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Alphabetical revision of the (sub)species in recent Conidae 9. ebraeus to extraordinarius with the description of Conus elegans ramalhoi, nov. subspecies

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INTRODUCTION

In this ninth part of the revision all names of recent *Conus* taxa beginning with the letter *e* are discussed. Amongst these are several nominal species of tent-cones with a pattern consisting of very close-set lines, giving the shell a darker appearance (e.g. *C. elisae, C. euetrios, C. eumitus*). The phenomenon was also mentioned for *C. castaneofasciatus, C. cholmondeleyi* and *C. dactylosus* in former issues. This occurs in populations where specimens with a normal tent-pattern are also found, so that we consider them as colour formae.

The opposite effect is known too, shells in which areas of white are present, leaving 'islands' with the tent-pattern (e.g. *C. bitleri, C. castrensis, C. concatenatus* and *C. episcopatus*). These are also colour formae.

Because of a change in the rules of the ICZN (3rd edition, 1985: art. 73-74), there has risen a disagreement about the concept of the "type series". In cases where a museum type-lot consists of more than one specimen, although the original author(s) did not indicate that more than one shell was used for the description, we will designate the single originally mentioned and/or figured specimen as the "lectotype". Nevertheless a number of taxonomists will consider that "lectotype" as the holotype, and disregard the remaining shells in the lot as type material. We will refer to these cases in our discussions of the species.

Assistance from colleagues as regards the loan of specimens, photographs, literature, advice or otherwise, is acknowledged with the species concerned. Most of the photographs were made by Mr. Th.J. Hovius; the maps were drawn by Mr. J. Zaagman.

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MUSEUM ABBREVIATIONS

AIM	Auckland Institute and Museum, New Zealand.
AMNH	American Museum of Natural History, New York, U.S.A.
AMS	Australian Museum, Sydney.
ANSP	Academy of Natural Sciences, Philadelphia, U.S.A.
BMNH	British Museum of Natural History, London.

CAS	California Academy of Sciences, San Francisco, U.S.A.
DMNH	Delaware Museum of Natural History, Wilmington, U.S.A.
HUJ	Zoological Museum, Hebrew University, Jerusalem, Israel.
IMT	Institute of Malacology, Tokyo, Japan.
IRScNB	Institut Royal des Sciences Naturelles de Belgique, Brussels, Belgium.
LACM	Los Angeles County Museum of Natural History, U.S.A.
MCZ	Museum of Comparative Zoology, Harvard University, Cambridge, U.S.A.
MHNG	Muséum d'Histoire Naturelle, Geneva, Switzerland.
MNHN	Muséum National d'Histoire Naturelle, Paris, France.
NM	Natal Museum, Pietermaritzburg, South Africa.
NMNZ	National Museum of New Zealand, Wellington.
NMW	Naturhistorisches Museum, Wien, Austria.
NMWC	National Museum of Wales, Cardiff.
NSMT	National Science Museum, Tokyo, Japan.
RMNH	Rijksmuseum van Natuurlijke Historie, Leiden, Netherlands.
SAM	South Australian Museum, Adelaide.
SAMC	South African Museum, Cape Town.
SMF	Naturmuseum und Forschungsinstitut Senckenberg, Frankfurt, West Germany.
USNM	National Museum of Natural History, Washington D.C., U.S.A.
WAM	Western Australian Museum, Perth.
ZMA	Institute of Taxonomic Zoology (Zoological Museum), University of Amsterdam, Netherlands.
ZMB	Zoologisches Museum, Humboldt University, Berlin, East Germany.
ZMUC	Zoologisk Museum, University of Copenhagen, Denmark.

GENUS *CONUS* LINNÉ, 1758

Valid names of species, subspecies, and formae are printed in heavy type in the alphabetical list. A junior synonym, homonym, nomen dubium or nomen nudum is printed in normal type. A name misspelt in the literature is generally mentioned under its correct name.

ebraeus

figs. 667, 681-683

Conus ebraeus Linné, 1758, Syst. Nat. 10 ed.1: 715 no. 268

Type material. — In the Linnaean collection in London four specimens are present of which one was designated lectotype and figured by Kohn (1963: 748, fig. 10); the dimensions are 28 × 19 mm (fig. 681).

Type locality. — "India".

Remarks. — *Conus ebraeus* is a valid and well-known species; the background colour of the shell may be white or rose. The pattern of Hebrew letters, after which the species is named, has sometimes changed into bands (figs. 682-683). *C. ebraeus* is closely related to, and largely sympatric with *C. chaldaeus* (Röding, 1798; vide Basteria 47: 111, figs. 307, 402-404); the latter was distinguished as a variety of *C. ebraeus* by Lin-

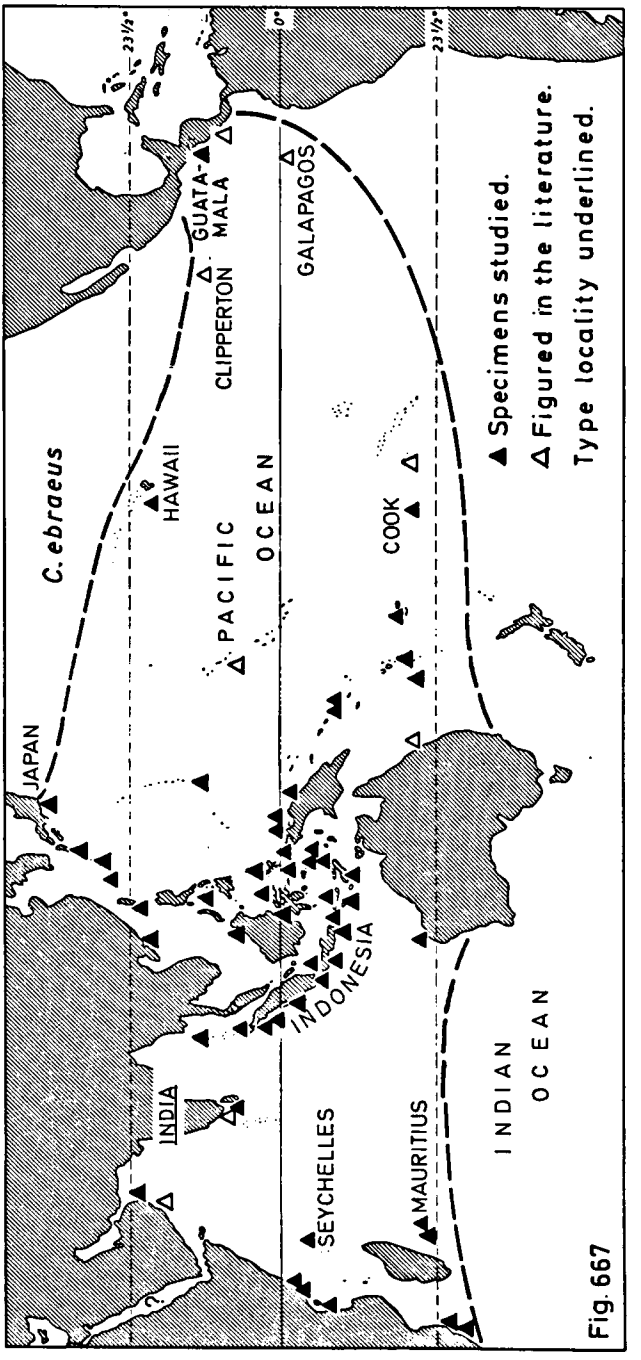

Fig. 667. Distribution of *Conus ebraeus*.

naeus. The name has often been emended to "hebraeus", which procedure is not correct.

Distribution. — The entire tropical Indo-Pacific (fig. 667), but not reported from the Persian Gulf. Sharabati (1984: pl. 28 fig. 2) mentioned it from the Red Sea, but without exact locality data. On the coast of India (the type locality) only known from the southernmost part. The species has enlarged its range in recent times as far as the coast of Central America (Emerson, 1968: 33).

Material studied. — ZMA has specimens from East Africa (Kenya, Tanzania, Mozambique, Natal), Mauritius and Reunion, the Seychelles, Oman (Muscat), Ceylon and the Andaman Is.; from many localities in Indonesia, including sta. nos. 34, 50, 81, 129, 131, 277, 313 of Siboga Exped. (Sumatra, Java, Lesser Sunda Is., Borneo, Celebes, Moluccas, New Guinea), the Philippines (Cebu, Mindanao), Hongkong, Japan (Riukiu Is. to Yokohama), W. Australia (Exmouth), and from islands in the Pacific (Solomon Is.: Florida, New Hebrides: Efate, N. Caledonia, Guam, Cook Is.: Raratonga, Fiji, Hawaii). In AMHN from Guatamala. In coll. Wils from Zanzibar, Taiwan and Malaita.

Dr. A.J. Kohn has kindly supplied the photograph of the lectotype.

eburneus

figs. 62, 350, 551, 668, 685-686

Conus eburneus Hwass in Bruguière, 1792, Encycl. Meth. 1: 640-641, no. 39

Type material. — The Hwass collection contained two shells (var. A and B); both are considered lost. Kohn (1968: 455, pl. 4 fig. 40) has designated the specimen figured in the Tableau Encyclopédique (pl. 324 fig. 1) lectotype of *Conus eburneus*. The type figure is reproduced here (fig. 685); dimensions 46 × 30 mm.

Type locality. — "aux mers des Indes orientales" (in the east Indian seas).

Remarks. — *C. eburneus* is a common and valid species, which shows variation in shape (height of the spire) and colour pattern (e.g. with or without spiral yellow bands), and in the number of rows of blotches (fig. 686). *C. alternatus* Link, 1807 (vide Basteria 44: 22, fig. 62) is a junior synonym of *C. eburneus*.

In the colour form *crassus* (vide Basteria 48: 272, fig. 551) the dots are reddish brown instead of blackish. The specimen of fa. *crassus* depicted in fig. 350, and mentioned a "paralectotype" of *C. caracteristicus* Fischer, does not belong to the type material of the latter, since it was considered a variety by Fischer (cf. ICZN art. 72 b).

The forma *polyglotta* Weinkauff, 1874, has a number of comma-shaped dots.

Distribution. — The eastern part of the Indian Ocean, from Ceylon (Sri Lanka) and the Maldives to N.W. Australia; in the Pacific Ocean from S. Japan to Queensland, and the island groups of the western and central Pacific as far as French Polynesia, except the Hawaiian chain (fig. 668).

Material studied. — ZMA has specimens from Ceylon; many from Indonesia: Sumatra (Atjeh, Batu Is.), Java (Djakarta Bay), Flores (Larantuka), Moluccas (Amboyna), New Guinea (Biak, Manokwari, Waren, Djajapura); Japan (Tosa Bay, Okinawa); Philippines (Batangas, Negros, Cebu, Sulu Arch.); Thailand (Pattaya); Singapore; N. Borneo (Mandi Darra Id.); Caroline Is. (Palau); Bismarck Arch.

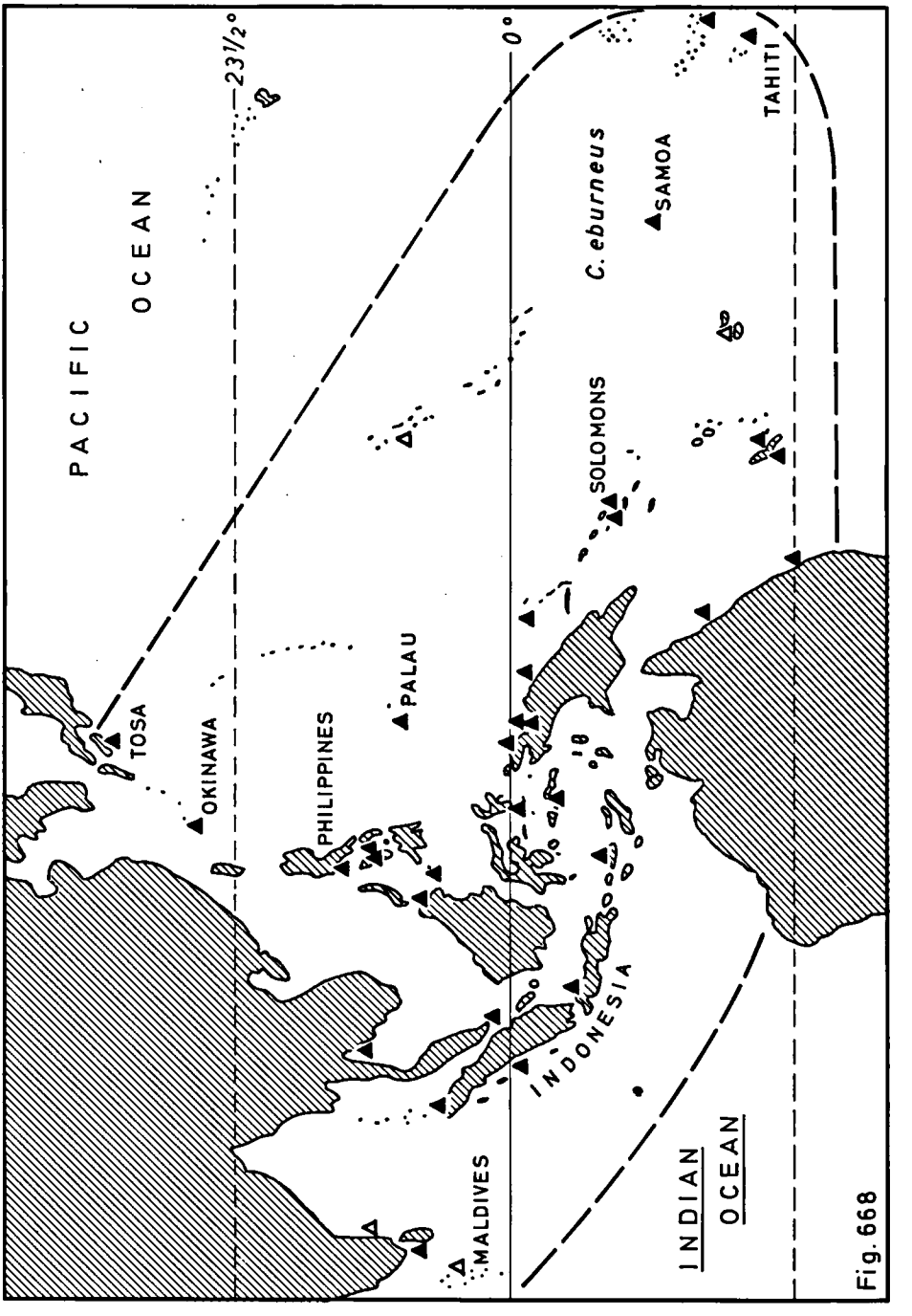

Fig. 668. Distribution of *Conus eburneus*.

(Manus); Solomon Is. (Malaita, Florida); Queensland (Michaelmus Cay, Innisfail, Dingo Bay, Heron Id.); New Caledonia (Noumea, Thio); and Samoa (Pagopago). In coll. Wils from Tahiti and Tuamotu Arch. (Aratika).

eburneus
fig. 684

Cucullus eburneus Röding, 1798, Mus. Bolten.2: 45 no. 565/74 (non *Conus eburneus* Hwass, 1792)

Type material. — The Bolten collection contained two specimens, which are considered lost. From the original references Kohn (1975: 204) has designated the shell figured in Martini (vol. 2, 1773: pl. 52 fig. 573) as lectotype of *Conus eburneus* (Röding); this specimen was one of the shells from the Bolten collection. The type figure is reproduced here (fig. 684), the dimensions are 58 × 23 mm.

Type locality. — Not given by Röding or Martini.

Remarks. — Röding only gave the vernacular name "Die elfenbeinetne Tute" (the ivory cone), but he did not supply a description. The lectotype was also designated lectotype of *C. ochroleucus* Gmelin, 1791, thus *C. eburneus* (Röding) is a junior objective synonym. In addition it is a junior secondary homonym of *C. eburneus* Hwass, 1792.

echinophilus
figs. 688-690

Africonus echinophilus Petuch, 1975, Veliger 18: 180-181, figs. 1-3, 7

Type material. — According to Petuch the holotype (11 × 7 mm) is in CAS. However, Drs. B. Roth and R. Van Syoc informed us (in litt. 1979 and 1986) that one of the paratypes (fig. 689) was deposited (CAS no. 61495, measurements 10.7 × 6.0 mm) instead of the holotype. A request to Dr. Petuch concerning the whereabouts of the holotype (fig. 688) remained unanswered. The original publication mentioned "twenty-five specimens collected". Although not designated by the author, the 24 remaining specimens must be considered paratypes, of which another is present in ANSP (no. 349100), the measurements are 10.7 × 5.6 mm (fig. 690).

Type locality. — "N'Gor, Cape Verde, Senegal, West Africa (14°43'N; 17°33'W)".

Remarks. — *Conus echinophilus* (Petuch) was placed by the author into his earlier described genus *Africonus* (Petuch, 1975a). He considered it distinct from *A. anthonyi* Petuch, which has a zigzag colour pattern on the body whorl. Walls (1979: 66) related *C. echinophilus* to *C. aemulus* Reeve from Angola (vide Basteria 43: 84); both shells have a similar pattern.

We have compared *C. echinophilus* to specimens (25-42 mm) of *C. adansonii* Lamarck (fig. 691) from Senegal. Except for the size we have not found distinctive characters, thus *C. echinophilus* may represent the juvenile stage of *C. adansonii* (vide Basteria 43: 21, figs. 6, 25).

Material studied. — Two paratypes; we are grateful to Drs. G. Davis and R. Van Syoc for the loan of these shells. Other specimens of *C. echinophilus* are present in ZMA (from Dakar), RMNH, and coll. D. Röckel.

C. anthonyi (fig. 93), from the Cape Verde Islands, must be assigned to the species complex of *C. cuneolus* Reeve (vide Basteria 48: 283; Röckel et al., 1980: 30, pl. 5).

echinulatus
fig. 687

Conus echinulatus Kiener, 1845, Coq. vivant. 2: pl. 105 fig. 2; 1849: 270

Type material. — Kiener did not state in which collection the specimen of *Conus echinulatus* was present, thus the whereabouts of the shell are unknown. It is not in MNHN at Paris. The type figure is reproduced here (fig. 687), dimensions 15 × 10 mm (Kiener: length 18 mm).

Type locality. — Not given.

Remarks. — This taxon represents a small white biconic shell, the body whorl covered with rows of granulations. The lower half of the body whorl has spiral grooves. Generally *C. echinulatus* is placed in the synonymy of *C. jaspideus* forma *verrucosus* Hwass. Although the latter is usually grooved all over, and mottled, ZMA has specimens which are pure white, or partly grooved. The present authors consider *C. echinulatus* a junior synonym of the above taxon.

edaphus
fig. 692

Conus edaphus Dall, 1910, Proc. U.S. natl. Mus. 38, no. 1741: 223-224

Type material. — The holotype is present in USNM (no. 130385); the measurements are 24.6 × 14.2 mm (fig. 692). The type specimen was not figured by Dall, a colour picture is given by Hanna (1963; pl. 9 fig. 5).

Type locality. — "Off Clarion Island in 31 fathoms", Revilla Gigedo Is., W. Mexico.

Remarks. — Dall stated that the pattern of the shell recalls *Conus taeniatus* and *C. tessellatus* (sic). At present *C. edaphus* is considered a subadult specimen of *C. tessulatus* Born, 1778, and thus a junior synonym. The latter is a common Indo-Pacific species, which has migrated to the offshore islands of the West coast of Central America in the 20th century.

The first author is grateful to his colleagues of the National Museum of Natural History for their hospitality, and to Ms. Diane Bohmhauer for the loan of the type specimen.

(edentulus)
fig. 693

Conus edentulus Reeve, 1844, Conch. Icon. 2, Mitra pl. 11 fig. 80

Type material. — The specimen was in the Cuming collection (ex Swainson), but it is not present in BMNH. The type figure is reproduced here (fig. 693); dimensions 33 × 12 mm.

Type locality. — Not given.

Remarks. — This species was provisionally mentioned and figured by Reeve in his "Monograph of the genus Mitra" (Conchologia Iconica vol. 2). The specimen was amongst the Mitridae of Mr. Swainson, with the "manuscript name *Conohelix edentula*". Since the shell has no plaits on the columella, Reeve placed it in the Conidae,

being allied to *Conus mitratus*. He intended to describe it on plate 48 of his *Conus* monograph, but this plate was never published. Likewise *C. edentulus* was neither figured on plates 1-9 of the Supplement (1848-1849) nor mentioned in the Emendations (1849).

The species is now placed in the Mitridae, as *Mitra* (*Diabaphus*) *edentula* Swainson, 1823 (cf. Cernohorsky, 1970: 38, pl. 3 fig. 9; 1976: 469-470).

edwardi
fig. 694

Conus edwardi Preston, 1908, Rec. Ind. Mus. 2: 190, pl. 15 fig. 28

Type material. — According to Preston the holotype was acquired by the Indian Museum in Calcutta, ex coll. J. Warneford. A request to borrow the specimen from the Zoological Survey of India remained unanswered. The type figure is reproduced here (fig. 694); the dimensions are 58 × 28 mm.

Type locality. — "Andaman Islands."

Remarks. — *Conus edwardi* was compared by Preston to *C. zonatus* Hwass, 1792, from which it was said to be different in a narrower and less pyriform shape, higher spire and reddish brown colour. These characters fall within the range of variation of *C. zonatus*, thus *C. edwardi* is considered a junior synonym.

egregius
figs. 695-696

Conus egregius Sowerby III, 1914, Ann. Mag. nat. Hist. (8) 14: 475-476, pl. 19 fig. 9

Type material. — The holotype (figs. 695-696) is in BMNH (no. 1919.12.31.12); the measurements are 3.5 × 1.8 mm (Sowerby: 4 × 1¼ mm).

Type locality. — "New Caledonia".

