

STUDIES ON THE FAUNA OF CURAÇAO AND OTHER
CARIBBEAN ISLANDS: No. 72

THE MARINE MOLLUSCA OF ST. MARTIN, LESSER
ANTILLES, COLLECTED BY H. J. KREBS

by

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In 1864 an anonymous list of species of the West Indian marine mollusks was published in Denmark. There were only twenty copies printed, seven of which were lost during transportation to the West Indies (CLENCH et al., 1947-1948, p. 23). The author was HENDRIK JOHANNES KREBS (1821-1907), Fig. 117, a Danish apothecary who lived on St. Thomas, Virgin Islands, from 1843 to 1870. Being the owner of a wholesale firm, he travelled throughout the West Indies, which gave him an opportunity to collect shells and plants. His species list was entitled: "The West-Indian Marine Shells with some remarks. A manuscript printed for circulation between collectors." It was published by W. Laub's Widow & Chr. Jorgensen, at Nykjöbing, Falster.

As this work is very rare, a republication was issued by CLENCH, AGUAYO & TURNER (1947-1948). The republication is preceded by some remarks, and concludes with a portrait of KREBS, a biography and a bibliography. For more data concerning KREBS, reference should be made to this republication.

In his species list KREBS gave, for each species, the scientific name and author, and sometimes one or more synonyms; the ecological situation, which he called "Station"; and finally the localities, each locality with the actual collector, or reference. He called the localities "Habitats". (Note: KREBS interchanged the words "habitat" and "station". According to modern ideas, the habitat is the ecological situation, while station refers to the locality.) Many species were provided with systematic remarks.

Table 1 shows the species which were collected by KREBS in St. Martin. In preparing this table, the republication has been used. KREBS mentioned a few species from two other islands of the Netherlands Antilles, Saba and Curaçao; for the sake of completeness these are also given in Table 1. Since many names used by KREBS are out of date or wrong, we added a special column for the modern scientific names. Some species numbers are provided with an asterisk (*); these species are commented on in annotations at the end of Table 1. To KREBS' record of the species of St. Martin two more columns have been added, showing the mollusks collected on that island during the present century. One column gives the shells collected by Dr. P. WAGENAAR HUMMELINCK and Mrs. VAN DEN BOS; these shells have been treated in our previous publication (COOMANS, 1958). Another column records the species collected by COOMANS on St. Martin in June 1959, and the data of several other collectors during the same year (H. J. KOELERS, Dr. J. H. STOCK, M. VAN VELDHoven M.D., and P. A. VAN DER WERF).

Mrs. J. CATE of Los Angeles, California, gave us valuable information concerning *Pusia semicostata*.

Mrs. G. L. WARMKE, Curator of Mollusks at the Institute of Marine Biology at Mayaguez, Puerto Rico, and Mr. E. C. AUER of New York, were both so kind as to read the manuscript.

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Fig. 117. HENDRIK JOHANNES KREBS (1821–1907) Danish author of
“The West-Indian Marine Shells”.

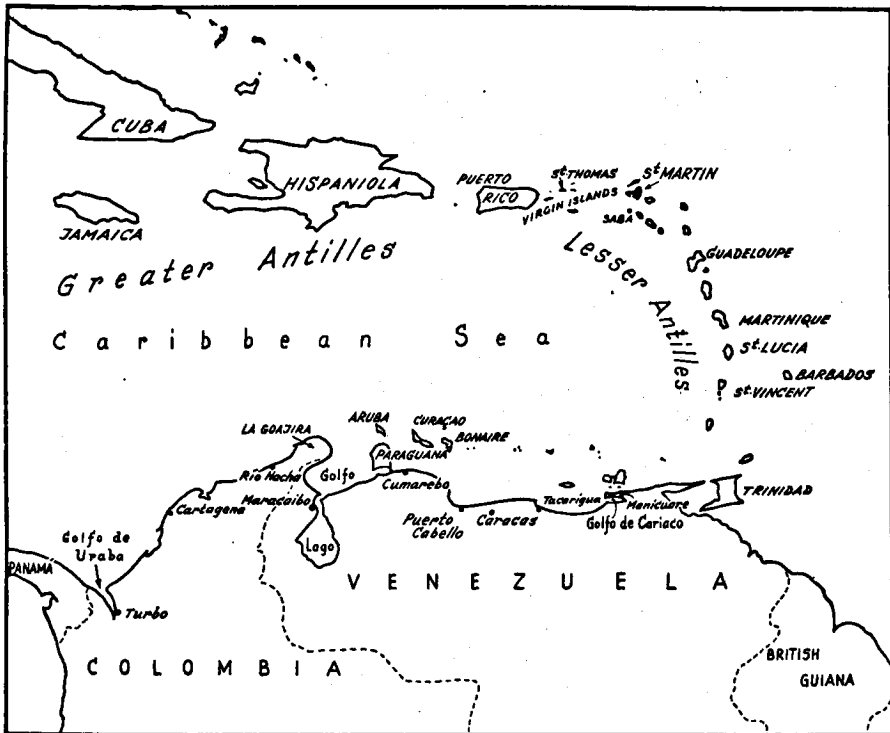


Fig. 118. Sketch map of the Caribbean, with localities mentioned in this paper.

TABLE 1

MARINE MOLLUSKS OF THE NETHERLANDS
ANTILLES MENTIONED BY KREBS (1864),
WITH THE MODERN SCIENTIFIC NAMES

The shells from St. Martin are provided with a number, without a letter.

* See annotations concerning this species at the end of the table.

Abbreviations of the references:

A = C. B. ADAMS

M = O. A. L. MÖRCH

B = M. BEAU

O = A. D'ORBIGNY

C = F. DE CANDÉ

R = A. H. RIISE

K = H. J. KREBS

S = R. SWIFT

Number	Page in KREBS	Name (and synonyms) according to KREBS	Modern scientific name	St. Martin			Saba in KREBS	Curaçao in KREBS
				in KREBS	in COOMANS (1958)	collected in 1959 by COOMANS et al.		
1	1	Gastropoda <i>Strombus costoso-muricatus</i> Mart. (<i>S. raninus</i> Gml. <i>S. bitubercularis</i> Lam.)	<i>Strombus raninus</i> Gmelin	K		×		
2	4	<i>Conus daucus</i> L.	<i>Conus daucus</i> Hwass	K				
3	5	<i>Conus leucostictus</i> Hw. (<i>C. nebulosus</i> Sol.)	<i>Conus regius</i> Gmelin	K	×	×		
4	5	<i>Conus mindanus</i> Hw. (<i>C. pusio</i> Brug.)	<i>Conus jaspideus</i> Gmelin	K	×	×		S
5	5	<i>Conus mus</i> Hw. (<i>C. barbadensis</i> Hw.)	<i>Conus mus</i> Hwass	K	×	×		
6	7	<i>Pleurotoma albocincta</i> Ad.	<i>Monilispira albocincta</i> (C. B. Adams)	K				
7*	8	<i>Pleurotoma coccinata</i> Reeve	<i>Drillia coccinata</i> (Reeve)	K				
8	8	<i>Pleurotoma costata</i> Gray (<i>P. trifasciata</i> Gray)	<i>Mangelia trilineata</i> (C. B. Adams)	K				
9	9	<i>Pleurotoma fucata</i> Reeve	<i>Fenimorea fucata</i> (Reeve)	K				

