The Geographical Distribution of Cowries

(Mollusca : Gastropoda)

BY

FRANZ ALFRED SCHILDER

University of Halle, German Democratic Republic

(2 Text figures)

THE FIRST ATTEMPT to outline the whole geographical distribution of the living species of cowries (Cypraeidae) has been made by HIDALGO (1906/07, p. 182-241); unfortunately HIDALGO was rather uncritical so that about 15 per cent of his indications of habitat are erroneous (SCHILDER 1952, p. 48). These zoogeographical studies have been continued by this writer in several papers (1924, 1927, 1932, 1940), especially in the "Prodrome" (1938/39) and in the catalogue of living and fossil Cypraeacea (1941), as well as by STEADMAN & COTTON (1946). Further studies made during the last twenty years show that many corrections are necessary, as many species proved to be more widely distributed than thought previously (e.g. SCHILDER 1964), whereas for other species the area of distribution should be restricted, because some indications seem not to be reliable (e.g. SCHILDER 1960).

Our present knowledge of the distribution of living cowries is still far from complete; nevertheless it seems to be advisable to publish a revised critical list. But one should consider that collecting beach specimens at any locality does not prove the species to live there (SPICER 1941, INGRAM & KENYON 1945): thus, for instance, I do not believe that the many Central Pacific cowries recently collected as beach shells at Clipperton Island (HERTLEIN & ALLISON 1960) really belong to the West American fauna. And even collecting single living specimens does not exclude their being introduced recently by man (SCHILDER 1960).

In my papers mentioned above I have used various systems of describing the distribution of cowries both as accurately and as briefly as possible, and STEADMAN & COTTON (1946) adopted a similar system of abbreviations. In the present paper I shall try to introduce a system of classification of faunas not restricted to the warm seas inhabited by the cowries (Cypraeidae) and their allies (Ovulidae, Eratoidae) as before, but embracing all shores of the globe so that my proposed system may be used also by students of other littoral mollusca living in cold zones.

This universal system looks rather complicated, but it allows any degree of exact description of the distribution to be expressed in the shortest way, without using the names of localities which often can be found only with great difficulty in an atlas. It has been established on the following seven principles:

1—The classification of the zoogeographical zones and provinces ("faunas") follows the arrangement established by EKMAN (1935, p. 338, fig. 165; see also SCHILDER 1956(p. 85, fig. 36).

2—The denomination of these 9 provinces has been expressed by the digits 1 to 9 according to the chief points of the compass (SCHILDER 1956, p. 69): they begin with the centre and the north and proceed clock-wise so that the even figures designate the four chief quadrants of the compass, and the odd figures designate the intermediate directions. Therefore the nine digits express:

9 = N.W.	2 = N.	3 = N.E.
8 = W.	1 = central	4 = E.
7 = S.W.	6 = S.	5 = S.E.

According to this system, the five zones and the nine provinces of the littoral fauna (EKMAN 1935) may be arranged as follows:

Zones:	Provinces:		
Arctic	2 = Arctic		
Northern temperate (or boreal)	9 = North Atlantic	3 = North Pacific	
Tropical	8 = Western	1 = Indian	4 = Pacific
Southern temperate (or antiboreal)	7 = South American	5 = South Australian	
Antarctic	6 = Antarctic		

The Western province (8) called hesperotropical by SCHILDER (1956, p. 74) contains three well separable subprovinces: the West-American, the East-American, and the West-African, while the Indian and the Pacific provinces (1+4) may be comprised as Indopacific superprovince (called Indo-Westpacific by EKMAN 1935 and eotropical by SCHILDER 1956). The temperate South African province of EKMAN has been united with the tropical Indian province (1) for several reasons.

3—The regions usually extending 3,000 to 5,000 kilometers (SCHILDER 1939, p. 223, map 1 and 2) have been expressed by compound numbers the first digit of which indicates the province, the second digit indicates the relative place of the region within this province. The arrangement of the nine littoral provinces and 53 zoogeographical regions of the globe has been illustrated in the map (fig. 1).

This systematic meaning of figures and its invariable use will permit remembering the numbers of regions far more easily than the rather arbitrary arrangement of numbers published by the Challenger Society (BORRADAILE 1914).

4—However, as errors frequently happen in writing or printing digits, it seems advisable (but not necessary) to add to each number the abbreviation of the name of the region, expressed by the three first letters printed in capitals (so that they cannot be confused with abbreviations of the areas, see below). The abbreviations of the 33 regions inhabited by Cypraeidae, which will be explained in the list of areas, are as follows:

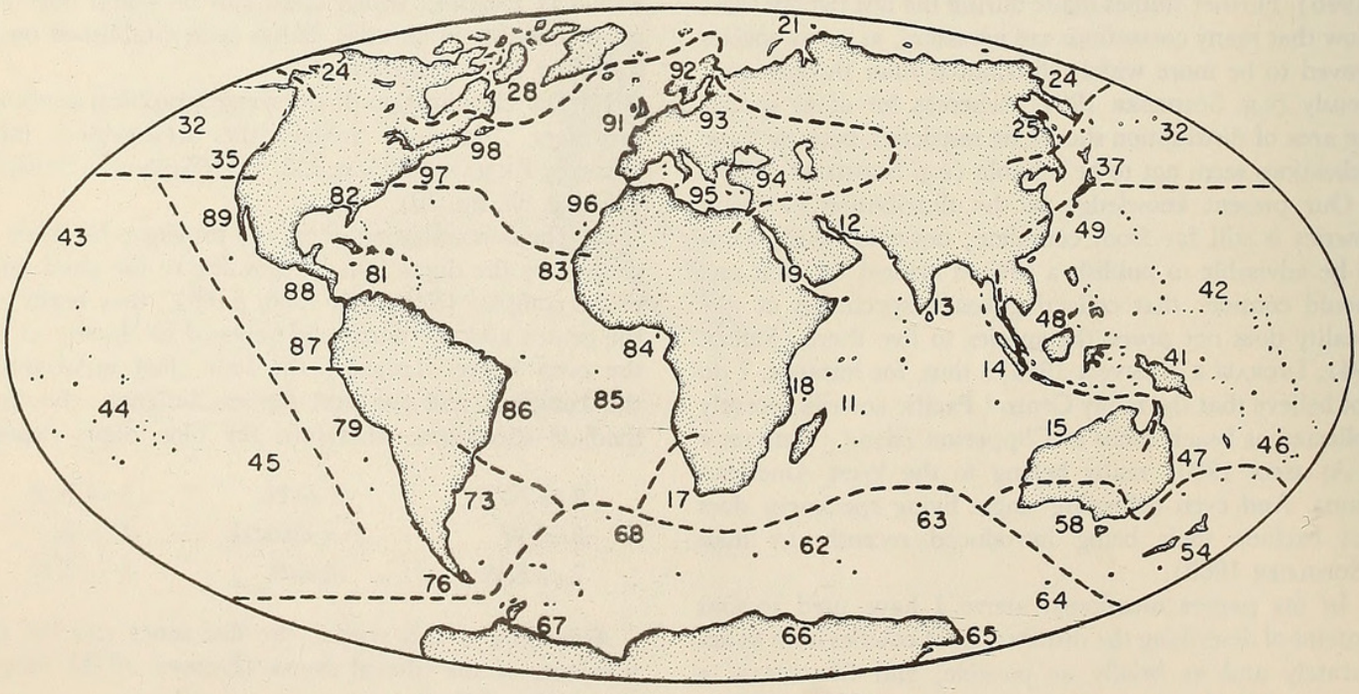

Figure 1: The littoral provinces and zoogeographical regions.

35		96	95			37		
ORE		CAN	MED			JAP		
89	82	83	19	12	13	49	42	43
CAL	FLO	SEN	ERY	PER	IND	RYU	MIC	HAW
88	81	84	18	11	14	48	41	44
PAN	ANT	GUI	ZAN	LEM	SUM	MAL	MEL	POL
87	86	85	17		15	47	46	45
ECU	BRA	ATL	CAP		DAM	QUE	FIJ	RAP
	73				58	54		
	ARG				TAS	ZEA		

5—The restriction of habitat to a general part of the region may be designated by a third digit added as an exponent.

