

Water Quality Assessment of Streams Draining the Akwapim Ridge of Ghana

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Abstract

Surface water samples from seven streams on the Akwapim Ridge were analysed over a period of 1 year for various water quality parameters following standard methods prescribed in APHA, AWWA, WEF and AOAC. The study was carried out in order to assess the suitability of the streams for drinking and other domestic purposes. Additionally, the effect of land use activities was assessed. The study revealed that, generally, most of the physico-chemical parameters of the streams were below the World Health Organization (WHO) limits recommended for drinking water, with the exception of the levels of sulphate and conductivity in three of the streams (Opiafo: 224 mg/l, 908.5 μ S/cm; Kwati: 221.3 mg/l, 920 μ S/cm; and Ademi: 246 mg/l, 1292 μ S/cm), respectively, which were above the WHO requirements. Nevertheless, taking these factors into consideration (except the sulphate and conductivity), the waters may be regarded as excellent and good for drinking and other domestic uses.