BASTERIA, 49: 145-196, 1985

Alphabetical revision of the (sub)species in recent Conidae
8. dactylosus to dux

H.E. COOMANS, R.G. MOOLENBEEK & E. WILS

Zoological Museum, Amsterdam

INTRODUCTION

This is the eighth part in this series, in which all names of recent *Conus* taxa beginning with the letter *d* are discussed. Included are three nominal species (*dautzenbergi, debilis* and *douvillei*) described by Fenaux (1942, 1943). The search for the type material of the 16 Conidae described by André Fenaux so far has been without result (see also under *C. cavailloni* and *C. circumclausus*, in Basteria 47: 100; 48: 229-230). Although the papers were published in the Bulletin de l'Institut Océanographique of Monaco, the types have not been deposited in that institute. Mars (1951: 63) stated that Fenaux at the time was living in Marseille, and possessed a very rich private collection; so we suppose that the type material was retained in that collection. His daughter, Mrs. M.-A. Fenaux at Marseille, was not able to supply information about her father's collection, which is not in the Musée d'Histoire Naturelle at Marseille. Rumour has it that (part of) the collection was sold to the museum in Nice; however, correspondence and personal contact with the Musée d'Histoire Naturelle in Nice has remained without success. It is regrettable that the types of Fenaux cannot be traced only forty years after description. The authors are grateful to Dr. J.G.J. Kuiper and Mr. and Mrs. H. Hoenselaar for their assistance in trying to locate this type material.

Clench (1942) has "selected type figures" for a number of West Indian Conidae (e.g., *C. cardinalis, citrinus, columba, daucus, dominicanus*). In his historical revision on the Conidae, Kohn (1963 sqq.) has treated the designations by Clench as valid. However, in discussing this matter with us recently (in litt., 1984), Dr. Kohn now disagrees with the designation of "type figures". The present authors consider (most of) Clench's selections valid, because a "type figure" represents the figured specimen. Thus "selecting a type figure" means "designating the figured specimen as lectotype".

Through a donation by Mr. and Mrs. M. and A. Roessingh-Schelling, ZMA recently acquired the collection of Ir. H.G.J. Schelling, which includes many Conidae. It also contains material from the well-known collection of Madame la Douarière F.J.M. Rethaan Macaré-Ontijd (1812-1887), which was auctioned in 1888.

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. L. van der Laan and the maps were drawn by Mr. J. Zaagman (both ZMA). In the next issue a list of abbreviations of institutions will be included.

Part of the cost of publication of this paper has been made defrayed by a grant from Shell Tankers B.V., Rotterdam.

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.

dactylosus
figs. 595-597

Conus dactylosus Kiener, 1845, Coq. vivant. 2: pl. 97 fig. 2; 1849-1850: 306

Type material. — The holotype was originally in the Bernardi collection. The type figure is reproduced here (fig. 595); dimensions 39 × 14 mm (Kiener: length 36 mm).

In the general collection of BMNH a shell was traced with measurements 38.7 × 14.0 mm (fig. 596), which closely agrees to the holotype of *Conus dactylosus*. However, there is no evidence that this specimen, originally from the Cuming collection, is the missing holotype.

Type locality. — Unknown.

Remarks. — Reeve (1849, Emendations: 4) stated that Cuming possessed specimens of *C. dactylosus*, which he regarded as a minutely reticulated variety of *C. clavus*. *C. clavus* Linné is a rejected and invalid name, vide Basteria 48: 236; *C. clavus* auct. represents *C. auricomus* Hwass, 1792. The above interpretation of *C. dactylosus* is generally accepted (Walls, 1979: 171, 174-175; Da Motta, 1982: 4-5), so that *C. dactylosus* is considered a forma of *C. auricomus* with an extremely fine colour pattern.

Distribution. — Under *C. auricomus* (vide Basteria 45: 35, figs. 103, 163) we stated that there were no definite records from the Indian Ocean. Since then the species was reported from Madagascar (Tuléar, fide Hinkle, 1981: 11; Nosy-Bé, fide Schildt, 1983: 19); the Seychelles have been mentioned by Jarrett & Slimming (1970: 18) and a specimen from Mahé Id. was figured by Da Motta (1982: fig. 33b). Mr.J.C. Martin has donated to ZMA a shell of *C. auricomus* from Réunion (St. Gilles, depth 30 m).

The opinion of Marsh (1964: 125, pl. 18 figs. 12, 14), that *C. dactylosus* represents the Pacific form of *C. auricomus*, is neither in accordance with specimens we have studied, nor with the shells he has figured from Mozambique and Guam.

See also sub *C. debilis* Fenaux in this publication (fig. 597).

The authors are grateful to Ms. K.M. Way for the loan of material from BMNH.

dahlakensis
fig. 599

Conus textile dahlakensis Da Motta, 1982, Publções Occas. Soc. Port. Malac. 1: 5-6, fig. 5

Type material — The holotype (fig. 599) is in MHNG (no. 982.111), measurements 87.4 × 39.4 mm (Da Motta: 87 × 40 mm). Three paratypes with lengths of 82.5, 63 and 48 mm, are also mentioned and are probably in the private collection of Mr. Da Motta.

Type locality. — "shallow waters in the area of Dahlak Archipelago, off Massawa in the Red Sea".

Remarks. — Da Motta has described the subspecies *dahlakensis* as distinct from nominate *textile* Linné, 1758, because the sides of the shell are ventricose, the contours oval, and the spire not concave.

In the discussion of *C. canonicus* Hwass (vide Basteria 47: 79-80) we have related *dahlakensis* to the slender form of this species (fig. 328). However, after studying the type of *dahlakensis*, we must now conclude that it belongs to the species complex of *C. textile*. The subspecific status of *dahlakensis* is doubtful; it merely represents a slender form of the shouldered *C. textile neovicarius* Da Motta, 1982.

Material studied. — The holotype and specimens from Port Sudan (in coll. Wils). ZMA has shells intermediate between subspecies *neovicarius* and forma *dahlakensis* from Jeddah (Saudi Arabia)..

We are grateful to Dr. C. Vaucher for the loan of the type specimen.

dalli
figs. 582, 600

Conus dalli Stearns, 1873, Proc. Calif. Acad. 5: 78-79, pl. 1 fig. 1

Type material. — Stearns wrote "Specimens are in my collection and that of Mr. Fischer of San Francisco". He gave the dimensions of two shells: 2.35 × 1.22 and 2.15 × 1.1 inches (59.5 × 30.9 and 54.4 × 27.9 mm respectively). The figured specimen is in USNM (no. 37418), ex coll. Stearns, and herewith designated lectotype of *Conus*

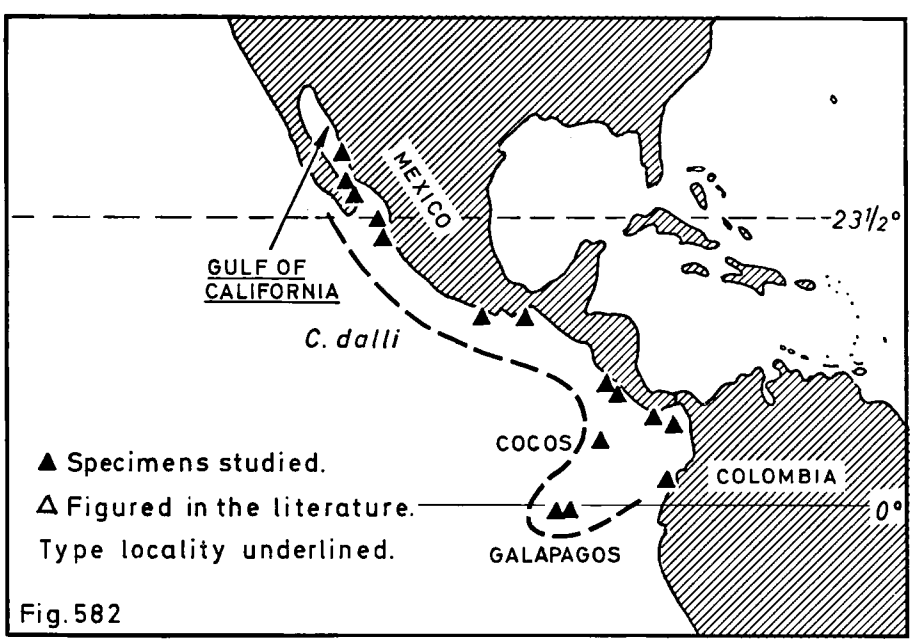


Fig. 582. Distribution of *Conus dalli*.

dalli (fig. 600). The measurements are 52.1 × 27.9 mm (dimensions of the figure are 66 × 34 mm).

Type locality. — "Gulf of California". The label with the specimen also indicates "Tres Marias Ids", situated just south of the Gulf entrance.

Remarks. — *C. dalli* is a valid species and the sole representative of the "*textile*"-cones to be found in the Western Hemisphere. Stearns indicated that this species resembles the cone shell of fig. 70 in Sowerby's Conchological Illustrations (1834), which was considered a variety of *C. textile* Linné, without a locality.

C. dalli Toula, 1911, is a junior homonym; this is a fossil species.

Distribution. — From the Gulf of California to southern Colombia, Cocos Island, and the Galapagos Islands (fig. 582).

Material studied. — ZMA has specimens from Costa Rica (beach at Tamarindo) and Colombia (Gorgona Id., 3°N, rocky shore); RMNH from Panama (Pearl Is.) and the Galapagos Is. (Isabella); LACMNH from the Gulf of California (Guyamas), and localities in S. Mexico, Costa Rica, Panama, Colombia, and the Galapagos Is.; the San Diego Museum of Natural History from the Gulf of California (San José Id., Cerralvo Id., La Paz), Mexico (Tres Maris Is., Jalisco), Panama, and Galapagos (Jervis and Duncan); AMNH from Mexico (Tres Marias, Guyamas), Costa Rica (Bahia Ballena, Port Parker), Cocos Id., Panama (Perlas Is.), and Galapagos Is. (Bartholome, S. Cristobal, Jervis, Duncan).

The authors are grateful to Ms. Diane Bohmhauer for the loan of the type specimen, and to Mr. W. Sage for his information.

damottai
fig. 601

Conus damottai Trovão, 1979, Amphitrite 1 (1): 8-9, pl. 1 fig. 2, pl. 2 fig. 2

Type material. — The holotype now in the collection of J.P. Borges will be donated to BMNH (where it has not yet been deposited, according to Ms. K.M. Way, in litt. 1985). The dimensions are 20.6 × 12.7 mm. We suppose that the figured shell in the original publication is the holotype; the figure is reproduced here (fig. 601). Ten paratypes, with measurements from 15.2 × 8.7 to 23.4 × 13.8 mm, have been dispersed to several private collections.

Type locality. — "Baía das Gatas, Ilha da Boavista, arquipélago de Cabo Verde". Depth 0.5 to 3 m, on coral. The paratypes are from the same locality.

Remarks. — The description of *Conus damottai* appeared in Portuguese in a local underwater sports journal. The Conidae from the Cape Verde Islands were studied by Röckel et al. (1980); they concluded (pp. 86-88, pl. 3 fig. 2) that *C. damottai* is a valid species, related to *C. ventricosus* Gmelin (= *C. mediterraneus* Hwass) and *C. guinaicus* Hwass. We are of the opinion that the relation between these species and the endemic Conidae from the Cape Verde Islands needs further investigation.

The shell of *C. damottai* is small and biconic with a pattern of brownish green blotches. Tucker (1985: 9) considered it a junior synonym of *C. crotchii* Reeve (vide Basteria 48: 278-279), which is also known from Boavista. Because of the existence of shells with an intermediate colour pattern, we tentatively agree with this synonymy.

Material studied. — ZMA has specimens from the type locality (leg. Dr. E. Rolán, and ex coll. J. Elsen).

dampierensis
figs. 583, 602

Conus dampierensis Filmer & Coomans, 1985, Beaufortia 35: 4-5, figs. 5-7, map 1

Type material. — Holotype in ZMA (Moll. no. 385004); the measurements 32.5 × 18.3 mm (fig. 602); one paratype (29.5 × 16.6 mm, with periostracum and operculum) in ZMA; one paratype in WAM (33.0 × 17.2 mm, with operculum); three paratypes in collection R.M. Filmer.

Type locality. — "Back Beach, Dampier, West Australia; on muddy sand, exposed at low tide".

Remarks. — Specimens of *Conus dampierensis* have in the past been identified with *C. lizardensis* Crosse, 1865; the latter is found in the Arafura Sea and off Queensland. The shell of *C. dampierensis* is obconic, the body whorl has punctate spiral grooves mainly on the lower half; the colour pattern consists of three chocolate brown bands and irregular axial streaks. A light colour form is found on local offshore islands.

C. lizardensis is also obconic, but is strongly corded from shoulder to base, with an irregular colour pattern of brown maculations; the animal lives subtidally (30-60 m).

Distribution. — Western Australia, around Dampier and the Dampier Archipelago; in shallow water (fig. 583).

Material studied. — The type material, and specimens from Rosemary Island (in ZMA and coll. Filmer) and Weld Island (in coll. J. Elsen). In AMNH there are specimens from Dampier and Roeburne.

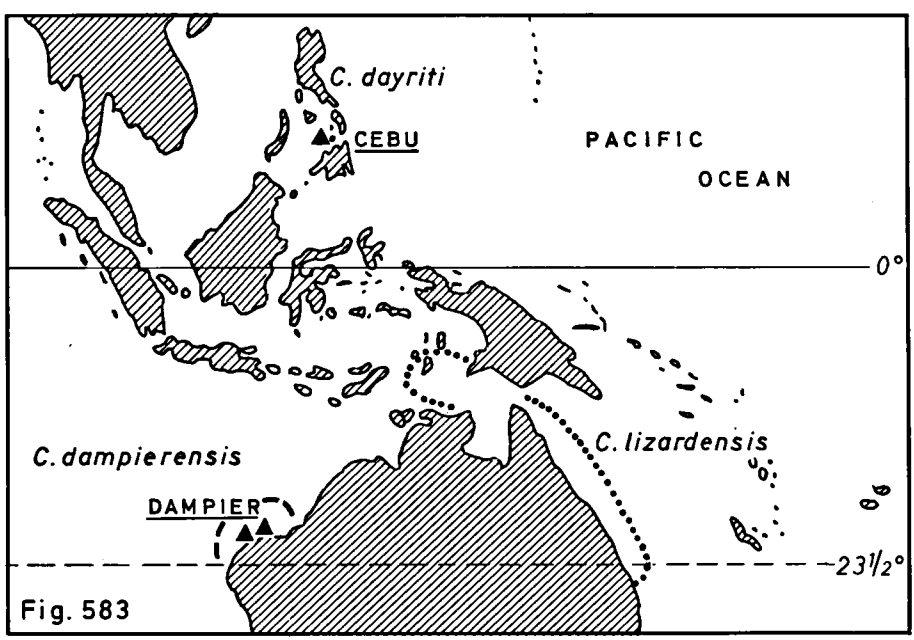


Fig. 583. Distribution of *Conus dampierensis*, compared to *C. lizardensis*. Known localities of *C. dayriti*.

danieli
fig. 603

Conus danieli Crosse, 1858, Revue Mag. Zool. (2) 10: 122

Type material. — *Conus danieli* is a new name for *C. jaspideus* Kiener, 1845 (non Gmelin, 1791), so that the holotype of the latter is also the holotype of *C. danieli*. The shell was originally in the collection of Prince Masséna, which collection was sold to Delessert and later acquired by MHNG (Dance, 1966: 115, 201-202). The specimen is not mentioned by Mermod (1947) as being in the Geneva Museum, and its present whereabouts are unknown. The type figure of Kiener (1845: pl. 55 fig. 4) is reproduced here (fig. 603), dimensions 34 × 18 mm (Kiener: length 33 mm).

Type locality. — According to Kiener (1848: 219) "la baie d'Algoa". The species is known from South Africa, but Algoa Bay is apparently not within the range.

Remarks. — Judging from the description of *C. jaspideus* Kiener and its type figure (fig. 603), *C. danieli* is considered a junior synonym of *C. algoensis scitulus* Reeve, 1849. The shell is characterized by punctuated brown spiral lines, and a brown band below the shoulder; the base is sometimes brown (vide Basteria 44: 20). The distribution of this subspecies is from Hermanus to Cape Agulhas, South Africa (fig. 51).

After the discussion of *C. algoensis* Sowerby (vide Basteria 44: 20-22, figs. 66-67), the present authors recognized and described a new subspecies: *C. algoensis agulhasi* (fig. 68), which is restricted to Cape Agulhas. The subspecific status of *agulhasi* was criticized anonymously in The Strandloper (1980, nos. 202: 1, and 204: 3), by Röckel (1981: nr. 151), Kilburn & Rippey (1982: 122) and Tucker (1983: 5). From a nomenclatorial point of view this is correct. However, as already discussed (Coomans, 1981: 9), the complex of *C. algoensis* shows clinal variation, i.e. the colour pattern (from dark to light) and the length of the shell (from 50-60 mm to 20-25 mm) more or less gradually change with the distribution along the South African coast. Forms of the (stepped) cline are recognized as *C. algoensis* s.s. (Saldanha Bay to Table Bay), *C. a. simplex* Sowerby (False Bay) and *C. a. scitulus* (Hermanus to Cape Agulhas); the lightest and smallest form of the cline, thus the one living at the end of the geographical range, at Cape Agulhas, was described as *C. algoensis agulhasi* (fig. 68).

As stated in the introduction to no. 5 of this series (Basteria 46: 3), the zoological nomenclature gives us only the possibility to name species and subspecies. All infrasubspecific taxa in systematics (semispecies, clinal forms, ecological forms, mutants, etc.) cannot be recognized by appropriate names. Three clinal variants of *C. algoensis* were originally described as nominal species, and are now considered three subspecies. To draw attention to the clinal variation of *C. algoensis*, we have described the extreme variant from Cape Agulhas as "subspecies" *agulhasi*. Considering it simply a colour forma was not preferred since a form may show up everywhere within the range of a species.

daphne
figs. 605-606

Conus daphne Boivin, 1864, J. Conchyl., Paris 12: 35-36, pl. 1 figs. 7-8

Type material. — The holotype was in the collection of Boivin; part of this collection is in MNHN, but the type of *Conus daphne* has not yet been traced. The type figure is reproduced here (fig. 605); measurements 35 × 19 mm (Boivin: 35 × 18 mm).

Type locality. — "océan Indien".

Remarks. — Boivin compared *C. daphne* to *C. conspersus* Reeve; in recent malacological literature these taxa are considered synonyms. *C. conspersus* (vide Basteria 48: 257-258, figs. 523-525) is a colour form of *C. spectrum* Linné.

C. daphne is characterized by a solid, yellow shell with many fine brown spiral lines; the shoulder has a wider brown line. The aperture is yellowish pink, like in *C. conspersus*, but the latter has irregular spots on body whorl and spire, which are lacking in *C. daphne*.

We have also compared *C. daphne* to the type of *C. sindon* Reeve, 1844, which shell is distinct in its textile pattern, white aperture and more convex body whorl.

C. daphne is considered a colour form of *C. spectrum*.

Material examined. — ZMA has specimens of *C. spectrum* forma *daphne* from Amboina (fig. 606), the Moluccas, and from Indonesia in general. The shells are commonly encountered in old Dutch collections, but at present they are rarely found; this forma may have a restricted range.

We are grateful to Ms. Alison Trew for the loan of the holotype of *C. sindon*.

daucus

figs. 115, 359-360, 465, 556, 584, 607-609

Conus daucus Hwass in Bruguière, 1792, Encycl. Méth. 1: 651-652, no. 51

Type material. — Hwass described *Conus daucus* as a polymorphic species, comprising four colour varieties. The specimens from the Hwass collection are not present in MHNG (Mermod, 1947: 178). From the references of var. A, Clench (1942: 21-22) has designated the shell figured in Chemnitz (1788, vol. 10: pl. 144A fig. L) as lectotype of *C. daucus*. This specimen is also the lectotype of *C. cardinalis* (Röding), discussed before (vide Basteria 47: 90, fig. 359). The shell was originally in the collection of Chemnitz, but its present whereabouts are unknown (Cernohorsky, 1974: 145).

