# MaCuMBA

Marine Microorganisms: Cultivation Methods for Improving their Biotechnological Applications

**Project number**: 311957
**Start of the project (duration)**: August 1st, 2012 (48 months)

Collaborative Project
Seventh Framework Programme
Cooperation, KBBE

# *Deliverable D9.32*

## International Industry Seminar 1

**Organisation name of lead contractor**: AquaTT

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| **Dissemination Level** | |
| **PU** Public | **x** |
| **PP** Restricted to other programme participants (including the Commission Services) | |
| **RE** Restricted to a group specified by the consortium (including the Commission Services) | |
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## List of reviewers

| Issue | Date | Implemented by |
|---|---|---|
| v.1 | March 2015 | AquaTT |
| | | |
| | | |
| | | |

**Indicate any document related to this deliverable (report, website, ppt etc) and give file name**

*N/A*

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# Summary

**Objective(s)**:
To present and transfer potential industry relevant results from MaCuMBA to international industry stakeholders by means of face to face events.

**Rationale:**
From Year 2 onwards, annual international industry seminars (three in total) will be organised where MaCuMBA results will be presented and transferred to industry end-users. D9.32 concerns the first industry event. The MaCuMBA partnership decided that for the first event it was most effective and cost-efficient to piggyback on another, bigger event with the same target audience. The fifth International BioMarine Business Convention offered the MaCuMBA partnership the chance to organise a round table event where target outputs of the MaCuMBA project that have potential industrial relevance were presented and the practical industrial development of these outputs was discussed with participants.

**Results:**
The fifth International BioMarine Business Convention in Cascais, Portugal, on 30-31 October 2014 was chosen to co-organise the first MaCuMBA international industry event. BioMarine 2014 was an international conference where CEOs and executives from all areas of the marine sector had the opportunity to meet stakeholders in the marine bioresources sectors and professionals in the marine industry. It was a platform for research and industry alike to diversify their cross-sectoral knowledge, strengthen their existing partnerships and build new opportunities. This event was therefore an excellent opportunity for MaCuMBA to build new relationships and promote and transfer the innovative outcomes of the project to key stakeholders. The MaCuMBA round table event presented a valuable opportunity for industry and research representatives to learn more about the project first hand and discover potential synergies for future collaboration.

**Partner(s) involved in Deliverable production**:
AquaTT (P9), NIOZ (P1)

# 1. Introduction

Having an impact on the marine biotechnology sector is an important aspect of MaCuMBA as the partners work towards exploiting the results of their research on culturing the uncultured and improving the cultivation of other marine microorganisms to enable the screening of interesting organisms and their compounds.

The effective transfer of novel research discoveries in the field of marine biotechnology can greatly improve Europe's capacity to generate new commercial opportunities, so badly needed in crisis stricken Europe. In addition we also aim to strengthen the awareness of marine biotechnology results and applications across European industries, particularly for SMEs.

One activity in MaCuMBA whereby it aims to have an impact on the marine biotechnology sector is the organisation of three international industry seminars where MaCuMBA results are presented and transferred to industry end-users. D9.32 concerns the first industry event.

# 2. Methodology

The MaCuMBA partnership decided that for the first event it was most effective and cost-efficient to piggyback on another, bigger event with the same target audience. The fifth International BioMarine Business Convention offered the MaCuMBA partnership the chance to organise a round table event where target outputs of the MaCuMBA project that have potential industrial relevance were presented and the practical industrial development of these outputs was discussed with participants.

The chosen format was a round table discussion of one hour. This format was chosen to allow the organisers to gain insights from the audience into the industry relevance of MaCuMBA results in order to assess whether the partnership needs to steer the research in a different direction. The session began with a brief "elevator pitch" introduction to MaCuMBA by coordinator professor Lucas Stal. This was followed by prepared questions to the audience from the moderator Marieke Reuver (WP9 leader), which aimed to communicate a deeper understanding of MaCuMBA and how its results are useful for the industry sector. There was also time allocated to open discussions and questions from the public.

The event was widely publicised and promoted to try and get as much attention as possible.

