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MUSEO POEY, UNIVERSIDAD DE LA HABANA, CUBA

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DE LA

SOCIEDAD CUBANA DE HISTORIA NATURAL

"FELIPE POEY"

PARA EL AÑO 1937

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MEMORIAS

DE LA

SOCIEDAD CUBANA DE HISTORIA NATURAL

"FELIPE POEY"

NOTES AND DESCRIPTIONS OF SOME NEW LAND AND FRESHWATER MOLLUSKS FROM HISPANIOLA

BY W. J. CLENCH* AND C. G. AGUAYO**

The following records and descriptions are based upon material collected during the past several years by G. M. Allen, T. Barbour, J. Bequaert, R. M. Bond, P. J. Darlington, W. J. Eyerdam and W. M. Mann. As our knowledge is still very imperfect regarding the distribution of the land and freshwater elements of Hispaniola, it seems advisable to include as many new locality records as possible for the species of this island.

Many large areas in Hispaniola still remain unexplored as far as the molluscan fauna is concerned. This is particularly true for the mountainous area in the central part of the island. The regions both north and south of Samana Bay and the mainland opposite Beata Island are almost wholly unknown. In addition to these larger areas, there are many smaller places that await the investigator, from which no material has been obtained.

The most important paper dealing with the mollusks is that of H. Crosse (1891, Jour. de Conch., vol. 39, pp. 6 - 211, pl. 1 - 3) which includes all of the species described from the island up to that time. Since 1891, additional papers have added many more species to this list, particularly from the western portion of the island. The Republic of Santo Domingo has had but little published about its land mollusks other than parts in the southwestern portion of the country in and about Barahona and the island of Beata.

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Dr. P. J. Darlington, who has contributed many of the records in this report, has published descriptions of several of the faunistic areas of Haití: (1935, Psyche, vol. 42, pp. 171-173).

All the following records are from the Republic of Haiti unless otherwise stated.

Helicinidae

EUTROCHATELLA (EUTROCHATELLA) EUGENIANA (Weinland)

Binzonton, Lesbaines, Port au Prince (Allen).

EUTROCHATELLA (EXCAVATA) GLOBOSA (Sowerby)

Helicina globosa Sowerby 1839, [in] The Zoology of Captain Beechey's Voyage. London, p. 145, pl. 38, fig. 22.(1)

Eutrochatella sphaerula Bartsch 1932, Proc. United States Nat. Mus., vol. 81, Art. 6, p. 4, pl. 2, fig. 10-12.

A large series of this species was obtained by T. Barbour in April 1934. They cannot be differentiated from the figure of Sowerby and our specimens agree very well with this published description. The only discrepancy is that in our material the umbilical area is definitely closed over whereas Sowerby states the "columellar callus only barely covering the umbilicus".

E. sphaerula Bartsch, named from specimens obtained on Beata Island, is in our opinion the species described by Sowerby. The differences noted by Bartsch between *globosa* and *sphaerula* certainly do not exist in our material from the same locality.

ALCADIA (EUALCADIA) SUCCINEA (Pfeiffer)

Milot; Diquini; Port au Prince (Mann).

ALCADIA (ANALCADIA) DOMINICENSIS (Pfeiffer)

Petionville (Mann); Bizonton, Lesbaines, Port au Prince (Allen).

LUCIDELLA (POENIELLA) PAIVANA (Pfeiffer)

Bizonton, Lesbaines and Fort Mecridi, Port au Prince; Lake Enriquillo; (Allen); Duquini; Petionville (Mann).

(1) Both J. E. Gray and G. B. Sowerby contributed the portion of the studies on the Mollusks. Many species, usually credited to Gray, are really Sowerby's, c. f. notes on the top of p. 143 and introductory notes by Beechey on pages VII and VIII.

LUCIDELLA (POENIELLA) GONAVENSIS Pilsbry

Lucidella (Poeniella) gonavensis Pilsbry 1928, Proc. Acad. Nat. Sci Phila., vol. 80, p. 481, pl. 27, fig. 8-9 (Gonave Island).

Milot, near Cap Haitien (Allen).

LUCIDELLA (POENIELLA) MANNI Clench and Aguayo

(PLATE 7, FIGURE 3)

Lucidella manni Clench and Aguayo 1932, Proc. New England Zool. Club., vol. 13, p. 35 (Furcy, Haití).