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				in KREBS	in COOMANS (1958)	collected in 1959 by COOMANS et al.	Saba in KREBS	Curaçao in KREBS
10*	11	<i>Pleurotoma pura</i> Reeve	? <i>Pyrgocythara coxi</i> Fargo	K				
11	12	<i>Daphnella lymnaeiformis</i> Kiener (<i>D. decorata</i> C. B. Adams)	<i>Daphnella lymnaeiformis</i> (Kiener)	K				
12	13	<i>Mangelia balteata</i> Reeve	<i>Mangelia balteata</i> Reeve	K				
13	14	<i>Mangelia quadrata</i> Reeve (<i>Pleurotoma deminuta</i> C. B. Adams)	<i>Mangelia quadrata</i> (Reeve)	K				
14	15	<i>Fasciolaria tulipa</i> Lmk.	<i>Fasciolaria tulipa</i> (Linné)	K	×	×		
15	16	<i>Turbinella ananas</i> Chem. (<i>M. infundibulum</i> Gml.)	<i>Latirus infundibulum</i> (Gmelin)	K		×		
16	17	<i>Turbinella nigella</i> Chem. (<i>P. ocellata</i> Gml.)	<i>Leucozonia ocellata</i> (Gmelin)	K				
17*	18	<i>Murex alveatus</i> Kien.	<i>Tritonalia intermedia</i> (C. B. Adams)	K				
17a*	19	<i>Murex elegans</i> Bech		O				
18	21	<i>Murex nuceus</i> Mörch	<i>Favartia cellulosus nuceus</i> (Möorch)	K				
19*	21	<i>Murex pleurotomoides</i> Reeve	?	K				
20	21	<i>Murex pomiformis</i> Mart.	<i>Hexaplex pomum</i> (Gmelin)	K		×		
21*	23	<i>Tritonium cynocephalum</i> Lmk.	<i>Cymatium caribbaeum</i> Clench & Turner	K		×		
22	23	<i>Tritonium femorale</i> L.	<i>Cymatium femorale</i> (Linné)	K	×	×		
23	23	<i>Tritonium labiosum</i> Wood (<i>Tr. Loroisis</i> Pt.)	<i>Cymatium labiosum</i> (Wood)	K				
24	23	<i>Tritonium lanceolatum</i> Mk.	<i>Colubraria lanceolata</i> (Menke)	K				

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25	24	<i>Tritonium piliare</i> L. & Lmk. (<i>T. martinianum</i> d'Orb.)	<i>Cymatium pileare</i> (Linné)	K	×	×		
26*	24	<i>Tritonium testaceum</i> Mörch	<i>Colubraria obscura</i> (Reeve)	K				
27*	26	<i>Purpura patula</i> Linné	<i>Purpura patula</i> (Linné)	K	×	×		
28	27	<i>Purpura rustica</i> Lam.	<i>Thais rustica</i> (Lamarck)	K	×	×		
29*	27	<i>Recinula nodulosa</i> Ad.	<i>Morula nodulosa</i> (C. B. Adams)	K	×			
30	27	<i>Recinula turbinella</i> Kien.	<i>Engina turbinella</i> (Kiener)	K		×		
31*	28	<i>Columbella catenata</i> Sowb. (<i>Buccinum mitrula</i> Dk.)	<i>Anachis catenata</i> (Sowerby)	K				
32	29	<i>Columbella laevigata</i> Lmk. (<i>Col. concinna</i> Sowb.)	<i>Nitidella laevigata</i> (Lamarck)	K				
33	29	<i>Columbella mercatoria</i> L.	<i>Columbella mercatoria</i> (Linné)	K	×	×		
34*	29	<i>Columbella nitida</i> Lmk. (<i>S. nitidula</i> (L. ?) Sowb.)	<i>Nitidella nitida</i> (Lamarck)	K	×	×		
35	30	<i>Columbella ocellata</i> Gml.	<i>Mitrella ocellata</i> (Gmelin)	K	×	×		
36*	30	<i>Columbella ovulata</i> Lmk.	<i>Pyrene ovulata</i> (Lamarck)	K		×		
37*	30	<i>Columbella parvula</i> Ph.	<i>Mitrella ocellata</i> (Gmelin)	K				
38*	30	<i>Columbella pulchella</i> Kiener (<i>Buc. triticum</i> Sol.)	<i>Anachis pulchella</i> (Kiener)	K		×		
39*	31	<i>Columbella subcostata</i> Ad.	<i>Anachis catenata</i> (Sowerby)	K				
40	34	<i>Cancellaria reticulata</i> L.	<i>Cancellaria reticulata</i> (Linné)	K		×		

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41	34	<i>Cancellaria rugosa</i> Lmk.	<i>Trigonostoma rugosa</i> (Lamarck)	K		×		
42	34	<i>Cassis gibba</i> Gml. (<i>C. globulus</i> Bolt. <i>C. abbreviata</i> Lmk.)	<i>Phalium granulatum</i> (Born)	K				
43	35	<i>Cassis tuberosa</i> L.	<i>Cassis tuberosa</i> (Linné)	K	×	×		
44	35	<i>Oniscia Oniscus</i> L.	<i>Morum oniscus</i> (Linné)	K	×	×		
45	35	<i>Dolium pennatum</i> Mart.	<i>Tonna maculosa</i> (Dillwyn) (<i>T. perdix pennata</i> (Mörch))	K		×		
45a*	36	<i>Eburnea glabrata</i> Lmk.	<i>Ancilla glabrata</i> (Lamarck)					S
46	36	<i>Mitra barbadensis</i> Gmelin (<i>M. striatula</i> Lmk.)	<i>Mitra barbadensis</i> (Gmelin)	K	×	×		C
47*	37	<i>Mitra dermestina</i> Lmk. (<i>M. speciosa</i> Reeve? Mörch!)	<i>Pusia dermestina</i> (Lamarck)	K				
48*	37	<i>Mitra semicostata</i> Anton	?	K				
49	38	<i>Mitra puella</i> Reeve	<i>Pusia puella</i> (Reeve)	K				
49a*	38	<i>Oliva exigua</i> Mart. (<i>O. conoidalis</i> Lmk. <i>Voluta jaspidea</i> Gml.)	<i>Jaspidella jaspidea</i> (Gmelin)					C
50	40	<i>Oliva oryza</i> Lmk.	<i>Olivella floralia</i> (Duclos)	K				
51*	40	<i>Oliva pura</i> Reeve	<i>Olivella bullula</i> (Reeve)	K				
52	40	<i>Oliva reticularis</i> Lmk. (<i>O. olivaceus</i> Meusch.)	<i>Oliva reticularis</i> Lamarck	K	×	×		A
	41	<i>Oliva scripta</i> Lmk.	<i>Oliva caribaeensis</i> Dall & Simpson					O
53	41	<i>Cypraea exanthema</i> L.	<i>Trona zebra</i> (Linné)	K	×	×		
53a*	41	<i>Cypraea mus</i> L.	<i>Siphocypraea mus</i> (Linné)					S