6—But if a still greater accuracy in fixing the distribution of a species is desired, one indicates the areas the diameter of which is about one thousand kilometers ("Gebiete" in SCHILDER 1941) by a small letter mostly adopted from my last catalogue (SCHILDER 1941, p. 63-64): these letters correspond to the initial letter of a generally well known central place, island, etc. within the area, as explained in the following list.

7—Whenever one wants to designate the restricted occurrence within such a small area, one can add to the letters some exponential digits indicating the general direction within the area.

The 160 areas inhabited by living true cowries (Cypraeidae, according to SCHILDER 1938/39 and 1941) will be enumerated in the following list. They have been arranged generally so that neighbouring areas follow each other: we begin with West America, East America, Europe, and West Africa, always from north to south, we continue with the Indian Ocean from South and East Africa to South Asia and Australia, then with the Western border of the Pacific from Melanesia to Japan, and we end with the central Pacific islands. The geographical relation of each area to the others has been shown in the map (fig. 2); the affinity of the cowrie faunas in these areas has been discussed by SCHILDER 1943.

In this list the left column contains the figures and letters by which the provinces, regions, and areas have been abbreviated in this paper. The central column indicates the names of provinces and regions (including their abbreviation by three capitals), as well as several localities, islands, etc. within each area without indicating its exact limits; the capital of a locality corresponding to the abbreviation of the area has been printed in *italics*. The figures of the right column indicate the average temperature of the surface of the sea in the coldest month (February or August) in centigrades according to the maps published by G. SCHOTT (1926, 1935).

LIST OF THE AREAS INHABITED BY LIVING CYPRAEIDAE

3	North Pacific province (see also below)	
35	ORE = Oregonian region	
35f	San *F*rancisco: C. Mendocino to Obispo	10-12
8	Western (Atlanto-American) province	
89	CAL = Californian region	
89d	San *D*iego: Santa Rosa to Cedros Is.	13-18
89c	*C*ape San Lucas: Magdalena Bay to San José	19-21
89g	*G*ulf of California north of the Tropic	18-21
89m	*M*azatlan and Tres Marias Is.	22 24
89r	*R*evilla Gigedo Is.	23-24
88	PAN = Panamic region	
88c	*C*lipperton Island	27-28
88a	*A*capulco: Manzanillo to Tehuantepec	24-27
88s	San *S*alvador, San José to Coiba Island	26-28

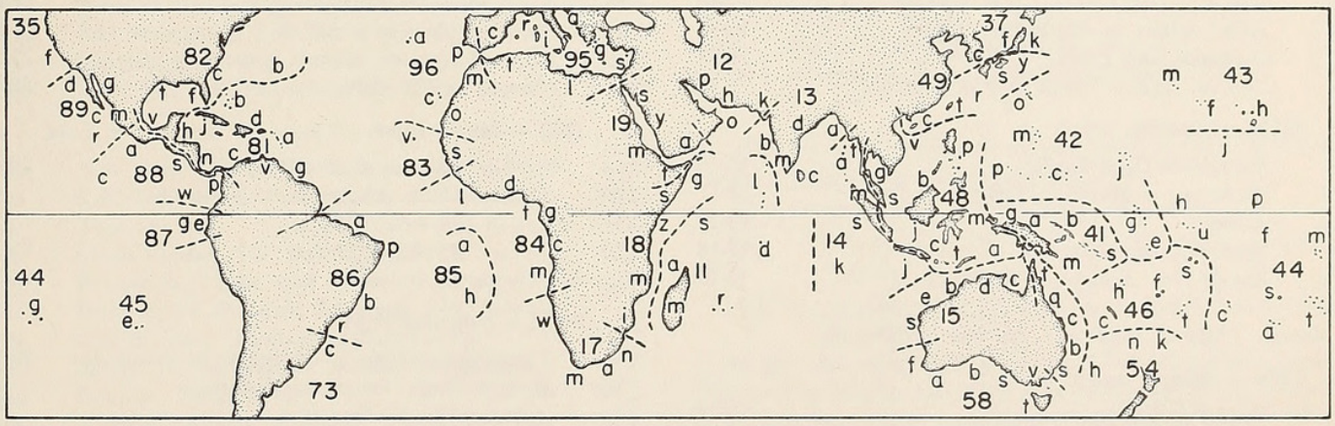

Figure 2: Geographical relation of the areas to each other.

88p Gulf of *P*anama, Esmeraldas 24-26
88w Cocos Island (*W*afer Bay) 26-27

87 ECU = Ecuadorian region

87e *E*cuador, North Peru: Manta to Sechura Bay 17-23
87g *G*alapagos Islands 20-22

82 FLO = Floridan region

82b *B*ermudas 20
82c *C*arolina: Cape Hatteras to Georgia 15-19
82f *F*lorida (East and West Coast), Key West 20-24
82t Alabama to *T*exas 20-22
82v *V*era Cruz: Tampico to Progreso 23-26

81 ANT = Antillean (Caribbean) region

81j Cuba, Cayman Is., *J*amaica 25-26
81b *B*ahama Islands 24-25
81d San *D*omingo (Hispaniola), Porto Rico 25-26
81a Lesser *A*ntilles: Saint Thomas to Grenada 26
81h Arrowsmith Bank to *H*onduras 26
81n *N*icaragua to Colon 26
81c *C*olombia from Darien to Rio Hacha 26
81v *V*enezuela, Curaçao, Trinidad 26
81g *G*uiana to Amazonas River 26-27

86 BRA = Brasilian region

86a *A*mazonas River to Parnahyba 25-26
86p *P*ernambuco to Fortaleza, Fernando Noronha 24-26
86b *B*ahía: Aracaju to Abrolhas 24-25
86r *R*io de Janeiro: Victoria to Santos 18-23

7 South American province

73 ARG = Argentinian region

73c Paranagua to Santa *C*atharina 16-18

9 North Atlantic province

95 MED = Mediterranean region

95c Gibraltar to *C*atalonia, Balearic Is. 13-14
95r *R*iviera: Southern France to Spezia 10-13
95i S. W. *I*taly, Sardinia, Sicily, Malta 13-14
95a *A*driatic Sea north of Otranto and Valona 12-13
95g *G*reece to Dardanelles, Crete, Rhodos 14-16
95s *S*yria: Adalia to Alexandria, Cyprus 16-17
95l Cyrenaica and *L*ibya 15-17
95t *T*unisia, Algeria, North coast of Morocco 14

96 CAN = Canarian region

96p *P*ortugal to Cape Tarifa 13-15
96m West coast of *M*orocco: Tangiers to Ifni 15-17
96a *A*zores 15-16
96c Madeira, *C*anary Islands 17-18
96o Rio de *O*ro: Bojador to St. Louis 13-15

8 Western (Atlanto-American) province (continued)

83 SEN = Senegal region

83v Cape *V*erde Islands 21-22
83s *S*enegal: Dakar to Konakri 19-24

84 GUI = Guinean region

84l *L*iberia: Freetown to Ivory Coast 25
84d *D*ahomey: Ghana to Nigeria 25
84t Sâo *T*homé: Principe to Annobon 24-25
84g Cameroons, Fernando Poo, *G*abun 24-25
84c *C*ongo River: Loango to Benguella 18-23
84m *M*ossamedes to Cunene River 16-18

85 ATL = South Atlantic region

85a *A*scension Island 23-24
85h St. *H*elena Island 20

1 Indian province

17 CAP = Cape (South African) region

17w *W*alvis Bay to Saldanha Bay 13-16
17m Cape Town to *M*ossel Bay, Agulhas Bank 15-17
17a *A*lgoa Bay to East London 18-20
17n Pondoland, *N*atal, Zululand 20-21

18 ZAN = Zanzibarian (East African) region

18i *I*nhambane: Delagoa Bay to Beira 22-23
18m *M*ozambique: Quelimane to Querimba 24
18z Tanganyika, *Z*anzibar, Kenya 25
18s *S*omaliland: Kismaju to Obbia 23-25
18g Hafun, Cape *G*uardafui, Socotra Island 22-25

