## **Coral bleaching: UMS marine scientists urge best practices**

**KOTA KINABALU:** Universiti Malaysia Sabah (UMS) marine scientists, who reported the occurrence of coral bleaching in Sepanggar Bay last week, do not suggest a knee-jerk response to coral bleaching from a management perspective. **UMS** Director of Borneo Marine Research Institute Prof Dr Saleem Mustafa said instead they urged a rational decision based on scientific facts. "It is difficult to exactly quantify (the extent of) coral bleaching which can be a subjective matter, but going by experience of diving in the area it is certainly not as severe as reported for west Malaysia," he told Bernama, here yesterday. On July 29, he was quoted as saying that UMS scientists had discovered widespread coral bleaching in Sepanggar Bay, off Sabah waters, and such activities deserved serious attention due to its implications on marine biodiversity and coral reef fisheries in the state's waters. Dr Saleem said in Sabah, bleaching seemed to have started in recent months and three scientists — Aw Soo Ling, Muhd Ali and Dr Abentin Estim, who

detected it, were examining the coral bleaching problem in more detail.

raised the possibility of an increase in pathogen concentration in the coastal waters linked to climate change. "If some pathogens are indeed taking advantage of the climate change, their effects on ocean ecosystem by attacking corals or their photosynthetic symbionts called zooxanthellae, remains to be scientifically confirmed. "This is yet another factor to be considered in addition to the release of zooxanthellae from corals due to warming of the sea water. It is the loss of zooxanthellae that causes corals to bleach," he said. Dr Saleem said UMS scientists had suggested long-terms measures to build resilience in coral reefecosystem in the earlier report. "It is time that measures for adaptation to climate change for managing our marine resources are elaborated and implemented. Such adaptations need to be incorporated in managing marine fisheries and aquaculture, conservation of mangroves and seagrasses, and in fact, in the comprehensive coastal zone," he added. -Bernama

"Of course, all possible efforts should be made to reduce stress to corals during the bleaching process by following universally accepted 'best practices' while diving.

"These include careful navigation to avoid contact with the corals, preventing oil and gas spill from boat engine, using buoys, rather than anchors wherever possible, avoiding contact of the body and diving gear with the corals," he said.

Dr Saleem said although control on fishing activity reduced stress, it was hard to achieve beyond the protected areas.

He said underwater nature

tourism, which is important in Sabah, was aimed at appreciating and admiring the marine biodiversity that promoted conservation.

However, he said: "Restrictions on diving can be placed if it contributes to bleaching or is a setback to recovery of corals from bleaching, and this requires scientific evidence and experience," he said. He said recent observations