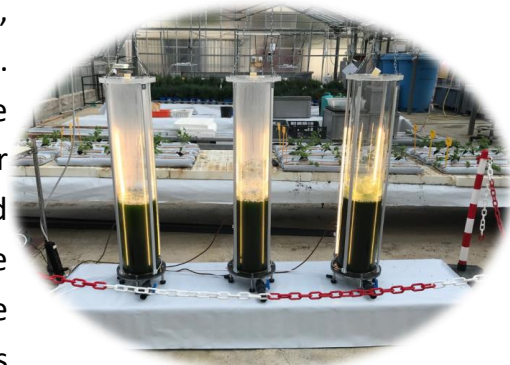


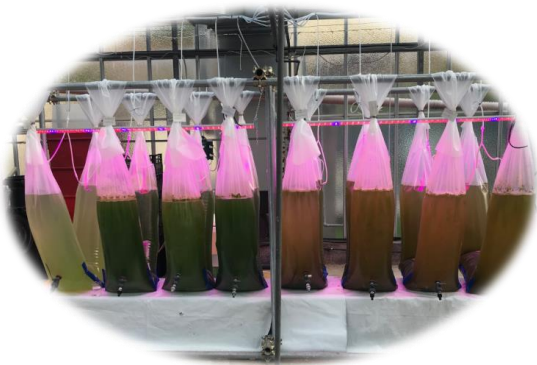
NEWSLETTER

SIMTAP in Pisa

Five microalgal strains, collected during 2019 from nearby lake areas, where agricultural runoff flow, have been later isolated and described. Microalgae are under investigation as both candidate organisms to the purification of waste water from soilless crops and feeding source for detritivorous filter feeders organisms (DFFOs). The strains identified within the *Chlorella sorokiniana* clade and named with the initials of the site of origin were: FB, Idr, CL_Sc, and CL_Ch. A new native *Chlorella*-like microalgal strain named SEC_LI_ChL_1 tolerant inorganic contaminants was also investigated.



All microalgal strains were kept in purity and sterility in laboratories, then they were grown in greenhouse in 2L bottles for experiments and in 20 L photobioreactors to allow adequate volume / biomass to inoculate the large 100 L bag photobioreactors. The CL_Ch and Sc strains were found to be unsuitable for developing in an exhausted solution of soilless cultures at a salinity level of 50mM with a dryweight biomass of 0.5 g/L in 4 weeks, while the SEC_LI_ChL_1 and Idr were the most suitable strain, respectively, in the spring-summer and in autumn-winter. The native microalgal SEC_LI_ChL_1 and the native Idr are very interesting strain as 2.5 – 3 g/L and 2 – 2.5 g/L dry weight biomass, respectively obtained in 4 weeks.



Dissemination activities

Webinar: Acquaponica sostenibile. University of Pisa; March 18, 2021.
<https://www.youtube.com/watch?v=vNLgYCr4JGA>

Webinar: The SIMTAP project for sustainable aquaponics. University of Pisa; March 19, 2021.
<https://www.youtube.com/watch?v=vNLgYCr4JGA>

Online workshop: Integrated Multi-Trophic systems for sustainable fish and crops production. EurAgEng 2021 conference; July 7, 2021.
<https://www.youtube.com/watch?v=4gqQN3KyWIo>

Online workshop: Un mare di opportunità. University of Pisa; July 15, 2021.
https://www.youtube.com/channel/UC8-DwHoHtlJgb_iQyB_fiqQ



The SIMTAP project at the Expo2020 in Dubai!

<https://www.simtap.eu/index.php/news>

MSc Thesis

Bacci, Leonardo. Screening di microalghe per la fitodepurazione delle acque di runoff" [Microalgae screening for runoff waste water phycoremediation]. MSc thesis