For the validity of Clench's designation we refer to the introduction.

Type locality. — Hwass stated "mers de l'Amérique, on en trouve à l'Isle S. Dominique, à la Guadeloupe et à la Martinique" (seas of America, one finds it on the islands of Dominica, Guadeloupe and Martinique). According to Chemnitz (1788: 92-93) the lectotype is from the "Westindische Zuckerinseln" (West Indian sugar islands); Clench (1942: 22) has restricted the type locality to Guadeloupe.

Remarks. — *C. daucus* is a valid species. The variation in colour was already expressed by Hwass, who recognized next to the carrot red (*rubra*) nominate form a dark brown (*fusca*), yellow (*lutea*), and orange (*crocea*) variety. The pattern on the body whorl is also variable: plain, banded, or punctuated (figs. 607-608). The objective junior synonyms *C. arausiensis* Reeve and *C. cardinalis* (Röding) were discussed earlier in this series. *C. castus* Reeve (fig. 360) is a junior synonym. *C. circumpunctatus* Usticke (fig. 465), and *croceus* Sowerby (figs. 115, 556, 609) are colour formae, the latter in deeper water off Martinique (Lozet & Pétron, 1977: 108, fig. 193).

The whitish to yellow form of *C. daucus* may be called forma *pastinaca* Lamarck, 1810. In the original description Lamarck (1810: 266, no. 60) indicated that the shell is white, but later (Lamarck, 1822: 469, no. 60) he added that the colour is "quelquefois jaunâtre" (sometimes yellowish). It is doubtful whether the specimen figured by Old (1965: pl. 3 figs. 3-4) is the holotype of *C. pastinaca*.

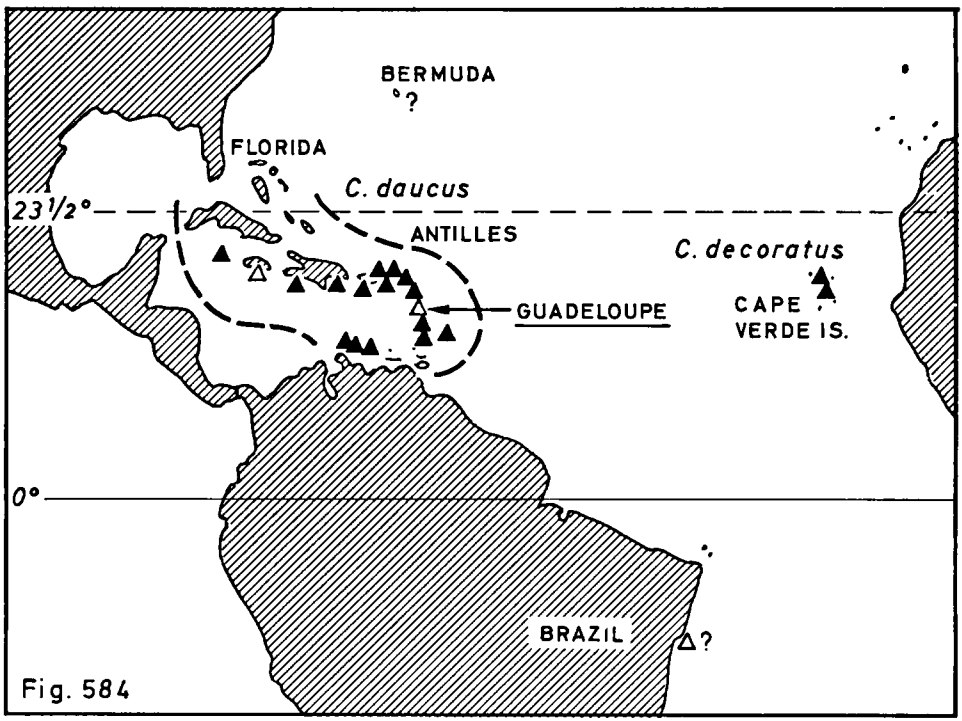


Fig. 584. Distribution of *Conus daucus*, and *C. decoratus* (cf. fig. 585).

C. daucus var. *luteus* Krebs, 1864 (not *C. luteus* Sowerby, 1833) is a nomen nudum. It is also considered the yellow forma of *C. daucus*; Krebs (1964: 4) indicated that it is found together with the orange-coloured shells.

C. daucus was recently discussed by Vink (1984: 19-21). *C. archetypus* Crosse (fig. 114) is no longer considered a junior synonym of *C. daucus* (vide Basteria 48: 275).

Distribution. — *C. daucus* ranges from the Greater and Lesser Antilles to the islands off the coast of Venezuela, and Grand Cayman (fig. 584). There are no records from the mainland of Central America, whereas those from Florida may refer to *C. juliae* Clench (cf. Van Mol & Tursch, 1968). Localities from Brazil (Van Mol et al., 1967: 243-244, pl. 7 fig. 2; Rios, 1975: 124, fig. 542) and Bermuda (Peile, 1926: 85) need confirmation.

Material studied. — ZMA has specimens from a number of localities in the Netherlands Antilles (Aruba, Curaçao and Bonaire), and from the Lesser Antilles (Barbados, Antiqua and St. Martin); RMNH from Aruba, Curaçao and St. Eustatius; AMNH from Haiti, Dominican Republic, Puerto Rico, St. Thomas, Martinique, St. Vincent, and Grand Cayman.

The authors are grateful to Dr. P. Gillis and Mr. P. Maquis for their material from Martinique.

daullei
fig. 604

Conus daullei Crosse, 1858a, Revue Mag. Zool. (2) 10: 81; 1858b: 119-120, pl. 2 figs. 2, 2a

Type material. — Crosse did not state whether the type specimen of *Conus daullei* was in his own collection, or in that of Dr. Daullé, a naval surgeon after whom the species is named. According to Bernardi (1861: 15, pl. 2 fig. 16) it was in the collection of Crosse, but the present whereabouts of the holotype are unknown. The type figure is reproduced here (fig. 604); dimensions 69 × 33 mm (Crosse: 70 × 33 mm).

Type locality. — "Mayotte", Comoro Islands, situated between Mozambique and Madagascar.

Remarks. — Crosse stated that the shell of *C. daullei* somewhat resembles that of *C. carinatus* Swainson (cf. fig. 363). We agree with most of the recent authors and consider *C. daullei* a junior synonym of *C. consors* Sowerby (vide Basteria 48: 257, figs. 519-521).

More evidence is now available about occurrence of *C. consors* in East Africa; in addition to the holotype of *C. daullei* from Mayotte, we have examined a specimen from Naçala Bay, Mozambique (vide Basteria 44: 35, under *C. anceps*), and material from Réunion (in coll. J.C. Martin, and Wils).

dautzenbergi
fig. 598

Conus dautzenbergi Fenaux, 1942, Bull. Inst. Océan. 814: 2, fig. 2

Type. — The holotype must have been retained in the private collection of Fenaux and the present whereabouts are unknown (see Introduction). The type figure is reproduced here (fig. 598); dimensions 41 × 18 mm.

Type locality. — "Madagascar".

Remarks. — Fenaux compared *Conus dautzenbergi* to *C. fuscatus* Born, 1778. The shell is elongate and straight, with a low spire; its colour is brown with dark brown spiral lines, and white dots on the middle of the body whorl. These characters fall within the range of variation of *C. fuscatus*, so that *C. dautzenbergi* is a junior synonym.

C. fuscatus is considered a subspecies of *C. imperialis* Linné, 1758. It is confined to the western Indian Ocean, including Madagascar. See also *C. coronoducalis* (Röding) in Basteria 48: 266, fig. 538.

dayriti
figs. 583, 610-611

Conus dayriti Röckel & Da Motta, 1983, Bull. Inst. Malac. Tokyo 1: 118, pl. 40 figs. 5-6

Type material. — The holotype has been deposited in SMF (no. 256227/1); measurements 20.6 × 11.5 mm (fig. 610). It is a very poor shell, obviously collected dead; part of the base is broken off. The dimensions of the seven paratypes range from 16.1 × 9.4 to 22.3 × 13.3 mm; five are in coll. H. Fischöder, and two in coll. D. Röckel.

Type locality. — "from forty to eighty fathoms depth in Punta Engano, Cebu", Philippines.

Remarks. — According to the original authors *Conus dayriti* belongs to the species complex which comprises *C. otohimeae* Kuroda & Itô, 1961 (S. Japan to Taiwan), *C. nadaensis* Azuma & Toki, 1970 (S. Japan), and *C. aphrodite* Petuch, 1979 (Taiwan and Philippines; vide Basteria 45: 4, fig. 107).

C. dayriti is distinct from its congeners by its low spire with a mamillate apex, and triangular shape. Based on the specimens studied, we consider *C. dayriti* a valid species.

Distribution. — So far only known from the type locality (fig. 583).

Material examined. — The holotype, and another specimen (fig. 611) from Punta Engano (coll. Wils).

The authors are grateful to Dr. R. Janssen for the loan of the holotype.

dealbatus
fig. 613

Conus dealbatus A. Adams, 1854, Proc. Zool. Soc. Lond. 1853: 117

Type material. — The holotype, which was not figured in the original publication, is present in BMNH, ex coll. Cuming; measurements 24.3 × 12.7 mm (fig. 613).

Type locality. — Unknown.

Remarks. — The type specimen of *Conus dealbatus* is a white, chalky shell with a fossil appearance. The whorls of the spire have four grooves and a well marked suture.

Weinkauff (1873-1875: 371-372) has stated that *C. dealbatus* is conspecific with *C. californicus* Reeve (vide Basteria 47: 74); this synonymy has been accepted by later authors. However, *C. dealbatus* (fig. 613) is distinct from *C. californicus* (fig. 321) in its concave spire and pointed apex.

Without a type locality and no material to compare with, Walls (1979: 267) considered it an unidentifiable taxon. The present authors have examined the holotype under ultraviolet light (cf. Kamp Krueger, 1974), which resulted in a fine reticulated pattern becoming visible. The holotype of *C. dealbatus* is considered a fossil shell.

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

debilis
fig. 614

Conus mediterraneus var. *debilis* Monterosato, 1917, Boll. Soc. zool. ital. (3) 4: 24

Type material. — Monterosato mentioned two small specimens in bad shape. These syntypes may be stored in the Monterosato collection of the Zoological Museum in Rome. The shell depicted on pl. 1 fig. 25 s.n. *debilis* is not one of the syntypes, but represents a specimen of forma *ater* from Messina. The figure is reproduced here (fig. 614), the dimensions are 30 × 19 mm.

Type locality. — "del fondo salmastro o algoide di Bu-Kemmásc" (on the base of brackish algae from Bu-Kemmásc), Tripolis, Libya.

Remarks. — Monterosato indicated that the variety *debilis* is similar to the variety *ater* Philippi, 1836, from Messina (Sicily), but the latter should be larger. *Conus mediterraneus* forma *ater* (vide Basteria 44: fig. 65) is the high spired and dark coloured form of the species; forma *debilis* is considered a junior synonym.

After we had designated a lectotype for forma *ater* (Basteria 45: 25); Dr. A.J. Kohn has traced the paralectotype (fig. 615) in the Zoologisches Museum at Berlin.

The turreted shells of *C. mediterraneus* Hwass were described several times: forma *ater* from Sicily; forma *alticonica* Pallary from the Gulf of Gabès, Tunisia (vide Basteria 44: 23); forma *debilis* from Tripolis; forma *gaudiosus* Nicolay, 1978, from Porto Rafti, Greece; *C. cailliaudii* Jay (vide Basteria 47: 73, fig. 343) without a locality.

We are grateful to Dr. A.J. Kohn for his information, and to Dr. R. Kilias for the loan of the paralectotype of *C. ater*.

debilis
fig. 597

Conus debilis Fenaux, 1943, Bull. Inst. Océan. 834: 4, fig. 11
(non *debilis* Monterosato, 1917)

Type material. — The present whereabouts of the holotype of *Conus debilis* Fenaux are unknown (see Introduction). The type figure is reproduced here (fig. 597); dimensions 34 × 13 mm.

Type locality. — "Nouvelle-Guinée" (New Guinea).

Remarks. — From description and type figure *C. debilis* can be identified as *C. auricomus* Hwass (vide Basteria 45: 35, fig. 163). Because of the fine reticulations on the body whorl, the shell is like the forma *dactylosus* Kiener (see this publication, figs. 595-596). Thus *C. debilis* Fenaux is a junior synonym of *C. dactylosus*, in addition to being a junior homonym of *debilis* Monterosato, 1917.

deburghiae
figs. 616-618

Conus deburghiae Sowerby II, 1857-1858, Thes. Conch. 3 (Conus): 2 no. 7, pl. 1 figs. 6-7

Type material. — Sowerby described two shells, one is smooth (from mrs. De Burgh's collection), the other granulated. In the Latin description the latter is considered a variety ("variat granulatus"), but in the English text is stated "The smooth variety". Both specimens were figured, according to the plate "½ nat. diam.", but we suppose (from the measurements of the other shells on the plate) that it should read "2/3 nat. diam." In the latter case the dimensions of the granulated shell (f. 6) are 58 × 31 mm, and the smooth specimen (f. 7) is 57 × 30 mm. These figures are reproduced here (figs. 616-617).

From Sowerby's text it is not clear which shell must be considered the variety (and therefore does not belong to the type series, ICZN art. 72b). Thus we accept both

specimens as syntypes of *Conus deburghiae*. The whereabouts of the syntypes are unknown; the figured shells are not in BMNH. Because the granulated shell was the first to be figured by Sowerby, and the smooth form was already described as *C. nocturnus* Lightfoot, we herewith designate the granulated shell (fig. 617) as lectotype of *C. deburghiae*.

The type collection of BMNH contains a smooth specimen (no. 19601625), labelled as "lectotype" of *C. deburghiae*. This shell is characterized by a white spiral line on the body whorl, and also its colour pattern is distinct from that of the specimen figured by Sowerby. We do not know by whom this shell was designated "lectotype". In addition BMNH has two smooth specimens from the Moluccas (no. 19601626), marked as "paralectotypes, ex mrs. De Burgh collection"; both shells are not identical to the specimen figured by Sowerby. These three shells were not mentioned nor figured by the original author, so that they do not belong to the type series of *C. deburghiae*.

Type locality. — "Moluccas".

Remarks. — Sowerby compared this species to "*C. nocturnus*", from which *C. deburghiae* is distinct by the bottle-shaped shell. However, the shell figured by Sowerby (pl. 1 fig. 4) as "*C. nocturnus*" (non *C. nocturnus* Lightfoot) must be identified as *C. bandanus* forma *equestris* (vide Basteria 46: 9, fig. 205). The type figure of *C. nocturnus* Lightfoot, 1786, also has a pyriform shape and a smooth body whorl, like the paralectotype of *C. deburghiae* (fig. 616).

C. nocturnus is considered a valid species, and *C. deburghiae* (figs. 617-618) represents its granulated forma (Coomans, 1973: 321). It is distinct from *C. bandanus* (fig. 204), which shell grows to a larger size (maximum 130 mm); the body whorl is almost straight, and the colour pattern is blackish brown. *C. nocturnus* reaches a length of 85 mm, the body whorl is convex, and the colour chestnut brown.

Material studied. — *C. nocturnus* is restricted to Indonesia (Moluccas and northwestern New Guinea). The granulated forma *deburghiae* seems to be rare. ZMA has a few specimens from old collections (18th-19th century), with the locality Moluccas.

decoratus

Conus decoratus Solander in Lightfoot, 1786, Cat. Portland Mus.: 55, no. 1305; 155, no. 3391

Type material. — The shells were sold at the auction of the Portland Museum, and are considered lost.

Type locality. — Not given.

Remarks. — Without a type figure, description or reference, *Conus decoratus* Solander is a nomen nudum.

The name "*Conus decoratus* Soland." was used by Humphrey (1797: 15 no. 247), and a specimen was present in the collection of C.A. de Calonne. He mentioned the vernacular names "le Caillouteux Ventru - Bellied Black Pudding", and added: "Madagascar, very scarce". (The "Black Pudding" is *C. rubiginosus*). Humphrey's Museum Calonnianum is placed on the index of invalid works (ICZN opinion 51).

Dillwyn (1817, vol. 1: 427) mentioned *C. decoratus* in the synonymy of *C. episcopus* Hwass.

decoratus
figs. 584-585, 619

Conus decoratus Röckel, Rolán & Monteiro, 1980, Cone shells from Cape Verde Islands: 61-65, text figs. 28-33, pl. 2 figs. 2, 4, 5
(non *C. decoratus* Solander, 1786)

Type material. — The holotype has been deposited in SMF; measurements 20.6 × 11.1 mm (fig. 619). One paratype is in MNHN, dimensions 20.1 × 12.2 mm; the remaining seven paratypes are in the private collections of the original authors.

Type locality. — "Matiota Beach, S. Vicente island", Cape Verde Is.

Remarks. — The endemic Conidae of the Cape Verde Islands, on which Burnay & Monteiro (1977) and Röckel et al. (1980) have performed basic studies, need further research to understand the interrelations between the taxa. *Conus cuneolus* Reeve, 1843 (vide Basteria 48: 282-283, figs. 448, 573-574) is the first available name in the complex.

C. decoratus was described in a species-group with *C. borgesi* Trovão, 1979 (vide Basteria 46: 33-34, figs. 247-248) and *C. cuneolus*. Röckel et al. recognized four colour forms in *C. decoratus*, indicated as formae A, B, C and D; all are characterized by zigzag markings on the body whorl, in forma D less conspicuous. The nominate form (= A) is marked with black, forma B with brown; formae C and D are olive green and can hardly be distinguished.

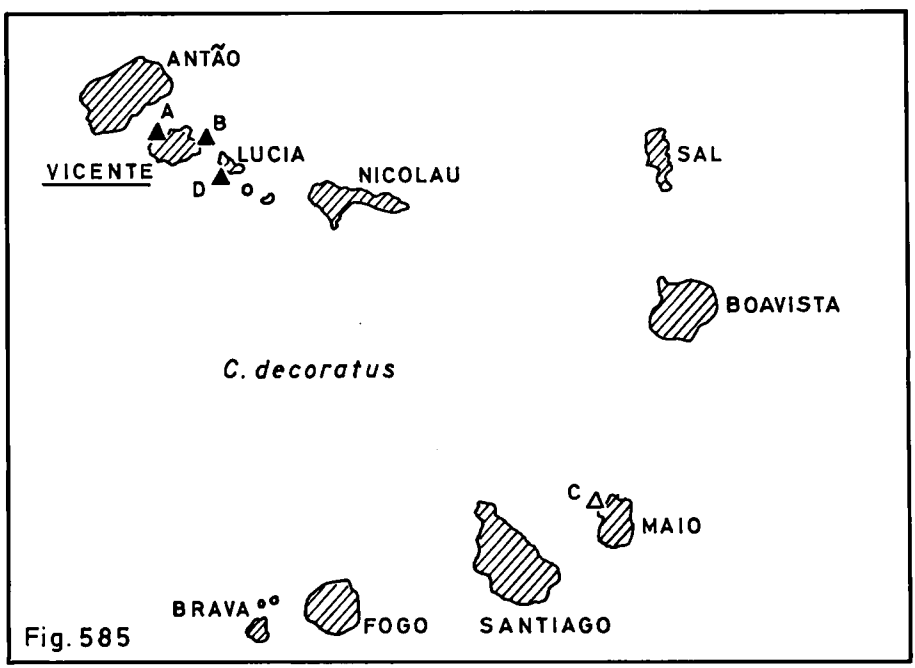


Fig. 585. Distribution of the formae A, B, C and D of *Conus decoratus* at the Cape Verde Islands.

Pending further research on the relationship with *C. cuneolus*, we provisionally consider *C. decoratus* a valid species. It is not a junior homonym of *C. decoratus* Solander, because the latter is not an available name.

