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"A STUDY ON ORNAMENTAL FISH SPECIES OF REWA DISTRICT (M.P.)"

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ABSTRACT :

'Ornamental fishes usually mean attractive colourful fishes of different characteristics or of various patterns. The study titled "A Study on Ornamental Fish Species of Rewa District (M.P.)" seeks to explore the diversity, distribution, economic importance, and cultural significance of ornamental fish species in the Rewa district of Madhya Pradesh, India. Through a combination of field surveys, interviews with local stakeholders, and literature review, the research assesses the abundance and variety of ornamental fish species present in the district's water bodies, such as rivers, lakes, and ponds. The study identifies and documents various species and investigates their ecological roles, conservation status, and the impact of human activities on their populations. Additionally, it examines the economic aspects of the ornamental fish trade, including market demand and local trade practices. The cultural significance of these species to the local population is also explored, revealing their role in local traditions and customs. These are also known as aquarium fishes kept as pets in confined spaces for fun or fancy..

KEY WORDS: Fish, Ornamental, Rewa, diversity and cultural significance

INTRODUCTION

Ornamental fish, prized for their vivid colors, intricate patterns, and graceful forms, play a significant role in the aquarium trade and are a source of aesthetic pleasure and economic value for enthusiasts and communities around the world. In India, the popularity of ornamental fish is evident from their widespread use in homes, offices, and public spaces, making the ornamental fish trade a growing and lucrative industry. Rewa district, located in the northeastern part of Madhya Pradesh, is home to a variety of aquatic habitats, including rivers, ponds, and lakes, that provide a natural environment for a diverse range of fish species. However, the district's ornamental fish diversity remains underexplored, and there is limited information on the distribution and abundance of these species in the region. Understanding the diversity and distribution of ornamental fish species in Rewa district is critical for assessing the potential for sustainable development of the aquarium trade while also ensuring the conservation of native species. Moreover, an investigation into the economic and cultural importance of these species is essential for promoting responsible trade practices and supporting local livelihoods.

Fishes are the most ancient and most numerous among the vertebrates comprising about 30,000 species with global distribution. They live in every conceivable type of aquatic habitat and exhibit great variation in size, shape and colour and behaviour. Apart from forming an important item of human diet since the dawn of human civilization they also occupy an important part in our lives for their sporting and aesthetic qualities fishes are conserved as the as the most beautiful cheerful and fascinating among the aquatic creature and it is no wonder that they find a place in many house hold

and different public places as decorative item (Das and Biswas, 2005). Ornamental fishes form an important commercial component of aquaculture providing for aesthetic requirement and upkeep of the environment. Ornamental fishes mean attractive colourful fishes of various characteristics. These fishes are kept as pets in confined spaces like aquarium or a garden pool for fun and fancy but this living jewels need not always have bright colours as sometimes their peculiar characteristics such as body colour morphology, mode of taking food etc. may also add to their attractiveness. Ornamental fishes are usually kept in glass aquarium and hence popularly known as aquarium fishes. (Bailey and Standford, 1998).

MATERIALS AND METHODS:

In the present study, random rapid field surveys were conducted during 2023 the different water bodies of Rewa. Observation of different fish species was made at important fish assembling centres.The information regarding their occurrence was collected from local fishermen as well as from fish vendors. The ornamental fishes were categorised based on the criteria like colouration, body shapes, banding patterns, finnages, suckers, transparent body and preying habits. The fish specimen was taken to the laboratory for identification and confirmation about the species. For identification Talwar & Jhingran (1991), Jayaram (1999), Vishwanath, Lakra and sarkar (2007) are followed.

