cost
EUROPEAN COOPERATION
IN SCIENCE & TECHNOLOGY

Deliverables of each Working Group

WG 1: Ulva biology

Report on the following topics:

a. *Ulva* spp. systematics and their identification; clarifying inconsistencies afflicting traditional taxonomy.

b. *Ulva* microbiome, interactions with bacteria on and in the seaweed fronds, affecting *Ulva's* growth and development.

c. Environmental and seasonal environmental factors affecting *Ulva* strains' growth and productivity (nutrients, light, temperature, hydrodynamics, green tide events, etc.).

WG 2: Ulva in aquaculture

Report on the following topics:

a. Guideline of engineering concepts for large-scale cultivation in land and sea-based facilities.

b. Cultivation protocol of spore collection and *Ulva* preservation, seeding, cultivation and harvesting in land and sea-based facilities.

c. The potential impediments (biological, technological, economic and political) for *Ulva* biomass production.

WG 3: Ulva as food and feed

Report on the following topics:

a. *Ulva* for human consumption, animal feed and use of inedible fractions as a source of biomaterials (e.g. nutraceutical).

b. Applications and nutritional values of *Ulva* for human and animal food, including food processing.

c. A list of inedible fractions of *Ulva* as a source of biomaterials.

WG 4: Bioactive products

Report on the following topics:

a. Extractable substances from *Ulva*, utilised as food additives, in cosmetics and for various other purposes.

b. The potential of *Ulva* strains extracts as natural antioxidants, antibacterial and antiviral activities and isolation of bioactive molecules.

WG 5: Ecosystem services

Report on the following topics:

a. Providing and supporting ecosystem services of *Ulva* spp., nutrient and carbon removal and recycling.

b. Regulating services, the effect of biomass culture on reducing climate gas emissions and mitigating ocean acidification.

c. An economic cost-benefit analysis of biomass production and harvesting of *Ulva* spp. for ecosystem services.

WG 6: Social, legal and regulatory aspects

Report on the following topics:

a. Updated recommendations for policies of official bodies and NGOs about seaweed culture regarding environmental issues and conflicts of interest (e.g., on land space).
b. Government regulations on seaweed mass production and its marketing as food, feed and valuable secondary metabolites.
c. The impact of *Ulva* cultivation on various communities concerning social aspects.
d. *Ulva* as food and feed, nutrition, job creation, community income and education.

WG 7: Project coordination and dissemination

D7.1 Reports by the MC, WG
D7.2 Six workshops
D7.3 Five Training Schools (TS)
D7.4 Eight STSMs per year
D7.5 Two conferences (open to the public)
D7.6 Publications of a number of articles in scientific journals and 'grey literature' on sustainable aquaculture on seaweeds
D7.7 Creation of a web page and social network accounts (FB, Instagram, ResearchGate and Twitter).
D7.8 Two public events
D7.9 A final report titled 'ULVA – Tomorrow's Wheat of the Sea' will be the ultimate publication, including all the reviews, protocols and reports which should become 'gospel' for students, scientists, producers of *Ulva*, and other seaweed stakeholders.