# Marine biotechnology and its role in aquaculture

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**Abstract**

The sea is one of the potential for human food production, which in recent years has led to marine aquaculture, especially fish aquaculture using cage culture methods. Marine biotechnology is a relatively new field using products and processes derived from marine organisms. High production capacity, high self-purification in marine environments, low maintenance costs, for fish production are the benefits of fish production techniques in marine cage culture systems. In this paper, we try to review the application of biotechnology, including the production of kits for detecting fish diseases in cage culture methods, the cross breeding of different species and the production of anti-fouling against invasive bio fouling.

**Keywords**: Marine Biotechnology, cage culture, marine disease detection kits, Antifoulings