Lucidella (Poeniella) lasellensis n. sp.

(PLATE 7, FIGURE 6)

Description.—Shell depressed, imperforate and shining. Whorls four and three quarters. Spire depressed. Aperture subovate. Outer lip narrow and slightly reflexed. Parietal area thinly glazed. Umbilical depression minutely granulose. Columella toothless and somewhat concave. Sculpture of numerous, flattened sigmoid riblets, about twice as wide as the space between them. Nuclear whorl minutely and irregularly pitted.

Diameter	Height	Aperture	
5.8	3.5	2 × 1.8 mm.	Holotype

Holotype.—Mus. Comp. Zoöl. no. 110626, La Visite, La Selle Range, Haiti. P. J. Darlington collector, 1934.

Remarks.—Apparently, this species is most closely allied to *Lucidella manni* Clench and Aguayo, differing by being larger, proportionately more depressed and having the sculpture more coarsely developed. There is no trace of spiral sculpture.

HELICINA FESTIVA MALLEATA Pfr.

Mt. La Hotte (Darlington).

Cyclophoridae

CROCIDOPOMA CASUALENSE Crosse

Bizonton, Lesbaines, Port au Prince (Allen); La Visite, La Selle Range (Darlington).

Pomatiasidae

Chondropoma Pfeiffer 1847, Zeitschrift für Malakozoologie, vol. 4, p. 109.

No type was selected by Pfeiffer, but Petit, 1850 (Jour. de Conch. 1, p. 39) selected *C. sagra* d'Orb. (=*C. pictum* Pfr.) from Cuba as the type of the genus. Dall 1905 (Proc. Malak. Soc. London, *6*, p. 209) overlooked this selection and gave *C. semilabre* Lam. from Haití as the type. Both species are apparently congeneric but are members of separate groups, the establishment of these groups being based upon sculptural differences.

CHONDROPOMA (CHONDROPOMIUM) SUPERBUM Hend. and Simp.

Manneville (Mann); Poste Terre Rouge (Darlington).

CHONDROPOMA (CHONDROPOMIUM) LINDENIANUM Weinl.

Petionville; Diquini (Mann); Kenskoff (Darlington).

Chondropoma (Chondropomorus) hispaniolae n. sp.

(PLATE 7, FIGURE 1, 2)

Description. — Shell perforate, elongate-conic, rather shining. Whorls rather convex, 4½ to 5½ in decollated specimens, 7 in complete shells. The last whorl wholly adnate. Aperture rounded ovate, with a slight angulation at the junction of the lip with the body whorl. Color yellowish-brown with a series of interrupted spiral dark brown lines, the interrupted areas in the markings arranged as to give an axial pattern. Peristome expanded and partially duplex. Double sections of the lip occuring in the region of the columella and the area of the outer lip where it joins the body whorl. Sculpture of numerous axial, flattened riblets which are irregularly grouped into tufts. Spiral sculpture of fine but more regular ridges which form a reticulated pattern with the axial ridges. Operculum typical, corneous.

Length	Width	Aperture Length	Aperture Width	
13.3	7.2	4.3	3.2 mm.	holotype
14.	7.2	4.3	3.2	paratype
14.6	7.7	4.5	3.3	„

Holotype.—Mus. Comp. Zoöl. no. 28410, Milot, Haití, W. M. Mann collector, January, 1913. Paratypes, M. C. Z. no. 92402, from the same locality and two specimens from Furcy, Haití, collected by P. J. Darlington and M. Bates, August, 1934.

Remarks.—The holotype possesses a complete spire, the two measured paratypes are both decollated. This species is included in the group of *C. dentatum* (Say), being near to *C. litturatum, petitiana, caricae* and *subreticulatum*. It differs from all of these by possessing very low riblets which give a smooth appearance to the shell. In addition, the external peritreme is produced at the upper angle only and again at the columellar region of the aperture. These two small areas are fused with the outer edge of the peristome. It differs as well from *C. subreticulatum* in having the last whorls wholly adnate.

It is to be compared best with *Chondropoma soror* (Pilsbry (Proc. Acad. Nat. Sci. Phila. 1933, vol. 85, p. 124, pl. 6, fig. 15[1]). From this species it differs in being smaller (13.3 mm. with a full complement of whorls, *C. soror* measuring 14.5 with at least two whorls missing); having pronounced subsutural dentation and a strongly reflexed lip, limiting the duplex condition to the upper angle of the aperture and again at the columellar margin.