Remarks. — Sowerby suggested that the type specimen of *Conus egregius* could be the juvenile shell of a larger species; for this reason later authors considered it as unrecognizable. Moolenbeek (1986) disclosed that it represents a juvenile of *C. quercinus* Solander (in Lightfoot), 1786. Thus *C. egregius* is a junior synonym of *C. quercinus*, the latter is a common species in New Caledonia (Estival, 1981: 90).

We are grateful to Ms. K.M. Way and Ms. A. Thomson for providing us with a photograph of the type specimen; a drawing of the shell was made by J. Zaagman.

elatensis
fig. 698

Conus nigropunctatus elatensis Wils et al., 1971, Fam. Conidae: 61

Type material. — The specimens on which this taxon is based are deposited in ZMA (ex coll. Wils). A lectotype is herewith designated (fig. 698); the measurements are 28.1 × 15.2 mm (ZMA no. 3.71.001). Two paralectotypes are 38.7 × 20.6 and 25.9 × 15.4 mm (ZMA no. 3.71.002).

Type locality. — "Noordelijk deel Golf van Akaba" (northern part of the Gulf of Aqaba). The label of the lectotype and one paralectotype also indicates "Sinai, Wadi Magresh"; the smallest paralectotype is from Elat, Coral Beach.

Remarks. — At the time when the subspecies *elatensis* was described, the nominate species *Conus "nigropunctatus"* was considered a taxon from the Western Pacific (cf. Wils et al., 1969-1974: 59 no. 90, pl. 10 fig. 6). However, recent research has disclosed that the populations from that area belong to *C. striolatus* forma *decurtatus* Dautzenberg (vide Basteria 49: 158-160, fig. 623), whereas *C. nigropunctatus* Sowerby, 1857, is confined to the Red Sea and the coast of Oman (fig. 586).

Comparing the type material of *elatensis* with the type figure of *C. nigropunctatus* leads to the conclusion that they are conspecific, thus *C. elatensis* is a junior synonym.

eldredi
figs. 669, 700-701

Conus eldredi Morrison, 1955, J. Wash. Acad. Sci. 45: 32

Type material. — *Conus eldredi* is a new name for *C. geographus rosea* "Broderip" Sowerby, 1833 (non *C. roseus* Fischer, 1807, and Lamarck, 1810), of which the type figure is reproduced here (fig. 700). Thus the type specimen of *rosea* Sowerby becomes the holotype of *C. eldredi*. The specimen is present in BMNH (ex coll. Cuming); the measurements are 53.5 × 23.1 mm. This shell is also the type of *C. intermedius* Reeve, 1843 (non *C. intermedius* Lamarck, 1810, a fossil), and of *C. mappa* Crosse, 1858, nomen novum (non *C. mappa* Lightfoot, 1786).

Type locality. — "Annaa" island, Tuamotu Archipelago.

Remarks. — This taxon was originally described as a variety ("varietas nana, rosea") of *C. geographus* by Broderip (1833: 55), and in the same year named and figured by Sowerby as the var. *rosea*. Reeve considered it a valid species, as do Morrison (1955), and Marsh (1964: 101). Other authors have placed *C. eldredi* in the synonymy of *C. geographus* Linné, 1758, or mention it as a rosy colour form. The latter opinion is based on juvenile specimens of *C. geographus*, in which the ground colour is sometimes rose instead of white.

According to very recent authors (Roeckel, 1984: no. 477; Richard, 1985: 20) *C. eldredi* is considered a valid species, characterized by its smaller size (to 70 mm), rose basic colour, higher spire (apical angle about 90°), and small whitish knobs on the shoulder. *C. geographus* becomes larger (to 150 mm), generally the shell has a low spire (apical angle to 140°), and larger knobs on the shoulder. Basing ourselves on the material studied (fig. 701), we consider *C. eldredi* a valid species.

Distribution. — The species seems to be rare, it occurs on the island groups in the Central Pacific (fig. 669): from Guam to the Tuamotu Archipelago, and perhaps Fiji (Lewis, 1980: 7) (*C. geographus* has a wide range in the Indo-Pacific).

Material studied. — The holotype of *C. rosea* Sowerby. ZMA has specimens from Annaa Island. In DMNH from the Marianes (Guam), Wake Id. and the Line Is. (Jervis, Fanning). In USNM from the Marshall Is. (Ujelang), Gilbert Is. (Apamana), Baker and Howland Id., Line Is. (Washington), Swains Ud., Danger Is. (Pukapuka), Palmerston, Cook Is. (Mangaia), Society Is. (Moorea), and Tuamotu Archipelago (Vahitahi, Raroja).

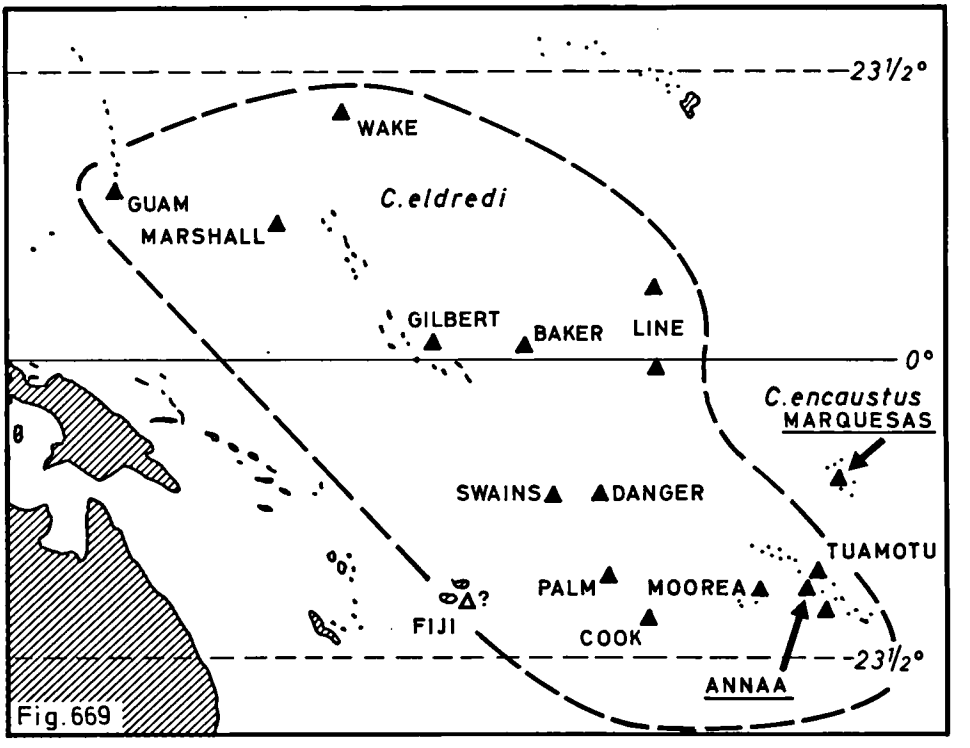

Fig. 669. Distribution of *Conus eldredi*, and *C. miliaris encaustus*.

elegans
figs. 670, 703-704

Conus elegans Sowerby III, 1895, Proc. malac. Soc. Lond. 1: 215, pl. 13 fig. 8

Type material. — The holotype (fig. 703) is present in BMNH (no. 1922.2.24.34); the measurements are 31.9 × 11.0 mm (Sowerby: 32 × 10 mm).

Type locality. — "Persian Gulf".

Remarks. — According to Sowerby *Conus elegans* is related to *C. aculeiformis* Reeve (vide Basteria 43: 15-16, figs. 14-15; 49: 162-164, figs. 588, 625) and to *C. insculptus* Kiener.

Walls (1979: 423) considered *C. aculeiformis* forma *torensis* Sturany, 1904, a junior synonym of *C. elegans*. This seems unlikely, because the spire whorls in *C. torensis* are smooth, whereas those of *C. elegans* are coronated, except for the penultimate and last whorl.

In *C. elegans* the anterior two thirds of the body whorl are grooved. The species was compared to *C. milesi* Smith by Moolenbeek & Coomans (1986, in press). *C. elegans* is considered a valid species.

Distribution. — The Persian Gulf, and the Gulf of Oman to the Makran coast of Pakistan (fig. 670), in offshore waters.

Material studied. — The holotype; we are grateful to Ms. K.M. Way for a photograph of this shell. ZMA has specimens (Fig. 704) from Oman (Sib; leg. Dr. D. Bosch); in ZMUC from the Persian Gulf (near Kharg Id. in 49 m, and Suzeh in 9-11 m); IRScNB has specimens from Pakistan (Karachi).

Walls (1979: 280, 429) and Röckel (1984; no. 446) illustrated specimens of "*C. elegans*" from Mozambique, which is outside the known range of the species. Walls calls it the narrow variety of the eastern Indian Ocean. We have studied material from Mozambique, and concluded that it represents a distinct taxon, which is described here as a new subspecies.

Conus elegans ramalhoi subspec. nov.
figs. 670, 705

Type material. — Holotype in NM (no. T 4283), length 31.7 mm, width 10.5 mm (fig. 705). Paratypes: one in ZMA (no. 3.86.011), 30.1 × 11.0 mm; four in NM (no. T 4283), with measurements 31.2 × 10.8 mm, 25.9 × 8.9 mm, 24.6 × 8.0 mm and 21.3 × 7.1 mm; these five paratypes are from the type locality. — Four paratypes are present in private collections: one from Angoche, 21.2 × 7.1 mm (R.M. Filmer, England); one from Massinga, 24.0 × 8.0 mm (Dr. P. Gillis, Belgium); one from Mozambique, 23.2 × 12.3 mm (H.M. van Rossum, Netherlands) and one from N. Mozambique, 21.3 × 7.9 mm (coll. E. Wils).

Type locality. — Northern Mozambique, Angoche, on muddy sand (leg. K. Grosch, 3.X.1982).

Description. — Shell thin and fragile, elongate biconical; spire high and slightly concave, apical angle about 60°; shoulder edge carinated, the anterior part of the body whorl narrowed; outer lip very thin and leaving a deep anal notch; aperture straight and narrow. The protoconch has 1½ whorls; there are eight postnuclear whorls, of which the first has about six spiral grooves, and small nodules in the middle; on the second postnuclear whorl these nodules become more prominent and are situated near the suture; the third postnuclear whorl has three grooves and pointed nodules on which some grooves are visible. The coronation is most prominent on the next three whorls, then it starts to disappear so that the shoulder of the body whorl is smooth, only two vague grooves are present just above the shoulder. The body whorl bears on the anterior half about 15 spiral grooves.

Colour. The protoconch is colourless; the spire has irregular light brown blotches which become darker towards the body whorl; just below the sutures of the penultimate and the body whorl a row of dark brown spots is present. The body whorl is violet grey with 15 or 16 spiral rows of small reddish brown spots, and a few irregular larger blotches which more or less form a band in the middle. Interior of the aperture brown.

The periostracum is light brown and semi-translucent. The radula has not been studied.

Diagnosis. — *C. elegans ramalhoi* is distinct from the nominate subspecies by its violet tinge instead of white to yellowish; only the anterior half of the body whorl has spiral grooves instead of two thirds; and the row of brown spots below the suture is lacking in *C. elegans* s.s.

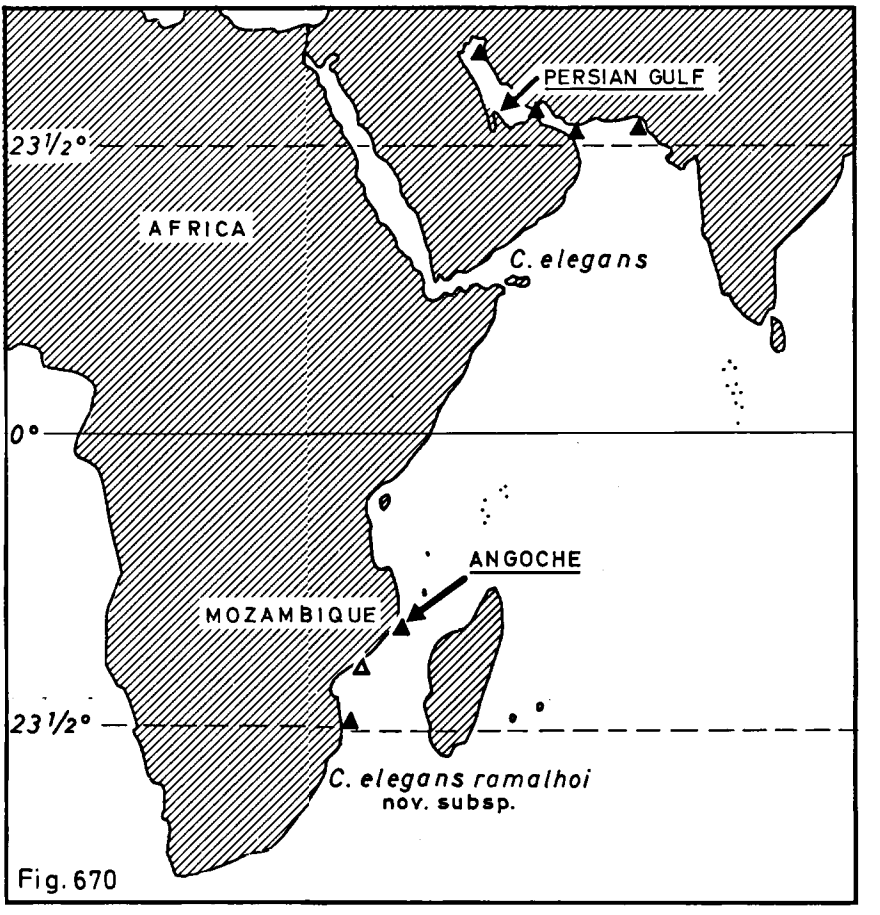

Fig. 670. Distribution of *Conus elegans* s.s. and *C. e. ramalhoi* n.ssp.

Distribution. — The subspecies *ramalhoi* is only known from the coast of Mozambique in shallow water (fig. 670).

Etymology. — *C. elegans ramalhoi* is named after the Portuguese engineer A.D. da Silva Ramalho, who has studied the Conidae of Mozambique and Angola.

elegans
fig. 697

Conus (*Asperi*) *elegans* Schepman, 1913, Siboga Exp. 49'e, Prosobranchia 5, Toxoglossa: 393, pl. 25 fig. 4 (non *C. elegans* Sowerby, 1895)

Type material. — Two syntypes are present in ZMA. The shell figured by Schepman is herewith designated lectotype of *Conus elegans* (fig. 697); the measurements are

21.0 × 7.8 mm (ZMA no. 313010). The paralectotype measures 16.1 × 6.6 mm (ZMA no. 313011).

Type locality. — Siboga Expedition "Stat. 153. 0° 3.8'N., 130° 24.3'E. Bougainville-strait. 141 M. Fine and coarse sand".

Remarks. — Being a junior homonym of *C. elegans* Sowerby, 1895, the species was renamed *C. schepmani* by Fulton (1936: 7). The lectotype designated above subsequently becomes the type specimen of *C. schepmani*. It is a valid species, which will be discussed under the latter name in this series.

elevata
fig. 699

Conus thalassiarchus var. *elevata* Wils et al., 1972, Familie Conidae: 73, pl. 13 fig. 3

Material. — The variety *elevata* was based on a number of specimens, of which the originally figured shell is deposited in ZMA (no. 3.72.002), ex coll. Wils. The measurements are 60.4 × 33.0 mm (fig. 699).

Locality. — "Zuidelijk Cebu en N.W.-Negros op de Filippijnen".

Remarks. — Being described after 1961 as a variety of *Conus thalassiarchus*, the name *elevata* is of infrasubspecific rank without nomenclatorial status. The shells are characterized by an elevated spire (apical angle 90°) and wider shape (length/width ratio about 1.8); in typical *C. thalassiarchus* these figures are: apical angle > 110°, and l/w ratio 1.9-2.1. At present *elevata* is considered a forma.

As for the colour in *C. thalassiarchus* fa. *elevata*, it belongs to the orange populations, which are found in the southern Philippines (vide Basteria 49: 164, under *C. depriesteri*).

elisae
figs. 708-710

Conus elisae Kiener, 1845, pl. 64 figs. 1, 1a; 1849-1850: 341-342

Type material. — Kiener described and figured one adult specimen, in addition he figured a subadult shell. From these two syntypes, we herewith designate the adult as lectotype of *Conus elisae*. The specimens were at the time in the collection of A. Boivin; their present whereabouts are unknown. The type figures are reproduced here, the dimensions of the lectotype are 53 × 27 mm (fig. 708), the subadult paralectotype measures 42 × 20 mm (fig. 709).

Type locality. — Unknown. We herewith designate Zanzibar as type locality for *C. elisae*.

Remarks. — In the literature *C. elisae* is mentioned from East Africa and from Hawaii (Kohn & Weaver, 1962: 62-64, pl. 16; Marsh, 1964: 104-105, pl. 13 fig. 17; Wagner & Abbott, 1978: pl. 4 figs. 7-8). Therefore Tucker (1980: 9, no. 19) proposed to use *elisae* Kiener as a form name in two distinct taxa; however, this is not to be preferred for taxonomical reasons.

Since the experiments of Perron (1979, 1980) the "Hawaiian elisae" is considered a colour form of *C. pennaceus* Born, 1778 (Kay, 1979: 378, fig. 123B). They are similar to *C. stellatus* Kiener. We have studied material from Oahu, used in the investigations by Perron, and concluded that these Hawaiian specimens (fig. 711) are different from the type figure of *C. elisae* (fig. 708) in size, shape and apical angle.

We here restrict the name *C. elisae* to the East African shells, representing the dark colour form of *C. praelatus* Hwass. In the literature specimens are reported from Kenya, Tanzania, and Mozambique. The Wils collection contains a specimen from Zanzibar (fig. 710).

Wagner & Abbott (1978: pl. 4 fig. 8) illustrated a specimen (in coll. Da Motta) from "Madagascar"; the same shell is figured again by Da Motta (1982: fig. 58b) from "off the coast of Kenya".

Conus "elizae" in Sowerby is a typographical error or invalid emendation. The authors are grateful to Dr. F.E. Perron for his material from Oahu.

elokismenos
figs. 671, 706

Conus orbignyi elokismenos Kilburn, 1975, Nautilus 89: 50

Type material. — *Conus orbignyi elokismenos* is a new name for *C. o. aratus* Kilburn, 1973 (non *C. aratus* Gabb, 1873, a fossil), thus the type material of *elokismenos* is identical to that of *aratus* Kilburn (vide Basteria 45: 8).

Type locality. — "off Tongaat in 150 fathoms", Natal, South Africa (holotype and 60 paratypes). Other paratypes were collected off Umhlanga Rocks in 164-169 fms. ZMA has received two paratypes from the type locality, of which one is figured here (fig. 706).

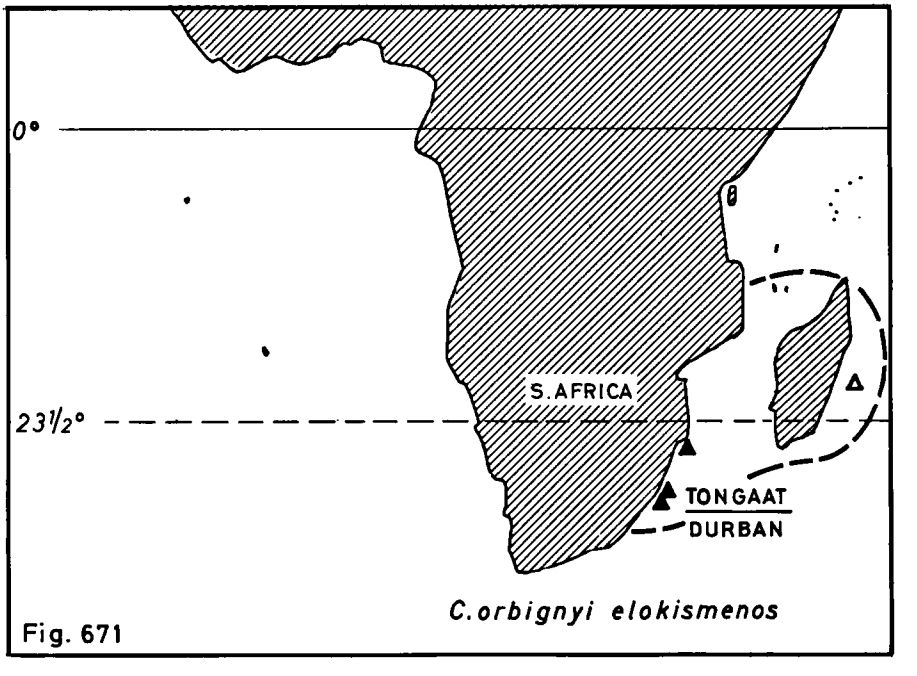

Fig. 671. Distribution of *Conus orbignyi elokismenos*.

Remarks. — *C. orbignyi* Audouin, 1831, is a Western Pacific species, therefore Kilburn described the populations from off South Africa as a distinct subspecies. It is different in the sculpture of the body whorl: the spiral grooves are narrow and leave wide intervals; in the nominate subspecies of *orbignyi* the grooves and ridges are about equally wide.

Distribution. — Offshore Natal and Mozambique, Madagascar and the Mascarenes (fig. 671).

Material studied. — ZMA has two paratypes, and specimens from off Durban in 150-155 fms. Off Reunion in 140 m (coll. J.C. Martin). In coll. Wils from off South Mozambique.

