Abstract
Dietary habits of the up side-down catfish, Synodontis membranaceus were investigated for 24 months (April 2002-March 2004, in Jebba lake, Nigeria) using frequency of occurrence, numerical, gravimetric and index of relative importance (RI) methods. The fish is euryphagus and feeds more at night. RI values indicate that 10 of the 16 food items were major diet components. The main five food categories are detritus (10.64 %), Aspatharia (9.08 %), plant parts (8.85 %), seeds (8.61 %) and Spirogyra (8.43 %), while the 5 less prominent food categories were gastropods (7.05 %), insect appendages (6.88 %), copepods (6.31 %), adult Povilla adusta (5.89 %) and coleoptera larvae (5.36 %). The remaining six food items, dragon flies, P. adusta larvae, chironomid larvae, Daphnia, water mites and fish scales had RI values considerably under 5 %. The prominence of detritus in the diet indicated that the fish is a bottom or benthic feeder. The wide variability in food supply enables S. membranaceus to maintain its overwhelming prominence in Jebba lake, and its euryphagus habit makes it suited for pond culture. Rev. Biol. Trop. 56 (2): 931-936. Epub 2008 June 30.

Keywords
S. membranaceus, food, trophic activity, Jebba lake, Nigeria.