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54	41	<i>Cypraea pediculus</i> L.	<i>Trivia pediculus</i> (Linné)	K		×			
55	42	<i>Cypraea rotunda</i> Kiener (<i>C. quadripunctata</i> Gray)	<i>Trivia quadripunctata</i> (Gray)	K		×			
56	42	<i>Cypraea spurca</i> Linné (<i>C. flaveola</i> Reeve, <i>C. lota</i> Born)	<i>Erosaria spurca acicularis</i> (Gmelin)	K		×			
57	42	<i>Cypraea succincta</i> L. (<i>C. cinerea</i> Mart. <i>C. sordida</i> Lmk.)	<i>Luria cinerea</i> (Gmelin)	K	×	×			
58	42	<i>Cypraea suffusa</i> Gray (<i>C. armindina</i> Ducl.)	<i>Trivia suffusa</i> (Gray)	K		×			
59	43	<i>Ovula acicularis</i> Lmk.	<i>Neosimnia acicularis</i> (Lamarck)	K					
60	43	<i>Marginella catenata</i> Mont.	<i>Persicula catenata</i> (Montagu)	K					
60a*	44	<i>Marginella maculosa</i> Kien.	<i>Persicula maculosa</i> (Kiener)						S
60b*	44	<i>Marginella marginata</i> Born (<i>M. bivaricosa</i> Lmk.)	<i>Marginella marginata</i> (Born)						S
60c*	45	<i>Marginella muralis</i> Hinds	<i>Persicula maculosa</i> (Kiener)						M
61*	45	<i>Marginella pallida</i> L. (<i>M. avenacea</i> Desh.)	<i>Hyalina avenacea</i> (Deshayes)	K					
61a	45	<i>Marginella subcoerulea</i> Mart. (<i>V. prunum</i> Gm. <i>V. coerulescens</i> Lmk.)	<i>Prunum prunum</i> (Gmelin)						C
62	46	<i>Marginella subtriplicata</i> d'Orb.	<i>Hyalina subtriplicata</i> (d'Orbigny)	K					
62a*	46	<i>Marginella xanhostoma</i> Mörch	<i>Prunum prunum</i> (Gmelin)						M

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63*	46	<i>Volvaria pellucida</i> Schm. (<i>V. pallida</i> Lmk. non L.)	<i>Hyalina pallida</i> (Linné) (<i>H. pellucida</i> Schumacher, <i>H. tenuilabra</i> (Tomlin))	K				
64	46	<i>Turritella exoleta</i> L.	<i>Turritella exoleta</i> (Linné)	K		x		
65	48	<i>Cerithium gibberulum</i> Ad.	<i>Bittium varium</i> (Pfeiffer)	K				
66*	48	<i>Cerithium interruptum</i> Mke?	<i>Seila adamsi</i> (H. C. Lea)	K			S	
67	49	<i>Cerithium litteratum</i> Brug.	<i>Cerithium litteratum</i> (Born)	K	x	x		
67a	49	<i>Cerithium minimum</i> Gml. (<i>C. zonale</i> Brug.)	<i>Batillaria minima</i> (Gmelin)					M
68*	50	<i>Cerithium Petiti</i> Kien.	<i>Cerithidea costata</i> (da Costa)	K	x	x	S	
69*	50	<i>Cerithium rugulosum</i> Ad.	<i>Cerithiopsis rugulosum</i> (C. B. Adams)	K				
70*	50	<i>Cerithium semiferrugineum</i> Lmk.	<i>Cerithium litteratum</i> forma <i>semiferrugineum</i> Lamarck	K		x		
71*	50	<i>Cerithium terebellum</i> Ad.	<i>Seila adamsi</i> (H. C. Lea)	K				
72	52	<i>Planaxis nucleus</i> Lmk.	<i>Planaxis nucleus</i> (Bruguière)	K		x		
73	52	<i>Planaxis lineatus</i> Da Costa (<i>P. pedicularis</i> Lmk.)	<i>Planaxis lineatus</i> (da Costa)	K		x		
74*	54	<i>Rissoa melanura</i> Ad.. (<i>Eulima incerta</i> d'Orbigny)	<i>Alaba incerta</i> (d'Orbigny)	K				
75*	57	<i>Rissoina Catesbya</i> d'Orb.	<i>Rissoina catesbyana</i> d'Orbigny	K				
76	57	<i>Rissoina elegantissima</i> d'Orb.	<i>Rissoina elegantissima</i> d'Orbigny	K				
77	59	<i>Littorina guttata</i> Ph. (<i>L. punctata</i> Pf.)	<i>Littorina meleagris</i> (Potiez & Michaud)	K	x	x		

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78	60	<i>Littorina lineata</i> d'Orb.	<i>Littorina ziczac</i> (Gmelin)	K	x	x		
79	60	<i>Littorina minima</i> Wood	<i>Littorina mespillum</i> forma <i>minima</i> (Wood)	K	x	x		
80	60	<i>Littorina muricata</i> Linné (<i>Tectus muricatus</i> Ch. ? <i>gothicus</i> Bolt. ?)	<i>Tectarius muricatus</i> (Linné)	K	x	x		
81	61	<i>Littorina trochiformis</i> Dillw. (<i>L. nodulosa</i> d'Orb. acc. to Beau)	<i>Nodilittorina tuberculata</i> (Menke)	K	x	x		
82	62	<i>Modulus lenticularis</i> Ch. (<i>Trochus unidens</i> List d'Orb.)	<i>Modulus modulus</i> (Linné)	K	x	x		
83	63	<i>Solarium infundibuliformis</i> Chem. (<i>Tr. Chemnitzii</i> Kl.)	<i>Heliacus infundibuliformis</i> (Gmelin)	K				
84	63	<i>Scalaria crenata</i> Linné	<i>Opalia crenata</i> (Linné)	K				
85*	64	<i>Scalaria hottessieriana</i> d'Orb.	<i>Opalia hottessieriana</i> (d'Orbigny)	K				
86	64	<i>Scalaria lamellosa</i> Lmk. (<i>Scl. clathrus</i> Linné acc. to Beau)	<i>Epitonium lamellosum</i> (Lamarck)	K	x	x		
87*	65	<i>Scalaria Martini</i> Wood?	?	K				
88	65	<i>Scalaria tenuis</i> Sowb.	<i>Epitonium occidentale</i> (Nyst)	K				
89	66	<i>Stylina subulata</i> Brod.	<i>Stilifer subulatus</i> Broderip	K				
90	66	<i>Natica canrena</i> L.	<i>Natica canrena</i> (Linné)	K	x	x		
91	66	<i>Natica fuscata</i> Chem. (<i>N. brunnea</i> Link. <i>N. mamilaris</i>)	<i>Polinices hepaticus</i> (Röding)	K				
92	68	<i>Sigaretus zonatus</i> d'Orb. (<i>S. martinianus</i> Ph.)	<i>Sinum maculatum</i> (Say)	K				

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93	69	<i>Crucibulum auriculatum</i> Ch. (<i>P. auriculata</i> Gml.)	<i>Crucibulum auricula</i> (Gmelin)	K				
94	69	<i>Trochita candeana</i> d'Orb.	<i>Calyptrea centralis</i> (Conrad)	K				
95	70	<i>Capulus incurvus</i> Gm. (<i>P. militaris</i> L., Dw. <i>P. intorta</i> Lmk.)	<i>Capulus incurvus</i> (Gmelin)	K		×		
96	71	<i>Pyramidella dolabrata</i> L.	<i>Pyramidella dolabrata</i> (Linné)	K				
97	74	<i>Eulima jamaicensis</i> Ad.	<i>Balcis intermedia</i> (Cantraine)	K				
98	75	<i>Acmaea pustula</i> Helb. (<i>P. punctulata</i> Gm. <i>P. puncturata</i> ...)	<i>Acmaea pustulata</i> (Helbling)	K	×	×		
99	76	<i>Nerita peloronta</i> L. (<i>N. erythron</i> Reculz)	<i>Nerita peloronta</i> Linné	K	×	×		
100	78	<i>Neretina viridis</i> L.	<i>Smaragdia viridis</i> (Linné)	K		×		
101	79	<i>Phasianella concinna</i> Ad.	<i>Tricolia affinis</i> (C.B. Adams)	K				
102	80	<i>Turbo castaneus</i> Chem. (<i>T. hippocastanum</i> Lmk.)	<i>Turbo castaneus</i> Gmelin	K	×	×		
	81	<i>Calcar ramosus</i> Meusch. (<i>T. imbricatus</i> Gml.)	<i>Astraea tecta</i> (Solander) (<i>A. imbricata</i> (Gmelin))					R
103	81	<i>Calcar Spenglerianus</i> Ch. (<i>Tuber aculeatus</i> Gml.)	<i>Turbo canaliculatus</i> Hermann	K	×			S
104	82	<i>Calcar Tuber</i> L.	<i>Astraea tuber</i> (Linné)	K	×	×		
105*	84	<i>Trochus fasciatus</i> Born (<i>Tr. livido-maculatus</i> Ad.)	<i>Tegula fasciata</i> (Born)	K		×		

