

JUL 1 1970

HARVARD
UNIVERSITY

JOHNSONIA

Published by
THE DEPARTMENT OF MOLLUSKS
Museum of Comparative Zoölogy, Harvard University
Cambridge, Massachusetts

JUNE 29, 1970

REVIEW NUMBER

VOL. 4, NO. 48

The material published in this Review Number is but a small part of the new information available on the various species covered in JOHNSONIA. However, space is limited and so we are restricting it to certain pertinent new data in the Volutidae and Conidae.

THE FAMILY VOLUTIDAE IN THE WESTERN ATLANTIC

BY

W. J. CLENCH AND R. D. TURNER

Since the publication of the Volutidae (no. 43) we have received several specimens which now allow us to figure the radulae of two species for the first time, to give some range extensions, and to figure the egg case and young of *Voluta musica* Linnaeus.

Voluta musica Linnaeus

Plate 172, figs. 1-3; Plate 173, fig. 3

Voluta musica Linnaeus. Clench and Turner 1964, Johnsonia 4: 140, pl. 84, fig. 13; pl. 85, figs. 1-3.

Remarks. While collecting at Playa Chiquito, Curaçao, Netherlands Antilles, Robert C. Bullock found the egg case of this species fastened to the underside of a coral slab in about 3 meters of water. It contained three young, nearly ready to emerge. These along with the egg case and the radula of the young are figured. The radula has only 12 teeth and these are proportionately narrower and have fewer denticles than the adult (Plate 173, fig. 3). The operculum is well formed, similar to that of the adult but exceedingly thin. The digestive system at this stage is completely formed, and while dissecting out the radula it was possible to identify all of the organs illustrated for the adult in Johnsonia no. 43, Plate 82, fig. 18. There is no question that the young are ready to feed immediately upon emerging from the egg case.



Plate 172. *Voluta musica* Linnaeus. Playa Chiquito, Curaçao, Netherlands Antilles. Young shells and the egg capsule from which they were removed. (Figs. 1-2, 3x; egg capsule 2.3x.)

***Voluta virescens* Solander**

Plate 173, fig. 4

Voluta (?) *virescens* Solander. Clench and Turner 1964, *Johnsonia* 4: 146, pls. 82, 84.

Remarks. At the time we monographed this species, we had not seen any preserved material. Through the kindness of Clifton S. Weaver we received the soft parts of a specimen of *virescens* obtained from the northern part of the Gulf of Mexico. The specimen was too poorly preserved for detailed anatomical work, but it was possible to determine that the radula is typical of the genus. It differs only in being very much smaller, the width being only 0.2 mm., the entire radula being less than 3 mm. in length.

Specimens examined. TEXAS: about 50 miles SE of Port Aransas in 146 meters (Clifton Weaver).

***Zidona dufresnei* (Donovan)**

Zidona dufresnei (Donovan). Clench and Turner 1964, *Johnsonia* 4: 147, pls. 82-83; 88-91.

Specimens examined. BRASIL: Camboriu; Itapema; Penha, all Estado Santa Catarina (all São Paulo Museum).

