

A COMPARATIVE STUDY OF THE FOOD AND
FEEDING HABITS OF PUNTIUS BIMACULATUS
AND P. TITTEYA (PISCES, CYPRINIDAE)

by

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SUMMARY

The food and feeding habits of two species of barbs, *Puntius bimaculatus* (Bleeker) and *P. titteya* Deraniyagala were studied. These two species co-occur in creeks leading to small streams at the foot-hills in most hilly areas of the country and are endemic to Sri Lanka. *P. bimaculatus* was found to be predominantly an algal-detrital feeder while the other was more omnivorous in its feeding habits. There were significant differences in the diet of different size groups of any one species and the similarity in the diet of the two species was found to increase with increasing size. All size groups of both species are thought to exhibit selectivity in their diet. *P. bimaculatus* was found to have a relatively longer gut and this is correlated to its diet; also the mean relative length of the gut was found to increase with increasing length. The gill rakers and pharyngeal teeth may also aid in dealing with ingested food material in *Puntius bimaculatus*.

INTRODUCTION

This is the second of a series of papers dealing with the biology and behaviour of the members of the sub-family Cyprininae found in Sri Lanka, (DE SILVA & KORTMULDER, 1977; KORTMULDER, FELDBRUGGE & DE SILVA, in prep.). The importance and need for such studies have been stressed earlier (FERNANDO, 1971; DE SILVA & KORTMULDER, 1977). In this paper the food and feeding habits of *Puntius bimaculatus* (Bleeker) and *Puntius titteya* Deraniyagala, commonly known as the two-spotted and the crimson carplet respectively, are presented. Both these barbs are also endemic to Sri Lanka; their distribution and specific characters have been dealt with by DERANIYAGALA (1952) and MUNRO (1955).

MATERIALS AND METHODS

Samples of the two species of *Puntius* were collected from pools (1.5 × 1.0 m) along three small creeks leading to small streams at the foot hills in the Sabaragamuwa and Central provinces of the Island. All collections were made between 1000-1400 hrs during the months of February, March and April 1977, using a cast net of 0.75 cm stretched mesh and/or a hand net. The nature of the habitat was