f/2 medium with soil extract

Roscoff Culture Collection

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ABSTRACT

Medium to grow phytoplankton species in particular dinoflagellates which often require soil extract.

BEFORE STARTING

Please refer to our general recommendations to grow cultures:

https://www.protocols.io/private/A48906DC1374AD6281495CB86A8F092F

Prepare f/2 medium

1. Filter 1L of old seawater of at least two months on prefilter and 0.2 µm filter
2. Heat seawater during 10/20 min at 100°C (pasteurisation)
3. Let the water cool down
4. Under laminar flow hood, add 25 mL of Guillard’s (f/2) Marine Water Enrichment Solution (Sigma-Aldrich G9903)
5. Filter the medium on 0,2 µm

Guillard’s (F/2) Marine Water Enrichment Solution
by Sigma – Aldrich
Catalog #: G0154-500ML

1.2 See: https://ncma.bigelow.org/media/wysiwyg/Algal_recipes/NCMA_algal_medium_f_2_1.pdf

Add soil extract

1. Sample 10 g of dry soil from a place that does not contain any pesticide nor pollutant and where you can be sure to be able to come back in

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2.1 Add the 10 g soil to 400ml of milliQ water.

2.2 Boil during 1 hour.

2.3 Filter on 0.2 µm or first through 0.8/0.4 µm and then through 0.2µm in order not to clog the filter.

2.4 Aliquot and freeze.

2.5 Add 30 à 50ml of soil extract per 1 L of medium.