11 LEM = Lemurian region

11a Comoro, *A*ldabra, Glorieuses, Providence 24-25
11m Nosi Bé, *M*adagascar, Europa Is. 22-24
11r *R*éunion, Mauritius, Rodriguez 22-23
11c *C*argados Carajos to Galega Is. 24-25
11s Coetivy Is., Amirantes, *S*eychelles 25-26
11d Chagos Archipelago (*D*iego Garcia) 26-27
11l Maldive Is., Minicoy, *L*accadive Is. 27-28

19 ERY = Erythraean (Red Sea) region

19t *T*ajura: Berbera to Perim Is. 25-26
19m *M*assawa: Assab to Port Sudan 21-25
19s Kosseir, *S*uez, Tor, Aqaba 19-21
19y Hejaz, Jidda, *Y*emen, Mocha 22-26
19a *A*den to Makalla 20-25

12 PER = Persian region

12o Kuria Muria Is. to *O*man 22-23
12p *P*ersian Gulf west of 55° E. 15-21
12h Strait of *H*ormuz, Mekran Coast 21-22
12k *K*arachi to Port Okha 22-23

13 IND = Indian region

13b *B*ombay: Cambay Gulf to Goa 23-26
13m *M*alabar Coast: Mangalore to Tuticorin 26
13c *C*eylon and Adams Bridge 27
13d *D*eccan: Karikal to Orissa 25-27
13a Calcutta to *A*rakan 24-26

14 SUM = Sumatran region

14t *T*enasserim: Mergui Archipelago to Salang Is. 26-28
14m *M*alacca Strait: Penang to Medan 28
14a *A*ndaman Is., Nicobar Is. 27
14s West coast of *S*umatra and adjacent islands 28

14j	South coast of *J*ava, Christmas Is.	26-28
14k	Cocos *K*eeling Is.	26
15	DAM = Dampierian (North West Australian) region	
15c	Gulf of *C*arpentaria	25
15d	*D*arwin: Wessel Is. to Wyndham	26
15b	Cape Londonderry to *B*roome, Rowley Shoals	23-26
15e	Shellborough to *E*xmouth Gulf, Dampier Is.	22-23
15s	*S*hark Bay to Geraldton, Abrolhos Archipelago	19-21
5	South Australian province	
58	TAS = Tasmanian (South Australian) region	
58f	*F*remantle: Cervantes Is. to Cape Leeuwin	17-18
58a	*A*lbany: Flinders Bay to Esperance	14-17
58b	Great Australian *B*ight around Eucla	14
58s	*S*pencer Gulf to Beachport	13-14
58v	*V*ictoria: Portland to Montague Island	13-14
58t	King Is., Flinders Is., *T*asmania	11-12
54	ZEA = Neozelanic region (see WHITLEY 1937, p. 199)	
54k	*K*ermadec Islands	17-18
54n	*N*orfolk Island	18-19
54h	Lord *H*owe Islands, Middleton Reef	17-18
4	Pacific province	
47	QUE = Queensland (North East Australian) region	
47s	*S*ydney: Ulladulla to Port Stephens	15-17
47b	*B*risbane: Sugar Loaf Point to Fraser Is.	18-19
47c	*C*apricorn Is.: Hervey Bay to Whitsunday Is.	19-20
47q	North *Q*ueensland: Port Denison to C. Melville	20-23
47t	*T*orres Strait: C. Melville to Fly River	23-26
46	FIJ = Fijian (Southern Melanesian) region	
46c	Chesterfield Is., New *C*aledonia, Loyalty Is.	22-24
46h	New *H*ebrides	23-26
46f	*F*iji Islands	24-25
46t	*T*onga (Friendly) Is., Niue (Savage) Is.	22-24
46s	*S*amoan Islands, Wallis Is.	27-28
41	MEL = (Northern) Melanesian region	
41s	Santa Cruz Is., *S*olomon Is., Nissan Is.	27-28
41b	*B*ismarck Archipelago, Admiralty Is.	28
41m	Port *M*oresby to Louisiade Archipelago	27
41a	*A*strolabe Bay: Huon Gulf to Aitapé	28
41g	Humboldt Bay to *G*eelvink Bay, Mapia Is.	28
48	MAL = Malayan (Indonesian) region	
48m	N.W. New Guinea, *M*oluccas, North Celebes	28
48a	S. W. New Guinea, *A*ru Is., Kei Is., Timorlaut	26-27
48t	*T*imor to Bali	26-27
48c	South *C*elebes, S.E. Borneo, Tiger Is.	27
48j	Bawean Is., North coast of *J*ava	27
48s	Belitong, S.E. Sumatra, *S*ingapore, S.W. Borneo	27
48g	*G*ulf of Siam: Thailand to Pulo Condor	25-28
48b	Natuna Is., Sarawak, N. *B*orneo, Tizard Bank	26-27
48p	Palawan, *P*hilippine Is.	26-27
48v	*V*ietnam (Annam, Tongking) Paracel Reefs	20-24
49	RYU = Ryukyu region (see NOMURA & HATAI 1936)	
49c	*C*hina from Hainan to Amoy	12-20
49t	Pescadores Is., *T*aiwan (Formosa)	18-24
49r	*R*yukyu Is.: Sakishima to Tanegashima	18-23
49s	*S*hikoku: Kyushu to Kii coast	14-16
49y	*Y*okohama: Ise to Chiba, Hachijoshima	12-14
3	North Pacific province (continued)	
37	JAP = (Northern) Japanese region (see NOMURA & HATAI 1936)	
37k	*K*asima and East coast of North Hondo	9-11
37f	*F*ukui: Tsushima Strait to Echigo	10-13
37c	South coast of *C*orea	10
4	Pacific province (continued)	
42	MIC = Micronesian region	
42o	*O*gasawara Is. (Bonin Is.), Volcano Is.	20-22
42m	*M*arianas Islands, Guam Is.	25-27
42p	Yap Is., *P*alau Is.	27-28
42c	*C*aroline Is.: Uleay (Oreai) to Kusaie	27-28
42j	Marshall Islands around *J*aluit	27-28
42g	*G*ilbert Is. (Kingsmill Is.), Nauru Is.	28
42e	*E*llice Islands, Rotuma Is.	28
44	POL = Polynesian region	
44h	*H*owland Is., Baker Is., Phoenix Is.	27-28
44u	*U*nion (Tokelau) Is. to Suvorov Is.	26-27
44c	*C*ook Islands	23-24
44a	*A*ustral Is. (Tubuai Is.)[1]	20-21
44s	*S*ociety Is.: Raiatea to Tahiti	24-25
44t	*T*uamotu Is.: Makatea to Pinaki	24-26
44g	*G*ambier Is.: Marutea du Sud to Henderson Is.	22-24
44m	*M*arquesas Islands	26
44f	*F*lint Is., Manahiki Is. to Malden Is.	26-27
44p	Line Is.: Jarvis Is. to *P*almyra Is.	26
44j	*J*ohnston Island	25
45	RAP = Rapanuian Region	
45e	*E*aster Island (Rapanui)	19-20
43	HAW = Hawaiian region	
43h	*H*awaii to Kauai	23-24
43f	*F*rench Frigate Shoals, Laysan Is.	21-22
43m	*M*idway Is.: Pearl-Hermes Reef to Kure Is.	19-21

The following list contains the living cowrie species and several degrees of subspecific rank, i. e.

(p) = prospecies of almost specific rank,
(s) = morphologically well recognizable subspecies (races),
(m) = morphologically well recognizable local mutants,

[1] As only one cowrie species (*Luria isabella lekalekana* LADD) is known from these rarely visited islands, the area generally has been treated in the list as if it were non existing or united with 44c.

(c) = clines which are morphologically recognizable in extreme areas only, but elsewhere gradually pass into the typical species,

(i) = geographically separated, but otherwise hardly recognizable infra-species;

the other "races" distinguished by SCHILDER 1938/39 have been suppressed, as they need further research concerning both characters and exact range.

The arrangement of species agrees with my latest catalogue (SCHILDER 1941) except if recent anatomical research made changes necessary.