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106*	84	<i>Trochus Hotessierianus</i> d'Orb. (<i>Tr. interrupta striatus</i> C. B. Ad.)	<i>Tegula hotessieriana</i> (d'Orbigny) (<i>T. maculostriata</i> C. B. Adams)	K	x	x		
107	85	<i>Stomatia picta</i> d'Orb.	<i>Synaptocochlea picta</i> (d'Orbigny)	B				
108	86	<i>Emarginula</i> (<i>Subemarginula</i>) <i>octoradiata</i> Gml.	<i>Hemitoma octoradiata</i> (Gmelin)	K	x	x		
109	86	<i>Fissurella barbadensis</i> Gml.	<i>Fissurella barbadensis</i> (Gmelin)	K	x	x		
110	86	<i>Fissurella cancellata</i> Sal. (<i>F. Sowerbyi</i> Guild.)	<i>Lucapina sowerbi</i> (Sowerby)	K		x		
111*	87	<i>Fissurella elongata</i> Reeve	<i>Lucapina philippiana</i> (Finlay)	K		x		
112*	87	<i>Fissurella gemmulata</i> Reeve (<i>F. minuta</i> Sowb. <i>F. elongata</i> Ad.)	<i>Diodora minuta</i> (Lamarck)	K	x	x		
113*	87	<i>Fissurella graeca</i> (<i>F. Listeri</i> d'Orb.)	<i>Diodora listeri</i> (d'Orbigny)	K	x	x		
114	87	<i>Fissurella larva</i> Reeve	<i>Diodora cayenensis</i> (Lamarck)	K	x	x		
115*	88	<i>Fissurella pustula</i> L.	<i>Fissurella punctata</i> Fischer	K	x	x		
116	92	<i>Bullinula undata</i> Brug. (<i>B. nitidula</i> Sol. <i>B. elegans</i> Mke.)	<i>Micromelo undata</i> (Bruguière)	K				
117	93	<i>Bulla maculosa</i> Mart. (<i>B. striata</i> Brug. non Ph.)	<i>Bulla striata</i> (Bruguière)	K	x	x		
118*	94	<i>Atys Guildingii</i> Sow.	<i>Haminoea elegans</i> (Gray)	K				
118a	97	<i>Pelecypoda</i> <i>Venus mactroides</i> Born (<i>C. corbicula</i> Gml. Lmk.)	<i>Tivela mactroides</i> (Born)					A

Number	Page in KREBS	Name (and synonyms) according to KREBS	Modern scientific name	St. Martin		Saba in KREBS	Curaçao in KREBS
				in KREBS	in COOMANS (1958) collected in 1959 by COOMANS et al.		
118b*	100	<i>Tellina bimaculata</i> L. (<i>T. sexradiata</i> Lmk. <i>Heterodonax</i> Mörch)	<i>Heterodonax bimaculata</i> (Linné)				K
119*	121	<i>Lucina serrata</i> d'Orb. (<i>L. Chemnitzii</i> Ph. <i>L. divaricata</i> Rv. non L.)	<i>Divaricella dentata</i> (Wood)	O	×		
120*	127	<i>Pectunculus</i> spec. ind.	<i>Glycymeris</i> spec.	K			
121	133	<i>Lima inflata</i> Lmk. (<i>L. pellucida</i> Ad.)	<i>Lima pellucida</i> C. B. Adams	K			

ANNOTATIONS to the species marked * in TABLE 1:

7. KREBS (1866, p. 397) remarked in a later publication: "*Pleurotoma Augustae* C.B.Ad., is *P. coccinata* Rv."
- 10: *Mangelia pura* REEVE (1846, p. 64) had no type locality. TRYON (1884, 6, p. 254) mentioned South Australia. The species is not known to us from the West Indies. KREBS probably had *Pyrgocythara cori* Fargo.
17. *Murex alveatus* Kiener was mentioned by KREBS (1864, p. 21) as a synonym of *M. intermedius* Ad. Most modern authors use for this species the name *Ocenebra intermedia* (C. B. Adams). However, *Tritonalia* Fleming 1828 is older than *Ocenebra* Gray 1847, sometimes misspelled *Ocinebra*.
- 17a. *Murex elegans* Beck (error in KREBS: Bech) is mentioned from St. Martin by mistake. For this locality, KREBS referred to D'ORBIGNY. However, D'ORBIGNY (1853, 2, p. 160) cited "Martinique", not St. Martin.
19. *Murex pleurotomoides* REEVE (1845, p. 109) had no type locality. TRYON (1880, 2, p. 120) placed this species in *Ocenebra*, and remarked: "Reeve does not state whether the columellar tubercles are the remains of revolving teeth or not; if they are, the species will be better placed in the genus *Peristernia*." — St. Martin is the only locality mentioned by KREBS for this species. It is impossible for us to decide which Caribbean species he collected.
21. Until recently *Cymatium cynocephalum* Lamarck was considered to be a species from both the eastern Pacific (Lower California to Peru), and the Caribbean Sea. CLENCH & TURNER (1957, p. 204) proved that a different species was found in each sea. *C. cynocephalum* was reserved for the Pacific species; the Caribbean species was named *C. caribbaeum*.

26. KREBS remarked concerning this species: "We have cause to believe that the localities mentioned by C. B. Adams under the *T. obscurus* Reeve are relative to *Trit. testaceum* Mörch."
27. According to WENZ (1941, p. 1115) the name of this species is *Pliocypurpura* (*Patellipurpura*) *patula* (Linné). It is the type species of the subgenus *Patellipurpura* Dall, 1909.
29. *Recinula* is an error for *Ricinula*.
31. See also No. 39.
34. *Buccinum nitidulum* Linné 1758 is unidentifiable (DODGE, 1956, p. 216).
36. KREBS (1864, p. 30) remarked under *Columbella ovuloides*: "surely synonymous with *C. ovulata* Lmk." — Some authors (WARMKE & ABBOTT, 1961, p. 110) agree with KREBS. With WEBER (1961, p. 56), we think they are two distinct species; or, at least, one is a variety of the other (USTICKE, 1959, p. 65). The differences between these two species are:



Fig. 119. *Pyrene ovulata* from St. Thomas, 14 mm in length.



Fig. 120. *Pyrene ovuloides* from Curaçao, 16 mm in length.

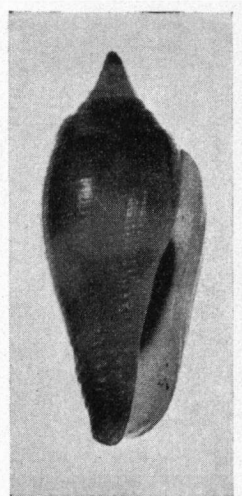


Fig. 121. *Pyrene ovuloides* from Jamaica, 13 mm in length.