The authors are grateful to Dr. R.N. Kilburn and Mr. M. Meyer for specimens donated to ZMA.

elongata

Bucquoy et al. (1882) and Dautzenberg (1937) named two varieties "*elongata*" within two distinct *Conus* species. They are emended to *elongatus* and discussed below as subspecific names.

elongatus
fig. 707

Conus elongatus Holten, 1802, Enum. Syst. Conchyl.: 39, no. 488

Type material. — Holten mentioned three specimens in the Chemnitz collection, and he referred to the shell figured by Chemnitz (vol. 10, 1788: pl. 144A figs. i-k). Kohn (1981: 286) designated the latter as "representative of the holotype"; however, there were three syntypes known to Holten, thus the shell figured by Chemnitz is herewith designated lectotype of *Conus elongatus* Holten. The specimen was at the time in the Chemnitz collection, parts of which are available in ZMUC, but this shell is not amongst them. The type figure is reproduced here (fig. 707); the dimensions are 64 × 33 mm (Chemnitz: 2′4‴ × 1′ = 57 × 26 mm).

Type locality. — Not given by Holten; Chemnitz (1788: 92) mentioned "der Guineischen Küste" (the coast of Guinea).

Remarks. — The lectotype of *C. elongatus* Holten is also the lectotype of *C. ammiralis guineensis* Gmelin, 1791 (designated by Walls, 1979: 546), thus these two names are objective synonyms, of which *C. guineensis* has priority. After Walls's designation, *C. guineensis* became the first available name for *C. mozambicus* Hwass, 1792, *C. elongatus* Holten, and *C. caffer* Krauss, 1828 (vide Basteria 47: 71, fig. 317).

Kohn (1966: 79) had considered *C. guineensis* a nomen dubium, and recommended suppression of the name to the ICZN (Kohn, 1966a: 320). Since the Commission had not come to a decision about *guineensis* after many years, Kohn (1981: 286) declared it a valid name, because of Walls' (1979) action.

Kilburn & Rippey (1982: 215) objected to the revival of *C. guineensis*, as being based on a crude type figure and incorrect type locality, to replace the long established name and recognizable species *C. mozambicus* Hwass, 1792 (not "1789" as mentioned by Kilburn & Rippey). We will discuss this matter later under *C. guineensis*.

C. elongatus in Dillwyn (1817: 430 no. 151) is a junior homonym and synonym, thus the selection of a lectotype figure by Walls (1979: 546), being the same figure in Chemnitz as mentioned above, was a superfluous action.

elongatus
fig. 702

Conus elongatus Reeve, 1843, Proc. zool. Soc. Lond. 11: 170; Conch. Icon. 1, Conus: pl. 27 spec. 157
(non *C. elongatus* Holten, 1802)

Type material. — The holotype was in the Stainforth collection, of which some types are now in BMNH or NMWC, but this specimen is not available. Thus the present whereabouts are unknown, the type figure is reproduced here (fig. 702); dimensions 26 × 13 mm.

Type locality. — Unknown.

Remarks. — After Reeve discovered that his *Conus elongatus* is a junior homonym, he renamed it *C. oblitus* Reeve (1849, Emendations: 1). However, the latter name was used before by Michellotti in 1847 for a fossil species. Crosse (1858: 122) renamed *C. elongatus* Reeve as *C. moreleti*, which is now considered the valid name for the species. It will be discussed later in this series.

elongatus
fig. 712

Conus mediterraneus var. *elongata* Bucquoy, Dautzenberg & Dollfus, 1882, Moll. mar. Roussillon 1(2): 82, pl. 13 figs. 14, "16" (error for 15)
(non *C. elongatus* Holten, 1802)

Type material — The authors mentioned one specimen of 23 × 10 mm, and figured two shells of 19 × 8 and 22 × 9 mm; these three are considered syntypes. The collection Dautzenberg in IRScNB contains one lot of this variety with five specimens, amongst them is the first mentioned shell. It is herewith designated lectotype of *Conus mediterraneus elongatus* B.D.D.; the exact measurements are 23.2 × 10.1 mm (fig. 712).

The two paralectotypes are not available, the specimen of 22 × 9 mm is also the holotype of the colour form *caerulescens* B.D.D. (vide Basteria 47: 70, where the measurements are erroneously indicated as 23 × 10 mm).

Type locality. — Although the publication describes the molluscs of Roussillon in S. France, the locality mentioned for *elongatus* is "de la faune des éponges, côtes de Barbarie" (from sponges, coasts of Barbary, i.e. western mediterranean North Africa), collected by Guilliou. These data are also written on the label with the specimens.

Remarks. — Bucquoy et al. (1882: 79-84) mentioned 18 varieties of *C. mediterraneus* Hwass, 1792, known to them from descriptions by other authors. In addition they described six new colour-varieties and four new shape-varieties. The var. *elongata* is combined with the colour varieties *fusca* and *caerulescens*, and with var. "*atra* Phil." (error for *ater*).

Variety names published before 1961 must be interpreted as denoting subspecific rank (ICZN art. 45 g, ii). Subsequently *C. mediterraneus elongatus* becomes a junior homonym of *C. elongatus* Holten. The shell of *elongatus* B.D.D. is characterized by a

more elongated body whorl than in typical *C. mediterraneus*. We consider these elongated specimens as a forma.

Röckel (1983: no. 406) has considered *elongata* B.D.D. tentatively a deepwater subspecies (-100 m) of *C. ventricosus* Gmelin (= *C. mediterraneus*), but it is doubtful whether his figured specimens are identical to the lectotype of *elongatus*.

elongatus
figs. 713-714

Conus episcopus var. *elongata* Adam & Leloup, in Dautzenberg, 1937, Mém. Mus. roy. Hist. nat. Belg. hors serie 2: 100, pl. 3 fig. 7
(non *C. elongatus* Holten, 1802)

Material. — The authors figured two specimens; these illustrations are reproduced here (figs. 713-714). The dimensions are 44 × 18 and 42 × 17 mm.

Locality. — "Amboine" (Amboyna).

Remarks. — Dautzenberg's work (1937) was published posthumously; at the time of publication he had not yet described the variety *elongatus*. The work was edited by W. Adam, E. Leloup and L. de Priester, of which the first two editors added in a note (translated here): "The two specimens from Amboyna figured on plate 3 figure 7 have on the label the name var. *elongata* nov. var.".

Thus we must conclude that *Conus episcopus elongatus* is a nomen nudum, only consisting of two figures and a locality. The specimens may be identified as juveniles of *C. magnificus* Reeve.

It is also a junior homonym of *C. elongatus* Holten. For that reason a new name was proposed by Fenaux (1942: 2, fig. 1): *C. episcopus* var. *oblongus* "Dautzenberg" (error for Fenaux). However, a substitute name for a nomen nudum remains a nomen nudum. Since Fenaux gave a very concise description, and included a photograph of a shell from Mauritius, we may consider *C. episcopus oblongus* Fenaux as a newly described subspecies (non *C. mediterraneus oblongus* Bucquoy et al., 1882). It will be discussed later under *C. oblongus* Fenaux.

Da Motta (1982a: 21 no. 47) replaced the name "*elongata* Dautzenberg" by *C. episcopatus pupillaris*; see under *episcopatus* in this issue.

elpus

Conus mediterraneus franciscanus fa. *elpus* De Gregorio, 1885a, Bull. Soc. malac. Ital. 11: 107

Type material. — De Gregorio mentioned a specimen in his collection, dimensions 32 × 21 mm, which must be considered the holotype. The collection is kept in the Museo di Paleontologia of the University of Palermo (vide Basteria 44: 94, under *C. amigus*).

Type locality. — "Mediterraneo alla Barra; Vivente pure nella zona della spugne di Barberia, raro" (Mediterranean Sea near Barra; living in particular in the Barberian sponge zone, rare).

Remarks. — The forma *elpus* is one of many fossil and recent varieties and formae described by De Gregorio within *Conus mediterraneus* Hwass. It was described as an interesting form, extremely short and wide. The type specimen may only represent an

abnormally wide specimen; thus *elpus* is considered one of the many junior synonyms of *C. mediterraneus*, which species is known for its variability.

The name "*alpus*" in Carus (1889: 430) is presumably a typographical error.

elventinus
fig. 746

Conus elventinus Duclos, 1833, Mag. Zool. 3: pl. 19

Type material. — The author described and figured one specimen from his collection, and he mentioned another shell in that of the Duke de Rivoli. From these syntypes we herewith designate the figured specimen as lectotype of *Conus elventinus*; the present whereabouts are unknown. The type figure is reproduced here (fig. 746); dimensions 32 × 17½ mm (Duclos: 4 × 2 cm).

Duclos also described a rare granulated variety from the Michelin collection; being a variety it does not belong to the type material.

Type locality. — "inconnue" (unknown).

Remarks. — Reeve (1843: pl. 20 spec. 115a, b) already united this species with *C. mindanus* Hwass, 1792; but he reserved the name *elventinus* for the granulated form, which is not correct.

From the type figure and description we agree with the generally accepted opinion that *C. elventinus* is a junior synonym of *C. mindanus*.

See also under *C. agassizii* (figs. 39-40, 47), *C. bermudensis* (fig. 222) and *C. cretaceus* (fig. 555), discussed before in this series.

emaciatus
figs. 672, 717

Conus emaciatus Reeve, 1849, Conch. Icon. I, Conus suppl.: pl. 5 spec. 248

Type material. — Reeve described and figured one shell from the Cuming collection, and he mentioned more specimens in the Gubba collection at Le Havre. From these syntypes we herewith designate the shell figured by Reeve as lectotype for *Conus emaciatus* (fig. 717); the specimen is present in BMNH, measurements 37.9 × 20.6 mm.

The type lot contains two more specimens (52 × 27 and 49 × 25 mm), these shells were not recorded by Reeve.

Type locality. — "Philippine Islands", leg. H. Cuming.

Remarks. — Reeve compared this species to *C. virgo* Linné, from which it is distinguished by a smaller size (to 60 mm), the body whorl is contracted in the middle, and covered with spiral cords. *C. virgo* grows larger (90-150 mm), body whorl straight and almost smooth. Both species have a purplish blue base.

Some authors consider *C. emaciatus* the juvenile of *C. virgo*; we have compared specimens of equal size of both nominal species, and conclude that *C. emaciatus* is a valid and distinct species. Cernohorsky (1964: 73), and McGill & Holeman (1968) had already reached the same conclusion.

Distribution. — Red Sea and central Indian Ocean to the Western Pacific, reported as far east as the Society Islands (fig. 672). Records from East Africa need confirma-

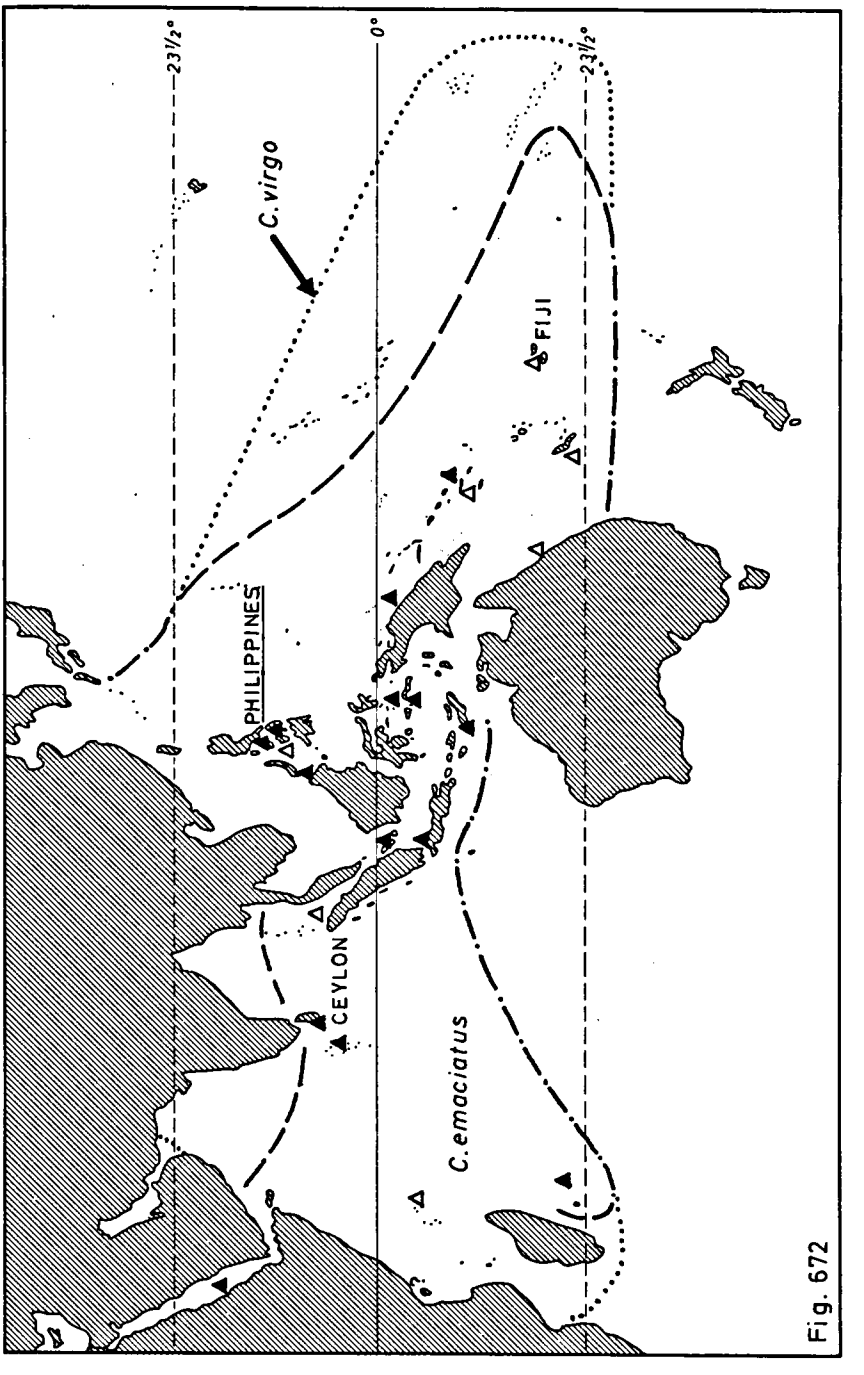

Fig. 672. Distribution of *Conus emaciatus* (broken line), as compared to the distribution of *C. virgo* (dotted line). The locality data refer to *C. emaciatus* only.

tion. — The range of *C. virgo* is larger, it covers the entire tropical Indo-Pacific, including the Red Sea, except for the Persian Gulf, N.W. Australia and Hawaii.

Material studied. — The lectotype in BMNH; we are grateful to Ms. K.M. Way for a photograph of this shell. ZMA has specimens from Mauritius, the Maldives (Malé), and Ceylon (Tangalle), from Indonesia (Dapur, Djakarta Bay, Semau near Timor, the Moluccas, and Djajapura), N. Borneo (Malawali Channel). In RMNH from the Solomon Is. (Ata Malaita) and Amboyna. In coll. Wils from the Red Sea (Port Sudan), the Maldives (Bandos and Malé), and the Philippines (Batanges, Boac: Marinduque).

emarginatus
figs. 124, 673, 720

Conus emarginatus Reeve, 1844, Conch. Icon. 1, Conus, pl. 43 spec. 232

Type material. — *Conus emarginatus* is a new name for *C. arcuatus* Gray, 1839 (non Broderip & Sowerby, 1829). According to Gray the shell was in the collection of Sowerby. Reeve figured the same specimen, which was at the time in the Cuming collection. At present the whereabouts of the shell are unknown; it is not in BMNH. The dimensions of the type figure are 50 × 23 mm (fig. 124).

Type locality. — "Pacific Ocean", the specimen was collected "near Mazatlan" (see below). Thus the restricted type locality "Cape San Lucas, Baja California, Mexico", mentioned in Basteria (vol. 45: 13) is not correct.

Remarks. — Reeve referred to the Proceedings of the Zoological Society of London of 1843, but the species was not described there. When discussing *C. arcuatus* Broderip & Sowerby (vide Basteria 45: 12), we mentioned a missing "holotype". In fact the original authors had two syntypes: (1) the specimen of Captain Beechey's voyage, with dimensions 2 × $^{9}/_{10}$ poll. = 50.6 × 22.8 mm, from the Pacific Ocean near Mazatlan. It was figured for the first time by Gray (1839: pl. 36 fig. 22, dimensions 50 × 23 mm, Pacific Ocean, in coll. Sowerby) as *C. arcuatus*; and again by Reeve (1844: pl. 43 fig. 232, same dimensions and locality, in coll. Cuming) as *C. emarginatus*. See our figure 124. (2) Broderip & Sowerby (1829: 379) stated "we have seen but one other specimen". It is well possible that this second specimen was figured by Sowerby in the "Conchological Illustrations" (part 25 fig. 9) as "*C. arcuatus* Nobis", dimensions 43 × 21 mm (reproduced here as fig. 719), locality "Bay of Montija, sandy mud, at 15 fathoms"; Sowerby also referred to the original description.

Specimens (1) and (2) are not conspecific, this was realized by Reeve (1843-1844) who described them as *C. emarginatus* and *C. arcuatus*. This action makes him the first reviser. Reeve selected for *C. arcuatus* "a specimen of the best authority" from the Cuming collection. This specimen (fig. 122) is from the same locality, the Pacific Ocean near Mazatlan in Mexico, as indicated by Broderip & Sowerby. Therefore it was designated lectotype of *C. arcuatus* by the present authors (vide Basteria 45: 12). Although the dimensions of this shell are about equal (43 × 21 mm) to those of the (? syntype) specimen of *C. arcuatus*, mentioned above under (2), they represent two distinct specimens because of different localities. Reeve's revision has been accepted by later authors.

C. emarginatus is generally placed in the synonymy of *C. recurvus* Broderip, 1833. However, after studying the holotype of the latter (fig. 721), we consider it distinct

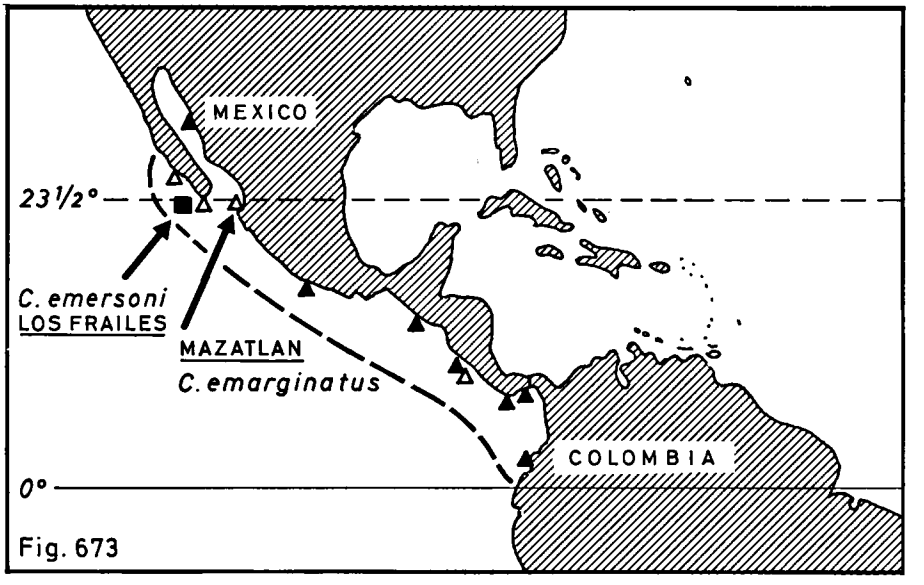

Fig. 673. Distribution of *Conus emarginatus*, and the type locality (black square) of *C. emersoni*.

from the type figure of *C. emarginatus* (fig. 124). The pattern of *C. recurvus* consists of spiral rows of irregular points and dots, like in *C. gradatus* Wood, 1828, and *C. regularis* Sowerby, 1833. Therefore Tomlin (1937) considered *C. regularis* and *C. recurvus* conspecific. *C. emarginatus* shows an axial flame pattern (figs. 124, 720) and is considered a valid species.

Distribution. — Offshore in the Eastern Pacific from Mexico (Magdalena Bay and the southern Gulf of California) to Colombia (fig. 673).

Material studied. — ZMA has specimens from Mexico (Guyamas), Costa Rica (Puntarenas) and Panama (Chirique Gulf). In LACM from the Gulf of California (26° NL), S. Mexico, El Salvador, Costa Rica, Panama and Colombia (2° NL).

Thanks are due to Ms. K.M. Way for a photograph of the holotype of *C. recurvus*, and to Dr. A.J. Kohn for his corrections concerning our discussion of *C. arcuatus*.

(embrikena)

Conus embrikena in Marsh, 1964, Cone shells of the world: 16

Remarks. — The name "*Conus embrikena*" was mentioned by Marsh under the "Rare species", of which only a single specimen was known. He must have been mistaken, because this species was never described.

Embrikena Iredale, 1937, was described as a genus in the Conidae.

emersoni
figs. 673, 718

Conus emersoni Hanna, 1963, Occ. Pap. Calif. Acad. Sci. 35: 25, pl. 1 fig. 2

Type material. — The holotype is in AMNH (no. 105211); measurements 43.0 × 18.5 mm (fig. 718). One paratype figured by Walls (1979: 776), is in CAS (no. 12405).

Type locality. — "off Los Frailes Cape San Lucas, Baja California in 300 fathoms".

Remarks. — The type material consists of dead and faded shells, collected together with living and fossil specimens of other mollusks. Therefore *Conus emersoni* is sometimes considered a fossil species, although the colour pattern is still visible. It was compared by Hanna to *C. australis* Holten (vide Basteria 45: fig. 168; and 47: fig. 371 under *C. cebuganus*) from the Western Pacific. Walls (1979: 774-776) unites it with *C. orbignyi* Audouin, a widespread species (see *C. elokismenos* in this publication), and according to him collected alive in deep water off Baja California.

Until more material becomes available for study, we tentatively consider *C. emersoni* a valid species.

Distribution. — Only known from the type locality (fig. 673).

