Heavy metals analysis of batik industry wastewater, plant and soil samples: a comparison study of FAAS and HACH colorimeter analytical capabilities

ABSTRACT

Zinc (Zn), iron (Fe) and copper (Cu) were chosen as representative of heavy metals for this study. The aim of this study was to analyze these heavy metals concentration in batik factories effluent. Samples from soil and plant nearby the factories were collected and analysed using flame atomic absorption spectrophotometer (FAAS) and HACH colorimeter. Results showed differences among the concentration of Fe, Cu and Zn from samples measured by both instruments.

Keyword: Heavy metals; Atomic absorption spectrophotometer (AAS); HACH colorimeter