

LXII.—*On a Collection of Land and Freshwater Shells from Rotuma Island.* By EDGAR A. SMITH.

IN April 1896 the British Museum received from Mr. R. B. Leefe, H.M. Vice-Consul at the Tonga Islands, a series of land and freshwater shells which he collected during a visit to Rotuma. The collection contained one species of *Partula*, an *Opeas*, one *Helicina*, an *Omphalotropis*, and a *Melania*.

Mr. J. Stanley Gardiner has kindly placed in my hands for examination the specimens which he obtained in this island, and which he believes to be a "tolerably complete collection." In addition to the species found by Mr. Leefe, his series includes one *Rhytida*, two species of *Charopa*, a *Tornatellina*, a *Succinea*, and a second species of *Helicina*. Besides these land-shells, Mr. Gardiner also collected some Auriculidæ and Littorinidæ, some of which were obtained over a hundred feet above the sea. He paid "a good deal of attention to collecting these, searching the tops of several of the hills as well as the valleys," and he thinks "the collection, though small, is fairly representative. There is no indigenous forest left anywhere on the island."

Rotuma, or Rotumah, is situated about 300 miles N.N.W. of Fiji. As no Mollusca have hitherto been recorded from this locality, the following list may have some interest.

The land Mollusca are similar in general characters to those occurring in the nearest groups of islands; and out of the ten species six appear to be peculiar to the island. Some of these being obscure forms and difficult of determination may, however, eventually prove to be slight variations of already known species.

None of the Auriculidæ and Littorinidæ, which usually have a more extended range than terrestrial Pulmonates and Operculates, are restricted to Rotuma.

LIST OF THE SPECIES.

Family Testacellidæ.

1. *Rhytida Gardineri*.

Testa orbicularis, late umbilicata, albida, rufo flammulata, periostraco tenui olivaceo induta, lineis incrementi subrugosis curvatis obliquis striisque spiralibus paucis supra et infra sculpta; spira depressa, in medio impressa; anfractus quatuor, convexiusculi, celeriter accrescentes, sutura profunda sejuncti, ultimus supra oblique depressus, ad peripheriam obtusissime subangulatus

antice haud descendens; apertura parva, leviter obliqua, late lunata; peristoma tenue vel subincrassatum, marginibus callo tenui junctis, columellari haud reflexo.

Diam. maj. 7 millim., min. 6; alt. $2\frac{3}{4}$.

Allied to *R. rapida*, Pfeiffer.

Family Helicidæ.

2. *Charopa Perryi*.

Testa orbicularis, latissime umbilicata, alba, epidermide olivacea induta, lineis incrementi elevatis curvatis tenuibus instructa; spira depressa, supra anfr. ultimum paulo elata; anfractus quatuor, convexi, primus lævis, pellucidus, ultimus supra leviter declivis, antice subdescendens; apertura obliqua, irregulariter rotundata, intus alba; peristoma tenue, marginibus conniventibus, callo tenui albo junctis, columellari ad insertionem vix expanso.

Diam. maj. $3\frac{1}{2}$ millim., min. 3; alt. 2.

Hab. Mota Island, New Hebrides (*Brit. Mus.*); Rotuma (*Gardiner*).

Remarkable for the very wide umbilicus, the absence of colour-markings, and the white porcellanous aperture. The riblets are fine and not so regular in appearance as in many other species in this genus. Named after Mr. W. W. Perry, who collected the species at Mota Island.

3. *Charopa rotumana*.

Testa parva, orbicularis, profunde mediocriter umbilicata, pallida, radiis obliquis curvatis rufis conspicue picta, lineis incrementi liriformibus tenuibus obliquis curvatis instructa, inter liras microscopice spiraliter striata; spira depressa, supra anfr. ultimum minime elata; anfractus $4\frac{1}{2}$, lente accrescentes, convexi, sutura profunda sejuncti, apicales $1\frac{1}{2}$ haud lirati, ultimus ad peripheriam rotundatus, haud descendens; apertura oblique lunata; peristoma tenue, simplex, margine columellari ad insertionem vix reflexo.

Diam. maj. $2\frac{3}{4}$ millim., min. $2\frac{1}{2}$; alt. $1\frac{1}{3}$.

In form very like *Endodonta consimilis*, Pease, from Tahiti, but smaller, more finely sculptured, and without a parietal lamella.

Family Bulimulidæ.

4. *Partula Leefei*.

Testa dextrorsa, parva, ovata, umbilicata, flavo-olivacea, infra suturam et versus apicem pallida; spira mediocriter producta,

ad apicem rotundata, obtusa; anfractus 5, convexiusculi, lineis incrementi tenuibus, striisque spiralibus tenuissimis (in anfr. ult. plus minus obsoletis) confertis sculpti, ultimus antice haud descendens; apertura ovata, intus fuscescens, longit. totius $\frac{1}{2}$ subæquans; peristoma album expansum et reflexum, vix incrassatum.

Longit. 14 millim., diam. 9; apertura intus 6 longa, $3\frac{1}{2}$ lata.

A small species, distinguished by its style of coloration and general form. Named after Mr. R. B. Leefe, who first discovered the species.

Family Stenogyridæ.

5. *Opeas juncea* (Gould).

Bulimus junceus, Gould, U.S. Explor. Exped. vol. xii. p. 76, Atlas, figs. 87-87 b; Pfeiffer, Mon. Hel. vol. ii. p. 220.

Hab. Sandwich Islands, Society Islands, Fiji, Upolu.

As is well known, certain forms of this group (Stenogyridæ) have an enormous geographical range; hence it is not surprising that this species should occur at such remote localities as the above.

Family Achatinellidæ.

6. *Tornatellina aperta*, Pease.