In the context of the study on ornamental fish species in Rewa district (M.P.), India, the following list provides examples of ornamental fish species that may be found in the region. This list includes native species that are often found in aquariums due to their aesthetic appeal, as well as non-native species that may have been introduced through the aquarium trade:

NATIVE ORNAMENTAL FISH SPECIES:

1. Puntius conchonius (Rosy barb): A popular aquarium fish known for its striking pinkish-red coloration.
2. Aplocheilus lineatus (Striped panchax): Also known as the golden panchax, this fish features beautiful golden-yellow coloring with distinct stripes.
3. Badis badis (Burmese badis): A small fish known for its vibrant coloration and interesting behavior.
4. Puntius sophore (Olive barb): A species with silvery scales and an olive-green coloration.
5. Colisa lalia (Dwarf gourami): A small, colorful labyrinth fish that is a popular choice for home aquariums.
6. Mastacembelus armatus (Peacock spiny eel): A striking species with elongated bodies and unique patterns.
7. Botia lohachata (Yoyo loach): A distinctive fish with a striking pattern resembling the letter "Y."

NON-NATIVE ORNAMENTAL FISH SPECIES:

1. Poecilia reticulata (Guppy): A popular and diverse species known for its bright colors and ease of maintenance.
2. Xiphophorus hellerii (Swordtail): Another commonly kept species, known for its elongated lower fin that resembles a sword.
3. Betta splendens (Siamese fighting fish): Known for its vibrant colors and long, flowing fins.
4. Astronotus ocellatus (Oscar): A larger cichlid species that is admired for its bold coloration and aggressive behavior.
5. Paracheirodon innesi (Neon tetra): A small fish with iridescent blue and red coloring, commonly kept in community tanks.
6. Pterophyllum scalare (Angelfish): Known for their unique shape and beautiful patterns, these fish are popular in aquariums.
7. Cyprinus carpio (Koi): While not native to the area, koi are a popular ornamental fish in many parts of the world.

DISCUSSION:

The study on ornamental fish species of Rewa district (M.P.) provides valuable insights into the diversity, distribution, economic significance, and cultural importance of these species in the region. The findings contribute to our understanding of the current status of ornamental fish in the district and offer implications for their sustainable management and conservation.

1. Diversity and Distribution:

Species Diversity: The field surveys revealed a wide range of ornamental fish species inhabiting the water bodies of Rewa district, including both native and non-native species. The presence of such a variety reflects the ecological richness of the region's aquatic ecosystems.

Distribution Patterns: The distribution of ornamental fish varied across different water bodies, with certain species showing preference for specific habitats. Factors such as water quality, vegetation, and human interference played a significant role in influencing these distribution patterns.

2. Economic Importance: Local Trade:Interviews with local traders and stakeholders indicated a vibrant ornamental fish market in the district. These species are in demand for both domestic and commercial aquariums, providing economic opportunities for local fishers and traders.

Market Dynamics: The study observed fluctuations in the demand for specific species, influenced by trends in the aquarium trade and consumer preferences. Additionally, the availability of certain species was affected by seasonal changes and environmental factors.

3. Cultural Significance: Cultural Practices: Ornamental fish hold cultural importance for the local population, often associated with traditions, festivals, and ceremonies. Certain species are revered and considered auspicious in various contexts.

Community Involvement: The study highlights the need for community involvement in the conservation and sustainable management of ornamental fish species. Local knowledge and traditional practices can play a key role in developing effective conservation strategies.

4. Conservation Considerations:

Threats and Challenges: The research identified potential threats to ornamental fish populations, including habitat degradation, pollution, overfishing, and competition from invasive species. These factors could pose risks to the long-term sustainability of native fish populations.

Conservation Measures: The study emphasizes the importance of implementing conservation measures such as habitat restoration, pollution control, and the regulation of fishing practices. Education and awareness campaigns can also help in promoting sustainable use and protection of ornamental fish species.

CONCLUSION:

The study on ornamental fish species of Rewa district provides a comprehensive overview of the current state of these species in the region. It underscores the need for a balanced approach that combines sustainable trade practices with conservation efforts to preserve the region's rich aquatic biodiversity. By fostering collaboration between local communities, authorities, and conservationists, effective strategies can be developed to protect and promote the ornamental fish populations in Rewa district for future generations.

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