

ON SOME EPIZOIC ROTIFERS FROM WEST BENGAL

Very little is known about the epizoic nature of the rotifers though Pennak (1953) pointed that free-living rotifers live as commensals or epizoids on a wide variety of freshwater invertebrates, especially on insects and crustaceans. During the course of my studies on the rotifer fauna of West Bengal, I came across certain epizoic associations between rotifers and other organisms which are described in this note.

The following species were found to show epizoic association :

1. *Brachionus rubens* Ehrenberg, 1838 ; Ahlstrom (1940) stated that this species occurred both free-swimming as well as a commensal on the cladoceran *Daphnia*. He however, did not specify any species of the above mentioned genus. Nayar (1968) reported a large number of individuals of *B. rubens* attached to the body of the fairy shrimp, *Brachinella kugenumaensis* (Ishikawa) [Crustacea : Branchiopoda : Anostraca]. Moreover, Mohan and Rao (1976) found it attached to dragonfly nymphs. My observations on this rotifer indicate that whereas it lived mostly as free-swimming ($85 \pm 5\%$), occasionally it also occurred in epizoic association with a number of cladoceran taxa i.e., *Daphnia carinata* King, *Moina micrura dubia* (Guerne et Richard), *Diaphanosoma excisum* Sars, and *Diaphanosoma sarsii* Richard. The degree of commensalistic association of this rotifer with the first two cladoceran taxa was high ($8 \pm 2\%$ and $5 \pm 3\%$ respectively). No other species of cladocerans seemed to be

involved in this association though 37 taxa spread over several genera were recorded in the present material.

2. *Brachionus caudatus* Borris and Daday, 1894 : This species represents a planktonic form but it has also been noticed to be attached to the damselfly nymphs by Mohan & Rao (1976). I have also observed three individuals of this species attached to a dragonfly nymph.

3. *Brachionus sessilis* Varga, 1951 : This species was described by Varga (1951) as an epizoic form on the cladoceran *Diaphanosoma brachyurum* (Lieven). Recently, Chengalath *et al.*, (1973) found that this species was epizoic on *Diaphanosoma excisum* Sars in Pavatkulam lake, Sri Lanka. Though very rare in the present material, my observations indicate it to be epizoic on *Diaphanosoma excisum* Sars and *Diaphanosoma sarsii* Richard. I agree with Chengalath *et al.*, (*loc. cit.*) that the epizoic association of this species seemed to be specific to the genus *Diaphanosoma*.

4. *Lepadella ovalis* (Muller, 1786) : *L. ovalis* is common in weedy lakes and ponds all over the world (Voigt, 1957, Kutikova, 1970). In this material it was also collected from some open water habitats and in one instance was also noticed to be attached with the help of its toes to the legs of damselfly nymph. The present example needs further confirmation before it could be accepted as an instance of epizoic association.

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