

**Description of a new species of freshwater snail,
Viviparus zilchi,
 from Ratnagiri, Maharashtra, India
 (Mollusca, Gastropoda, Viviparidae).**

By

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With one figure.

In a small lot of molluscs received for identification, in February, 1964, from Dr. B. K. TIKADER, Officer-in-Charge, Western Regional Station of Zoological Survey of India, Poona, was found one unique shell of freshwater gastropod collected, in January, 1963, from a slightly exposed rocky boulder lying in shallow water of the Jagbori River in Khed, Ratnagiri (Lat. 17·8 N. and Long. 73·19 E.), Maharashtra. On a cursory view it may appear identical with *Viviparus bengalensis* (LAMARCK) — the common Banded-snail of India, but the shell-characters when critically examined doubtless show some novelty agreeing hardly with any existing forms, recent or fossil, of the genus *Viviparus* MONTFORT, 1810. But to be more sure about its exact identity and relationships, we sent the specimen to Dr. ADOLF ZILCH, Senckenberg Institut, Frankfurt am Main, Germany, for his expert opinion. He also after a careful study and comparison of the shell with the representative collections at his disposal failed to assign it properly to any known Viviparids. So, we consider it a great pleasure to associate with the new species *Viviparus zilchi* the name of Dr. A. ZILCH who took so much trouble and interest to examine the shell.

***Viviparus zilchi* n. sp.**

Fig. 1.

Diagnosis: Shell of rather small size and of thin texture, dextral, somewhat ovato-conoid, perforate with a very small but clear-cut slit, translucent; surface brownish in colour and glazy, encircled with conspicuous alternate broad and narrow dark bands as in typical *bengalensis*, but distinctly rimate with rather broad vertical lines of growth so regularly and closely arranged in the form of striae as to present a nice tile-like pattern (more so on the body-whorl) somewhat recalling *Viviparus* (= *Bellamya*) *martensi costellata* (KOBELT, 1908) from Salang figured by ZILCH in pl. 5 fig. 40 (1955: 72), and besides these, very fine, close-set and numerous spiral striae can also be seen there with

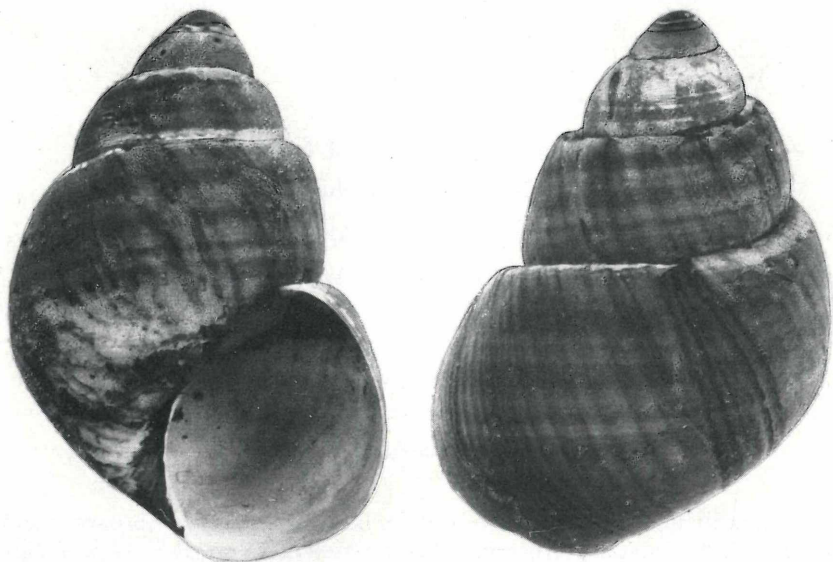


Fig. 1. Ventral and dorsal aspects of the holotype of *Viviparus zilchi* from Jagbori River in Khed, Ratnagiri, Maharashtra, India.

the help of a lens decussating with growth lines; whorls $5\frac{1}{2}$, gradually increasing in size, less ventricose but slightly high and looking pyramid-like in shape owing to their proximal part being more or less angular and separated from one another by more oblique and obviously excavate sutures showing *Sinotaia* affinity and also somewhat approaching *V. bengalensis* race *gigantea* found in the Chapparwara Lake, Rajasthan, and *V. crassus* (BENSON) from Assam (when the shell is fully mature and thickened); spire short, conoid, as long as broad but much shorter than the bodywhorl and its apex appearing blunt possibly for being slightly eroded; bodywhorl largest of all, nearly half the total shell-length, only slightly produced at the lower end, but more conspicuously rimate on the surface than in any other whorls; aperture longer than broad, nearly subrhomboidal in shape and subangulate at its anterior extremity and its interior whitish with a bluish tinge, and opaque; peristome rather thin and sharp and has a black margin, slightly more raised anteriorly, but a little more expanded below and then making a regular curve downwards (here the lip has become slightly damaged) finally joins the lower end of the columella forming an obtuse angle there; inner lip only slightly arched at its lower part and reflected over the umbilical slit, but upwardly rather slantingly raised and thereby giving the entire columellar area a somewhat bow-shaped appearance.

Measurements (in mm.):

Length of shell (apex to base of bodywhorl)	23.5
Diameter of shell (round the bodywhorl)	16.5
Length of bodywhorl	14.5
Diameter of bodywhorl	16.5
Length of spire	11
Diameter of spire (round the penultimate whorl)	11
Length of aperture	12
Breadth of aperture	8.5
Number of whorls	5½.

Holotype: Regd. No. M 17808/3. Deposited in the Zoological Survey of India, Calcutta (India).

Type-locality: Jagbori River in Khed, Ratnagiri, Maharashtra, India. Coll. Dr. B. K. TIKADER. Date of Collection. January, 1963.

Remarks: *Viviparus zilchi* is an interesting species which may be allied to *V. bengalensis* (LAMARCK), but is distinguished from that and other known Viviparids in some very essential features of its shell. The Sinotaia affinity in this case appears more pronounced and also the broad and regular costulations on the bodywhorl recalling *V. martensi costellata* (KOBELT) from Salang.

The valuable contributions to Indian Viviparidae are those of ANNANDALE (1920, 1921), PRASHAD (1928) and PRESTON (1915) which we have carefully seen in connection with this study. Besides these, the works of KOBELT (1908) and ZILCH (1955) are also worthy of reference.

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