Material studied. — The holotype; we are grateful to W. Sage for the loan of this specimen.

emisus
fig. 722

Conus mediterraneus var. *emisus* De Gregorio, 1885b, Bull. Soc. malac. Ital. 11: 112

Type material. — De Gregorio mentioned a specimen in his collection (at present in the Museo di Paleontologia, Palermo); dimensions 52 × 29 mm, length of the spire 14 mm. In addition he refers to a figure in Philippi (1836: pl. 12 fig. 19). The latter specimen is present in ZMB (no. 10852 c), and herewith designated lectotype of *C. emisus*; the measurements are 32.4 × 17.5 mm (fig. 722). This shell also belongs to the type series of *Conus mediterraneus marmoratus* Philippi.

Type locality. — De Gregorio mentioned "Mediterraneo" which is now restricted to Sicily, being the locality of the lectotype.

Remarks. — The variety *emisus*, which according to the ICZN must be treated as a subspecies, is one of the many varieties described by De Gregorio in *C. mediterraneus* Hwass, from which it was considered to be distinct by a shorter spire. Because a spire length of about one fourth of the total shell length is normal within this species, we may conclude that *emisus* is a junior synonym of the nominate form.

Although Philippi figured his specimen with the living animal, the shell must have been dead collected (fig. 722): it has a damaged outer lip and tubeworms attached inside the aperture. However, measurements, shape and pattern agree in details with the figure.

We are grateful to Dr. R. Kilias for the loan of type material.

empismus

Conus mediterraneus franciscanus var. *pereirae* subvar. *empismus* De Gregorio, 1885a, Bull. Soc. malac. Ital. 11: 106

Type material. — De Gregorio did not state how many shells were available to him, and no specimen was figured. The material was stored in his private collection, which is at present in the Museo di Paleontologia of the University of Palermo.

Type locality. — "Barra, Palermo, anche nella zona delle spugne di Barberia" (Barra, Palermo, also in the zone of the Barberian sponges), Sicily, Italy. Some localities of fossil material are mentioned too.

Remarks. — This subvariety of the variety *pereirae* De Gregorio, belonging to the "sezione" (section, subspecies) *franciscanus* of *Conus mediterraneus*, shows the incredible splitting of this species by the author. Therefore the names *pereirae* and *empismus* are not available for the nomenclature (art. 45, f, iii).

The subvariety *empismus* has the aperture anteriorly somewhat wider, so that the columellar side is comparatively slightly thinner.

encaustus
figs. 669, 723-724

Conus encaustus Kiener, 1845, Coq. vivant. 2: pl. 14 fig. 2; 1846: 54-55

Type material. — The holotype was in the collection of H.A. Prevost (1821-1883), which was bought by G.B. Sowerby III and dispersed (Dance, 1986: 223). Thus the present whereabouts of the specimen are unknown. The type figure is reproduced here (fig. 723); dimensions 26 × 15 mm.

Type locality. — Not mentioned. We herewith designate the Marquesas Islands as type locality for *Conus encaustus*, from where specimens are present in ZMA (fig. 724).

Remarks. — Although no type specimen is available, *C. encaustus* can be recognized from the type figure and description. Kiener compared it to *C. miliaris* Hwass, a species to which *C. encaustus* belongs as a distinct subspecies. *C. abbreviatus* Reeve (vide Basteria 43: 14, fig. 10) also is a subspecies of *C. miliaris*.

C. praetextus was described by Reeve (1848: suppl. pl. 2 spec. 277) from the Marquesas; it is considered a junior synonym of *C. encaustus*.

Distribution. — *C. miliaris encaustus* is mentioned to be endemic to the Marquesas Islands in French Polynesia (fig. 669), where it is not rare (Richard, 1985: 20). It has once been reported and figured from Fiji (Lewis, 1979: 11).

Material studied. — ZMA has specimens from the Marquesas.

endorus

Conus fuscocingulatus var. *endorus* De Gregorio, 1885, Bull. Soc. malac. Ital. 11: 96

Type material. — In the collection of De Gregorio, which is at present in the Museo di Paleontologia of the University of Palermo. The author did not state how many shells were available to him, and no specimen was figured.

Type locality. — "Mediterraneo, zona delle spugne" (Mediterranean Sea, sponge zone).

Remarks. — De Gregorio mentioned *endorus* as a variety under *Conus fuscocingulatus* "Bronn" (error for Hoernes), a fossil. However, the description begins as follows: "Another interesting variety of *Conus mediterraneus*". The body whorl of the shell is anteriorly a little more oblong, and posteriorly less angulate.

We consider it one of the many individual variants named by De Gregorio, and thus *endorus* is a junior synonym of *C. mediterraneus*. Our thanks are due to Mr. B. Bujama for his translations.

epaphus

Conus mediterraneus var. *epaphus* "Ch." Nardo, 1847, Sinon. moderna, pt. 2: 41-42, sp. 13

Type material. — This variety was originally figured and described as *Conus epaphus* in a manuscript by S. Chiereghini in 1802, to which Nardo referred. The shell(s) discussed in that manuscript are the type material of *epaphus*. Because Chiereghini's collection was dispersed, no material is available.

Type locality. — On "*Spongia officinalis*" (a sponge), in the Gulf of Venice.

Remarks. — The variety *epaphus* has a smooth and somewhat ventricose shell, cinnamon colour with a white dotted band, and white nodules on the spire. Within the variable *C. mediterraneus* this is another colour variant, and thus *epaphus* is considered a junior synonym. See also under *C. clodianus* Nardo (in Basteria 48: 237).

Our thanks are due to Mrs. Dr. M.I. Gerhardt for translating the Latin description.

epaticus

Conus epaticus Renier, 1804, Tav. alfab. Conch. Adriat.: 8

Remarks. — According to Tomlin (1937: 245) *Conus epaticus* is a nomen nudum. Renier only mentioned that the species is near to *C. magus*; Kohn (1981: 295) considered it a nomen dubium.

Because S.A. Renier's work was rejected in 1954 by the ICZN (opinion 316), his zoological names are invalid. See also under *C. capitaneus* Renier (in Basteria 47: 84).

Nardo (1847a) mentioned the name *C. epaticus* without a description, he considered it a synonym of *C. mediterraneus* var. *marmorata* Philippi, 1836.

episcopatus
figs. 725-726

Conus episcopatus Da Motta, 1982, Publ. Ocas. Soc. Port. Malac. 1: 1-2, fig. 1 (15 May); 1982a, Conchiglia 14 (158-159): 21 no. 46 (May-June)

Type material. — Holotype in MHNG (no. 981.739); measurements 81.6 × 37.6 mm (fig. 725). Two paratypes (70 × 32 and 69 × 32) were "retained by the author for distribution to other museums".

Type locality. — "Shallow water, Mahe Island, Seychelles". The paratypes were collected at "Comorro Island" in the Indian Ocean.

Remarks. — *Conus episcopatus* was described simultaneously by Da Motta (1982, 1982a) in two different journals. It was introduced as a new species, and also as a new

name for *C. episcopus* auct. (non Hwass, 1792). The type specimen of *C. episcopatus* has a pattern of large chestnut-brown blotches, without the fine tent-marks in the white areas. This variation in design is known to occur in tent-cones (cf. *C. aulicus* forma *propenudus* Melvill, 1900). Comparing *C. episcopatus* with material in ZMA disclosed that *episcopatus* may be considered a colour form of *C. magnificus* Reeve.

Material studied. — The holotype; with thanks to Dr. C. Vaucher for the loan of this shell. ZMA has specimens of *C. magnificus* forma *episcopatus* from Manus Island (fig. 726) and the Philippines.

Da Motta (1982a: 21 no. 47) introduced *C. episcopatus pupillaris* as a nomen novum for *C. episcopus elongata* Dautzenberg, and for *C. episcopus oblongus* Fenaux. We have discussed in this publication that *C. elongatus* Adam & Leloup in Dautzenberg, 1937, is a nomen nudum. When the subspecific name *oblongus* Fenaux must be substituted by "*episcopatus pupillaris*", the result is *C. episcopus episcopatus pupillaris*. The latter name is not valid according to the ICZN.

episcopus
figs. 674, 748-729

Conus episcopus Hwass in Bruguière, 1792, Encycl. Meth. 748-749, no. 142

Type material. — Hwass mentioned two specimens in his collection (var. A and B), and he referred to some figures in the literature. Kohn (1968: 455-456, pl. 4 fig. 41) has designated the specimen of var. A. as lectotype for *Conus episcopus*. The shell is present in MHNG (no. 1106/70); dimensions 58 × 33 mm (fig. 728).

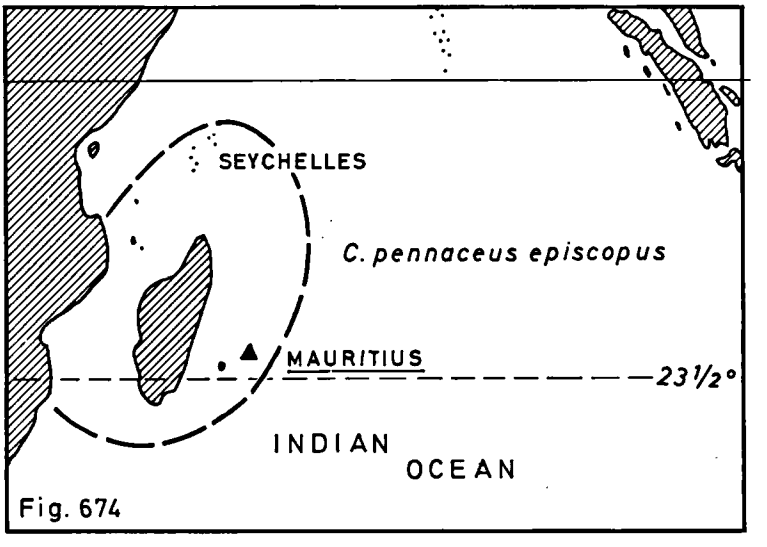

Fig. 674. Distribution of *Conus pennaceus episcopus* (according to Da Motta).

Type locality. — "les mers des grandes Indes" (Indian Ocean), herewith restricted to the island Mauritius.

Remarks. — Kohn has identified the lectotype as conspecific with *C. pennaceus* Born, 1778, which is a variable species with a number of local formae and subspecies. The lectotype of *C. episcopus* agrees in pattern and shell morphology with material known from Mauritius (fig. 729). Therefore we tentatively consider it a subspecies: *C. pennaceus episcopus* Hwass.

Distribution. — Da Motta (1981-1983: no. 45) mentioned that typical *C. episcopus* is only found in the area of Mauritius, Madagascar, the Seychelles and Mozambique (fig. 674).

Material studied. — The lectotype; we are grateful to Dr. C. Vaucher for a photograph of this shell. ZMA has specimens from Mauritius.

C. episcopus auct. (non Hwass) was renamed and described by Da Motta as *C. episcopatus* (see above, fig. 725)

For *C. episcopus elongata* "Dautzenberg", see under *elongatus* in this issue (figs. 713-714).

epistomioides
fig. 730

Conus epistomioides Weinkauff, 1875, System. Conch. Cab. Martini Chemnitz 4(2): 315-316, pl. 57 figs. "5"-6 (error for 6-7)

Type material. — The described specimen is present in the Loebbecke Museum at Düsseldorf. It is herewith designated lectotype of *Conus epistomioides*. The dimensions are 32 × 15½ mm (fig. 730). A request to borrow the shell remained unanswered. Weinkauff also referred to the illustration of *C. epistomium* "Reeve" in Kiener (1845: pl. 55 fig. 6); dimensions 52 × 24 mm. This paralectotype is not discussed in Kiener's text.

Type locality. — "Wahrscheinlich Ostafrica" (probably East Africa). This locality may have been derived from the locality of *C. epistomium* Reeve, reported as Mauritius.

Remarks. — The type specimen of *C. epistomioides* was traced by Röckel (1976: 12). It is identified as *C. magus* Linné, a polymorphic species from the tropical Indo-Pacific. Thus *C. epistomioides* is a junior synonym of *C. magus*, which may reach an average length of 50-60 mm. Hence the lectotype of *C. epistomoides* is a subadult shell.

The authors are grateful to Dr. D. Röckel for a photograph of the lectotype.

epistomium
fig. 731

Conus epistomium Reeve. 1843, Proc. zool. Soc. Lond. 11: 174; Conch. Icon. I, Conus: pl. 42 spec. 227

Type material. — The type lot in BMNH (no. 1982229, ex coll. Cuming) contains two specimens (see the introduction of this publication). Reeve described and figured only one shell, which is herewith designated lectotype of *Conus epistomium*. The measurements are 48.2 × 21.1 mm (fig. 731).

Type locality. — "Mauritius".

Remarks. — We have studied the lectotype and have concluded that it is conspecific with the neotype of *Conus magus* Linné. The latter is a polymorphic species, with a

tropical Pacific distribution. Therefore the type locality of *C. epistomium*, the island of Mauritius in the Indian Ocean, must be incorrect.

The second specimen in the type lot is identified as *C. magus* forma/subsp. *carinatus* Swainson, known from the Philippines.

We are grateful to Ms. K.M. Way for the loan of the type material.

eques
figs. 732-733

Conus eques Hwass in Bruguière, 1792, Encycl. Method. 1: 705-706, no. 97

Type material. — Hwass mentioned two varieties in his collection (var. A and B) and in addition he referred to two illustrations in Favanne & Favanne (1780: pl. 14 figs. F1 and F2). At present there are no specimens available in the Hwass collection. Kohn (1966: 456, pl. 4 fig. 42) has designated the shell figured in the Tableau Encyclopédique (vol. 23: pl. 337 fig. 3) as lectotype for *Conus eques* (see below).

Type locality. — Var. A: "suivant M. de Favanne, de la nouvelle Zélande" (according to Mr. de Favanne, New Zealand); var. B: "les mers d'Amérique, et suivant M. de Favanne, sur les côtes de la Floride" (the American seas, and according to Mr. de Favanne, on the coasts of Florida).

Remarks. — Kohn has compared the original description of *C. eques* with its accompanying figure in the "Tableau" (pl. 335 fig. 9); he concluded that these do not agree. Hence Kohn selected another, but matching, illustration (of "*C. fulgurans*") to represent the type figure of *C. eques*.

The present authors have asked the opinion of Prof. Dr. Mia Gerhardt, a linguist and amateur malacologist; she agreed with Dr. Kohn's conclusion. Nevertheless we believe that in this case the designation of one of the other syntypes (i.e. the two shells illustrated by De Favannes) should have been preferred; that of var. A is reproduced here (fig. 732), dimensions 30½ × 20 mm.

According to the descriptions by Hwass and by Favanne, the shell of var. A has a yellow band in the middle of the shell, and two zones with brown axial stripes.

Kiener (1849-1850: 274) stated that he had not seen the shell of *C. eques*; however, he supplied (1845: pl. 66 fig. 1) a coloured illustration of the "erroneous" black and white figure from the Tableau (pl. 35 fig. 9). He recorded it from the Southern (= Pacific) Ocean and the Seas of America. From the figure of *C. eques* in Kiener, reproduced here (fig. 733), we can see a similarity with "*Conus*" *dupontii* Kiener, which is now placed in the Columbellidae (vide Basteria 49: 179, fig. 660).

Based on the Florida type locality, Clench (1942: 3) identified *C. eques* as *C. regius* Gmelin. Kohn considered it a junior synonym of *C. testudinarius* Hwass (= *C. ermineus* Born).

Because of the dubious type material, with two disjunct type localities, and the controversial figures, the present authors consider *C. eques* a nomen dubium.

We are grateful to Dr. M.I. Gerhardt for her valuable advice and translations.

equestris [1]
figs. 205, 735-736

Cucullus equestris Roeding, 1798, Mus. Bolten. 2: 38, no. 474/6

Type material. — Roeding mentioned two specimens in the Bolten collection, which are considered lost, and he referred to the shell figured by Chemnitz (vol. 10, 1788: pl. 138 fig. 1279). The latter specimen is designated lectotype by Kohn (1975: 204, pl. 2 fig. 22); the shell is present in ZMUC, ex coll. Spengler, and the measurements are 47.6 × 24.7 mm (fig. 735). It is also the lectotype of *Conus torquatus* (Roeding).

Type locality. — Not given by Roeding. Chemnitz (1788: 21-22) mentioned the Spengler specimen from the "Ostindischen Meere" (East Indian Seas); this locality is also indicated on the original label with the shell.

Remarks. — Roeding only mentioned the vernacular name "Der gebandete Schout by Nagt" (the banded rear-admiral). We have studied the lectotype of *Conus equestris* (Roeding) and consider it a colour form of *C. bandanus* Hwass (vide Basteria 46: 9), in which the dark bands are wider. The name *C. nocturnus* auct. (non Lighfoot, 1786) is incorrectly used for these dark specimens of *C. bandanus*. From material in ZMA it is evident that the forma *equestris* (figs. 205, 736) is found in the Moluccas in Indonesia.

C. torquatus (Roeding) is an objective synonym of *C. equestris*. See also *C. equestris* [2], discussed below.

We are grateful to Dr. J. Knudsen for the loan of the type specimen.

equestris [2]

Cucullus equestris Roeding, 1798, Mus. Bolten. 2: 46, no. 578/1
(non *C. equestris* Roeding [1])

Type material. — Roeding mentioned one specimen in the Bolten collection, which is considered lost. The single reference to Favanne is erroneous (vide Kohn, 1975: 204).

Type locality. — Not given.

Remarks. — Roeding described two nominal species as *Cucullus equestris*, so that these names are homonyms. The second is mentioned as a "subspecies" under *C. ammiralis*. From its description "Der Ritter mit 5 Banden" (the knight with five bands) is concluded that *Conus ammiralis equestris* (Roeding) represents the colour form with five bands.

C. ammiralis is known for the variation in number and width of the "golden admiral bands" on the body whorl. The nominate form and the forma *amboinensis* Donovan, both with four bands, have already been discussed in this series. The forma *donovani* Dautzenberg has six bands.

See also *C. extraordinarius* in this publication (fig. 760).

ermineus
figs. 145, 316, 494, 560, 675, 737

Conus ermineus Born, 1778, Index Mus. Vindob. 1: 141-142; 1780, Test. Mus. Vindob.: 159

Type material. — Born (1778) did not state how many specimens were available in the emperor's collection, but two years later he mentioned one shell of "1 poll. 4 lin. ×

8 lin." (= 35 × 17½ mm) which was not figured. At present two syntypes are available in NMW in Vienna (nos. 4051 and 4052), of which Kohn (1964: 156, fig. 5) has designated no. 4051 as lectotype of *Conus ermineus* (fig. 737); the dimensions are 37 × 22 mm. The paralectotype measures 38 × 22 mm, so that the type material is larger than the one specimen mentioned by Born.

In addition Born referred to illustrations in the literature; these, however, do not seem to be conspecific with the available syntypes.

Type locality. — Not mentioned in 1778. Born (1780) copied the locality "in Indiis" from Martini (1773: 272, "in Indien"), one of his references for *C. ermineus*. However, the species described and figured by Martini (pl. 57 figs. 630-631) represents *C. litoglyphus* Hwass, as was discussed in this series under *C. cinamomeus* (vide Basteria 47: 120, fig. 419). Therefore we cannot accept "India" as type locality for *C. ermineus*. Because of the amphi-Atlantic distribution, the designation of a type locality is to be deferred at the moment.

Remarks. — *C. ermineus* is the first name for a valid species, which was known for a long time as *C. testudinarius* Hwass, 1792, and erroneously as *C. ranunculus* auct. (non Hwass). The shell is large (to 100 mm) and sturdy, with an irregular pattern in the colours yellow, brown or blackish-brown. Juveniles (to about 35 mm) are granulated, and were described as *C. verrucosus piraticus* Clench, 1942. Because of the variation in colour, the species has a number of junior synonyms, some already treated in this series are: *C. aspersus* (fig. 145), *C. caerulans* (fig. 316), *C. coerulescens* (fig. 494) and *C. crucifer* = *C. cutisanguina* (fig. 560).

C. ermineus was recently discussed by Vink (1984a: 5-7, figs. 6a-j), who also placed *C. barathrum* (Röding) in the synonymy, because of its higher spire and more slender shell. Coomans et al. (1982: 11-12, figs. 207-208) considered *barathrum* a colour form of *C. spurius*, not only for the pattern, but because the spire whorls of the lectotype were described by Martini (1773: 250) as "ganz flach gewunden und ein wenig ausgekehlet" (completely flat and a little bit concave). These characters point to *C. spurius* rather than to *C. ermineus*.

Rolan (1986) studied the radula of juvenile and adult specimens of *C. ermineus*, and disclosed that there exists an evident difference in tooth structure due to a change of diet in this species (from vermivorous to piscivorous).

Distribution. — The western Atlantic, including the Gulf of Mexico and the Caribbean Sea, from Florida to the north coast of Brazil; in the eastern Atlantic from the Canary Islands to Angola (fig. 675). Smith (1890: 254) mentioned two specimens of "*C. testudinarius* Martini" from St. Helena.

C. purpurascens Sowerby, 1833, is the twin-species of *C. ermineus* from the tropical Eastern Pacific.

Material studied. — ZMA has specimens from Puerto Rico, the Lesser Antilles (Islote Aves, Saba, St. Vincent, Grenadines, Barbados), Colombia (S. Martha), Netherlands Antilles (many localities on Aruba, Curaçao, Little Curaçao, Bonaire), Venezuela (Blanquilla Id.), Surinam, French Guiana, and off Guiana/N. Brazil. In the Eastern Atlantic from the Canary Is. (Teneriffe), Cape Verde Is. (Sao Nicolau, Sal, Boavista, Sao Tiago), Senegal (St. Louis, Dakar, Almadies), Spanish Guinea (Rio Muni), Gabon, Congo and Angola. In coll. T. Kemperman from Ghana (Tema).

Dr. O. Paget kindly supplied the photographs of the type material.

