinghe, 1932

— —, Gnanamuthu, 1953, p. 1-2, fig. 1-8. On
Hemirhamphus far Forsk., Madras, India

-- --, Heegaard 1962. p. 185, fig. 207-208

-- --, Shiino, 1965, p. 435-440, FIGS. 1, 2, HAWAII, EX CORYPHAENA

--, Rangnekar, 1961, p. 196

--, BASHIRULLAH, 1975: 248

--, Pillai, 1967, p. 1645, fig. 193-194

—, Kazatchenko & Avdeev, 1977: 35-36. fig. 3a-d

LERNAEENICUS HEMIRAMPHI KIRTISINGHE CARD 2

--, RADHAKRISHNAN & NAIR 1983: 103, IN HEMIRAMPHUS
XANTHOPTERUS & H. FAR, INDIA

-- BAMSTEDT 1986: 37-

-- HONMA & HO 1988: 41-

-- CASTRO R. & BAEZA K. 1991: 613-

-- OLDEWAGE 1989: 320

-- SEBASTIAN 1966: 114-

Lernaeenicus inflexus, Stp & Lütke. ♀.

— —. Steenstrup & Lütken, 1861, p. 401, pl. XIII, fig. 27.

— —. Richiardi, 1877^{NYC}, p. 8. [202]

— —. B-Smitk, 1899, p. 485.

(Referred to Jungersen's genus Sarcotretes)

Host. Gills of Barracuda.

Sphyræna vulgaris, Cuv. & Val.
Atlantique.

Lernaeenicus kabatai Oldewage, 1989

-- Oldewage 1989: 319-321, fig. 1,2, n.sp. female only,
ex Carangoides equula, off Kowie River mouth, s. coast
of South Africa

Loernaenicus labracis, Richiardi, ♀.

- —, Richiardi, 1880, p. 150 (no description).
 — —, Carus, 1865, p. 372.
 — —, Wilson, 1917, a. p. 58 —

Host. Labrax lupus: Box boops: Trachurus
trachurus, In the muscles.

Mediterranean

Lernaeenicus lesueurii, M-Edwards, ♀.
Lernaeidae.

Lernaeopenna flavivillii, Lesueur, 1824, p. 289,
pl. XI, fig. 3.

Lernaeonema lesueurii, M-Edwards, 1840, p. 524.
——, Stp & Ltk, 1861, p. 398.

Host, Exocoetus volitans.

(over)
European Seas

— Wilson, 1917, q, p. 58 (key).

This is a second specimen from the same fish as the Toernaeopenna blainvillii, but so different from it that Lesueur places a question mark after the name - He suggests that it may be the male of the above species, but states that his observations require confirmation since it is not certain that this last specimen (male?) is entire - From Lesueur's figures & description M-Edwards makes a new genus & species of it.

Richiardi (1877^e), p. 199

suggests that it is a

Young Pennella (blainvillii) exocoeti.

Toeruacenicus longiventris, New Sp. ♀, Bernacidae.

— — Wilson, 1917, p. 66: pl. 7, fig. 62-70.

— — Brian, 1924, p. 45.

— — Wilson, 1932, p. 483: fig. 290.

— — Carvalho, 1957: 241-252, 1 pl.

Hosts. Caraux crysos: Palinurichthys per-
ciformis: Tomatomus saltatrix:
Cybinus maculatum: Caraux hippos

(over)

N. Eug. Coast & Atlantic.

Coryphaena equisetus : Scomberomorus
maculatus : Mugil cephalus

— —, Carvalho, J. de P., 1953, Bol. Inst. Oceanogr. São Paulo 4 (1-2)
181-190, figs. 1-2. Distribution on host, Xenomelanius brasiliensis
(Quoy + Gaimard), Cananéia, Brazil.

— —, Carvalho, J. de P., 1957. Ibid. 7 (1/2): 241-252, pl. 1.
Larval development.

— —, Causey, 1960, p. 332. Seriola dorsalis, Mazatlán, Sinaloa, Mexico.

