



## **The Evaluation of Manganese at *Rainbow trout* in Albania**

Selami Fejzo\*, Bizhga Bejo

*Faculty of Veterinary Medicine A.U. Tirana, Albania*

*Received February 25, 2011; Accepted March 14, 2011*

**Abstract:** Bioaccumulation and magnification is capable of leading to toxic level of these metals in fish even when exposure is low. The presence of metal pollutant in fresh water is known to disturb the delicate balance of the aquatic systems. Fishes are notorious for their ability to concentrate heavy metals in their muscles and since they play an important role in human nutrition, they need to be carefully screened to ensure that unnecessary high levels of some toxic trace metals are not being transferred to man through fish consumption. This study evaluates the content of the manganese element (Mn) in the muscle tissue of the trout (*Rainbow trout*), caught upstream and downstream in some rivers of Albania, such as: Vjosa, Buna, Drini. A total of 60 *Salmo trutta* samples were analyzed in the Laboratory of Toxicology, Department of Food Safety at the Institute of Food and Veterinary Safety in Tirana. The average value of manganese concentration in the trout's muscle tissue caught in the Vjosa river was 0.45 mg/kg of the upstream samples and 0.90 mg/kg of the downstream samples. In the muscle tissue of the trout caught in the Buna river, the average value of manganese concentration was 1.65 mg/kg in the upstream samples and 0.75 mg/kg in the downstream samples. In the muscle tissue of the trout caught in the Drini river the average value of manganese concentration was 0.55 mg/kg in the upstream samples and 0.80 mg/kg in the downstream samples.

**Key words:** *manganese, muscle tissue, trout, river.*

---

\* Corresponding; E-Mail: [selami.fejzo@gmail.com](mailto:selami.fejzo@gmail.com);