The areas inhabited have been arranged according to the preceding list. The regions have been indicated both by the abbreviation consisting of three capitals and by the number composed of the digits of the province and the region within; these figures are followed by the small letters indicating the areas of the region in which the species actually has been found (the letter x indicates occurrence in the region without exact area known). These letters have been replaced by an asterisk (*) if evidently all areas of the region are inhabited, even if less common species have not yet been reported from less investigated areas which are surrounded by inhabited areas; if, however, some few areas situated at the border of the distribution of the species evidently are not any more inhabited because of unfavorable conditions chiefly in temperature, the letters of such excluded areas have been added to the asterisk separated by a minus (—). Doubtful occurrence has been put in parentheses; probably artificial introduction by man (as dead or even living specimens) have been marked by a preceding cross (×) thus becoming separated from the genuine distribution. Evidently erroneous indications of habitat have been omitted.

CYPRAEIDAE GRAY, 1824

Cypraeorbinae SCHILDER, 1939

Bernaya JOUSSEAUME, 1884

(*Protocypraea* SCHILDER, 1927)

teulèrei (CAZENAVETTE, 1846) ERY: 19my[6]a PER: 12h[8](op)

fultoni (SOWERBY, 1903) CAP: 17n(a)

(*Bernaya* JOUSSEAUME, 1884)

catei SCHILDER, 1963 DAM: 15s[7]

Zoila JOUSSEAUME, 1884

decipiens (SMITH, 1880) DAM: 15bes[2]

venusta (SOWERBY, 1846) DAM: 15e (TAS: 58f[2])

(s) *episema* IREDALE, 1939 TAS: 58f[6]

(m) *sorrentensis* SCHILDER, 1963 (DAM: 15s[7]) TAS: 58f[2]

thersites (GASKOIN, 1849) TAS: 58s

(c) *contraria* IREDALE, 1935 TAS: 58b

friendii (GRAY, 1831) TAS: 58f

(c) *vercoi* SCHILDER, 1930 TAS: 58a

marginata (GASKOIN, 1849) DAM: 15s[7] TAS: 58f[2](a[8])

rosselli (COTTON, 1948) TAS: 58f

Siphocypraea HEILPRIN, 1887

(*Akleistostoma* GARDINER, 1948)

mus (LINNAEUS, 1758) ANT: 81cv(a)

Cypraeinae SCHILDER, 1939

(Cypraeini SCHILDER, 1927)[2]

Trona JOUSSEAUME, 1884

stercoraria (LINNAEUS, 1758) SEN: 83s GUI: 84*

Macrocypraea SCHILDER, 1930

zebra (LINNAEUS, 1758) FLO: 82*(—b) ANT: 81* (—g)

(i) *dissimilis* (SCHILDER, 1924) BRA: 86pbr ARG: 73c

cervus (LINNAEUS, 1771) FLO: 82* ANT: 81j(da[2])

(p) *cervinetta* (KIENER, 1843) CAL: 89cgm PAN: 88*—cw ECU: 87* × MIC: 42j

Mauritia TROSCHEL, 1863

valentia (PERRY, 1811) QUE: 47t

mappa (LINNAEUS, 1758) (ZAN: 18z) (LEM: 11m) DAM: 15c QUE: 47cqt FIJ: 46* MEL: 41* MAL: 48*—gv RYU: 49tr MIC: 42*—o POL: 44*—gj

(c) *geographica* SCHILDER & SCHILDER, 1933 SUM: 14aj(ms)

(s) *alga* (PERRY, 1811) ZAN: 18z LEM: 11* (ERY: 19tm) (IND: 13c)

eglantina (DUCLOS, 1833) SUM: 14j(ms) DAM: 15*—s ZEA: 54h QUE: 47*—s FIJ: 46*—t MEL: 41* MAL: 48* -gbv RYU: 49tr(c) MIC: 42cjg(e)

[2] Ed. note: As we have no typographical provision for Dr. Schilder's taxon, the "infrafamily", we now introduce this type style to designate this taxon: (Infrafamily). While each lower taxon is indented one full space (an m-space), the infrafamily is indented only one half space more than the Subfamily.

histrio (Gmelin, 1791) (CAP: 17n) ZAN: 18imz LEM: 11* IND: 13* SUM: 14* —tm
(c) *westralis* (Iredale, 1935) DAM: 15: dbe
grayana Schilder, 1930 ZAN: 18s²g (LEM: 11s) ERY: 19* PER: 12* IND: 13b
arabica (Linnaeus, 1758) SUM: 14* DAM: 15* ZEA: 54h QUE: 47* FIJ: 46* MEL:41* MAL:48* RYU:49* MIC: 42*
(c) *dilacerata* Schilder & Schilder, 1939 IND:13*
(s) *immanis* Schilder & Schilder, 1939 CAP: 17an ZAN: 18*—g LEM: 11*
maculifera Schilder, 1932 FIJ:46sf(cht) (MAL:48p) RYU: 49trs MIC: 42*—o POL:44* HAW:43*—m ×PAN: 88cs
depressa (Gray, 1824) FIJ: 46* MEL: 41b MAL: 48p (RYU:49trs) MIC:42*—o POL: 44*—j × PAN: 88c
(i) *dispersa* Schilder & Schilder, 1939 ZAN: 18z LEM: 11sl IND: 13mc SUM: 14sjk
mauritiana (Linnaeus, 1758) (CAP: 17an) ZAN: 18* LEM: 11* ERY: 19tma (PER: 12o)
(i) *regina* (Gmelin, 1791) IND: 13*—b SUM: 14* DAM: 15b QUE: 47* FIJ: 46* MEL: 41* MAL: 48* RYU: 49*(—c) MIC: 42* POL: 44* HAW: 43*
scurra (Gmelin, 1791) ZAN:18mz LEM:11* IND: 13mc SUM:14asj DAM:15x
(s) *indica* (Gmelin, 1791) (SUM: 14j) QUE: 47* FIJ: 46* MEL: 41* MAL: 48⁴(*) RYU: 49tr MIC: 42* —o POL: 44* HAW: 43* × PAN: 88c

Talparia Troschel, 1863

talpa (Linnaeus, 1758) CAP: 17n ZAN: 18* LEM: 11* ERY: 19* PER:12o IND: 13mcd SUM: 14tasj DAM: 15*—s QUE: 47cqt FIJ: 46* MEL: 41* MAL: 48*—sgv RYU: 49trs MIC: 42*—o POL: 44* HAW: 43*
exusta (Sowerby, 1832) ERY: 19*—s(a)

Cypraea Linnaeus, 1758

tigris Linnaeus, 1758 CAP: 17n ZAN: 18* LEM: 11* ERY: 19ta
(i) *pardalis* Shaw, 1795 IND: 13*—b SUM: 14* DAM: 15bes ZEA: 54h QUE: 47cqt FIJ: 46* MEL: 41* MAL: 48*—g RYU: 49*(—y) MIC: 42* POL: 44*—j
(c) *schilderiana* Cate, 1961 POL: 44j HAW: 43*
(hybrid) *catulus* Schilder, 1924, 1962 ERY: 19a(t)
pantherina Solander, 1786 ERY: 19*

Lyncina Troschel, 1863

aurantium (Gmelin, 1791) FIJ: 46* MEL: 41sb MAL: 48p⁶ MIC:42*—o POL: 44cst
broderipi (Sowerby, 1832) CAP: 17n (LEM: 11m)
nivosa (Broderip, 1827) (LEM: 11r) IND: 13cd SUM: 14t
leucodon (Broderip, 1828) LEM: 11d
argus (Linnaeus, 1758) ZAN: 18z LEM: 11* IND: 13cd SUM: 14asj DAM: 15es² QUE: 47cqt FIJ: 46* MEL: 41* MAL: 48*—g RYU: 49tr MIC: 42*—o POL: 44up
lynx (Linnaeus, 1758) CAP: 17n ZAN: 18* LEM: 11* ERY: 19* IND: 13cd SUM: 14* DAM: 15*—s ZEA:54h QUE: 47* FIJ: 46* MEL: 41* MAL: 48* RYU: 49*—cy MIC: 42*—o POL: 44* HAW: 43*
vitellus (Linnaeus, 1758) CAP: 17an ZAN: 18* LEM: 11* (ERY: 19a) IND: 13cd SUM: 14* DAM: 15* (TAS: 58f) ZEA:54h QUE: 47* FIJ: 46* MEL:41* MAL: 48* RYU: 49*—c MIC: 42* POL: 44*—g HAW: 43* × PAN: 88c
camelopardalis (Perry, 1811) ERY: 19*—s(a)
reevei (Sowerby, 1832) TAS: 58fabs
ventriculus (Lamarck, 1810) FIJ:46* MEL:41sb MAL:48p MIC:42*—o POL: 44*—j
schilderorum (Iredale, 1939) FIJ:46cfs (MAL:48p) MIC:42*—o POL:44* HAW: 43* × PAN:88c
(i) *kuroharai* (Kuroda & Habe, 1961) RYU:49rs
sulcidentata (Gray, 1824) HAW: 43*
carneola (Linnaeus, 1758) CAP: 17an ZAN: 18* LEM: 11* ERY: 19* PER: 12* IND: 13* SUM: 14*-tk DAM: 15* ZEA: 54kh QUE: 47* FIJ: 46*