Chondropoma (Chondropomorus) manni n. sp.

(PLATE 7, FIGURE 3)

Description.—Shell perforate, elongate-conic, slightly shining. Color light brownish straw, faintly patterned with reddish-brown, axial, zig-zag lines. Certain small areas, subsuturally placed, are whitish, with small bars of white below the zig-zag lines. Whorls convex, 6 in number when decollated, probably 7 in complete specimens. Last whorl very slightly free only along the margin. Aperture rounded-ovate, non duplex, reflected slightly and evenly along the palatal area, more strongly along the parietal margin. Sculpture of numerous, close-set axial riblets, occasionally bifurcating. Subsutural bosses exceedingly fine and occurring only in scattered blocks. Suture well depressed and slightly indented.

Length	Width	Aperture	
14.5	8.3	4.5 × 4.1 mm.	Holotype
15.	7.5	6.3 × 4.5	Paratype
14.	6.5	4.6 × 3.6	„

Holotype.—Mus. Comp. Zoöl. no. 25415 and paratype no. 36692, Furcy, Haití, W. M. Mann collector, 1913.

(1) The figure references on page 161 for plate 6 are wrongly assigned. Figure 14 should read figure 15; figures 15-19 should read figures 14, 16-19. This species in question is not *C. soror* Pils. 1930, but *C. soror* Pils. 1933, the latter name changed to *C. gnote* Pils. (1935, Nautilus, *48*, p. 144).

Remarks.—Similar in general shape to *C. petitiana,* differing in having the ribs very much reduced and not possessing a duplex lip. From *C. hispaniolae,* herein described, it differs in its non reticulated sculpture, single lip and lack of pronounced subsutural bosses. The operculum is unknown.

Chondropoma (Chondropomorus) trachyderma Pils.

San Lorenzo, Samana Bay, Santo Domingo. (Barbour and Greenway). This is the first specific locality recorded for this species. The original series collected by Gabb were known only as coming from Santo Domingo.

Chondropoma (Chondropoma) pupiforme (Sby.)

Cyclostoma pupiforme Sowerby 1843, Thes. Conch. *1,* p. 102, pl. 24, fig. 43-44 (no locality).

Tudora pupaeformis "Sowerby" Pfeiffer 1852, Mono. Pneumopomorum Viven., vol. 1, p. 249.

This species was listed by Henderosn and Bartsch (1920, Proc. United States Nat. Mus. **57**, p. 66) as a *Parachondria* and assigned to Haití. Two lots in our possession, originally from the T. Bland collection, are from St. Martins and Anguilla. Both lots posses specimens of a brick-red color, a character indicated in the figures of Sowerby. The operculum is typically that of *Chondropoma,* and not *Parachondria.* It is questionable whether the species occurs in Hispaniola at all.

Parachondria quaternata (Lam.)

Cyclostoma quaternata Lamarch 1822, Hist. Nat. An. Sans Vert. *6,* pt. 2, p. 147 no locality).

Port au Prince; Fort Mecridi; Manneville; Diquini (Mann).

Parachondria (Parachondria) darlingtoni n. sp.

(Plate 7, figure 4)

Description.—Shell narrowly though deeply perforate, elongate-ovate, shining, solid. Color reddish-brown to dark brown. Whorls 4, (decollated) and slightly convex, last whorl very slightly free along its upper margin. Aperture ovate with a simple peristome which is white in color and very slightly expanded. Sculpture of a fine, reticulated pattern, the axial threads stronger than the spiral threads.

A few to several rather fine spiral cords are developed around the umbilicus. Sutures strongly crenulated, the beads or bosses generally disposed and alternating more or less regularly in size between large and small.

Operculum with the nucleus in the lower half, with numerous radial and vertical lamellae developed. Central lamellae more or less filled in with a calcareus deposit.

Length	Width	Aperture	
18.7	10.4	6.8 × 5.1 mm.	Holotype
17.	9.1	6. × 4.7	Paratype
17.	9.	6. × 4.8	„
14.5	8.6	5.8 × 4.8	„

All specimens decollated.

