Methodology

The mean discharge in the upstream, midstream and downstream of river Tana was calculated. The mean discharge was compared with the species of eels found at that particular level of discharge. One way analysis of variance was used to determine the statistical significance of discharge among different eels species and sections of the river.

Inference

The results showed that Anguilla bengalensis and Anguilla mossambica were found in locations with high discharge of 8m3/s compared to Anguilla marmorata which occurred in areas of lower discharge of 1m3/s. the analysis of variance indicated statistical significance (p-value = 0.1, ns, anova).

According to river continuum concept discharge is lowest downstream but varies midstream and upstream. The discharge was low upstream, higher midstream and lowest downstream.