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## New type of terrestrial mollusc of *Archaica* (Gastropoda, Pulmonata, Hygromiidae) from Central Asia

**A Pazilov, J Kudratov and Z Makhmudzhonov**

### Abstract

A new species of land mollusk of the genus *Archaica* (Gastropoda, Pulmonata, Hygromiidae) from Central Asia A. Pazilov, Z. Kudratov, Z. Makhmudzhonov - New species - differs in relatively thin-walled slightly translucent shell, not more than 4.5 well convex, slowly growing turns.

**Keywords:** *Euarchaica*, *Archaica*, *Ugama*, *papanica*, *Karatumshuk*, *Haziratishoh*, diameter, stylofords, upper, internal, distal

### Introduction

As the genus *Archaica*, it was first established by A.A. Shileyk (1970) <sup>[1]</sup> with two genus *Euarchaica* and *Archaica* in one species. Upon further study of the mollusks of Central Asia, the genus was replenished by another under the genus *Ugama* (Shileiko, 1978).

Currently, the genus *Archaica* has 6 species, and over the last thirty years it has been replenished with new species, *Archaica* (E.) *suspecta* from the mountain Yangyskyr, \$. Pkhan (right tributary of the Ala-Buka river), (Sileiko, Moiseyev, 1989) <sup>[3]</sup>; *Archaica* (U.) *papanica* from the neighborhood of Papan, r. Ak-Bura (Alai Range), (Pasilov, Shileiko, 1992).

As we know, the terrestrial malacofauna of Central Asia has been studied very unevenly. The least known regions include the little-known mountains of the Fergana valley, systematic and focused study from the point of view of the mollusk fauna was not conducted at all.

In April 2019, one of the authors (A. Pazilov) conducted the collection of land mollusks in the Fergana valley of Mount Karatumshuk, near the village of Khazratishoh (Namangan region, Uzbekistan), which collected 25 copies. mollusks, the shells of which are very similar to the dwarf forms of *Leukozonella hypophaea*. The results of studying the structure of the reproductive tract of these animals turned out to be new species of the genus *Archaica* which is the subject of this article.

### Material and methods

25 copies from mountain Karatumshuk in ok r.s. Hazratishoh. Opened 9 copies. method of manual anatomy in 75% alcohol under binocular MBI-10.

The shell was measured using the method A, Shileiko (1978): shell height (BP), large shell diameter (BDR), small shell diameter (MDR), mouth height (WU), revolutions number (PR). For comparison, material from the Samarkand State University Zoological Museum has also been studied: 10 shells from three locations identified as *Leukopenia hypophaea* (Lindholm, 1927).

### Systematic part and discussion

Superfamily Xanthonychoidea Pfeiffer in Strebel et Pfeiffer, 1880 Family Hygromiidae Tryon, 1886 Subfamily Archaicinae Sehileyko, 1978 Genus Archaic Sehileyko, 1978  
*Archaic haziratishaxika*, Pazilov, Qudratov et Maxmudjonov, sp. nov. (Figs. 1, A, B, C)  
Locus typicus - Karatumshuk mountains, surroundings with. Hazratishoh (Namangan region)

### Material

25 copies of the typical location, 04/16/2019; anatomously 9 copies. The holotype and 15 paratypes are stored in the Zoological Museum of Gulistan State University.

The shell is small, of varying degrees pressed, relatively thin-walled, slightly translucent, dome-shaped conic curl. Revolutions 4-4.5 convex, slowly increasing. The last turn in the profile is rounded, smoothly lowered to the mouth. The color of the embryonic momentum is always brown, definitive horny, below the periphery grayish-horny, translucent. Fetal embryos are shiny, with strongly smoothed radial striations. The sculpture of definitive revolutions in the form of irregular radial ribs, which are strongly weakened on the basal surface.