Holotype.—Mus. Comp. Zoöl. no. 108576, Poste Terre Rouge, Haiti; at ± 2,000 feet. P. J. Darlington collector, October, 1934. Paratypes from the same locality.

Remarks.—This species appears to be related to *P. quaternata* Lam. differing in its much larger size, coarser sculpture, more numerous and a more regular disposition of the sutural crenulations.

We have placed this form in *Parachondria* s. s. on the basis of the shell characters, though the opercular characters appear to be those of the subgenus *Clydonopoma.* As Pilsbry has stated, there seems to be but very few sharp lines by which most of the subgenera and sections of the Pomatiasidae can be separated within the generic elements. Specifically, certainly, most of the forms in this family are well differentiated and the problem of naming is complicated only by the large number of species described, it is the various grouping of species within a genus that is more or less confusing.

Choanopoma (Choanopoma) blandi Weinland

Bizonton, Lesbaines, Port au Prince (Allen); Momance and Diquini (Mann).

Choanopoma (Abbotella) solutum "Richard" Pfr.

Mt. Trou d'eau (Darlington).

Choanopoma (Abbotella) moreletianum Crosse

San Lorenzo, Samana Bay, Santo Domingo (Barbour and Greenway).

Potamopyrgus coronatus ariomus n. subsp.

(PLATE 7, FIGURE 10)

Description.—Differing from typical coronatus by the development of sharply shouldered whorls. There is no indication of spines on any of the specimens in a very large series before us.

The subspecies *P. coronatus unicarinatus* v. Mart. from México, usually possesses a single row of spines, when these spines are absent, the whorls are smoothly convex but not shouldered as in the present new form.

Lengt	Wdith	Whorls	
2.2	3.7	4½	Holotype
2.3	3.8	4½	Paratype

Holotype.—Mus. Comp. Zoöl. no. 108818, Lake Miragoane, 2 mi. S. of Miragoane, Haití: W. J. Eyerdam collector, 1927.

Planorbidae

HELISOMA EYERDAMI Clench and Aguayo

(PLATE 7, FIGURE 7)

Helisoma eyerdami Clench and Aguayo 1932, Proc. New England Zoological Club, vol. 13, p. 38 (Lake Miragoane, near Miragoane, Haití).

We overlooked a second index reference to the errors in Sowerby's Conch. Icon., vol. 20, pl. 3, as given in our original citation. These errors and corrections stand as follows:

Plate 3, fig. 20, *Planorbis redfieldi* C. B. A., corrected in index to *P. auritus* Sby.

Plate 3, fig. 19, *Planorbis succineus* Sowerby corrected to *P. redfieldi* C. B. Ad. This leaves *P. succineus* as an absolute synonym of *redfieldi* as both refer to the same figures (20 a-b) on plate 3. This correction in no way invalidates our species, but is given here only to add to the remarks mentioned in our original citation. Though our species is somewhat similar, it differs by being smaller, having fewer whorls, is differently colored and lacks the axial sculpture of that species as figured by Sowerby.

HELISOMA CARIBAEA (d'Orb.)

Miragoane (Eyerdam).

TROPICORBIS PALLIDA (C. B. Ad.)

Planorbis pallidus C. B. Ad. 1846, Proc. Bost. Soc. Nat. His., vol. 2, p. 102 (Jamaica).

River Hinchs (Eyerdam); Diquini, near Bizonton, Port au Prince (Mann).

TROPICORBIS HAVANENSIS (Pfr.)

Fond Parisien (R. M. Bond).

Because of the similarity of the shell of this species to that of *Tropicorbis pallida* it is considered a *Tropicorbis* rather than a *Planorbula*.

TROPICORBIS ALBICANS (Pfeiffer)

Planorbis albicans Pfr. 1839, Wiegm. Arch. fur Naturg., p. 354 (Matanzas, Cuba).

Lake Miragoane, near Miragoane (Eyerdam). This species is know as well from both Cuba and Jamaica.

The dissection of specimens of this planorbis from Marianao, Cuba, shows that it belongs to the genus *Tropicorbis*. The sac of penis is long and slender, with an elongate verge, similar to that figured by Pilsbry (1934, Proc. Acad. Nat. Sci. Phila., vol. 80, p. 53, fig. 4) for *Tropicorbis pallida*. The prostate gland is also similar to that of this species with its very long digitiform alveoli. There is no penial gland and no flagellum at the apex of penis.