Distribution. — According to Röckel et al. the populations of the four formae have very limited and distinct ranges on the Cape Verde Islands. The nominate form at the type locality, fa. B on the east coast of S. Vicente, fa. C at Mayo Island, and fa. D at S. Lucia (figs. 584-585).

Material studied. — The holotype; ZMA has specimens of the formae B and D (ex coll. Dr. E. Rolán, and Dr. B.M. Tursch).

We are grateful to Dr. R. Janssen for the loan of the holotype.

decrepitus
fig. 620

Conus decrepitus Kiener, 1845, Coq. vivant. 2: pl. 99 fig. 4; 1849: 263-264

Type material. — The holotype was originally in the collection of A. Bernardi; and according to Reeve (1849, suppl.: 4) later in the Gubba collection at Le Havre. The specimen is not in MNHN and the present whereabouts are unknown. The type figure is reproduced here (fig. 620); dimensions 39.5 × 20 mm (Kiener: length 38 mm).

Type locality. — "l'océan Austral, les côtes de la Nouvelle-Hollande" (the Southern Ocean, the coasts of Australia).

Remarks. — *Conus decrepitus* material was examined by Reeve, who stated that it is a faintly coloured specimen of *C. cocceus* Reeve (vide Basteria 48: 240, figs. 436, 486-487). We agree with this generally accepted conclusion, thus *C. decrepitus* is a junior synonym of *C. cocceus*.

decurtatus
figs. 586, 621-623

Conus magus var. *decurtata* Dautzenberg, 1910, J. Conchyl., Paris 58: 26

Type material. — The type series of the variety *decurtata*, here emended to *Conus decurtatus*, is stored in IRScNB, ex coll. Dautzenberg. The shells were collected by P. Aubin in 1909. This lot contains seven specimens, of which one is designated herewith the lectotype of *C. decurtatus*; measurements 28.5 × 16.7 mm (fig. 623). The remaining paralectotypes are: 32.2 × 18.5 (light coloured), 30.6 × 17.9 mm, 29.1 × 17.3 (worn), 27.0 × 16.4 (dark coloured), 26.9 × 16.3 (very light), and 22.1 × 12.3 mm (subadult, with periostracum). None of the specimens from Aubin was figured by Dautzenberg; he referred to other shells depicted in Sowerby (1857: pl. 199 figs. 286-289).

Type locality. — "l'ile de Rua-Sura (Archipel Salomon)", 9°30′ S 160°37′ E.

Remarks. — Dautzenberg used the name *decurtata* for his specimens from Rua-Sura, but in addition he seems to introduce it as another name for *C. adansoni* Sowerby, 1857, non *C. adansonii* Lamarck, 1810 (vide Basteria 43: 82). This action has confused later authors about the identity of *C. decurtatus*. The short description only mentioned that it

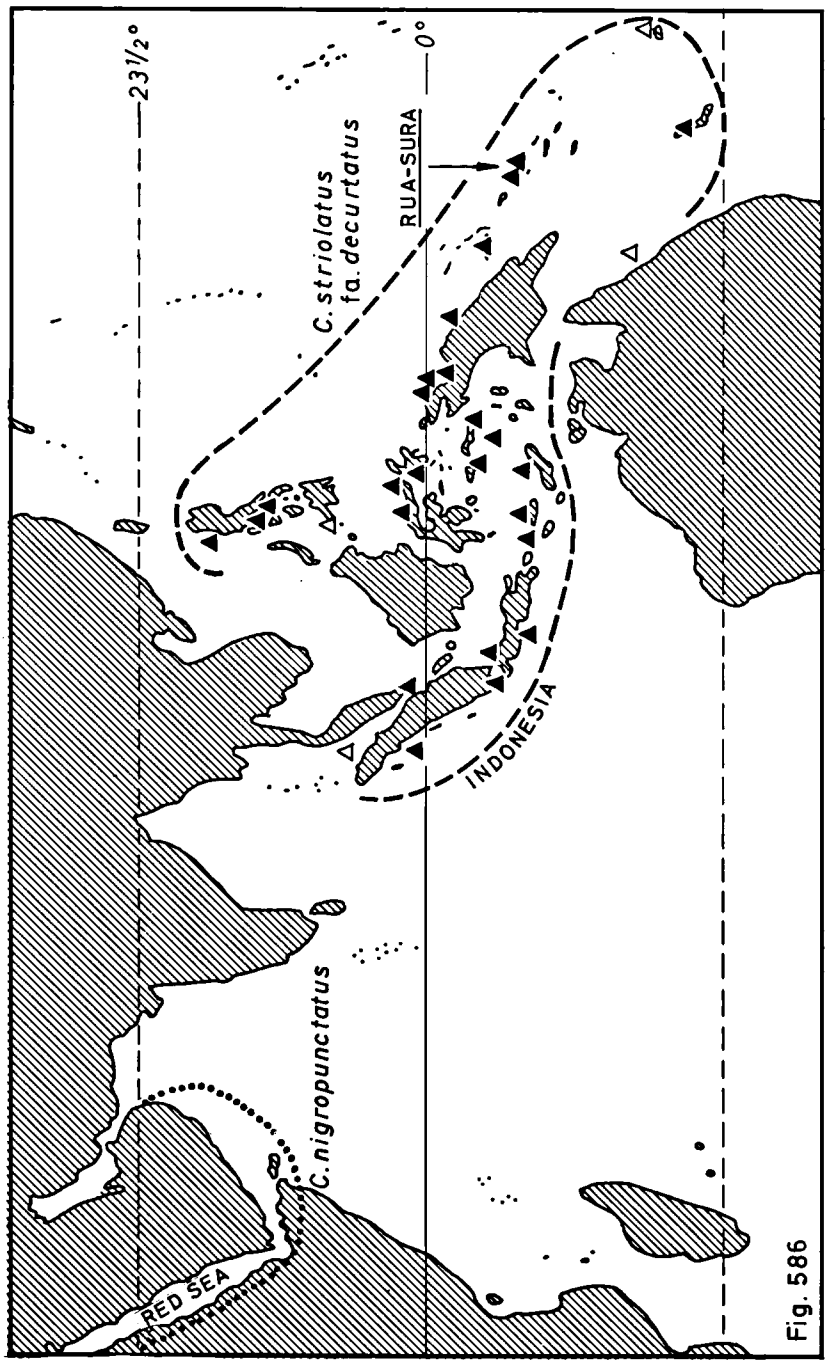


Fig. 586. Distribution of *Conus striolatus* forma *decurtatus* as compared to *C. nigropunctatus*.

is a form of *C. magus* Linné, with identical pattern and colour, but smaller, short and squat.

In the literature *C. decurtatus* is referred to as *C. nigropunctatus* Sowerby, 1857 (considered by us a valid species from the Red Sea and coast of Oman), or to *C. vinctus* A. Adams, 1853 (actually a colour form of *C. achatinus*, cf. fig. 13).

Examination of the type material makes us agree with Dautzenberg that *C. decurtatus* belongs to the species complex of the very variable *C. magus*, but it is recognizable as a distinct taxon (cf. Röckel, 1982: new no. 146).

An extensive description of *C. decurtatus* was supplied by Holeman & McGill (1969: 3, ill., 8), which authors have followed Cernohorsky (1967: 226, fig. 431) in considering *C. ranunculus* Hwass, 1792, the first available name for *C. decurtatus*. Kohn (1976: 44-45) and Richard (1982: 310) hold the same opinion. However, Abbott & Dance (1982: 266) agree with Clench (1942: 32-34) that *C. ranunculus* is from the Caribbean and should be considered a junior synonym of *C. ermineus* Born, 1778. This controversy is based on the interpretation of the type specimen of *C. ranunculus*: (1) Clench has "selected a type figure" (accepted by us as designation of a lectotype) from the references of Hwass (viz. the shell figured in Seba, 1758: vol. 3, pl. 43 fig. 36), whereas (2) Kohn (1968: 480-481, pl. 8 fig. 101) considered the specimen from the Hwass collection the holotype. The controversy will be discussed later in this series, but neither the figure in Seba (41 × 21 mm), nor the Hwass specimen (45 × 23 mm) is conspecific with *C. decurtatus*. Both shells (length/width ratio = 2) do not have the small and squat shape of the latter (l/w ratio about 1.7). We agree with Da Motta (1980: 1) and the earlier opinion of Kohn (1968: 480-481), that the "holotype" of *C. ranunculus* is a beach-worn specimen of *C. achatinus* Gmelin, 1791 (vide Basteria 43: 15).

Specimens in ZMA from New Guinea (fig. 621) have convinced us that *C. striolatus* Kiener, 1845, is the first available name for *C. decurtatus*. The type figure of *C. striolatus* measures 28 × 15 mm. We have studied specimens with colour patterns intermediate between those of *C. striolatus* and of *C. decurtatus* (fig. 622), the latter is now considered a colour form.

Distribution. — *C. striolatus* forma *decurtatus* seems to be the common form of the species; it occurs in Indonesia, the Philippines, New Guinea and the Solomon Islands to Fiji, Queensland and New Caledonia (fig. 586).

The authors are grateful to Dr. J. van Goethem and Mr. A. Lievrouw for their assistance, and permission to study the Dautzenberg collection.

delanoyi
fig. 624

Conus delanoyi Trovão, 1979, Amphitrite 1 (1): 3-4, pl. 1 fig. 1, pl. 2 fig. 1

Type material. — The holotype from the collection of G.E. Soares will be donated to BMNH (where it has not yet been deposited, according to Ms. K.M. Way, in litt. 1985); measurements 27.2 × 16.15 mm. We suppose that the figured shell in the original publication is the holotype (fig. 624). Eight paratypes, dimensions from 19.9 × 13.0 to 30.5 × 18.3 mm, have been dispersed to several private collections.

Type locality. — "Baía das Gatas, Ilha da Boavista, arquipélago de Cabo Verde", depth 1.5 m. Seven paratypes are from the same locality, the smallest is from the island of S. Nicolau (cf. fig. 585).

Remarks. — Trovão mentioned the similarity of *Conus delanoyi* (fig. 624) and *C. cuneolus* Reeve (vide Basteria 48: 282-283, figs. 448, 573-574). The complex of *C. cuneolus* was studied by Röckel et al. (1980: 92-116); it was concluded that *C. delanoyi* represents the population of *C. cuneolus* (called "form B") from Gatas Bay in Boavista Island.

The body whorl of *C. cuneolus* forma *delanoyi* is characterized by a dark brown, intricate reticulate pattern above a light coloured central band; below this band there is a dark coloured base. In *C. cuneolus* s.s. the base is white.

Material studied. — ZMA has specimens of forma *delanoyi* from the type locality.

delessertii
figs. 587, 627-629

Conus delessertii Récluz, 1843, Rev. Zool. (Soc. Cuv.) 6: 2-3

Type material. — Although not mentioned by Récluz, the type specimen was present in the collection of Delessert (Mermod, 1947: 178, no. 48), which is now in MHNG; dimensions 61½ × 30 mm (fig. 627). The holotype was figured by Reeve (1843: pl. 39 fig. 213, s.n. *Conus "delessertianus"*) and by Kiener (1845: pl. 23 fig. 2), but not with the original publication.

Type locality. — "la Mer Rouge, près des côte de l'île de Socotra" (the Red Sea, near the coast of the island of Socotra). *C. delessertii* was described together with five land shells from Socotra, all collected by the naval officer Jehenne. We suppose that the

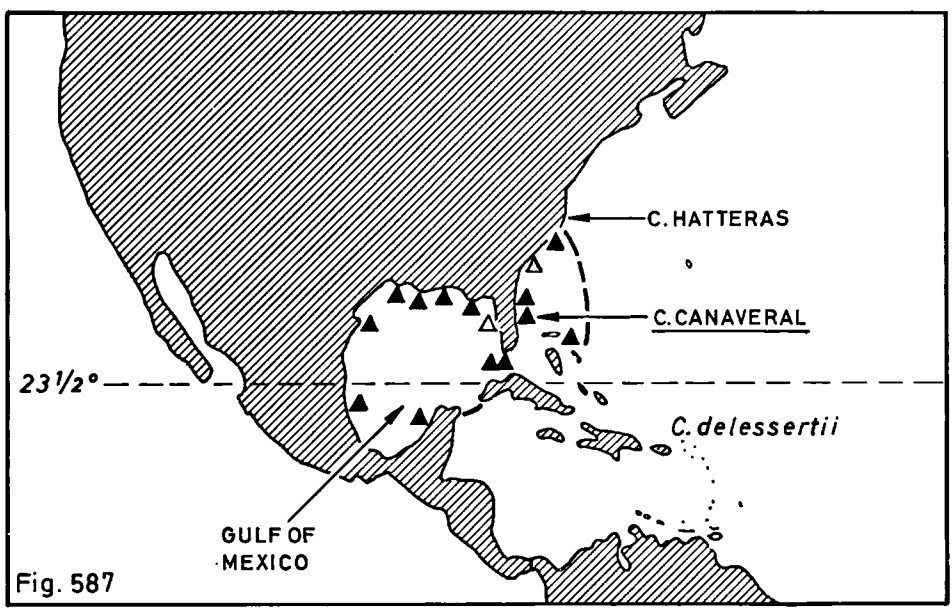


Fig. 587. Distribution of *Conus delessertii*.

marine cone shell was accidently mixed up with these land molluscs, because *C. delessertii* is not known from the Red Sea. In addition, Socotra is situated in the Arabian Sea, not in the Red Sea. We herewith designate Florida, off Cape Canaveral, as corrected type locality; many specimens (fig. 628) from there are present in ZMA (leg. P.L. van Pel, and G. Saunders).

Remarks. — Dall (1889: 70, 158) and Johnson (1934: 135) recorded *C. delessertii* from the United States. This was overlooked by Bartsch (1939: 1-2, pl. 1 figs. 1-3), who described a very large specimen (length 100 mm) from Tarpon Springs, Florida, as *C. sozoni*. Clench (1942: 30-31) recognized the similarity of juvenile shells of *C. sozoni* to *C. delessertii*. At present this synonymy is generally accepted, and *C. delessertii* is considered a valid species. Reeve's misspelling of "*delessertianus*" was copied by a number of authors.

Walls (1979: 260 below right, 398) considered *C. candidus* Kiener (vide Basteria 47: 79) a juvenile of *C. delessertii*. This opinion is doubted by the present authors, as the type figure of *C. candidus* (fig. 325, length of the shell 31 mm) is different from specimens of *C. delessertii* with the same length (fig. 629).

Distribution. — Offshore from North Carolina (south of Cape Hatteras) to the Florida Keys and Bahamas; in the Gulf of Mexico from Dry Tortugas to the Gulf of Campeche (fig. 587). Localities from Bermuda need verification.

Material studied. — ZMA has one 19th century specimen with the incorrect locality "Red Sea" (ex coll. Roeters van Lennep); recent specimens are from along the Atlantic coast of Florida (off St. Augustine in 30-40 m; off Cape Canaveral in 60-80 m), and the Florida Keys (Sombrero, dredged in 120 m); in coll. Wils from the Bahamas (Eleuthera); in AMNH from N. Carolina (Drum Inlet), Florida (Florida Keys, Dry Tortugas, Cape San Blas), Alabama (off Petit Bois Id), Mississipi (south of Horn Id), Louisiana (S.W. Pass), Texas (off Port Isabel), Mexico (Tuxpan, Campeche).

A photograph of the holotype was kindly supplied by Dr. C. Vaucher.

delicatus
figs. 588, 625

Conus (Asperi) delicatus Schepman, 1913, Siboga Exp. 49'e, Prosobranchia 5, Toxoglossa: 392-393, pl. 25 fig. 3

Type material. — The holotype is present in ZMA (Moll. no. 313009); measurements 17.6 × 5.9 mm (Schepman: 18½ × 6 mm). It is a juvenile shell (fig. 625).

Type locality. — "Madura-bay, 69-91 m", Indonesia (Siboga sta. 51).

Remarks. — Schepman mentioned that *Conus delicatus* was allied to *C. aculeiformis* Reeve, but the sculpture and height of the spire are different. The present authors have stated under *C. aculeiformis* (vide Basteria 43: 15-16, figs. 14-15) that its type material consists of two shells belonging to different species. Therefore a lectotype of *C. aculeiformis* was designated (Basteria 43: fig. 14; 1979); comparison of this lectotype with the holotype of *C. delicatus* (fig. 625) leads to the conclusion that these are conspecific. Thus *C. delicatus* is a junior synonym of *C. aculeiformis*.

Independent from our type designation, Walls (1979: 46) has also selected the same specimen as lectotype of *C. aculeiformis*; the shell is figured by Cernohorsky (1978: 290, pl. 50 fig. 6) as the "holotype".

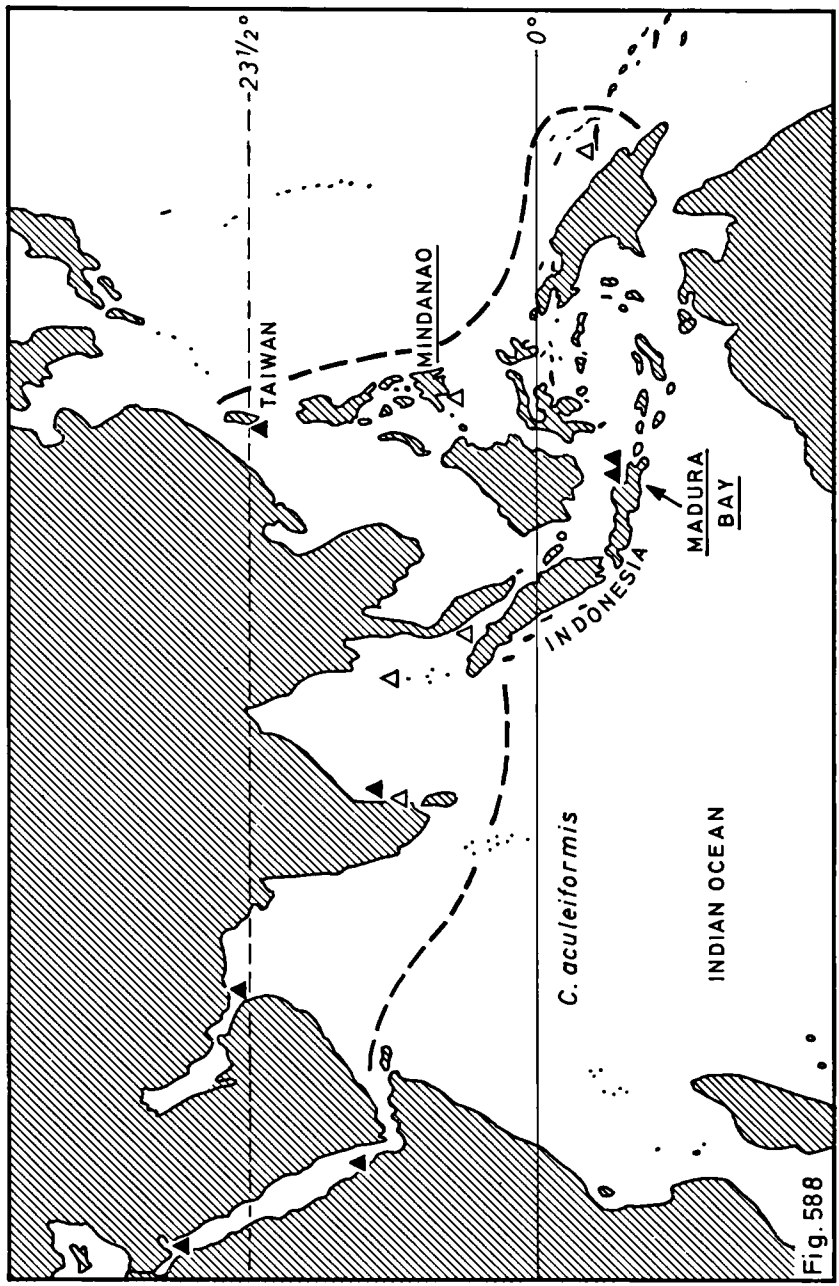


Fig. 588. Distribution of *Conus aculeiformis*, including *C. delicatus*.

