Phytoplankton Community Occuring in the Southern Coast of Myanmar Especially Focusing on Potentially Harmful Dinoflagellates

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Myanmar has been faced over fishing which ocean productivity and recent rapid coastal development were often led eutrophication and subsequent harmful algae bloom. Any of these issues should be primarily regarded in a view of phytoplankton, however, researches and information are lack of in the Myanmar's coast. This research was firstly carried out in prior and post rainy season at the foremost marine fisheries area.

Eutrophycation can cause of phytoplankton blooms, including the harmful dinoflagellates. This research objectives are to concern on study of eutrophycation and subsequent harmful algae blooms. As a result, this research listed around 64 diatoms and 100 dynoflagellates species. There were differs species founding the period March and May 2010. This is because of different nutrient supply in coastal area and also due to oligotrophic environment in the late dry season, prolong rainy weather during the southwest monsoon, and mix coastal and ocenic waters. High diversities of heterotrophic dinoflagellates cysts were also characteristics in Myanmar Coast. These are 21 species as potential harmful dinoflagellates species finding. Some species of dinoflagellates tolerate to temperature, especially in low temperature (15 degree celcius) and adapted to tropical environment.

Such dinoflagellates cyst also was conducted in Selangor District, west coast of Malay Peninsula. In this area was also detected the toxic dinoflagellates such as Gymnodinium catenatum and Alexandrium tamiyavanichii because this coast had already been polluted by the cockle culture and paralytic selfish poisoning. Such awareness will be applied also to Myanmar coast to avoid from harmful algae blooms like is Selangor Coast.

As a conclusion, this study record remarkable diversities of diatoms and dinoflagellates off the coast of Myeik. These diversities were largely influenced by two distinctive seasons caused by monsoon and largely supported by nutrient loads
from native rivers or oceanic water extension, which all characteristics of the Myanmar coast.