DREPANOTREMA CIMEX (Moricand)

Planorbis cimex Mori. 1839, Mem. Soc. Phys. Geneve, vol. 8, p. 143, pl. 3, fig. 8-9. (Bahía, Brasil).
Planorbis macnabianus C. B. Adams 1849, Cont. to Conch. p. 43 (Jamaica).
Planorbis pocyanus Clessin 1884, Conchy.-Cab. *1*, pt. 17, p. 205, pl. 31, fig. 2 (Santo Domingo and Havana).

Lake Miragoane, near Miragoane (Eyerdam).

P. pocyanus was probably described from young specimens of *P. cimex*. Specimens of this species with 4½ whorls (the number given for *pocyanus*), are exactly the same in measurements and proportions.

P. cimex occurs in Brasil, Venezuela, Cuba, Jamaica, Puerto Rico and Hispaniola. It is quite probable that it also occurs in the Lesser Antilles.

DREPANOTREMA ANATINUM (d'Orb.)

Lake Miragoane, near Miragoane (Eyerdam).

See C. G. Aguayo (1933, Nautilus, vol. 47, pp. 65-68) for a full synonomy of this species.

DREPANOTREMA LUCIDUM Pfr.

St. Marc (Darlington).

Ancylidae

Ferrissia (Laevapex) haitiana n. sp.

Description.—Shell thin and very fragile, depressed, elongate-oval in contour with both ends broadly rounded. Apex smooth, slightly pointed and obtuse, and situated well towards the right and a short distance below the middle. Anterior and left slopes of the cone slightly convex, posterior slope nearly flat, right slope a little concave. Surface with fine growth lines crossed by much stronger radial striae that start below the apex.

Height	Greater diameter	Lesser diam.	
1.2	5.	3.5 mm.	Holotype
1.4	4.8	3.5	Paratype

Holotype.—Mus. Comp. Zoöl. no. 83889, Lake Miragoane, Miragoane, Haití. W. J. Eyerdam collector, 1927.

Remarks.—This species is very similar to *F. peninsulae* P. and J. from Florida, differing by its more excentric and acute apex, more concave right slope and more convex left slope. The radial sculpture is very much stronger in the Haitian form and ends nearer the apex than it does in the Florida species. (Comparisons were made with cotypes of *F. peninsulae,* Mus. Comp. Zoöl. 59647). From *F. complanatus* Bgt., the only other species to which it appears to be at all related, it differs in being far more oval and in the possession of the radial sculpture, a character apparently lacking in *complanatus.*

Succineidae

There is still much uncertainty regarding the names to employ for the several species of the *Succinea* in the West Indies. A complete revision is necessary of the entire group. Most of the species are of fairly wide distribution, only a few appear to be peculiar to single islands or island groups.

SUCCINEA DOMINICENSIS Pfeiffer

Succinea dominicensis Pfr. 1851, Proc. Zool. Soc. London, p. 147.
Succinea dominicensis pellucida "Pfr." Crosse 1891, Jour. de Conchy. vol. 39, p. 153.

Crosse (loc. cit), has listed a variety *pellucida* "Pfeiffer" under this species. It was never described by Pfeiffer but only indicated and figured in the Conchy.—Cab., *1*, pt. 11, p. 43, pl. 5, fig. 38-39, as a variety without a name. The specimens possessed by us agree with the figures in the Conchy.—Cab. but the difference between these and the typical form are certainly not enough to warrant its retention as a valid variety.

These semi-pellucid specimens, which occur in colonies of more opaque forms *may* be only the younger members of the species that have reached the size of the others but have not produced sufficient lime to render their shells opaque.

Grand Riviere; Diquini (Mann); Milot, near Cap Haitien (Bequaert).

SUCCINEA OCHRACINA Pfeiffer

We believe this to be the species that Crosse identified as *luteola* Gould.

Camp Perrin (Darlington); Fort Mecridi, Port au Prince (Allen).

SUCCINIA RIISEI Pfeiffer

Momance; Diquini (Mann).

Pupillidae

PUPOIDES MARGINATUS NITIDULUS (Pfr.)

Duquini (Mann).

Subulinidae

SUBULINA OCTONA Brug.

Camp Perrin (Darlington); Ennery (Mann).

OPEAS BECKIANUM (Pfr.)