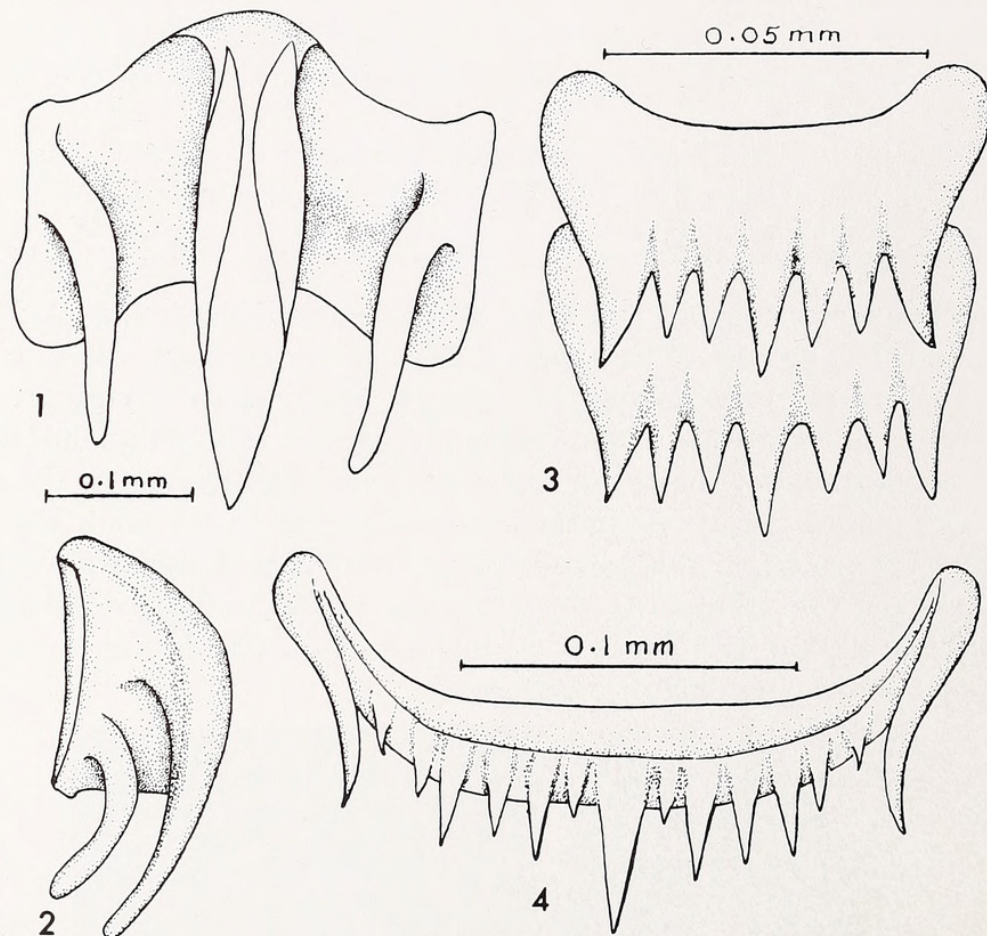


Plate 173. Radulae of Volutidae. Figs. 1-2. Front and side view of single tooth of *Odontocymbiola subnodosa* (Leach), from off Punta Médano, Argentina, in 91.4 meters. Fig. 3. Two teeth from the young *Voluta musica* Linnaeus figured on Plate 172, fig. 2. Fig. 4. Single tooth of *Voluta virescens* Solander from 50 miles SE of Port Aransas, Texas, in 146 meters.

Odontocymbiola subnodosa (Leach)

Plate 173, figs. 1-2; Plate 174, figs. 1-2

Adelomelon (?) *subnodosa* (Leach). Clench and Turner 1964, *Johnsonia* 4: 155, pls. 95-96.

Remarks. At the time we considered this species, we did not have any preserved material for study and there were no published reports concerning the radula. Consequently our previous generic assignment was tentative. In September 1966, Dr. E. de Carvalho Rios of the Museu Oceanográfico, Rio Grande do Sul, Brasil, sent us a preserved specimen. The radula, here figured, proved to be that of an odontocymbolid and not an *Adelomelon* as we had thought on the basis of the shell only.

This is the fourth known species in this genus which is restricted to the east coast of South America from Brasil south to Argentina and the Falkland Islands.

Specimens examined. ARGENTINA: off Punta Médano, Prov. Buenos Aires, in 91.4 meters (Leopold Pontes).

