

Proposal for update of *Cochlodinium* website

1. Background

In the CEARAC Medium Term Strategy for Marine Biodiversity Conservation (hereafter, CEARAC BIO MTS) developed in 2019, plankton species related to aquaculture and fisheries is selected as one of the high priority topics for the future CEARAC's marine biodiversity project. In recent years, fishery damages caused by red tides and/or Harmful Algal Blooms are reported in the NOWPAP member states regularly. Not only for biodiversity conservation but also for sustainable fisheries in the NOWPAP region, sharing information on causative species of fishery damages is important.

Cochlodinium polykrikoides is well-known red tide causative species and caused mass mortality of fish in the NOWPAP member states. Therefore, the CEARAC Secretariat developed *Cochlodinium* website in 2005 with support of experts for sharing information on *Cochlodinium polykrikoides* among the NOWPAP member states and with other regions. However, for the past 10 years, updating of the contents of website was stopped.

2. Objective

Objective of this activity is to update *Cochlodinium* website to add the latest information on *Cochlodinium polykrikoides* in the NOWPAP member states. In addition, new target species which cause huge damage to fisheries in the NOWPAP member states in recent years will be selected, and a new website on selected new target species will be developed.

3. Tasks

3.1 Collecting and updating the latest information on *Cochlodinium polykrikoides* in the NOWPAP region

The last update of the website was in 2010. CEARAC Secretariat will ask experts of the member states to collect the latest information on *Cochlodinium polykrikoides* in each member state. The collected information will be updated to the website.

3.2 Selection of new potential target species and development of a new website

In recent years, fishery damage caused by *Cochlodinium polykrikoides* is in a decreasing trend in Japan and Korea. Effective and efficient monitoring contributes to reduce fishery damage by *Cochlodinium polykrikoides*. However, in Japan, new causative species such as *Karenia mikimotoi* and *Chattonella antiqua* cause huge fishery damage. Based on information from the NOWPAP member states and scientific papers, new target species will be selected. CEARAC Secretariat will ask experts to collect information on new target species and develop a new website using provided information.

4. Expected outputs

It is expected to enhance the contents of the websites and CEARAC' HAB activities as well.

CEARAC has kept communication with PICES's HAB group (S-HAB) in the past decade. Through this activity, CEARAC would like to strengthen cooperation with PICES.

5. Budget

Tasks	Budget (USD)
- Collecting information on <i>Cochlodinium polykrikoides</i> in the NOWPAP member states - Collecting information on new targeted species in the NOWPAP member states	3,000
- Updating the Cochlodinium website - Development of a new website on the newly selected species	3,000
- Updating a website	3,000
Total	9,000

6. Schedule

Year	Tasks	Main Body
2021	Aug. 18 th CEARAC FPM Approval of the draft workplan	CEARAC FPs and CEARAC Secretariat
	Winter 24 th NOWPAP IGM Approval of Workplan	NOWPAP National FPs
2022	Spring 19 th CEARAC FPM Approval of implementation plan Selection of new targeted species	CEARAC FPs and CEARAC Secretariat
	Q2-Q4 Collecting information on <i>Cochlodinium polykrikoides</i> and new targeted species in the NOWPAP member states	Experts and CEARAC Secretariat
2023	Updating the Coclodinium website Developing new site on the selected species	CEARAC Secretariat