

SUPERFAM. CENTROPAGOIDEA — CALANONA

FAMILY CENTROPAGIDAE GIESBRECHT, 1892

- MAUCKLINE 1988: 711-, PORE PATTERNS
- DUSSART 1986: 63-64, LIST + SHORT DIAGNOSES OF GENERA; PARATHALASSIUS GEN. NOV.
- RAYNER 1992: 303, IN KEY
- BAYLY 1992: 135-, NEOBORCKELLA N.G.
- BORUTZKY ET AL. 1991: 47-48, DIAGNOSIS, KEY TO GENERA
- BAYLY 1992c: 1-30, NON-MARINE SPECIES, KEYS

CALANOIDA

SUPERFAMILY CENTROPAGOIDEA GIESBRECHT, 1892

- MAUCHLINE 1988: 699, 711 - PORE PATTERNS
- ANDRONOV 1991: 133-134, NAME CHANGED TO
DIAPTOMOIDEA BAIRD, 1850

11
Centropages valid

Calanoida - Centropagidae

Krøyer, 1849 ---

C. typicus^o

- Syn. Ichthyophorba Lilljeborg, 1853, p. 185.
Calanopia Dana, 1852. (pars) p. 1132
Catopia Dana, 1849^a, p. 25.
(pars) Catopia Dana, 1849^b, p. 280; 1852, p. 1172
Κεντροπαχίς, deeply pricking
Hemicalanus Dana, 1852, p. 1103.
Diaptomus Tubboeck, 1857, p. 403.
Ichthyophorba Claus, 1863, p. 198; 1866, p. 11

Body slender: lateral parts of last segt.
of metasome acute: urosome in ♀ asym-
metrical, in ♂ 4-jointed - 1^o antennae
in ♀ 24-jointed: exopod of 2^o antennae 6-
jointed, longer than endopod.
Endopod of 5^o legs in both sexes 3-jointed -
exopod of left leg of ♂ 2-jointed, of right
leg 3-jointed. No ovisac in ♀

Centropages Krøyer, 1849, p. 588; 1849, p. 602.

Centropages Boeck, 1865, p. 242.

Centropages Wheeler, 1901, p. 172.

Cyclopsina Dana, 1849, p. 25 (pars).

Centropages Brady, 1883, p.81; 1882, p.658.

Centropages Giesbrecht, 1892, p.59, 303, 731.

Centropages Wheeler, 1899, p.172.

Centropages Thompson & Scott, 1903, p.247.

Centropages Eisterly, 1905, p.171.

Centropages G.O.Sars, 1902, p.74.

Centropages Brady, 1878, p.64; 1879, p.215.

not. Centropages De Guerne, 1886, p.276.

Ichthyophorba Lindström, 1853, p.68.

Ichthyophorba Norman, 1868, p.299.

Centropages Brady, 1872, p.432; 1875, p.162.

Centropages Brady & Robertson, 1873,

Centropages Möbius, 1875, p. : 1887, p.

Centropages Sars, 1877, p.

Centropages Trybom, 1881, p.

Giesbrecht, 1882, p. : 1889, c. p. 811.

Car, 1884, p. 241 : Toppe, 1885, p.

Malcolmson, 1886, p.

Thompson, 1886, p. 205, 1888, p. 150

Thompson, 1888, c. p. 142 : 1889, p.

Braun, 1888, p.

Nordqvist, 1888, p.

Canu, 1888, p. 96 : 1890, p. 474.

Centropages Bourne, 1889, p. ; 1890, p.

" " " Gourret, 1889, p. 474.

" " " Hensen, 1890, p.

" " " De Guerne, 1886, p. 276.

" " " Giesb. & Schmeil, 1898, p. 53.

" " " Pesta, 1921, p. 519.

Not

Centropages

(4)

- superspecies, Fleminger, ~~1972~~ 1972: 86
- , GAULD, 1966: 314-33 (SWIMMING & FEEDING)
- , ANDRONOV & MAIGRET 1980: 76.
- , CLAUS 1893: 224.
- , Moore & Sander, 1976, p. 594 (tbl. 3 for @ species listed)
- , Grindley & Wooldridge, 1974, p. 204
- , Gardner & Szabo, 1982, p. 27, 351
-) SEKIGUCHI, 1984: 42
-) SATO & HIRANO, 1978: 151

CENTROPAGES KRØYER

CARD 5

- VINOX + HEIP 1979: 295
- PETIPA 1975: 36 - 48, FEEDING TYPES
- FLEMINGER 1986: 94
- MAUGHLINE 1988: 711-, PORE PATTERNS
- DUSSART 1986: 63
- BAMSTEDT 1986: 8-
- BJÖRNBERG, T. 1986: 60-, FIG. 8
- BJÖRNBERG, T. 1986: 260 (IN KABATA-ED.)
- DOWIDAR 1986: 629, SE MEDITERRANEAN

Centropages Krøyer

card 6

- Björnberg & Campaner 1988: 356

- TURNER 1984d: 7, FEEDING

- GAUDY 1984: 209 -

CENTROPAGES ABDOMINALIS

SATO ~~1913~~
no parens

— —, MORI, 1937. P. 58 JAPAN.

— —, FURUHASHI, 1957, P. 15, JAPAN, MAIZURU BAY.

— —, Chiba, 1956, p. 58-59, fig. 54 A-G.

— —, Chiba, Tsuruta, + Maeda, 1955. Bikini.

HABITAT : JAPAN

— —, Shen + Bai, 1956, pp. 187-188, ^{pp. 220} pl. 3, fig. 17-22. Off Chefoo, China.

— —, Omori, 1965. Pp. 18-27

— —, Northcote et al, 1964. p. 1079

-- --, Chiba, 1956, p. 58, fig. 54

n.sp., Sato, 1913, no. 15, pl. 4?, pp. ?

--, Shen & Bai, 1956, p. 220, pl. III, figs. 17-22

--, Shen & Lee, 1963, p. 576

--, Fulton, 1968, p. 40, fig. 27, C. hamatus var.
& C. mcmurricchi are syns.

--, Hue, 1967, p. 14.

--, Bjornberg, 1963: 100 (table)

--, JOHNSON, 1980: 567

--, TANAKA, 1963: 7, 11 ♀♂

CENTROPAGES ABDOMINALIS Sato CARD 2

- , HIROTA, 1979a: 14; FIG. 3
- , HIROTA & UOJ, 1977: 77, 78, 79, 81, 83; FIGS. 3 (EGG), 5
- , FLEMINGER, 1975: FIG. 2
- , GAUDY, 1971: 68
- , KOS, 1977: 37, 50
- , BRADFORD, 1978b: JFF
- , FIGUEIRA 1971: 146.
- , Kasahara, S., S. Uye, & T. Onbé, 1974, p. 170, figs. 1 & 2
- , Kasahara, S., S. Uye, & T. Onbé, 1975, p. 27-28

Centropages abdominalis Sato

card 3

- , Ueda, 1978, p. 56, tbl. 1
- , Grice & Marcus, 1981, passim
- , Gardner & Szabo, 1982, p. 27, 352-353, fig. 21.1.1,
Syn.: C. mcMurrichi, C. hamatus
- , Uye, 1982, p. 5-7
- , Hirota, ~~1969a~~ 1969b: passim.
- , PETERSON & MILLER, 1977: 718, 720, 722
- , HIROTA, 1982: 50.
- , HIROTA, 1981: 21 TAB.1

CENTROPAGES ABDOMINALIS SATO

CARD 4

--, MOTODA + MINODA, 1974: 207, 211, 212, 215, 232

-- UYE 1984b: 165

-- KOGA 1960b: 877-881, FIGS. 1, 2, 3 - DEVELOPMENTAL STAGES.

JAPAN

-- KOGA 1968: 17, 18, Pl. I FIG. 15 - EGG

-- KOGA 1970b: 195, 198, 202, TABLE 3 - NAUPLIUS

-- KOGA 1973: 32-33, FIG. 4-19, EGG-

-- KOGA 1984b: 109, 110-113, FIGS. 4-2, 5-2, 6-2,

8-3-4, 9-4, NAUPLII; FIG. 11-15, EGG; 127, 141-142,
FIG. 26, TABLE 2-(9); 186; FIG. 60(1)

- TANAKA, 1965a: 25, fig. 6a-c
- HIRAKAWA 1986: 296-299, FIG. 1a-d, record-s. Chile;
syn. Centropages mcMurrichi
- SAZHINA 1975: 82, 83
- AMBLER ET AL. 1985: 189, SAN FRANCISCO BAY
- UYE, 1985: 441, ~~Fig.~~ Pl. 1
- MCKINNON & KIMMERER 1988: 175, SYN. C.
- McMURRICH WILLEY
- HIRAKAWA 1988: 337, 338
- MARUKAWA 1921: 7-, JAPAN
- NAGASAWA 1988: 255-, JAPAN

Centropages abdominalis Sato

card 5

- Uye et al. 1987: 428-, Inland Sea, Japan
- UYE & MATSUDA 1988: 281-, " " "
- SHIH ET AL. 1971: 146, CANADA-PACIFIC; 203,
ARCTIC
- COYLE ET AL. 1990: 763-, AUK BAY, ALASKA
- OHMAN 1986: 686-, DABOB BAY, WASHINGTON STATE
- BRODSKII ET AL. 1983: 16-, FIGS. 4
- CARLTON & GELLER 1993: 80, INTRODUCED - CHILE
- FLEMINGER & KRAMER 1988: 538

CENTROPAGES ABDOMINALIS SATO

CARD 6

- CARMAN + DOBBS 1997: 121, TAB. 1
- UYE + MURASE 1997: 98, INLAND SEA, JAPAN
- LIANG + UYE 1996: 225, 226, " " "
- LIANG + UYE 1997: 415, 419-420, " " "
- LIANG + UYE 1997: 409, 413-414, " " "

Centropages acutus McKinnon & Dixon, 1994

-- McKinnon & Dixon 1994: 9-14, figs. 1-3, n. sp.

female + male, Fly River estuary, Papua New Guinea

Centropagidae - Calanoida

Centropages alcocki Seymour-Sewell, ♀, ♂.

-- Pillai, P.P., 1971, p. 164

-- Sewell, 1912, p. 338: pl. 17, figs. 1-7.

___ Sewell 1932, p. 228, not since collected

-- --, Saraswathy, 1967, pp. 78-79

-- --, Madhupratap & Rao, 1979: 10

Habitat. Bay of Bengal.

-- Madhupratap et al 1975: passim.

--, Bjornberg, 1963: 100 (table)

--, Madhupratap ~~et al~~, 1979: passim

--, TANAKA, 1963: 7

--, Madhupratap, 1980: passim.

--, Madhupratap & Haridas, 1975: passim

-- MADHUPRATAP & HARIDAS, 1986: 108, III-INDIAN OC.

Centropagidae - Calanoida -

Centropages arabicus Cleve ♂♀.

— — Cleve, 1903, p. 371: pl. 16. figs. 1-9: pl. 17. fig. 1.

— — McKINNON & KIMMERER 1988: 175, =

C. TENUIREMIS

Habitat. Indian Ocean.

Centropages armatus

--, Bjornberg, 1963: table 17

Centropagidae - Catalanoida.

Centropages auklandicus Krämer, ♂. ♀.
1895

C. typicus, var. a — Krämer, 1895, p. 217: pl. 15, f. 1-5.

C. a — Giesbrecht & Schmeil, 1898, p. 55.

— — Pesta, 1921, p. 520.

— — Grandore, 1910,

-- Deerey, 1966, p. 156

Habitat. New Zealand.

-- M. ROSE 1934: 58-81, OFF ALGERIA

-- Björnberg, 1963: table 10

-- BRADFORD, 1978b: 287-291; FIG. 1-3

— — Farran, 1929, p. 256: text-fig. 21, a—h.

-- -- Vervoot, W. 1964, pp. 293-311.

— —, Bradford, 1970, p. 345.

--, Bradford, 1972, p. 46, fig. 11.10-11.13

--, TANAKA, 1964b: 8, TAB. 2, 3

--, Bradford, 1979, passim

-- McKINNON & KIMMERER 1988: 171; 175, SYN. OF
O. DISCAUDATUS

-- RAZOUKS 1994: 9

Centropagidae-Calanoidea

Centropages australiensis Fairbridge

— — — — —, Fairbridge 1944, p. 209, pl. I, pl. II, figs.
7-9, ♀♂, Western Australia

-- -- Vervoort, W., 1964, pp. 293-311.

--, BRADFORD, 1978b: 287, 288

--, Bradford, 1979, *passim*

-- McKINNON & KIMMERER 1988: 171

Centropages brachiatus (Dana) ♀. 1853

Calanopia
a Dana, 1853, p. 1133: pl. 79, f. 7, a-b.

centropagesb vs Brady, 1883, p. 82: pl. 26, f. 1-7.

— — T. Scott, 1894, p. 77; 1912, p. 533.

— — Giesbrecht & Schmeil, 1898, p. 55.

— — Heinrich, 1971 p. 292, fig. 2

Habitat. Gulf of Guinea; Cape Good Hope
Chili; Canary Islands; Tropical
Pacific.

Thomson, 1900: 279

Pontella brachiata Dana, 1849, p. 27.

Centropages bicus Giesbrecht, 1892, p. 304: pls. 17, 18, 38.

— — Stebbing, 1910, p. 533.

— — Thompson, 1888, a, p. 150: 1888, c, p. 142

— — Giesbrecht, 1889, c, p. 811.

— *chilensis* Krøyer, 1849, p. 603, 609.

— — Rose, 1929, p. 32.

-- --, Decker, 1964. pp. 19-20. South Africa

--, DeDecker, 1962, p. 104

--, Arcos, 1975, pp. 20-21, figs. 58-64

--, Lee, 1972, pp. 1-, figs. 1, 2, & 6, pls. 7-10.

--, Bjornberg, 1963: 4, 9, 44, 45, 95, 97, 99, 104, 111

CENTROPAGES BRACHIATUS

CARD 2

--, HIRAKAWA + ZAMA 1985:117, SOUTH CHILE FJÖRD

--, VERVOORT, 1965:94

--, TANAKA, 1964b: 4, 8-9, Pl. II, TAB. 2, 3

--, FLEMINGER, 1975: FIG. 2

--, AHUMADA + Arcos 1976: 108.

--, Grindley, Estuarine plankton, p. 124, tbl. 3

--, Bradford, 1979, passim.