MEL: 41* MAL: 48* RYU: 49*-c MIC: 42* POL: 44* HAW: 43h

(m) *titan* Schilder & Schilder, 1962 ZAN: 18mz LEM: 11mr

(m) *leviathan* (Schilder & Schilder, 1937) (POL: 44*-hu) HAW: 43hf

(Luriini Schilder, 1932)

Chelycypraea Schilder, 1927

testudinaria (Linnaeus, 1758) (QUE: 47*-s FIJ: 46* MEL: 41* MAL: 48mp RYU: 49trs MIC: 42*-o POL: 44*-j

(i) *ingens* (Schilder & Schilder, 1938) (CAP: 17n) ZAN: 18mz LEM: 11* IND: 13c

Luria Jousseaume, 1884

tessellata (Swainson, 1822) (POL: 44h) HAW: 43*

pulchra (Gray, 1828) ERY: 19tma [s=*fossil only*] PER: 12oph

isabella (Linnaeus, 1758) CAP: 17an ZAN: 18* LEM: 11* ERY: 19* IND: 13c

(c) *lekalekana* (Ladd, 1934) SUM: 14*-tm DAM: 15* ZEA: 54kh QUE: 47* FIJ: 46* MEL: 41* MAL: 48* RYU: 49*-c MIC: 42* POL: 44*(-j)

(c) *controversa* (Gray, 1824) HAW: 43*

(p) *mexicana* (Stearns, 1893) CAL: 89cgmr PAN: 88cw (ECU: 87g)

cinerea (Gmelin, 1791) FLO: 82* ANT: 81* BRA: 83*-r

lurida (Linnaeus, 1758) MED: 95* CAN: 96* SEN: 83* GUI: 84*-m

(i) *oceanica* Schilder, 1930 ATL: 85*

Nariinae Schilder, 1932

(Pustulariini Schilder, 1932)

Pustularia Swainson, 1840

(*Annepona* Iredale, 1939)

mariae Schilder, 1927 FIJ: 46* MEL: 41sb MAL: 48p RYU: 49r MIC: 42*-o POL: 44* HAW: 43h

(*Pustularia* Swainson, 1840)

globulus (Linnaeus, 1758) IND: 13c SUM: 14asj DAM: 15s[2] QUE: 47xt FIJ: 46*-t MEL: 41* MAL: 48*-g RYU: 49trs MIC: 42*-o (POL: 44p)

(s) *brevirostris* Schilder & Schilder, 1938 (CAP: 17n) ZAN: 18z LEM: 11*

(p) *nov. prospec.* HAW: 43h

margarita (Dillwyn, 1817) FIJ: 46*-t MEL: 41sba MAL: 48p MIC: 42* POL: 44*-gmj

(i) *tricornis* (Jousseaume, 1874) LEM: 11r(s) (ERY: 19a)

cicercula (Linnaeus, 1758) SUM: 14tasj DAM: 15c QUE: 47c(s) FIJ: 46*(-s) MEL: 41*-m MAL: 48*-v RYU: 49trs MIC: 42c POL: 44c

(i) *lienardi* (Jousseaume, 1874) ZAN: 18z LEM: 11rsd ERY: 19a

(s) *tetsuakii* Kira, 1959 RYU: 49r HAW: 43*

bistrinotata Schilder & Schilder, 1937 (IND: 13c) SUM: 14*-t DAM: 15c (ZEA: 54h) QUE: 47* FIJ: 46* MEL: 41* MAL: 48-v RYU: 49trs[6] MIC: 42* POL: 44* HAW: 43*

(*Ipsa* Jousseaume, 1884)

childreni (Gray, 1825) FIJ: 46* MEL: 41sba MAL: 48gbp RYU: 49trs MIC: 42*-o POL: 44* HAW: 43*

(i) *lemurica* Schilder & Schilder, 1938 LEM: 11rd SUM: 14j[6]

Propustularia Schilder, 1927

surinamensis (Perry, 1811) ANT: 81av[2](g)

(Nariini Schilder, 1932)

Monetaria Troschel, 1863

annulus (Linnaeus, 1758) CAP: 17an(m) ZAN: 18* LEM: 11* ERY: 19* PER: 12o IND: 13* SUM: 14* DAM: 15*-es ZEA: 54h QUE: 47* FIJ: 46* MEL: 41* MAL: 48* RYU: 49*-c JAP: 37kf MIC: 42* POL: 44hucfp

(c) *obvelata* (Lamarck, 1810) POL: 44cstgmf

moneta (Linnaeus, 1758) CAP: 17man ZAN: 18* LEM: 11* ERY: 19* PER: 12o IND: 13* SUM: 14* DAM: 15* ZEA: 54h QUE: 47* FIJ: 46* MEL: 41* MAL: 48* RYU: 49*-c JAP: 37f MIC: 42* POL: 44* HAW: 43h × PAN: 88cw × ECU: 87g

Naria Broderip, 1837

irrorata (Gray, 1828) FIJ: 46s(c) MEL: 41sb MIC: 42*-op POL: 44*-j

Erosaria Troschel, 1863

(*Paulonaria* Iredale, 1930)

dillwyni (Schilder, 1922) FIJ: 46ft⁴s (MIC: 42mg) POL: 44ucstg

becki (Gaskoin, 1836) (FIJ: 46c) MEL: 41bg MAL: 48m²p RYU: 49trs MIC: 42*-o POL: 44u (HAW: 43h)

macandrewi (Sowerby, 1870) ERY: 19t²ms

(*Erosaria* Troschel, 1863)

labrolineata (Gaskoin, 1849) SUM: 14j DAM: 15e ZEA: 54h QUE: 47* FIJ: 46*-t MEL: 41* MAL: 48*-v RYU: 49*(-c) MIC: 42* POL: 44u

cernica (Sowerby, 1870) (CAP: 17n) LEM: 11rd

(i) *viridicolor* (Cate, 1962) DAM: 15es(c) (TAS: 58f)

(s) *tomlini* Schilder, 1930 ZEA: 54knh QUE: 47sb FIJ: 46c(h)

(s) *ogasawarensis* Schilder, 1944 RYU: 49rsy MIC: 42o POL: 44h HAW: 43*

citrina (Gray, 1825) CAP: 17an × LEM: 11m

gangranosa (Dillwyn, 1817) (CAP: 17n) ZAN: 18z(m) LEM: 11l ERY: 19ta IND: 13mc(a) SUM: 14asj MEL: 41g MAL: 48mt⁸cjs

boivini (Kiener, 1843) SUM: 14j MAL: 48*-av RYU: 49sy

(p) *ostergaardi* (Dall, 1921) HAW: 43*

helvola (Linnaeus, 1758) CAP: 17n ZAN: 18* LEM: 11* ERY: 19ta(m) IND: 13cd(m) SUM: 14*-t DAM: 15* TAS: 58fa⁸ ZEA: 54h QUE: 47* FIJ: 46* MEL: 41* MAL: 48* RYU: 49*-c JAP: 37f MIC: 42* POL: 44* HAW: 43* × PAN: 88c

(c) *meridionalis* Schilder & Schilder, 1938 CAP: 17an

caputserpentis (Linnaeus, 1758) CAP: 17an ZAN: 18*-sg LEM: 11* IND: 13mcd SUM: 14* DAM: 15*-s ZEA: 54kn (QUE:47t) FIJ46* MEL:41* MAL: 48* RYU: 49* JAP: 37f MIC:42* POL:44*-j × PAN:88cs

