

SNAILS FROM THE NORTHERN PARTS OF IRAN (CASPIAN AREA)

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Abstract

In a project to identify snails in the northern parts of Iran (Caspian Sea Area) more than 2000 snails, in 120 sampling, were collected in different seasons in 1973–1976. During this period 25, 10 and 9 different species were identified from the land, the fresh-water and the sea respectively.

Introduction

Snails are widely spread throughout the world. Some species of snails live on the land, some in the sea and others in fresh water. Many species of snails have adopted themselves to live in different habitates. Iran on the basis of climatic conditons; e.g. northern parts with high humidity, southern parts with high humidity and high temperature and the arid central desert area, can be divided into different zones and therefore one expects to find various species of snails. The present paper presents the result of work on identification of snails occurring in the Caspian Sea area, north of Iran.

Description of the area

Most of the Caspian Sea area is covered with forest. The area is bordered in the north by Caspian Sea, in the South by Alborz ranges of mountains, in the west by Khalkhal and Ardabil and in the east by Gorgan. The area is humid and the relative humidity sometimes exceeds 80% in some parts of the area. The range of temperature is 4.2 to 28°C. and the maximum annual precipitation is 1379 mm for Bandar Enzeli. (1)

Materials and Methods

In a period of four years (1973–1976), 120 random sampling were carried out in different seasons of the year and more than 2000 snails were collected. The methods of collection were as follows:

a-Land snails. As the land snails are nocturnal creatures, collection was carried out during cloudy days. Habitates such as under leaves, old logs, stones and grassy lands were searched. To kill the live snails they were submerged in a bottle of water. The so killed snails were preserved in alcohol 70% to be dissected at a later stage.

b – Fresh-water snails. The collection was made from such habitates such as ponds, springs, swamps, rivers, streams and rice-fields. The site of collection and the dates were recorded. Rivers and streams' sides were searched for shells. Dead shells were sent to the laboratory in a box, arranged in layers wrapped in the cotton-wool. Live snails were first narcotized by adding a few drops of menthol to the water of their containers, and then transferred into alcohol 70%.

C-Seashells.

Dead shells were picked up from the sea shore and the live snails the were collected from the sea in a distance of a few meters from the shore, when sea was calm and the tides were low.

Identification

This was carried out on the basis of features of the shells, shape, number of whorls, coiling, aperture, operculum and sculpture. The key to the identification of the snails of Iran which had been supplied by Danish Bilharziasis Laboratory (DBL) was mainly consulted for the present work but the work of other authors (2–3) have been taken into the consideration. The identified snails were sent to DBL for comments and confirmation.

Results

The following species were identified in the area:

| Genus | Species |
|------------------|--------------------------|
| | <i>O. filicum</i> |
| <i>Oxychilus</i> | <i>O. duboisi</i> |
| | <i>O. herzi</i> |
| <i>Levantina</i> | <i>L. dschulfensis</i> |
| | <i>E. transcaucasica</i> |

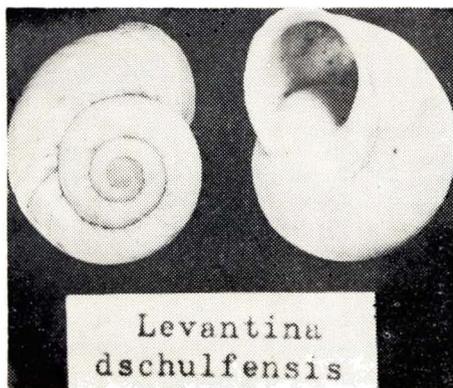
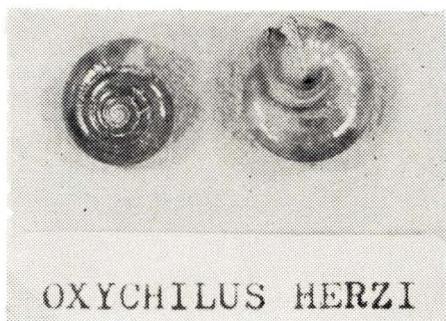
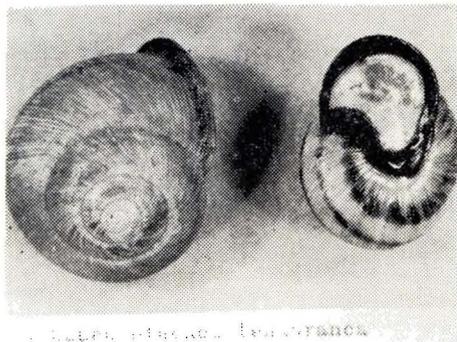
| | | |
|-----------------------|----------------|------------------------|
| | Euomphalia | E. aristata |
| | | E. pisiformis |
| | | E. selecta |
| | Serrulina | S. sieversi |
| 1- Land snails | Euxina | E. lessonae |
| | | E. persica |
| | Ena | E. nogellii |
| | Caucasotachea | C. lencoranea |
| | Caspiophaedusa | C. perlucens |
| | Oxyloma | O. elegans |
| | Jaminia | J. ghilanensis |
| | | J. didymoda |
| | Caspicyclotus | C. sieversi |
| | Pomatias | P. costulatum hyrcanum |
| | Trochoidea | T. langloisiana |
| | | T. serrulata |
| | Monacha | M. syriaca |
| | Parmacella | P. olivieri |
| | | L. morgani |
| | Limax | L. keyserlnigi |
| | Lymnaea | L. pereger |
| | | L. palustris |
| | | L. truncatula |
| | Physa | P. acuta |
| 2- Fresh water snails | Planorbis | P. planorbis |
| | Theodoxus | T. lituratus |
| | Bithynia | B. rubens |
| | Sphaerium | S. corneum |
| | Corbicula | C. fluminalis |
| | Anodonta | A. cygnea |
| | Brachyodontes | B. monterosatoi |
| | Cerastoderma | C. glaucum |
| | Dreissena | D. polymorpha marina |
| 3-Caspian sea snails | Didacna | D. trigonoides |
| | Adacna | A. laeviuscula |
| | | A. vitrea |
| | Abra | A. ovata |
| | Monodacna | M. edentula |
| | Hydrobiids | H. caspiella |