- Ramirez, 1969: 75-76, fig. 105-106, 110, 112, 113, 115

-- HERMAN 1984: 131, 133, 135-137, 141-145

- Bjornberg, 1981: 644, fig. 215 #1

- DeDecker, 1984: 316
- HIRAKAWA 1986: 296
- Mikheev, 1977: 511-516
- HUNTLEY, MARIN & ESCRITOR 1987: 913
- MONTÚ 1980b: 57-, BRAZIL - RIO GRANDE DO SUL
- MONTÚ & GLOEDEN 1986: 91-, FIG. 28 f-c, "
- LE BORGNE 1986: 120-
- Mc KINNON & KIMMERER 1988: 175, C. CHILENSIS
A SYNONYM.
- TURNER 1984d: 7-
- DE DECKER 1984b: 156-, OFF S. AFRICA

Centropages brachiatus (Dana, 1853)

card 3

-- Ramirez 1966: 15-, Lam. III Figs. 13-21, Mar del Plata, Argentina


-- OKENWA & REVIS 1986: 31, TAB. 1, KENYA COAST

Centropagidae - Calanoida

Centropages bradyi Wheeler, ♀. ♂.

- — Wheeler, ¹⁸⁹⁹1904, p. 174: text-fig. 12, a-f.
- — Sharpe, 1909,
- — Fowler, 1912, p. 494.
- violaceus Brady, 1883, p. 83: pl. 37, f. 1-14.

Habitat. Gulf Stream.

— Bjornberg, 1981: 644,  fig. 215 #2

- bradyi Esterly, 1905, p. 172: text-fig. 32, a-c
- — Farran, 1929, p. 255.
- — Wilson, 1932, p. 86: fig. 59.
- — Bigelow, 1924, p. 219.
- — , Anraku, 1954, pp 1-8, N W Pacific
- — , Mori, 1937, P. 60, JAPAN.
- — , BRODSKY, 1950, P. 318, fig. 221.
- — , Chiba, Tsuruta, Maeda, 1955. Bikini.
- — , Honjo et al, 1957. pp. 120-128
- — , Brodsky, 1962. p. 126, fig. 29
- — , Colton et al, 1962. p. 168
- — , Omori, 1965. pp. 18-27
- — Park, 1968, pp. 527-572.
- — Vilela, 1968, pg. 21 Est. V Fig. 1

Centropages bradyi Wheeler, 1900^{1899?}

2

- --; Vervoort, 1957, p. 126.
- ✓ --, Bradford, 1957, p. 347
- , Chiba, 1956, p. 41
- , Bradford, 1972, p. 46, fig. 12.1-12.3
- , Corral, 1970, pp. 182-3, pl. 48, 49
- , Sato, 1913, no. 14, pl. 5
- , Seno, Komaki & Takeda, 1963, tab. 2
- , Hue, 1967, p. 14.
- , Roe, 1972a, pp. 304-
- , Furuhashi, 1966: 307

--, Vives, 1972, p. 219

--, Furuhashi, 1961: 107

--, Bjornberg, 1963: ~~43~~ 44, 100 (table), 104 (table 7 = brady),
table 10

--, TANAKA, 1963: 7, 10-11 ♀

--, BINET & DESSIER, 1971: 433, 454

Centropages bradyi Wheeler, 1900

card 3

--, Turner, 1981, p. 369, tbl. 2

--, Uye, 1982, p. 5-7

- Ramirez, 1969: 74-75, fig. 107-109, 111, 114

- GRICE & HART 1967b: TABLE 3, w. NORTH ATLANTIC

- Deevoy, 1952 b: 131, 147

- Deevoy, 1960a: 15

- Dakin & Colefax, 1940: 92, fig. 114a-e

- Dakin & Colefax, 1933: 205

- Turner & Dagg, 1983: 21, tbl. 2

- Dawson & Knatz, 1980: 29, pl. 16, fig. a-h
- DeDecker, 1984: 264'
- McKinnon & KIMMERER 1988: 171

Centropages bradyi

- Marin & Antezana, 1985: 963 tab 1 Chile
- Solvevilla, et al. 1988: 59 Canary Islands
- Grant, 1988: 227-236 figs 2,3 tabs 2-5
Middle Atlantic Bight

- SHIH ET AL. 1971: 37, CANADA-ATLANTIC
- ALVARIÑO 1989: 69-, OFF S. CALIFORNIA
- BRODSKII ET AL. 1983: 18-
- RAZOUKS 1994: 9
- M. ROSE 1934: 68-81, OFF ALGERIA

CENTROPAGES BRACHIATUS. (DANA, 1849)

--, Arcos, 1976: 95-97, 99; TAB. II

-- Marin & Antezana 1985: 963, 964 tab 1 Chile

C. BRACHIATUS, Razouls 1994: 9

Centropages brevicaudatus, Brady - see Boeckella

Centropages brevivirgatus Shen & Lee, 1963

n. sp., Shen & Lee, 1963, pp. 575-6593, fig. 11-14

-- SHEN & LEE 1966: 214, CHINA.

-- CHEN & ZHANG 1965: 127.

-- CHEN, Q.-C. 1986: 524

Centropagidae - Calanoida

Centropages calaninus (Dana), ♀.

- Cyclopsina calanina Dana, 1849, p. 25.
- Centropages c. — Thompson & Scott, 1903, p. 247.
- — Giesbrecht, 1889, c, p. 811.
- — Giesbrecht, 1892, p. 305: pl. 38, 17, 18.
- — A. Scott, 1902: 404

Habitat. Indian Ocean: Tropical Pacific:
Arabian Sea, Malay Archipelago
—, Wolfenden, 1906: 1014, pl. 98, fig 6, 15

- Hemicalanus c-vus* Dana, 1852, p. 1105: pl. 78, f. 10, a-b.
- H. tenuicornis*, Dana, 1852, p. 1106: pl. 78, f. 11, a-b.
- C. calaninus*, Giesbrecht & Schmeil, 1898, p. 58.
- — Cleve, 1901, p. 5.
- — T. Scott, 1912, p. 533: A. Scott, 1909, p. 112.
- — Wilson 1942, p. 177, fig. 30
- — Sewell 1932, p. 228, Indian O.
- — MORI, 1937, P. 61, JAPAN.
- —, SEWELL, 1947, P. 163, ARABIAN SEA.
- —, Chiba, 1956, p. 58-59, fig. 55 A-D
- —, chiba, Tsuruta, & Maeda, 1955. Bikini.
- --, Decker, 1964. p. 20. South Africa
- --, Grice, 1962. p. 220, pl. 23, fig. 13-18
- —, Brodsky, 1962. p. 130, fig. 31

C. calaninus

(2)

Centro pages

-- -- Park, 1968, pp. 527-572.

-----, Paraswathy, 1967, p. 78

-- --, Chiba, 1956, p. 58, fig. 55

C. Calanius, Chiba, 1956, p. 41

--, Cleve, 1901, p. 5

--, DeDecker, 1962, p. 105

--, Furuhashi, 1961: 107

--, Bjornberg, 1963: 104 (table 7), table 10

--, TANAKA, 1963: 7, 8 ♀♂

--, Madhupratap et al, 1977: tbl. 3.

--, GREENWOOD, 1977: 50, 61; SYN: CYCLOSPINA CALANINA

--, STEPANJANTS, 1977: 78, 81, 85, 93; TAB. 1, 3

--, Madhupratap et al 1981: 266-267

--, Sreekumaran, et al 1981: passim

- Dakin & Colefax, 1940; 92, fig. 112a-b

- Dakin & Colefax, 1933: 204 fig. 112a-b

- Bjornberg, 1981: 644, fig. 215 #6

--, ARCO & FLEMINGER 1986: 171-184, E. PACIFIC

-- MADHU PRATAP & HARIDAS, 1986: 108, 109, 111, 114-

INDIAN OCEAN

- DeDecker, 1984: 316'

- Greenwood, 1982b: table 3

Centropages calaninus (Dana 1849)

card 3

- calininus, McKinnon & Kimmerer 1988: 171

- - DESSIER & DONGUY 1987: 14, 397-, EASTERN
EQUATORIAL PACIFIC

- SUAREZ & GASCA 1989c: 94-, COSTA RICA DOME

Centropages caribbeanensis Park, 1970

-- -- Park, 1970, pp. 477, 515, figs. 202-210.

-- --. Minello, 1976, pp 42-44, figs 1-7. Descr. of ♂.

-- Roe, 1975, p. 344.

-- YOUNG-BLUTH 1979:22, CARIBBEAN

-- HULSEMANN, 1984:253, 254

-- CARIBBEANENSIS, CUMMINGS 1982:33,
GULF OF MEXICO

-- REID 1990g: 186

Centropagidae - Calanoida.

Centropages chierchiae Giesbrecht, ♀.♂

— — Giesbrecht, 1889^c, p. 811.

— — Cleve, 1900, p. 141; 1904, p. 187.

— — Giesbrecht, 1892, p. 304: pls. 17, 18 & 38.

— — Stebbing, 1910, p. 533.

Habitat, So. Africa: Indian Ocean.
Gibraltar

Thompson & Scott, 1903, p. 246.
 -- Giesbrecht & Schmeil, 1898, p. 55.
 -- Pesta, 1921, p. 520: text-fig C 31.
 -- Wolfenden, 1911, p. 356.
 -- Rose, 1929, p. 32.
 -- Cleve, 1900, p. 52.
 -- Wilson, 1942, p. 177
 -- Cridafi, 1960, pp. 484-491, fig. 13-20, 22-23.
 -- Vilela, 1968, pp. 21-22
 -- Corral, 1970, pp. 181-2
 -- DeDecker, 1962, p. 105
 -- Bernard, 1970, p. 145, 148, 152, 153, 155
 --

Centropages chierchiae

card 2

- , Ehrhardt, 1967, p. 740
- , Lee, 1972, pp. 1-, figs. 1,2, & 5, pls. 4&5.
- , Vives, 1972, p. 219.
- , Bjornberg, 1963: 43, 100 (table), 111, 124, Table 17
- , VERVOORT, 1965: 90-91
- , TANAKA, 1963: 7 SYN. C. TYPICUS, TANAKA, 1960
- , TANAKA, 1964b: 9, TAB. 2, 3; SYN. C. TYPICUS, TANAKA, 1960
- , CORREAL ALVAREZ-OSSORIO, 1978: 138
- , BINET & DESSIER, 1971: 433, 454
- , BINET, ET AL., 1972: 133, 136
- , Andronov & Maigret 1980: 71-76, 78, 84

Centropages chierchiae

card 3

- , Grindley, Estuarine plankton, p. 124, tbl. 3
- , Bradford, 1979, passim
- , Marques, 1953, p. 116
- , Cannicci, 1959: passim
- Marques, 1958: 215
- Marques, 1953: 116
- MASSUTI & NAVARRO 1950: 20.
- Dakin & Colefax, 1933: 205
- DeDecker, 1984: ~~216~~ 316

Centropages chierchiae Giesbrecht, 1889

card 4

-chierchiae, Sazhina 1975:80

- CARLI 1971a: 61-, LIGURIAN SEA
- CARLI 1971b: 371-2, " "
- CARLI ~~1971~~ 1973: 340-, SICILY
- MAUCHLINE 1988: 711-
- SCHNACK, 1988: 50, 51, 52 fig. 3 tabs 1-2 NW Africa
- SOLDEVILLA et al 1988: 59 CANARY ISLANDS
- RODRIGUEZ & VIVES 1984: 242-, MALAGA HARBOR
- MEDINA-GAERTNER 1988: 26-, SENEGAL
- DE DECKER 1984b: 155-, OFF S. AFRICA

CENTROPAGES CHIERCHIAE GIESBRECHT, 1889 CARD 5

-- M. ROSE 1927: 145, 156, 161, 162, OFF ALGERIA

Centropagidae - Calanoida.

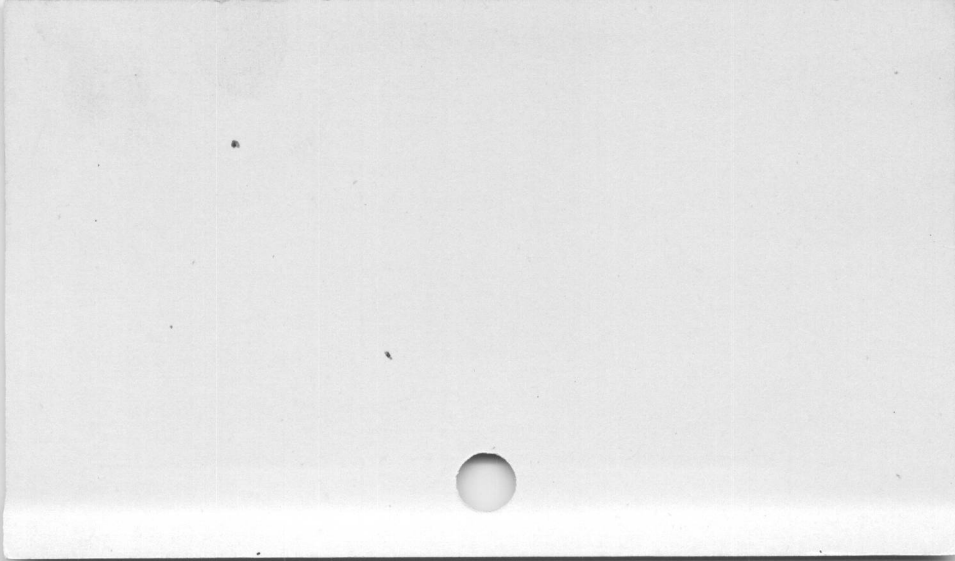
Centropages chilensis Krøyer, ♀.

— — Krøyer, 1849, p. 603, 609.

— — (= *C. brachiatus*) Giesbrecht, 1892, p. 304.

-- McKINNON & KIMMERER 1988: 175, = *C. BRACHIATUS*

Habitat. Pacific, near Chili.