Pyrene ovulata (Lamarck),
Fig. 119.

shell ovoid
length is $2 \times$ width or less
spire is about $\frac{1}{6}$ of length
spire straight
angle of spire 75°

Pyrene ovuloides (C. B. Adams),
Fig. 120–121.

shell more slender
length is $2-2\frac{1}{2} \times$ width
spire is about $\frac{1}{4}$ of length
spire concave
angle of spire 60°

surface has smooth appearance,	surface not smooth,
although there are many fine spiral grooves	spiral grooves more clearly visible
dark red-brown to black brown	orange brown
white markings, not in solid bands	spiral white band over the middle of the body whorl, often a few axial white bands

37. *Columbella parvula* (Dunker), not Philippi, is considered to be a synonym of *Mitrella ocellata* (No. 35), although KREBS remarked regarding *Columbella ocellata*: "in a manuscript of C. B. Adams stands *C. parvula* Dunker (Philippi?) and *C. guttata* Sowb. as synonyms of this species, but the first mentioned species is surely distinct."
38. For *Buccinum pulchellum*, KIENER (1834, p. 51) referred to DE BLAINVILLE, who had described it from the Mediterranean Sea. According to PACE (1902, p. 125) these two species might be different. WARMKE & ABBOTT (1961, p. 111) mentioned *Anachis pulchella* Sowerby. However, in describing *Columbella pulchella*, SOWERBY (1844, p. 131) meant the species called *Buccinum pulchellum* by KIENER.
39. *Columbella subcostata* (error for *subcostulata*) C. B. Adams is a synonym of *Anachis pulchella* (Kiener), No. 38. However KREBS (1866, p. 395) stated that *C. subcostata* (sic) and *C. catenata* Sowb. are positively the same species. For this reason we consider No. 39 to be *Anachis catenata* (Sowerby), the same species as No. 31.
- 45a. *Ancilla glabrata* (Lamarck) is found only in the southern Caribbean Sea; KREBS mentioned the species from Curaçao and Jamaica, COOMANS (1958, p. 94) from Paraguaná in Venezuela, Aruba and Curaçao.
47. Under *Mitra pulchella* Reeve, KREBS (1864, p. 37) remarked: "is it not synonymous with *M. derme[stina]*. Lmk.?" — He was right: both *Mitra albicosta* C. B. Adams and *M. pulchella* Reeve are synonyms of *Pusia dermestina* (Lamarck).
48. *Mitra semicostata* ANTON (1839, p. 68) had no type locality. TRYON (1882, 4, p. 195) called it a "doubtful species." Mrs. J. CATE, specialist in Mitridae, informed us that this species is certainly not West Indian. *M. semicostata* was mentioned from Flores by SCHEPMAN (1911, p. 289); KURODA & HABE (1952, p. 80) recorded *Pusia semicostata* from Japan. It is impossible for us to decide which Caribbean species was collected by KREBS.
- 49a. This species, and No. 118b, were mentioned by KREBS from Curaçao. For most records from Curaçao KREBS referred to other authors.
51. St. Martin is the only locality mentioned by KREBS; in addition, the locality was provided with a question mark.
- 53a. COOMANS (1963, p. 62) proved that *Siphocypraea mus* does not live in the Netherlands Antilles; the distribution of this species is from the Gulf of Uraba, Colombia, as far as Cumarebo, east of the peninsula of Paraguaná, Venezuela. (see Fig. 118)
- 60a. *Persicula maculosa* (Kiener) is a species from the southern Caribbean Sea, and is mentioned from Curaçao only. See also No. 60c.
- 60b. *Marginella marginata* (Born) is, like No. 60a, a southern Caribbean species.

- 60c. Most authors consider *Marginella muralis* Hinds a synonym of *M. maculosa* Kiener (No. 60a); however, TOMLIN (1917, p. 282-283) stated regarding *muralis*: "I am not at all sure that the usual identification with *maculosa*, Kien., is correct, and am inclined to think that they are quite distinct species."
61. This species is to be considered together with No. 63. According to some authors, *Voluta pallida* Linné 1767 is unidentifiable (TOMLIN, 1917, p. 287). We suggest that No. 61 is *Hyalina avenacea*, the species listed by KREBS as a synonym. Some other authors (DODGE, 1955, p. 87-88; WENZ, 1943, p. 1376) stated that *Marginella pallida* (Linné) is sufficiently characterized; they considered *M. pellucida* Schumacher to be synonymous. This latter species was named *Marginella tenuilabra* by TOMLIN (1917, p. 287). We consider No. 63 to be this species. Our opinion is supported by the fact that *pellucida* was placed by KREBS in another genus. According to modern systematics, *Hyalina pallida* (= *pellucida* = *tenuilabra*) is placed in the subgenus *Hyalina* s. str. (syn. *Neovolvaria*), while most other Caribbean *Hyalina* species, including *H. avenacea*, belong to the subgenus *Volvarina*.
- 62a. The type locality of *Marginella xanhostoma* MÖRCH (1852, p. 120) was "Curaçoa". TOMLIN (1917, p. 306) remarked concerning this species: "*xanhostoma*, Mörch (Marginella), 1852. Catal. Conch. Yoldi, 1, 120. Loc.- Curaçoa. Evidently a typographical error for *xanthostoma*. I agree with Jousseume in referring this to *sapotilla*, Hds., and in doubting the correctness of the locality." — *Prunum sapotilla* Hinds lives on the Pacific side of America, from Panama to Peru (KEEN, 1958, p. 434). It is a twin species with *Prunum prunum* (Gmelin) from the Atlantic; for this reason we consider *xanhostoma* Mörch to be synonymous with *Prunum prunum*, which is also known from Curaçao, see No. 61a.
63. See under No. 61.
66. No. 71 is the same species.
68. KREBS (1866, p. 394) stated: "*Cerithium ambiguum* C. B. Ad., is syn. with *C. costata* Da Costa, and *C. Petitii* Kien." — The species is now placed in the genus *Cerithidea*.
69. According to KREBS (1866, p. 395), *Cerithium vicinum* C. B. Adams is a synonym of *C. rugulosum* C. B. Adams.
70. KREBS remarked: "a variety of *C. litteratum* Brug." — *Cerithium semiferrugineum* Lamarck is considered now to be a colour form of *C. litteratum* (Born), No. 67 (WARMKE & ABBOTT, 1961, p. 72).
71. The same species as No. 66.
74. KREBS remarked: "we agree with C. B. Adams, who has described this species in Contribution No. 7 page 116, that it is not a *Rissoa* and we take it to be the shell described by d'Orbigny as *Eulima incerta*, but he himself doubts it is an *Eulima*; we doubt it to be either a *Rissoa* or an *Eulima*; we have specimens with two and three strongly developed varices on each whorl and in some few specimens are the varices forming two or three continuous rows from the, in most cases, black nucleus until the last whorl." — In his publication of 1866 (p. 397) KREBS made an additional remark: "*Rissoa tervaricosa* C. B. Ad., is syn. with *R. melanura* C. B. Ad., and *Eulima incerta* d'Orb."
75. KREBS remarked concerning this species: "This *R. Cat.* d'Orb. is certainly the same as the shell A. H. Riise Esq. has in his collection by the name of *Rissoa Dunkeri* Pf. and we consider it the same shell as C. B. Adams *Rissoa scalaroides*, *R. scalaroides minor* and *R. scalarella*. The number of ribs and their proportion

