



# **SARGASSUM ORIGINS**

## *Identity and origins of pelagic Sargassum*

Thierry THIBAUT, Aix-Marseille University, MIO  
(Etienne BEZAULT, University of Antilles, BOREA)

Certified project



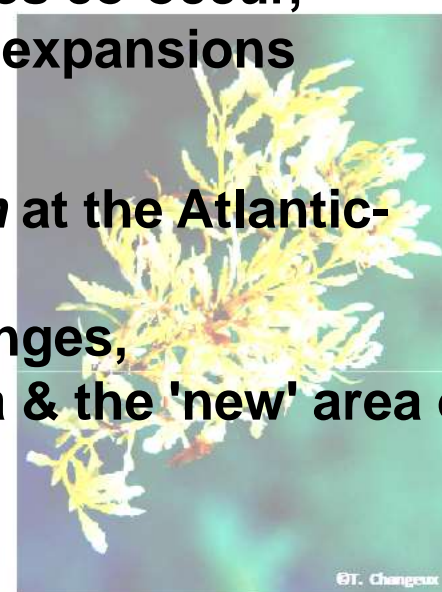
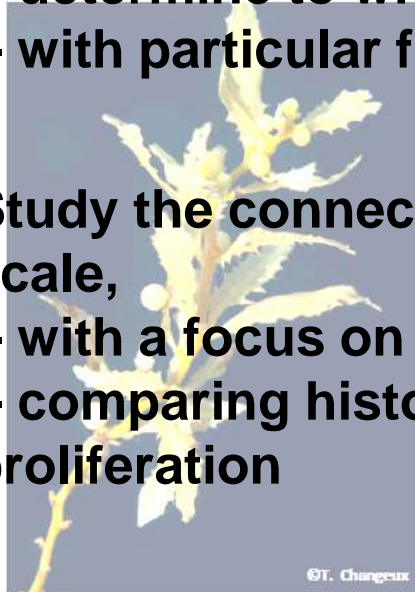
International Joint call on Sargassum, 19/10/24, CWTC Guadeloupe

# The consortium – 10 partners

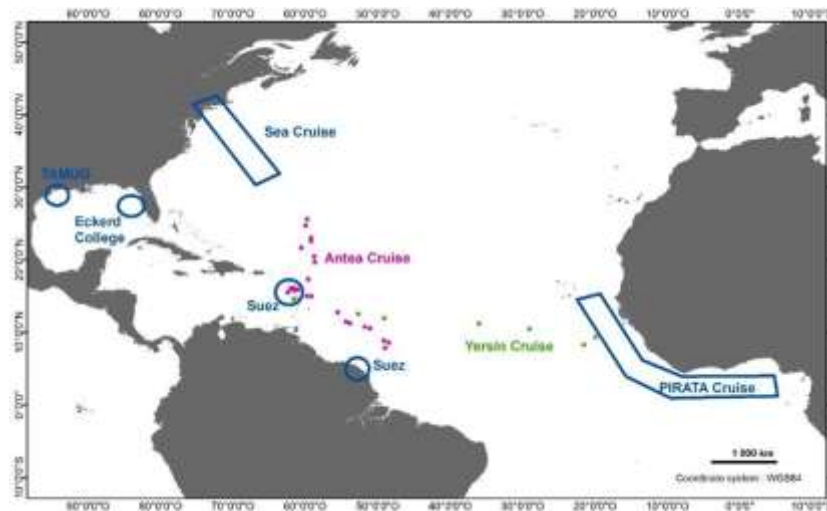
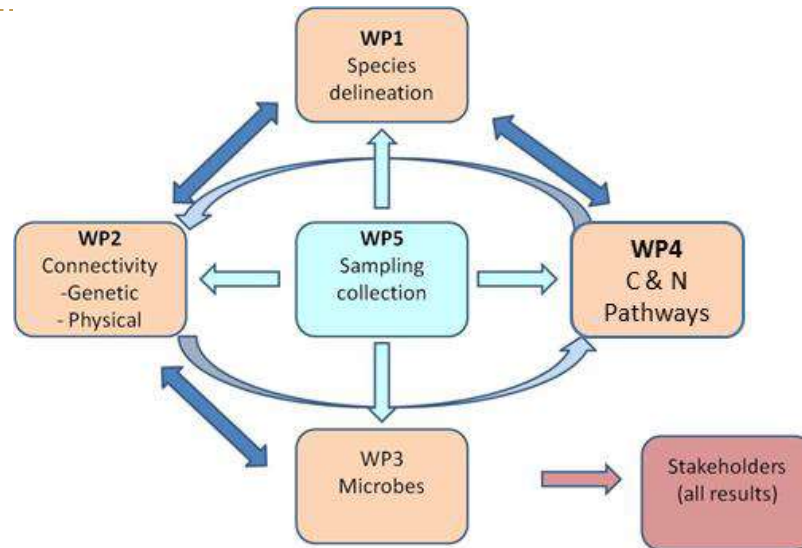
- ▶ **MIO** (Mediterranean Institute of Oceanography ) – Marseille
- ▶ **LEMAR** (Marine Environmental Science Laboratory ) – Brest
- ▶ **AD2M** (Adaptation and Diversity in Marine Environments) – Roscoff
- ▶ **ISYEB** (Institut de Systématique, Evolution, Biodiversité ) – Paris
- ▶ **LEGOS** (Lab. Etudes en Géophysique et Océanographie Spatiales ) – Toulouse
- ▶ **BOREA** (Biology of Aquatic Organisms & Ecosystems ) – Pointe-à-Pitre
  
- ▶ **Suez consulting/Safege SAS** – Cayenne – Pointe-à-Pitre – Fort-de-France – St Barthelemy
  
- ▶ **Eckerd College** – St Petersburg – Florida
- ▶ **SEA** (Sea Education Association) – Woods-Hole - Massachusetts
- ▶ **TAMUG** (Texas A&M University at Galveston) – Galveston - Texas

# Aims

- ▶ Identify the *Sargassum* species growing in North Atlantic,
  - determine to what extent the species co-occur,
  - with particular focus on the recent expansions
- ▶ Study the connectivity of *Sargassum* at the Atlantic-scale,
  - with a focus on the fluxes & exchanges,
  - comparing historical Sargasso Sea & the 'new' area of proliferation
- ▶ Trace the Carbon & Nitrogen pathway within the *Sargassum*



# Management of the project



# Research questions addressed

- ▶ How many species are involved?  
What are the evolutionary consequences for the *Sargassum* genus?
- ▶ Are the pelagic *Sargassum* (fully) clonal?
- ▶ Are North & South *Sargassum* populations connected?
- ▶ Do microbes assemblages are good tool to detect the origin of the *Sargassum* raft?
- ▶ What is the origin of C & N in *Sargassum*: oceanic or terrestrial?

# Added value/dissemination/perspective for development

- ▶ A complementary consortium has been involved in *Sargassum* studies since 2015
- ▶ ORIGINS is linked to SAVE-C & FORESEA projects
- ▶ Transfer of knowledge to private companies
- ▶ Dissemination