Centropagidae - Calanoida

Centropages discaudatus, Brady, ♂ ♀,

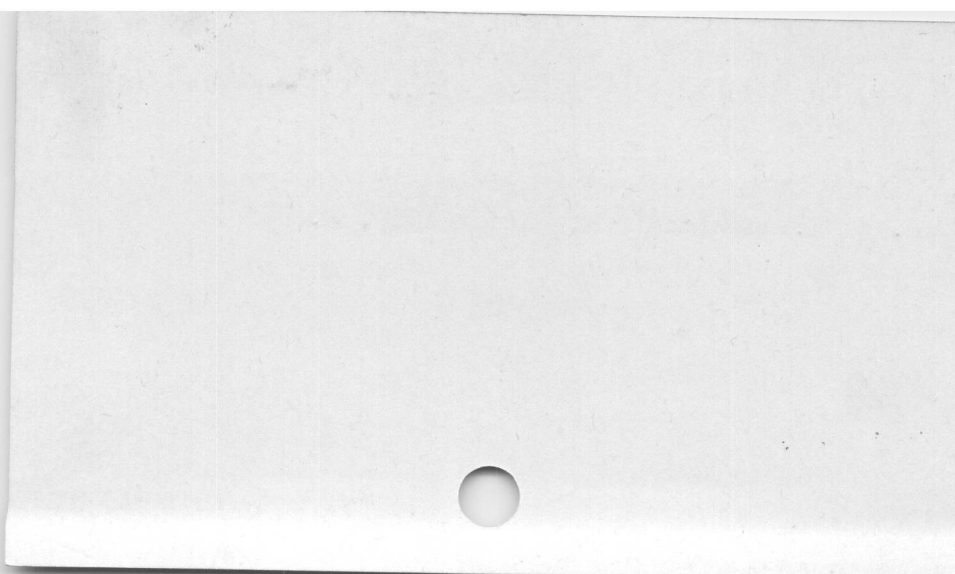
— — Brady, 1899, p. 35: pl. 10, figs. 1-7.

syn. of *C. aucklandicus*, Farran 1929, p. 256

" " " " , McKINNON & KIMMERER 1988:

175.

Habitat, New Zealand,



Centropagidae — Calanoida. ①

Centropages dorsispinatus Thompson & Scott, ♀[♂]

— — Thompson & Scott, 1903, p. 247: pl. 1, f. 19-25.

— — Sewell, 1914, p. 222.

— — Sewell 1932, p. 228

-- -- Ummerkutty, 1967, pp. 332-343.

-- --, Saraswathy, 1967, p. 78

Habitat. Indian Ocean: Gulf of Mannar

--, Haq, S. & F. Rehman, 1973, p. 187

--, TANAKA, 1963: 7

--, CHENG et al. 1965: 2, 3.

1875

CENTROPAGES DORSISPINATUS THOMPSON + SCOTT

-- DAS ET AL. 1982: 53.

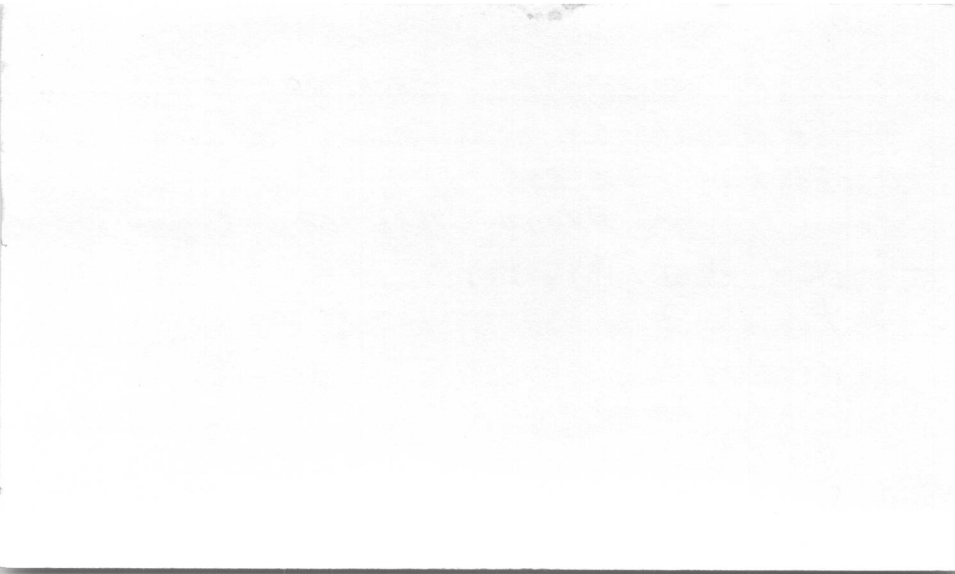
-- WICKSTEAD 1962: 546

-- MADHU PRATAP + HARIDAS, 1986: 108, III - INDIAN OCEAN

— Sarkar, et al., 1986: 177

-- McKinnon & KIMMERER 1988: 175, C. NOTOCERAS

A SYNONYM.



Centropagidae - Calanoidae.
Centropages elegans Giesbrecht, ♂. ①

— — Giesbrecht, 1895, p. 256; pl. 4. f. 1-2.

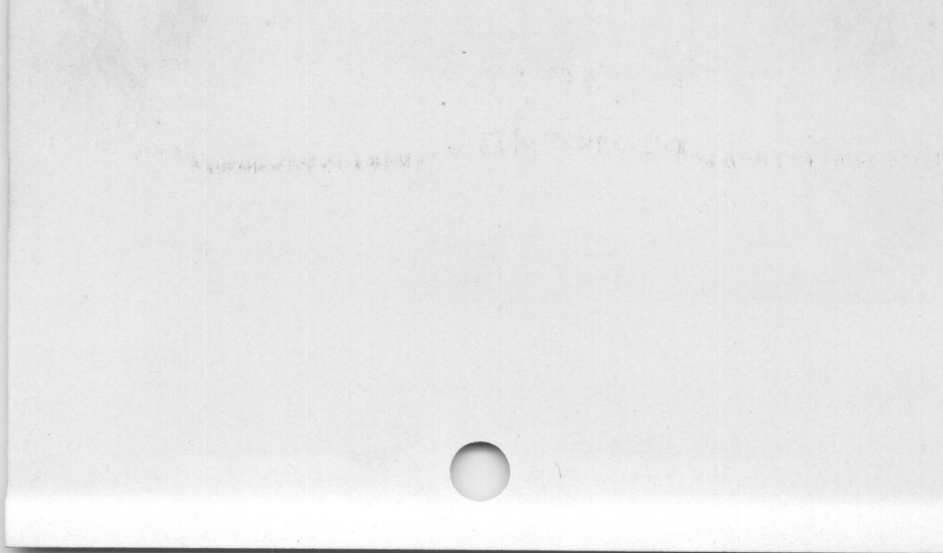
— — Giesbrecht & Schmeil, 1898, p. 57.

— —, Brodsky, 1950, p. 318, fig. 222.

— — Park, 1968, pp. 527-572.

— — Roe, 1975, p. 344.

Habitat. No. Atlantic.



CENTROPAGES ELEGANS GIESBRECHT

CARD 2

-- AMBLER + MILLER 1987: 561-577

-- DESSIER + DONGUY 1987: 14, 397-, EASTERN
EQUATORIAL PACIFIC

Centropagidae - Calanoida.

Centropages elongatus Giesbrecht, ♀.

— — Giesbrecht, 1896, p. 322: pl. 5, f. 3-6.

— — Thompson & Scott, 1903, p. 246.

— — Giesbrecht & Schmeil, 1898, p. 58.

— — Sewell, 1914, p. 222.

— — Wolfenden, 1906: 1014-1015, pl. 98, fig 2, 3 ^{1910, 14}

Habitat. Indian Ocean: Red Sea.

--, Furuhashi, 1961: 107

--, Bjornberg, 1963: 100 (table)

--, STEPANJANTS, 1977: 78, 81, 82, 85, 93; TAB. 1, 3

- — A. Scott, 1909, p. 113.
- — A. Scott, 1902, p. 404: pl. 1. figs. 13-14.
- — Wilson 1942, p. 177
- — Sewell 1932, p. 229
- —, MORI, 1937, P. 61. JAPAN.
- —, Chiba, Tsuruta, & Maeda, 1955. Bikini.
- —, Decker, 1964. p. 20. South Africa
- —, Grice, 1962. p. 220, pl. 23, fig. 4-12
- — Park, 1968, pp. 527-572.
- —, Chiba, 1956, p. 14.
- —, DeDecker, 1962, p. 105
- —, TANAKA, 1963: 7
- —, TOHOSONO, 1954: 309

Centropages elongatus Giesbrecht

- AMBLER & MILLER 1987: 561-576, N. PACIFIC
- , Chiba & Hirakawa 1972: Tab. 2.
- MADHU PRATAP & HARIDAS, 1986: 108, 111, 114-INDIAN Oc.
- DeDecker, 1984: 316
- McKINNON & KIMMERER 1988: 171, 175, C.
PACIFICUS A SYNONYM.
- DESSIER & DONGUY 1987: 14, 397-, EASTERN
EQUATORIAL PACIFIC

Centropagidae - Calanoida.

Centropages furcatus (Dana). ♀.

p. 25

Catopia — Dana, 1852, p. 1173; ¹¹⁷⁴pl. 79, f. 1, a-d: 1849, ¹

Centropages — Brady, 1883, p. 83: pl. 28, f. 1-11.

— — T. Scott, 1894, p. 77: 1912, p. 532.

— — Giesbrecht, 1892, p. 304: pls. 17 & 38 & 18.

— — Wolfenden, 1906: 1016

Habitat. Gulf of Guinea: Indian Ocean.

Philippines: Tropical Pacific: Australia.

— Thomson, 1900: 279

— A. Scott, 1902: 403

- — Cleve, 1904, p. 187; 1901, p. 5.
- — Stebbing, 1900, p. 533.
- — Thompson & Scott, 1903, p. 246.
- — Giesbrecht, 1889, c. p. 811.
- — G. & Schmeil, 1898, p. 56.
- — Sewell, 1914, p. 220.
- — A. Scott, 1909, p. 113.
- — Wolfenden, 1911, p. 356.
- — Pesta, 1911, p. 46: fig. 5. text.
- — Farran, 1929, p. 255.
- — Cleve, 1900, p. 52.
- — carli, Früchtl, 1925, p. 45: fig.
- — Wilson, 1942, p. 177

Centropages furcatus-2

— —: Sewell 1933, p. 26. Off Penang, Malaya.

— —: Sewell 1932, p. 229, Indian O.

— —, Carvalho, 1945, p. 95, pl. 7 fig. 6. no E. de Paraná.

— —, Carvalho, 1952, p. 145. Bay of Santos, Brazil.

— —, Mori, 1937, p. 63, JAPAN,

— —, Grice, 1960. p. 224. W. coast Florida. 1956, pp. 52-53.
alligator Harbor, Fla.

— —, King, 1950, p. 128 [Table]. W. coast Florida.

— —, Davis, 1950, p. 92 [Table]. W. coast Florida.

— —, Wickstead, 195

— —, A.G. Fish, 1962, p. 15. Barbados, W.I.

Manoia velificata Oliveira, 1947, pp. 466-467, fig. 10 (text), pl. 6 fig. 1-9 Ilha Grande
Brazil

— —, Foster, 1904, p. 73. Off Calcasieu Lake, La., in Gulf of Mexico.

-- --, Cervigon, 1962. p. 184

-- --, Decker, 1964. p. 20. South Africa

--, Bjornberg, 1971, p. 348

--, Lee, 1972, pp. 1 -, figs. 1, 2, 7, & 8.

--, Bjornberg, 1963: 4, 9, 42-45, 91, 94, 96, 98, 99, 100,
(*Mania velificata* is a synonym) 100 (table), 104 (3 tables),
Table 10, 111, 114, 116, 120, 117, Table 17, 126

--, OWREN & FOY, 1972; TAB. 3, 6

--, OWREN & FOY, 1964b: 365

--, CALEF & GRICE (UNPUBL.) IN KETCHUM & RYHER
1966 (UNPUBL.): 37; APPENDIX

Centropages furcatus (Dana)

(2) 3

-- --, A. G. Fish, 1962. p. 15

-- --, Brodsky, 1962. pp. 130-132, fig. 32

-- --, González & Bowman, 1965. pp. 247-8, fig. 4b-g

-- --, Owre, 1962

-- -- Ummerkutty, 1967, pp. 332-343.

-- --, Saraswathy, 1967, p. 77

-- --, Fleminger, pp. 92-98, 1959-1961

--, Chiba, 1956, p. 14

--, Cleve, 1901, p. 5

--, Bowman, 1971, p. 6

--, Furuhashi, 1961: 107

- , DeDecker, 1962, p. 105
- , Paiva, 1971, p. 24
- , Rose, 1937, p. 154
- , Rose, 1955, p. 391
- , Rose, 1956, p. 460
- , Coker & Gonzalez, 1960, p. 18
- , Gurjanova, 1972, p. 69
- , Brodsky, 1972, p. 228
- , Kolesnikov, 1966, p. 154
- , Fleminger and Hulseman, 1973, pp. 344-346.
- , Van Engel & Tan, 1965, p. 184-
- , Tundisi & Tundisi, 1968, pp. 57-
- , Pillai, P. P., 1971, pp. 164, 167, 170
- , MOORE & SANDER, 1979: 200

CENTROPAGES FURCATUS

CARD

✓✓

— Marikoua & Campos, 1967: 67

--, VERVOORT, 1965: 88, 90, 91 SYNONYMS: CATOPIA FURCATA

CENTROPAGES LENUCULARI; MANAIA VELIFICATA

--, TANAKA, 1963: 7, 9 ♀♂

--, HIROTA, 1977: 45; TAB. 1

--, HOPKINS, 1977: 471

--, GREENWOOD, 1977: 50, 61-63; FIG. 59, 60; SYN: CATOPIA F.

--, FLEMINGER, 1975: FIG. 2; TAB. 1

--, BAINBRIDGE, 1972: 67, 69, 81

--, HELPV SMOL, 1976: TAB. 5

- , GOSWAMI & GOSWAMI, 1974: 109, 110, 113; TAB. 1 + 2
- , GAUDY, 1971: 68
- , BAYLY, 1965: 339
- , BINET & DESSIER, 1971: 439, 448, 454; FIG. 14
- , BINET, ET AL., 1972: 133, 136
- , ITOH, 1970: TAB. 1
- , ~~CALET & GRICE (UNPUBL.) IN KETCHUM & RUTHER~~
~~1966 (UNPUBL.): APPENDIX~~
- , ARCOS 1978: TAB. III, 50.
- , DAVIS 1950: Tab. V-p. 92.
- , CARVALHO 1952: 145.
- Mori, 1942: 552 - 553

Centropages furcatus (DANA)

card 5

- , Grindley, Estuarine plankton, p. 124, tbl. 3
- , Madhupratap, et al 1975: passim
- , Madhupratap et al, 1981: 266-267
- **S**reekumaran et al, 1981: passim
- , Madhupratap & Haridas, 1975: passim
- chen, 1980: table 1
- Santos, 1970: 285
- Marques, 1958: 215
- Marques, 1947: 35

Bjornberg, 1968: 61-75, pl. X-XIV

-- DAS ET AL. 1982: 53

-- TRANTER 1977: 593-625.