Our knowledge of the distribution of *C. aculeiformis* has increased since the original map was published (cf. fig. 4); it now comprises the Red Sea, and the coasts of the northern Indian Ocean to Indonesia and in the western Pacific the area from Taiwan and the Philippines to the Bismarck Archipelago (fig. 588).

(demarcoi)

Remarks. — The name *Conus demarcoi* De Marco is mentioned by Wagner & Abbott (1978: 25-016), as "a fictitious name for *bajanensis*".

(dentatus)
fig. 612

Conus dentatus Schröter, 1803, Arch. Zool. Zoot. 3 (2): 74-75

Remarks. — Schröter described *Conus dentatus* as being intermediate between *Conus* and *Voluta*. The shell is white and about 13 mm in length. With six columellar folds, after which it was named "dentatus", the species does not belong to the Conidae; this conclusion was also drawn by Kohn (1981: 292).

The identification of *C. dentatus* remains questionable, as there is no type specimen available; nor is there a type figure or locality. From the short description we suggest that "*Conus*" *dentatus* represents *Imbricaria punctata* (Swainson, 1821), family Mitridae (fig. 612).

depriesteri
fig. 630

Conus thalassiarchus var. *depriesteri* Wils, 1972, Fam. Conidae: 73 no. 121

Type material. — The specimen on which this variety is based was deposited in ZMA (Moll. no. 372001, ex coll. Wils); measurements 64.2 × 34.8 mm (fig. 630).

Type locality. — Not mentioned; according to the label the specimen is from Palawan, Philippines.

Remarks. — *Conus thalassiarchus* var. *depriesteri* was described after 1961, thus this infrasubspecific name is without nomenclatorial status. According to its description the shell has a dark brown colour with irregular whitish tent-marks on the body whorl, and without spiral bands; the base is black. Because the type figure of *C. thalassiarchus* Sowerby, 1834, shows the same colour pattern, we must conclude that forma *depriesteri* is identical to the nominate form.

The taxon was named after the Dutch shell collector Leunis de Priester (1880-1968).

According to Barnett (1983) there are two main colour forms in *C. thalassiarchus*: brown and orange. The brown shells are from the Central Philippines (Palawan to the Samar Sea); they include *C. thalassiarchus* s.s. and *castrensis* (vide Basteria 47: 96, fig. 365). The orange shells are found in Coron (rare) and mainly in the southern Philippines (Sulu Archipelago) like the forma *azona* (vide Basteria 45: 41, fig. 171).

deshayesii
figs. 631-632

Conus deshayesii Reeve, 1843, Proc. zool. Soc. Lond. 11: 168-169; Conch. Icon. 1 (Conus): pl. 5 spec. 28 (non *C. deshayesii* Bellardi & Michelotti, 1840 [a fossil])

Type material. — A lectotype has already been designated at an earlier date (vide Basteria 48: 285-286, under *C. cuvieri*). The specimen was traced by us in IRScNB (ex coll. Dautzenberg); measurements 51.2 × 27.4 mm (fig. 631).

Type locality. — "Swan River", Australia. This locality is erroneous, therefore Djibouti in the Gulf of Aden was designated as corrected type locality.

Remarks. — The lectotype was misidentified in Sowerby (1838: 3 pt. 147 fig. 94) as "*Conus cervus*" (non *C. cervus* Lamarck).

The figure in Sowerby is reproduced here (fig. 632); dimensions 50 × 26 mm. Reeve (1843) discovered the misidentification and described the shell as *C. deshayesii*. Because this name was preoccupied in 1840 by Bellardi & Michelotti for a fossil species, *C. deshayesii* Reeve was renamed *C. cuvieri* Crosse, 1858. The latter has already been discussed in this series.

The authors are grateful to Dr. J. van Goethem and Mr. A. Lievrouw for their assistance.

desidiosus
figs. 633-634

Conus desidiosus A. Adams, 1854, Proc. zool. Soc. Lond. 1853: 119, no. 24

Type material. — The holotype is present in BMNH (no. 1985098), ex coll. Cuming; measurements 24.1 × 11.6 mm (fig. 633). The specimen was not figured in the original publication.

Type locality. — "West Africa".

Remarks. — *Conus desidiosus* is considered by recent authors to belong to the *C. mediterraneus* complex (Röckel et al., 1980: 105). Petuch (1975: 263) placed it in his genus *Africonus* (type species *C. cuneolus* Reeve).

The holotype of *C. desidiosus* is polished smooth, the body whorl bears brown punctuated spiral lines, with a weak reticulate pattern at the shoulder and in the middle, the spire is elevated. Saunders (1978: 16-17) described identical specimens from Lanzarote as daylight-active animals of *C. guinaicus* Hwass. The shells of nocturnal animals show a distinct pattern.

We consider *C. desidiosus* a colour form, representing a local population of *C. guinaicus* from the Canary Islands.

Material studied. — The holotype; ZMA has specimens (fig. 634) of forma *desidiosus* from Lanzarote.

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

desmotus
figs. 381, 383, 589, 635

Conus desmotus Tomlin, 1937, Proc. Mal. Soc. Lond. 22: 206

Type material. — *Conus desmotus* is a nomen novum for *C. catenatus* Sowerby, 1878 (non Sowerby, 1850), so that the holotype of *C. catenatus* is also the type of *C. desmotus* (fig. 383).

Type locality. — "Panama?". Although Sowerby used a question mark, it is quite possible that the holotype came from the Caribbean side of Panama (see under material studied, and fig. 635 b).

Remarks. — We have discussed *C. desmotus* under *C. catenatus* (vide Basteria 47: 97-98), being a subspecies of *C. cedonulli* Linné. *C. c. desmotus* (figs. 381, 383, 635) is distinct from *C. cedonulli* s.s. (figs. 375-378) by (1) a more slender shape, (2) a higher spire, which is straight or slightly concave, (3) the last whorl, covered with about 40 punctuated spiral lines in adult specimens; the pattern of orange to brown spots is very irregular, and both smooth and granulated shells are known to occur.

C. sanctaemarthae Vink, 1977, is a junior synonym; *C. "consobrinus"* in Petuch (1981: 334) is a misidentification for *C. desmotus*. See also under *C. concatenatus* Sowerby in Basteria 48: 253.

In our opinion *C. granarius* Kiener, 1845, is not the first available name for *C. desmotus* (cf. Basteria 47: 97). The type figure of *C. granarius* may suggest a granulated specimen of *C. desmotus*, but the holotype is lost and the type locality unknown.

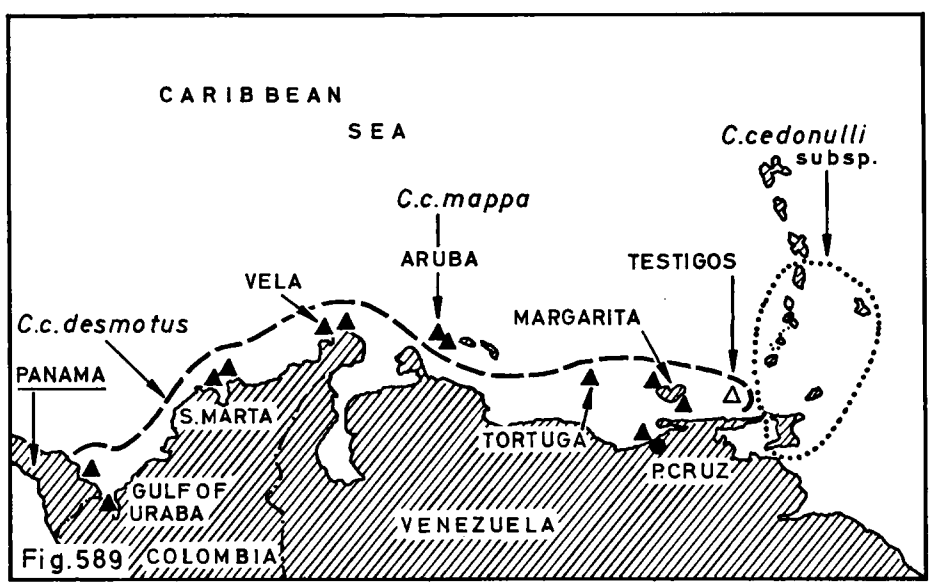


Fig.589

Fig. 589. Distribution of *Conus cedonulli desmotus* and *C. c. mappa* (= *curassaviensis*) as compared to the remaining subspecies of the *C. cedonulli* complex (cf. fig. 303).

Distribution. — *C. cedonulli desmotus* is the subspecies in the *C. cedonulli* complex restricted to the coasts of the mainland; it ranges from Panama to the Testigos Islands, Venezuela (fig. 589).

Material studied. — The holotypes of *C. catenatus* (Natl. Mus. Wales) and *C. sanctae-marthae* (RMNH); specimens from Santa Marta (in ZMA, RMNH, coll. Wils); specimens trawled in the Gulf of Uraba and off Cabo de la Vela, 32 fms. (in coll. Dr. E.F. García). The Los Angeles County Museum of Natural History has specimens from Panama (Caledonia Bay, 28-29 fms), Colombia (off Bahia Honda, 9-10 fms), and Venezuela (Tortuga Id., 40-41 fms; Puerta la Cruz, dredged; Margarita Id., 21-22 fms; Coche Id., 19-33 fms). The first author is grateful to Dr. J.H. McLean and Mr. Gale Sphon for the loan of specimens and assistance in Los Angeles.

(desselatus)

Remarks. — *Conus desselatus* in Reichenbach (1842: 51, pl.17 figs. 376-377) is an error for *C. tessulatus* Born, 1778.

detritus
fig. 626

Conus detritus Menke, 1830, Syn. Meth. Moll., ed. alt.: 73

Remarks. — Menke has used the name *detritus* as a synonym of *Conus lividus* Hwass, 1792. He refers to the figure in Martini (vol. 2, 1773: pl. 53 fig. 589), which is reproduced here (fig. 626); the dimensions are 41 × 20 mm. It can be identified as *C. lividus*.

The name *C. detritus* was traced by Kohn & Riggs (1979: 137); according to the ICZN (art. 11 d and 16 b) it is not available.

diadema
figs. 590, 636-637

Conus diadema Sowerby I in Sowerby II, 1834, Conch. Illustr. pt. 57 fig. 88; Proc. zool. Soc. Lond. 2: 19

Type material. — The whereabouts of the holotype are unknown. The type figure is reproduced here (fig. 636); dimensions 42 × 25 mm.

Type locality. — Not given in the Conchological Illustrations. In the Proceedings of the Zoological Society of London the author states "ad Insulas Gallapagos, found in the clefts of the rocks at low water", which we consider the type locality.

Remarks. — In the index of the Conchological Illustrations the author states that *Conus diadema* is conspecific with *C. brunneus* Wood, 1828. At present these two are considered distinct and valid species (Hanna 1963: 14-15; Keen, 1971: 661). *C. diadema* (figs. 636-637) is chestnut-brown with a light buff central stripe and a purple aperture; *C. brunneus* (vide Basteria 46: 43-44, figs. 266-267) is dark brown with even darker spiral lines and white blotches and the aperture is grayish white.

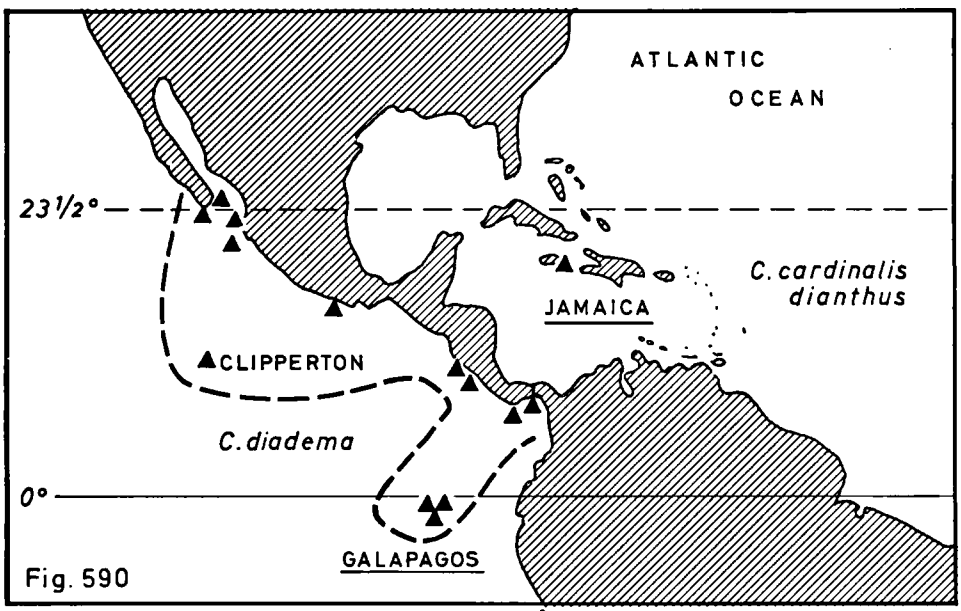


Fig. 590. Distribution of *Conus diadema*, and known localities of *C. cardinalis dianthus* (cf. fig. 300).

C. prytanis Sowerby III, 1882, is a junior synonym of *C. diadema*; its holotype came also from the Galapagos Islands. Granulated specimens of *C. diadema* are known as the forma *pemphigus* Dall, 1910 (originally described as a subspecies of *C. brunneus*).

Distribution, — *C. diadema* is known from the Gulf of California to Panama, Clipperton, and the Galapagos Islands (fig. 590).

Material studied. — ZMA has specimens from Costa Rica (Sámara) and Panama (Canal Zone, Venado Id.); coll. Wils from Mexico (Cape San Lucas) and Galapagos (Sta Cruz); AMNH from Mexico (Cape Pulmo, Cerralvo Id., Mazatlan, Tres Maris Is.), Panama (Perlas Is.), Clipperton Id., and the Galapagos Islands; LACMNH from a number of localities throughout the range (Gulf of California from 24° N, South Mexico, Costa Rica, Panama and Galapagos Is.).

dianthus
figs. 590, 638, 639

Conus dianthus Sowerby III, 1882, Proc. zool. Soc. Lond. 1882: 118, pl. 5 fig. 4

Type material. — The holotype (fig. 638) was originally in the Melvill collection, later in the Tomlin collection, at present in NMW, Cardiff (no. 1955.158.37); measurements 27.1 × 15.0 mm (Sowerby: 28 × 13 mm).

Type locality. — Not given. Based on specimens examined we herewith designate Jamaica type locality for *Conus dianthus*.

Remarks. — In the literature this species has been united with *C. boeticus* Reeve. The holotype of the latter was considered to be lost (vide Basteria 46: 31), but has recently been traced by one of the present authors (R.M.) in the general collection of BMNH. Comparison of the type specimens of both *C. dianthus* and *C. boeticus* shows that synonymy cannot be established.

We have stated under *C. cardinalis* Hwass (vide Basteria 47: 89-90) that *C. dianthus* possibly belongs to that species complex, occurring around the Greater Antilles. This opinion is confirmed by material from Jamaica (fig. 639), collected by Dr. R. Bieler. In recent literature (Humphrey, 1975: pl. 21 fig. 14a; Röckel, 1984: nr. 479) these shells from Jamaica were misidentified as *C. havanensis* Aguayo & Farfante.

Basing ourselves on the material studied in the *C. cardinalis* complex we provisionally consider *C. dianthus* a subspecies. The shell has a white ground colour with a pinkish undertone, and irregular orange dots more or less grouped together in two spiral bands; the apex is pink. *C. cardinalis* (figs. 356-358) has a coral-red shell with a white central band. Occasionally there is another white band below the shoulder; the spire and shoulder are also white. In these white areas there are irregular brown spots.

The shells of both *C. cardinalis* s.s. and its subspecies *dianthus* are coronated and granulate, with a pink aperture.

Distribution. — *C. cardinalis dianthus* is only recorded from Jamaica (fig. 590).

Material studied. — The holotype and specimens from the north coast of Jamaica (in ZMA).

We are grateful to Dr. Rudolf Bieler for his donations, and to Ms. A. Trew for the loan of the holotype.

dictator
fig. 640

Conus (*Leptoconus*) *dictator* Melvill, 1898, Mem. Proc. Manchr lit. phil. Soc. 42 (4): 9-10, pl. 1 fig. 10

Type material. — The holotype is in BMNH (no. 1898.7.5.87; ex coll. F.W. Townsend); dimensions 46 × 19 mm (fig. 640). Trew (1982: 8) listed one "paratype" in NMW, Cardiff (no. 1955.158.457; ex coll. Townsend, and Melvill). Because this specimen is not mentioned by Melvill in the original description, it does not belong to the type series.

Type locality. — "Sheikh Shuaib Island, Persian Gulf, 10 fathoms in coral sand".

Remarks. — We have compared the holotype of *Conus dictator* to the type of *C. milesi* Smith, 1887, from Muscat, Oman, which is a juvenile shell of 20.7 × 7.5 mm. It is concluded that they represent the adult and juvenile stages of the same species. Thus *C. dictator* is a junior synonym of *C. milesi*.

We are grateful to Ms. K.M. Way for a photograph of the holotype, and to Ms. A. Trew for the loan of the supposed "paratype" and to C. Pettitt for the original description.

dilectus
fig. 641

Conus dilectus Gould, 1850, Proc. Boston Soc. nat. Hist. 3: 172; 1852, Unit. Stat. Expl. Exp. 12: 286, pl. 21 fig. 367a

Type material. — The holotype is present in USNM (no. 5762); measurements 12.8 × 5.8 mm (fig. 641). The shell was not figured in the original publication.

Type locality. — "Feejee Islands", Fiji.

Remarks. — Cernohorsky (1964: 71-72, pl. 17 fig. 62) has studied the Conidae of Fiji, and stated that *Conus dilectus* is an endemic species from North Viti Levu. However, his figured shell is not conspecific with the holotype of *C. dilectus*.

We have examined the type specimen (fig. 641); it is a juvenile cone shell with a vague tent-pattern, now identified as a juvenile *C. textile* Linné, a species occurring at Fiji.

Thanks are due to Dr. R.S. Houbrick for the loan of the holotype.

dillwynii
fig. 642

Conus dillwynii Reeve, 1849, Conch. Icon. 1, Conus, Emendations: 2

Type material. — *Conus dillwynii* is a nomen novum for *C. piperatus* Reeve, 1843 (non Dillwyn, 1817). The type lot of *C. piperatus* in BMNH (no. 196171) contains three conspecific specimens, marked as "syntypes", with measurements 30.7 × 17.3, 27.9 × 16.8 and 27.7 × 14.9 mm. The smallest is figured by Reeve (Conch. Icon. 1, Conus pl. 43 spec. 230), and must be considered the holotype (fig. 642), because Reeve's text does not indicate that there were more specimens. Thus the two remaining shells are excluded from the type series; the larger specimen was figured by Sowerby (1857-1858: pl. 14 fig. 334).

Type locality. — Not given.

Remarks. — Reeve mentioned *C. erythraeensis* Reeve to be the nearest ally; this is generally smaller (18-25 mm) and the pattern consists of regular rows of squarish dots. *C. dillwynii* grows to a larger size (25-35 mm) and the dotted lines are less frequent and somewhat irregular. In both taxa some dots may coalesce (cf. *C. erythraeensis* forma *adustus* Sowerby, vide Basteria 43: 83, 101 top figure "31", to be corrected to 32).

Tentatively we consider *C. dillwynii* a subspecies of *C. erythraeensis*. In Walls (1979: 385) the shells are identified as *C. jickeli* Weinkauff (which is placed by us in the complex of *C. inscriptus* Reeve).

C. hamilli Crosse, 1858, is also a nomen novum for *C. piperatus* and thus an objective junior synonym of *C. dillwynii*.

Distribution. — *C. erythaeesis dillwynii* is found on the East African coast from the Gulf of Aden to Madagascar; it may have penetrated the southern Red Sea. The nominal subspecies is confined to the Red Sea.

