



# CYANOCOST – ES 1105 Action

Cyanobacterial blooms and toxins in water resources:  
Occurrence, impacts and management.

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## Short Term Scientific Mission (STSM)

### BMAA accumulation by blue mussel fed with cyanobacteria from the Baltic Sea

#### Researcher



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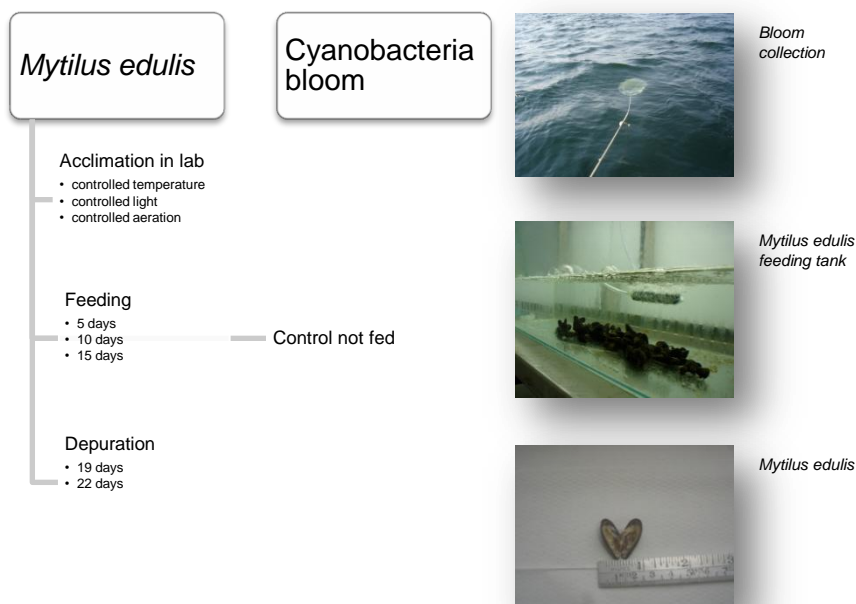
#### Objectives

This work aimed at studying the kinetic of BMAA accumulation and detoxification in blue mussel  
*Mytilus edulis* fed with Baltic Sea cyanobacteria-blooming species.

#### Host Organization

Department of Ecology, Environment  
and Plant Sciences  
Stockholm University  
Sweden  
Host: Ulla Rasmussen

#### Methodology



All the experiments with animals were performed in compliance with the Directive 2010/63 of the European Parliament and of the Council of 22 September 2010.

#### Results

Optical microscope analysis revealed the bloom to be composed mostly by *Aphanizomenon* sp., *Anabaena* sp., and *Nodularia* sp. Parameters such as water temperature and dissolved O<sub>2</sub> did not vary throughout the study. Mussel mortality or abnormal behaviour was not registered during the experiment.

Cyanobacteria bloom composition:

- a) *Nodularia* sp. and *Aphanizomenon* sp.
- b) *Anabaena* sp.
- c) *Aphanizomenon* sp.

#### Highlights

This experiment, under controlled laboratory conditions, will enable quantifying rates of BMAA accumulation and depuration in a filter-feeder organism.



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