-- SANDER + MOORE 1978: 232.

-- CONLEY + TURNER 1985: 113-114, C. FURCATUS OF

PAFFENHÖFER + KNOWLES, 1980, = C. VELIFICATUS.

-- R.S. FULTON 1983: 78

-- WICKSTEAD 1962: 546

-- KOGA 1968: 17, 18, PL. I FIG. 16-EGG

-- KOGA 1973: 33, FIG. 4-16-EGG

-- KOGA 1984b: 108, 119, FIG. 11-16-EGG; 127, 142, 186;
FIG. 61 (9)

Centropages furcatus (Dana) 1852

card 6

-- Grice & Hart 1962b: Table 3, w. North Atlantic

→ Deewey, 1960a: 15

— Dakin & Colefax, 1940: 91, fig. 109a-e

— Dakin & Colefax, 1933: 205

— Saraswathy & Santhakumari, 1982: 37-42

— Binet & Dessier, 1968: 13, OFF MADAGASCAR

-- Arcos & FLEMINGER 1986: 171-185, E. PACIFIC

-- MADHUPRATAP & HARIDAS, 1986: 108, 109, 111, 114, INDIAN Oc.

— DeDecker, 1984: 316

— Kimmerer, et al, 1985: table 3

- Greenwood, 1982a: 55
- Greenwood, 1982b: table 3
- HIRAKAWA 1986: 296
- MICHEL ET AL. 1986: 35, ARABIAN GULF
- MICHEL ET AL. 1986: 67, 75 - ARABIAN GULF
- Morykova & Kampos, 1966: 131, passim (Cuba)
- Sarkar, et. al., 1986: 178
- ~~W. Neg, 1923: 12~~
- Wickstead, 1956: 12
- Tafe & Griffiths, 1983: 112 Australia
- MAUCLINE 1988: 711 -

Centropages furcatus (Dana, 1852)

card 7

- Le Borgne 1986: 142-
- CORNER ET AL. 1986: 265-
- BJÖRNBERG, T. 1986b: 233-, FIG. 10c, NAUPLIUS
- PAFFENHÖFER & STEARNS 1988: 37
- MCKINNON & KIMMERER 1988: 171; 175, SYN.
- C. LENICULARIS OLIVEIRA; NOT = C. VELIFICATUS
- LÖTZ, et al 1987: 501 in Table IV
- DESSIER & DONGUY 1987: 14, 397-, EASTERN
EQUATORIAL PACIFIC

Centropages furcatus (Dana, 1852)

card 8

-- Ferrari & Hayek 1990: Tab. 1

-- HERRING 1988: 185-

-- REVIS 1988: 344-, KENYA

-- HO & PERKINS 1988: 587-

-- JIMENEZ-PEREZ & LARA-LARA 1988: 126-, GULF
OF CALIFORNIA

-- TURNER 1984d: 7- (ATLANTIC = C. VELIFICATUS)

-- COPLEY & WIEBE 1990: 12, GUAYMAS BASIN

-- VALENTIN 1989: 31-, CABO FRIO, BRAZIL

Centropages furcatus (Dana, 1852)

card 9

- Suarez M. & Gasca 1989c:94-, Costa Rica Dome
- MEDINA-GAERTNER 1988: 26-, SENEGAL
- BURRELL + ZWERNER 1972: 138, CHESAPEAKE BAY
- COPLEY ET AL. 1989: 11-, NW ATLANTIC
- DE DECKER 1984 b: 154-, OFF S. AFRICA
- MICHEL + HERRING 1984: 328-, ARABIAN GULF
- NEUMANN-LEITÃO ET AL. 1990: 85, OFF PERNAMBUCO, BRAZIL
- REID 1990g: 186
- HADA + UYE 1991: 155-

Centropages furcatus (Dana, 1852)

card 10

-- Ramirez 1966: 14-, Lam. III Figs. 1-12, Mar del Plata, Argentina

C. LENUNCULARI, OLIVEIRA 1945 (1946): 191, 194-197, FIGS. 14-22, N.S.P. ♀ ONLY, GUANABARA BAY, RIO DE JANEIRO, BRAZIL

-- POR ET AL. 1984: 218-, SÃO PAULO, BRAZIL

-- OKEMWA + REVIS 1986: 31, TAB. 1, KENYA COAST

-- CARMAN + DOBBS 1997: 124, TAB. 2

Centropages furcatus var. carli Fruchtl, 1923

---, Fruchtl, 1924, p. 45, fig. 25



Centropagidae - Calanoida.

Centropages gracilis (Dana), ♀.

Cyclopsina gr - Dana, 1849, p. 25.

Centropages - Thompson & Scott, 1903, p. 247.

— — Giesbrecht, 1889, c. p. 811. f. 31, 32, 46

— — Giesbrecht, 1892, p. 305: pl. 38, f. 4, 13: pl. 17, n

Habitat. Indian Ocean: Tropical Pacific.

—, Wolfenden, 1906: 1013 - 1014., pl. 98, fig. 7

- Hemicalanus gr—Dana, 1852, p. 1108: pl. 78, f. 12, a-b.
C. gracilis Giesbrecht & Schmeil, 1898, p. 57.
— — Cleve, 1901, p. 5: Sewell, 1914, p. 223.
— — A. Scott, 1909, p. 119.
— — Wolfenden, 1911, p. 356.
— — Rose, 1929, p. 32.
— — Sewell 1932, p. 229
— — Mori, 1937, p. 62, JAPAN SEAS.
— —, Sewell, 1947, p. 163, ~~ARABIAN~~ ARABIAN SEA AREA.
— —, Chiba, 1956, p. 57, fig. 52A-E, 53A-D.
— —, Chiba, Tsuruta, + Maeda 1955. Bikini.
— —, Honjo et al, 1957. Pp. 120-128
— —, Decker, 1964. p. 20. South Africa
— —, Grice, 1962. pp. 218, 220, fig-1-3, pl. 23

Centropages gracilis (DANA)

(2)

-- --, Brodsky, 1962. pp. 126, 128, fig. 30

-- --, Tanaka, 1960. p. 46

-- --, Saraswathy, 1967, p. 78

-- --, Chiba, 1956, p. 57, fig. 52, 53

--, Cleve, 1901, p. 5

— Chen & Yin, 197—; 274

--, DeDecker, 1962, p. 105

--, Furuhashi, 1961: 107

--?, Bjornberg, 1963: 100 (table)

--, TANAKA, 1963: 7, 8 ♀♂

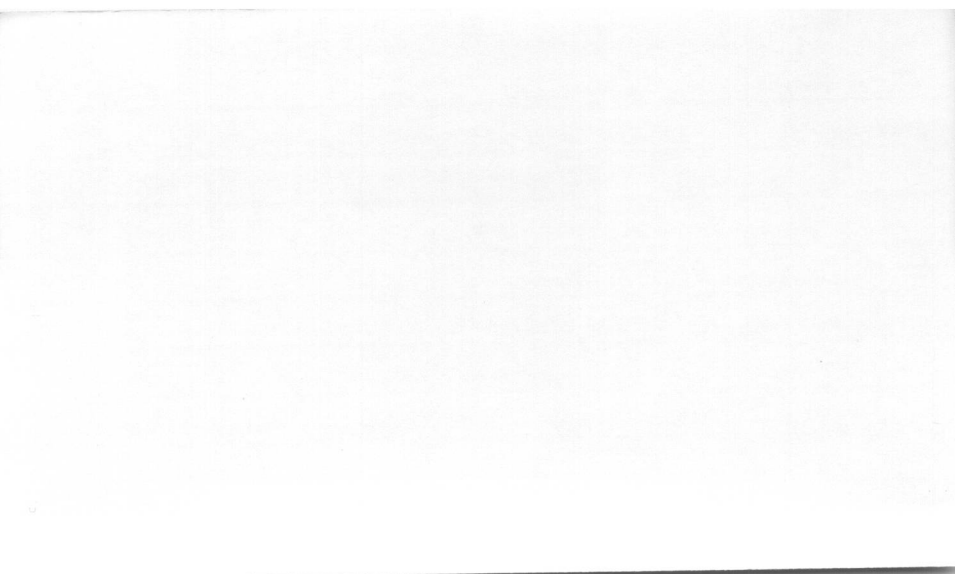
--, Madhupratap et al 1977: Pl. 3

- , STEPANJANTS, 1977: 78, F3; TAB. 1, 3
- , DEEVEY, 1971: TAB. 3
- , BINET & DESSIER, 1971: 433, 454
- , Chiba & Hirakawa 1972: Tab. 2.
- Chen, 1980: table 1
- Chen, 19--: 208
- Chen, Chen, Zhang, 19--: 76
- Dakin & Coletax, 1940: 92, fig. 113a-c
- Binet & Dessier, 1968: 8, OFF MADAGASCAR
- Bjornberg, 1981: 644, fig. 215 #3

CENTROPAGES GRACILIS (DANA)

CARD 3

- ARCOS + FLEMINGER 1986: 171-184, E. PACIFIC
- MADHUPRATAP + HARIDAS 1986: 108, 109, 111, 114 -
INDIAN OCEAN
- DeDecker, 1984: 316
- CHEN Q-C. 1986: 526 -
- Mc KINNON + KIMMERER 1988: 171
- DESSIER + DONGUY 1987: 14, 397 - EASTERN
EQUATORIAL PACIFIC
- OKEMWA + REUS 1986: 31, TAB. 1, KENYA COAST.



Centropagidae - Calanoida.

Centropages grimaldi De Guerne, ♀.

— — De Guerne, 1886, p. 276.

— — (=Limnocalanus macrurus) Giesbrecht, 1892, p. 305.

A synonym of Limnocalanus macrurus.
(Hervey, 1895, p. 49).

Centropages halinus McKinnon & Kimmerer 1988

-- McKinnon & Kimmerer 1988: 171-176, figs. 1, 2, n. sp.
♀♂, Western Australia (Shark Bay)

— Centropagidae — Calanoida.
Centropages hamatus (Lilljeborg) ♂. ♀.

— — Boeck, 1865, p. 20 (244).

— — Carus, 1885, p. 339. [p. 185: pl. 21, fig. 1-5, 7-9.

Ichthyophorba hamata Lilljeborg, 1853, [10-12

— angustata Claus, 1863, p. 199; pl. 35, fig. 2.

Habitat. German Ocean: British Seas
Mediterranean. Rhode Island.
Arctic Ocean (Mrázek).

— Scott & Scott, 1901: 339

Centropages hamatus Cleve, 1900, p. 140

— — Oberg, p. 42: pl. 2, figs. 1-7.

— — Möbius, 1874, p. 274; 1875, p. : 1887,

— — Sars, 1902, p. 76: pl. 52.

Ichthyophorba hamata Brady, 1865, p. 39: pl. 4, fig. 7-10.

Centropages — Brady, 1878, p. 67: pl. 8, figs. 11-13.

— — Norman & Brady, 1909, p. 113.

— — M. Rathbun, 1905, p. 104.

— — T. Scott, 1906, p. 300: 1908, b. p. 262,

— — Giesbrecht & Schmeil, 1898, p. 56.

— — Stephensen, 1913, b. p. 72.

— — Williams, 1907, p. 71: 1906, p. 640.

— — Wright, 1907, p. 14.

C. hamatus (2)

Diaptomus bateanus Tubbock, 1857, p. 404: pl. 11, f. 1-3.

C—hamatus Wheeler, 1901, p. 174: text-fig. 11, a-f.

— — Giesbrecht, 1882, p. 156: pl. 2, 3, 5-11.

— — Poppe, 1885, p. 188: pl. 5: Car, 1884, p. 241.

— — Thompson, 1886, p. 205: 1889, p.

— — Canu, 1888, p. 98: pl. 8: 1890, p. 474.

— — Nordquist, 1888, p. 26: pl. 1.

— — Giesbrecht, 1892, p. 304: pl. 38, ²³~~17, & 18~~.

Ichthyophorba hamata Lindström, 1855, p.

— — Norman, 1868, p. 299.

— angustata Grebnitzky, 1874, p. 241.

- *denticulata* Grebnitzky, 1874, p. 241: pl. 2.
Centropages hamatus Trybom, 1881, p.
— — Brady & Robertson, 1873, p. 128
— — Sars, 1877, p. : 1886, p.
— — Braun, 1888, p.
— — Nordquist, 1888, p. 26: pl. 1.
— — Hensen, 1890, p.
— — Bourne, 1890, p.
— — Arrivillius, 1898, p. 118.
— — Mrázek, 1902, p. 515
— — Pesta, 1921, p. 521: text-fig. c 35.
— — Cleve, 1902, p. 19.
— — Timm, 1894, p. 370

entropages

C. hamatus

(3)

— — Thompson, 1893, p. 183: pl. 16, f. 3, a-b.

— — Sars, 1925, p. 206.

— — Rose, 1929, p. 31.

— — Gurney, 1931, p. 89.

— — Cleve, 1900, p. 52.

— — Wilson, 1932, p. 89: fig. 61. 1942, p. 177

— — Jaschnov, 1927, p. 20, Kara Sea.

— —, JESPERSEN, 1934, p. 103, W. GREENLAND COAST. - 1940, p. 49-51.
Iceland.

— —, Grice, 1960, p. 224. West coast Florida.

— — Willey, 1923: 311, 322, 325

(see back)

C. hamatus, Anraku & Omori, 1963. p. 118, fig. 5-10

-- --, Anraku, 1964. pp. 221-231

-- --, Jeffries, 1962 p. 731

-- --, Anraku, 1964. p. 49

— —, Faber, 1966, p. 421.