- are very variable; we have a large number of specimens before us and we have come to the conclusion that they are one species." — Two years later KREBS (1866, p. 397) stated: "*Rissoa minor* C. B. Ad., *R. multcostata* C. B. Ad., *R. scalarella* C. B. Ad., and *R. scalaroides* C. B. Ad., are syn. with *R. Catesbya* d'Orb." — D'ORBIGNY's name *catesbyana* is misspelled by KREBS in these two papers. In a later publication KREBS (1873, p. 55) mentioned *R. catesbyana* Orb. as a synonym of *R. bryenea* Montague (sic). For the synonymy we used DESJARDIN 1949 (p. 198).
85. KREBS remarked: "Take d'Orbigny's drawing of *S. Hot.* and Lamarck's description of *Scalaria crenata* Linné [No. 84]; they approach surely each other very much."
 87. KREBS placed a question mark against *Scalaria Martini*, to show that he was doubtful whether he had collected this species. REEVE (1873-1874, 19, pl. 3, spec. 20) mentioned *Scalaria Martinii* from the West Indies. TRYON (1887, 9, p. 78) placed the species in the subgenus *Amaea*, with localities Mauritius and the Philippines, and remarked: "Reeve's locality, West Indies, is erroneous." — According to MÖRCH (1876, p. 190), *Scala martinii* Wood = *S. minuta* Bolten. This synonymy is no help at all, for it is impossible to define which Caribbean species had been collected by KREBS.
 105. *Trochus livido-maculatus* C. B. Adams, mentioned by KREBS as a synonym of *Tr. fasciatus*, is a distinct species.
 106. KREBS mentioned *Trochus interrupta striatus* C. B. Ad., a synonym. This must be an error for *T. maculo-striatus*, since C. B. ADAMS did not describe a species with the name *interrupta striatus*, see CLENCH & TURNER, 1950.
 111. REEVE is not the author of this species. *Fissurella elongata* in REEVE (1850, 6, pl. 15, spec. 110) is *F. elongata* Philippi, now *Lucapina philippiana* (Finlay). This is not *Fissurella elongata* C. B. Adams, see No. 112.
 112. KREBS remarked: "We have in a note by C. B. Adams seen that he considered *F. gemmulata* Reeve synonymous with *F. elongata* Ad." — Compare with No. 111.
 113. KREBS omitted the author, Linné, of *Fissurella graeca*. This is a European species; from the synonymy we know which Caribbean species was collected by KREBS.
 115. *Patella pustula* Gmelin 1789, non Linné 1758. The latter is a species from the eastern Atlantic, probably a synonym of *Diodora graeca* (Linné). The first valid name for Gmelin's species is *Fissurella punctata* Fischer.
 118. For this species KREBS referred to MÖRCH (1852, p. 135), where the species was called "*Haminea Guildingii* Sw"[ainson], which is a synonym of *Haminea elegans* (Gray). KREBS, however, placed the species in the genus *Atys*, and mentioned another author, Sow[erby], instead of Sw[ainson]. — It is remarkable that five years later SOWERBY described (in REEVE, 1869, 17, pl. 5, spec. 26) a species with the name *Atys Guildinii*, a name that had been used before, by mistake, by KREBS. SOWERBY also made an error, in omitting the letter g.
 - 118b See No. 49a.
 119. *Divaricella dentata* (Wood) is sometimes (WARMKE & ABBOTT, 1961, p. 179) considered to be only a form of *D. quadrisulcata* (d'Orbigny). For the locality of St. Martin KREBS referred to D'ORBIGNY (1853, 2, p. 296).
 120. KREBS remarked: "it is inequilateral and approaching *P. spadiceus*, but mostly white with a few brown specks: diameter from 4 to 6 lines." — He had only one valve from St. Martin.

In the annotations to the species of Table 1, a later publication of KREBS (1866) is often referred to. This can be considered a supplement to the species list of 1864.

The references that KREBS used for the localities in the Netherlands Antilles are: MÖRCH (1852), D'ORBIGNY (1853), BEAU (1858), and SWIFT (1863). The locality references of DE CANDÉ were also mentioned by D'ORBIGNY (1853), and they had been copied by KREBS. The localities of RIISE were probably taken from his shell collection, since we do not know any publication by A. H. RIISE. He was the first apothecary in St. Thomas, and KREBS was his assistant for some time (CLENCH et al., 1947-1948, p. 47). KREBS became interested in shells under the influence of RIISE.

The two Curaçao references of C. B. ADAMS in KREBS' list are hard to find in the many publications of ADAMS. It is possible that these have never been published, since we know that ADAMS sold shells to KREBS (CLENCH & TURNER, 1950, p. 236).

KREBS mentioned 2 species from Saba and 16 from Curaçao, but some of these are synonyms (No. 60a = 60c, 61a = 62a). A total of 121 species was mentioned from St. Martin, three of which are synonyms (No. 31 = 39, 35 = 37, 66 = 71); hence, 118 species from St. Martin remain. One species (No. 17a) was mentioned by mistake from St. Martin. In the case of four names (Nos. 19, 48, 87, and 120) it is impossible to decide which Caribbean species they stand for.

From Table 1 it is seen that KREBS' own localities are nearly exclusively from St. Martin; one species (No. 107) was copied by KREBS from BEAU, another (No. 119) from d'ORBIGNY. For both species from Saba and the 16 species from Curaçao, KREBS referred to other authors, except as regards Nos. 49a and 118b.

KREBS did not make a distinction between the French (Saint-Martin) and the Dutch (Sint Maarten) part of the island. It is remarkable that he mentioned many gastropods from St. Martin, and only three pelecypods (Nos. 119, 120 and 121), one of which is unidentifiable. It is possible that KREBS had not yet identified the pelecypods from St. Martin, for those from the other Caribbean islands are treated extensively in his publication. He included the Amphineura and Scaphopoda, but none were mentioned from the

Netherlands Antilles. The Cephalopoda were not treated in KREBS' list.

After 1864 KREBS probably collected again on St. Martin, for eleven years later MÖRCH published a species list of the West Indian marine Gastropoda. A number of species was mentioned from the Netherlands Antilles, mostly from St. Martin, for which MÖRCH referred to KREBS. Twenty-five of these species were new for St. Martin.

Table 2 shows the species from the Netherlands Antilles in MÖRCH's publication (1875–1877). The numbering of the species from St. Martin corresponds with the numbers of Table 1. Only the species new for St. Martin are numbered; for the species already mentioned by KREBS (1864), reference should be made to the column of modern scientific names in Table 1.

TABLE 2

MARINE GASTROPODS OF THE NETHERLANDS ANTILLES
MENTIONED BY MÖRCH (1875-1877), WITH THE
MODERN SCIENTIFIC NAMES

The shells from St. Martin, not mentioned in KREBS (1864), are provided with a number, without a letter. The numbering corresponds with Table 1.

* See annotations concerning this species at the end of the table.

! Localities already mentioned in table 1.

Abbreviations of the references:

C = F. DE CANDÉ

K = H. J. KREBS

O = A. D'ORBIGNY

R = A. H. RIJSE

Ra = H. RAVEN

S = R. SWIFT

Number	Page in Mörch	Name (and synonyms) according to Mörch	Modern scientific name	St. Martin				
				in Mörch	in COOMANS (1958)	collected in 1959 by COOMANS et al.	Saba in Mörch	Curaçao in Mörch
122	142	<i>Scala Krebsii</i> Mörch	<i>Epitonium krebsi</i> (Möorch)	K	x			
123	143	<i>Scala pretiosula</i> Mörch	<i>Epitonium foliaceicostatum</i> (d'Orbigny)	K				
124	148	<i>Scala unifasciata</i> Sowb.	<i>Epitonium unifasciatum</i> (Sowerby)	K	x	x		
125*	149	<i>Scala eburnea</i> Pot. & Mich.	<i>Epitonium albidum</i> (d'Orbigny)	K				
126	150	<i>Scala turricula</i> Sowb.	<i>Epitonium candeanum</i> (d'Orbigny)	K				
127	151	<i>Scala turritellula</i> Mörch	<i>Epitonium turritellulum</i> (Möorch)	K				
128*	152	<i>Scala filaris</i> Mörch	?	K				
	152	<i>Scala crenulata</i> Kiener	Table 1, n°. 84	K				
128a*	153	<i>Scala Hottesseriana</i> d'Orb.	Table 1, n°. 85	S				
	155	<i>Architectonica (Philippia) Krebsii</i> Mörch	<i>Philippia krebsi</i> (Möorch)					R
129*	156	<i>Torinia</i> sp. n. an juv. sequentis sp.	? <i>Helicacys cylindricus</i> (Gmelin)	K				
130	159	<i>Obeliscus (Triptychus) niveus</i> n.sp.	<i>Triptychus niveus</i> (Möorch)	K				

