Morphological variation in Rasbora daniconius (Teleostei: Cyprinidae) among selected geographic populations

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Intra-specific morphological variation and differentiation among eight populations of the common freshwater fish Rasbora daniconius (Cyprinidae) were investigated. Significant heterogeneity and differentiation was found among some of the populations studied indicating limited geographic variation, as suggested by relatively large overlap in canonical scores among most of the samples. However, two samples could be separated convincingly from the rest; Dediyagala, and Pattiyapola. Cluster inter-location based on the pair-wise morphological distinctiveness identified Dediyagala analysis population as the most distinct one from all others. Maavil Aaru population formed a distinct branch as well. The group of fish (L9) having close resemblance to R. daniconius but with a slightly different lateral stripe also separated. The present results show that R. daniconius in Sri Lanka is not phenotypically homogenous. The absence of differences between population samples that experience highly limited present-day interchange may be partly explained by colonization history.