# 3. Results

The fifth International BioMarine Business Convention (http://www.biomarine.org/cascais-2014/) in Cascais, Portugal, from 30-31 October 2014 was chosen to co-organise the MaCuMBA first international industry event. BioMarine 2014 was an international conference where CEOs and executives from all areas of the marine sector had the opportunity to meet stakeholders in the marine bioresources sectors and professionals in the marine industry. It was a platform for research

and industry alike to diversify their cross-sectoral knowledge, strengthen their existing partnerships and build new opportunities. This event was therefore an excellent opportunity for MaCuMBA to build new relationships and promote and transfer the innovative outcomes of the project to key stakeholders. The MaCuMBA round table event presented a valuable opportunity for industry and research representatives to learn more about the project first hand and discover potential synergies for future collaboration.

Professor Lucas Stal, MaCuMBA project coordinator, and Marieke Reuver, MaCuMBA work package leader for dissemination and knowledge management & transfer, coordinated the round table session. During the round table, target outputs of the MaCuMBA project that have potential industrial relevance were presented and the practical industrial development of these outputs was discussed with participants.

Feedback from Round Table Participant Bruno Ferreira, CEO Biotrend:

## Round Table Participant: Bruno Ferreira, CEO Biotrend

Bruno Ferreira, Biotrend

biotrend
Inovação e engenharia em biotecnologia

**Can you provide a brief description of your company/role in industry?**

Biotrend is a research-based company focused on the development, optimisation, de-risking and scale-up of bioprocesses for industrial biotechnology applications. Clients range from start-up companies without bioprocessing know-how and infrastructure to large chemical and pulp and paper companies exploring opportunities to create value from the use of renewable raw materials, including industrial by-products. Additionally, Biotrend invests in internal projects to create its own IP portfolio.

Biotrend has tremendous experience in dealing with naturally occurring microorganisms (including those from marine environments) and complex raw materials, namely plant-based hydrolysates, to implement fermentation-based processes, for the effective production of microbial biomass, specific chemicals or value-added products. Our experience makes Biotrend an important player and partner in the emerging marine biotechnology sector, as we can help validate processes from lab to pilot scale (from 1mL to 250L fermentation capacity in-house) and beyond, and carry out essential process intensification to improve the process robustness and productivity and reduce process costs, all crucial aspects for the process transition to commercial operation. Further, our broad experience with different and complex raw materials enables us to swiftly devise the most effective sequence of operations for the treatment of materials such as residues of marine bioproduct processing industries to enable their use as fermentation substrates.

**What attracted you to the MaCuMBA round table event?**

The MaCuMBA round table devoted to novel strategies for marine microbe cultivation met the core interest of Biotrend's activities in marine biotechnology. Biotrend was particularly interested in discussing novel strategies for the identification of promising activities from new marine microbes and improving the "hit rate". We were also curious about the project's advancement towards the potential commercial developments that could emerge from the project. Finally, it also provided a networking opportunity with potential partners or clients.

**From an industry perspective, what do you think are the most promising/exciting aspects of the research being carried out by the MaCuMBA project?**

From our experience while executing work for clients and within the Bluegenics FP7 project (www.bluegenics.eu), the screening of microorganism activities and the assessment of their commercial potential (i.e. not only detect an activity but quantify whether the performance is higher than existing molecules or platforms) are key to foreseeing translation to a commercial setting. The tools being developed in MaCuMBA can provide a significant contribution to this.

www.biotrend.biz

The MaCuMBA round table at BioMarine was the project's first real opportunity to meet and talk with an audience that will hopefully strongly benefit from the research the MaCuMBA partnership is undertaking. A major aim for this first MaCuMBA industry event was for the industry audience to get to know MaCuMBA and what the project does and what it is going to deliver in the near future so the partnership could set the first steps towards successful and optimal collaboration.

Concluding, fruitful discussions were had and better insight was gained into the kind of results the industry audience is interested in and how the MaCuMBA partnership can establish collaboration and transfer of results between the project and industry users of the project's results.