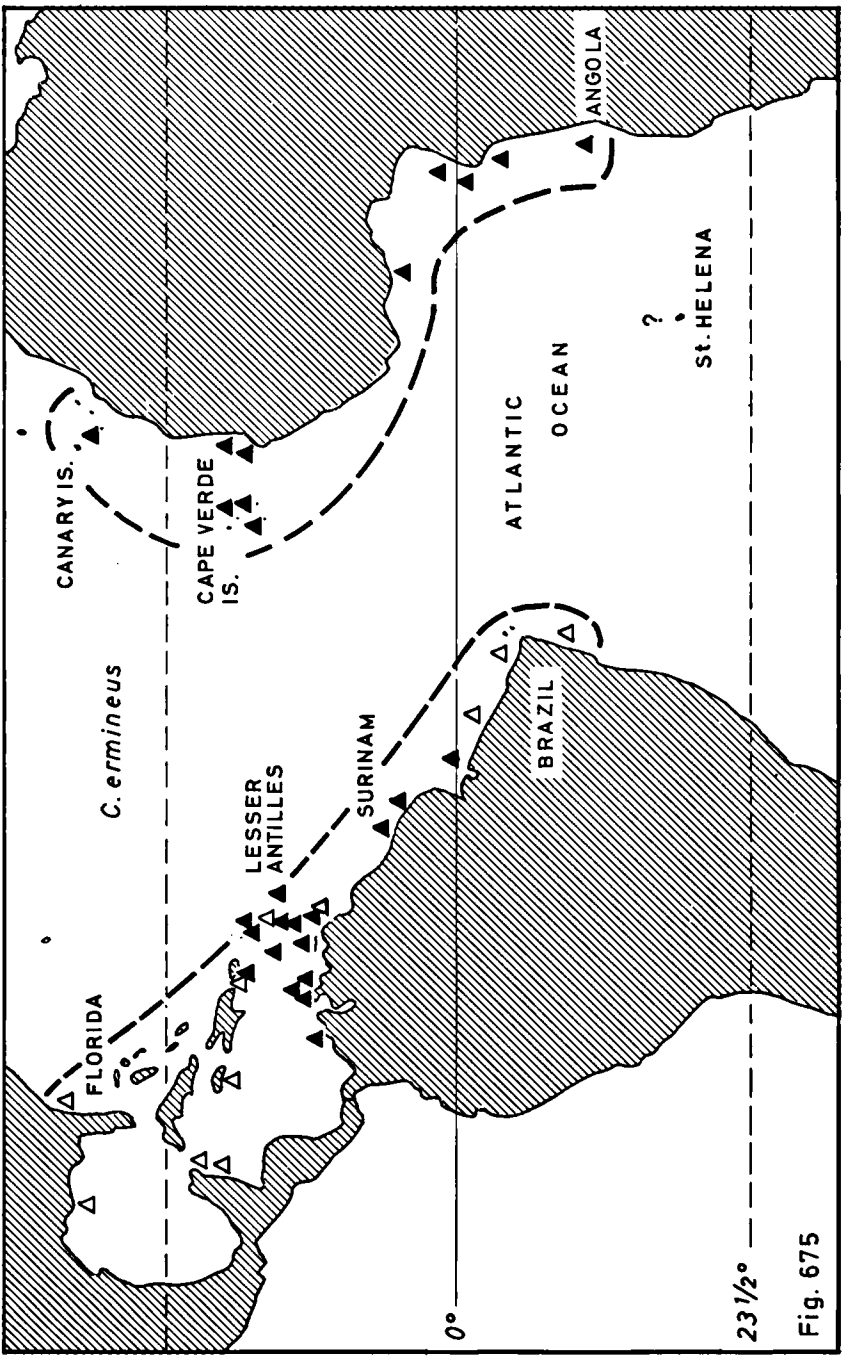

Fig. 675. The amphi-Atlantic distribution of *Conus ermineus*.

errosus
fig. 500

Conus errosus Renier, 1804, Tav. alfab. Conch. Adriat.: 8

Remarks. — Renier referred to a figure in Gualtieri (1742: pl. 25 fig. G), which is also the type figure for *Conus columba* Hwass (vide Basteria 48: 246, fig. 500). Thus Kohn (1981: 295) concluded that *C. errosus* is an objective junior synonym of *C. columba*.

Because Renier's work was rejected by the ICZN, *C. errosus* is not an available name. See also under *C. epaticus* in this publication.

Nardo (1847a) mentioned the name *C. errosus* without a description, and considered it a synonym of *C. mediterraneus* var. *franciscanus*.

erythraeensis
figs. 32, 676, 739-740

Conus erythraeensis Reeve, 1843, Conch. Icon. 1, Conus pl. 24 spec. 137

Type material. — The author referred to a specimen in the Stainforth collection. Some material from this collection is present in BMNH or NMWC, but a syntype of *Conus erythraeensis* has not been found. The original figure is reproduced here (fig. 739); the dimensions are 28 × 15 mm.

Reeve also referred to material in the collection of the King of Denmark, which is now in ZMUC. From these syntypes we herewith designate a lectotype for *C. erythraeensis* (fig. 740); the measurements are 24.3 × 16.4 mm.

Type locality. — Not mentioned. Because of the name "*erythraeensis*", which Reeve had copied from a manuscript by H. Beck, the shells must have an erythrean (Red Sea) origin.

Remarks. — In the literature *C. erythraeensis* is considered the first name for a well-known species from the Red Sea. However, there is an older name available for this taxon: *C. quadratus* (Röding, 1798). A lectotype for *Cucullus quadratus* was designated by Kohn (1975: 218, pl. 3 fig. 51), i.e. the specimen described and figured in Chemnitz (vol. 10, 1788: 42-43, pl. 140 fig. 1300). The type locality is "Rothen Meere" (Red Sea). According to Tomlin (1937: 300) and Kohn *C. quadratus* is a junior synonym of *C. spurius* Gmelin from the West Indies. Subsequently Vink (1985: 8-9) considered *C. quadratus* a distinct subspecies from the Caribbean coast of Central America: *C. spurius quadratus*. He designated "Belim, British Honduras" as type locality for *quadratus*, without referring to the original locality of the lectotype. We assume that the correct name for the populations of *C. spurius* from Yucatan and Honduras is *C. weinkauffi* Löbbecke, 1882.

The type figure of *C. quadratus* (fig. 741) is 39 mm long, but Chemnitz mentioned a maximum length of "einen Zoll" (one inch = 26 mm). His description agrees in all details with the shells from the Red Sea. The type specimen was at that time in the Chemnitz collection. It originated from "Jene gelehrte Gesellschaft, welche einst aus Dännemark nach Arabien gesandt worden, hat mehrere von dieser Gattung vom Ufer des rothen Meeres hierher geschickt" (the learned company, which were once sent from Denmark to Arabia, had mailed home some specimens of this species from the shores of the Red Sea). It is possible that some of these shells were deposited in the col-

lection of King Christian VIII of Denmark; these may be the ones to which Beck referred in his manuscript (see above).

We prefer not to reinstate *C. quadratus* as the first available name, because it was never used in the *C. erythraeensis* complex, and has often been misidentified. In the complex were described: *C. adustus* Sowerby, *C. dillwynii* Reeve, *C. induratus* Reeve and *C. quadratomaculatus* Sowerby. The taxonomy of this complex needs more research. From material studied we provisionally recognize:

C. e. erythraeensis (figs. 739-740), with a slightly convex body whorl and violet aperture;

C.e. dillwynii (fig. 642), discussed before (Basteria 49: 170), from the East African coast to Madagascar;

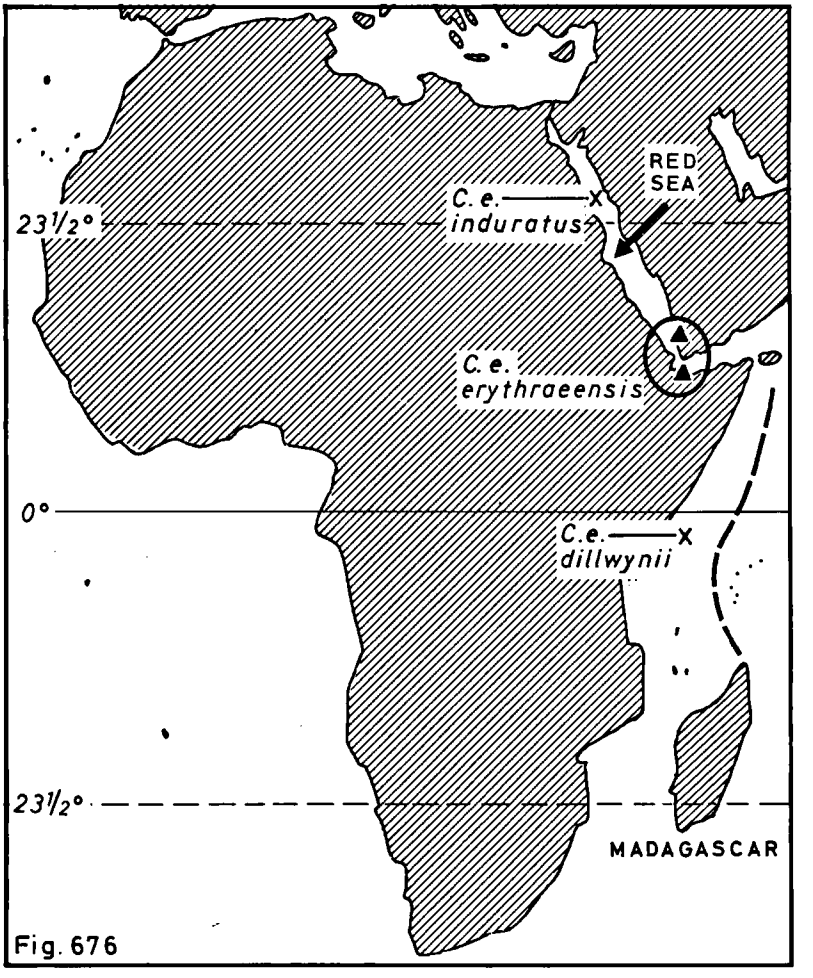

Fig. 676. Distribution pattern of the *Conus erythraeensis* complex, with locality data of *C. e. erythraeensis*.

C. e. induratus (fig. 741), with a straight body whorl and brown aperture, from the Red Sea. *C. adustus* (vide Basteria 43: 82, 101 top fig. "31", error for 32) is a colour form of this subspecies.

Distribution. — *C. erythraeensis* s.s. is known from the southern Red Sea (Erithrea) and the Gulf of Aden (fig. 676).

Material studied. — The syntypes from the collection of King Christian VIII; we express our thanks to T. Schiøtte (ZMUC) for the loan of this material. Coll. Wils contains specimens from the Gulf of Aden (Yemen and Djibouti).

erythraeozonatus
fig. 734

Conus erythraeo-zonatus Barros e Cunha, 1933, Mem. Est. Mus. zool. Univ. Coimbra (1) 71: 108-110, no. 92

Type material. — The author mentioned two specimens, with dimensions 33 × 19.5 and 29.5 × 18 mm. In addition he referred to the shell figured in Kiener [1845: pl. "65" (error for 66) fig. 2] as "*Conus tabidus* Reeve" (non Reeve, 1843).

The type lot (no. 92) in the Department of Zoology of the University of Coimbra, Portugal, contains two non-conspecific shells, with measurements 32.7 × 19.4 and 48.5 × 27.3 mm. The measurements of the latter specimen do not agree with those of one of the syntypes, so that it is excluded from the type material. The first mentioned specimen is herewith designated as lectotype of *Conus erythraeozonatus*. The shell is figured here for the first time (fig. 734).

Type locality. — Unknown. The label with the type lot does not mention the locality either.

Remarks. — The name *C. erythraeo-zonatus* must be emended to *erythraeozonatus*. The lectotype is identified as *C. flavidus* Lamarck, 1810, thus *C. erythraeozonatus* is a junior synonym.

The second specimen in the type lot is *C. lividus* Hwass. Reeve (1849, Emendations: 6) indicated that *C. tabidus* sensu Kiener appears to be *C. mus* Hwass.

We are grateful to Dr. Maria M.G.F. Assalino for the loan of the type specimen.

espinosai
fig. 742

Conus granulatus espinosai Sarasua, 1977, Poeyana 165: 3-5, fig. 1, C and D

Type material. — The holotype (dimensions 24 × 10.2 mm) and two paratypes (38 × 14.5 and 19 × 8 mm) are present in the Institute of Zoology, Academia de Ciencias de Cuba, at Havanna (nos. 54, 55 and 56). A request to study the holotype was not granted. The type figure is too poor to be reproduced.

Type locality. — "dragado de 10-15 m de profundidad frente a la costa de Marianao" (dredged in 10-15 m depth off the coast of Marianao), Cuba.

Remarks. — Without having studied the type material, and with a poor type figure, it is difficult to give an opinion on *Conus granulatus espinosai*. According to its description the subspecies *espinosai* is characterized by a smooth and shiny body whorl, whereas *C. granulatus* s.s. is spirally grooved from shoulder to base. The colour of the shell in both subspecies is the same.

The collection of ZMA contains one specimen of *C. granulatus* Linné from Antigua (fig. 742), in which the body whorl has less and very undeep grooves. Therefore it may represent an intermediate form. Since typical *C. granulatus* shells are also found around Cuba, we consider *espinosai* as a forma.

The authors are grateful to Mr. Theo C.M. Kemperman for translating the Spanish description.

eucoronatus
figs. 677, 743

Conus eucoronatus Sowerby III, 1903, Mar. Inv. S. Afr. 2 (3): 217, pl. 3 fig. 9

Type material. — Sowerby described and figured one specimen, and he mentioned a second shell from another locality. The former is present in SAMC (no. A 1753) and herewith designated lectotype of *Conus eucoronatus* (fig. 743). The measurements are 45.0 × 25.0 mm (Sowerby: 45 × "34" mm, the width obviously is a printing error). The whereabouts and dimensions of the paralectotype are unknown.

Type locality. — "Cape St. Blaize bearing N. 85° W.; distant 4½ miles; depth 27 fathoms. Bottom sand." The paralectotype is from the Natal coast, Cape Natal, in 85 fms.

Remarks. — Sowerby mentioned the presence of a very small operculum (5 × 1¼ mm) in the description of the lectotype, but it is not preserved with the specimen. It must have belonged to the paralectotype, because the columellar side of the aperture in the lectotype is worn, caused by a hermit crab.

C. eucoronatus, considered a valid species, has a very distinctive sculpture on the shell.

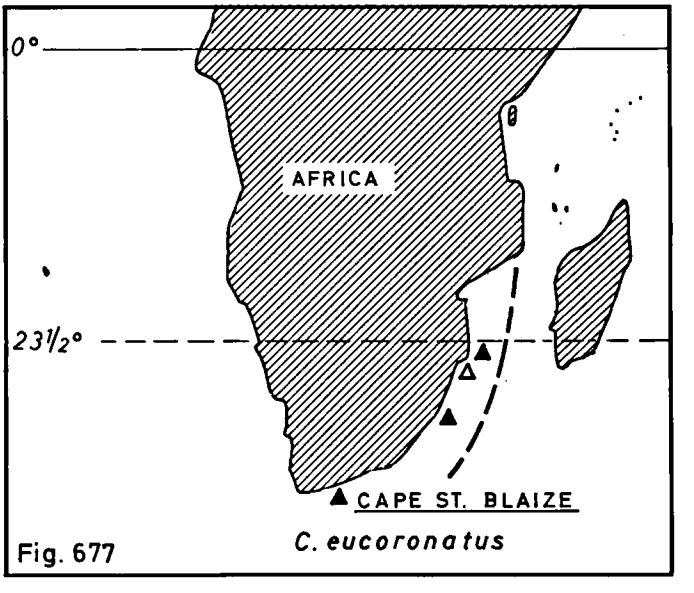

Fig. 677. Distribution of *Conus eucoronatus*.

Distribution, — From Natal to southern Mozambique (fig. 677), offshore in 100-200 m. The type locality Cape St. Blaize is situated near Mossel Bay in the Cape Province. This is outside the known range of the species, and therefore considered doubtful by Kilburn & Rippey (1982: 121).

Material studied. — The holotype; we are grateful to the South African Museum for the loan of this shell. ZMA has a specimen from Mozambique.

eudoxus
figs. 744-745

Conus marchionatus var. *eudoxus* "Melvill" Tryon, 1883, Man. Conchol. 6: 10, pl. 27 fig. 3

Type material. — Tomlin (1937: 245) stated that the type specimen was in his collection, but it was not recorded as such by Trew (1982: 9). Upon our request Miss Alison Trew checked the Melvill-Tomlin collection, and informed us (in litt. 1985) that the probable holotype (fig. 745) is present in NMWC (no. 1955.158.1179). The measurements are 60.7 × 36.2 mm (Tryon: length 2.25 inches). The periostracum and operculum are present. Although there are a few discrepancies in colour and shading with the type figure (reproduced here as fig. 744), we are convinced that the shell in NMWC is identical to the one figured by Tryon. The specimen has a Melvill label, which indicates "*Conus eudoxus* (Melvill) = *marchionatus* β".

Type locality. — Not mentioned.

Remarks. — Tryon had not seen the type specimen, he described *Conus marchionatus eudoxus* from a drawing of the shell. He considered it a gigantic specimen of *C. marchionatus* Hinds, 1843, which is endemic to the Marquesas Islands.

We have studied the holotype, and conclude that it is indeed a large specimen of *C. marchionatus*. In the collection of DMNH there is an even larger specimen; length 67.6 mm, with operculum, from Port Anna Maria, Nahuhiva, Marquesas, in 5-10 fms.

We are grateful to Ms. A. Trew for her information and the loan of the type specimen. The first author expresses thanks to Dr. A. Chadwick and Mr. R. Jensen for their hospitality in DMNH.

euetrios
fig. 747

Conus textile var. *euetrios* Sowerby III, 1882, Proc. zool. Soc. Lond. 1882: 120-121, pl. 5 fig. 6

Type material. — The holotype (fig. 747) is in NMWC (no. 1955. 158.35, ex coll. Melvill and Tomlin); the measurements are 49.4 × 24.0 mm (Sowerby: 51 × 23 mm). The shell is artificially polished smooth.

Type locality. — Not given.

Remarks. — The shell is characterized by a very fine reticulate tent pattern (see the introduction of this issue). Melvill had used the name *Conus euetrios* in a manuscript, after which Sowerby described it as a variety of *C. textile* Linné. Sowerby may have changed his opinion afterwards, because he did not treat *euetrios* in the *Conus* supplement of the Thesaurus Conchyliorum (Sowerby, 1887).

In the literature *C. euetrios* is sometimes considered a valid species from Mozambique and Madagascar (Da Motta, 1981: 9, no. 24), but mostly it is described as a forma in either *C. textile, C. abbas*, or *C. archiepiscopus*.

We have studied the holotype of *C. euetrios* and agree with Sowerby that it is a colour form in the *C. textile* complex. Shells with a similar shape and pattern are known to us from Reunion.

C. "enetrios" in Wagner & Abbott (1978: 25-017) is an error. We are grateful to Ms. A. Trew for the loan of the holotype.

eugrammatus
figs. 678, 749-751

Conus eugrammatus Bartsch & Rehder, 1943, Proc. Biol. Soc. Wash. 56: 85-86

Type material. — Holotype in USNM (no. 173213); the measurements are 30.0 × 15.9 mm (fig. 749). The specimen was not figured in the original publication. The shell has a hole, drilled by a predator. The authors mentioned three more specimens which must be considered paratypes (USNM no. 335304 and 190415).

Type locality. — "Albatross Station 3889 off the north coast of Molokai Island near Makapu Islet", Hawaiian Islands. The paratypes are from Pailolo Channel in 127 fms, and off the south coast of Oahu Island in 211-53 fms.

Remarks. — *Conus eugrammatus* is considered a valid species. In Japanese literature it is sometimes misidentified as "*C. praecellens* A. Adams" (non Adams, 1854). The shell of *C. eugrammatus* resembles those of some species from Japan and the Western Pacific.

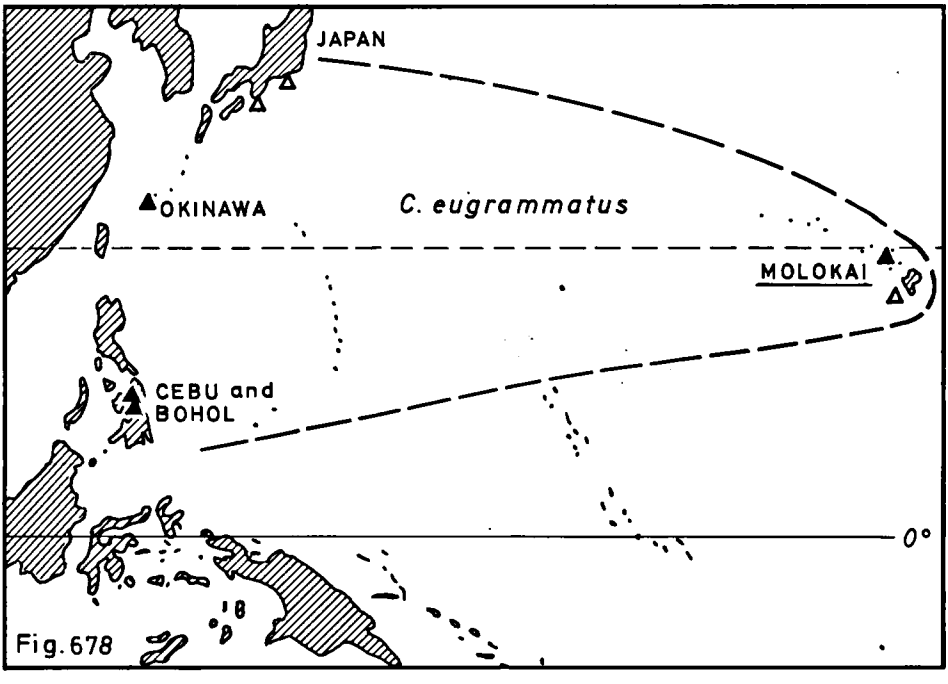

Fig. 678. Distribution of *Conus eugrammatus*.