— —, Deevey, 1948. p. 21, 36-37

-- --, Apstein, 1905, p. ~~VI~~, ~~VIII~~, ~~XVIII~~, ~~XX~~, ~~XXII~~, ~~XXIV~~,
~~XXVI~~, ~~XXX~~, ~~XXXII~~, ~~XXXIX~~, ~~XXXX~~,
~~XXXXII~~, ~~XXXXIV~~, ~~XXXXVIII~~, L,
LIV, LVI

-- --, Heinrich, "The life histories...", p.16

Centropages hamatus

(4)

--Honedale & Coull, 1977, pp. 275, 278.

--, Bernard, et al, 1967, p.85

--, Bernard, 1970, p.71,

--, Jacobs, 1969, p. 357#

--, Jeffries, 1969, p. 46

--, Jeffries, 1970, pp. 421

--, Pertsova, 1967, p. 240-

--, Stormer, 1929, p. 54, ?

--, Stock & Vos, 1960, p. 205

--, Schwarz, 1960, p. 294

--, Cuzon du Rest & Rene, 1963, p. 140.

--, Sato, 1913, in no. 15

-- Evans, 1972, D.48.

C. hamatus var., Fulton, 1968, p. 40, a syn. of
C. abdominalis

- , Giesbrecht, 1881, p. 258, syns.: Ichthyophorba hamata,
I. angustata
- , Van Engel & Tan, 1965, p. 184-
- , Crisafi, 1974, pp. 146, 149, 153, fig. 6.
- , Bowman, 1971, p. 6 -
- , Bjornberg, 1971, p. 348-9
- , Sherman, 1968, p. 6
- , Maclellan, 1967, p. 102.
- , Lee, 1972, pp. 1 -, figs. 1, 2, & 4, ~~1~~
- , ^{DS}Wilson, 1973, p. 912.
- , Robertson, 1968, p. 190, 193, 197.
- , Hamond, 1973, p. 338.

Centropages hamatus

--Frolander, 1962, pp. 659.

--Zillioux, Gonzales, 1972, p. 218.

--, Bjornberg, 1963: 100 (table)

--, VAUPEL-KLEIN & WEBER, 1975: 301

--, TANAKA, 1963: 11

--, MARSHALL & ORR, 1966: 513-530 (RESPIRATION & FEEDING)

--, CORRAL & ALVAREZ-OSSORIO, 1978: 138

--, HOPKINS, 1977: 471

--, HOPKINS, ~~ET AL.~~ ET AL., 1978: 636

--, MARTENS, 1976: 64; FIG. 5; TAB. 1

- , FLEMINGER, 1975: FIG. 2
- , JEFFRIES + JOHNSON, 1976: TAB. 1
- , GAULD, 1957: 510
- , CARTER, 1965: 353
- , GAUDY, 1971: 68
- , GAUDY + RAYMONT, 1953: 447-460; FIG. 2; TAB. 2, 4-6
- , BREEMEN, 1906: 5, 16-17
- , LACROIX + FILTEAU, 1971: 776, 799-802, 803, 804, 805, 809, 810, 812; FIG. 16, 17, 20; TAB. 11, 12, 17, 18
- , PRYGUNKOVA, 1977: 105, 107
- , TOPITSKY, 1976: 109, 120; TAB. 1, 2
- , DIEBZ, 1950: 395, 401, 408, 411; TAB. 18-20

CENTROPAGES HAMATUS

CARD 6

--, ITOH, 1970: 9; FIG. 4; TAB. 2

--, COZON DU REST, 1963: 139, 140, 145, 152

--, LANCE, 1965: 158; TAB. 2

--, FARMER, 1950: 359

--, MARTENS, 1976: 412-415; TAB. 1

--, RAYMONT & GAULD, 1951: 681, 682, 683, 686,
688, 691-693 & FIG. 2 & TAB. I-III

--, LINDQUIST, 1959: 5, 6, 14, 16; FIG. 4; TAB. 3

--, LINDQUIST, 1961: 8, 12, 13; FIG. 2

-BOUSFIELD 1955: p. 52; TAB IX.

--, COMITA 1956: 589.

- Hensen, 1911: 321-322

- Person-LeRuyet, et al 1975: 283-312

Centropages hamatus

card 7

- , Kraneis & Martens, 1975, p. 188
- , Turner, 1981, p. 369, tbl. 2
- , Grice & Marcus, 1981, passim
- , Turner, 1982, p. 267
- , Hensen, 1911: 292
- , Lacroix, 1966: 52
- , Lacroix, 1963a: 65, 66
- , Pertsova, 1974: 1013 - 1022, fig 1-5,
- FULTON 1984: 403

Centropages hamatus (Lilljeborg)

card 8

-- Turner et al. 1984: 199

-- IKEDA 1977b: 33.

-- PROFANT & MEURICE 1982: 158-163, Pl. I FIGS. 3, 4;
Pl. II, FIG. 6

-- ?, MASSUTI & NAVARRO 1950: 27.

-- CONLEY & TURNER 1985: 113-120.

-- R. S. FULTON 1983: 68, BEAUFORT, N.C.; 78.

-- KOGA 1960b: 877, 879, 881

-- KOGA 1968: 16, 17, 18, Pl. I FIG. 13-EGG

CENTROPAGES HAMATUS (LILLJEBORG)

CARD 9

- KOGA 1970b: ~~7, 10~~ 196, 198, 202, TABLE 2-NAUPLIUS
- KOGA 1973: 53, FIG. 4-13-EGG
- KOGA 1984b: 113, FIGS. 9-5-6, NAUPLII; FIG. 11-13, EGG,
142, 186; FIGS. 59 (19-24), 61 (8)
- MÄRMETS & VELDRE 1956a: 15, 18, 50, PL. III, FIGS 1-5,
ESTONIA
- BRUNEL 1963b: 85, TAB. 1- GULF OF ST. LAWRENCE
- GRICE & HART 1962a: 295, w. NORTH ATLANTIC
- GRICE & HART 1962b: TABLE 3

Centropages hamatus (Lilljeborg)

card 10

-- Jermolajev 1958: 1219-1228, Bay of Fundy

— Deevey, 1952b: 131, 134, 145

— Deevey, 1952a: 80-82

→ Deevey, 1960a: 15, 22-24

→ Deevey, 1960b: 60, 69-72

— Harding, et al, 1986: 960

— Kjørboe, et al, 1985: passim

-- LABBE 1929: 567, CROISIC BAY

-- LAWSON & GRIGG 1970: 188, 189-190, EAST COAST U.S.; 191

CENTROPAGES HAMATUS (LILLJEBORG)

CARD 11

-- HERDMAN ET AL. 1910: 228-297, ISLE OF MAN.

-- HERDMAN & SCOTT 1911: 221, ISLE OF MAN.

-- HERDMAN & SCOTT 1912: 143-145, ISLE OF MAN.

-- HERDMAN ET AL. 1913: 213-214, ISLE OF MAN.

-- HERDMAN ET AL. 1914: 289-290, ISLE OF MAN.

-- HERDMAN ET AL. 1915: 233, ISLE OF MAN.

CENTROPAGES, HERDMAN ET AL. 1920: 82, ISLE OF MAN.

— Uye, 1985: 441, tbl. 1

-- ASSIS ET AL. 1984: 223-, PORTUGAL

Centropages hamatus (Lilljeborg) 1853

card 12

-- Rae & Fraser 1941: 197-, southern North Sea

-- VYSHKUARTZ ~~VA~~ 1972b: 162

-- HUNTLEY, MARIN & ESCRITOR 1987: 937-

-- MAUCKLINE 1988: 711-

-- SAGE & HERMAN 1972: 32-, SANDY HOOK BAY, NJ

-- McADEN ET AL. 1987: 291, TEXAS

-- DAVIS 1982: 727-, NEW FOUNDLAND

-- DAVIS 1986: 30-, "

-- BARETTA & MALSCHART 1988: 69; EMS ESTUARY,
NETHERLANDS / GERMANY

Centropages hamatus (Lilljeborg, 1853)

card 13

-- Mayzaud 1986a: 190-

-- CITARELLA 1986: 278-, MARSEILLES

-- CORKETT 1986: 69

-- PESSOTTI ET AL. 1986: 418

-- DAVIS, CABELL S. 1986: 628, GEORGES BANK

-- MARTENS, P. 1975: 33 - 37, OSTSEE

-- CHOJNACKI 1984: 132 figs 2-5 Baltic table I

-- SOLER, et al. 1988: 130, 142, 143, 145 tab 5

-- SOLDEVILLA, et al 1988: 59 Canary Islands

Centropages hamatus (Lilljeborg, 1853) card 14

- Magnesen 1988: 193- tabs 1-3 W. Norway
- Franz, et al. 1984: 86- figs 1-3, tabs 1,4
Central North Sea
- Grant, 1988: 227-236 figs 2,3 tabs 2-5
Middle Atlantic Bight

-- KAWABATA 1989: 1270

-- RODRÍGUEZ + VIVES 1984: 242-, MALAGA HARBOR

-- FERRARI + HAYEK 1990: TAB. 1

-- CITARELLA 1989: 126-, ST. LAWRENCE GULF, CANADA

-- NORDQVIST 1888: 26-30, PL. I FIGS. 1-8, OFF FINLAND

-- HEAD 1986: 371-

Centropages hamatus (Lilljeborg, 1853)

card 15

-- Head & Harris 1987: 228

-- HEAD ET AL. 1985: 286 -

-- HEAD ET AL. 1986: 282 -

-- BAMSTEDT 1988: 50

-- MARUKAWA 1921: 7-, JAPAN

-- HUNTLEY 1988: 88 -

-- TURNER 1983: 89 -, PECONIC BAY, LONG ISLAND

-- KJØRBOE ET AL. 1988: 219-225, KATTEGAT (BALTIC)

-- SHIH ET AL. 1988: 319-, BRAS D'OR LAKES, NOVA SCOTIA

Centropages hamatus (Lilljeborg 1853)

card 16

- Lindley 1986: 399-400, English Channel, North Sea
- LINDLEY 1990: 209, ENGLISH CHANNEL, NORTH SEA
- HO & PERKINS 1988: 592 -
- DERJUGIN 1928b: 528, KILDIN IS., BARENTS SEA
- LINDQUIST 1959b: 64, GULF OF BOTHNIA
- LINDLEY & HUNT 1989: 407-413, NORTH SEA
- TURNER 1984d: 7 -
- MONTU' 1989: 40, FIG. 3B
- GARDKE 1990: 187, EMS-DOLLART ESTUARY

Centropages hamatus (Lilljeborg, 1853)

card 17

-- Peterson et al. 1990:90-

-- BURRELL + ZWERNER 1972:138, CHESAPEAKE BAY

-- GRANT 1977:4-58-, OFF NEW JERSEY

-- HARDING, G. ET AL. 1980:32-, NOVA SCOTIA

-- SHIH ET AL. 1971:37-38, CANADA-ATLANTIC

-- BRYLINSKI 1984:91-101, DUNKIRK

-- CITARELLA 1984:138, SHÉDIAC BAY, NEW BRUNSWICK,
CANADA

-- LEE, W. Y. + McALICE 1979:565, DAMARISCOTTA R., MAINE

-- Williamson, 1963: Pl. IV. distrib. map

Centropages hamatus (Lilljeborg, 1853)

card 18

-- Gauld 1951: 698-, ne Atlantic

-- HARDING + SMITH 1974: 8-, FIG. 3, BRITAIN

-- FRYD ET AL. 1991: 683-689, KATTEGAT, DENMARK

-- OHMAN 1988b: 535-

-- Wiborg, 1944: 34, 49-50, 78 Pl. 2-3, f. 24-25

-- REID 1990g: 186

-- BOWMAN 1978a: 114-, FIG. 1K

-- BRADY 1872: 427-428, NORTH SEA OFF ENGLAND

-- SAZHINA 1969: 140-

CENTROPAGES HAMATUS (LILLJEBORG, 1853) 19

- LEGARÉ + MACLELLAN 1960: 434, MAINE/NEW BRUNSWICK, USA/CANADA.
- TUPITSKII 1976: 108-120, TABS. 1, 2, BARENTS SEA
- CARMAN + DOBBS 1997: 119, 121, TAB. 1
- NOJI 1991: 6
- ASTTHORSON + GJISLASON 1992: 229, 231, TAB. 1, OFF ICELAND.
- N. ROSE 1927: 156, 161, OFF ALGERIA
- N. ROSE 1934: 77 " "

CENTROPAGES HAMATUS

20

-- ALVAREZ-SILVA 1996: 19, TAB. 2, VERACRUZ, MEXICO

-- ALCARAZ 1997: 182, 183, TAB. 1

Centropages karachiensis n. sp.

--, Haq, S., & F. Rehman, 1973, p. 183, figs 1-19

(may be a synonym of C. alcochi)

Centropagidae—Calanoida.

Centropages krøyeri Giesbrecht, ♂.♀.

[pl. 18, f. 10: pl. 38, f. 6, 8, 11, 14

— — Giesbrecht, 1892, p. 303: pl. 17, f. 24, 25, 40, 47:

— — Moroff, 1909, p. 455: pl. 35, f. 24-39.

— — Steuer, 1910, p. 1029 (25).

— — Thompson & Scott, 1903, p. 247.

— — —, Shmeleva, 1963

Habitat. Adriatic: Indian Ocean.

— — —, Gilat, Kane & Martin, 1965, pp. 13-20

- hamatus Car, 1884, p. 241. 178, 38
- Krøyeri Giesbrecht, 1892, p. 303: pl. 2, 3, 17, 18
- — G. & Schmeil, 1898, p. 56.
- — Pesta, 1921, p. 521: text fig. C 33.
- — Sars, 1925, p. 206.
- — Rose, 1929, p. 31.
- — Sewell 1932, p. 230
- —, Mathias + Euzet, 1951, p. 185. Étang de Thau.
- —, Marcus, 1957, p. 92, fig. 2. Black Sea.
- —, Crisafi, 1960, pp. 483 et seq., figs. 12, 21. Straits of Messina.
- —, Sewell, 1933, p. 26. Kurau River, Malaya.
- —, El-Maghraby, 1965. pp. 42-43, fig. 2A, 3E
- —, Brian, 1937, pp. 1-18

- --, Hure & Scotto di Carlo, 1968, p. 52.
- - , Berdugo & Kimor, 1968, p. 448.
- - , Bernard, 1970, p. 42, 53
- , Sazhina, 1970, p. 155, pl. III
- , Ehrhardt, 1967, p. 740
- , Steuer, 1910, p. 592
- , Bjornberg, 1963: 104 (table 7), *Table 17*
- , *TANAKA, 1963: 7*
- , *GAUDY, 1971: 68*
- , *CHISLENKO, 1977: TAB. 3*
- , *BRIAN 1927: 11; TAB. IV.*
- , *CRISAFI et al. 1973: 105, 106, 110, 111.*
- , *CRISAFI & CRESCENTI 1975: 209, 211.*

Centropages kroyeri Giesbrecht, 1892

card 3

--, Shmeleva & Zaika, 1973, p. 874

--, Cannicci, 1959: passim

--, Croce, et al, 1973: table 13

— Hillbricht-Ilkowska & Patalas, 1967: 148

--, SPECCHI & VALLI, 1979: 134

-- MASSUTI & NAVARRO 1950: 28.

