

**THE INFESTATION OF MYTILUS EDULIS LINNAEUS BY POLYDORA
CILIATA (JOHNSTON) IN THE CONWY ESTUARY, NORTH WALES**

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The incidence of the shell-boring parasite *Polydora ciliata* in *Mytilus edulis* from the Conwy estuary, North Wales is described. Amongst mussels >40 mm in shell length both the occurrence and abundance of *P. ciliata* increased steeply with host size. Infestation was highest amongst mussels near the mouth of the estuary where around 60–65% of the population was parasitized; no systematic relationship between the incidence of *P. ciliata* and tidal elevation was observed. Mussel condition was negatively correlated with the degree of infestation. Moderately and heavily infested mussels, however, never accounted for more than ca. 10% of this population and the overall detrimental effects of *P. ciliata* on growth and production is thus probably quite small. Whilst heavily infested mussels were evidently more vulnerable to predation, the shore crab, *Carcinus maenas*, selected smaller, non-infested mussels whenever these were available. No obvious relationships were found between the presence of *P. ciliata* and the incidence of either pearls or pea crabs.

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