

**COPPER, IRON, LEAD AND NICKEL ACCUMULATION  
BY FUNARIA HYGROMETRICA IN INDUSTRIAL AND  
RESIDENTIAL AREAS OF KANO-MUNICIPALITY,  
KANO-NIGERIA.**

**J. T. AYODELE AND S. M. BATAGARAWA**

---

Department of Chemistry, Bayero University, P.M.B. 3011, Kano-Nigeria.  
E-mail: tjayodele@yahoo.com

---

**ABSTRACT**

Metal concentrations (Cu, Fe, Pb and Ni) were determined in *fun aria hygrometric a* collected from industrial and adjacent residential areas of Kano-Nigeria using Atomic Absorption Spectrophotometer with an air acetylene flame. These areas have been modified by the increase of industrial activities and extensive road net work. The mean concentration of these elements in the zones ranged between 0.13\_0.14 $\mu\text{gg}^{-1}$  in Ni to 2.17-105.01 $\mu\text{gg}^{-1}$  for lead; 52.51-151.67 $\mu\text{gg}^{-1}$  for iron and 3.56-4.51 $\mu\text{gg}^{-1}$  for copper. Their varying concentrations may be due to their prevalence in the industrial and residential areas of the municipality.

**Keywords:** *Funaria hygrometrica*, trace metal bioaccumulation, industrial, residential.