In particular the relation to *C. wakayamaensis* Kuroda, 1956, and *C. nereis* Petuch, 1979, needs to be studied.

Distribution. — *C. eugrammatus* is a bathyal species (50-500 m) from off the Hawaiian Islands. In the Western Pacific it is reported from S. Japan, the Riukiu Archipelago, Taiwan and the Philippines (fig. 678).

Material studied. — The holotype; we are grateful to Ms. Diane Bohmhauer for the loan of the specimen. ZMA has specimens from Japan (Okinawa), the South China Sea, and the Philippines (Cebu-Bohol area, in 150-300 m, leg. R. & S. Martin, figs. 750-751).

eumitus
figs. 411, 748

Conus eumitus Tomlin, 1926, Ann. Natal Mus. 5: 288-289, pl. 16 fig. 3

Type material. — Tomlin described and figured one specimen of 53 × 27 mm, and he mentioned a smaller but characteristic specimen from Umtwalumi. The first shell is present in BMNH (no. 1926.12.6.4) and herewith designated lectotype of *Conus eumitus* (fig. 748); the measurements are 53.0 × 28.2 mm.

Kilburn (1972: 4) reported: "in the Natal Museum are two worn paratypes, being two of the original shells collected at Scottburgh and Umtwalumi by Chas. Alexander and Mrs. Ballendon during the 1920's". If one of these is the specimen from Umtwalumi, referred to by Tomlin, it is the paralectotype. The other shell was not mentioned in the original publication, and is excluded from the type material.

Type locality. — "Scottburgh (C.W. Alexander)". The paralectotype is from "Umtwalumi (Mrs. Ballendon)". Both localities are south of Durban, Natal, S. Africa.

Remarks. — Tomlin stated that *C. eumitus* is "certainly a Textile Cone". The shell has a very fine pattern of wavy axial lines, after which the species was named ("eumitus" = having fine threads). This design is known to occur occasionally in tent-cones (see the introduction). Kilburn & Rippey (1982: 121) remarked that *C. textile* Linné is rare in South Africa, and represented chiefly by the dark, finely patterned forma *archiepiscopus* Hwass, which integrades to *eumitus*.

C. textile forma *cholmondeleyi* Melvill, 1900, shows a similar pattern (fig. 410), and occurs on the East African coast. Therefore *C. eumitus* may be considered a junior synonym of *C. cholmondeleyi* (vide Basteria 47: 116-117).

In the literature this forma is reported from South Africa (Natal), Mozambique, Tanzania and Kenya.

Material studied. — The type specimens of *C. cholmondeleyi* and *C. eumitus*; we are grateful to Ms. K.M. Way for a photograph of the latter. ZMA has a specimen from Zanzibar.

We express our thanks to Dr. A.C. van Bruggen for a copy of the original publication.

euschemon
fig. 727

Conus euschemon Tomlin, 1937, Proc. Malac. Soc. Lond. 22: 206, 255

Type material. — Being a new name for *Conus gracilis* Wood, 1828 (non Sowerby I, 1823), the holotype of the latter automatically becomes the type specimen of *C.*

euschemon. The specimen was originally in the cabinet of Mrs. Mawe; the present whereabouts of this shell are unknown. The type figure is reproduced here (fig. 727). The original figure in Wood (1828, suppl.: pl. 3 fig. 3) measures only 13 mm, but the indication "a+" means that the shell is 1½ inch long (about 38 mm).

Type locality. — "Timor", Indonesia.

Remarks. — Wood (1828, suppl.: 8) did not give a description of *C. gracilis* (= *euschemon*), he only wrote that the shell is slender. The ground colour is white with irregular reddish maculations, and interrupted spiral lines on the body whorl.

From the type figure and locality *C. euschemon* is generally considered to be conspecific with, and thus a junior synonym of, *C. timorensis* Hwass, 1792.

evelynae
fig. 752

Conus evelynae Sowerby III, 1882, Proc. zool. Soc. Lond. 1882: 117-118, pl. 5 fig. 2

Type material. — The holotype (fig. 752) is present in NMWC (no. 1955.158.34, ex coll. Melvill and Tomlin); the measurements are 26.1 × 13.6 mm (Sowerby: 28 × 14 mm).

Type locality. — Not given.

Remarks. — In the Thesaurus Conchyliorum vol. 5 (1887: 267, pl. 34 fig. 729) Sowerby misspelt the name as "evelinae"; the species was named after Evelyn Melvill. In the literature *Conus evelynae* is doubtfully considered a junior synonym of *C. gladiator* Broderip, 1833.

We have compared the holotype to specimens of *C. gladiator* from the eastern Pacific, and concluded that these are conspecific. Thus *C. evelynae* is a junior synonym of *C. gladiator*.

Thanks are due to Ms. Alison Trew for the loan of the type specimen.

exaratus
figs. 428, 754-755

Conus exaratus Reeve, 1843, Proc. zool. Soc. Lond. 1843: 176; 1844, Conch. Icon. 1, Conus: pl. 44 spec. 238

Type material. — The holotype is in BMNH (no. 1982228); the measurements are 21.1 × 9.2 mm (fig. 754).

Type locality. — Unknown.

Remarks. Emerson & Old (1962: 36, fig. 20) considered *Conus exaratus* the juvenile form of *C. ximenes* Gray, having incised lines on the body whorl. This opinion was accepted by later authors. We do not agree with their conclusion, because the spire whorls of *C. exaratus* have grooves, which is not the case in *C. ximenes*.

The present authors have identified *C. exaratus* as a juvenile of *C. cinereus* Hwass (vide Basteria 47: 122); the body whorl of the latter is partly grooved in juveniles and subadults (fig. 755). A completely grooved body whorl, as in the type specimen of *C. exaratus*, is exceptional. The type figure of *C. caerulescens* Lamarck (fig. 428), which is considered a junior synonym of *C. cinereus*, also suggests a grooved shell like the holotype of *C. exaratus*.

Material studied. — The holotype; we are grateful to Ms. K.M. Way for a photograph of this shell. The general collection of BMNH contains another specimen of *C. exaratus* (ex coll. Cuming). ZMA has partly grooved shells of *C. cinereus* from Indonesia.

excavatus
fig. 738

Conus excavatus Sowerby II, 1866, Thes. Conch. 3 (Suppl.): 326 no. 411, pl. 25 fig. 616

Type material. — The holotype is in BMNH (no. 1879.2.26.7), ex coll. Taylor; the dimensions are 41 × 24 mm (fig. 738).

Type locality. — Unknown.

Remarks. — Sowerby compared *Conus excavatus* to "*C. coffeae*", from which it was considered to be distinct in a "more compact, neat, and regular appearance in texture, colour and markings", next to "a round excavation on the top of the whorls". However, *C. coffeae* in Sowerby is identified as *C. fumigatus* Hwass, and not *C. coffeae* Gmelin (vide Basteria 47: fig. 34; 48: 244; Coomans & De Visser, in press).

Walls (1979: 296, 454) considered *C. fumigatus* and *C. excavatus* distinct species from the Red Sea area, of which the latter is thinner and larger with a plainer pattern. According to other authors these two nominal species are conspecific.

From material studied we conclude that *C. fumigatus* has three colour formae in the southern Red Sea. (1) The nominate form has a dark brown shell with white bands at the shoulder and on the middle of the body whorl. (2) Forma *excavatus* is brownish yellow with some spirally dotted lines in the white bands, and below the centre band. (3) In forma *blainvillei* Kiener (figs. 234-235), synonym *pazii* Bernardi, 1857, the body whorl has brown punctated spiral lines.

Our thanks are due to Ms. K.M. Way for a photograph of the holotype.

excelsus
figs. 679, 753

Conus excelsus Sowerby III, 1908, Ann. Mag. nat. Hist. (8) 1: 465-466, ill.

Type material. — The holotype (fig. 753) is in BMNH (no. 1908.5.30.1); the measurements are 88.7 × 32.5 mm (Sowerby: 93 × 33 mm).

Type locality. — "New Caledonia?" Sowerby added: "The shell came to me from New Caledonia; but I have at present no certain information as to its habitat".

Remarks. — *Conus excelsus* is a valid species with a characteristic biconical shell. A senior synonym is *C. pulcherrimus* Brazier, 1894 (non Heilprin, 1879, a fossil), of which *C. tannaensis* Cotton, 1945, is an objective junior synonym. The name is often misspelt as "*exelsus*".

Distribution. — *C. excelsus* is a rare species known from 100-300 m depth in the Western Pacific from S. Japan to Queensland (fig. 679). Recently it was reported from New Caledonia (Richter de Forges & Estival, 1986: 17). Mr. Roger Martin informed us (in litt.) that the species is found in the Philippines only off Balut Island. In the literature it is recorded from the Solomon Is. (100 fms. near Russel Group), and from Queensland (120 fms., Lady Elliot Id.). Dr. Ph. Bouchet informed us (in litt.) that he

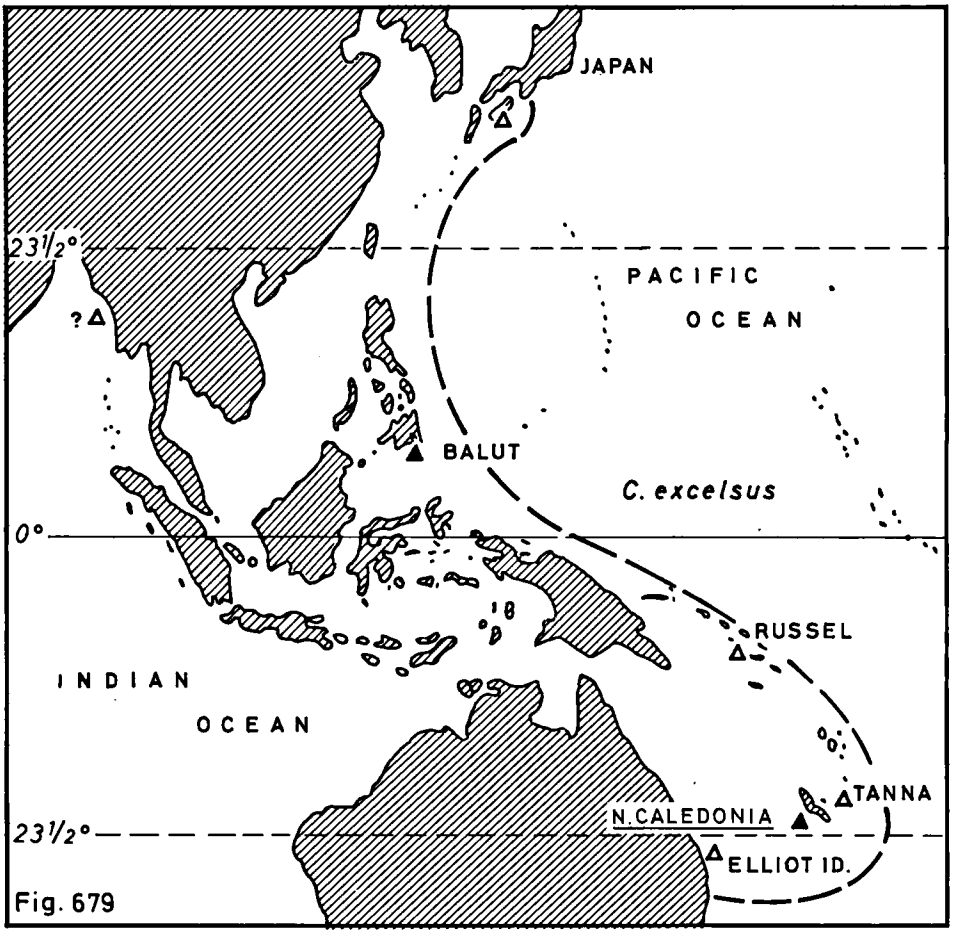

Fig. 679. Distribution of *Conus excelsus* (including *C. nakayasui* and *C. tannaensis*).

has dredged this species at Reunion, Indian Ocean. Records from the Bay of Bengal need confirmation.

The type locality of *C. tannaensis* is Tanna Id., New Hebrides. Another synonym, *Turriconus nakayasui* Shikama & Habe, 1968, was described from Kashiwajima Id., Shikoku, Japan.

Material studied. — The holotype; thanks are due to Ms. K.M. Way for a photograph of this shell. Specimens from Balut Island in IRScNB, and in the collections of J. Elsen, Dr. P. Gillis, and R. & S. Martin.

exdeshayesi

Chelyconus exdeshayesi Sacco, 1893, Memorie Accad. Sci. Torino (2) 44 (13): 73

Remarks. — *Conus exdeshayesi* (Sacco) is a new name for *C. deshayesii* Reeve, 1843 (non Bellardi & Michelotti, 1840, a fossil). An earlier nomen novum is *C. cuvieri* Crosse, 1858 (vide Basteria 48: 285-286; 49: 165).

exiguus
figs. 288, 312-313, 680, 756-757

Conus exiguus Lamarck, 1810, Annls Mus. Hist. nat. Paris 15: 39, no. 43

Type material. — The holotype is present in MHNG (no. 1105/20, ex coll. Lamarck); the dimensions are 18½ × 10 mm (fig. 756). The specimen is also figured by Kiener (1845: pl. 11 fig. 1).

Type locality. — "les mers de l'Asie" (the seas of Asia), restricted herewith to New Caledonia (fig. 757).

Remarks. — *Conus exiguus* is considered a valid species, of which *C. cabritii* Bernardi is a junior synonym (vide Basteria 47: 68, figs. 312-313). A colour form with a flake pattern is known as forma *bougei* Sowerby (vide Basteria 46: 36-37, fig. 287). *C. exiguus* forma *plumbeus* Reeve has a granulated shell.

Distribution. — According to Estival (1981: 58, 124) *C. exiguus* is endemic to New Caledonia and the Loyalty Islands (fig. 680).

Material studied. — The type specimen; we are grateful to Dr. C. Vaucher for a photograph of this shell. ZMA has specimens from New Caledonia (Prony, in 15 m; Goro, in 0.5 m).

eximius
figs. 680, 758-759

Conus eximius Reeve, 1849, Conch. Icon. 1, Conus (suppl.): pl. 6 spec. 256

Type material. — The holotype is present in BMNH, ex coll. Cuming; the measurements are 27.3 × 14.9 mm (fig. 758).

Type locality. — "Moluccas", Indonesia.

Remarks. — The holotype is a rather small and worn specimen. The shell is white, the body whorl has two broad bands with irregular yellowish-brown blotches. Tucker (1978) placed *Conus eximius* in the synonym of *C. malacanus* Hwass (fig. 324), but most authors recognize these as two distinct species. The differences were discussed by Roeckel (1980). We consider *C. eximius* a valid species (fig. 759).

Distribution. — Southeast Asia from the Bay of Bengal via Indonesia and the Philippines to the East China Sea (fig. 680). It is mentioned from SW. Taiwan by Clover (1969), and from Papua-New Guinea by Hinton (1977: pl. 61 fig. 14). Except for the holotype, no specimens are known to us from the Moluccas.

Material studied. — The holotype; Ms. K.M. Way kindly supplied a photograph of this shell. ZMA has specimens from India (Madras), the Andaman Sea (W. Thailand in 45 fms.), Indonesia (Java, Djakarta Bay), the South China Sea (East coast of Malaya in 15 m), and the Philippines (Sulu Sea, dredged by R. Martin). In RMNH from Thailand (Phuket); in ZMUC from the Java Sea (6° S, 106° E in 25 m).

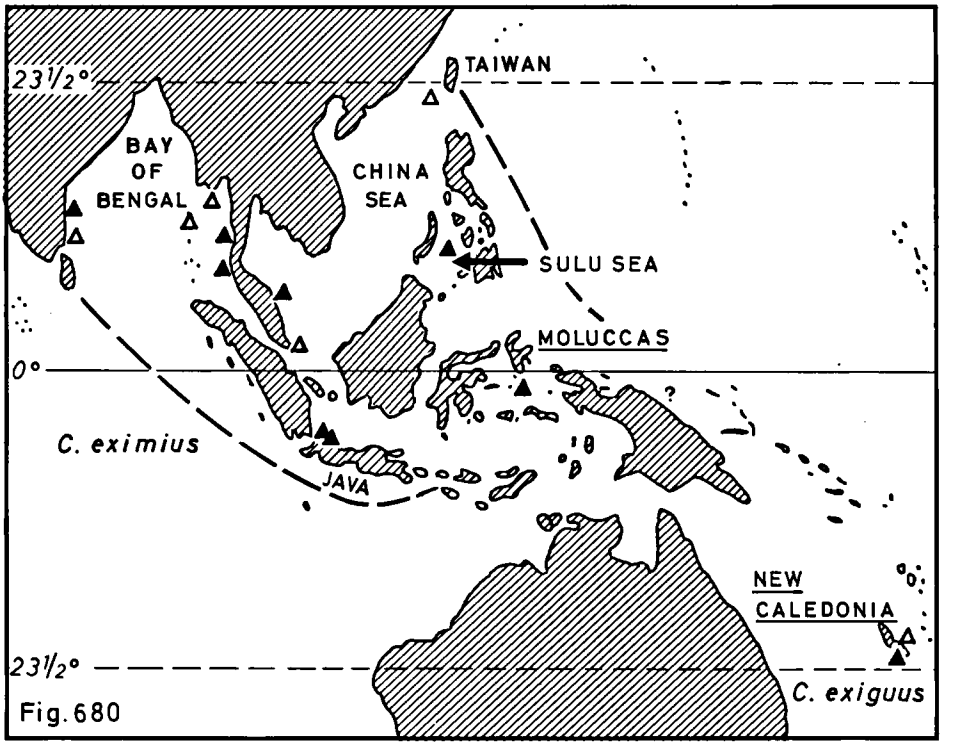

Fig. 680. Distribution of *Conus exiguus* and *C. eximius*.

exquisitus
fig. 715

Conus exquisitus Sowerby III, 1887, Thes. Conch. 5, Conus Suppl.: 274-275, pl. 36 fig. 757

Type material. — The holotype (fig. 715) is present in BMNH (no. 1887.8.23.2); the measurements are 20.5 × 11.1 mm (Sowerby: 24 × 12 mm).

Type locality. — Doubtfully mentioned as California, because Sowerby wrote: "The specimen fell from the mouth of a *Fusus dupetitthouarsi* from California, but as there were shells from other localities with it, its habitat cannot with certainty be stated".

Remarks. — The type specimen has a coronated shoulder, without grooves on the spire whorls, the nucleus is worn; shell white with orange-brown zigzag markings on the body whorl, apex and inside of aperture pink.

Walls (1979: 751) placed *Conus exquisitus* with a question mark under *C. musicus* Hwass; however, the latter is not coronated. Wagner & Abbott (1978: 25-017) mentioned "New Caledonia?" as locality.

We have examined the holotype (fig. 715). Except for the zigzag pattern *C. exquisitus* is identical to the type figure of *C. ornatus* Sowerby, 1833 (fig. 716); thus it is considered

a junior synonym of the latter name. *C. ornatus* is placed in the species-complex of *C. cardinalis* (vide Basteria 47: 89-90); this complex was discussed by Vink (1984: cf. his fig. 3c s.n. *C. magellanicus*).

We are grateful to Ms. K.M. Way for the loan of the type specimen.

extraordinarius
fig. 760

Conus ammiralis extraordinarius Hwass in Bruguière, 1792, Encycl. Méth. 1: 659, no. 57, var. C

Type material — The Hwass collection contained one specimen, which is figured in the Tableau Encyclopédique (vol. 23: pl. 328 fig. 9). In addition, the author referred to figured specimens in the literature. Walls (1979: 86) has designated the illustration in the Tableau as lectotype for *Conus ammiralis extraordinarius*; the shell is not present in MHNG (Kohn, 1968: 438). The type figure is reproduced here (fig. 760); the dimensions are 51 × 25 mm.

Type locality. — Not given; Bruguière (1792: 662) mentioned Ceylon and some localities in Indonesia for all the varieties of *C. ammiralis*.

Remarks. — *C. ammiralis* Linné shows variation in the number and width of the golden bands on the body whorl. The "subspecies" *extraordinarius* has four bands, of which the second from above is narrow. We agree with Kohn (1968: 438-439) that it is only a colour form of *C. ammiralis*.

See also *C. equestris* (2) in this publication.