Material studied. — The holotype; for the loan we are grateful to Ms. K.M. Way. ZMA has specimens from Madagascar (Nosy Bé), and the Bay of Obock; coll. Wils from the Gulf of Aden (Djibouti) and Somalia (Mogadishi).

discrepans
fig. 646

Conus discrepans Sowerby I in Sowerby II, 1833, Conch. Illustr. pt. 29 fig. 28

Type material. — The present whereabouts of the holotype are unknown. The type figure is reproduced here (fig. 646); dimensions 28 × 17 mm.

Type locality. — Not mentioned.

Remarks. — The figure shows a white shell with grooves below the shoulder. In the literature *Conus discrepans* is united with *C. adamsonii* Broderip (figs. 24, 454-455), and with *C. catus* Hwass (figs. 368-370); both identifications are questionable.

With neither type specimen nor description we consider *C. discrepans* unidentifiable for the present.

dispar
fig. 647

Conus dispar Sowerby I in Sowerby II, 1833, Conch. Illustr.: 3, pt. 37 fig. 57

Type material. — The present whereabouts of the holotype are unknown. The type figure is reproduced here (fig. 647); dimensions 22 × 9 mm.

Type locality. — Not given.

Remarks. — *Conus dispar* is sometimes considered a junior synonym of *C. gradatus* Wood, 1828, based on the figure in Sowerby II (1857-1858: pl. 9 fig. 195). However, that depicted shell is not conspecific with the figure of the type specimen of *C. dispar*.

Weaver (1966: 4, figs. 1-2) recognized it as a valid species from the Gulf of California; Keen (1971: 667) also mentioned *C. dispar* from this area, being a junior synonym of *C. scalaris* Valenciennes. The shape and dimensions of the type figure also recalls *C. attenuatus* (fig. 151), but the pattern is distinct.

Without a type specimen, and with no description, the identity of *C. dispar* remains questionable. Tentatively we consider it a nomen dubium.

distans
figs. 134, 409, 591, 644-645

Conus distans Hwass in Bruguière, 1792, Encycl. Méth. 1: 634 no. 32

Type material. — There are two syntypes: (1) a shell from the Hwass collection which is now in MHNG (no. 1106/67), and (2) a reference in Chemnitz (vol. 10, 1788: 24-25, pl. 138 fig. 1281, s.n. *C. mennonitarum coronatus*). Mermod (1947: 178) and Kohn (1968: 454, pl. 4 fig. 38) considered the shell in MHNG as the holotype; this specimen is here designated lectotype of *Conus distans*. Its measurements are 100 × 51 mm (fig. 644).

Type locality. — "dans l'océan pacifique, sur les côtes de la nouvelle Zélande" (in the Pacific Ocean, on the coasts of New Zealand), which is erroneous. We herewith designate the Moluccas as corrected type locality, from where specimens are present in ZMA (fig. 645).

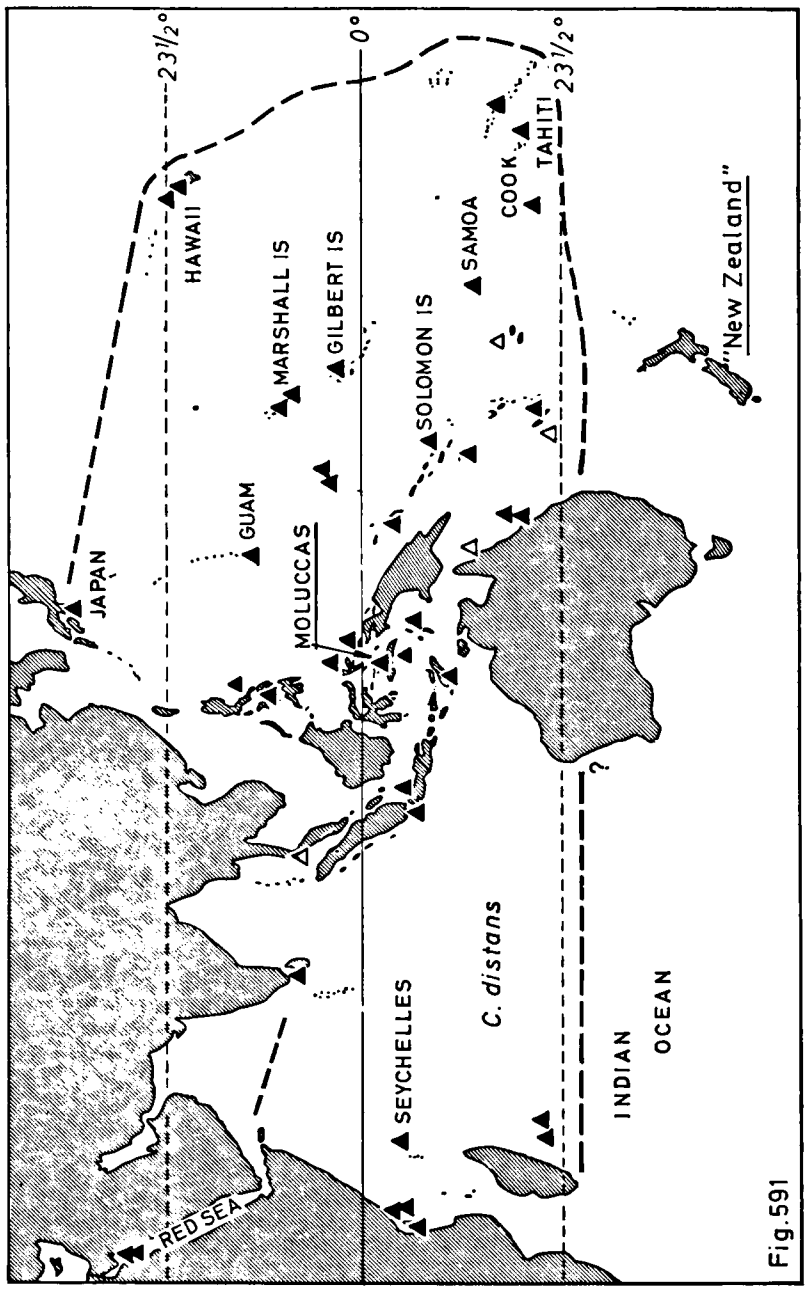


Fig. 591. Distribution of *Conus distans*.

Remarks. — *C. distans* is a valid and well-known species. The large shell may reach a maximum size of 135 mm; the base is stained brown, and the spire has a characteristic flat apex. Unlike adults, the shell in its juvenile stage is grooved and has a distinct colour pattern. In the literature these young specimens were described several times as distinct species: *C. kenyonae* Brazier, 1896, and its variety *arrowsmithensis* (fig. 134), *C. waterhousae* Brazier, 1896, and recently as *C. chinoi* Shikama (fig. 409).

Distribution. — *C. distans* is known from sublittoral habitats in the Indo-Pacific from East Africa via Madagascar, Ceylon and Indonesia to S. Japan, and from Queensland to French Polynesia and Hawaii (fig. 591). It is uncommon in the northern Red Sea (Kohn, 1965: 56; Mienis, 1981: 423). The species has not yet been recorded from the Arabian Sea and India.

Material studied. — ZMA has specimens from Tanzania (Dar-es-Salaam), Mauritius and Réunion, Ceylon (Yala), Java (Djakarta Bay, P. Panaitan), Moluccas (Morotai, Ambon, Dobo), Bismarck Archipelago (New Britain), Solomon Is. (Malaita), and Society Is. (Tahiti). The collection Wils contains specimens from Egypt (Hurghada), Zanzibar, the Seychelles (Mahé), Philippines (Cebu), and Tuamotu Archipelago (Aratika); RMNH from Indonesia (Obi, Ambon, Timor, Waigeu), the Philippines (Luzon), Queensland and Guam; AMNH from Tanzania (Zanzibar, Pemba), and localities in the Pacific: Caroline Is (Lukunor, Ponape), Marshall Is (Kwajalein, Aruno), Gilbert Is, Samoa, Cook Is, and Hawaii (Oahu, Maui).

Thanks are due to Dr. C. Vaucher for a photograph of the type specimen.

dolium
fig. 643

Conus dolium Boivin, 1864, J. Conchyl., Paris 12: 38-39, pl. 1 figs. 3-4

Type material. — The holotype was in the collection of Boivin, but its present whereabouts are unknown. The type figure is reproduced here (fig. 643); dimensions 37 × 22 mm (Boivin: 36 × 21½ mm).

Type locality. — Unknown.

Remarks. — Boivin mentioned that he was the owner of a manuscript by Duclos, entitled "Album Conchyliologique", in which this shell was figured and named "Madionella", but without a description. Because he did not like the name "*Conus madionella*" the species was described as *C. dolium*.

The type figure (fig. 643) shows a shell with a flat spire and mucronate apex, and large areas of orange on the body whorl. *C. broderipii* Reeve (figs. 260-261, 291) has a similar shell, but with more grooves and a pink aperture.

C. dolium seems to be close to *C. spectrum* Linné, 1758, which species usually has a higher spire and a pattern of small but darker dots. We consider it a colour form; *C. spectrum* forma *dolium* is rarely seen. A specimen from the Philippines is figured by Walls (1979: 613, above left).

dominicanus
fig. 648-649

Conus cedonulli dominicanus Hwass in Bruguière, 1792, Encycl. Méth. 1: 603, 605

Type material. — The specimen described from the Hwass collection and figured in the Tableau Encyclopédique (vol. 23, 1798: pl. 316 fig. 8) is not present in MHNG (Mermod, 1947: 174). From the references Clench (1942: 6-7) has designated the figure in Chemnitz (vol. 10, 1788: pl. 141 fig. 1306) as lectotype of *Conus dominicanus* (fig. 648). This shell was recently traced by the present authors in ZMUC, and therefore not yet mentioned by Cernohorsky (1974: 186-188). The measurements are 42.4 × 21.3 mm (fig. 649), ex coll. Spengler. For the validity of Clench's designation we refer to the Introduction of this publication.

Type locality. — According to Hwass "les côtes de l'isle de la Dominique" (the coasts of the island Dominica). Because Dominica does not fall within the known range of *C. cedonulli* s.l. (figs. 303, 589) this locality is incorrect.

Chemnitz (1788: 47-50) does not give a locality for the lectotype, which he named "*Conus cedonulli regina australis*". The original label of the shell in ZMUC bears the same name, including the locality "Syd America". Thus South America may be considered the type locality for *C. dominicanus*.

Remarks. — Because the identity of *C. cedonullii* Linné has long been misunderstood (vide Basteria 47: 102-103), the name *C. dominicanus* was selected by Clench (1942: 6-7) as the valid name for the West Indian species. Kohn (1976: 448) provisionally regarded *dominicanus* as of infrasubspecific rank; it must be considered of subspecific rank (ICZN art. 45).

We have examined the lectotype of *C. cedonulli dominicanus* (fig. 649); it agrees in shape, colour and pattern with a specimen in the *C. cedonulli* complex from Aruba (cf. figs. 576-577). This makes *C. c. dominicanus* a synonym of *C. c. curassaviensis* Hwass, and a junior synonym of *C. c. mappa* Lightfoot (vide Basteria 48: 283-284, fig. 578).

The authors are grateful to Dr. J. Knudsen for his hospitality in ZMUC, and for the loan of the lectotype.

dondani
figs. 592, 650

Conus dondani Kosuge, 1981, Bull. Inst. Malac. Tokyo 1: 114, pl. 39 figs. 8-9

Type material. — The type specimen is in IMT (no. 81-35); measurements 23.1 × 9.2 mm (fig. 650).

Type locality. — "Panglau, Bohol, Philippines".

Remarks. — Kosuge has compared *Conus dondani* to the juvenile shell of *C. gloriamaris* Chemnitz, from which it differs in colour pattern and sculpture of the spire whorls. We have compared the holotype to juveniles of *C. bengalensis*, which is distinct in having a stepped protoconch.

It is our impression that the type specimen of *C. dondani* is a juvenile shell; based on the limited material available for study, we provisionally consider it a valid species.

Distribution. — So far only known from the type locality (fig. 592).

Material studied. — The holotype; we are grateful to Dr. S. Kosuge for the loan of this specimen.

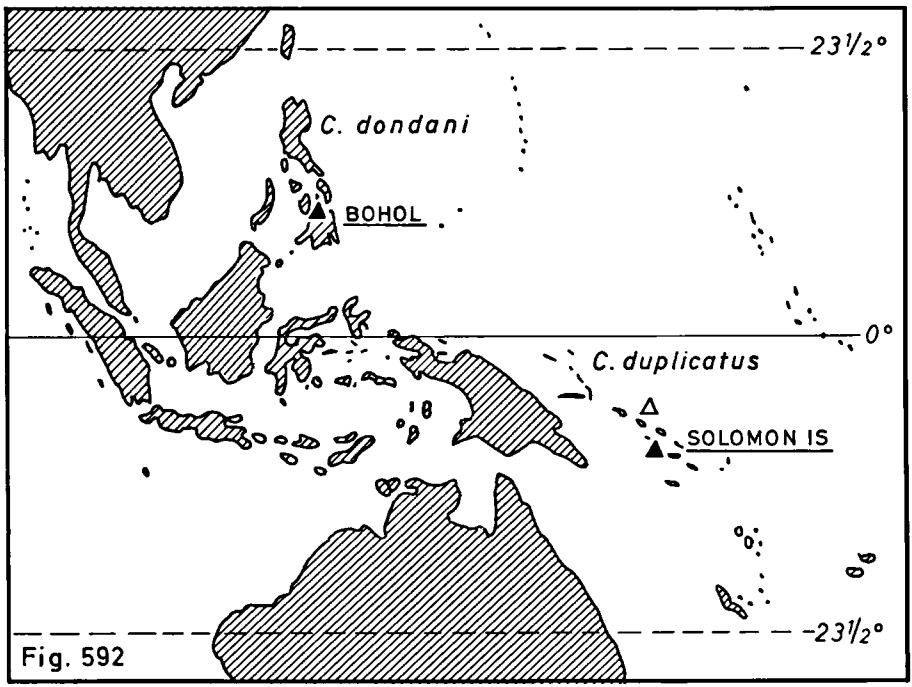


Fig. 592. Known localities of *Conus dondani* and *C. duplicatus*.

donovani
fig. 651

Conus ammiralis var. *donovani* Dautzenberg, 1937, Mém. Mus. r. Hist. nat. Belg. hors série 2(18): 20

Type material. — Dautzenberg proposed the name *donovani* as a nomen novum for *Conus ammiralis* var. *amboinensis* β in Donovan (1822: pl. 1 fig. 2). The specimen figured by Donovan is the holotype. The shell was originally in the "Leverian" collection, but was sold afterwards and the present whereabouts are unknown. The type figure is reproduced here (fig. 651): dimensions 39 × 17 mm (Donovan: 1½ × 5/8 inch).

There is no specimen of forma *donovani* in the collection of Ph. Dautzenberg, now in IRScNB.

Type locality. — "Amboyna". This Moluccan island lies within the range of *C. ammiralis* Linné, 1758 (fig. 54).

Remarks. — Donovan has named this variety the "six-banded Amboyna high-spired admiral shell". Because of the small size the shell is subadult. The number and width of the bands in *C. ammiralis* is variable and if one so desires *C. donovani* may be considered a colour form of *C. ammiralis*.

For the publication date of Donovan's work we refer to Basteria 44: 28-29, under *C. amboinensis* Donovan.

C. ammiralis and other colour formae (*australis, crebremaculatus*) have already been discussed in this series. We have designated a lectotype of *C. crebremaculatus* Dautzenberg in 1984 (vide Basteria 48: 272, fig. 552); however, the same specimen was already selected as lectotype by Walls (1979: 87).

(dorbignyi)

Remarks. — *Conus d'orbignyi* in Weinkauff (1874: 258) is an error for *C. orbignyi* Audouin.

(doreyanus)

Conus doreyanus "Blainville" Tomlin, 1937, Proc. Malac. Soc. Lond. 22: 241

Remarks. — "*Cucullus doreyanus* Blainville, 1830", from Port Dorey in New Guinea, was considered by Tomlin to belong to the Conidae (since *Cucullus* Röding, 1798, is an objective junior synonym of *Conus* Linné, 1758).

After checking the description of *Cucullus doreyanus* in the Dictionnaire des Sciences Naturelles (vol. 60: 119), and comparing it with de Blainville's reference to Quoy & Gaimard's Voyage de l'Astrolabe (vol. 4: 93; Zoophytes pl. 4 figs. 21-23), it became evident that this species belongs to the Coelenterata. Therefore it is neither *Conus striatus* Linné from Port Dorey, nor an emendation for *C. dorreensis* Péron, as Tomlin suggested.

dormitor
fig. 503

Conus dormitor Pilsbry, 1904, Proc. Acad. nat. Sci. Philad. 56: 6, pl. 1 figs. 9-9a
(non *C. dormitor* Solander, 1766, a fossil)

Type material. — A lectotype was designated by Coomans et al. (1985: 247, fig. 503).

Remarks. — *Conus dormitor* Pilsbry is a junior homonym of the fossil *C. dormitor* Solander. The species was renamed *C. comatosa* Pilsbry, 1904 (vide Basteria 48: 247).

dorreensis
figs. 593, 653-655

Conus dorreensis Péron, 1807, Voy. découv. Terres Australes 1: 120

Type material. — The collection of François Péron was present in the museum of Le Havre, but destroyed during World War II (Kohn, 1981: 301). Thus the holotype does not exist anymore; its length was reported to be 40 mm. The shell was not figured in the original publication.

Type locality. — "la Terre d'Endracht". According to the map in Péron, this area ranges from North West Cape to Shark Bay in Western Australia. The species was named after Dorre Island, which is situated in this area (fig. 593).

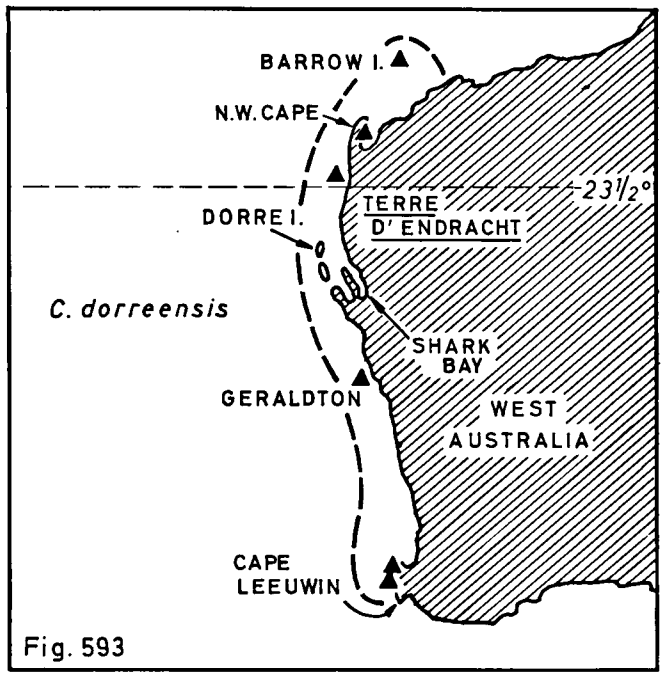


Fig. 593. Distribution of *Conus dorreensis*.

Remarks. — *Conus dorreensis* is a valid species. The shell has a distinctive papery yellowish-green periostracum, which often adheres to the shell long after the death of the animal (figs. 653, 655). Lamarck (1810: 38) has renamed the species *C. pontificalis*, which is a junior synonym; he mentioned that the species was discovered and reported on by Péron.

See also under *C. doreyanus* in this publication.

Distribution. — The western coast of W. Australia between Barrow Island and Cape Leeuwin (fig. 593). The type locality of *C. pontificalis*, "Terre de Diemen" = Tasmania, is erroneous.

