



## Seasonal Investigation of Rainbow Trout Waterbodies in Western Ghats, South India

J.C. Walter Devaa and U. Ramesh\*

Department of Molecular Biology, School of Biological Sciences  
Madurai Kamaraj University, Madurai-625 021, India

\*E-mail: ramesh.biological@mkuniversity.org

---

**Abstract:** Rainbow Trout (*Oncorhynchus mykiss*) was introduced in Munnar, Ooty and Kodaikanal in the Western Ghats regions of South India in the 19th century. After successful introductions, the trout stocks have vanished from many waterbodies and is currently limited to one waterbody in each of three geographical locations. Therefore, this study was done to know the habitat suitability by assessing the water quality (Physiochemical and Heavy metal analysis) on a seasonal basis in three waterbodies (where rainbow trout inhabits) namely, Rajamallay Stream of Munnar, Upper Bhavani Reservoir of Ooty, Gundar Stream of Kodaikanal because of constant size diminishment of the rainbow trout. Results showed the presence of ammonia to be above range for all the waterbodies in all seasons and significant difference was observed with Total Dissolved solids, while there was absence of all heavy metals. The presence of ammonia is a possible factor for size diminishment of the fish along with other human activities. However, the water quality for all the waterbodies was fair, good, excellent and marginal category according to the Canadian Council of Ministers of the Environment - Water Quality Index. But other water quality parameters were below limits and the three waterbodies studied were found suitable for the rainbow trout.

**Keywords:** Water quality, Rainbow trout, Temperature, Dissolved oxygen

---