— —, Kabata, 1970, p. 34, 87, fig. 93

— —, Pillai, 1967, p. 1648, fig. 207a

Lernaeenicus longiventris C.B. Wilson, 1917 card 2

-- Zwerner & Lawler 1972:84, off Virginia, host

Coryphaena hippurus

-- SHIINO 1965: 440, cf. HEMIRAMPHI

-- OLDEWAGE 1989: 320

-- SEBASTIAN 1966: 114 -

-- KNOFF ET AL. 1995: 45

Lernaeenicus medusaeus, ♀. n. sp. Lernaeidae.

— —, Wilson, 1908, p. 458: pl. 76, figs. 99 + 100.

— —, Brian, 1912, p. 27: pl. 10, figs. 1-5.

(Made the type of a new genus Cardiodoetes)
(Wilson, 1917, a, p. 51).

— — Stebbing, 1918, p. 42.

Pacific Coast.

Lernaeidae - Caligoida

Lernaeenicus monillaris Milne Edwards, ♀.

Lernaeonema - Milne Edwards, 1840, p. 525: pl. 41, f. 5.
— — Heller, 1865, p. 248: pl. 25, fig. 7, & 4a.

Host. Eye of Sprat, Clupea spratta, Europe.

Lernaeenicus musteli - see Tripaphylus

Lernaeenicus neglectus, Richiardi, ♀. ①
Lernaeidae.

- , Richiardi, 1877, [p. 206^a (original)
p. 13; pl. VII, figs. 22-43.
--, Cass, 1885, p. 372.
--, B. Smilk, 1899, p. 485.
--, Richiardi, 1880, p. 6.
--, Rainbaut & Hassine, 1977, p. 844

Host. Mugil cephalus; M. capito; M. chelo;
M. auratus; M. saliens.

Mediterranean.

—, Valle, 1880, p. 70. Stossich, 1880, p. 265.

— Wilson, 1917, a, p. 58.

There is not enough difference between this species + L. vorax to warrant any separation. Hence this stands as a synonym of L. vorax.

LERNAEENICUS NEGLECTUS RICHARDI, 1877

(2)

--, BEN HASSINE, 1983: 57, 108-113, 148, 190

FIGS. 115-124

HOSTS: LIZA RAMADA, LIZA SALIENS

Lernaeenicus nemipteri Gnanamuthu, 1953

-- Sebastian 1966: 114-

Lernaeenicus nodicornis, ^{Lernaeidae.} Stp & Ltk, ♀.

— —, Stp. & Ltk, 1861, p. 401; pl. XIII, fig. 26.

Lernaeonema n—, Beneden, 1870, p. 359.

Lernaeenicus n—, Ricciardi, 1877^c, p. 8. [202]

— —, B-Smitk, 1899, p. 485.

Host. Coryphaena, sp. : Delphinus delphis,
In the muscles & body.

European Seas. (over)

(Referred to Jungersen's genus Sarcotrites)
(Wilson, 1917, a. p. 58),

Ternaeidae.

Toernaeenicus polycerans New Species ♀

— — Wilson, 1917, a, p. 62: pl. 5. 8, 42-47,

— — Wilson, 1932, p. 481: fig. 288.

— —, Pearse, 1947, p. 12. Beaufort, N.C., on Anchoviella mitchilli, Anguilla rostrata,
Gobiosoma bosci.

Host. Red goat-fish, Upeneus maculatus
and Tomcod, Microgadus tomcod

Woods Hole, Mass.

--, Kabata, 1970, fig. 40

Lernaeenicus polynemi, B-Smitk, ♀, ^{Lernaeidae.}

Lernaeonema p., B-Smitk, 1898a, p. 12: pl. VII, fig. 1.

Lernaeenicus p., ———, 1899, p. 485.

— — Wilson, 1917, a, p. 58,

— —, Pillai, 1967, p. 1644-1645, figs. 191-192

— — OLDFWAGE 1989: 320

Host, Body of Polynemus tetradactylus.

— — SEBASTIAN 1966: 114—

Bombay.

Lernaeenicus procerus (Leidy). ♀. Lernaeidae.

Lernaeonema —, Leidy, 1889, p. 165.

— —, Fowler, 1912, p. 125 [under Ergasilidae!!]

