Phytoplankton community in Utö, northern Baltic proper 5.7.2018

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Phytoplankton community in Utö is dominated by the cyanobacteria *Aphanizomenon flos-aquae* and *Dolichospermum* sp., dinoflagellates *Dinophysis acuminata* and *Heterocapsa triquetra*, endosymbiontic ciliate *Mesodinium rubrum*, and nanoflagellates including e.g. *Cymbomonas tetramitiformis*, *Pyramimonas* sp., cryptophytes and euglenophytes (Fig. 1).

Surface temperature is 12.8°C and chl *a* concentration 4.8 µg/l, based on Alg@line FerryBox data collected near Utö from the route of Silja Serenade.

Data sources

Phytoplankton community is observed daily using the Imaging FlowCytoBot (IFCB) owned by the SYKE Marine Research Centre. IFCB is situated in the Utö Atmospheric and Marine Research Station of the Finnish Meteorological Institute. Utö Island (59° 46'50N, 21° 22'23E) is located at the outermost edge of the Archipelago Sea, facing the Baltic proper (Fig. 2).

IFCB, Utö Atmospheric and Marine Research Station, and the Alg@line FerryBox network are parts of the Finnish Marine Research Infrastructure FINMARI (<u>https://www.finmari-infrastructure.fi/</u>).

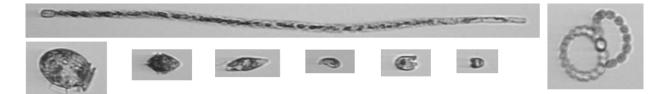


Fig. 1. Selected phytoplankton images taken by the Imaging FlowCytoBot (IFCB) on 4.7.2018. Images from left to right: top row: *Aphanizomenon flos-aquae*, *Dolichospermum* sp.; bottom row: *Dinophysis acuminata*, Heterocapsa triquetra, cf. *Eutreptiella* sp., Cryptomonadales sp., *Cymbomonas tetramitiformis, and Pyramimonas* sp.

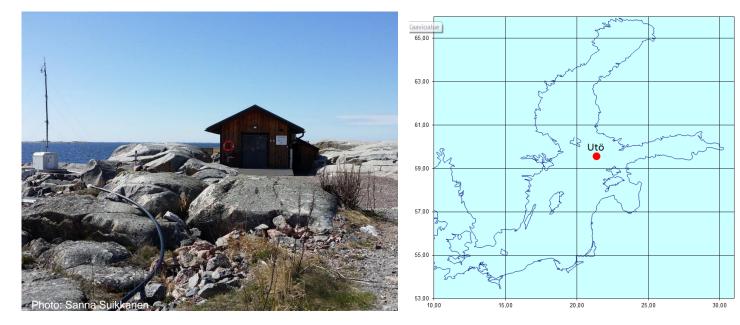


Fig. 2. SYKE's Imaging FlowCytoBot (IFCB) is situated in the Utö Atmospheric and Marine Research Station of the Finnish Meteorological Institute (left, photo: Sanna Suikkanen). Utö is located at the outermost edge of the Archipelago Sea, facing the Baltic proper (right).