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## **Development of Producing Pearl of Bivave Molluscs (Mollusca: Unionidae, Corbiculidae) in Uzbekistan**

**Key words:** *bivalvia, hydrobionts, pelolimnofil, peloreofil, water reservoirs.*

**Annotation:** *the article is devoted to the process of producing different types of bivalve molluscs in Uzbekistan according to the modern long term investigation and literature.*

### **Introduction**

It was defined more than 197 types of bivalve molluscs in Uzbekistan according to the modern long term investigation (1998-2015) and literatures by (Martence, 1874; Argengelski, 1933; Zhadin, 1952; Alidjanov, Bronstein, 1956; Strobogatov, 1970; Antonova, 1987; Anistratenco, 1988,1990). They were belong to 75 species, 25 family and 2 class. They are: Gastropoda and Bivalvia (1). According to the living areas it is possible to divide them into 3 groups: dry land, molluscs of clean and salty water.

The materials were collected from low parts of Amudarya, Chimkurgan, Chelak and Yangiyer fish farms, Kattakurgan, Chimkurgan, Pchkamar, Tallimarjon and other water reservoirs, Amudarya, Syrdarya Zarafshan, Kashkadarya and Surkhandarya rivers of Uzbekistan. It was defined mollusks types which lived in following non clean water and divided into the groups.

In total, there were more than 100 examples of mollusks were collected in this areas. Bivalvia mollusks species of them belong into 2 families (Unionidae, Corbiculidae), 4 roots Sinanodonta, Colletopterum, Corbicula, Corbiculina, 9 species and 2 small species (2,3).

Sinanodonta – *S.orbicularis*, *S.gibba*, *S.pueorum*, Unionidae family and Colletopterum – *C.cyreum sogdianum*, *C.bactrianum*, *C.ponderorum volgense* were types and family root of Unionidae mollusks the first time were done experience to get pearls, but it was identified there were pearls which belong to two groups from collected molluscs (4,5). Then, on the purpose of growing pearls on the snail of mollusks was continued experience on Sinadonta *orbicularis*, *S.pueorum*, *S.gibba* and Colletopterum *cyreum sogdianum* which were more according to the number of 2-3 ages types from Syrdarya, Zarafshan river and Chimkurgan, Kattakurgan water reservoirs. In May, 2010 between manthia of the following mollusks were set balls specially produced by polyethylene. The experiences were continued in laboratories, aquariums, artificial pools in field condition: Hothouse of SamSU and Zarafshan collective farm of Payarik district.

It was defined that the snails of Sinanodonta and Colletopterum types which live in rivers were little bit smaller by size than which live in water reservoirs. The main reason was:

it was small in the first than in the second and also, the fastest of the stream in the first than in the second, less of the organic elements and dregs, good ecologic condition in the second. Addition to the above metioned, it was defined only *Colletipterum cyreum sogdianum* local small type of Central Asia were largely extended big bivalve mollusks in nearby water canals of Ferghana and Kokand in August, 2011 (6).

It was allowed to mention that according to the result of 3 year experience led us to get a very small pearl (in size of 0.5-1.0 mm) of circle shape from Chinese molluscs in the territory of hothouse of the SamSU (1, 2, - picture). But in generally periods this position wasn't gazed. The main reason of getting pearls it was needed to create natural possibilities and to grow mollusks together with growing fish in big pools of fish farms. This process was very strong and required for many years.



A)



B)

1-picture. *Sinanodonta (S.) gibba* (Benson, 1855). Snail (A) and Pearl (B).



A)



B)

2-picture. *Sinanodonta puerorum* (Heude, 1980). Snail (A) and Pearl (B).

In addition, it was possible to recommend to collect big, thin snail of huge amount when it were at the bank of lakes, rivers and water reservoirs in Autumn and to use the body of the snail as additional meal for the bird and fish farms to grow their segoletcs, from sidaf of snail to use for making musical instruments, decoration of doors of hotels and ashtray from big snail. To achieve to this purpose organize this works needed special laborotories and collaboration of farm and the rich experience of neighbouring countries.

In conclusion, in big bivalve mollusks especially in Unionidae family types were possible to grow pearls, because the walls and snails of them are bigger and thinner the local types. The following information is very useful to protect ecosystem of water, to develop biologic productivity, to solve the problems of agrofarms.

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