

MORPHOLOGICAL PLASTICITY IN THE LAOPHONTIDAE (COPEPODA: HARPACTICOIDA): ADAPTATIONS TO DEAD CORAL SUBSTRATES (FROM THE COAST OF KENYA)

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Morphological adaptations to the habitat are clearly shown in the different habitus shapes present in the family of Laophontidae. By developing different body shapes laophontids were able to explore a wide range of habitats. It is clear that the difficulties in unraveling the relationships is a consequence of this morphological plasticity.

Copepod communities associated with dead coral substrates are studied along the Kenyan coast. A wide range of substrates have been sampled, ranging from coral sand, fine coral gravel, coral rubble up to large coral fragments. Until now, within the harpacticoid family Laophontidae 37 species were found of which 23 are new to science. Several among them will be designated to new genera.

Three new Kenyan species are being placed in a new genus. The new genus is characterised by the depressed and very broadened body shape. This dorsoventral flattening is assumed to be an adaptation to live on the coral fragments in an environment with strong currents. Another five new species, collected in the Indian Ocean (Red Sea, Andaman Islands) and the western Pacific Ocean (Papua New Guinea, Solomon Islands) are being placed in the new genus as well. All specimens were recovered from dead coral substrates, suggesting a close affinity with this substrate.

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