-- KOGA 1984b: 143

— Dakin & Colefax, 1940: 91⁹², fig. III a-f.

-- GRANDORI 1913: 394, 412-425, PLATE IX - DEVELOPMENT; 437, 450.

- Vives, 1978: 266, 278
- ASSIS ET AL. 1984: 223-, PORTUGAL
- REGNER 1987: 373-, ADRIATIC
- CARLI + CRISAFI 1983: 51-52, PL. 6 FIG. 2, ITALY
- KRÖYER, KIORTSIS ET AL. 1969: 37-, AEGEAN
- KRÖYER, CITARELLA 1986: 278-, MARSEILLES
- , MCKINNON + KIMMERER 1988: 175, NOT = C.
PONTICUS.

Centropages kroyeri Giesbrecht, 1892

card 4

- Soler et al. 1988: 129,142,143,145 tab 5
- Soldevilla, et al. 1988: 59 Canary Islands
- FLEMINGER & HULSEMANN 1987: 75 -
- LAKKIS 1984: 289-, E. MEDITERRANEAN
- KRÖYERI, GRANDORI 1914: 164, VENICE LAGOON
- KRÖYERI, DUKA 1969: 209-, BLACK SEA, AS FISH FOOD
- M. ROSE 1927: 145, 156, OFF ALGERIA
- M. ROSE 1934: 65-81, " "

Centropages kroyeri pontica Karaw, 1895

---, Dolzonolskaya, 1970, p. 39, pl. 2, fig. 1

-- PONTICUS, FLEMINGER + HULSEMANN 1987: 75

C. K. VAR. PONTICA, SAZHINA 1969: 111

Centropages lenunculari Oliveira, 1946

-- Oliveira 1945(1946): 191, 194-197, figs. 14-22, n.sp.
female only, Guanabara Bay, Rio de Janeiro, Brazil

C. lenicularis, McKinnon & Kimmerer 1988: 175, synonym
of C. furcatus Dana

Centropagidae - Calanoida

Centropages longicornis Mori, ♀

— — Mori, 193²♂, p. 174: text-fig. 2, a-d. ♀
(in Japanese)

— — MORI, 1937 - P. 62. E. CHINA SEA.

— —, Chiba, Tsuruta, + Maeda, 1955. Bikini.

--, Chiba, 1956, p. 22

Habitat. South coast of Japan.

--, Furuhashi, 1961: 107

--, TANAKA, 1963: ? 10 ♀, FIG. 152

--, ITOH, 1970: TABLE

-Tanaka, 1965a: 25, fig. 7a-b

-DeDecker, 1984: 316

Centropagidae - Calanoida,
Centropages mcmurrichi Willey.

— — Willey, 1919, p.

— — Willey, 1920, p. 10 K.

— — Willey, 1931, pp. 4, 5, 6, 7.

— — Campbell 1929, p. 314

— —, Brodsky, 1950, p. 316, FIG. 219.

Habitat. British Columbian Coast.

Hudson Bay

— — Cameron, 1957, p. 176-7. Queen Charlotte Is.

— —, Johnson, 1961. p. 317

— —, Johnson, 1958. p. 276

--, Fulton, 1968, p. 40, a syn. of C. abdominalis

--, Meshcheryakova, 1964, p. 150

--, JOHNSON, 1956a: 9; FIG. 4, 6; TAB. 5, 6

--, CHENG et al. 1965: 1, 2, 3.

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1000

1000

Centropages memurrici Willey, 1920

(2)

— Willey, 1923: 325, 330

--, Meshcheryakova, 1970, p. 97

--, Kos, 1958, p. 191

C. memurrici, Lubni-Gertsik, 1959, p. 71-

" " , Bjornberg, 1963: 100 (table)

--, Fonseca & Prado, 1979b, p. 12

— Chen, 1980: table 1

--, PETERSON & MILLER, 1977: 722

--, MOTODA & MINODA, 1974: 207, 211, 212, 215, 232

(AS CENTROPAGES ABDOMINALIS SATO)

-- HIRAKAWA 1986: 296, C. ABDOMINALIS asyn. ?

Centropages mcmurrichi Willey, 1920

card 3

-- Mauchline 1988: 711-

-- CHEN, Q.-C. 1986: 526-528.

-- McKinnon & Kimmereer 1988: 175, SYN. OF

C. ABDOMINALIS SATO

-- HERRING 1988: 185-

Centropages natalensis Connell, 1981

—Connell, 1981: 494-497, figs. 18-34, ~~5~~
n. sp.

Centropages notoceras Cleve, ♀, ♂.

— — Cleve, 1903, p. 373: pl. 17, f. 2-10: pl. 18, f. 1.

— — Sewell, 1912, p. 360.

— — MCKINNON & KIMMERER 1988: 175, SYN. OF C.

DORSISPINATUS

Habitat. Indian Ocean.

Centropagidae - Calanoids.

Centropages orsinii Giesbrecht, ♀.

— — Giesbrecht, 1889, c, p. 811.

— — Thompson & Scott, 1903, p. 247.

— — Giesbrecht, 1892, p. 305: ^{pl. 17, f. 35, 36, 41, 42: pl. 1} f. 2, 14, 23: ^{pl. 38, f. 12, 19.}

— — G. & Schmeil, 1898, p. 57.

— — Wolfenden, 1906: 015, pl. 98, fig. 14-5, 8, 11-12

Habitat. Indian Ocean: Red Sea: Malay Archipelago.

— A. Scott, 1902: 404

- — Cleve, 1901, p. 5.
— — Sewell, 1914, p. 221: 1912, p. 362.
— — A. Scott, 1909, p. 115.
— — Pesta, 1911, p. 46: fig. 6. text
— — Sewell 1932, p. 230
— —, MORI, 1937, P. 60, JAPAN pl. 29, figs 1-7
— —, SEWELL, 1947, P. 163, ARABIAN SEA, N.
— —, Saraswathy, 1967, p. 78
— —, Chiba, 1956, p. 41
— —, Cleve, 1901, p. 5

Centropages orsinii

card 2

- Orsinii, Rose, 1955, p. 391
- Pillai, P.P. 1971, p. 164, 168, (Fig. 3a, b)
- , Rose, 1956, p. 460
- , Vervoort, 1964, p. 7-~~10~~⁸, fig. 1, IFALUK ATOLL
- , Frucht1, 1924, p. 44-45
- , Hamner & Carleton, 1979: 1, 6, 8, 9, 11, 12
- , Bjornberg, 1963: 100 (table), table 17
- , HIROTA, 1977: 45; TAB. 1
- , GREENWOOD, 1977: 50, 63; FIG. 5c, d
- , Chiba & Hirakawa 1972: Tab. 2.
- , Ueda, et al., 1983. p. 165

- Chen & Yin, 197- : 274
- Mori, 1942: ~~552~~ 553
- GOSWAMI 1983: 256-257, INDIA
- Dakin & Colefax, 1940: 91, fig. 110a-e
- Dakin & Colefax, 1933: 205
- MADHU PRATAP & HARIDAS, 1986: 108, III- INDIAN OC.
- DeDecker, 1984: 316
- MICHEL ET AL. 1986: 35, ARABIAN GULF
- MICHEL ET AL. 1986: 67, 75- ARABIAN GULF
- Greenwood, 1982b: table 3
- Kimmerer, et al, 1985: table 3
- Tafe & Griffiths, 1983: 112 Australia

Centropages orsinii Giesbrecht, 1892

card 3

- orsini, Mauchline 1988: 711-

-- MCKINNON & KIMMERER 1988: 171, 172-175,
WESTERN AUSTRALIA

-- REVIS 1988: 349, KENYA

-- MICHEL & HERRING 1984: 328-, ARABIAN GULF

-- MADHUPRATAP ET AL. 1991a: 951-, LACCADIVES

-- BINET & DESSIER 1968: 13, OFF MADAGASCAR

-- OKENWA & REVIS 1986: 31, TAB.1, KENYA COAST

Centropages pacificus Chiba 1956

- --, Decker, 1964. p. 20. South Africa
n. sp., Chiba, 1956, p. 47, fig. 37, Japanese
--, DeDecker, 1962, p. 105
-- McKinnon & KIMMERER 1988:175, SYN. OF e.

ELONGATUS

Centropagidae - Calanoida.

Centropages pectinatus, Brady, ♀.

— — Brady, 1899, p. 36: pl. 9, figs. 24-27.

= GLADIOFERENS PECTINATUS, GREENWOOD, 1977: 63

- Thomson, 1946: 38-39

Habitat, New Zealand.

Centropagidae - Calanoida

Centropages ponticus Karawiew, ♂ ①

— krøyeri, v. pontica, Karawiew, 1895, p. 140

— ponticus, Gurney, 1927, p. 150: fig. 19, A-E. ♂.

-- Zillioux & Gonzales, 1972, p. 218.

--, Bjornberg, 1963: 100 (table)

--, JOHNSON, 1980: 567, 582

Habitat, Suez Canal.

--, Kovalev, A.V., 1968, p. 441

--, Svetlichnyi, Zagorodnyaya, & Stepanov, 1977, p. 434

--, Grice & Marcus, 1981, passim

— Monod, 1931: 399

Centropages ponticus Karawiew

card 2

-- Uye & Kasahara 1978: 117

-- KOGA 1984 b: 105

-- STEPANOV & SUETLICHNII 1976a: 42, 44, 46

-- STEPANOV & SUETLICHNII 1976b: 48, 50

-- PETIPA 1975: 36-37, 48, FIG. 6

-- Uye, 1985: 441, Vol. 1

-- CORNER ET AL. 1986: 268-

-- MCKINNON & KIMMERER 1988: 174, NOT = C. FROYERI

-- Soler et al. 1988: 129-145 figs. 1-11 tabs 1-5

Spain = valid species

Centropages ponticus Karawiew

card 3

-- Rodriguez & Vives 1984: 242-, Malaga harbor

-- LAKKIS 1984: 289-, E. MEDITERRANEAN

-- SAZHINA 1969: 111-122, FIGS. 7-11, COPEPODID STAGES,
BLACK SEA; p. 111, mentions C. KRÖYERI VAR. PONTICA

-- KOVALEU 1969: 168-, = C. KRÖYERI VAR. PONTICA;
FIG. 4, BLACK SEA, SEA OF AZOV, ETC.

Centropages sinensis Chen & Zhang 1965

-- Chen & Zhang 1965L 126-127, Pl. 26, figs. 1-7, n. sp.
♀♂, Chekiang, Fukien.

-- CHEN, Q.-C. 1986: 524-

-- MCKINNON & KIMMERER 1988: 172

Centropages spinosus (Kritchagin, 1873)

Ichthyophorba spinosa, Kritchagin 1873:417-419, pl. 11
figs. 7-10, 19; n. sp., Black Sea

I. spinosa, Karavaev 1894:45-47, Pl. IV figs. 5-19;
Black Sea

Centropages spinosus, Dolzonolskaya 1970:40, pl. 2 fig. 2
from Ichthyophorba spinosa.

Centropages tenuicornis Brady, 1914

-- McKinnon & Kimmerer 1988: 176, nomen dubium

Centropagidae - Calanoida. ①
Centropages tenuiremis Thompson & Scott, ♀, ♂.

— — Thompson & Scott, 1903, p. 247: pl. 1, fig. 14-18.

— —, Sewell, 1914, p. 221.

— —, Sewell, 1912, p. 363: pl. 24, figs. 6-7.

— —, Sewell 1932, p. 230, fig. 82, developmental stages

— —, Broosky, 1950, p. 317, fig. 20.

Habitat. Indian Ocean: Gulf of Mannar.

— —, Shen & Bai, 1956, pp. 188-189, pl. 3, fig. 23-24; pl. 4, fig. 25-31. Off Chefoo, China

— — Pillai, P.P. 1971, pp. 164.

— —, Kos, 1977: 37

- --, Saraswathy, 1967, p. 78
- , Shen & Bai, 1956, p. 220-1, pl. III (~~21-22~~) (23-24),
pl. IV (25-31)
- , Shen & Lee, 1963, p. 577
- , Bjornberg, 1963: 100 (table)
- , TANAKA, 1963: 7
- --, CHENG et.al. 1965: 1, 2.
- , Madhupratap et al 1975: passim
- , Madhupratap ~~et al~~ 1979: passim
- , Madhupratap & Haridas, 1975: passim
- , Chen, 1980; table 1
- SHEN & LEE 1966: 214.

Centropages tenuiremis Thompson & Scott, 1903 card 2

-- Goswami 1983: 256-257, India

-- MADHUPRATAP & HARIDAS, 1986: 108, III-INDIAN OCEAN

-- CHEN, Q-C & ZHANG 1986: 274, SOUTH CHINA SEA

-- CHEN, Q-C 1986: 526 -

-- Mc KINNON & KIMMERER 1988: 175, C. ARABICUS

A SYNONYM; ALSO C. YAMADAI.

-- UYE & MURASE 1987: 98, INLAND SEA, JAPAN

Centropages trispinosus Sewell, ♀. ①

— — Sewell, 1914, p. 223: pl. 18, figs. 5-8.

— — Sewell 1932, p. 232

-- Pillai, P.P. 1971, pp. 164, 169 (fig. 3a)

-- --, Saraswathy, 1967, p. 78

-- --, Madhupratap & Haridas, 1975: passim

-- --, TANAKA, 1963: 7

Habitat. Gulf of Mannar

-- --, Madhupratap et al; 1975: passim.

-- GOSWAMI 1983: 256-257, INDIA

GENTROPAGES TRISPINOSUS SEWELL

CARD 2

-- MADHU PRATAP + HARIDAS, 1986: 108, 111 - INDIAN OCEAN

Centropages typicus Krøyer, ♂.♀.