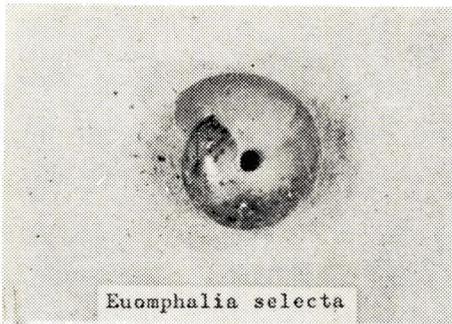
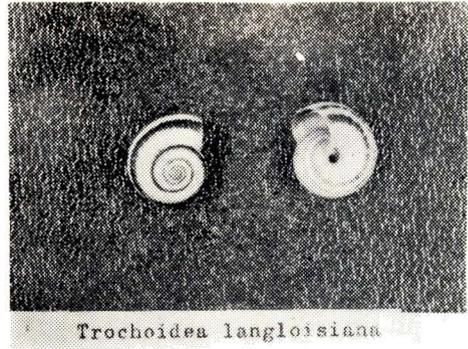
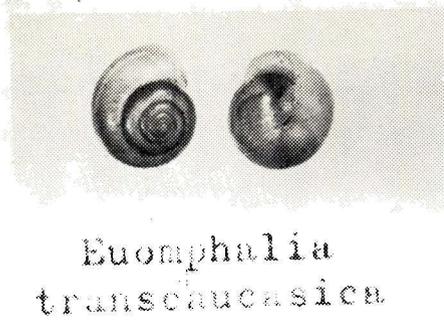
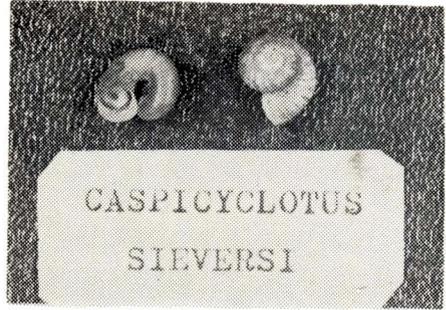
Acknowledgement,

The authors wish to thank Dr. G. Mandahl-Barth “Danish Bilharziasis Laboratory” for his kind cooperation and the key for identification of Iranian snails.

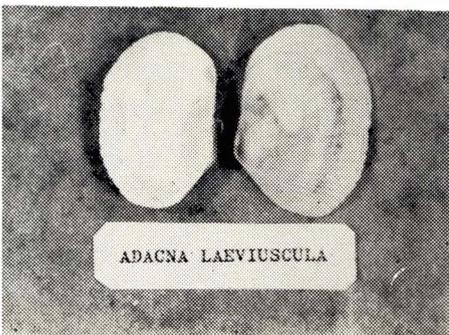
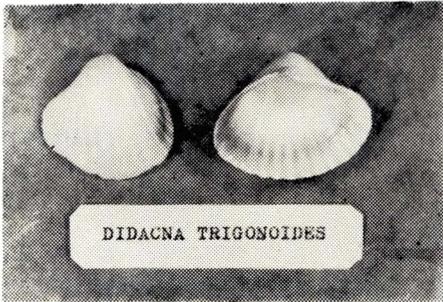
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1. Regional climatique Et vegetation En Iran, par Ahmad Hossein Adle university press (1960).
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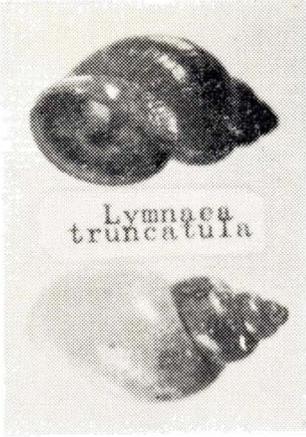




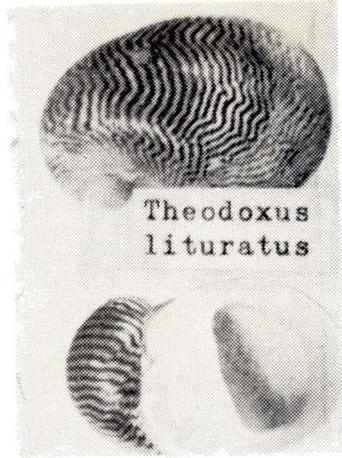
Species of sea - water snails;



Species of fresh - water snails



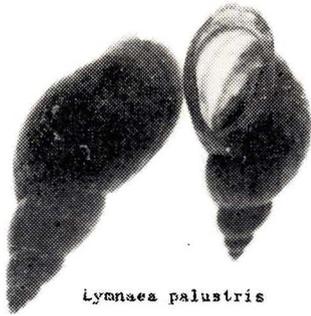
Lymnaea truncatula



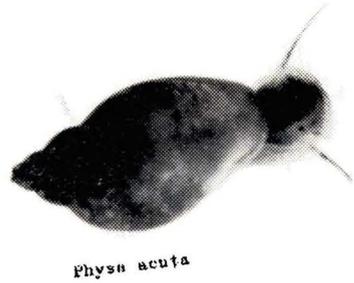
Theodoxus lituratus



Lymnaea pereger



Lymnaea palustris



Physa acuta



Sphaerium corneum



CORBICULA FLUMINALIS