Tornatellina aperta, Pease, Proc. Zool. Soc. 1864, p. 673; Pfeiffer, Mon. Hel. vol. vi. p. 264.

Hab. Tahiti (Pease); Rotuma (Gardiner); Tongatabu (Leefe).

The type from Tahiti is a little larger and somewhat browner than the shells from Rotuma, but is similar in other respects. The bidentate columellar projection within the aperture is very remarkable and readily distinguishes this peculiar form.

Family Succineidæ.

7. *Succinea rotumana*.

Testa ovata, parva, cornea, lineis incrementi tenuibus striata; spira brevis, rufescens; anfractus $2\frac{1}{2}$, perconvexi, celeriter accrescentes, ultimus maximus, oblique valde descendens; apertura ovata, longit. totius $\frac{3}{4}$ fere æquans, intus plus minus iridescens; columella tenuis, arcuata, superne anguste reflexa, appressa.

Longit. $8\frac{1}{2}$ millim., diam. $3\frac{3}{4}$; apertura 6 longa, $3\frac{1}{2}$ lata.

A small species, with a mammiform spire and rather like
Ann. & Mag. N. Hist. Ser. 6. Vol. xx. 35

S. venusta, Gould, from the Hawaiian Islands. Like many other so-called species of this genus, the present one offers very slight distinguishing features from several others.

Family *Helicinidæ*.

8. *Helicina modesta*, Pfeiffer.

Helicina modesta, Pfr. Proc. Zool. Soc. 1853, p. 52; Mon. Pneumon. vol. ii. p. 186; Sowerby, Thes. Conch. vol. iii. pl. cclxxi. figs. 221, 222; id. Conch. Icon. vol. xix. pl. xxix. figs. 259 *a, b*.

Hab. Solomon Islands and New Hebrides.

9. *Helicina fulgora*, Gould.

Helicina fulgora, Gould, U.S. Explor. Exped. vol. xii. p. 97, Atlas, figs. 10 *b, c*; Pfeiffer, Mon. Pneumon. vol. i. p. 401.

Hab. Samoa, New Hebrides, Tonga Island, Namuka; Rotuma (*Gardiner*).

H. articulata, Pfr., *H. zebriolata*, Pfr., and *H. Brenchleyi*, Baird, appear to be synonyms of this species.

Family *Cyclostomatidæ*.

10. *Omphalotropis rotumana*.

Testa ovata, superne acuminata, anguste umbilicata, rufescens vel fuscescens, albo irregulariter picta et strigata, interdum ad peripheriam albo vel rufo cincta; spira elongata, conoidea, ad apicem mediocriter acuminata; anfractus sex, lente accrescentes, convexiusculi, sutura subprofunda sejuncti, lineis incrementi striati, ultimus ad peripheriam tenuissime carinatus et circa umbilicum carina altera crassiuscula instructus; apertura piriformis, intus rufescens vel fuscescens, longit. totius $\frac{1}{2}$ haud æquans; peristoma intus leviter incrassatum, continuum, marginibus columellari et basali leviter expansis.

Longit. $6\frac{1}{2}$ millim., diam. 4; apertura 3 longa, $2\frac{1}{3}$ lata.

Larger than *O. solidula*, Pfeiffer, from Lord Howe's Island, with more varied colour-markings, a wider umbilicus, and a stronger keel; also larger than *O. vitiensis*, Liardet, from Fiji, broader in form and narrower in the umbilicus.

Family *Auriculidæ*.

11. *Pythia scarabæus*, Linn.

Rather a small form.

12. *Melampus luteus*, Quoy and Gaimard.

13. *Melampus fasciatus*, Deshayes.

Both banded and plain varieties.

Family **Melaniidæ**.

14. *Melania Mageni*, Gassies.

Fide the late Dr. Brot.

Family **Littorinidæ**.

15. *Littorina obesa*, Sowerby.

16. *Littorina undulata*, Gray.

17. *Littorina intermedia*, Philippi.

LXIII.—*Description of a new Snake from the Andes of Colombia.* By G. A. BOULENGER, F.R.S.

Leptognathus Pratti.

Body strongly compressed. Eye moderately large, its diameter equalling its distance from the oral border. Rostral as deep as broad, just visible from above; internasals about half as long as the præfrontals; frontal as long as broad, shorter than its distance from the end of the snout, which equals the length of the parietals; nasal divided; loreal longer than deep, bordering the eye; præocular partially fused with the præfrontal; two postoculars; temporals 2+3; eight or nine upper labials, fourth and fifth or fifth and sixth entering the eye; first two pairs of lower labials forming a suture behind the symphysial; two pairs of chin-shields, broader than long. Scales in 15 rows, vertebrals strongly enlarged. Ventrals 173; anal entire; subcaudals 71. Dark brown above and below, with paler brown cross-bars, one scale wide, disposed in pairs; belly with interrupted light longitudinal streaks.

Total length 770 millim.; tail 150.

A single specimen (a female) was obtained by Mr. A. E. Pratt at Medellin, Republic of Colombia.



Smith, E. A. 1897. "LXII.—On a collection of land and freshwater shells from Rotuma Island." *The Annals and magazine of natural history; zoology, botany, and geology* 20, 519–523. <https://doi.org/10.1080/00222939709487394>.

View This Item Online: <https://www.biodiversitylibrary.org/item/87729>

DOI: <https://doi.org/10.1080/00222939709487394>

Permalink: <https://www.biodiversitylibrary.org/partpdf/64712>

Holding Institution

Smithsonian Libraries and Archives

Sponsored by

Smithsonian

Copyright & Reuse

Copyright Status: Public domain. The BHL considers that this work is no longer under copyright protection.

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.