Biological invasion: evidence from a tropical reservoir (Eleiyele, SW, Nigeria)

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Abstract

The encroachment of freshwater territories by invasive species is a global issue with its associated co-existence, displacement and facilitation of native species. The blackchin tilapia, *Sarotherodon melanotheron* is one of the most successful biological invasive species. Data on its apparent ecological consequences on native species are rare in Nigerian inland waters. Based on stomach contents analyses, diets, feeding strategies, and dietary niche breadths of two sympatric invasive *S. melanotheron* and native Nile tilapia *Oreochromis niloticus* populations in a tropical domestic water supply were assessed for possible convergence. Both species exhibited generalist feeding strategies subsisting mostly on algae but fish eggs and larvae were conspicuous preys of *S. melanotheron*. Dietary niche of S. melanotheron was wider than that of O. niloticus. Dietary niche overlap was high and significant between these sympatric species. These findings imply that competitive feeding interactions-including predations on vulnerable early life stages may potentially promote invasion success of *S. melanotheron* in Eleiyele Reservoir.

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