Material studied. — ZMA has recently collected specimens from Barrow Id., Exmouth, Ningaloo, north of Geraldton, Cape Naturaliste, and Margaret River; RMNH from Yallingup and P. Augusta (near Cape Leeuwin).

douvillei
fig. 659

Conus douvillei Fenaux, 1942, Bull. Inst. Océan. 814: 2-3, fig. 5
(non *Hemiconus douvillei* Cossmann & Pissarro, 1901, a fossil)

Type material. — The holotype was in the collection of Fenaux; the present whereabouts are unknown (see Introduction). The type figure is reproduced here (fig. 659); dimensions 54 × 26 mm.

Type locality. — "Madagascar".

Remarks. — Fenaux mentioned that *Conus douvillei* is intermediate between *C. bandanus* Hwass and *C. imperialis* Linné. The shell is white with yellow spots; the spire is flat and coronated. We consider it a junior synonym of *C. imperialis fuscatus* Born, 1778 (cf. fig. 538); this subspecies is known from the western Indian Ocean.

C. douvillei Fenaux is a junior secondary homonym of *C.* (*Hemiconus*) *douvillei* (Cossmann & Pissarro, 1901), an Eocene fossil from France.

(drador)

Remarks. — *Conus drador* is mentioned by Hanley (1859: 62), being used by Linnaeus in his manuscript of the Museum Ulricae. The name is derived from the vernacular French name "drap d'or", which stands for *C. textile; C. drador* is therefore an unavailable name.

drangai
fig. 652

Conus drangai Schwengel, 1955, Nautilus 69: 13-14, pl. 2 figs. 1-7

Type material. — The holotype is present in USNM (no. 617612); measurements 32.0 × 18.4 mm (fig. 652). One paratype is in USNM, the other paratypes were retained in the collections of Jeanne S. Schwengel and Ted T. Dranga. The original author did not mention the number of paratypes, neither their measurements, nor which of the seven figured shells represents the holotype. After comparing the type specimen to the depicted shells, we have now established that fig. 1 in Schwengel is the holotype. A colour photograph of the latter was published by Hanna (1963: pl. 9 fig. 2).

Type locality. — "Bahia Salinas, Costa Rica", at the Pacific side; collected by T. and A. Dranga in 1954.

Remarks. — Schwengel stated that *Conus drangai* closely resembles *C. vittatus* Hwass, although a number of distinct characters was mentioned. She did not compare it to *C. orion* Broderip, 1833, which is considered conspecific (Hanna, 1963: 46; Keen, 1971: 664), so that *C. drangai* is a junior synonym.

Material studied. — The holotype; we are grateful to Ms. Diane Bohmhauer for the loan of the specimen.

dubitatus

Cucullus dubitatus Röding, 1798, Mus. Bolten. 2: 46, no. 580

Remarks. — Röding mentioned one specimen in the Bolten collection, which is considered lost. He did not refer to any figure in the literature, and only mentioned a vernacular name "Der After Admiral". It is concluded that *Conus dubitatus* (Röding) is a nomen nudum.

duplicatus
figs. 592, 656-658

Conus duplicatus Sowerby I, 1823, Gen. Rec. Foss. Shells 2, pt. 16, pl. 267 fig. 5

Type material. — The holotype was originally in the cabinet of the Rev. J. Goodall, which collection is at present in BMNH. However, the type specimen of *Conus duplicatus* could not be traced (Ms. K.M. Way, in litt. 1980). The type figure is reproduced here (fig. 656); dimensions 68 × 30 mm.

Type locality. — Not given. We herewith designate the Solomon Islands type locality for *C. duplicatus*.

Remarks. — The species was named after the paired spiral grooves which run over the body whorl, otherwise the shell is rather smooth. The colour is white with yellowish brown spots tending to be vermiculate (fig. 657).

In a colour form (fig. 658) the axial vermiculate lines become paler, whereas spiral punctuated lines are more conspicuous.

C. duplicatus is distinct from *C. australis* Holten (vide Basteria 45: 40, figs. 104, 168). The latter is somewhat more slender with a roughly textured body whorl and single spiral grooves; in the maculated pattern three bands are visible.

We do not favour the opinion that *C. armadillo* Shikama (vide Basteria 45: 19-20, fig. 133) and *C. kuroharai* Habe, both from Taiwan and the Philippines, are conspecific with *C. duplicatus*.

Distribution. — *C. duplicatus* seems to be confined to the Solomon Islands (fig. 592).

Material studied. — IRScNB has specimens from the Solomon Islands (ex coll. H. Saesen); coll. Wils from Russell Id.

(dupontii)
fig. 660

Conus dupontii Kiener, 1845, Coq. vivant. 2: pl. 61 fig. 2; 1849-1850: 273

Type material. — The holotype was in the collection of Madame Dupont; its present whereabouts are unknown. The type figure is reproduced here (fig. 660); dimensions 28 × 18 mm (Kiener: length 25 mm).

Type locality. — Not given.

Remarks. — Although Kiener mentioned a relationship with *Conus africanus* (vide Basteria 43: 87), *C. dupontii* is generally considered to belong to the genus *Parametaria* (fam. Columbellidae). Thus this species is excluded from the Conidae. "*Conus*" *concinnus* Broderip, 1833 (vide Basteria 48: 253) is a synonym.

dusaveli
figs. 224, 594, 662-664

Leptoconus (*Phasmoconus*) *du saveli* H. Adams, 1872, Proc. zool. Soc. Lond. 1872: 12, pl. 3 fig. 17

Type material. — The type specimen (fig. 662) was originally in the collection of Du Savel, at present in NMW (no. 1955.158.25); measurements 50.7 × 19.7 mm (Adams: 50 × 20 mm).

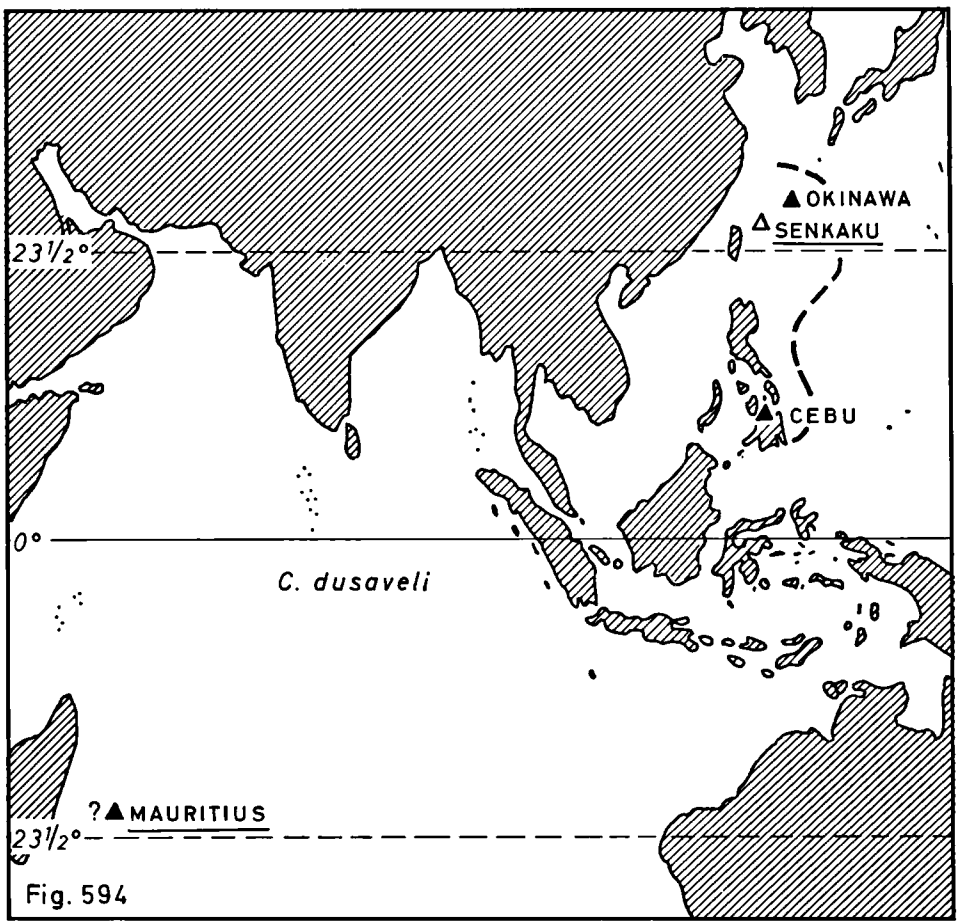


Fig. 594. Distribution of *Conus dusaveli*, including *C. benten*.

Type locality. — "Mauritius, from the stomach of a fish" (see below).

Remarks. — The holotype of *Conus dusaveli* was for about one hundred years the sole specimen known (Dance, 1969: 115-116). In recent literature (Janowsky, 1979; Bellin, 1980) more specimens are mentioned; only then we learned that the holotype is a subadult shell. The surface is shiny, the colours somewhat faded compared to the type figure in Adams. *C. dusaveli* (Adams) is a valid species; the shell may reach a length of 90 mm (figs. 663-664).

Shikama & Oishi (in Shikama, 1977) described the subspecies *Textilia dusaveli benten* from Senkaku Island in the East China Sea. It is considered an adult shell, and therefore the name is a junior synonym of *C. dusaveli* (vide Basteria 46: 19, fig. 224).

Distribution. — The species is reported from deeper water (50-200 m) near Okinawa and the southern Philippines (fig. 594). Except for the holotype no other

specimens are known from Mauritius; this is the reason why there is some doubt as regards the type locality.

Material studied. — The holotype; we are grateful to Ms. A. Trew for the loan of this shell. ZMA has a damaged specimen from Okinawa; AMNH from the Philippines (Cebu, Mactan, 120 fms). Specimens from Okinawa (coll. J.P. Camp) and Cebu (coll. A. Herlaar) have also been examined.

duvali
figs. 223, 289, 665

Conus duvali Bernardi, 1862, J. Conchyl., Paris 10: 404-405, pl. 13 fig. 3

Type material. — The holotype is present in MNHN (ex coll. Crosse); measurements 13.6 × 7.3 mm (fig. 665).

Type locality. — "Guadeloupe"; the shell was collected by A. Schramm.

Remarks. — Walls (1979: 730, 465 ill.) considered *Conus duvali* a variety of *C. mindanus*, whereas Richard (1980: 97) stated that it is a junior synonym of *C. pusillus* Lamarck, 1810 (non *pusillus* Reeve, 1843 = *C. parvatus* Walls, 1979). Kohn (1981: 327, fig. 55) has designated a lectotype for *C. pusillus*, and advised that its relationship with *C. jaspideus* Gmelin and *C. mindanus* Hwass should be studied.

In our discussion of *C. boubeeae* Sowerby, 1903 (vide Basteria 46: 36, figs. 223, 289) it was considered a junior synonym of *C. duvali*, and a relationship to the *C. mindanus* complex was suggested. We have studied the type material of *C. duvali* and *C. boubeeae*, in addition to specimens of *C. pusillus* from Guadeloupe (in coll. Wils). Tentatively we consider *C. pusillis* a valid species from the West Indies, belonging to the *C. mindanus* complex. *C. duvali* and *C. boubeeae* are junior synonyms of *C. pusillus* Lamarck.

We now have the possibility to discuss another nominal species in the *C. mindanus* complex. When *C. branhamae* Clench, 1942, was treated (vide Basteria 46: 37, fig. 259) we were not able to examine its type specimen, which was assumed to be in the H. Branham collection. It was originally described as a subspecies of *C. jaspideus* Gmelin, from shallow waters in the Bahamas. In the meantime the holotype of *C. branhamae* has been traced in AMNH (no. 166926); measurements 27.7 × 13.3 mm (fig. 666). Because the body whorl is not grooved all over (like in *C. jaspideus*), we now place this taxon in the *C. mindanus* complex. The type specimen of *branhamae* looks similar to the shells of *C. mindanus* cf. *agassizii* (vide Basteria 43: 89, figs. 28, 41), but the latter are larger (50 mm) and occur in southern Brazil (States of Rio de Janeiro and Espirito Santo).

Since its description *C. branhamae* has been recorded from St. Croix and Antigua by Usticke (1968: 7, fig. 984); a specimen from Bimini (Bahamas) is figured by Walls (1979: 465 below left). ZMA has some specimens from a 19th century collection without a locality. Provisionally we consider it a form of *C. mindanus* Hwass. The forma *branhamae* is characterized by a smaller shell (20-30 mm) with straight sides; the spire is elevated, there are large irregular brown areas on a pale background, and the last whorl is covered with about 15 neatly punctuated spiral lines.

We are grateful to Dr. Ph. Bouchet and the late W.E. Old for the loan of type material.

dux
fig. 463

Conus dux Hwass in Bruguière, 1792, Encycl. Méth. 1: 732-733, no. 126

Type material. — Hwass described two varieties of *Conus dux*, of which the specimen or var. A is present in MHNG (no. 1106/68); it was designated lectotype by Kohn (1968: 454-455, pl. 4 fig. 39). This shell is also the lectotype of *C. circumcisus* (fig. 463).

Type locality. — "aux mers des grandes Indes" (Indian Ocean).

Remarks. — The lectotypes being the same specimen, *C. dux* is a junior objective synonym of *C. circumcisus* Born, 1778 (vide Basteria 48: 228-229). Although Hwass knew that the name *C. circumcisus* is a synonym, he still renamed this species.

"*C. dux*" in Sowerby's Conchological Illustrations (1839: pt. 153 fig. 112) is a misidentification, it is not *C. dux* Hwass. In the index (Conus: 3, nr. 112) it was renamed *C. floccatus* Sowerby, and a short diagnosis added. The species will be discussed and figured under the latter name in this series.

dux
fig. 661

Cucullus dux Röding, 1798, Mus. Bolten. 2: 44, no. 561/71
(non *Conus dux* Hwass, 1792)

Type material. — The Bolten collection contained one specimen, which is considered lost. From the references Kohn (1975: 203, pl. 2 fig. 21) has designated the shell figured in Martini (vol. 2, 1773: pl. 58 fig. 648) as lectotype of *Conus dux* (Röding). The type figure is reproduced here (fig. 661); measurements 55 × 29 mm.

Type locality. — Not given. Martini (1773: 291-295) mentioned the name "westindische Admiral" for eight shells on his plate 58 figs. 645-652; however, the West Indies is an erroneous locality.

Remarks. — Röding only gave a vernacular name "Der Feldmarschall" (the field marshal), but did not supply a description. The lectotype is generally identified with *C. generalis* Linné; the short spire and the pattern of the body whorl are known to occur in the East African subspecies *maldivus* Hwass, 1792. Thus *C. dux* (Röding) is a junior synonym of the latter name; in addition it is a junior secondary homonym of *C. dux* Hwass.

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 eighth part the following *Conus* names are discussed:

dactylosus Kiener — form of *C. auricomus* Hwass.
dahlakensis Da Motta — form of *C. textile neovicarius* Da Motta - Red Sea.
dalli Stearns — valid species; lectotype designated - West Mexico to Colombia, Galapagos Is.
damottai Trovão — junior synonym of *C. crotchii* Reeve.

dampierensis Filmer & Coomans — valid species - Western Australia.
danieli Crosse — nomen novum for *C. jaspideus* Kiener; junior synonym of *C. algoensis scitulus* Reeve.
daphne Boivin — colour form of *C. spectrum* Linné - Indonesia.
daucus Hwass — valid species - Antilles.
daullei Crosse — junior synonym of *C. consors* Sowerby.
dautzenbergi Fenaux — junior synonym of *C. imperialis fuscatus* Born.
dayriti Röckel & Da Motta — valid species - Philippines.
(*dealbatus* A. Adams) — a fossil *Conus*.
debilis Monterosato — junior synonym of *C. mediterraneus* forma *ater* Philippi.
debilis Fenaux — junior homonym; junior synonym of *C. auricomus* forma *dactylosus* Kiener.
deburghiae Sowerby — lectotype designated; granulated form of *C. nocturnus* Lightfoot - Moluccas.
decoratus Solander — nomen nudum.
decoratus Röckel, Rolan & Monteiro — provisionally considered a valid species - Cape Verde Islands.
decrepitus Kiener — junior synonym of *C. cocceus* Reeve.
decurtatus Dautzenberg — lectotype designated; colour form of *C. striolatus* Kiener - Central Indo-Pacific.
delanoyi Trovão — colour form of *C. cuneolus* Reeve - Cape Verde Islands.
delessertii Récluz — valid species - Cape Hatteras to Florida and Gulf of Mexico; type locality corrected to off Cape Canaveral.
delicatus Schepman — junior synonym of *C. aculeiformis* Reeve.
(*demarcoi* De Marco) — an unavailable name.
(*dentatus* Schröter) — not a *Conus*; fam. Mitridae.
depriesteri Wils — junior synonym of *C. thalassiarchus* Sowerby.
deshayesii Reeve — junior homonym, renamed *C. cuvieri* Crosse.
desidiosus A. Adams — colour form of *C. guinaicus* Hwass - Canary Islands.
desmotus Tomlin — nomen novum for *C. catenatus* Sow., 1878; subspecies of *C. cedonulli* Linné - Panama to Venezuela.
(*desselatus* in Reichenbach) — error for *C. tessulatus* Born.
(*detritus* Menke) — an unavailable name.
diadema Sowerby — valid species - Gulf of California to Panama, Galapagos Islands.
dianthus Sowerby — subspecies of *C. cardinalis* Hwass - Jamaica designated type locality.
dictator Melvill — junior synonym of *C. milesi* Smith.
dilectus Gould — junior synonym of *C. textile* Linné; type a juvenile shell.
dillwynii Reeve — nomen novum for *C. piperatus* Reeve; provisionally considered a subspecies of *C. erythraeensis* Reeve - East Africa.
discrepans Sowerby — unidentifiable.
dispar Sowerby — nomen dubium.
distans Hwass — valid species; lectotype designated - tropical Indo-Pacific; the Moluccas designated as corrected type locality.
dolium Boivin — colour form of *C. spectrum* Linné.
dominicanus Hwass — lectotype found; junior synonym of *C. cedonulli mappa* Lightfoot.
dondani Kosuge — probably a juvenile shell; provisionally considered a valid species - Philippines.
donovani Dautzenberg — nomen novum for *C. ammiralis amboinensis* var. β Donovan; colour form of *C. ammiralis* Linné.
(*dorbignyi* in Weinkauff) — error for *C. orbignyi* Audouin.
(*doreyanus* "Blainville" Tomlin) — not a mollusc (Coelenterata).
dormitor Pilsbry — junior homonym, renamed *C. comatosa* Pilsbry.
dorreensis Péron — valid species- Western Australia.
douvillei Fenaux — junior secondary homonym; junior synonym of *C. imperialis fuscatus* Born.
(*drador* in Hanley) — unavailable name.
drangai Schwengel — junior synonym of *C. orion* Broderip.
dubitatus (Röding) — nomen nudum.
duplicatus Sowerby — valid species - Solomon Islands designated type locality.
(*dupontii* Kiener) — is *Parametaria dupontii*, fam. Columbellidae.

dusaveli (H. Adams) — valid species - S. Japan to Philippines.
duvali Bernardi — junior synonym of *C. pusillus* Lamarck.
dux Hwass — junior objective synonym of *C. circumcisus* Born.
dux Sowerby — a misidentification, renamed *C. floccatus* Sowerby.
dux (Röding) — junior secondary homonym; junior synonym of *C. generalis maldivus* Hwass.

