

FAM. CALANIDAE DANA, 1849

Calanoida

COSMOCALANUS BRADFORD + JILLET, 1974

- NISHIDA, 1984: 39
- MAUGHLINE 1988: 719
- BRADFORD 1988: 73-, SPECIES COMPOSITION

COSMO -

Calanidae - Calanoida.

Calanus caroli Giesbrecht, ♀. 1

— — Giesbrecht, 1888, p. 331.

— — Giesbrecht, 1892, p. 91: pl. 6, 7, 8.

— — Giesbrecht & Schmeil, 1898, p. 17.

— —, Wolfenden, 1906: 994, pl. 97, fig. 41.

Habitat. Tropical Oceans.

Cosmocalanus caroli (GIESBRECHT)

-- Bradford & Gillett, 1974, pp. 6, 13.

— Fleminger, 1985: 275-291, fig. 6B

-- ARCO S + FLEMINGER 1986: 171-184,

TREATED WITH C. DARWINI AS

COSMOCALANUS spp.; E. PACIFIC

C. -, BRADFORD 1988: 74-

ANDINUKA DARWINII CAROLI, BRODSKY 1972: 103

Calanidae - Calanoida
Undinula caroli (Giesbrecht), ♂

Calanus c — Giesbrecht, 1888, p. 331.

— — Giesbrecht, 1893, p. 91: pl. 8, fig. 36.

— — Giesbrecht & Schmeil, 1898, p. 17.

— — Wolfenden, 1895, a, p. 994: pl. 97, fig. 41.

Undinula c — A. Scott, 1909, p. 18.

Habitat. Pacific and Indian Oceans.

— — Sewell, 1912, p. 356. Var. plumulosus

— — Wilson 1942, p. 210

— — Sewell 1929, p. 46

C. -, BOWMAN 1978a: 113-

Cosmo -

Calanidae - Calanoida.

Calanus darwinii (Lubbock), ♀. 1

Undina — Lubbock, 1860, p. 7: pl. 29.

Calanus — Giesbrecht, 1892, p. 91: pl. 6, §. 5; pl. 7,

— — Giesbrecht & Schmeil, 1898, p. 17. §. 29: pl. 8, §. 11, 37

— — Cleve, 1904, p. 185; 1901, p. 5.

— — A. Scott, 1902: 400-401

Habitat: South Africa; Indian Ocean:
Australia; New Guinea; Philippines:
Tropical Oceans; Malay Archipelago.

— Thompson, 1900: 275

— — Stebbing, 1910, p. 520.

— — Thompson & Scott, 1903, p. 241.

— — Giesbrecht, 1895, p. 248 (name only).

— — Giesbrecht, 1888, p. 331.

Undina darwini Brady, 1883, p. 54: pl. 16.

Calanus appressus Dana, 1849, p. 17. (?)

— darwini, Farran, 1929, p. 217.

--- MOTODA AND ANRAKU? 1955, P 212 IDZU IS.

-- -- , Anraku, 1954, pp. 1-8.. N W Pacific..

-- -- , MORI - 1937 - P. 18 - JAPAN.

-- -- , Honjo et al, 1957. pp. 120-128

-- -- ,

C65710 -

Calanus darwinii

card 2

-- --, Chiba, 1956, fig. 32

--, Cleve, 1901, p. 5

--, Sato, 1913, no. 6, pl. 3

--, (= UNDINULA DARWINI), TANAKA, 1956: 264, 265

= COSMOCALANUS DARWINI, GREENWOOD, 1976: 8

--, Wolfenden, 1906: 994, pl. 97, fig. 40.

- Mori, 1942: 549 -

- Dakin & Colefax, 1933: 203

Cosmocalanus darwini (Lubbock) 3

-- Bradford, Jillett, 1974, pp. 6, 13

--, GREENWOOD, 1976: 1, 8; FIG. 3d; TAB. 1; SYN: UNDINA D.;
CALANUS D.; UNDINOLA D.

- Fleminger, 1985: 275-291, Fig. 6B

-- ARCOS + FLEMINGER 1986: 171-184,
TREATED WITH C. CAROLI AS
COSMOCALANUS spp.; E. PACIFIC

-- MADHUPRATAP, HARIDAS, 1986: 107, 108, 110 - DISTRIBUTION
INDIAN OCEAN

- Greenwood, 1982b: table 3

Cosmocalanus darwini (Lubbock, 1860)

card 4

Undina -, Sato 1913: no. 6

Undina -, Greenwood 1976: 8, = Cosmocalanus darwini.

C. -, Mauchline 1988: 719, fig. 12d, pore signature

C. -, STEPHEN 1984: 165-, ARABIAN SEA

UNDINULA -, LE BORGNE 1986: 143-

UNDINULA -, CORNER ET AL. 1986: 269-

U. DARWINII, DESSIER & DONGUY 1987: 14, 356-,

EASTERN TROPICAL PACIFIC

U. -, SHIH ET AL. 1971: 203, CANADA - ARCTIC

COSMOCALANUS Calanidae - Calanoida.
Undinula darwinii (Tubbock) ♀. ⑤

Undina Tubbock, 1860, p. ¹⁷⁹7: pl. 29,
— — Brady, 1883, p. 54: pl. 16, f. 1-4, 6-14,
Undinula darwinii A. Scott, 1909, p. 17.