**Table 1:** The mouth is round, oblique, the attachment points are wide apart, the edges are thin, sharp, the columellar edge is turned away, but does not close the expanded-cylindrical navel  
Dimensions (mm)

Shell height	Large diameter	Small diameter	Estuary height	Speed
<b>Holotype</b>				
5,9	9,9	8,1	4,2	4,5
<b>Paratype</b>				
6	10,1	9	4,8	4,5
6,1	11	9,1	5	4,5
5,9	9,9	9	4,3	4,5
6	10	8,9	4,8	4,5
5,8	9	8,8	4,5	4,5

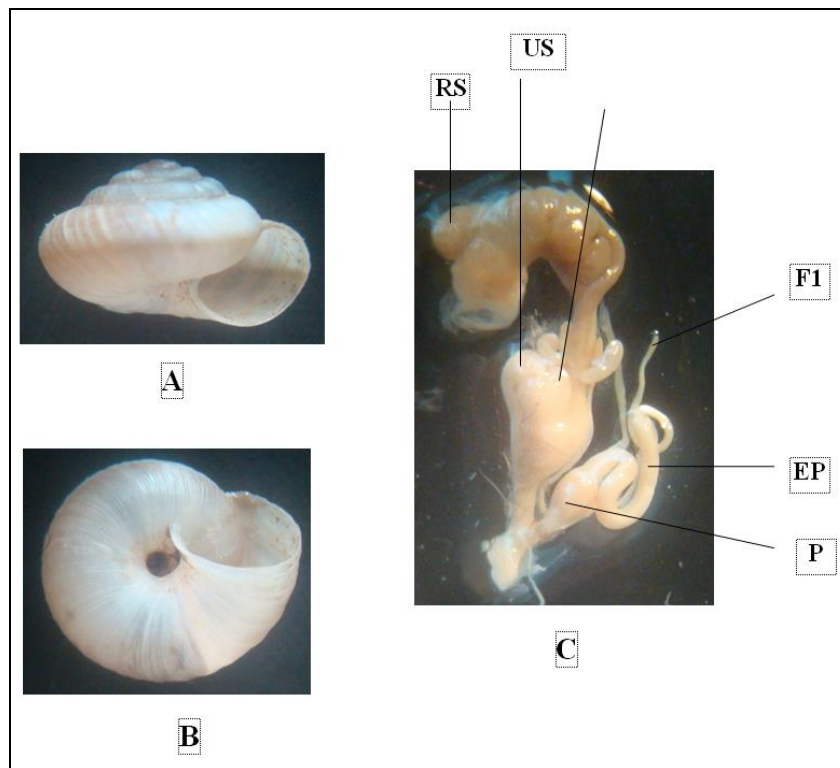
Distal spermoviduct and oviduct straight. The mucous glands are 2 X 2. Stylofors are developed to varying degrees: the outer one is much larger, the apex is spherical in shape, the inner stylofor squeezes the wall of the vagina with the spherical outer stylofor slightly, but retains spherical shape. The penis is small, spherical. Cylindrical epifallus forms a double bend. Flagellum 1.5 times short epiphallus. There is no membrane between the vas deferens, the epiphallus and the penis. The duct of the seminal receptacle is short, ends with a spherical reservoir.

**Distribution and habitat.** The species is known only from a typical location, where it lives in scree among semi-shrubs.

**Remarks.** The shell of the present species differs from the representative of the genus Archaica: with a small, relatively thin walled, slightly translucent shell, not more than 4.5 well convex, slowly increasing revolutions.

The anatomical difference is that in the new species, the stylophores (upper and inner) are always spherical, the mucous glands are 2 X 2, while in other species of the genus, the upper stylophores are more or less distinctly pointed, the mucous glands are 3 X 2 or 4 X 2.

**Etymology.** The name is formed from the name with. Hazratishoh - typical location of the species.



**Fig 1:** *Archaica schileykoi* sp. nov., holotype. A, B- sink; C-reproductive tract; P-penis; US- upper stylophors; VN - internal stylophors; FI Flagellum; EP-epiphallus; RS- seminal receptacle.

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