Fort Mecridi, Port au Prince (Allen).

OPEAS GRACILE (Hutton)

Fort Mecridi, Port au Prince (Allen); Diquini; Milot; Momance (Mann).

OBELISCUS DUNKERI Pfr.

Mt. Basil, Northern Haití (Darlington). Cap Haitien; Milot (Mann).

Oleacinidae

SPIRAXIS RECTUS Pfr.

Petionville (Mann).

VARICELLA IMPRESSA TEREBRIFORMIS (Pfr.)

Milot (Mann).

VARICELLA DENTICULATA (Weinl.)

Milot (Mann).

OLEACINA (LAEVOLEACINA) CLERIEI (Weinl.)

Poste Terre Rouge (Darlington).

OLEACINA MÜLLERI (Maltzan)

Cap Haitien (Mann).

OLEACINA MICROLESTES Pilsbry

Fort Mecridi, Port au Prince (Allen).

Sagdidae

HOJEDA BOOTHIANA (Pfeiffer)

Port au Prince (Allen).

SUAVITAS PUBESCENS (Pfeiffer)

Port au Prince (Allen). Diquini (Mann).

LACTEOLUNA SELENINA (Gould)

Port au Prince (Allen; Mann); Milot; Diquini (Mann).

ODONTOSAGDA SUPREMA Pilsbry

La Visite, La Selle Range (Darlington).

ODONTOSAGDA ALLENI Clench and Aguayo

(PLATE 7, FIGURE 9)

Odontosagda alleni Cl. & Ag. 1932, Proc. New England Zool. Club, vol. 13, p. 36 (Petionville).

ODONTOSAGDA POLYODON (Weinl. & v. Mts.)

La Visite, La Selle Range (Darlington).

Zonitidae

ZONITOIDES ARBOREUS (Say)

Furcy (Mann).

Bulimulidae

LIGUUS VIRGINEUS (Linneus)

One-half mile west of Lake Miragoane, Miragoane (Eyerdam and Darlington); Poste Terre Rouge; Aquin; (Darlington); Hills above Thomoseau (Allen).

There are apparently several races of this species occurring in both Haiti and Santo Domingo but much additional material will be necessary before any appreciable understanding can be had of their distribution. Two color (black and white) tips occur in *L. virgineus*, paralleling the condition found in *L. fasciatus* of Cuba and Florida, the latter species possessing either pink or white spire-tips. The *L. blainianus* group of Cuba possesses black tip forms as well as white and pink. This multiple spire coloration is, however, not peculiar to *Liguus*, but exists in *Cerion*, *Cepolis*, *Helicostyla*, *Papuina* and many other diverse groups of land snails.

Considerable variation of the banding occurs in *Liguus*, both in individuals of a single colony and in different colonies, variation in shape, however, appears to be limited to different colonies.

BULIMULUS GUADELOUPENSIS Brug.

Grand Riviere; Petionville (Mann); Camp Perrin (Darlington).

DRYMAEUS DOMINICUS (Reeve)

Grand Riviere; Milot; St. Marc (Mann).

DRYMAEUS MULTILINEATUS (Say)

Camp Perrin (Darlington).

This is apparently the first record of this species from Hispaniola.

DRYMAEUS MOUSSONI (Pfr.)

Poste Terre Rouge (R. M. Bond).

DRYMAEUS LILIACEUS (Fer.)

Miragoane (Darlington).

Camaenidae

POLYDONTES UNDULATA (Fer.)

Port au Prince; Furcy (Mann).

A dead specimen of this species was obtained by Mr. J. L. Peters at San German, Puerto Rico. This either represents a recent introduction of this form into Puerto Rico or else a specimen carried over in a dead condition with merchandise.

CARACOLUS MARGINELLA SEMIAPERTA (v. Martens)

Helix arangiana semiaperta v. Marts. 1877, Novit. Conch. vol. 5, p. 33, pl. 144, fig. 15-18 (probably Haití).
Pleurodonte marginella semiaperta, Pilsbry 1894, Man. of Conch. (2), vol. 9, p. 93.

This form has been known under the name of *Helix arangiana* Poey. It is probably generally distributed throughout the western end of the island.

Isle de Gonave (Allen).

