Effects of weight and age on Cadmium and Lead levels in foot, gills and the rest of soft tissue of Mussel *Mytilus galloprovincialis*

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Natural levels of Cd and Pb in foot, gills and the rest of soft tissue were analyzed in ıussel *Mytilus galloprovincialis*, collected from unpolluted shelf breeding area ıistrina in the Bay of Mali Ston (eastern middle Adriatic). Three different age groups ⁄ere used (A, 1.0; B 1.5; C, 2.0 years).

The aim of this study was to establish the distribution of these metals between foot, ills and the rest of soft tissue as affected by the weight and age of organisms.

Cadmium concentration in foot of mussel from the natural environment was ›und to decrease with the increase of this organ mass (Fig. 1).

This was observed for all three ge groups (A, B, C), particularly ›r the youngest one. In contrast › the mass, age does not affect ıdmium concentration in mus-ıl foot.

The effect of foot mass on lead ›ncentration is more significant ıan in Cd (Fig.1). Pb concen-ations is decreased with greater ›ot mass in all age groups, ırticularly in age group A.

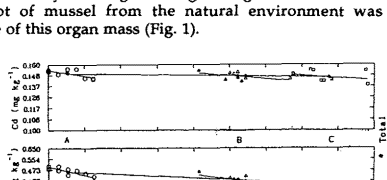

Fig.1. Log-log relation between metal concentration and foot wet weight

Apart from the tissue mass, lead concentration in foot (in contrast to cadmium) is ıe function of mussel age.

As distinct from foot, Cd ›ncentration in gills is gher if their mass is greater ig. 2). This was observed for l three age groups, ırticularly for the oldest one :) Cd concentration in gills ghtly increases with mussel ıe.

Gill mass increase effect on › gills concentration is ıilar to that on Cd gills ncentration (Fig.2). Lead ›ncentrations are also gnificantly affected by ıssel age.

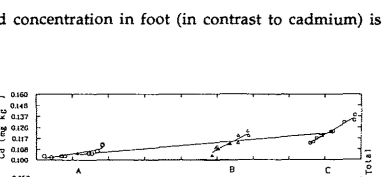

Fig.2. Log-log relation between metal concentration and gills wet weight

In contrast to foot and gills, in hich the mass considerably ects cadmium and lead levels, ı rest of soft tissue does not at l affect its Cd and Pb ncentrations (Fig. 3).

Cd concentration is very ghtly reduced and that of lead ry slightly increased with ıssel age.

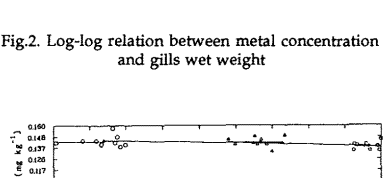

Fig.3. Log-log relation between metal concentration and the rest of soft tissue weight

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