Lernaeenicus — Wilson, 1917, p. 69.

-- OLDEWAGE 1989: 320

Host. Upper lip of Odontaspis littoralis.

N. Atlantic

Lernaeenicus quadrilobatus Yamaguti + Utinomi ♀

- Yamaguti and Utinomi, 1953; ^{51-53, 1 FIG.} from lantern-fish,
Diaphus coeruleus Klunzinger, Tanabe Bay, Japan.
- , Kazatchenko & Ardeev, 1977: 36, fig 2d-j
- CASTRO & BAEZA 1988: 84

Lernaeenicus radiatus, (Lesueur) ♀. Lernaeidae.

Lernaeocera radiata, Lesueur, 1824, p. 288; pl. XI, fig. 1.
— —, M. Edwards, 1840, p. 528.

Lernaeonema n. —, Sp. & Ltk, 1861, p. 400.

— —, Smilk, 1874a, p. 578; pl. VII, fig. 30.

Host, Outside muscles of Clupea tyrannus ^{DeKay}
C. mallowaca. Mitchill

N. Atlantic

Lernaeoneura —, Rathbun, 1884, p. 491,

— —, Richiardi, 1877^{no. 11}, p. 7 [201]

Lernaeenicus radiatus, B. Smith, 1899, p. 484,

— —. M. J. Rathbun, 1905, p. 99.

Lernaeenicus — Fowler, 1912, p. 87: pl. 21, [289]

Lernaeenicus, n. gen. type *L. radiatus* Le Sueur, 1824, p.

— — Williams, 1907, p. 70. [8, 36-41]

— — Wilson, 1917, a, p. 59: pl. 4, 8, 24-35; pl. 5;

Lerneia radiata De Kay, 1844, vol. 6, p. 60, [pl. 24]

Lerneoceroopsis septemramosus Fowler, 1913, p. 92, n

Lernaeenicus radiatus — Wilson, 1932, p. 480: fig. 287

— — Dawson, 1958, p. 43. On *Leiostomus xanthurus* Lacépède. Id. Cause

Lernaeenicus radiatus (LE SUEUR)

CARD 2

--, Kroger & Guthrie, 1974, pp. 208, 209, 210

--, Shields, R.J., Second Intl. Cong. Parasitology:
Rate of development of marine parasitic
copepod, Lernaeenicus radiatus

-- KENSLEY & GRINDLEY 1973: 108

-- OVERSTREET 1978: 83-84, HOST LIST, GULF OF MEXICO;
FIG. 171

-- ZWERNER & LAWLER 1972: 84, RECORDS & HOSTS-
CHESAPEAKE BAY; SYN. LERNAEOCERA CENTROPRISTI

- KABATA 1992: 103

Lernaeenicus ramosus Kirtisinghe, 1956

-- --, Shiino, 1964, p. 254,

--, Rangnekar, 1961, pp. 196-8, fig. 2, a-1.

-- --, Pillai, 1967, p. 1645, figs. 195-196

-- RADHA KRISHNAN & NAIR, 1983: 112

-- SEBASTIAN 1966: 114-

-- BOXSHALL 1986: 220-223, FIG. 4, GREAT BARRIER
REEF, AUSTRALIA

Ternaeenicus sardiniae Baudouin

— —, Baudouin, 1904, p. 1000 - (provisional)

— —, —————, 1905^a, p. 326.

— —, —————, 1905^b, p. 299.

— —, —————, 1905^c, p. 715, 4 text figs.

Host. The common sardine Clupea pilechardus
Wal. on the side of the body -

European Seas

— —, Baudouin, 1908, p. 17.

— —, ———, 1909, 19 pp.

— —, ———, 1910^a, p. 657.

— —, ———, 1910^b, pp. 1-5.

— —, ~~Wilson~~, 1913, p. 1-3.

— —, ~~Wilson~~, 1917, a, p. 58 (key).

(Probably the same as eucrasecoli)

— —, Fischetti, 1938, Boll. Mus. Zool. Comp. Genara 18 (104): 89-96.

-- --, Fischetti, 1938, Translation of pp. 89-96.

--, BAUDOUIN 1907, pp. 97-114; 5 figs.