— — Krøyer, 1849, p. 588, 603: pl. 6. figs. 22-26.

— — Claus, 1885, p. 339. [pl. 35, fig. 1, 3-9

Ichthyophorba denticornis Claus, 1862. b, p. 199:

— — var. nicaeensis Claus, 1866, p. 11: pl. 1, fig. 11.

Habitat, German Ocean: Mediterranean

- — Claus, 1881, b, pl. 2, figs. 5-7.
Centropages typicus Cleve, 1900, p. 141: 1904, p. 187.
— — Moebius, 1874, p. 274; 1875, p. : 1887,
— — Moroz, 1909, p. 463: pl. 25, figs. 40-51.
— — Brady, 1878, p. 65: pl. 8, figs. 1-10.
— — G. O. Sars, 1902, p. 75: pls. 49, 50, and 51.
Ichthyophorba denticornis Brady, 1865, p. 40: pl. 4, figs. 1-6.
Centropages typicus Norman & Brady, 1909, p. 112.
— — M. Rathbun, 1905, p. 104.
— — T. Scott, 1906, p. 300: 1912, p. 533.
— — Giesbrecht & Schmeil, 1898, p. 54, fig. 11.
— — Stebbing, 1910, p. 533.
— — Steyerl, 1910, p. 1028 (24).

Q. typicus (2)

- — Thompson & Scott, 1903, p. 246.
- — Boeck, 1865, p. 243.
- — Wheeler, 1901, p. 173 | text-fig. 10, a-e.
- — Sharpe, 1910, p. 406.
- — Fowler, 1912, p. 493.
- — Canu, 1888, p. 96: pl. 8: 1890, p. 474: pl. 23
- — Giesbrecht, 1892, p. 303: pl. 2, f. 4: pl. 17, f. 48-9
pl. 18, f. 4.9.22: pl. 38, f. 9-10
- — Brady & Robertson, 1873, p. 128.
- — Sars, 1877, p. : 1886, p.
- — Trybom, 1881, p.
- — Brady, 1882, p.

- — Car, 1884, p. 241; Sars, 1925, p. 205
— — Malcolmson, 1886, p.
— — Thompson, 1886, p. 205: 1888.a. p. 150: 1888.c. p. 142
— — Giesbrecht, 1889, c, p. 811.
— — Bourne, 1889, p. 148; 1890, p.
— — Giesbrecht, 1892, p. 303: pl. 2, 4, 17, 18, 38.
— — Aurivillius, 1898, p. 34.
— — Giesbrecht & Schmedl, 1898, p. 54.
— — Pesta, 1921, p. 522: text fig. C 34.
— — Cleve, 1902, p. 20, var. *ducklandicus*
— — Krämer, 1895, p. 217: pl. 15. f. 1-5. ^
— — Timm, 1894, p. 370

Centropages C. typicus (3)

- — Cleve, 1900, p. 53.
- — Wilson, 1932, p. 87. fig. 60: 1942, p. 177
- —, Farran 1929 p. 255,
- —, Mathias + Eugyt, 1951, p. 185. Étang de Thau.
- —, Crisafi, 1960, pp. 475-483, figs. 1-11. Straits of Messina
- --, Anraku & Omori, 1963. pp. 118-119, fig. 5-10
- --, Anraku, 1964. pp. 221-231
- --, Jeffries, 1962. p. 731
- --, Tanaka, 1960. pp. 46-47, pl. 20, fig. 1-5 = C.
- -- Cowover, 1968, p. 112

CHIERCHIAE
(TANAKA 1962)

Heberer, 1932: 265, passim, fig. 56-66.

---, Cronin, 1962, p. 83

---, Moraitou-Apostolopoulou, 1969, pp. 1-3, table 1

---, Shmeleva, 1963, p. 141

---, Gilat, Kane & Martin, 1965, pp. 13-20

---, Brian, 1937, pp. 1-18

---, Apstein, 1905, p. ~~XVIII~~, ~~XX~~, ~~XXXII~~, ~~XXXVIII~~, L,
LIV, LVI

---, DeDecker, 1962, p. 104

---, Bernard, et al, 1967, p. 86, 89, 91, 92

---, Bernard, 1970, pp. 21, 22, 42, 48, 52, 53, 71, 72, 140, 159,

---, Van Engel & Tan, 1965, p. 184-

Centropages typicus

card 4

- , Jeffries, 1970, p. 421
- , Pesta, 1928, pp. 23-4, fig. 16, fig. 5, 1, 2
- , Vaissiere, 1961, p. 66-72, figs. 2728, p. 81
- , Seno, Komaki & Takeda, 1963, tab. 2
- , Honesdale = Coull, 1977, pp. 275, 278.
- , Ehrhardt, 1967, p. 740
- , Omori, 1973, p. 4.
- , Cushing, 1951, p. 165
- , Vives, 1972, p. 219.
- , Umringer, 1968, p. 256.
- , Bjornbeg, 1963: 44, 100 (table), table 17
- , BARSZCZ & YEVICH, 1976: 104

- , GALHANO, ET AL., 1978: 15
- , CORRAL Y ALVAREZ-OSSORIO, 1978: 138
- , FLEMINGER, 1975: FIG. 2
- , JEFFRIES Y JOHNSON, 1976: TAB. 1
- , GAULD Y RAYMONT, 1953: 456, 458
- , BREEMEN, 1906: 5, 16, 17
- , LACROIX Y FILTEAU, 1971: 799
- , BRODSKY, 1976: 7
- , KNATZ, 1978: 70; TAB. 1
- , DIGBY, 1950: 393, 395, 400, 408, 411, 415; FIG. 4, 13,
TAB. 1, 4, 12, 18-20
- , ITOH, 1970: FIG. 3

Centropages typicus

45

- , Cushing, 1951, p. 183
- , Bowman, 1971, p. 6 -
- , Sherman, 1968, p. 6-
- , Lee, 1972, pp. 1 -, figs. 1,2,3, & 14, pls. 1, 3, 6.
- Evans, 1972, pp. 48.
- Robertson, 1968, p. 197.
- Hamond, 1973, p. 338.6
- Frolander, 1969, pp. 659.
- Zillioux, Gonzales, 1972, p. 217, 218.
- , Bjornberg, 1963: 104 (table 7), table 10
- , VAUPEL-KLEIN & WEBER, 1975: 301
- , TANAKA, 1964: 9

- , FERRARI, 1978: 517
--, HULSEMAN & FLEMINGER, 1975: 175
--, GAUDY, 1971: 65, 67, 68, 68; FIG. 1; TAB. 1
--, BEAUDOUIN, 1973: 103, 148-154, 166, 167; FIG. 17, 18; T. 1
--, BRADFORD, 1978: 287, 288
--, SCOTTO DI CARLO, ET AL., 1975: TAB. 1
--, RAYMONT & GAULD, 1951: 681, 683, 685-687,
691-693; FIG. 2; TAB. I-III.
--, LINDQUIST, 1959: 5, 14, 16; TAB. 3
--, LINDQUIST, 1961: 12; FIG. 2
--, EVANS, 1961: 195
--, BRIAN 1927: 9, 10, 16; TAB. IV.

Centropages typicus

-- Cannicci, 1959: passim

--, CRISAFI et al. 1973: 112.

--, CRISAFI & CRESCENTI 1975: 211-212, 214; Fig
1.

--, Shmeleva & Kovalev, 1968, p. 63, fig. 9b

--, Turner, 1981, p. 369, tbl. 2

--, Smol & Heip, 1974, p. 162

-- Turner & Dagg, 1983: 8, passim

Centropages typicus KROYER

--, Shmeleva & Zaika, 1973, p. 874

--, Grice & Marcus, 1981, passim

--, Bradford, 1979, passim

--, Blades & Youngbluth, 1979, p. 354

--, Blades, 1977, passim

--, Blades & Youngbluth, 1980, p. 48-50

--, Turner, 1982, p. 269

--, Cowles & Strickler, 1983: 106-115

--, Cross et al 1973: table 13

- Person-LeRuyet, et al, 1975: 283-312
- , NISHIDA, 1984: 39
- , FERRARI, 1980: 548
- , SPECCHI + VALLI, 1979: 134
- MILLER ET AL. 1984: 1278, 1282, 1285
- TURNER ET AL. 1984: 199
- DUGAS & KOSLOW 1984: 131.
- MASSUTI' + NAVARRO 1950: 20.
- NIVAL + NIVAL 1973: 135-144.
- R.S. FULTON 1983: 68 - BEAUFORT, N. C.
- PATRITI ET AL 1984: 138-140, MARSEILLES
- Turner & Dugg 1983: 11, 21, 23, 34-35, 31. fig. 5, 12, 18

Centropages typicus Krøyer

card 8

-- Patrity 1984a: 157-161, gulf of Fos-sur-Mer

-- PATRITY 1984b: 157-166, MARSEILLES

-- WICKSTEAD 1962: 546

-- KOGA 1984b: 104, 105, 113; FIG. 9-7, NAUPLII; 114, 141, 143; 186; FIG. 59 (25-30); FIG. 61 (7)

-- SAGE ET AL 1976: 86, TAB. I POTOMAC RIVER

-- GRICE & HART 1962a: 294, w. NORTH ATLANTIC

-- GRICE & HART 1962b: TABLE 3

-- Deever, 1952a: 77-80

-- Deever, 1952b: 131, 134, 137-139

- Deewey, 1960a: 16, 19-22
- Deewey, 1960b: passim
- Hure, 1955: 31
- Hure, 1961: 23
- SAZHINA 1975: 79-85
- VILELA 1972: 2
- GRANDORI 1913: 368, 425-430, Pl. X FIGS. 163-167; 450
- LAWSON & GRICE 1970: 187-208, FIGS. 1-137,
DEVELOPMENT; BLOCK ISLAND SOUND, MASSACHUSETTS
- Turner, et al, 1985: 1-7 feeding
- Vives, 1978: 266, 276
- ASSIS ET AL. 1984: 223-, PORTUGAL

Centropages typicus Krøyer

card 9

-- Rae & Fraser 1941: 197-, southern North Sea

-- RAZOULS, S. ET AL. 1986: 887

-- REGNER 1987: 373-, ADRIATIC

-- BRUZZONE ET AL. 1979: 79-, GULF OF GENOA

-- BRUZZONE ET AL. 1982: 235, " " "

-- CARLI 1966: 319-338, TUSCAN LITTORAL

-- CARLI 1968: 100-, LIGURIAN SEA

-- CARLI 1971a: 61-, " "

-- CARLI 1971b: 371-2, " "

-- CARLI ET AL. 1973: 340-, SICILY

Centropages typicus Krøyer

card 10

- Carli & Crisafi 1983: 50-51, Pl. 6 fig. 1, Italy
- CARLI & SERTORIO 1964: 207-, LIGURIAN SEA
- CARLI & VALENTE 1981: 731-, " "
- IZAWA 1987: 174- ; FIG. 14C
- IANORA ET AL. 1987: 30
- MAUCHLINE 1988: 711-
- KIORTSIS ET AL. 1969: 37-, AEGEAN
- JAGE & HERMAN 1972: 32-, SANDY HOOK BAY, N.J.
- McADEN ET AL. 1987: 290-291, COLORADO RIVER, TX.

Centropages typicus Krøyer

card 11

-- Bamstedt 1986: 11-

-- LE BORGNE 1986: 111-

-- MAYZAUD 1986a: 187-, FIGS. 4.3C, 4.4

-- CORNER ET AL. 1986: 268-

-- CITARELLA 1986: 278-, MARSEILLES

-- BLADES- ECKELBERGER 1986: 32-, FIG. 10C

-- CONOVER + POULET 1986: 94-

-- MORAITOU - APOSTOLOPOULOU ET AL. 1986: 575-583,
SARONICUS GULF, GREECE

Centropages typicus Krøyer, 1849

card 12

-- Davis, Cabell S. 1986: 628, Georges Bank

-- Franzs et al. 1984: 86- tab 1 Central North Sea

-- Grant, 1988: 227-236 figs 2,3 tabs 2-5
Middle Atlantic Bight

-- CECCHERELLI & FERRARI 1982: 393; LAGOONS, ITALY

-- RODRIGUEZ & VIVES 1984: 242; MALAGA HARBOR

-- FERRARI & HAYEK 1990: TAB. 1

-- ROMAN ET AL. 1988: 25; US - GULF STREAM

-- TANDE & GRØNVIK 1983: 52 -

Centropages typicus Krøyer, 1849

card 13

-- Kjørboe et al. 1988: 222, North Sea

-- IANORA + SCOTTO DI CARLO 1988: 247-, MEDITERRANEAN
FIGS. 3-5

-- McLAREN, TREMBLAY ET AL. 1989: 560, SCOTIAN SHELF

-- LINDLEY 1990: 209-, ENGLISH CHANNEL, NORTH SEA

-- LINDLEY + HUNT 1989: 907-, NORTH SEA, ENGLISH CHANNEL

-- TURNER 1984 d: 7-

-- BURRELL + ZWERNER 1972: 138, CHESAPEAKE BAY

-- COPLEY ET AL. 1989: 11-, NW ATLANTIC

Centropages typicus Krøyer, 1849

card 14

-- Grant 1977:4-8-, off New Jersey

-- HARDING, G., ET AL. 1980: 32-, NOVA SCOTIA

-- SHIH ET AL. 1971: 38-39, CANADA-ATLANTIC

-- TSUDA & NEMOTO 1987: 123-

-- GAUDY 1984: 200-213, NW MEDITERRANEAN

-- LAKKIS 1984: 289-, E. MEDITERRANEAN

-- PETERSON, U. & DAM 1990: 450-, LONG ISLAND SOUND

-- FRYD ET AL. 1991: 683-689, KATTEGAT, DENMARK

-- OHMAN 1984: 129

Centropages typicus Krøyer, 1849

card 15

-- Ohman 1985:28-

-- Wiborg, 1944:55

-- REID 1990g: 186

-- GRANDORI 1904: 164, VENICE LAGOON

-- BOWMAN 1978a: 114-

-- BRADY 1872: 427, ENGLAND

-- CARLTON & GELLER 1993: 80, INTRODUCED - TEXAS

-- SAZHINA 1969: 111-

-- MCKINNON & DIXON 1994: 9-, c.f. C. acutus n. sp.