(c) *kenyonae* Schilder & Schilder, 1938 DAM: 15es TAS: 58fa

(c) *caputanguis* (Philippi, 1849) ZEA: 54h QUE: 47sbc

(c) *caputophidii* Schilder, 1927 HAW: 43*

caputdraconis (Melvill, 1888) RAP: 45e

albuginosa (Gray, 1825) CAL: 89*-d PAN: 88cw(sp) ECU: 87*

spurca (Linnaeus, 1758) MED: 95* CAN: 96* SEN: 83* GUI: 84*-m

(s) *sanctaehelenae* Schilder, 1930 ATL: 85*

(p) *acicularis* (Gmelin, 1791) FLO: 82*-bc ANT: 81*-hnc BRA: 86*

poraria (Linnaeus, 1758) ZAN:18z LEM: 11* IND: 13c SUM: 14sj DAM:15e

(i) *scarabaeus* (Bory, 1827) ZEA: 54kh QUE: 47s FIJ: 46* MEL: 41sba MAL: 48mbp RYU: 49*-c MIC: 42* POL: 44*-gm HAW: 43*

erosa (Linnaeus, 1758) CAP: 17an ZAN: 18*-sg LEM: 11* IND: 13cd SUM:14* DAM: 15*-s ZEA: 54k QUE:47*-s FIJ: 46* MEL: 41* MAL: 48*-v RYU: 49* MIC: 42* POL: 44*-m HAW: 43h

(c) *pulchella* Coen, 1949 ZEA: 54h QUE: 47sb

(p) *nebrites* (Melvill, 1888) ZAN: 18zsg ERY: 19* PER: 12ohk IND: 13b

ocellata (Linnaeus, 1758) LEM: 11l (ERY: 19ta) PER: 12hk IND: 13* SUM: 14j

marginalis (Dillwyn, 1827) CAP: 17an ZAN: 18* LEM: 11rs ERY: 19a PER: 12o

miliaris (Gmelin, 1791) SUM:14j DAM: 15* QUE: 47* MEL: 41mg MAL: 48* RYU: 49* MIC: 42p × ZAN: 18z

(s) *eburnea* (Barnes, 1824) QUE: 47bcq FIJ: 46chf(t) MEL: 41* (MAL: 48p)

(p) *lamarcki* (Gray, 1825) CAP: 17an ZAN: 18*-g LEM: 11am

(c) *redimita* (Melvill, 1888) LEM: 11*-a PER: 12k IND: 13*-a SUM: 14tmas

turdus (Lamarck, 1810) ZAN: 18z²sg ERY: 19*

(c) *winckworthi* Schilder & Schilder, 1938 PER: 12* × CAP: 17a

guttata (Gmelin, 1791) FIJ: 46h MEL: 41sb MIC: 42c

(i) *azumai* Schilder, 1960 RYU: 49s

Staphylaea Jousseaume, 1884

staphylaea (Linnaeus, 1758) CAP: 17an ZAN: 18* LEM: 11* (ERY: 19a) IND: 13c(b) SUM: 14tasj DAM: 15be ZEA: 54h QUE: 47* FIJ: 46* MEL: 41* MAL: 48*-v RYU: 49*-c MIC: 42*-o POL: 44ucst

limacina (Lamarck, 1810) CAP: 17n ZAN: 18imz LEM: 11*-l IND: 13c SUM: 14sj DAM: 15bes ZEA: 54h QUE: 47*-s FIJ: 46* MAL: 48*-agv RYU: 49* JAP: 37f MIC: 42m
semiplota (Mighels, 1845) HAW: 43*

Nuclearia Jousseaume, 1884

nucleus (Linnaeus, 1758) ZAN: 18* LEM: 11* ERY: 19* IND: 13c SUM: 14*-k DAM: 15e ZEA: 54h QUE: 47cqt FIJ: 46* MEL: 41* MAL: 48* RYU: 49* MIC: 42* POL: 44*-j HAW: 43* [*rare*]
(p) *granulata* (Pease, 1862) POL: 44j HAW: 43*

Cypraeovulinae Schilder, 1930

(Zonariini Schilder, 1932)

Schilderia Tomlin, 1930

achatidea (Sowerby, 1837) MED: 95crit(gl)
(i) *inopinata* Schilder, 1930 GUI: 84m
langfordi (Kuroda, 1938) RYU: 49s
(s) *nov. subspec.* QUE: 47b
hirasei (Roberts, 1913) RYU: 49s
teramachii (Kuroda, 1938) RYU: 49s

Zonaria Jousseaume, 1884

(*Zonaria* Jousseaume, 1884)

zonaria (Gmelin, 1791) CAN: 96o SEN: 83s GUI: 84*-m
(m) *gambiensis* (Shaw, 1909) SEN: 83s
picta (Gray, 1824) (CAN: 96c) SEN: 83*
sanguinolenta (Gmelin, 1791) SEN: 83s
pyrum (Gmelin, 1791) MED: 95* CAN: 96*(-a) SEN: 83s
(c) *senegalensis* Schilder, 1928 SEN: 83s
(i) *angolensis* (Odhner, 1923) GUI: 84m
(p) *petitiana* (Crosse, 1872) SEN: 83s (GUI: 84tg)
annettae (Dall, 1909) CAL: 89cgm
(p) *aequinoctialis* Schilder, 1933 ECU: 87e

(*Neobernaya* Schilder, 1927)

spadicea (Swainson, 1823) ORE: 35f[6] CAL: 89d

(*Pseudozonaria* Schilder, 1927)

robertsi (Hidalgo, 1906) CAL: 89cgm PAN: 88asp ECU: 87e
nigropunctata (Gray, 1828) ECU: 87*
arabicula (Lamarck, 1810) CAL: 87cgm PAN: 88asp ECU: 87*

(Cypraeovulini Schilder, 1941)

Cypraeovula Gray, 1824

(*Luponia* Broderip, 1837)

fuscorubra (Shaw, 1909) CAP: 17w[6]ma
fuscodentata (Gray, 1825) CAP: 17ma
algoensis (Gray, 1825) CAP: 17ma
edentula (Gray, 1825) CAP: 17a(n[6])

(*Cypraeovula* Gray, 1824)

amphithales (Melvill, 1888) CAP: 17a(n)
capensis (Gray, 1828) CAP: 17a(n)

Umbilia Jousseaume, 1884

armeniaca (Verco, 1912) TAS: 58b
(p) *hesitata* (Iredale, 1916) TAS: 58vt QUE: 47s

Notocypraea Schilder, 1927

pulicaria (Reeve, 1846) TAS: 58fa[8]
bicolor (Gaskoin, 1849) TAS: 58bsvt
(m) *wilkinsi* (Griffiths, 1959) TAS: 58v[1]
(c) *reticulifera* (Schilder, 1924) TAS: 58a
(i) *euclia* (Steadman & Cotton, 1946) TAS: 58b[8]
(s) *occidentalis* Iredale, 1935 TAS: 58f[6]
piperita (Gray, 1825) TAS: 58f[6]absv
(i) *dissecta* Iredale, 1931 TAS: 58v[4]
(s) *comptoni* (Gray, 1847) TAS: 58a[4]bsvt
(m) *casta* Schilder & Summers, 1963 TAS: 58s[5]
(c) *mayi* (Beddome, 1898) TAS: 58vt
angustata (Gmelin, 1791) TAS: 58svt
(i) *moelleri* (Iredale, 1931) TAS: 58v[4]
(p) *declivis* (Sowerby, 1870) TAS: 58v[8]t

(Erroneini Schilder, 1930)