SUMMARY

Based on the type material and the original descriptions, on the *Conus* collection of the Zoological Museum Amsterdam and other museums and private collections, the (sub)specific names in the recent Conidae are revised. Illustrations and distribution maps are supplied. In the ninth part the following *Conus* names are discussed:

ebraeus Linné, — valid species - tropical Indo-Pacific to central America.
eburneus Hwass — valid species - eastern Indian Ocean, western and central Pacific.
eburneus (Röd). — junior secondary homonym; junior objective synonym of *C. ochroleucus* Gmelin.
echinophilus (Petuch) — juvenile of *C. adansonii* Lam. - Senegal.
echinulatus Kien. — junior synonym of *C. jaspideus* forma *verrucosus* Hwass.
edaphus Dall — junior synonym of *C. tessulatus* Born.
(*edentulus* Reeve) — is *Mitra* (*Diabaphus*) *edentula* Swainson, fam. Mitridae.
edwardi Preston — junior synonym of *C. zonatus* Hwass.
egregius Sow. — juvenile of *C. quercinus* Solander.
elatensis Wils et al. — lectotype designated; junior synonym of *C. nigropunctatus* Sow.
eldredi Morrison — nomen novum for *C. geographus rosea* Sowerby; valid species - islands of the central Pacific.
elegans Sow. — valid species - Persian Gulf and Gulf of Oman to Karachi (Pakistan).
elegans ramalhoi new subspecies — Mozambique; type locality Angoche.
elegans Schepman — lectotype designated; junior homonym; renamed *C. schepmani* Fulton.
elevata Wils et al. — form of *C. thalassiarchus* Sow. - southern Philippines.
elisae Kiener — lectotype designated; colour form of *C. praelatus* Hwass - East Africa; Zanzibar designated type locality.
elokismenos Kilburn — new name for *C. aratus* Kilburn; subspecies of *C. orbignyi* Audouin - S.E. Africa and Madagascar.
elongatus Holten — lectotype designated; objective junior synonym of *C. guineensis* Gmel.
elongatus in Dillwyn — junior homonym and junior synonym.
elongatus Reeve — junior homonym; renamed *C. oblitus* Reeve and *C. moreleti* Crosse.
elongatus B.D.D. — lectotype designated; junior homonym; a form of *C. mediterraneus* Hwass.
elongatus Adam & Leloup in Dautzenberg - nomen nudum; renamed *C. episcopatus puppillaris* Da Motta.
elpus De Gregorio — junior synonym of *C. mediterraneus* Hwass.
elventinus Duclos — lectotype designated; junior synonym of *C. mindanus* Hwass.
emaciatus Reeve — lectotype designated; valid species - Red Sea to western Pacific.
emarginatus Reeve — new name for *C. arcuatus* Gray; valid species - E. Pacific from Mexico to Colombia; the type locality is Mazatlan, not Cape San Lucas.
embrikena in Marsh — nomen nudum.
emersoni Hanna — tentatively considered a valid species; fossil? - Baja California.
emisus De Gregorio — lectotype designated; junior synonym of *C. mediterraneus* Hwass.
empismus De Gregorio — perhaps not a valid name; junior synonym of *C. mediterraneus* Hwass.
encaustus Kien. — subspecies of *C. miliaris* Hwass — endemic on Marquesas Islands, which are designated type locality.
endorus De Gregorio — junior synonym of *C. mediterraneus* Hwass.
epaphus Nardo — junior synonym of *C. mediterraneus* Hwass.
(*epaticus* Renier) — rejected and invalid name.
episcopatus Da Motta — colour form of *C. magnificus* Reeve.
episcopus Hwass — subspecies of *C. pennaceus* Born - type locality restricted to Mauritius.
epistomioides Weinkauff — lectotype designated; junior synonym of *C. magus* Linné.
epistomium Reeve — lectotype designated; junior synonym of *C. magus* Linné.
eques Hwass — nomen dubium.
equestris (Röd.) — colour form of *C. bandanus* Hwass — Moluccas.
equestris (Röd). — junior homonym; colour form of *C. ammiralis* Linné.

ermineus Born — valid species - West Indies from Florida to N. Brasil; West Africa from Canary Islands to Angola.
(*errosus* Renier) — rejected and invalid name.
errosus in Nardo — nomen nudum.
erythraeensis Reeve — lectotype designated; valid species - S. Red Sea and Gulf of Aden.
erythraeozonatus Barros e Cunha — lectotype designated; junior synonym of *C. flavidus* Lam.
espinosai Sarasua — a form of *C. granulatus* Linné.
eucoronatus Sow. — lectotype designated; valid species - S. Africa and Mozambique.
eudoxus Tryon — holotype traced; junior synonym of *C. marchionatus* Hinds.
euetrios Sow. — colour form of *C. textile* Linné.
eugrammatus Bartsch & Rehd. — valid species - Hawaii, S. Japan to Philippines.
eumitus Tomlin — lectotype designated; junior synonym of *C. cholmondeleyi* Melvill — Kenya to Natal.
euschemon Tomlin — new name for *C. gracilis* Wood; junior synonym of *C. timorensis* Hwass.
evelynae Sow. — junior synonym of *C. gladiator* Brod.
exaratus Reeve — type is juvenile shell; junior synonym of *C. cinereus* Hwass.
excavatus Sow. — a colour form of *C. fumigatus* Hwass.
excelsus Sow. — valid species - S. Japan to Queensland, and New Caledonia.
exdeshayesi (Sacco) — new name for *C. deshayesii* Reeve; junior secondary synonym of *C. cuvieri* Crosse.
exiguus Lam. — valid species — type locality restricted to New Caledonia.
eximius Reeve — valid species - Bay of Bengal to East China Sea.
exquisitus Sow. — junior synonym of *C. ornatus* Sow., which belongs to the *C. cardinalis* complex.
extraordinarius Hwass — colour form of *C. ammiralis* Linné.

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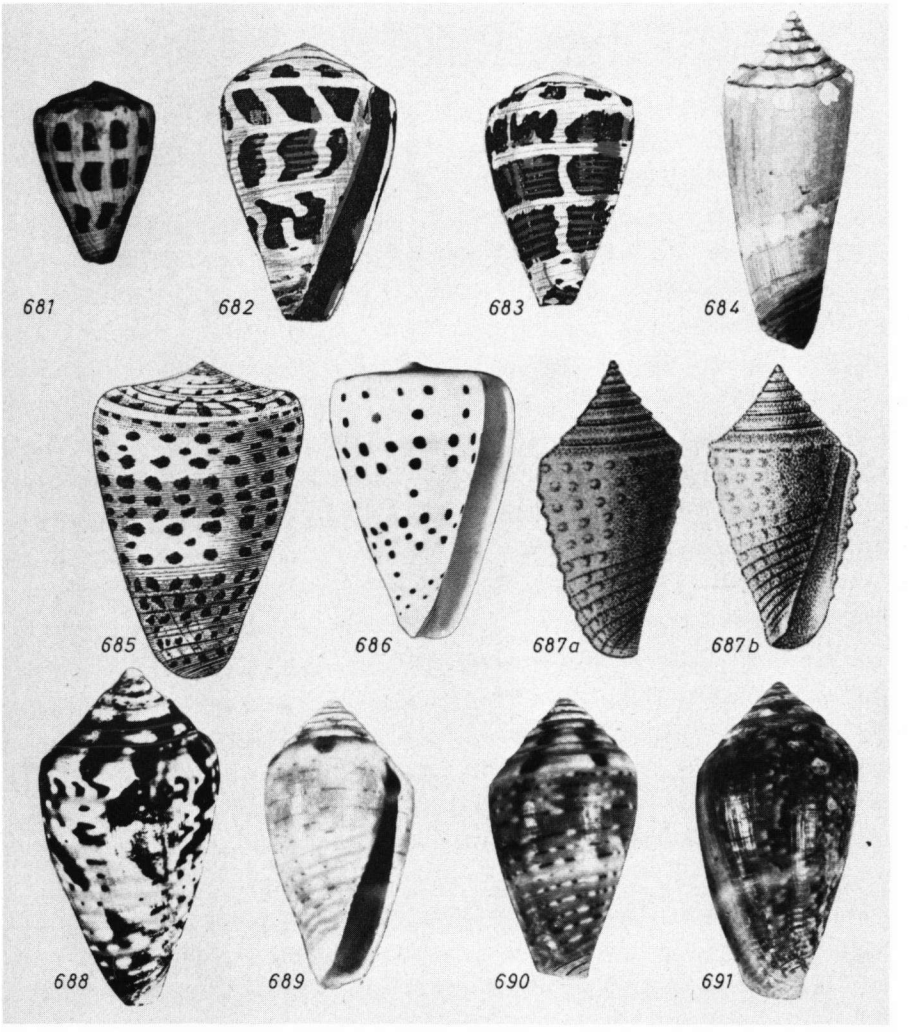


Figs. 681-683. *Conus ebreaus* L. 681. Lectotype (Linnean Soc.), India, length 28 mm (photo A.J. Kohn). 682. Japan, Tanegashima Id., length 30.1 mm. 683. Tanzania, Dar es Salam, length 26.0 mm.
Fig. 684. *C. ochroleucus* Gmel. Lectotype figure of *C. eburneus* (Röd.), length 58 mm (after Martini).
Figs. 685-686. *C. eburneus* Hwass. 685. Lectotype figure, Indian Ocean, length 46 mm (after Hwass). 686. Philippines, Sulu, length 42.7 mm.
Fig. 687. *C. jaspideus* fa. *verrucosus* Hwass, type figure of *C. echinulatus* Kien., length 15 mm (after Kiener).
Figs. 688-690. *C. echinophilus* (Petuch), Senegal, N'Gor. 688. Type figure of *Africonus echinophilus*, length 11 mm (after Petuch). 689. Paratype, length 10.7 mm (CAS). 690. Paratype, length 10.7 mm (ANSP).
Fig. 691. *C. adansonii* Lam., Senegal, Pt. Almadies, length 25.7 mm.

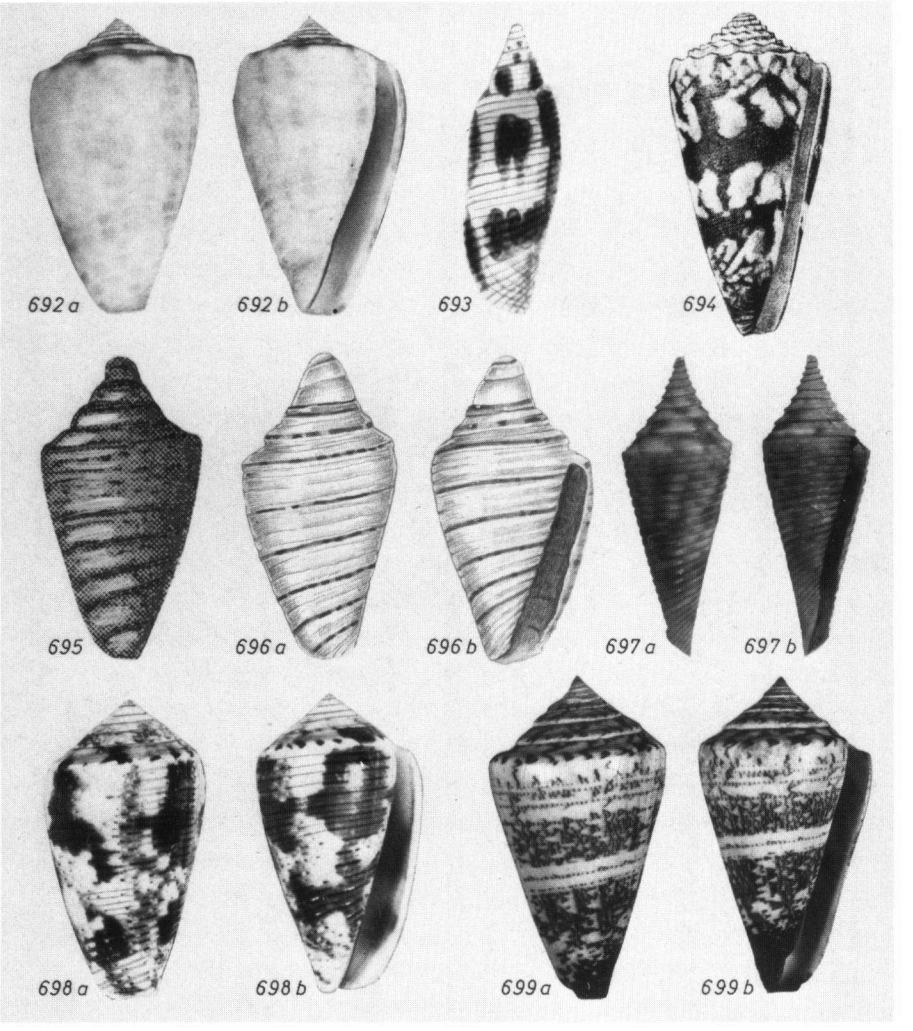


Fig. 692. *Conus tessulatus* Born, holotype of *C. edaphus* Dall, off Clarion Id., W. Mexico, length 24.6 mm (USNM).

Fig. 693. *Mitra edentula* Swainson, type figure of *C. edentulus* Rve, length 33 mm (after Reeve).

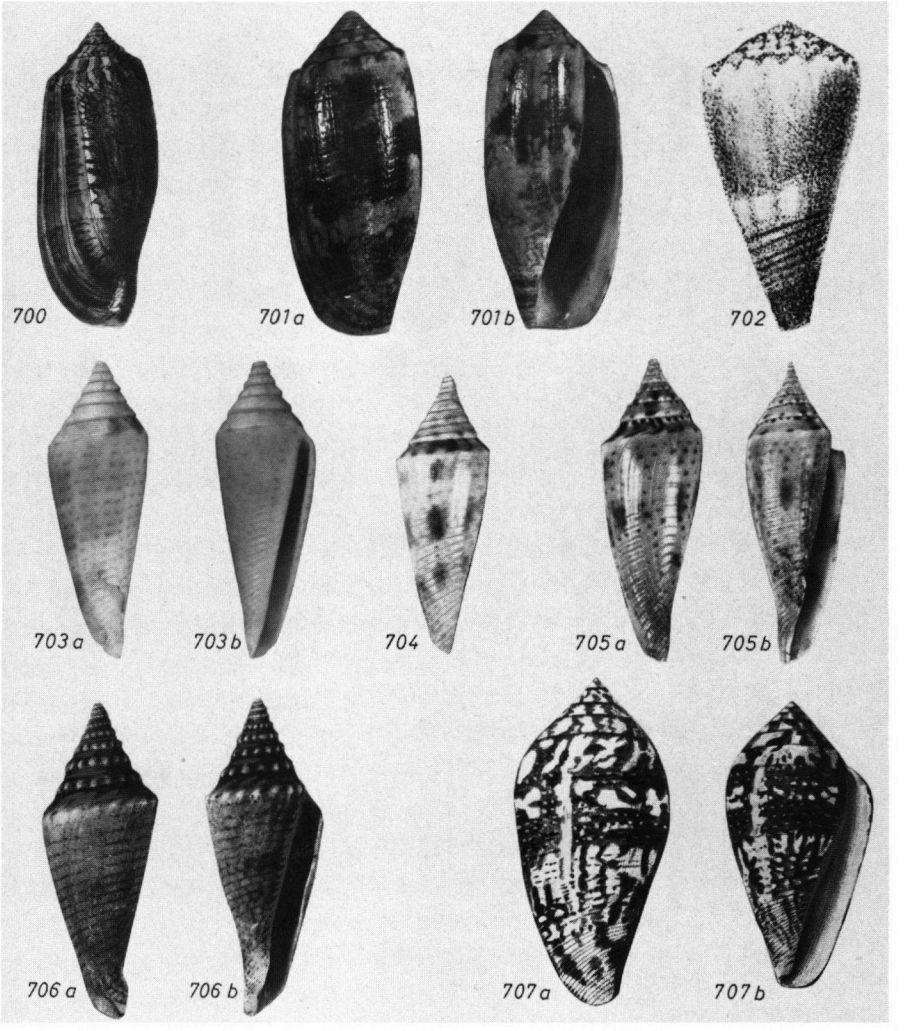
Fig. 694. *C. zonatus* Hwass, type figure of *C. edwardi* Prest., Andaman Is, length 58 mm (after Preston).

Figs. 695-696. *C. quercinus* Sol., juvenile, holotype of *C. egregius* Sow., New Caledonia, length 3.5 mm. 695. Type figure (after Sowerby). 696. Drawing of holotype.

Fig. 697. *C. schepmani* Fulton, lectotype of *C. elegans* Schepman, Bougainville-strait, length 21.0 mm.

Fig. 698. *C. nigropunctatus* Sow., lectotype of *C. nigropunctatus elatensis* Wils, Gulf of Aqaba, length 28.1 mm.

Fig. 699. *C. thalassiarchus* fa. *elevata*, original specimen described as var. *elevata* Wils, Cebu-Negros, length 60.4 mm.



Figs. 700-701. *Conus eldredi* Morrison, Annaa Id. 700. Type figure of *C. geographus* var. *rosea* Sow., length 53 mm (after Sowerby). 701. Length 48.6 mm.

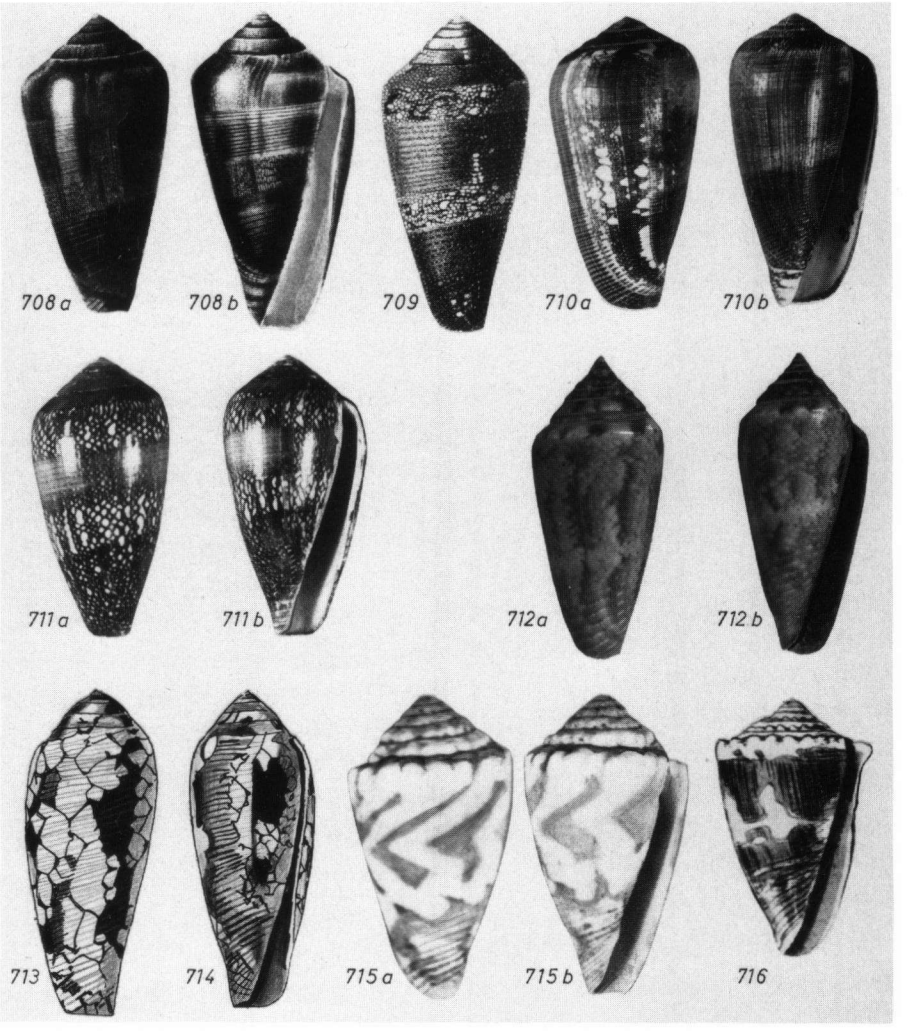
Fig. 702. *C. moreleti* Crosse, type figure of *C. elongatus* Rve and of *C. oblitus* Rve, length 26 mm (after Reeve).

Figs. 703-704. *C. elegans* Sow. 703. Holotype, Persian Gulf, length 31.9 mm (photo BMNH). 704. Oman, Sib, length 24.2 mm.

Fig. 705. *C. elegans ramalhoi* subspec. nov., holotype, Mozambique, Angoche, length 31.7 mm (NM).

Fig. 706. *C. orbignyi elokismenos* Kilburn, paratype, off Tongaat, Natal, length 58.3 mm.

Fig. 707. *C. guineensis* Hwass, lectotype figure of *C. elongatus* Holten, Guinea coast, length 64 mm (after Chemnitz).



Figs. 708-710. *Conus praelatus* fa. *elisae*. 708. Lectotype figure of *C. elisae* Kien., length 53 mm (after Kiener). 709. Figure of paralectotype, length 42 mm (after Kiener). 710. Zanzibar, length 51.8 mm (coll. Wils).

Fig. 711. *C. pennaceus* Born, colour forma, incorrectly considered as "*C. elisae*", Hawaii, Oahu, length 38.4 mm.

Fig. 712. *C. mediterraneus* fa. *elongatus* B.D.D., lectotype of var. *elongata* B.D.D., coast of Barbary, length 23.2 mm (IRScNB).

Figs. 713-714. *C.* cf. *magnificus* Rve, juveniles. Figured specimens of *C. episcopus* var. *elongata* Adam & Leloup, Amboyna, length resp. 44 and 42 mm (after Dautzenberg), renamed *C. episcopatus pupillaris* Da Motta.

Figs. 715-716. *C. ornatus* Sow. 715. Holotype of *C. exquisitus* Sow., "California"?, length 20.5 mm (BMNH). 716. Type figure of *C. ornatus* Sow., length 24 mm (after Sowerby).

