## Abstract

The objective of the study was to investigate some aspects of the breeding patterns of the cyprinid *Barbus amphigramma* in Lake Naivasha. The study was carried out from February to October, 2003. Fishing was done with the use of gillnets of mesh size 0.5 inch to 3 inch and a beach seine of mesh size 1 inch. Six gonad maturity stages have been described visually, based on morphological features, and validated by histological features of the ovary, as well as examination of the oocyte diameter. Females dominate the population at all sizes classes. *Barbus amphigramma* spawns all year round, but with discernible peaks in March, July and October. The peaks in March and October correspond with the beginning of the long and short rains, respectively, in Kenya.