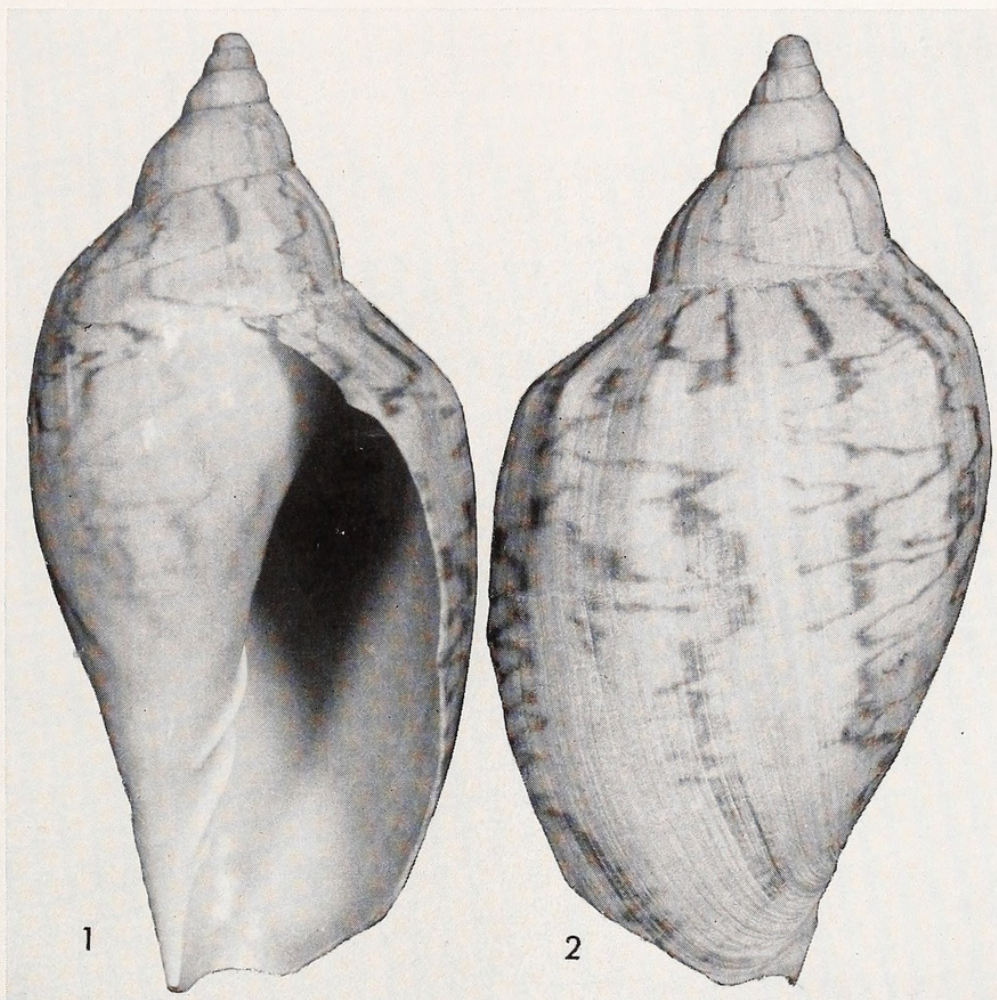


Plate 174. *Odontocymbiola subnodosa* (Leach). From off Punta Médano, Prov. Buenos Aires, Argentina, in 91.4 meters (nat. size).

Scaphella (Scaphella) junonia (Lamarck)

Voluta junonia 'Chemnitz' Lamarck 1804, Ann. Muséum National d'Histoire Naturelle 5: 156 (no locality given) [refers to Chemnitz 1795, Conchylien-Cabinet (1) 11: 16, pl. 177, figs. 1703-1704].

Scaphella (*Scaphella*) *junonia* (Shaw). Clench 1946, *Johnsonia* 2: 49, pl. 28, figs. 1-3.



Clench, William James and Turner, Ruth Dixon. 1970. "The Family Volutidae in the Western Atlantic." *Johnsonia* 4(48), 369–372.

View This Item Online: <https://www.biodiversitylibrary.org/item/127903>

Permalink: <https://www.biodiversitylibrary.org/partpdf/249178>

Holding Institution

Harvard University, Museum of Comparative Zoology, Ernst Mayr Library

Sponsored by

Harvard University, Museum of Comparative Zoology, Ernst Mayr Library

Copyright & Reuse

Copyright Status: In copyright. Digitized with the permission of the rights holder.

License: <http://creativecommons.org/licenses/by-nc-sa/3.0/>

Rights: <https://biodiversitylibrary.org/permissions>

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>.