Erronea Troschel, 1863

(*Gratiadusta* Iredale, 1930)

walkeri (Sowerby, 1832) LEM: 11csl SUM: 14as [j *fossil only*] DAM: 15cbe QUE: 47*(-s) (MEL: 41b) MAL: 48*-v RYU: 49r(s) Mic: 42c
(p) *bregeriana* (Crosse, 1868) FIJ: 46cf (MEL: 41m)
pyriformis (Gray, 1824) IND: 13cd SUM: 14tm QUE: 47cqt MAL: 48*-gbv
(c) *smithi* (Sowerby, 1881) DAM: 15dbe

pulchella (Swainson, 1823) MAL: 48p RYU: 49ctr
(s) *novaebritanniae* Schilder & Schilder, 1937 FIJ: 46f MEL: 41b
(s) *pericalles* (Melvill & Standen, 1904) ERY: tm[6]a PER: 12oph
hungerfordi (Sowerby, 1888) RYU: 49sy
(s) *coucomi* Schilder, 1964 QUE: 47b
barclayi (Reeve, 1837) (CAP: 17n) LEM: 11d(r)
(*Adusta* Jousseaume, 1884)
xanthodon (Sowerby, 1832) QUE: 47*(-t)
vredenburgi Schilder, 1927 SUM: 14j MAL: 48t[8](m[2])
pallida (Gray, 1828) PER: 12*-o IND: 13* SUM: 14tm MAL: 48s(g) × ERY: 19a
(c) *insulicola* Schilder & Schilder, 1938 SUM: 14s[6] MAL: 48j
subviridis (Reeve, 1835) QUE: 47* FIJ: 46c
(p) *dorsalis* Schilder & Schilder, 1938 DAM: 15* (MAL: 48a)
onyx (Linnaeus, 1758) (SUM: 14j) MEL: 41g MAL: 48* RYU: 49* MIC: 42m
(s) *melanesiae* Schilder & Schilder, 1937 MEL: 41b
(p) *adusta* (Lamarck, 1810) ZAN: 18imz LEM: 11*-rd PER: 12*-o IND: 13* SUM: 14ta
(m) *nymphae* (Jay, 1850) LEM: 11rd
(*Erronea* Troschel, 1863)
ovum (Gmelin, 1791) SUM: 14sj DAM: 15b QUE: 47cqt MEL: 41* MAL: 48* RYU: ctr MIC: 42p
errones (Linnaeus, 1758) IND: 13*-ba SUM: 14*-k DAM: 15*-s ZEA: 54h QUE: 47* FIJ: 46* MEL: 41* MAL: 48* RYU: 49* MIC: 42mpc(g) POL: 44c(p) (×) ZAN: 18z(s)
cylindrica (Born, 1778) SUM: 14sj QUE: 47*-s FIJ: 46h(c) MEL: 41* MAL: 48*-v RYU: 49tr(s) MIC: 42mp(g)
(s) *sowerbyana* Schilder, 1932 DAM: 15*-s
caurica (Linnaeus, 1758) CAP: 17an ZAN: 18* LEM: 11* ERY: 19* PER: 12* IND: 13*-da SUM: 14*-k DAM: 15* ZEA: 54h QUE: 47* FIJ: 46* MEL: 41* MAL: 48* RYU: 49trs MIC: 42*-o POL: 44c
(*Melicerona* Iredale, 1930)
felina (Gmelin, 1791) CAP: 17an ZAN: 18imz LEM: 11m(a)
(c) *fabula* (Kiener, 1843) ERY: 19tma PER: 12*
(p) *listeri* (Gray, 1824) LEM: 11*-am IND: 13*-a SUM: 14asj TAS: 58v[3] ZEA: 54h QUE: 47* FIJ: 46* MEL: 41* MAL: 48*-jsgv RYU: 49trs MIC: 42mpc(g) POL: 44c ×CAP: 17n

Notadusta Schilder, 1935

punctata (Linnaeus, 1771) (CAP: 17n) ZAN: 18z LEM: 11*-l (ERY: 19ta) IND: 13c SUM: 14asj DAM: 15*-s QUE: 47*-s FIJ: 46* MEL: 41* MAL: 48*-gv RYU: 49tr(s) MIC: 42*-o
(i) *trizonata* (Sowerby, 1870) POL: 44cstmf
rabaulensis Schilder, 1964 MEL: 41b MAL: 48p
katsuae (Kuroda, 1960) MAL: 48p RYU: 49rs
martini (Schepman, 1907) QUE: 47c MAL: 48mp
superstes (Schilder, 1930) FIJ: 46h

Palmadusta Iredale, 1930

asellus (Linnaeus, 1758) ZAN: 18z LEM: 11* IND: 13c SUM: 14tasj DAM: 15* ZEA: 54h QUE: 47* FIJ: 46* MEL: 41* MAL: 48*-v RYU: 49*-c MIC: 42*-o POL: 44fp(hu)
clandestina (Linnaeus, 1767) CAP: 17n ZAN: 18*-sg LEM: 11* ERY: 19ta IND: 13mc SUM: 14asj DAM: 15*-s ZEA: 54h QUE: 47* FIJ: 46* MEL: 41* MAL: 48*-sgv RYU: 49*-c MIC: 42*-o POL: 44cp(hu)
artuffeli (Jousseaume, 1876) RYU: 49*-c JAP: 37f MIC: 42o(m)
saulae (Gaskoin, 1843) SUM: 14t DAM: 15b QUE: 47* MAL: 48p (RYU: 49s) MIC: 42p [*rare, scattered*]
contaminata (Sowerby, 1832) CAP: 17n LEM: 11rs SUM: 14a DAM: 15e QUE: 47bc FIJ: 46c MEL: 41b MAL: 48cjsgbp RYU: 49r
lutea (Gmelin, 1791) (IND: 13c) SUM: 14sj DAM: 15* MEL: 41g MAL: 48*-v RYU: 49*-c
(p) *humphreysi* (Gray, 1825) ZEA: 54h QUE: 47* FIJ: 46*-h(s) MIC: 42j
ziczac (Linnaeus, 1758) CAP: 17an ZAN: 18*(-sg) LEM: 11* ERY: 19* PER: 12oh(p) IND: 13mc SUM: 14aj(s) DAM: 15e QUE: 47*-s FIJ: 46*-s MEL: 41b(s) MAL: 48mtcp RYU: 49*-c MIC: 42mpc
diluculum (Reeve, 1845) CAP: 17n ZAN: 18imz ERY: 19a

(c) *virginalis* SCHILDER & SCHILDER, 1938 LEM: 11*-l ERY: 19a

lentiginosa (GRAY, 1825) (ERY: 19a) PER: 12*(-o) IND: 13bmc

Purpuradusta SCHILDER, 1939

gracilis (GASKOIN, 1849) IND: 13c SUM: 14masj ZEA: 54h QUE: 47* MEL: 41b(m) MAL: 48* RYU: 49* JAP: 37f(c) MIC: 42mc(op)

(c) *irescens* (SOWERBY, 1870) DAM: 15* TAS: 58f

(i) *notata* (GILL, 1858) ZAN: 18z²(sg) ERY: 19* PER: 12*

hammondae (IREDALE, 1939) DAM: 15*-s QUE: 47*-s

(s) *raysummersi* SCHILDER, 1960 MAL: 48p

fimbriata (GMELIN, 1791) CAP: 17an ZAN: 18z(im) LEM: 11* (ERY: 19at) IND: 13c SUM: 14asj DAM: 15be MEL: 41g MAL: 48mtcbp RYU: 49trs MIC: 42mp

(i) *unifasciata* (MIGHELS, 1845) FIJ: 46fs MIC: 42j POL: 44stgfmp HAW: 43*

minoridens (MELVILL, 1901) (SUM: 14a) ZEA: 54h QUE: 47* FIJ: 46* MEL: 41sb MAL: 48p RYU: 49rs MIC: 42p POL: 44*-mpj(g)

serrulifera (SCHILDER & SCHILDER, 1938) POL: 44*-j (huc)

microdon (GRAY, 1828) SUM: 14j (ZEA: 54h) (QUE: 47cqt) FIJ: 46* MEL: 41sb MAL: 48mtbp(g) RYU: 49trs

(s) *chrysalis* (KIENER, 1843) ZAN: 18z LEM: 11amr ERY: 19ta

Blasicrura IREDALE, 1930

quadrimaculata (GRAY, 1824) SUM: 14msj DAM: 15* QUE:47cqt (FIJ:46f) MEL: 41* MAL: 48*-v RYU: 49tr MIC: 42pj(c)

luchuana (KURODA, 1960) RYU: 49r

(s) *dayritiana* (CATE, 1963) MAL: 48p

coxeni (COX, 1873) MEL: 41s

(m) *hesperina* SCHILDER & SUMMERS, 1963 MEL: 41bmag

pallidula (GASKOIN, 1849) SUM: 14j DAM: 15* ZEA: 54h QUE: 47cqt FIJ: 46chf MEL: 41* MAL: 48*-g RYU: 49tr MIC: 42p