A synonym of Calanus darwinii.
(Giesbrecht, 1892, p. 91).

Undinula — Sewell, 1914, p. 197: 1912, p. 356.
— — T. Scott, 1912, p. 529.
— — Wilson, 1942, p. 210, fig. 119

- ____ Sewell 1929, p. 42, forma typica, p. 43, fig. 11
var. *symmetrica*, p. 45, var. *intermedia*, p. 45,
fig. 12.
- —, *Carvalho*, 1952, *Bay of Santos, Brazil*.
- --, *Vervoot*, 1946, pp. 78-82, *Snellius Expedition*.
- —, *SEWELL*, 1947, *R.P. 18*
- Calanus —, *Chiba, Tsuruta, + Maeda*, 1955. *Bikini*.
- --, *Furuhashi*, 1961. p. 4
- --, *Decker*, 1964, p. 25. *South Africa*
- --, *Grice*, 1962. pp. 178-180, pl. 2, fig. 1-9
- --, *Heinrich*, 1961. p. 83 (*vertical distribution*)
- --, *Brodsky*, 1962. pp. 102-104, fig. 6
- —, *Tanaka*, 1960. p. 20
- -- *Park*, 1968, pp. 527-572.
- — *SARASWATHY*, 1967. *Pp. 75*

COSMOCALANUS

Undinula darwinii



--, Heinrich, 1960, p. 3

--, DeDecker, 1962, p. 113

--, Heinrich, 1960, p. 3, 5, 6, 10, 12

--, Chen et al 1977: *passim*

--, Rose, 1955, p. 390

--, Rose, 1956, p. 459 U. Darwini

--, Gurjanova, 1972, p. 67

--, Brodsky, 1972, p. 245

--, Brodsky, 1967, p. 191-

--, Shushkina & Vilenkin, 1971, p. 186-

--, Ostapenya & Shushkina, 1971, p. 193

--, Seno, 1962, p. 13

--, Krylov, 1967?, p. 248

--, Hue, 1967, p. ~~16~~, 18

--, Furuhashi, 1961: 100, 105

--, Bjornberg, 1963: 104 (table 7), 124

--, ITOH, 1970 : TAB. 1

- Motoda & Marumo, 1963 : *passim*.

Undinula darwini

-- Bradford: Jillett, 1974, pp. 6, 11, 13

--, TANAKA, 1956a: 264, 265 SYN: CALANUS DARWINI

= COSMOCALANUS DARWINI, (GREENWOOD, 1976: 8)

--, JOHNSON, 1954: 309

--, CHENG et al. 1965: 2.

--, Chiba + Hirakawa 1972: 74, 76, 78; Tab. 2; Fig. 2.

--, CARVALHO 1952: 139.

--, Madhupratap et al. 1981: 266-267

- Chen, et al 1982: 260, passim

- Chen & Yin, 197_ : 274

- Chen, Zhang, Chen, 19_ _ : 63

- Chen, 19__-: 203

- Chen, Chen, Zhang, 19__-: 76

- Chen, Zhang, Chen, 19__-: 81

- DARWINII, CHEN + ZHANG 1965: 129, Pl. 4, FIGS.
6-11, ♀. EAST CHINA SEA.

- Dakin & Colefax, 1940: 89, fig. 104 a-f

- Bjornberg, 1981: 618, fig. 205 #11

-- AMBLER + MILLER 1987: 561-576, N. PACIFIC

- Sarkar, et al, 1986: 178 India

COSMOCALANUS

Undinula darwinii

(Lubbock, 1860)

8

U. -, SUÁREZ, F. ET AL. 1990: 126 -, W. GULF OF MEXICO

U. -- Tranter 1977: 593-625.

- Tanaka, 1965a: 13, fig. 2a-c

- Binet & Dessier, 1968: 9

~~Deevey~~

- DeDecker, 1984: 315

C. -, BRADFORD 1988: 74 -

U. -, JIMENEZ-PÉREZ & LARA-LARA 1988: 126 -,

GULF OF CALIFORNIA

COSMOCALANUS DARWINII (LUBBOCK, 1860)

9

UNDINULA -, BRODSKY 1972: 8-107, FIGS.

U. -, C. B. WILSON 1936: 371, CANADIAN ARCTIC

COSMOCALANUS DARWINII INTERMEDIA (SEWELL)

UNDINULA D. I., BRODSKY 1972:103

COSMOCALANUS

Undinula darwini var. typica (SEWELL)

--- Goswami 1983: 252, India

U. DARWINII TYPICA, BRODSKY 1972:103