

# **MORPHOLOGY AND MODERN TAXONOMY OF THE SPECIES OF THE GENUS SCHIZOTHORAX HECKEL 1836 IN THE WATER BODIES OF UZBEKISTAN.**

**Gafurova Ominakhan Muhammadzikirovna is a doctoral student of Fergana State University**

**Annotatsiya:** Ushbu maqolada O'zbekiston suv havzalaridagi Schizothorax Heckel 1836 urugi turlarining morfologiyasi va zamonaviy taksonomiyasi, yashash muhiti, yashash joylarida muhim ekologik rol o'ynashi, geografik sharoitlarga moslashishi haqida ma'lumotlar berilgan.

**Kalit so'zlar:** O'zbekiston suv havzalari, Schizothorax Heckel 1836, morfologik tuzilishi, taksonomiyasi, tez oqadigan suvlar, ekologik sharoit, Iogann Yakob Heckel.

**Аннотация:** В статье представлены сведения о морфологии и современной таксономии видов рода Schizothorax Heckel 1836 в водоемах Узбекистана, их местообитаниях, важной экологической роли в местах обитания и адаптации к географическим условиям.

**Ключевые слова:** водные объекты Узбекистана, Schizothorax Heckel 1836, морфологическая структура, систематика, быстroteкущие воды, экологические условия, Иоганн Якоб Хекель.

**Abstract:** This article provides information on the morphology and modern taxonomy of species of the genus Schizothorax Heckel 1836 in the water bodies of Uzbekistan, their habitats, their important ecological role in their habitats, and their adaptation to geographical conditions.

**Key words:** water bodies of Uzbekistan, Schizothorax Heckel 1836, morphological structure, taxonomy, fast-flowing waters, ecological conditions, Johann Jacob Heckel.

Schizothorax Heckel 1836, also known as schizothorax fish, is a genus of fish in the family Cyprinidae. It is a freshwater fish found in rivers and lakes of Central and South Asia. The fish Schizothorax Heckel 1836 was named in 1836 by Johann Jacob Heckel. Schizothorax species are known for their adaptation to cold water environments and are often found in mountainous areas with fast flowing rivers.

The species Schizothorax Heckel 1836 is also common in freshwater ecosystems in Uzbekistan. They live especially in Amudarya and Syrdarya and their tributaries. These species are considered an important trade and food source by the local population. Schizothorax species in Uzbekistan usually prefer cold water conditions. Their morphological characteristics may be similar to species found in other regions, but they may show adaptation in certain geographical conditions. That is, their morphological structure depends on the environment they live in.

Research on the presence and distribution of schizothorax species is being conducted in Uzbekistan. As a result of studying these, it is possible to gain more information about the ecology, taxonomy and conservation of the species.

Their morphological structure is covered with skin scales. He has three pairs of whiskers, one pair is located in the nose area. They can use their right or left wings and have right or left color spots. They prefer cold, flowing and clean waters. Schizothorax fish also show active heartbeats, gill movements, and rapid blood pumping when frightened. These fish have a laterally compressed body shape and are usually olive-brown or gray in color. They are known for their strong swimming abilities and are well adapted to life in fast flowing water.

They have long tails, streamlined bodies, and strong fins that help them move in fast currents. Schizothorax species feed mainly on herbivores, aquatic plants, and algae. However, some species also eat small invertebrates and insects. They play an important ecological role in their habitats by controlling plant growth and contributing to nutrient cycling. These fish are ecologically and economically important in many regions where they are found. They are usually intended for meat, which is considered by local fishermen to be of good quality. Conservation efforts are underway to protect their habitat and ensure sustainable fishing practices.

Modern taxonomic methods and genetic studies on the species of Schizothorax provide more information about these species. These data provide additional information on their zoological classification, new subspecies and related relationships.

Types of schizothorax in Uzbekistan are classified as follows:

1. Schizothorax intermedius: This species is usually found in Amudarya and Syrdarya. The morphology and ecological preferences of this species are similar to other schizothorax species.
2. Schizothorax cfr esocinus: This species lives in some freshwater lakes and streams in the mountains of Uzbekistan. Morphologically, it is similar to other types of schizothorax, but genetically it differs from others.
3. Schizothorax kessleri: This species is found in some rivers of the Fergana Valley. Like other species of schizothorax, it also prefers cold stream waters.

Taxonomic classifications are often based on information obtained through a combination of morphology, genetic analyses, and ecological data. However, new

studies and analyzes may reveal more precise taxonomic details in the future, and we may learn more about these taxa.

### **Conclusion:**

Schizothorax Heckel 1836 is a freshwater fish known for its adaptation to cold water environments and its importance in Central and South Asian ecosystems.

### **References:**

- 1..Aspect of fish fecundity. pp. 75-101. In: Ecology of Freshwater Fish Production (ed. S.D. Gerking), Blackwell Scientific Publications, Oxford, UK. Cushing, D.H. 1968.**
- 2.Fisheries biology. pp. 220. In: A Study of Population Dynamics. University of Wisconsin, Wisconsin, USA. Habib, G. 1979.**
- 3. Reproductive biology of the pufferfish, Uranostomarichei (Plectognathi: Lagocephalidae), from Lyttelton Harbour. New Zealand, Journal of Marine and Freshwater Research, 13: 71-78.**
- 4. Horwood, J.W., Bannister, R.C.A and Howlett, G.J. 1986. Comparative fecundity of North Sea Plaice (Pleuronectes platessa L.) Proceedings of Royal Society of London B, 228: 401-431.**
- 5. Jacobson, T., Fogarty, M.J., Megrey, B.A. and Moksness, E. 2009.**
- 6.Fish reproductive biology. pp. 430. In: Implications for Assessment and Management. Wiley-Blackwell, USA.**

**7. www.IndianJournals.com                      Members Copy, Not for Commercial Sale**  
**Downloaded From IP - 14.139.231.178 on dated 9-Dec-2015**  
**Fecundity of snow trout in river Jhelum 57.**

**8. James, P.S.B.R., Chendrasekhar Gupta, T.R. and Shanbhogue, S.L. 1978.**

**9. Some aspects of the biology of ribbon fish, *Trichiurus lepturus* (Linnaeus).  
*Journal of Marine Biology*, 290: 120-137.**