CENTROPAGES TYPICUS KRØYER, 1849

CARD 16

- LEGARÉ + MACLELLAN 1960: 434, MAINE/NEW BRUNSWICK, USA/CANADA
- BRODSKY 1976: 7
- ACKMAN ET AL. 1974: 1812-1817, LIPIDS, NORTH ATLANTIC.
- CARMAN + DOBBS 1997: 121, TAB. 1
- FLEMINGER + KRAMER 1988: 538
- BARTHEL ET AL. 1995: 26, TAB. 1, NORWAY
- ITO, TAT. 1985: 153, 154, 157, FIG. 16, H

CENTROPAGES TYPICUS KRÖYER, 1849

(17)

-- M. ROSE 1927: 145, 156, 157, 161, OFF ALGERIA

-- M. ROSE 1934: 54-81, OFF ALGERIA

Centropagidae - Calanoida

Centropages typicus Krøyer.

var. aucklandicus, n. Krämer.

— — — Krämer, 1894, p. 217: pl. 15, figs. 1-5
-- --, Hure & Scotto di Carlo, 1968, p. 52.

Habitat. Auckland.

Centropages velificatus (Oliveira)

①

--, Fleminger and Hulseman, 1973, pp. 344-345.

--, MOORE & SANDER, 1979: 201

--, FLEMINGER, 1975: FIG. 2

--, Turner, 1981, p. 369, tbl. 2

- VELICATUS, DIAS & NOGUEIRA 1985: 54.

-- CONLEY & TURNER 1985: 113-114, 118; = C. FURCATUS OF
PAFFENHÖFER & KNOWLES, 1980)

-- YOUNG-BLUTH 1979: 22, 23, CARIBBEAN (= "Atlantic cognate" of C. FURCATUS)

Centropages velificatus OLIVEIRA

card 2

-- Youngbluth 1980: 265-287, Puerto Rico

- Turner & Dagg, 1983: Pl. 2

- Bjornberg, 1981: 644, fig. 215 #5

-- HIRAKAWA 1986: 296

-- MILSTEIN & JUANICO 1985: 159, 162 - MALDONADO
BAY, URUGUAY

-- MILSTEIN 1983: 353, MALDONADO BAY

-- McADEN ET AL. 1987: 291, TEXAS

-- MONTU' 1980b: 57-, BRAZIL

Centropages velificatus Oliveira

card 3

-- Montú & Gloeden 1986: 90-, figs. 28a-e, southern Brazil

-- CAMPANER 1986: 261-, S. BRAZIL SHELF

-- MCKINNON & KIMMERER 1988: 175, NOT = C. FURCATUS

-- Grant, 1988: 227-236 figs 2,3, tabs 2-5
Middle Atlantic Bight

-- CUMMINGS 1982: 33-, GULF OF MEXICO

-- TESTER & TURNER 1988: 211-217, GULF OF MEXICO

-- TURNER 1984d: 7-, C. FURCATUS IN ATLANTIC C.

-- SUAREZ, E. ET AL. 1990: 125-, W. GULF OF MEXICO

Centropages velificatus (Oliveira, 1947)

card 4

-- Reid 1990g:186, DOMINICA, MARTINIQUE, ST. LUCIA,
TRINIDAD / TOBAGO.

- VELIFICATA, BOWMAN 1978a: 114 -

-- SUÁREZ M., E. 1992: 142-, W. GULF OF MEXICO

-- SUAREZ + GASCA 1991: 596-, GULF OF MEXICO

-- ALVAREZ SILVA 1988: 166-, VERACRUZ, MEXICO

-- ALVAREZ SILVA + LUNA FAUSTO 1991: -, VERACRUZ, MEXICO

-- LANSAI TÔHA + LIMA 1993: 91-, TAB.1, S. PAULO, BRAZIL

-- PARANAGUA' 1985: 774, PERNAMBUCO, BRAZIL

Centropages velificatus (Oliveira, 1947)

card 5

-- Alvarez-Silva & Gomez-Aguirre 1994: 268, Tamiahua
Lagoon, Veracruz, Mexico

-- ALVAREZ-CADENA ET AL. 1996: 700-702, TAB. 2,
LAGOON, CARIBBEAN COAST, MEXICO

-- ALVAREZ-SILVA 1996: 19, TAB. 2, VERACRUZ, MEXICO

Centropages violaceus (Claus), ♂, ♀, ^{Calanoida}

Ichthyophorba violacea Claus, 1863, p. 199: ^{pl. 31, §. 13-14} ^

Centropages ^a Claus, 1885, p. 339.

— violaceus Cleve, 1900, p. 142.

not — Brady, 1883, p. 83: pl. 27, §. 1-14.

Habitat. Atlantic: Pacific: Australian
Ocean: Mediterranean-

— Thompson, 1900: 279

-- --, Gilat, Kang & M.

- — T. Scott, 1894, p. 78: 1912, p. 533.
— — Thompson & Scott, 1903, p. 246.
— — Thompson, 1888, a, p. 150: 1888, e, p. 142.
— — Gourret, 1889, p. 474.
— — Giesbrecht, 1889, c, p. 811.
— — Giesbrecht, 1892, p. 304: pl. 2, 4, 17, 18, 38.
— — Giesbrecht & Schmeil, 1898, p. 57.
— — Pesta, 1921, p. 523: text fig. C 32.
— — Wolfenden, 1911, p. 356.
— — Farran, 1929, p. 255; Sars, 1925, p. 206.
— — Rose, 1929, p. 32.
— — Cleve, 1900, p. 59.
— — Wilson, p. 177, 1942

Centropages violaceus-2

- _____ Sewell 1932, p. 232
- _____ Matoda and Anraku 1955 p 212, Idzu Is.
- —, Mori, 1937, P. 63, JAPAN AREA.
- —, Chiba, 1956, p. 56-57, fig. 51A-D.
- —, Chiba, Tsuruta, Maeda, 1955. Fig. 8. Bikini.
- _____, Crisafi, 1960. Copepodid stages, Str. of Messina
pp. 503-512, figs. 1-11.
- —, Cervigon, 1962. p. 184
- —, Tanaka, 1960. p. 47
- —, Owre, 1962

- -- Park, 1968, pp. 527-572.
- --, Moraitou-Apostolopoulou, 1969, pp, 1-3, table 1
- --, Shmeleva, 1963, p. 141
- , Bjornberg, 1963: 104 (3 tables)
- , GAUDY, 1971: 68
- , DEEVEY, 1971: TAB. 3 ; P. 230
- , BINET & DESSIER, 1971 : 433, 454
- , OWRE & FOYO, 1972 : 493 ; TAB. 3
- , OWRE & FOYO, 1964 b : 366
- , Cannicci, 1959: passim
- Croce et al 1973: table 13

Centropages violaceus -3

- --, Gilat, Kane & Martin, 1965, pp. 13-20
- --, Chiba, 1956, p. 34, fig. 25, p. 56, fig. 51
- , Corral, 1970, pp. 183
- , Berdugo & Kimor, 1968, p. 447
- , Bernard, 1970, p. 48, 72, 75, 77, 171
- , Bowman, 1971, p. 6 -
- , Bjornberg, 1971, p. 349
- , Roe, 1972a, pp. 304-
- , Vives, 1972, p. 219.
- , Furuhashi, 1961: 107
- , BRIAN 1927: 11, TAB IV

--, Bjornberg, 1963: 44 ^{9 45 104 tables 8+10, 114, 122,}
^{124) Table 17, 125}

--, VERVOORT, 1965: 91-92 SYNONYM: ICHTHYOPHORBA

VIOLACEA

--, TANAKA, 1963: 7

--, WHEELER, 1970: 4

--, CALEF & GRICE (UNPUBL.) IN KETCHUM & RYHER, 1966
(UNPUBL.): APPENDIX

--, EVANS, 1961: 195; TAB. III

Centropages violaceus

card 4

- , Shmeleva & Kovalev, 1968, p. 64, fig. 10a
- , Shmeleva & Zaika, 1973, p. 874
- Marikova & Campos, 1967: 67
- YOUNGBLUTH 1979: 22, CARIBBEAN
- GRICE & HART 1976: TABLE 3, W. NORTH ATLANTIC
- Kolesnikov & Alfonso, 1966: table 3
- Soldevilla, et al. 1988: 59 Canary Islands

Centropages violaceus (Claus)

card 5

-- Massuti & Navarro 1950: 20.

-- SANDER + MOORE 1978: 232.

— Dakin & Colefax, 1933: 206

— Bjornberg, 1981: 644, fig. 215 #4

— DeDecker, 1984: 316

— Hure, 1955: 31

— Hure, 1961: 23

-- SAZHINA 1975: 80, 84

— Moryakova & Campos, 1966: 131, passim (Cuba)

~~Whitney, 1923: 12-~~

Wickstead, 1956: 12-13

Vives, 1978: 266, 276

- CARLI 1968: 100-, LIGURIAN SEA

- CARLI 1971a: 61-, " "

- CARLI 1971b: 371-2, " "

- CARLI ET AL. 1973: 340-, SICILY

- KIORTSIS ET AL. 1969: 37-, AEGEAN

- MCKINNON & KIMMERER 1988: 171

Centropages violaceus (Claus)

card 6

-- Grant, 1988: 227-236 . figs 2,3 . tabs 2-5
Middle Atlantic Bight

-- FERRARI & HAYEK 1990: TAB. 1

-- SUAREZ, E. & GASCA 1989a: 198-, YUCATAN CHANNEL

-- SUAREZ, E. & GASCA 1990: 62, QUINTANA ROO, MEXICO

-- COPLEY ET AL. 1989: 11-, NW ATLANTIC

-- GRANT 1977: 4-8-, OFF NEW JERSEY

-- LAKKIS 1984: 289-, E. MEDITERRANEAN

-- SUÁREZ, E. ET AL. 1990: 125-, W. GULF OF MEXICO

-- REID 1990g: 187

-- SUÁREZ M., E. 1992: 142-, W. GULF OF MEXICO

Centropages violaceus (Claus)

card 7

-- Suarez & Gasca 1991: 596-, Gulf of Mexico

-- M. ROSE 1927: 145, 156, 161, OFF ALGERIA

-- M. ROSE 1934: 58-81, " "

-- ALCARAZ 1997: 178, FIG. 2

Centropagidae - Calanoida

Centropages violaceus Brady. ♂♀.

— — 1883, p. 83: pl. 27, figs. 1-14.

Changed to Centropages bradyi by
Wheeler, 1901, p. 174.

Centropagidae - Calanoida

Centropages yamadai Mori, ♂♀.

— — Mori, 1934, p. 81.

— — Mori, 1937, p. 59. Pl. 28, Figs. 7-12.

— —, FURUHASHI, 1957, p. 18, MAIZURU BAY, JAPAN.

--, Chiba, 1956, p. 41

--, Furuhashi, 1961: 107

Habitat. Korea Strait, Bay of Fusan.

--, TANAKA, 1963: 7, 11-12 ♀♂ FIG. 153

--, HIROTA & UNO, 1977: 77, 78, 79, 81, 83, 84; FIGS. 3 (EGG), 6

--, HIROTA, 1979a: 14; FIG. 3

--, ITOH, 1970: TAB. 1

--, BRADFORD, 1978b: 288.

Centropages yamadai Mori

card 2

--, Kasahara, S., S. Uye, & T. Onbé, 1974, p. 170,
figs. 1&2

--, Kasahara, S., S. Uye, & T. Onbé, 1975, p. 27-28

--, Ueda, 1978, p. 56, tbl. 1

--, Grice & Marcus, 1981, passim

-- UYE 1984b:165

-- KOGA 1968: 17, 18, Pl. I FIG. 14 - EGG

-- KOGA 1970b: 195-202, FIGS. 1, 2, DEVELOPMENTAL STAGES

-- KOGA 1973: 33, FIG. 4-14, EGG

Centropages yamadai Mori

card 3

-- Koga 1984b: 104, 119, FIG. 11-14, FIG. 127, 142, FIG. 27,
TABLE 2-(10); 186

— Tana Ka, 1965a: 25, fig. 5a-c.

-- MICHEL ET AL. 1986: 35, ARABIAN GULF

-- MICHEL ET AL. 1986: 67, 75 - ARABIAN GULF

— Uye, 1985: 441, Pl. 1

— Uye, 1986e: 35-42, fig. 1-4 graphs.

-- Mc KINNON & KIMMERER 1988: 175, SYN. OF C.

TENUIREMIS

Centropages yamadai Mori

card 4

-- Uye et al. 1987: 428-, Inland Sea, Japan

-- MICHEL & HERRING 1984: 328-, ARABIAN SEA

Centropages sp.

①

--, Meshcheryakova, 1964, p. 151

--, Kos, 1958, p. 191

--, Bjornberg, 1963: 104 (table 7)

--, VAUPEL-KLEIN & WEBER, 1975: 306

--, FIGUEIRA 1971: 146.

--, Chiba & Hirakawa 1972: Tab. 2.

--, CRISAFI & CRESCENTI 1975: Fig. 8,

--, CHATTON 1911: 1.

--, Hempel, et al., 1983, p. 18

-- Croce et al 1973: table 14

CENTROPAGES sp.

CARD 2

- MINODA + HOSHIAI, 1982: 33-37, SOUTH GEORGIA
- Kimmerec, et al, 1985 table 4, Australia
- JUV., TOKIOKA 1951: 21, EIGU BAY, JAPAN
- CARLI 1971a: 61-, LIGURIAN SEA
- CARLI + VALENTE 1981: 731-, " "
- GÓMEZ AGUIRRE + LEÓN ALVAREZ 1987: 54-,
CHAMELA BAY, MEXICO
- SPP., UROSA 1983: 129-, VENEZUELA
- JAZDZEWSKI ET AL. 1982: 241, DRAKE PASSAGE

Centropages sp.

card 3

-- Jimenez-Perez & Lara-Lara 1988:126, Gulf of California

-- SHIH ET AL. 1971: 39, CANADA-ATLANTIC; 146,
PACIFIC

Centropages n. sp. ? Dussart 1984

-- Dussart 1984b: 301, 302 - see Parathalassius fagei

Centropages spp.

-- R.S. Fulton 1982: 79-84.

-- TRANTER 1977: 598.

-- R.S. FULTON 1983: 67-81, BEAUFORT, N.C. (= C.

HAMATUS + C. TYPICUS)

-- CARRADA ET AL. 1987: 152-, LAGOONS, ITALY