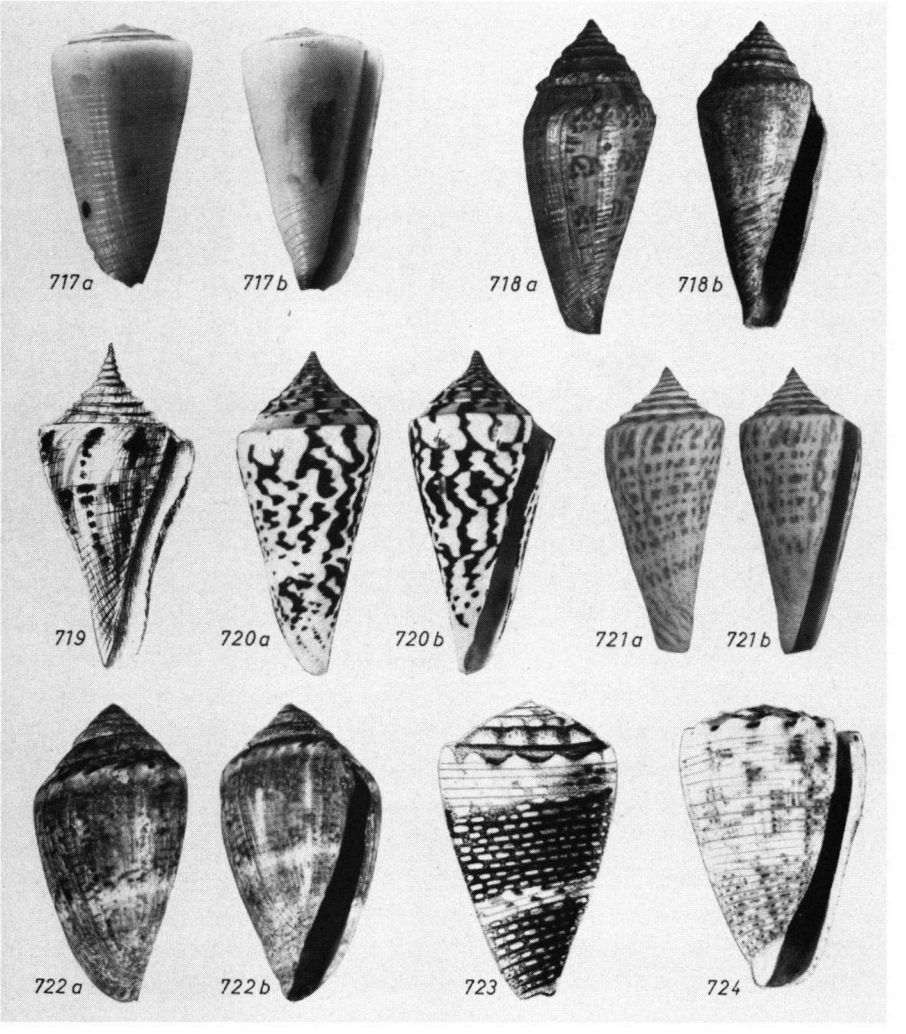
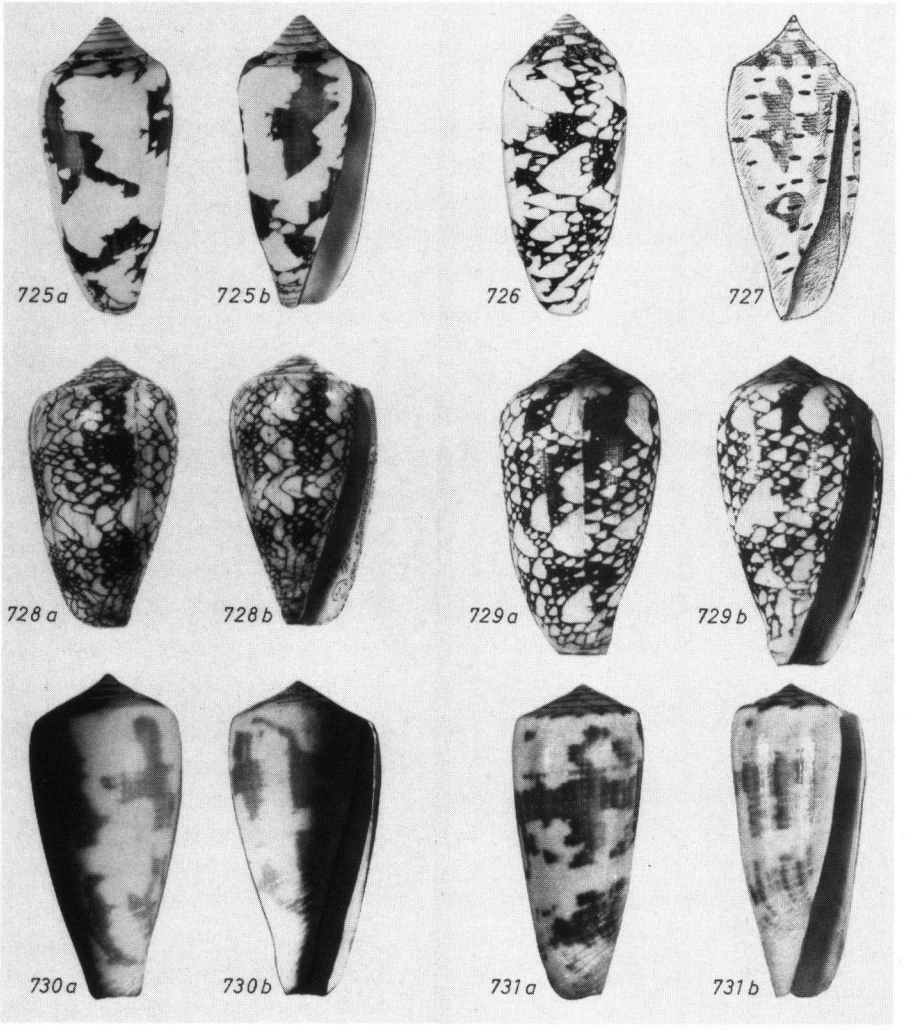


Fig. 717. *Conus emaciatus* Rve, lectotype, Philippines, length 37.9 mm (photo BMNH).
Fig. 718. *C. emersoni* Hanna, holotype, off Cape San Lucas, length 43.0 mm (AMNH).
Fig. 719. *C. arcuatus* Brod. & Sow., figure of possible syntype, Bay of Montija, length 43 mm (after Sowerby).
Fig. 720. *C. emarginatus* Rve, Panama, Chirique Gulf, length 66.1 mm.
Fig. 721. *C. regularis* Sow., holotype of *C. recurvus* Brod., Monte Cristi, length 53 mm (photo BMNH).
Fig. 722. *C. mediterraneus* Hwass, lectotype of *C. m. emisus* De Gregorio, Sicily, length 32.4 mm (ZMB).
Figs. 723-724. *C. miliaris encaustus*. 723. Type figure of *C. encaustus* Kien., length 26 mm (after Kiener). 724. Marquesas Is, length 30.3 mm.



Figs. 725-726. *Conus magnificus* Rve forma *episcopatus*. 725. Holotype of *C. episcopatus* Da Motta, Seychelles, Mahe Id, length 81.6 mm (MHNG). 726. Bismarck Arch., Manus Id, length 68.9 mm.

Fig. 727. *C. timorensis* Hwass, type figure of *C. gracilis* Wood = *C. euschemon* Tomlin, Timor, length about 38 mm (after Wood).

Figs. 728-729. *C. pennaceus episcopus*. 728. Lectotype of *C. episcopus* Hwass, Indian Ocean, length 58 mm (MHNG, photo Dajoz). 729. Mauritius, length 56.3 mm.

Figs. 730-731. *C. magus* L. 730. Lectotype of *C. epistomioides* Weink., ? East Africa, length 32 mm (Loebbecke Mus., photo D. Röckel). 731. Lectotype of *C. epistomium* Rve, "Mauritius", length 48.2 mm (BMNH).

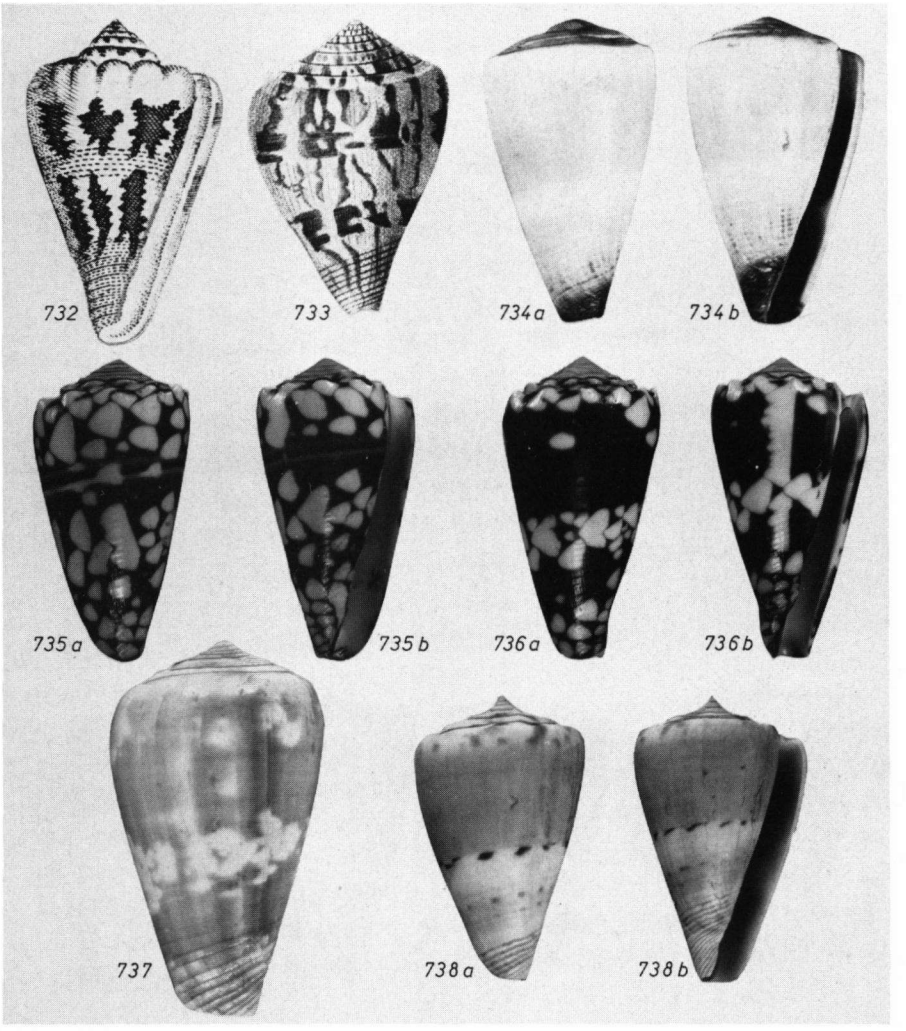


Fig. 732. *Conus eques* Hwass, syntype figure, "New Zealand", length 30½ mm (after Favanne).
Fig. 733. ? *Parametaria dupontii* (Kien.), fam. Columbellidae, figure of *C. eques* Hwass in Kiener, length 33 mm (after Kiener).
Fig. 734. *C. flavidus* Lam., lectotype of *C. erythraeozonatus* Barros e Cunha, length 32.7 mm (dept. Zool. Univ. Coimbra).
Figs. 735-736. *C. bandanus* fa. *equestris*. 735. Lectotype of *C. equestris* (Röd.) and of *C. torquatus* (Röd.), East Indian Seas, length 47.6 mm (ZMUC). 736. Moluccas, 56.4 mm.
Fig. 737. *C. ermineus* Born, lectotype, length 37 mm (photo NMW).
Fig. 738. *C. fumigatus* fa. *excavatus*, holotype of *C. excavatus* Sow., length 41 mm (photo BMNH).

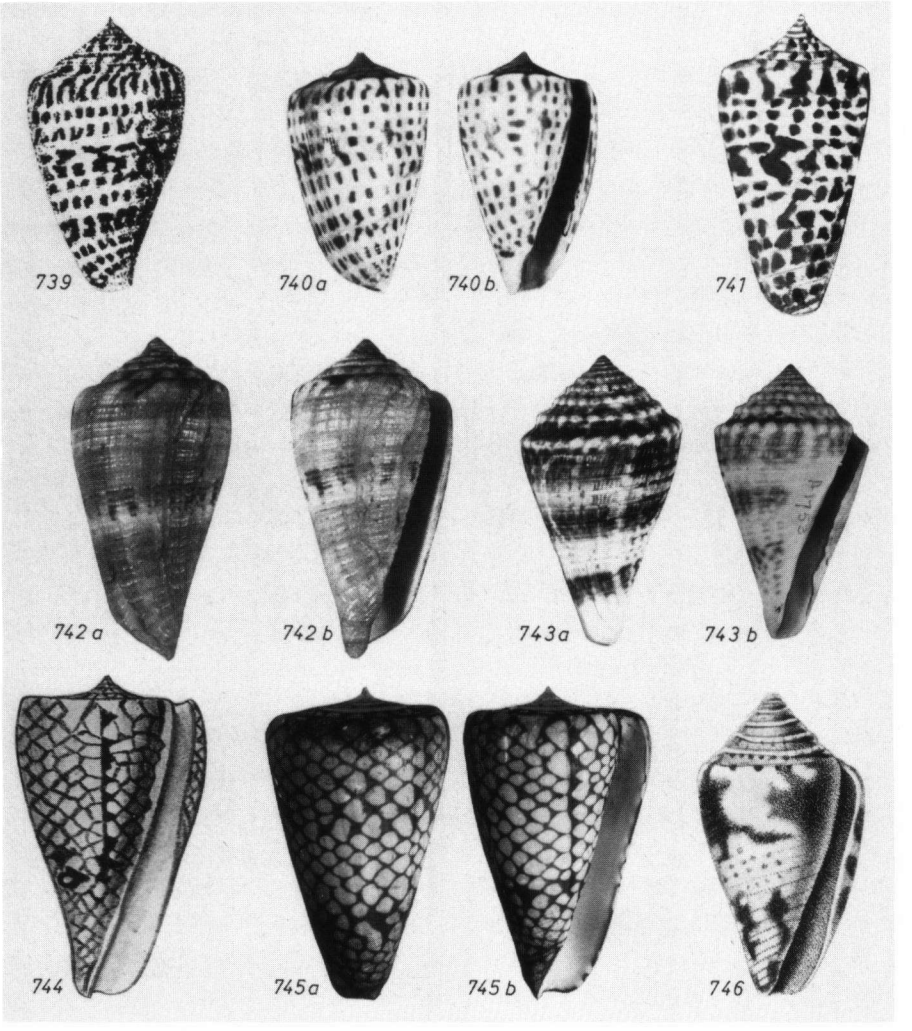


Fig. 739-740. *Conus erythraeensis* Rve. 739. Syntype figure, length 28 mm (after Reeve). 740. lectotype, length 24.3 mm (ZMUC).

Fig. 741. *C. induratus* Rve, lectotype figure of *C. quadratus* (Röd.), Red Sea, length 26 ("39") mm (after Chemnitz).

Fig. 742. *C. granulatus* L., intermediate to forma *espinosai* Sarasua, Antigua, length 38.8 mm.

Fig. 743. *C. eucoronatus* Sow., lectotype, S. Africa, Cape St. Blaize, length 45.0 mm (SAMC),

Figs. 744-745. *C. marchionatus* Hinds. 744. Type figure of *C. eudoxus* Tryon, length 64 mm (after Tryon). 745. Holotype of *C. eudoxus*, length 60.7 mm (NMWC).

Fig. 746. *C. mindanus* Hwass, lectotype figure of *C. elventinus* Ducl., length 32 mm (after Duclos).

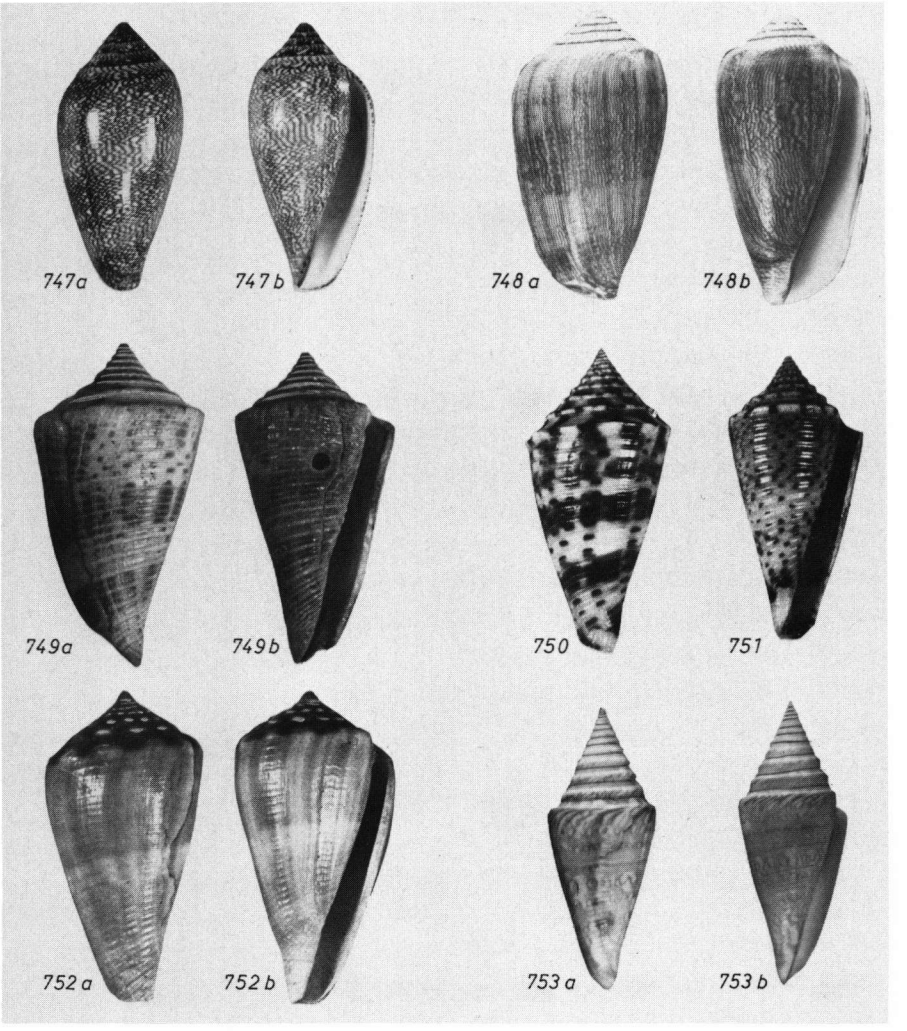
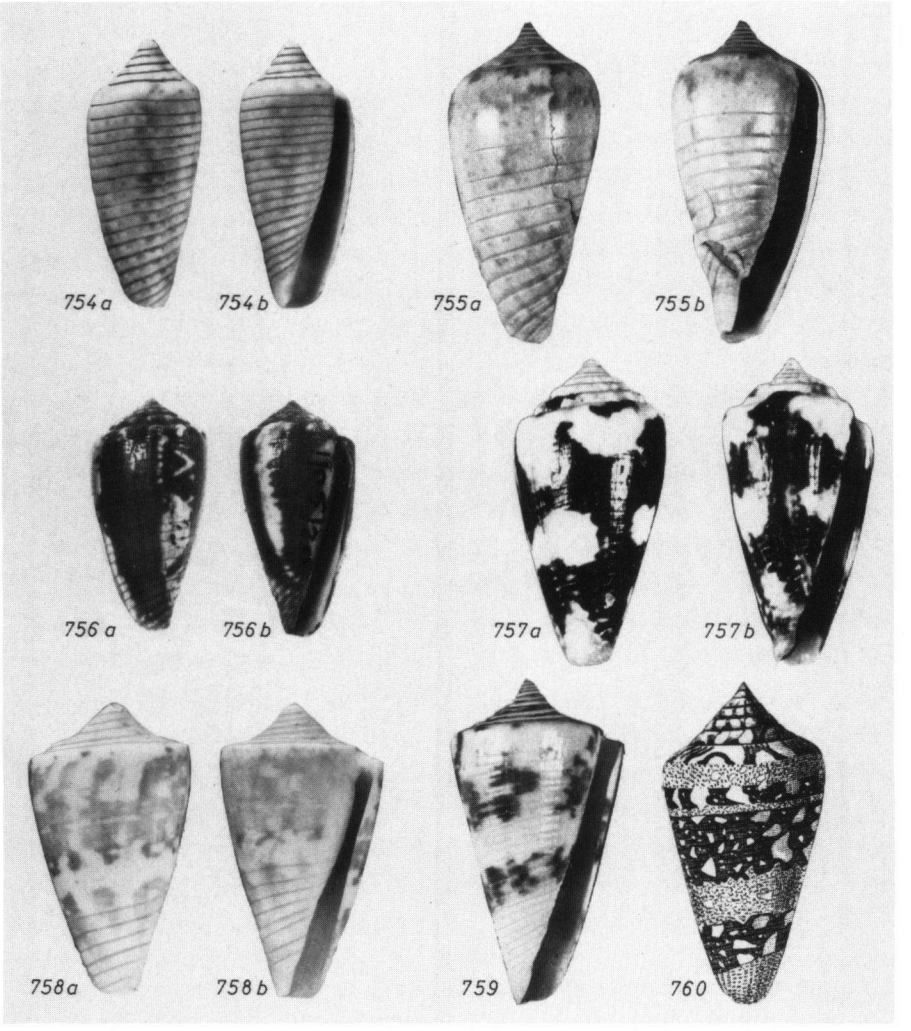


Fig. 747. *Conus textile* fa. *euetrios* Sow., holotype, length 49.4 mm (NMWC).
Fig. 748. *C. textile* fa. *cholmondeleyi* Melv., lectotype of *C. eumitus* Toml., S. Africa, Scottburgh, length 53.0 mm (photo BMNH).
Figs. 749-751. *C. eugrammatus* Bartsch & Rehd. 749. Holotype, Hawaii Is, Molokai, length 30.0 mm (USNM). 750-751. Philippines, Cebu-Bohol, length resp. 30.3 and 26.1 mm.
Fig. 752. *C. gladiator* Brod., holotype of *C. evelynae* Sow., length 26.1 mm (NMWC).
Fig. 753. *C. excelsus* Sow., holotype, New Caledonia, length 88.7 mm (photo BMNH).



Figs. 754-755. *Conus cinereus* Hwass. 754. Holotype of *C. exaratus* Rve, length 21.2 mm (photo BMNH). 755. Subadult, Indonesia, length 31.2 mm.

Figs. 756-757. *C. exiguus* Lam. 756. Holotype, Seas of Asia, length 18½ mm (photo Dajoz, MHNG). 757. New Caledonia, Goro, length 18.2 mm.

Figs. 758-759. *C. eximius* Rve. 758. Holotype, Moluccas, length 27.3 mm (photo BMNH). 759. Malaya, length 31.8 mm.

Fig. 760. *C. ammiralis* fa. *extraordinarius* Hwass, lectotype figure, length 51 mm (after Hwass).

Unless otherwise stated, specimens in ZMA.