(c) *summersi* (SCHILDER, 1958) FIJ: 46fts

interrupta (GRAY, 1824) IND: 13mc SUM: 14*-k MAL: 48matjp

rashleighana (MELVILL, 1888) FIJ: 46c

(s) *eunota* (TAYLOR, 1916) HAW: 43hf × PAN: 88w

(p) *latior* (MELVILL, 1888) HAW: 43*

teres (GMELIN, 1791) CAP: 17an ZAN: 18*-sg LEM: 11* IND: 13c SUM: 14*-k DAM: 15* ZEA: 54h QUE: 47* FIJ: 46* MEL: 41* MAL: 48*-sgv RYU: 49*-c MIC: 42* POL: 44*-g(t) HAW: 43* × PAN: 88cp

(p) *subteres* (WEINKAUFF, 1881) POL: 44cstg

goodalli (SOWERBY, 1832) FIJ: 46s MIC: 42ge(m) POL: 44*-j

Bistolida COSSMANN, 1920

kieneri (HIDALGO, 1906) ZAN: 18imz LEM: 11* IND: 13c

(s) *depriesteri* (SCHILDER, 1933) SUM: 14*-k ZEA: 54h QUE: 47* FIJ: 46* MEL: 41* MAL: 48*-v RYU: 49tr(s) MIC: 42m

(i) *landeri* SCHILDER & GRIFFITHS, 1962 POL: 44p

oweni (SOWERBY, 1837) ZAN: 18z LEM: 11*-l

(i) *vasta* (SCHILDER & SCHILDER, 1938) CAP: 17n(a)

hirundo (LINNAEUS, 1758) ZAN: 18z LEM: 11* (ERY: 19t) IND: 13mc SUM: 14* DAM: 15* ZEA: 54h QUE: 47*-s FIJ: 46* MEL: 41* MAL: 48* RYU: 49*-c MIC: 42* POL: 44huc

ursellus (GMELIN, 1791) SUM:14*-tk (DAM:15b) ZEA: 54h QUE: 47cqt FIJ: 46*(-s) MEL: 41* MAL: 48*-gv RYU: 49trs MIC: 42g(e)

erythraeensis (SOWERBY, 1837) ERY: 19*

stolida (LINNAEUS, 1758) CAP: 17n ZAN: 18imz LEM: 11amrs (IND: 13c) SUM: 14tsj DAM: 15be QUE: 47*-s FIJ:46* MEL:41* MAL:48mjsbp RYU: 49*-c JAP: 37k MIC: 42* POL: 44hufp

Ovatipsa IREDALE, 1931

chinensis (GMELIN, 1791) SUM: 14j DAM: 15*-s QUE: 47* FIJ: 46*-t MEL: 41* MAL: 48mtp RYU: 49*-c MIC: 42* POL: 44p(hu)

(i) *amiges* (MELVILL & STANDEN, 1915) HAW: 43h

(i) *variolaria* (LAMARCK, 1810) CAP: 17an ZAN: 18*-sg LEM: 11* (ERY: 49tax)
(m) *tortirostris* (SOWERBY, 1906) CAP: 17a(n)
(p) *coloba* (MELVILL, 1888) ERY: 19a (PER: 12k) IND: 13bmc SUM: 14ma)

Cribraria JOUSSEAUME, 1884

cribraria (LINNAEUS, 1758) LEM: 11rcdl ERY: 19ta(m) IND: 13c SUM: 14*-k DAM: 15bes TAS: 58f QUE: 47*-s FIJ: 46* MEL: 41* MAL: 48*-acsv(j) RYU: 49trs MIC: 42*-o POL: hp × HAW: 43h
(c) *comma* (PERRY, 1811) CAP: 17n ZAN: *-sg LEM: 11ams ERY: 19a
cribellum (GASKOIN, 1849) LEM: 11r
esontropia (DUCLOS, 1833) LEM: 11r
catholicorum SCHILDER & SCHILDER, 1938 QUE: 47c FIJ: 46ch MEL: 41sb
gaskoini (REEVE, 1846) HAW: 43hf × MIC: 42j
cumingi (SOWERBY, 1832) FIJ: 46s MIC: 42g(ce) POL: 44*-mpj

SUMMARY

This accurate and concise method to catalogue reliable and probable localities facilitates both to map the distribution of each species and subspecies, as well as to compose lists of cowries collected or expected at any locality. The communicated data answer our present knowledge which surely will be increased by future investigations.

LITERATURE CITED

BORRADAILE, L. A.

1914. Bibliography of the marine fauna: Synopsis of the classification. 2nd. ed. London: Challenger Soc.

EKMAN, SVEN

1935. Tiergeographie des Meeres. Leipzig. 142 pp.; 242 figs.

HERTLEIN, LEO GEORGE & EDWIN C. ALLISON

1960. Species of the genus *Cypraea* from Clipperton Island. The Veliger **2** (4): 94 - 95; plt. 22 (1 April 1960)

HIDALGO, JOAQUIN GONZALES

1906. Monografía de las especies vivientes del género *Cypraea*. Mem. Acad. Cienc. Madrid, **25**: 1 - 240; (**1907**) 241 - 588; I to XV.

INGRAM, WILLIAM MARCUS & KARL WALTON KENYON

1945. Cypraeidae of the Admiralty Islands. Nautilus **58** (4): 129 - 134

NOMURA, SHICHIHEI & KOTORA HATAI

1936. A note on the zoological provinces in the Japanese Seas. Bull. Biogeogr. Soc. Japan **6** (21): 207 - 214; plt. 13

SCHILDER, FRANZ ALFRED

1924. Systematischer Index der rezenten Cypraeidae. Arch. Naturgesch. **90** (A.4): 179 - 214; 1 diagram

1927. Revision der Cypraeacea (Moll. Gastr.). Arch. für Naturgesch. **91** (for 1925) (A. 10): 171 pp.; 1 diagram

1932. Cypraeacea. In Fossilium Catalogus I: Animalia, part **55**: 276 pp.

1941. Verwandtschaft und Verbreitung der Cypraeacea. Arch. Molluskenk. **73** (2 - 3): 57 - 120; 2 plts.

1943. Zur Verwandtschaft der Litoralfaunen. Arch. Molluskenk. **75** (2-3): 68 - 82; 2 maps

1952. Einführung in die Biotaxonomie (Formenkreislehre). Jena, 162 pp.; 121 maps.

1956. Lehrbuch der allgemeinen Zoogeographie. Jena, 150 pp.; 134 maps and diagrams.

1960. Probleme der Zoogeographie. Zool. Anz. Suppl. **23**: 369 - 373; 4 maps

1964. The distribution of *Erronea walkeri* SOWERBY (Cypraeidae). Hawaiian Shell News, n.ser. **49**: 7 - 8; 1 map

SCHILDER, FRANZ ALFRED, & MARIA SCHILDER

1938 - 1939. Prodrome of a monograph on living Cypraeidae. Proc. Malacol. Soc. London, **23** (3 - 4): 119 - 231.

1940. Die Verbreitung und Häufigkeit der rezenten Cypraeidae. Arch. Moll. **72** (2 - 3): 33 - 56

SCHOTT, GERHARD

1926. Geographie des Atlantischen Ozeans. 2nd. ed. Hamburg. 368 pp.; 28 plts.; 115 figs.

1935. Geographie des Indischen und Stillen Ozeans. Hamburg. 413 pp.; 38 plts.; 114 figs.

SPICER, VARNUM DENNIS PHILIP

1941. Shells from Midway. Nautilus **55** (1): 1 - 2

STEADMAN, W. R. & BERNARD C. COTTON

1946. A key to the classification of the cowries (Cypraeidae). Rec. So. Austral. Mus. **8**: 503 - 530; 6 plts.

WHITLEY, G. P.

1937. The Middleton and Elizabeth Reefs. Austral. Zoologist **8**: map on p. 199