CAROCOLUS BIZONALIS (Deshayes)

Helix bizonalis Desh. 1850, in Ferussac, Hist. Nat. des Moll., vol. 1, p. 68.
Pleurodonte bizonalis Pilsbry 1894, Man. of Conch. (2), vol. 9, p. 93.

1 mile S. of Lake Miragoane, near Miragoane (Eyerdam); Bizonton ,Les Baines, Port au Prince; above Thomozeau (Allen).

Cepolidae

CEPOLIS CEPA NICOLSINIANA (Montf.)

Cepolum nicolsinianum Montfort 1810, Conchyl. Syst., *2*, p. 141.
Cepolis cepa nicolsiniana, Pilsbry 1933, Proc. Acad. Nat. Sci. Phila., *85*, p. 135.

Roche Croix and Tardieu, Mt. La Hotte (Darlington).

Recently Pilsbry has separated this subspecies from *C. cepa* with which it was long considered a synonym. The series at hand certainly warrants such a separation.

CEPOLIS DEFINITA Fulton

5 miles W. of Cabral, Barahona Prov., Santo Domingo (R. M. Bond).

CEPOLIS TRIZONALOIDES A. D. Brown

Helix trizonaloides Brown 1861, Proc. Acad. Nat. Sci. Phila., p. 333.
Helix (Cepolis) pimesoma Pilsbry 1889, Manuel of Conch. (2) vol. 5, p. 95, pl. 24, figs. 44-47.
Cepolis pimesoma, Clench 1932, Proc. New England Zoological Club, vol. 12, p. 104.
Cepolis trizonaloides Pilsbry 1933, Proc. Acad. Nat. Sci. Phila., vol. 85, p. 134.
Cepolis trizonaloides beatensis Bartsch 1932, Proc. United States Nat. Mus., vol. 81, Art. 6, p. 7, pl. 3, figs. 1-2.

Four specimens of this species were obtained by T. Barbour at the northwestern tip of Beata Island, Santo Domingo in April, 1934. See Pilsbry (1933, p. 134) for critical notes on the synonymy of this species and its several varieties.

In a recent paper by Dr. P. Bartsch (1932, Proc. United States Nat. Mus. *81*, Art. 6, pp. 1-12, pl. 1) dealing with the mollusk fauna of Beata Island, it is stated that "The affinities of the various forms herein described are Haitian, but all are so strikngly differentiated that it is safe to believe that Beata Island has for a long time been separated from the larger island".

Though many of the mollusks obtained from Beata are new, the mollusk fauna can hardly be called "strikingly differentiated" from species occurring on Hispaniola proper. It is to be borne in mind that little or nothing is known of the adjacent coast of the larger island and it is not only possible but highly probable that many species of Beata and the mainland may be identical. The depth of water between Beata and the coast of Santo Domingo is only 18-20 feet, its disconnection from the mainland probably dates only from the Pleistocene if not at an even later date.

PLAGIOPTYCHA INDISTINCTA (Fer.)

Diquini (Mann); El Fordo, Lake Enriquillo (Allen); Fort Mecridi, Port au Prince (Allen); Manneville (Mann); Milot (Mann); Miragoane (Darlington); Momance (Mann); hills near Port au Prince (Mann; Darlington); Poste Terre Rouge (Darlington); hills above Thomozeau (Allen).

Apparently generally distributed throughout southwestern Hispaniola.

Hemitrochus cerosa n. sp.

(PLATE 7, FIGURE 5)

Description.—Shell thin, dull, globose and imperforate. Color light yellowish brown with a lighter 1½ mm. peripheral band margined above and below with reddish. Whorls 5, globose. Aperture subcircular, with a very thin, slightly expanded reddish lip. Parietal area thingly glazed. Columella short, slightly expanded. Sutures slightly indented. Entire shell covered with a fine, dull velvet-like periostracum. Sculpture of fine growth lines. No microscopic sculpture seen under a 14 power lens.

