



Conceptual model for a terrestrially influenced tropical karst subterranean estuary microbial loop. Dissolved organic carbon (DOC) and methane (CH₄) produced from soil organic matter degradation within the shallow and anoxic saturated zone of the carbonate rock-matrix are transported into hypoxic cave conduits, where methane oxidizing bacteria (MOB) and heterotrophic bacteria (HEB) consume these reduced forms of organic carbon. Bacterial biomass is assimilated by filter-feeding crustaceans that are, in turn, preyed upon by higher trophic levels of the food web in this anchialine ecosystem.

