



## GENetic diversity exploitation for Innovative macro-ALGal biorefinery

### *Deliverable 6.1*

Faunal biodiversity datasets uploaded to European biodiversity database, e.g. through biodiversity information system for Europe

**Planned delivery date:** December 2020 (M48) extended to June 2021 (M54) (COVID)

**Actual submission date:** 30<sup>th</sup> July 2021

**Work Package:** WP6

**Work Package Leader:** Ciimar

**Deliverable Leader:** NUIG

**Version:** 1.0

**Start date of the project:** September 1<sup>st</sup>, 2017

Project co-funded by the European Commission within the Horizon 2020 Programme (2014-2020)	
Dissemination Level	
PU Public	X
CI Classified, as referred to Commission Decision 2001/844/EC	
CO Confidential, only for members of the consortium (including the Commission Services)	



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## History of revisions

<b>Version, Date</b>	<b>Summary of changes made</b>
V0.1, 01 July 2021	Brief report created Jose M. Fariñas-Franco
V0.2 30 July 2021	Brief updated Jose M. Fariñas-Franco
V1.0 30 July 2021	Final version Jose M. Fariñas-Franco

## Contributors

<b>Organisation</b>	<b>Contributor</b>	<b>contribution</b>
GMIT/NUIG	Jose M. Fariñas-Franco	Brief. Data uploading

## Summary

According to the GENIALG DoA, "Task 6.1.1 [will] Monitor biodiversity in and around the reference farms, to assess effects of this new habitat and increase of seaweed biomass, on diversity of other species, including commercial fish and unwanted invasive species." and "Task 5.1.3. Measure and monitor abiotic factors to validate models and evaluation of farm footprint: Relevant parameters such as dissolved nitrogen and phosphorus concentrations, together with turbidity, pH, temperature, current speed and current direction, will be monitored and used to validate the carrying capacity". One of the two deliverables for which NUIG was responsible was Deliverable 6.1 "Faunal biodiversity datasets uploaded to European biodiversity database, e.g. through biodiversity information system for Europe". The second deliverable, Deliverable 6.2 is the report "Interaction and impact of cultivated macroalgae and growing structures on faunal community assemblages and surrounding ecosystems"<sup>1</sup> to which Deliverable 6.1 datasets refer to.

A broad range of biotic and abiotic datasets were gathered in test farms in Ventry Harbour, Ireland (NUIG) and East Schelde (WUR/NUIG) during the course of WP6.1. The datasets included species diversity and abundance from cultivated seaweed samples, experimental, droppers, video and photo quadrat habitat surveys, and grab samples. Seagrass biomass, seagrass coverage and density metrics were also collected. Abiotic parametrisation data included temperature, salinity, current velocities and direction, turbidity, Secchi disk depth, water chemical analysis (total suspended solids, particulate organic and inorganic matter, nitrates, phosphates, and ammonia), sediment granulometry and organic matter content. For more information on methodology and interpretation of these data see Deliverable 6.2 report (Fariñas-Franco et al. 2021)<sup>1</sup> available from <https://genialproject.eu/results/deliverables/>.

These datasets were uploaded by Jose M. Fariñas-Franco to the European Marine Observation and Data Network (EMODnet) public data repository via the EMODnet <https://www.emodnet-ingestion.eu/>.

The European Marine Observation and Data Network (EMODnet) consists of more than 160 organisations. This Data Ingestion portal facilitates the sharing of marine datasets for "further processing, publishing as open data and contributing to applications for society." (<https://www.emodnet-ingestion.eu/about>).

The datasets submitted are listed in Table 1 and have been assigned to the Marine Institute Data Centre in Ireland.

Table 1 List of WP6.1 biotic and abiotic datasets uploaded to EMODnet Ingestion Portal for Deliverable 6.1

Submission identifier (UUID)	Title of dataset	Contents	Status	Last Update
5e0bf483-1e64-4078-8dbf-160f664103d3	GENIALG - WP6.1 Abiotic Dataset_Sediments	Granulometry and organic matter content from sediment samples.	Leading Data Centre assigned by Master	2021-07-19 09:56:15.925194

<sup>1</sup> Fariñas-Franco, J.M., Jansen, H., Santa maria San segundo, J., Coca Tagarro, I., Nash, S., Nielsen, D., Fort, A., Sulpice, R. (2021) Interaction and impact of cultivated macroalgae and growing structures on faunal community assemblages and surrounding ecosystems. Project GenialG - GENetic diversity exploitation for Innovative macro-ALGal biorefinery, EC Grant agreement no: 727892 (Jose M. Fariñas-Franco, Ed), Available from <https://genialproject.eu/results/deliverables/>.

Submission identifier (UUID)	Title of dataset	Contents	Status	Last Update
		Ventry Harbour test farm.		
<b>c98b3e59-2d6e-40fe-bd2f-8d4d97ed7f6d</b>	GENIALG - WP6.1 Species Dataset-Droppers	List of macroinvertebrate taxa associated with experimental dropper replicates. Ventry Harbour test farm.	Leading Data Centre assigned by Master	2021-07-16 12:10:35.547386
<b>6c69e230-e87e-4b5e-a661-8bb076bd1894</b>	GENIALG - WP6.1 Species Dataset-longlines	List of macroinvertebrate taxa found in Sacharina latissima and Alaria esculenta cultivated on longlines. Ventry Harbour test site.	Leading Data Centre assigned by Master	2021-07-14 10:08:20.491413
<b>ed9f1a72-79cf-4c4e-8dab-13fed85538dc</b>	GENIALG - WP6.1 Abiotic Dataset_Water	Datasets used for parametrisation and validation of models and evaluation of farm footprint. The dataset consists of continuous and spot sampling records of temperature, salinity (conductivity), turbidity, Secchi disk depths, irradiance (as PAR), nutrients and suspended matter content in water samples. Ventry Harbour Test Site	Leading Data Centre assigned by Master	2021-07-14 10:07:24.969692
<b>532df6f8-a5a3-4039-ac85-56a0515b0162</b>	GENIALG - WP6.1 Ventry	Species abundance and seagrass cover. Calculated from	Form part 1 submitted by Data Submitter	2021-07-30 16:30:08.774783



Submission identifier (UUID)	Title of dataset	Contents	Status	Last Update
	Photoquadrats and Video Dataset	phot quadrats and video recorded by divers along seabed transects surveyed by divers as part of GENIALG monitoring surveys. Ventry Harbour Test Site.		
<b>30e7021f-2d01-4acb-bd19-9b11a90747aa</b>	GENIALG - WP6.1 Species Dataset-Droppers-WUR	List of macroinvertebrate taxa associated with experimental dropper replicates. Collected at two test seaweed farms in The Netherlands.	Form part 1 submitted by Data Submitter	2021-07-30 16:41:25.280217

