COLLECTION STANDARD OPERATING PROCEDURE

Zooplankton

1 Sample collection

- Zooplankton is collected using a double WP2 plankton net.
- Each hoop is equipped with a WP2 net with 0.25 m^2 aperture and 200 µm mesh size (Fig. 1)
- This double WP2 plankton net allows duplicate samples in one tow.

Figure 1 Zooplankton collection using WP2 plankton net

- The net is towed vertically from 200 m depth to surface at the NEREA_CAPRI station and from 50 m depth to surface at the NEREA_MC station, while it is towed obliquely from 15 m depth to surface at the NEREA_SARNO station
- A mechanic flux meter is used to calculate the water passed through the net
- The sample is collected in a 500 mL plexiglas filtering cod-end (Fig. 2)
- The sample is then disposed into clean plastic containers (500 ml) (Fig. 2)

Figure 2 Transfer of samples into clean plastics containers

2 SAMPLE PROCESSING

Sample processing is done as soon as possible.

Two samples are collected: one community metabarcoding, metagenomics and metatrascriptomics, another for Reference Library and qualitative, quantitative analysis

For community meta B/G/T:

- The sample is passed through 2000 µm sieve (Fig.3)
- The pellet is split into three subsamples
- Each subsample is disposed into 2 ml cryovials
- Cryovials are immediately frozen in liquid nitrogen on board and later stored at -80°C

Figure 3 Sample passed through 2000 µm sieve

For Reference Library construction, and quali-quantitative analysis:

- The net sample is split in two subsamples each of 250 ml
- Each subsample is disposed into clean plastic containers
- 95% Ethanol is poured into each container
- and preserved in 95% ethanol