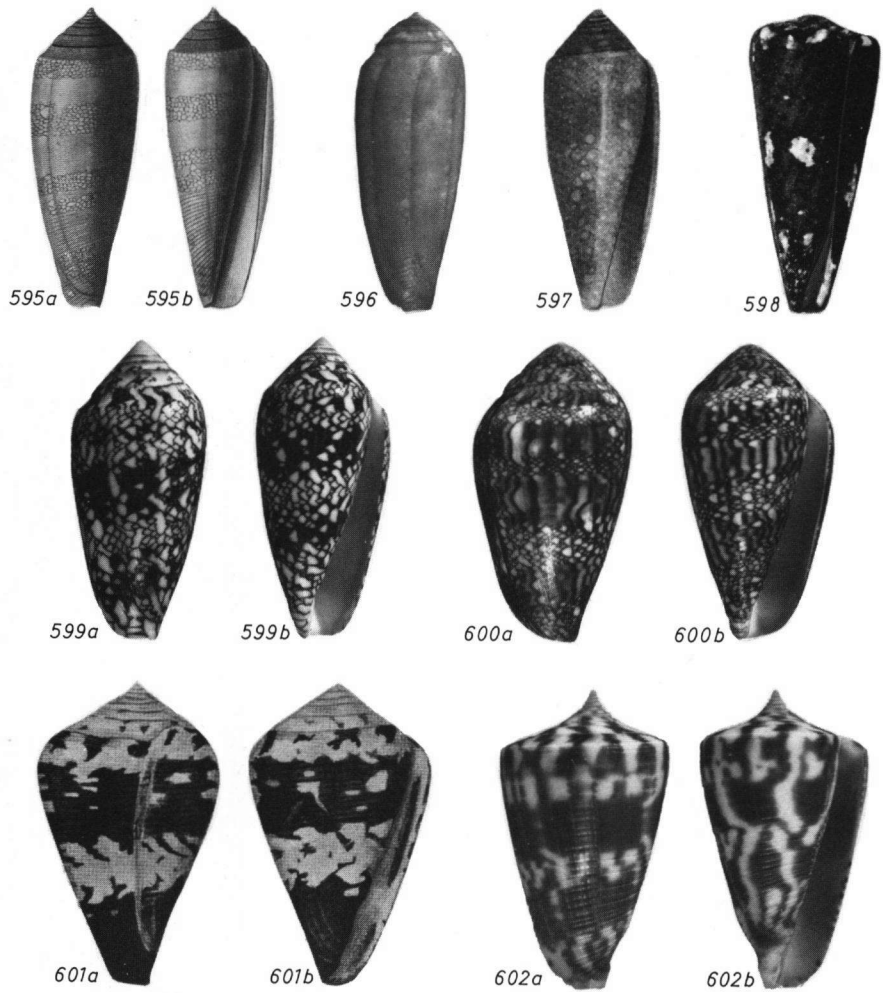
REFERENCES

General works on Conidae are mentioned in the 1st, 4th and 6th part of this series, Basteria 43: 11, 45: 44-45, 47: 125-126.

ABBOTT, R.T., 1958. The marine mollusks of Grand Cayman Island, British West Indies. — Monogr. Acad. nat. Sci. Philad. 11: 1-138.
ADAMS, H., 1872. Descriptions of fourteen new species of land and marine shells. — Proc. zool. Soc. Lond. 1872: 12-15.
BARNETT, J.L., 1983. The many forms of Conus thalassiarchus. — Hawaii. Shell News 31(5): 4.
BARTSCH, P., 1939. Two remarkable new species of marine shells from Florida. — Smithson. misc. Collns 98(1): 1-3.
BELLIN, P., 1980. It's C. dusaveli time in Okinawa waters. — Hawaii. Shell News 28(5): 12.
BERNARDI, A., 1861. Monographie du genre Conus: I-IV, 1-23. Paris.
——, 1862. Description d'un cône nouveau. — J. Conchyl., Paris 10: 404-405.
BOIVIN, A., 1864. Description de cinq espèces nouvelles du genre Conus. — J. Conchyl., Paris 12: 33-40.
BURNAY, L.P., & A.A. MONTEIRA, 1977. Seashells from Cape Verde Islands (1): 1-88. Lisboa.
CERNOHORSKY, W.O., 1967. Marine shells of the Pacific: 1-248. Sydney.
——, 1974. Type specimens of Mollusca in the University Zoological Museum, Copenhagen. — Rec. Auckland Inst. Mus. 11: 143-192.
COOMANS, H.E., 1981. Conus algoensis agulhasi and its place in the *C. algoensis* species complex. — Strandloper 208: 9.
——, & R.M. FILMER, 1985. Studies on Conidae (Mollusca, Gastropoda) 3. Systematics and distribution of some Australian species, including two new taxa. — Beaufortia 35: 1-14.
——, R.G. MOOLENBEEK & E. WILS, 1985. Alphabetical revision of the (sub)species in recent Conidae 7. cingulatus to cylindraceus including Conus shikamai nomen novum. — Basteria 48: 223-311.
CROSSE, H., 1858a. Diagnosis de coquilles nouvelles. — Revue Mag. Zool (2)10: 81-82.
——, 1858b. Observations sur le genre Cône et descriptions de trois espèces nouvelles, avec un catalogue alphabétique des Cônes actuellement connus, I-V. — Revue Mag. Zool. (2)10: 113-127, 150-157, 199-209.
DALL, W.H., 1889. Reports on the results of dredging... "Blake". Report on the Mollusca, 2. — Bull. Mus. comp. Zool. Harv. 18: 1-492.
DANCE, S.P., 1969. Rare shells: 1-128. London.
DAUTZENBERG, P., 1910. Liste de coquilles recueillies par le R.P. Aubin dans l'ile de Rua-Sura (Archipel Salomon) en 1909. — J. Conchyl., Paris 58: 24-33.
DONOVAN, E., 1822-1823. The Naturalist's Repository, 1 (unpaged). London.
FENAUX, A., 1943. Descriptions de Scalidae nouveaux. Observations sur la classification de cette famille. Descriptions de Conidae nouveaux. — Bull. Inst. océanogr. Monaco 834: 1-4.
GOULD, A.A., 1850. Several new species of shells brought home from the United States Exploring Expedition. — Proc. Boston Soc. nat. Hist. 3: 169-172.
——, 1852. Mollusca & Shells. — U.S. Explor. Exped. 12: 1-509.
HANLEY, S., 1859. On the Linnean Manuscript of the "Museum Ulricae". — J. Proc. Linn. Soc. 4: 43-90.
HINKLE, F.R., 1981. Cones of Tulear, Madagascar. — Hawaii. Shell News 29(2): 11.
HOLEMAN, J., & O. McGILL, 1969. The Conus corner. — Hawaii. Shell News 17(11): 1, 8-9.

HUMPHREY, G., 1797. Museum Calonnianum 5: 1-84.
HUMPHREY, M., 1975. Sea shells of the West Indies: 1-351. London.
JANOWSKY, R., 1979. Some notes on Conus dusaveli H. Adams, 1872. — N.Y. Shell Club Notes 250: 8-9.
JARRETT, A.G., & D. SLIMMING, 1970. The Cone shells of Seychelles: 1-32. London.
JOHNSON, C.W., 1934. List of marine Mollusca of the Atlantic coast from Labrador to Texas. — Proc. Boston Soc. nat. Hist. 40: 1-203.
KAMP KRUEGER, K., 1974. The use of ultraviolet light in the study of fossil shells. — Curator 17: 36-49.
KILBURN, R., & E. RIPPEY, 1982. Sea shells of Southern Africa: 1-249. Johannesburg.
KOHN, A.J., 1965. Conus collected by the Israel South Red Sea expedition, 1962, with notes on collections from the Gulf of Aqaba and the Sinai peninsula. — Israel. Sth Red Sea Exped., Rep. 11: 53-59.
KOSUGE, S., 1981. Studies on the collection of Mr. Victor Dan (4) Descriptions of new species of the genera Lyria, Conus and Fissidentalium. — Bull. Inst. Malac. Tokyo 1: 113-115.
KREBS, H.J., 1864. The West-Indian marine shells with some remarks: 1-137 (Privately printed, Nykjobing). Republished by Clench et al., 1947-1948.
LOZET, J.B., & C. PÉTRON, 1977. Coquillages des Antilles: 1-138. Tahiti.
MARS, P., 1951. Les collections malacologiques du muséum d'histoire naturelle de Marseille. — J. Conchyl. Paris 91: 59-64.
MELVILL, J.C., 1898. Further investigations into the molluscan fauna of the Arabian Sea, Gulf of Oman, and Persian Gulf, with descriptions of forty species. — Mem. Proc. Manchr lit. phil. Soc. 42(4): 1-40.
MENKE, C.T., 1830. Synopsis methodica Molluscorum generum omnium et specierum earum quae in Museo Menkeano adservantur; cum synonymia critica et novarum specierum diagnosibus: 1-168. Pyrmont.
MIENIS, H.K., 1981. A preliminary checklist of Conidae from the Sinai area of the Red Sea. — Levantina 35: 421-426.
MOL, J.-J. VAN, & B. TURSCH, 1968. Distinction between Conus juliae, C. daucus and C. brasiliensis. — Nautilus 82: 5-6.
MONTEROSATO, M. DI., 1917. Molluschi viventi e quaternari raccolti lungo le coste della Tripolitania dall'ing. Camillo Crema. — Boll. Soc. zool. ital. (3)4: 1-26.
MOTTA, A.J. DA, 1980. Confusion in the museums. — Hawaii. Shell News 28(8): 1, 10.
——, 1982. An examination of the Conus textile complex, VII. — Conchiglia 14 (160-161): 4-5.
OLD, W.E., 1965. On the identity of Conus pastinaca. — Nautilus 79: 23-26.
PEILE, A.J., 1926. The mollusca of Bermuda. — Proc. malac. Soc. Lond. 17: 71-98.
PÉRON, F., 1807. Voyage de découvertes aux terres Australes 1: 1-496. Paris.
PETUCH, E.J., 1975. A review of the small Mauretanian cone shells with description of a new genus and a new species. — Veliger 17: 262-263.
——, 1981. A relict neogene Caenogastropod fauna from northern South America. — Malacologia 20: 307-347.
PILSBRY, H.A., 1904. New Japanese marine Mollusca: Gastropoda. — Proc. Acad. nat. Sci. Philad. 56: 3-37.
RÉCLUZ, C.A., 1843. Descriptions de coquilles nouvelles rapportées par M. Jehenne, officier supérieur de la marine royale. — Revue zool. 6: 2-5.
REICHENBACH, A.B., 1842. Die Land-, Süsswasser- und See-Conchilien: 1-170. Leipzig.
ROECKEL, D., & A.J. DA MOTTA, 1983. Descriptions of two new species of the genus Conus. — Bull. Inst. Malac. Tokyo 1: 117-118.
——, E. ROLAN & A. MONTEIRO, 1980. Cone shells from Cape Verde Islands. A difficult puzzle: 1-156. Spain.
SAUNDERS, G.D., 1978. A speculation upon Conus guinaicus Hwass, 1792. A species or a complex?. — Conchiglia 10(106-107): 16-18.
SCHEPMAN, M.M., 1913. The Prosobranchia of the Siboga Expedition. Part V, Toxoglossa. — Siboga Exped. 49: 365-452.

SCHILDT, A., 1983. Cônes de Madagascar. — Xenophora 17: 19-21.
SCHWENGEL, J.S., 1955. New Conus from Costa Rica. — Nautilus 69: 13-15.
SHIKAMA, T., 1977. Descriptions of new and noteworthy Gastropoda from western Pacific and Indian Oceans. — Sci. Rep. Yokohama natn. Univ. (II) 24: 9-23.
SOWERBY I, G.B., 1823. The genera of recent and fossil shells, for the use of students in Conchology and Geology 2: Conus, pls. 266-267. London.
SOWERBY II, G.B., 1834. Characters of new genera and species of Mollusca and Conchifera, collected by Mr. Cuming. — Proc. zool. Soc. Lond. 2: 17-19.
SOWERBY III, G.B., 1882. Descriptions of new species of shells in the collection of Mr. J. Cosmo Melvill. — Proc. zool. Soc. Lond. 1882: 117-121.
STEARNS, R.E.C., 1873. Descriptions of new marine mollusks from the West coast of North America. — Proc. Calif. Acad. Sci. 5(1): 78-82.
TROVÃO, H.F.M., 1979. Contribuição para o estudio dos moluscos Gasterópodos da família Conidae da África occidental. — Amphitrite 1(1): 3-12.
TUCKER, J.K., 1983. Recent cone shell names II. The species described by Coomans and coworkers. — Hawaii. Shell News 31(11): 5-6.
——, 1985. Cone shell names: part 8. The species described by other authors. — Hawaii. Shell News 33(5): 9-11.
VINK, D.L.N., 1984. The Conidae of the western Atlantic part I. — Conchiglia 16 (186-187): 18-22.
WEAVER, C., 1966. Conus dispar G.B. Sowerby, I rediscovered. — Hawaii. Shell News 14(8): 4.



Figs. 595-597. *Conus auricomus* fa. *dactylosus*. 595. Type figure of *C. dactylosus* Kien., length 39 mm (after Kiener). 596. Length 38.7 mm (BMNH). 597. Type figure of *C. debilis* Fen., New Guinea, length 34 mm (after Fenaux).

Fig. 598. *C. imperialis fuscatus* Born, type figure of *C. dautzenbergi* Fen., Madagascar, length 41 mm (after Fenaux).

Fig. 599. *C. textile neovicarius* fa. *dahlakensis*, holotype of *C. textile dahlakensis* da Motta, Massawa, length 87.4 mm (MHNG).

Fig. 600. *C. dalli* Stearns, lectotype, Gulf of California, length 52.1 mm (USNM).

Fig. 601. *C. crotchii* Rve, type figure of *C. damottai* Trov., Boavista, length 20.6 mm (after Trovão).

Fig. 602. *C. dampierensis* Film. & Coom., holotype, Dampier, length 32.5 mm.

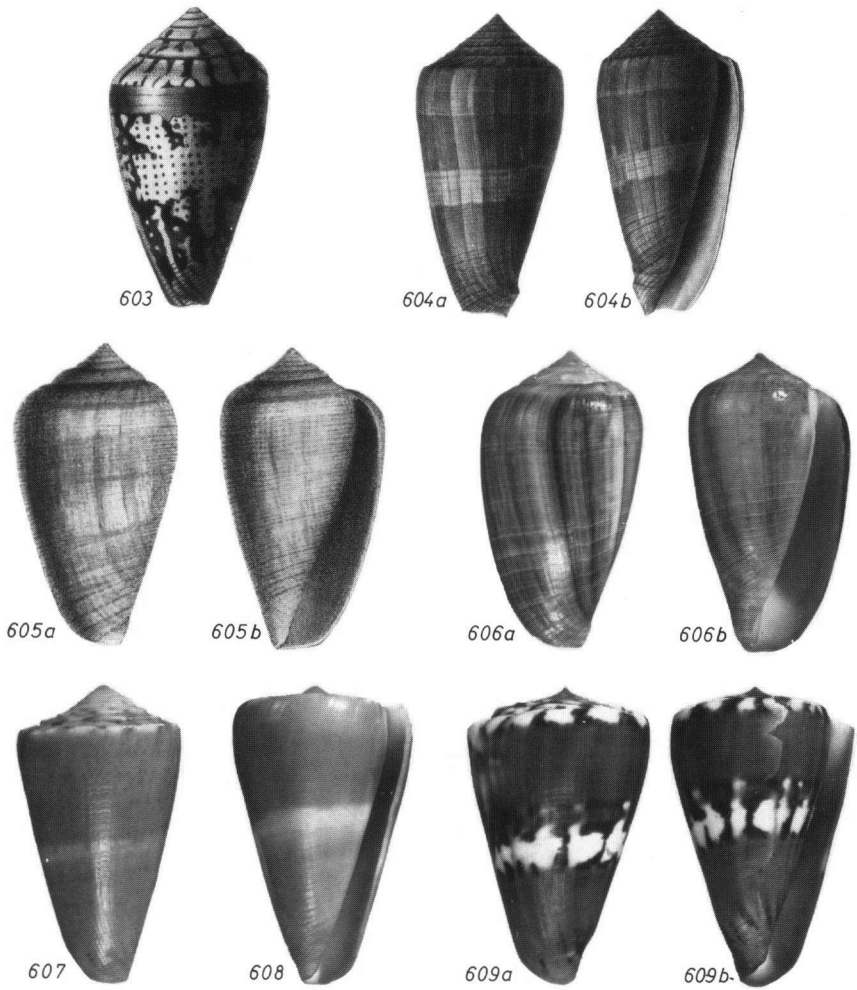
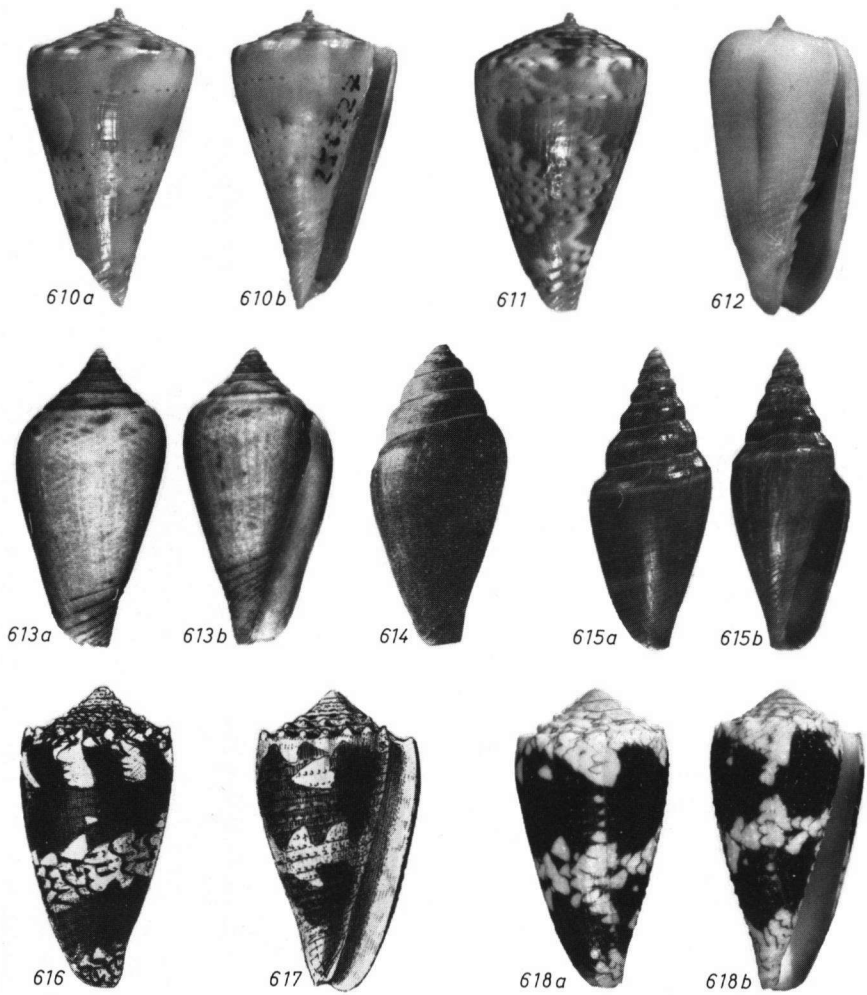


Fig. 603. *Conus algoensis scitulus* Rve, type figure of *C. jaspideus* Kien. = *C. danieli* Crosse, "Algoa Bay", length 34 mm (after Kiener).
Fig. 604. *C. consors* Sow., type figure of *C. daullei* Crosse, Mayotte, length 69 mm (after Crosse).
Figs. 605-606. *C. spectrum* fa. *daphne*. 605. Type figure of *C. daphne* Boiv., Indian Ocean, length 35 mm (after Boivin). 606. Amboina, length 35.9 mm.
Figs. 607-608. *C. daucus* Hwass. 607. West Indies, length 34.7 mm. 608. Curaçao, length 43.2 mm.
Fig. 609. *C. daucus* fa. *croceus* Sow., Martinique, length 49.1 mm (coll. Dr. P. Gillis).



Figs. 610-611. *Conus dayriti* Röck. & Motta, Cebu. 610. Holotype, length 20.6 mm (Mus. Senckenberg). 611. Length 17.2 mm (coll. Wils).

Fig. 612. *Imbricaria punctata* (Swains.), fam. Mitridae, possibly *C. dentatus* Schröter, length 15.6 mm.

Fig. 613. *C. dealbatus* A. Ads, fossil, under ultraviolet light, length 24.3 mm (BMNH).

Figs. 614-615. *C. mediterraneus* fa. *ater* Phil., Messina. 614. Original figure of *C. m.* var. *debilis* Monts., length 30 mm (after Monterosato). 615. Paralectotype, length 31.8 mm (Zool. Mus. Berlin).

