KEYWORDS

dietary breadth, endemism, freshwater fish, macroinvetebrates, trophic index

1 | INTRODUCTION

Rich biodiversity is a characteristic feature of tropical rivers and streams, but geomorphologically their habitat characteristics are governed by simple physical characteristics, i.e., flow and gradient (Calow & Petts, 1992; Welcomme, 2000). Form and function of a river/stream system from headwaters to lower reaches present a wide range of habitats having well oxygenated, nutrient poor lower order streams in upper reaches and usually nutrient rich and often less oxygenated slow flowing lower reaches (Welcomme, 1985). As these diverse habitats in streams support invertebrate and vertebrate communities, the presence of species through food webs in stream ecosystems can vary with space and time (Rosi-Marshall & Bruce, 2002). Weliange, Amarasinghe, Vijverberg, Leichtfried & Füreder (2017a) have also shown that different discharge regimes due to landscape properties in the catchment of two Sri Lankan streams, affected trophic interactions of fish assemblages.

Habitat occupation by stream fish is known to be governed by combination of physical factors such as flow velocity, depth and substrate type (Arunachalam, Nair, Vijverberg & Kortmulder, 1997) that produce a mosaic of microhabitats favouring diverse assemblage structure (Gorman & Karr, 1978). Dietary structure of stream fish assemblages in relation to habitat heterogeneity is therefore important to be investigated. Also, habitat heterogeneity coupled with longitudinal gradient in streams of different climatic zones with contrasting terrains is an important piece of knowledge to understand