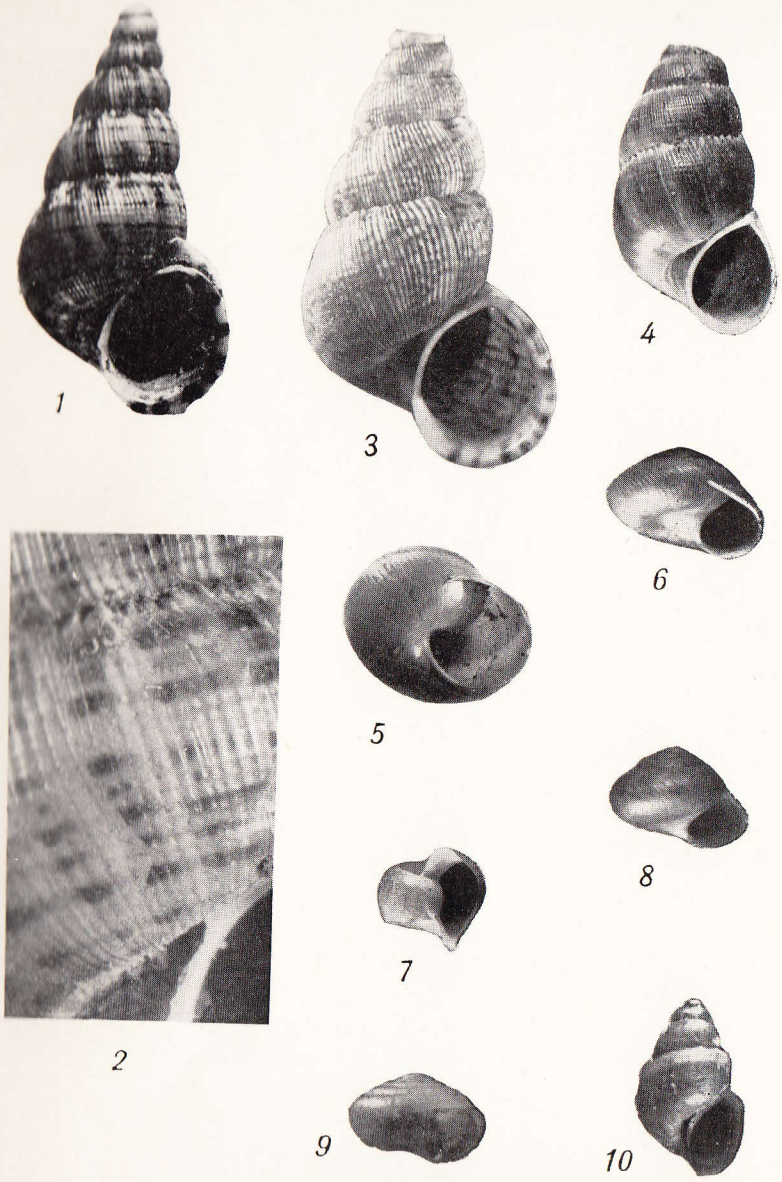
Height	Lesser diameter	Greater Diameter	Whorls	
12.5	12.6	15.3 mm.	5	Holotype
12.	13.	16.	4½	Paratype
11.8	12.6	15.2	4¾	Paratype

Holotype.—Mus. Comp. Zoöl. no. 110620, La Visite, La Selle Range, Haití. P. J. Darlington collector, 1934. Paratypes from the same locality.

Remarks.—This species is not readily compared with others known to us from Hispaniola. The peculiar velvet-like periostracum appears to be rare among the Cepolids of Hispaniola, but it is, however, a character quickly lost on dead shells and consequently may not have been mentioned in descriptions of certain of the species.

EXPLANATION OF PLATE 7

Fig. 1 — *Chondropoma hispaniolae* Cl. and Ag. Holotype 4 ×
Fig. 2 — *Chondropoma hispaniolae* Cl. and Ag. Holotype 10 ×
Fig. 3 — *Chondropoma manni* Cl. and Ag. Holotype 4 ×
Fig. 4 — *Parachondria darlingtoni* Cl. and Ag. Holotype 2 ×
Fig. 5 — *Hemitrochus cerosa* Cl. and Ag. Holotype 1½ ×
Fig. 6 — *Lucidella lasellensis* Cl. and Ag. Holotype 4 ×
Fig. 7 — *Helisoma eyerdami* Cl. and Ag. Holotype 2 ×
Fig. 8 — *Lucidella manni* Cl. and Ag. Holotype 4 ×
Fig. 9 — *Odontasagda alleni* Cl. and Ag. Holotype 6 ×
Fig. 10 — *Potamopyrgus coronatus ariomus* Cl. and Ag. Holotype 6 ×



Clench and Aguayo. — MOLLUSKS FROM HISPANIOLA