

The Norwegian Culture Collection of Algae (NORCCA): Diversity and Applications

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The Norwegian Culture Collection of Algae, NORCCA, is the largest algal culture collection in the Nordic countries, with more than 2000 prokaryotic and eukaryotic microalgae strains. NORCCA gives access to an essential asset for research and industries in various fields. The available microalgae are biologically and chemically diverse and can be used for different applications, such as nutritional supplements, feed ingredients, wastewater management, and pharmaceutical or cosmetic industries.

In the past few years, NORCCA became a key player in several projects focusing on strains valorization, linking NORCCA's biological diversity, and the implemented effective and reliable high throughput screening platform, with industries in different fields of algae application. Urban wastewater bioremediation is being explored under ALGECO project. This project is funded by the Research Council of Norway, and aims to promote a green shift into the sector using filamentous green algae co-culture. Other application sectors are currently explored, such as the development of microalgae-based functional aquafeeds to improve fish health and resilience to pathogens (MICROBOOST, funded by the EEA Grants), or lipid-rich diet formulations for larvae scallops (MARBLE, Vestland Regional Research Fund).

NORCCA represents a great resource for researchers around the globe, as well as for industrially and commercial exploitation. The collection intends to keep the work on utilising the algal strains stored and is actively working on expanding the range of applications.