Number	Page in MÖRCH	Name (and synonyms) according to MÖRCH	Modern scientific name	St. Martin			Saba in MÖRCH	Curaçao in MÖRCH
				in MÖRCH	in COOMANS (1958)	collected in 1959 by COOMANS et al.		
131	171	<i>Tornatina bullata</i> Kien.	<i>Retusa bullata</i> (Kienner)	K				
132	171	<i>Tornatina recta</i> d'Orb.	<i>Acteocina recta</i> (d'Orbigny)	K				
133	172	<i>Cylichna Krebsii</i> n.sp.	<i>Cylichna krebsei</i> Mörch	K				
134	172	<i>Atys caribaea</i> d'Orb.	<i>Atys caribaea</i> (d'Orbigny)	K				
135	173	<i>Atys Riiseana</i> Dkr. mss.	<i>Atys riiseana</i> Mörch	K		×		
135a*	173	<i>Bullea ibyx</i> Meusch. (<i>B. striata</i> Brug. d'Orb.)	<i>Bulla striata</i> (Bruguière)					Ra
	174	<i>Bullina undata</i> Brug.	Table 1, n°. 116	K				
	174	<i>Haminea Guildingii</i> Sws.	<i>Haminoea elegans</i> (Gray)					Ra
136	174	<i>Haminea Petiti</i> d'Orb.	<i>Haminoea petiti</i> (d'Orbigny)	K				
	90	<i>Cerithidea costata</i> Da Costa	Table 1, n°. 68	R	!	!		
	94	<i>Pyrasus (Lampanella) nigrescens</i> Mke	Table 1, n°. 67a					K
	99	<i>Bittium (Platygyra) terbellum</i> C. B. Ad.	Table 1, n°. 71	K			S	
136a*	116	<i>Cerithium versicolor</i> C. B. Ad.	<i>Cerithium variable</i> C. B. Adams					S R
	124	<i>Planaxis lineata</i> Da Costa	Table 1, n°. 73	K		!		
	125	<i>Planaxis semisulcata</i> Sow.	Table 1, n°. 72	K		!		
	127	<i>Torcula exoleta</i> L.	Table 1, n°. 64	K		!		
	141	<i>Littorina minima</i> Gray	Table 1, n°. 79	K	!	!		
	19	<i>Strombus raninus</i> Gm.	Table 1, n°. 1	K		!		
	25	<i>Triton testaceum</i> Mörch	Table 1, n°. 26	K				
	25	<i>Triton lanceolatum</i> Menke	Table 1, n°. 24	K				
	28	<i>Triton Martinianum</i> d'Orb	Table 1, n°. 25	K	!	!		
	31	<i>Triton femorale</i> L.	Table 1, n°. 22	K	!	!		
	32	<i>Triton cynocephalum</i> Lam.	Table 1, n°. 21	K		!		

Number	Page in Mörch	Name (and synonyms) according to Mörch	Modern scientific name	St. Martin			Saba in Mörch	Curaçao in Mörch
				in Mörch	in COOMANS (1958)	collected in 1959 by COOMANS et al.		
136b*	33	<i>Triton (Linatella)</i> <i>Poulsenii</i> n.sp.	<i>Cymatium poulsenii</i> (Mörch)					K
	34	<i>Triton (Cabestana?) la-</i> <i>biosum</i> Wood	Table 1, n°. 23	K				
	38	<i>Cassis tuberosa</i> L.	Table 1, n°. 43	K	!	!		
	40	<i>Morum oniscus</i> L.	Table 1, n°. 44	K	!	!		
	42	<i>Dolium perdx</i> L. <i>occi-</i> <i>dentalis</i>	Table 1, n°. 45	K		!		
	45	<i>Cypraea exanthema</i> L.	Table 1, n°. 53	K	!	!		
136c*	45	<i>Cypraea mus</i> L.	Table 1, n°. 53a					S
136d*	46	<i>Cypraea cinerea</i> Gm.	Table 1, n°. 57	K	!	!		
	48	<i>Cypraea spurca</i> L.	Table 1, n°. 56	K		!		
	48	<i>Trivia pediculus</i> L.	Table 1, n°. 54	K		!		
	49	<i>Trivia suffusa</i> Gray	Table 1, n°. 58	K		!		
	49	<i>Trivia quadripunctata</i> Gray	Table 1, n°. 55	K		!		
137	50	<i>Trivia globosa</i> Gray	<i>Trivia leucosphaera</i> Schilder	K				
138	51	<i>Erato Maugeriae</i> Gray	<i>Erato maugeriae</i> Gray	K				K
	54	<i>Ovula acicularis</i> Lam.	Table 1, n°. 59	K				
138a*	55	<i>Stomatia depressa</i> Phil.	<i>Sinum perspectivum</i> (Say)	O				
	56	<i>Stomatia zonata</i> d'Orb	Table 1, n°. 92	K				
139	57	<i>Natica (Naticina) semi-</i> <i>sulcata</i> Gray	<i>Sigatica semisulcata</i> Gray	K	×			
	62	<i>Natica (Nacca) canre-</i> <i>na</i> L. Ch.	Table 1, n°. 90	K	!	!		
140*	65	<i>Natica (Cochlis) pro-</i> <i>xima</i> C. B. Ad.	<i>Natica proxima</i> C. B. Adams	K				R
141	93	<i>Sigaretus Rangii</i> Bergh	<i>Lamellaria rangi</i> (Bergh)	K				
141a*	94	<i>Vanikoro lamellosa</i> d'Orb.	<i>Vanikoro lamellosa</i> (d'Orbigny)	C				
	97	<i>Hipponyx militaris</i> L.	Table 1, n°. 95	K		!		
142	98	<i>Hipponyx antiquatus</i> L. var. <i>minor</i>	<i>Hipponyx antiquatus</i> (Linné)	K	×	×		
143*	99	<i>Hipponyx effodiens</i> Carp.	<i>Hipponyx effodiens</i> Carpenter	K				

Number	Page in MÖRCH	Name (and synonyms) according to MÖRCH	Modern scientific name	St. Martin				
				in MÖRCH	in COOMANS (1958)	collected in 1959 by COOMANS et al.	Saba in MÖRCH	Curaçao in MÖRCH
144	101	<i>Crucibulum auriculatum</i> Chem.	Table 1, n°. 93	K				
	102	<i>Crypta aculeata</i> Gm.	<i>Crepidula aculeata</i> (Gmelin)	K				
145*	105	<i>Crypta navicula</i> Dkr. mss.	<i>Crepidula convexa</i> Say	K				
146	106	<i>Galerus Candeanus</i> d'Orb.	Table 1, n°. 94	K				
	111	<i>Vermicularia spirata</i> Phil.	<i>Vermicularia spirata</i> (Philippi)	K		×		S

ANNOTATIONS to the species marked * in TABLE 2:

