

UMS scientists find new red tide species

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KOTA KINABALU: Marine scientists from Borneo Marine Research Institute (BMRI) of Universiti Malaysia Sabah (UMS) have identified a new species of red tide in Sepanggar Bay.

Prof Datin Dr Ann Anton, who heads the harmful algal bloom (HAB) research group of researchers at BMRI, said yesterday that the scientists were studying the recent red tides in order to determine the factors which caused them and eventually to examine the ways and means of preventing the blooming of harmful alga species.

The ongoing studies include finding innovative methods of identifying the

species for early detection of the blooms, studying the ecology of the red tide species and measuring the ocean currents which help in dispersing the red tide blooms.

The red tide which began last week had caused the water to be reddish in colour due to the presence of *Cochlodinium polikrikoides*, one of the red tide causing species.

This species does not produce harmful substances (toxins), but kills fishes through asphyxiation or lack of oxygen due to the gills being clogged by the cells.

But, consumption of fish that dies as a result of oxygen deprivation caused by *C.*

polikrikoides does not cause any health hazard for humans.

However, Dr Normawaty Mohammad Noor, lecturer at BMRI, has identified another species of red tide in Sepanggar Bay, namely *Gymnodinium catenatum* which forms chains in which as many as 30 cells per chain were observed.

G. catenatum is known to produce a toxin that can kill fish. The toxin, commonly known as paralytic shellfish poison or PSP, is readily accumulated by mussels and oysters, and when affected shellfish are consumed by humans they can cause neurological and gastrointestinal problems, and in

severe condition may result in death.

PSP toxins are also produced by *Pyrodinium bahamense* var *compressum*, another red tide species commonly found in the coastal waters in the west coast of Sabah.

Meanwhile, BMRI director Prof Dr Saleem Mustafa has suggested that the relevant agencies should monitor this harmful alga – *G. catenatum* – in coastal waters of Sabah and to intensify research on the chemistry of the toxins it produced.

He also said the poison produced by *G. catenatum* could be easily accumulated by suspension feeders like mussels and oysters.