COMMUNITY ASSEMBLY: THE FORAMINIFERAL COMMUNITY IN INTRODUCED MANGROVES ON MOOREA, FRENCH POLYNESIA

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The coastal mangroves (*Rhizophora stylosa*) on Moorea, French Polynesia, harbor a community of foraminifera that is distinct from other foraminiferal communities on the island. Yet the mangroves were introduced from New Caledonia only in 1930 and again in 1935 at Vaianahe Bay; they have spread from there to many other sites around the island. The foraminifera inhabiting the muddy substrata upon which the mangroves grow cluster uniquely among themselves when compared to other habitats occupied by foraminifera. Thus, the introduction of mangroves has allowed the development of a new community of foraminifera.

The mangrove foraminiferal community is dominated by species of *Ammonia, Anomalinoides, Elphidium, Quinqueloculina,* and *Rosalina*, and include other subsidiary forms. This assemblage clusters most closely with foraminifera found in muddy substrata underlying *Hibiscus* trees that also overgrow the marine nearshore. They are also similar to foraminifera living in marshes of the salt grass *Paspalum,* which the mangroves commonly colonize.

The unique foraminiferal community in the mangroves appears not to have been introduced with the initial tree introductions, as it is also found in other newer stands that were colonized by floating propagules. Rather, the foraminiferal community appears to have been assembled from species already living in other, somewhat similar habitats on Moorea. Mangroves invade and replace both *Paspalum* marshes and *Hibiscus* stands. Some foraminiferal species from these environments were able to occupy the new mangrove habitat. This indicates that communities have no unity, but are simply assemblages of species that tolerate the same environmental and biological environments, at least among foraminifera.