125. CLENCH & TURNER (1951, p. 288) stated regarding *Epitonium eburneum*: "It is impossible to tell just what this species may be, as the poor figures could represent any of several forms." — Since MÖRCH (1874, p. 261) mentioned *Scalaria albida*, a synonym of *Scala eburnea*, we consider this species from St. Martin to be *Epitonium albidum* (d'Orbigny).
128. CLENCH & TURNER (1952, p. 356) reported concerning *Epitonium filare* (Mörch): "We are unable to recognize this species among the collections that we have studied from the Western Atlantic." — St. Martin is the only locality for the species.
- 128a. MÖRCH referred to SWIFT for the locality of St. Martin; however, this species was also recorded from St. Martin by KREBS, see Table 1, No. 85. Both KREBS and MÖRCH misspelled the name: *Hottesseriana*, instead of *hotessieriana*.
129. MÖRCH considered this a new species, and also a juvenile of the next species on his list! The next species is *Torinia cylindracea* Chem., which is now called *Heliacus cylindricus* (Gmelin).
- 135a. MÖRCH gave the name RAVN as reference. This is HENRY RAVEN, after whom were named several endemic land gastropods which he had collected on Curaçao: *Brachypodella raveni* (Crosse) and *Cistulops raveni* (Crosse). See CROSSE & BLAND, 1873, p. 41.
- 136a. KREBS (1866, p. 394–395) remarked: "*Cerithium variabile* C. B. Ad. We take this to be syn. with *C. minimum* Gmel. and *C. zonale* Brüg., perhaps also with *C. septemstriatum* Say, *C. ferrugineum* Say, *C. megasoma* C. B. Ad., and *C. nigrescens* Menke."

- 136b. This species was described new by MÖRCH. The type localities were Curaçao and Portocabello, for which localities the author referred to KREBS.
- 136c. Also recorded from Bonaire, with reference to DIETZ; see No. 53a.
- 136d. MÖRCH also mentioned this species from Bonaire, with reference to RIISE.
- 138a. For the localities St. Martin and Cuba, MÖRCH referred to D'ORBIGNY (1853, 2, p. 37–38, cited as *Sigaretus haliotideus*). However, D'ORBIGNY mentioned St. Lucia and Cuba, so we do not consider this to be a species from St. Martin.
140. KREBS (1864, p. 67) remarked concerning *Natica proxima*: "By us considered young *Nat. canrena* L."
- 141a. MÖRCH mentioned *Vanikoro lamellosa* d'Orb. from St. Martin and Guadeloupe; for these localities he referred to DE CANDÉ. St. Martin must be a mistake, because D'ORBIGNY (1853, 2, p. 42) remarked under *Narica lamellosa*: "Martinique et de la Guadeloupe rapportés par M. de Candé." KREBS (1864, p. 68) also cited Martinique, not St. Martin, and referred to DE CANDÉ.
143. *Hipponyx effodiens* CARPENTER (1856, p. 5) was described originally from the Antilles. It was not figured by CARPENTER, and we have never seen this species. DALL (1889, p. 290) mentioned *H. effodiens*, and stated that it seems to be confined to the Lesser Antilles. — We did not collect any *Hipponyx* that fits the description of *H. effodiens*, but we collected in St. Martin some specimens of *Hipponyx grayanus* Menke, a species from the eastern Pacific. This eastern Pacific and Caribbean distribution is not surprising, as two more Caribbean *Hipponyx* species, *H. antiquatus* (Linné) and *H. subrufus* (Lamarck), are both to be found in the eastern Pacific and in the Caribbean Sea.
145. TRYON (1886, 8, p. 125) remarked about this species: "*C. navicula* (Dunker), Mörch; a West Indian form, insufficiently described, and unfigured, is probably a synonym" [of *C. convexa* Say].

A number of Epitoniidae (Nos. 122–128) and Opisthobranchia (Nos. 130–136), which had been found by MÖRCH in KREBS' material, were new for St. Martin. Seven of these (Nos. 122, 123, 127, 128, 130, 133, and 135) were described by MÖRCH as new species.

Since MÖRCH only treated the Gastropoda, knowledge of the Pelecypoda of St. Martin remained nil. The total number of marine mollusk species known by KREBS to occur in St. Martin, was 146 (Tables 1 and 2), 143 of which were Gastropoda. We have already mentioned that three names were synonyms, and hence 140 species of marine Gastropoda were collected by KREBS.

COOMANS (1958, p. 46–49) listed 82 species of marine Gastropoda, collected mainly by P. WAGENAAR HUMMELINCK on the Dutch side of the island; 45 of these are indicated in Tables 1 and 2. Therefore 37 species were collected by HUMMELINCK et al. in Dutch St. Martin which were not known to occur on the island by KREBS. However, KREBS collected 95 species of gastropods that have not been found by HUMMELINCK.

During June 1959 we were able to collect on both the French and Dutch sides of St. Martin. Our results, completed with some data furnished to us by several collectors, are given in another column of Tables 1 and 2. Altogether 66 of KREBS' Gastropoda species were collected by us on St. Martin; 88 of our species were not mentioned by either KREBS or MÖRCH. Of these 88 species, 57 had not been collected by HUMMELINCK et al. Our total results were:

marine Gastropoda	154 species
marine Pelecypoda	90 species
Amphineura	2 species
Scaphopoda	—
Cephalopoda	2 species
<hr/>	
marine Mollusca	248 species

Without any doubt the largest collection of shells from St. Martin was collected by H. E. VAN RIJGERSMA. He was a Dutch physician, born in the Netherlands in 1835, who came to St. Martin in 1863 (one year before KREBS' list was published). He lived on St. Martin until his death in 1877, except for the period 1873–1874. Two articles concerning VAN RIJGERSMA were published by HOLT-HUIS (1959, 1961), in which he showed that VAN RIJGERSMA was especially interested in mollusks. VAN RIJGERSMA also collected animals other than mollusks, and traded them for shells with the Academy of Natural Sciences in Philadelphia and the Rijksmuseum van Natuurlijke Historie in Leiden. After his death in 1877, his wife remained on St. Martin until 1893. It is not known what became of VAN RIJGERSMA's shell collection.

That VAN RIJGERSMA was indeed a good collector may be shown by reference to VERNHOUT (1914). VERNHOUT mentioned the land and fresh-water mollusks of the Netherlands Antilles, altogether 73 species. The numbers for each island were: Aruba 2, Curaçao 21, Bonaire 6, St. Martin 48, Saba 4, St. Eustatius 5. The large species list for St. Martin was completely copied from MAZÉ (1890, p. 22–34), who also mentioned the collector of these species: VAN RIJGERSMA (misspelled as "Van Rijersma", "Van Rigersma", or "Van Rijesma"). However, of these 48 "land and fresh-water" mollusk

species, there were twelve brackish-water and marine gastropods. Seven of these were never collected on St. Martin by KREBS, HUMMELINCK or COOMANS.

The total number of marine Gastropoda species known from St. Martin in the nineteenth and twentieth centuries is:

140 species, collected by KREBS, mentioned in KREBS (1864) and MÖRCH (1875–1877);

37 species, collected by HUMMELINCK et al., mentioned in COOMANS (1958), not collected by KREBS;

57 species, collected by COOMANS et al., in 1959, collected by neither KREBS nor HUMMELINCK;

7 species, collected by VAN RIJGERSMA, mentioned in MAZÉ (1890), copied by VERNHOUT (1914) and SCHEPMAN (1915), not collected by KREBS, HUMMELINCK or COOMANS;

11 species, not recorded by any of the above mentioned authors, were lately found by us in several publications.

252 species.

The results of the collecting trip made by us to St. Martin in June 1959 will be published later. Until then KREBS' hundred-year-old publication will remain the most extensive list of marine gastropods from St. Martin.

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