Lernaeenicus sargi, Richiardi, ♀.

- —, Richiardi, 1880, p. 150 (no description)
 — —, Casus, 1885, p. 372 " "
 — —, Wilson, 1917, a, p. 58,

Host. Skin of Sargus salvianii.

Mediterranean.

Lernaeidae - Caligoida

Lernaeenicus sayori Yamaguti, ♀.

①

— — Yamaguti, 1939, p. 479: pl. 31, f. 174-5; pl. 32, f. 176-182.

— —, Rangnekar, 1961, pp. 193-6, fig. 1, a-1.

— —, Pillai, 1967, p. 1645, fig. 197.

— — COLLETTE 1974: 18 —, HOST RECORDS, NEW ZEALAND

Host Head, *Hemirhamphus sayori*. Temm. & Schleg

— — HONMA & HO 1988: 33, 39-45, FIGS. 2-1-2-12, EX

HEMIRHAMPHUS SAYORI, JAPAN Tarumi - Japan

— — OLDEWAGE 1989: 320

Lernaeenicus sayori Yamaguti, 1939

card 2

-- Sebastian 1966: 114-

Lernaeidae - Caligoida

Lernaeenicus seeri, Kirtisinghe, ♀.

— — Kirtisinghe, 1934, p. 173: figs. 18-21.

--, Rangnekar, 1961, p. 200

-- SEBASTIAN 1966: 114-

Host. Seerfish, *Cybium* sp. Ceylon.

Lernaeenicus sprattae, Sowerby, ♀.

Lernaea spratta, Sowerby, 1806, p. 17; pl. LXVIII.

Lernaea cyclophora, Blainville, 1822, p. 436; pl. 26. f. 7.

Lernéide articulée, ———, ———, ^{p. 477, fig. 7.} pl. XXVI, fig. 17.

Lernaeocera survivae, ^{Fais} ———, ———, p. 376; fig. 2, 2^a.
———, ———, 1823, p. 117.

Host, Attached to the Eye of Clupea spratta

Europe + America.

- Lernaea ocularis*, Cuvier, 1830, p. 256.
Lernaeonema monillaris, M-Edwards, 1840, p. 525;
_____, _____, _____, pl. xxi, fig. 5.
_____, Thompson, 1843, p. 270.
Lernaeonema spratta, Baird, 1850, p. 341; pl. xxxv, fig. 10.
Lernaeonema bairdii, Salter, 1850, p. 86; pl. VII, figs 1-5.
_____, White, 1850, p. 132.
_____*sprattae*, White, 1850, p. 131; 1857, p. 332.
_____*bairdii*, Stp & Ltk, 1861, p. 399 (footnote).
_____*monillaris*, _____, _____, p. 398.
_____, Heller, 1865, p. 248; pl. xxv, fig. 4.
_____*B-Smith*, 1896, a, p. 160

Lernaeonema spratta, Olsson, 1869, p. 46.

— *monillaris*, Beneden, 1870, p. 67.

Lernaeenicus sprattae, Carus, 1885, p. 371.

— —, Richiardi, 1880, p. 101.

— —, T. Scott, 1891, p. 306.

— —, Brian, 1898, p. 21.

— —, B. Smith, 1899, p. 484.

— —, T. Scott, 1900, p. 161; pl. VII, figs. 7-10.

— —, T. Scott, 1901, p. 127.

— — Pearson, 1906, p. 27.

(over)

The Eye Sucker, Baker, 1745, p. 35; pl. I, figs. 243.
Foroculum spratti, Thompson. W. Cat. Museum
Coll. Surgeons. (between 1830 & 1840)

- Lernaeenicus sprattae, Richardi, 1877^c, p. 200.
— —, A. Scott, 1904^b, p. 121; 1904, a, p. 41.
— —, A. Scott, 1907, p. 94; pl. II, figs. 1-5.
— —, Baudouin, 1910^b, p. 383.
— —, Baudouin, 1904, p. 998; 1905, p. 326.
— —, Baudouin, 1908^a, p. 17; 1913, p. 366.
— —, Baudouin, 1908^b, 15 pp.
— —, Baudouin, 1910^a, 5 pp.
— —, T & A. Scott, 1913, p. 156; pl. 46 - figs. 1-5

— — Joubin, 1888, p. 1177 — not named.

