

MICROPALAEONTOLOGY NOTEBOOK

The habitat of the foraminifer *Paratrochammina* (*Lepidoparatrochammina*) *haynesi*

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INTRODUCTION

Trochammina haynesi Atkinson, 1969, the type species of *Paratrochammina* (*Lepidoparatrochammina*) *haynesi* (Atkinson), was described from the holdfasts of *Laminaria* from the shallow sublittoral zone (18.3m) of Cardigan Bay, Wales. After collection, the algae were placed in a bucket in a solution of one part formalin to ten parts seawater and agitated to free the foraminifera. Some 16 specimens of *P. (L.) haynesi* were recovered out of a total assemblage for two samples of 2787 individuals. Because of the method of preparation, nothing could be said of the mode of life other than that all the foraminifera were associated with algae. Brönnimann and Whittaker (1986) also recorded this species from off Plymouth.

In their remarks on the subgenus *Paratrochammina* (*Lepidoparatrochammina*), Brönnimann and Whittaker (1986) suggested that the form of the test is 'better adapted to fixation than the higher spired *Paratrochammina s.s.*'.

NEW OBSERVATIONS

In the course of a broader study of the Hamble estuary, a tributary of Southampton Water, we collected sediment samples from the intertidal and subtidal areas. These were preserved in alcohol, stained with rose Bengal, and washed on a 63µm sieve. The foraminifera were concentrated by flotation using trichloroethylene.

One coarse grained sandy gravel from the margin of the channel contained an abundance of rose Bengal stained (living) *P. (L.) haynesi* in the flotation. These formed 53% of the living and 6% of the dead assemblage >63µm. However, examination of the coarse material in the sediment fraction revealed that this species lives in sheltered microhabitats. For example, it has been observed on the surface of a *Littorina* shell which was severely pitted by endolithic algae and criss-crossed by hydroid stems (Fig. 1, 2), in the marginal crenulations of *Cerastoderma* and on a quartz pebble. In each case, some individuals are close to hydroid tubes but others are in hollows away from hydroids. It is believed that the mode of attachment is clinging as only stained individuals have been observed *in situ*. The stained loose individuals in the flotation were probably dislodged from the substrate during sample preparation. Fig. 3 is an individual detached from the substrate showing the umbilical surface and attachment material.

All the shells and pebbles which yielded individuals are >1cm in size. No pebbles or shell debris <1cm in size yielded any specimens. It is probable that the smaller particles are more frequently disturbed during storms so the larger substrates present the most stable conditions over a period of time.

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REFERENCES

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