Fig. 616. *C. nocturnus* Lightf., figure of paralectotype of *C. deburghiae* Sow., Moluccas, length 57 mm (after Sowerby).

Figs. 617-618. *C. nocturnus* fa. *deburghiae*, Moluccas. 617. Type figure of *C. deburghiae* Sow., length 58 mm (after Sowerby). 618. Length 54.3 mm.

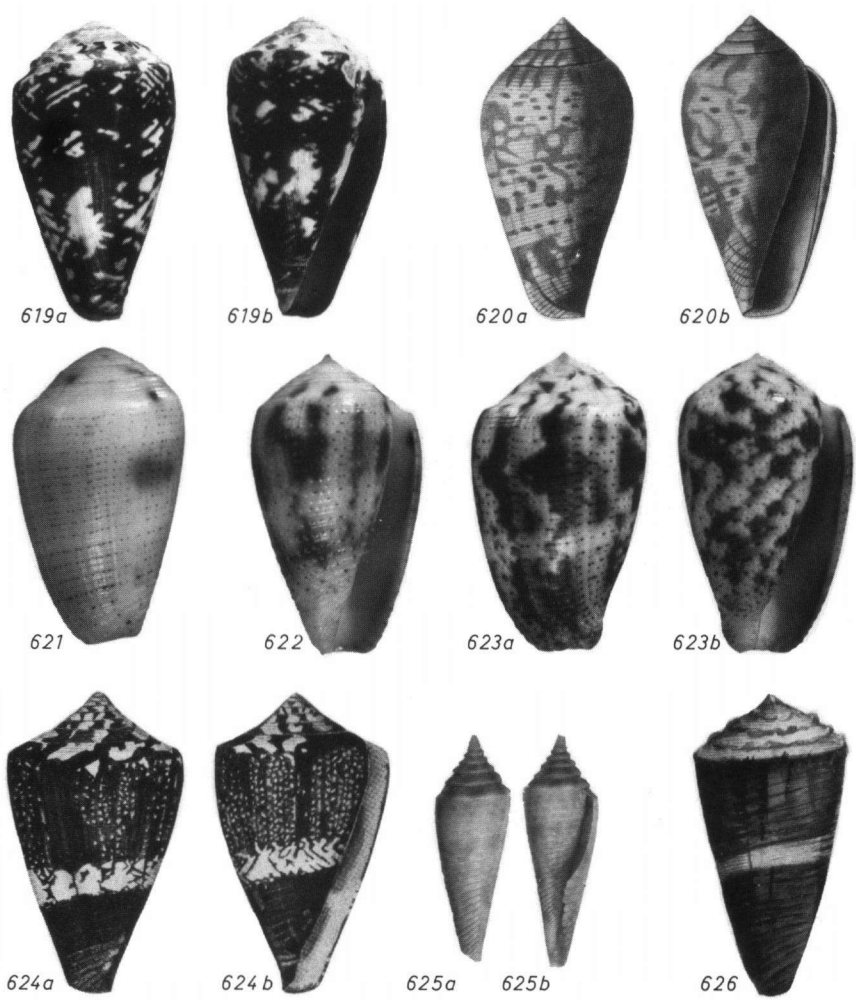
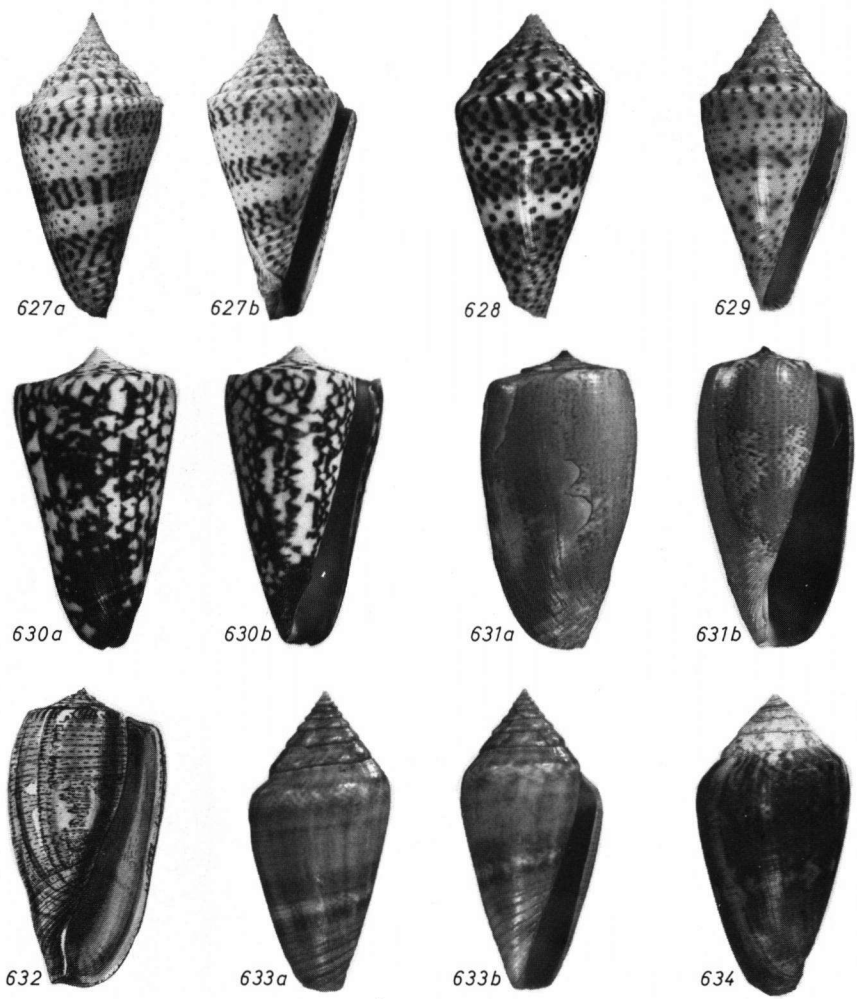


Fig. 619. *Conus decoratus* Röck., Rol. & Mont., holotype, S. Vicente, length 20.6 mm (Mus. Senckenberg).
Fig. 620. *C. cocceus* Rve, type figure of *C. decrepitus* Kien., Australia, length 39½ mm (after Kiener).
Figs. 621-622. *C. striolatus* Kiener, New Guinea. 621. Waren, length 27.4 mm. 622. Intermediate to forma *decurtatus* Dautz., Schouten Is, Woendi, length 25.3 mm.
Fig. 623. *C. striolatus* fa. *decurtatus*, lectotype of *C. magus decurtatus* Dautz., Rua-Sura, length 28.5 mm (IRScNB).
Fig. 624. *C. cuneolus* fa. *delanoyi*, type figure of *C. delanoyi* Trov., Boavista, length 27.2 mm (after Trovão).
Fig. 625. *C. aculeiformis* Rve, juvenile, holotype of *C. delicatus* Schepman, Madura Bay, length 17.6 mm.
Fig. 626. *C. lividus* Hwass, referred to as *C. detritus* Menke, length 41 mm (after Martini).



Figs. 627-629. *Conus delessertii* Récluz. 627. Holotype, "Red Sea", length 61½ mm (photo G. Dajoz, MHNG). 628. Off Cape Canaveral, Florida, length 55.9 mm. 629. Juvenile, off St. Augustine, Florida, length 32.6 mm.

Fig. 630. *C. thalassiarchus* Sow., described as var. *depriesteri* Wils, Palawan, length 64.2 mm.

Figs. 631-632. *C. cuvieri* Crosse, lectotype of *C. deshayesii* Reeve. 631. "Swan River", length 51.2 mm (IRScNB). 632. Type figure of *C. cervus* Sow., length 50 mm (after Sowerby).

Figs. 633-634. *C. guinaicus* fa. *desidiosus*. 633. Holotype of *C. desidiosus* A. Adams, West Africa, length 24.1 mm (BMNH). 634. Lanzarote, Matagorda, length 28.8 mm.

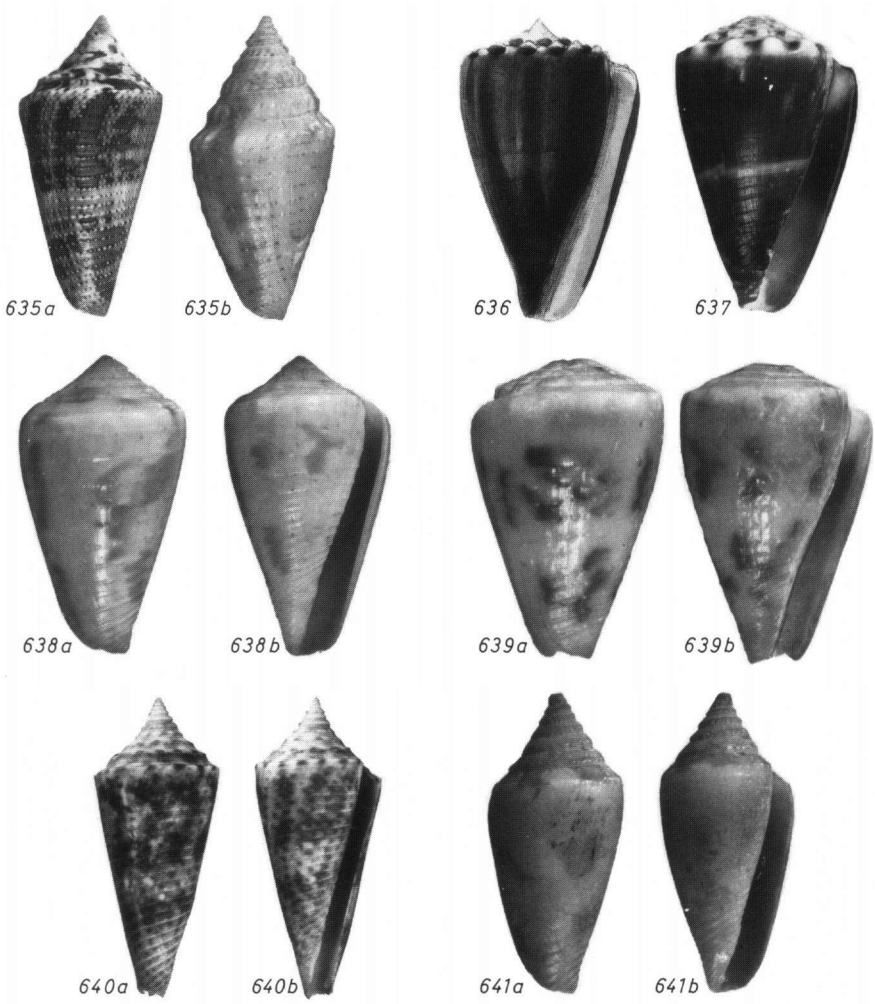


Fig. 635. *Conus cedonulli desmotus* Tomlin. a. Colombia, Gulf of Uraba, length 45.0 mm (coll. Dr. E.F. García). b. Juvenile, length 19.2 mm, Panama, Caledonia Bay (LACMNH).

Figs. 636-637. *C. diadema* Sow. 636. Type figure, Galapagos Is, length 42 mm (after Sowerby). 637. Costa Rica, Sámara, length 35.2 mm.

Figs. 638-639. *C. cardinalis dianthus*. 638. Holotype of *C. dianthus* Sow., length 27.1 mm (Natl. Mus. Wales). 639. Jamaica, length 18.7 mm.

Fig. 640. *C. milesi* Smith, holotype of *C. dictator* Melvill, Persian Gulf, length 46 mm (photo BMNH).

Fig. 641. *C. textile* Linné, juvenile, holotype of *C. dilectus* Gould, Fiji, length 12.8 mm (USNM).

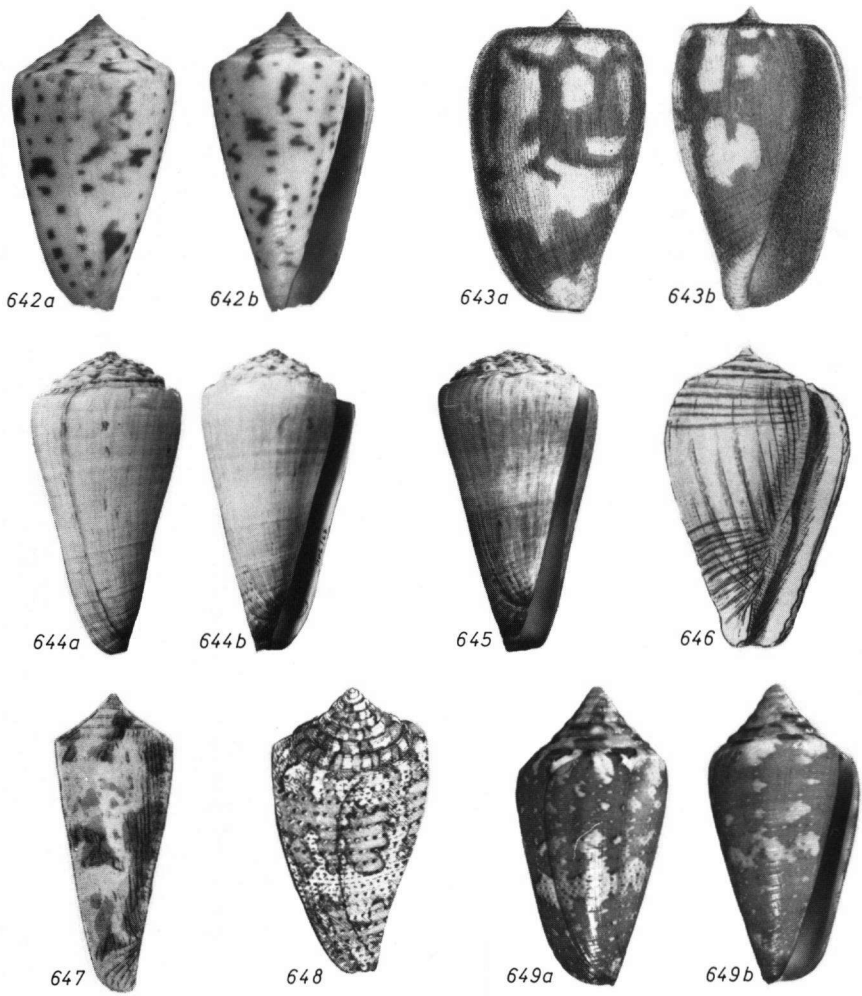


Fig. 642. *Conus erythraeensis dillwynii*, holotype of *C. dillwynii* Rve, length 27.7 mm (BMNH).
Fig. 643. *C. spectrum* fa. *dolium*, type figure of *C. dolium* Boiv., length 37 mm (after Boivin).
Figs. 644-645. *C. distans* Hwass. 644. Lectotype, "New Zealand", length 100 mm (photo G. Dajoz, MHNG). 645. Moluccas, length 101.8 mm.
Fig. 646. *C. discrepans* Sow., type figure, length 28 mm (after Sowerby).
Fig. 647. *C. dispar* Sow., type figure, length 22 mm (after Sowerby).
Figs. 648-649. *C. cedonulli mappa* Lightfoot. 648. Type figure of *C. dominicanus* Hwass, length 43 mm (after Chemnitz). 649. Lectotype of *C. dominicanus*, South America, length 42.4 mm (ZMUC).

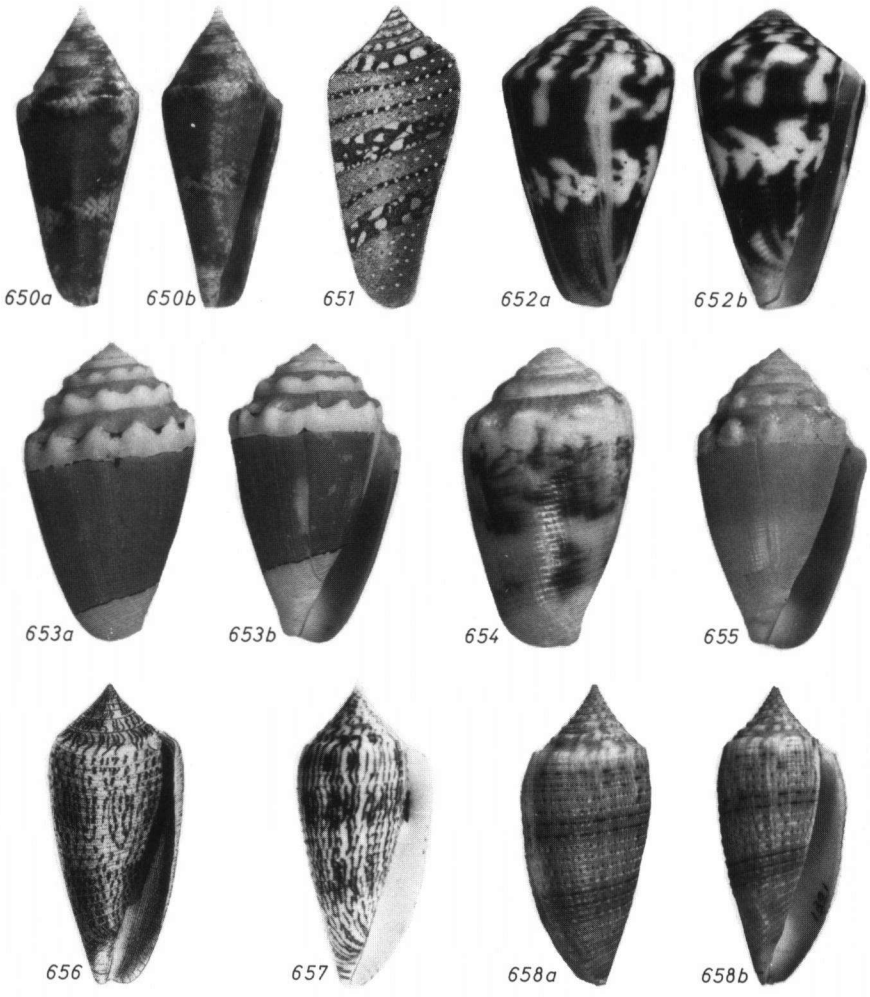


Fig. 650. *Conus dondani* Kosuge, holotype, Bohol, length 23.1 mm (IMT).
Fig. 651. *C. ammiralis* fa. *donovani* Dautz., type figure, Amboina, length 39 mm (after Donovan).
Fig. 652. *C. orion* Broderip, holotype of *C. drangai* Schwengel, Bahlia Salinas, length 32.0 mm (USNM).
Figs. 653-655. *C. dorreensis* Péron. 653. With periostracum, Barrow Id, length 28.1 mm. 654. Juvenile, Cape Naturaliste, length 15.3 mm. 655. Without periostracum, Barrow Id, length 32.2 mm.
Figs. 656-658. *C. duplicatus* Sow. 656. Type figure, length 68 mm (after Sowerby). 657. Solomon Is, length 61 mm (after Röckel). 658. Colour form, Russell Id, length 60.8 mm (coll. Wils).

Fig. 659. *Conus imperialis fuscatus* Born, type figure of *C. douvillei* Fen., Madagascar, length 54 mm (after Fenaux).

Fig. 660. *Parametaria dupontii*, fam. Columbellidae, type figure of *C. dupontii* Kien., length 28 mm (after Kiener).

Fig. 661. *C. generalis maldivus* Hwass, type figure of *C. dux* (Röding), length 55 mm (after Martini).

Figs. 662-664. *C. dusaveli* H. Adams. 662. Holotype, "Mauritius", subadult, length 50.7 mm (Natl. Mus. Wales). 663. Okinawa, length 78.7 mm (coll. J.P. Camp). 664. Cebu, length 82.8 mm, (coll. A. Herlaar).

Fig. 665. *C. pusillus* Lamarck, holotype of *C. duvali* Bernardi, Guadeloupe, length 13.6 mm (MNHN).

Fig. 666. *C. mindanus* fa. *branhamae*, holotype of *C. jaspideus branhamae* Clench, Bahamas, length 27.7 mm (AMNH).

Unless otherwise stated, specimens in ZMA.