



Research Highlight

2-phenoxyethanol: An Effectual Anaesthetic Agent

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Freshwater hill stream fish scientifically known as "*Hypselobarbus kurali*" is a well known omnivorous species. It is generally termed as the "kooal" and is widespread in the Western Ghats Rivers of peninsular, India. Unfortunately, this fish is drastically reducing in number in the rivers of Kerala.

Hypselobarbus kurali which belongs to the family cyprinidae has been listed as susceptible species according to the protocols of "International Union for Conservation of Nature" (IUCN) and it can become an endangered species in the absence of proper managing protocols. Therefore, it is the need of the hour to prioritize implementation of conservation measures for "kooal".

Accordingly, these strategies involve induced breeding of the *H. kurali* and transportation of brood as well as seed. But, handling of live fish is difficult that stresses the fish and can cause injury, loss of mucus and ultimately leads towards mortality.

However, this problem can be solved by anaesthetizing the fish. It is a useful option to facilitate handling, enhanced egg yield and breeding response by lessening brood mortality rates. In this regard, anaesthetic

2-phenoxyethanol plays a significant role in handling and the transportation of the freshwater hill stream fish.

It is a common fish anaesthetic that is extensively used in sedation and transportation of fish¹. The efficient anaesthetic concentration of 2-phenoxyethanol in several fish species have been suggested to range between^{2,3} 200-600 $\mu\text{L L}^{-1}$.

Considering these facts, scientists performed a novel study regarding the application of a commonly used anaesthetic 2-phenoxyethanol, in the handling as well as transportation of the fresh water hill stream fish "*Hypselobarbus kurali*"⁴.

The findings of this experiment showed that 2-phenoxyethanol is an effectual and safe anaesthetic for the handling as well as the transportation of *H. kurali* broodstock. The effective dosage that induces anaesthesia in *H. kurali* was found as 500 $\mu\text{L L}^{-1}$. Moreover, a recovery period of more than 1 sec was noticed as desirable in the transportation.

Conclusively, a thorough investigation is needed regarding the effects of this anaesthetic on the transportation of seed

Key words:

Fresh water fish, *Hypselobarbus kurali*, endangered species, induced breeding, fish anaesthetic, 2-phenoxyethanol, transportation, brood

and adults of *H. kurali* to standardize the package of practices. In a nutshell, the proper application of this anaesthetic will absolutely be of great help in facilitating easy handling, propagation as well as the stock revival of this endangered indigenous fish.

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