— spratta T. Scott, 1906. b. p. 370.

— sprattae Wilson, 1917. a. p. 57 (key).

— — Pesta, 1934, p. 46; fig. 28.

— — , Gurney, 1947, p. 135-137, fig. 2. Young adult, 3 mm.

— — , Leigh-Sharp, 1935

— — , Sprosten + Hartley, 1941

— — , Beer, 1951, Ecology of animal parasites. U. Ill. Press. figs. of L. sprattae

— — , Harding + Wheeler, 1958. In eye of sprat, River Crouch.

— — , BAUDOIN 1907, pp. 97-114; 5 figs.

--, Kabata, 1970, p. 35, 78, 88-89, 105

--, Boer, 1970-2, pp. 6, 10, tbl. 1

--, ACLOQUE, 1899: 203-204, pl. 96 - as
LERNAEONEMA MONILLARIS

-- DO ET AL. 1984: 23.

- SPRATTA, KENSLEY & GRINDLEY 1973: 108

- Schram & Anstensrud, 1985: 127-134

-- PERKINS 1983: 70, 85

-- EL GHARBI ET AL. 1983 (85): 191-201, FIG. 1,
PLS. I, II, HOST SARDINA PILCHARDUS, FRENCH
MEDITERRANEAN.

Lernaeenicus sprattae Sowerby, 1806

card 4

-- Raibaut et al. 1986: 31-36, on Sprattus sprattus and

Sardina pilchardus, Languedoc; L. encrasicholi a

possible synonym.

-- Schram & Anstensrud, 1985: 127-134, figs 2,3 tab 1-7
Norway

-- Schram, 1987: 279-288 tabs 1-6 Norway

-- P. J. WHITFIELD ET AL. 1988: 584-

-- ANSTENSRUD & SCHRAM 1988: 587-595, HOSTS,

OSLOFJORD; ON SPRATTUS SPRATTUS & CLUPEA

HARENGUS

Lernaeenicus sprattae Sowerby, 1806

card 5

-- Castro R. & Baeza K. 1988:82-

-- SCHRAM 1991: 327

-- DRON ET AL. 1991: 211

-- LÜHNING 1953: 15-

-- KABATA 1992: 103; FIG. 24A, SYNONYMY, HOST LIST

-- RAIBAUT 1985: 250; FIG. 11, LIFE CYCLE

-- BEN HASSINE, RAIBAUT, BEN SOUSSI & ROUSSET 1990: 10

Lernaeenicus stromatei Gnanamuthu, 1953

-- Oldewage 1989: 320

-- SEBASTIAN 1966: 114 -

Lernaeenicus triangularis Heegaard, 1966

n. sp., Heegaard, 1966, pp. 195-6, figs. 20-3, TEXAS,

EX POGONIAS CROMIS

Lernaeenicus tricerastes Stuardo et Fagetti

--- --- Stuardo et Fagetti 1961, pp. 72-77,
pl. 5, fig. 1-9

--, Kabata, Z., and J. Ho, 1981, p. 387

— Stuardo & Fagetti, 1960: 199

Lernaeenicus vorax, Richiardi. ♀. Lernaeidae.

— —, Richiardi, 1877, ^[p. 203, (original)] p. 9; pl. VII, figs. 1-21.

— —, Carus, 1885, p. 372.

— —, B-Smith, 1899, p. 485.

— —, Richiardi, 1880, p. 6.

Host. Sciaena aquila: Corvina nigra:
Labrax lupus: Umbrina cirrosa.

On the skin. Mediterranean.

— —. Valle, 1880, p. 69.

— —. Storsich, 1880, p. 265.

— —. Wilson, 1917, a, p. 58 (key).

-- OLDEWAGE 1989: 320

Lernaeenicus sp.

--, Yamaguti, 1936, pt. 2, p. 2

--, RADHAKRISHNAN & NAIR, 1983: 103-, ON
EPINEPHELES MALABARICUS, INDIA