# Annex 1 – BioMarine 2014 Programme

## Wednesday 29 October 2014

15:00 - 18:00: Registration opens for delegates @ Estoril Congress Center
14:00 – 16:00: BioMarine International Clusters Association (BICA) First General Assembly (Estoril Congress Center)
**18.00 to 19:45: Welcome reception offered by the President of the Republic of Portugal at the Cascais 'Cidadel in Presence of HSH Prince Albert II of Monaco**

## Thursday 30 October 2014

**7:45: Registration opens for registered Visitors and BioMarine Delegates**

**8:00-8:45: Welcome Coffee**

**Auditorium Public plenaries:**
**8.50 – 9.00 Openings words:**
**Pierre Erwes, Chairman BioMarine**
**Tiago Pitta e Cunha, Co-Chair BioMarine 2014**
**Carlos Carreiras, President Cascais Municipality**

**9:00-10:00: "Transforming the Political Vision into a Blue Economic Asset"**
*Moderator: António Rocha Mendes, Partner Campos Ferreira, Sá Carneiro & Associados, Portugal*

- Dilek Ayhan, State Secretary, Norwegian Ministry of Trade, Industry and Fisheries
- Fausto Brito e Abreu, Regional Secretary for the Sea, Science and Technology, Government of Azores, Portugal
- HE Eng. Jaber M. Al Shehri, Deputy Minister for Fisheries, Kingdom of Saudi Arabia
- Alain Rousset, President of the Aquitaine Region, France

**Keynotes**
10:00-10:20: Manuel Pinto de Abreu, Secretary of State for the Sea, Portugal
10:20-10:40: HSH Prince Albert II of Monaco shares his vision

BPI

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10:45-11:15: Coffee BREAK

**11:15-12:00: "Fish by catches and by products as a supplier for the Biomarine Industry"**

*Moderator:* Steve Dillingham Global Director, AlaskOmega® Ingredients,Organic Technologies,USA

*Panelists:*

- Øyvind Fylling-Jensen, CEO NOFIMA, Norway
- Jean Pierre Rivery, President ID Mer, France
- Jose Apolinario, President Docapesca, Portugal
- Karl Andreas Almas, CEO, SINTEF, Norway

**12:05-12.50: "Biotechnology and Genetics in Aquaculture"**

*Moderator:* Oystein Lie, CEO Marlife, Norway

*Panelists:*

- Odd Magne Rødseth, Director EW Group, Germany
- Veronica McGuire, Executive Director, Program, Regulatory and Trade Policy Directorate, Canadian Food Inspection Agency
- Jorge Dias, CEO, Sparos, Portugal
- Claudia Baule, Coordinator, Biotechnology and Biosciences Hub, Maluana Science and Technology Park, Mozambique

12:50 - 13:55 :

**Public Lunch** Standing buffet for BioMarine Delegates and invited visitors of the public plenary sessions.

**VIP Seated Lunch** Dedicated to BioMarine 2014 Partners, Sponsors and Officials

1-to-1 Business Meetings for delegates open from 13 :00 to 18.00 pm

Visitors leave the premises and delegates enter the business convention

13:55 to 14:55 Parallel Sessions & Pitchings

**Panel Session : BioMarineTV Studio / Level 2**
**"Micro algae: the key to improving Nutrition worldwide**
*Moderator :* Pierre Erwes, CEO, BioMarine Organization Limited, Hong Kong
*Experts:* Joao Navalho, Director Allma, Portugal
Douglas McKenzie, Director, Xanthella Ltd, UK
Katerina Kousoulaki, Nutrition and Feed Technology Expert, Nofima, Norway

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**Round Table : Room A – Level 2**
**"Marine compounds for the nutraceutical and cosmetic industry"**
*Moderator :* Margarida Couto, Partner, VDA & Associados, Portugal

**Pitching sessions: Room C - Level 2**

14.00 A4F
14.10 CIIMAR
14.20 SPAROS
14.30 ALLMA
14.40 ALGA+

15:00 to 16:00 Parallel Sessions

**Panel Session : BioMarineTV Studio – Level 2**
**"How can Norway as the leading marine country, help developing and boost marine research and innovations in other parts of the world?"**
*Moderator :* Michael Whitney Managing Partner, Kincannon & Reed, UK
Experts: Karl Andreas Almas, CEO SINTEF, Norway
Øyvind Fylling-Jensen, CEO NOFIMA, Norway
Christina Abildgaard, Director, Department for Environmental Research and Marine Resources, Research Council of Norway

**Round Table : Room A- Level 2**
**"Developing use of marine by-products and discards from agriculture to nutraceutical uses"**
*Moderator:* Steve Dillingham, Global Director, AlaskOmega® Ingredients, Organic Technologies, USA

**Round Table : Room B – Level 2**
**"Untapped potential of biomolecules extracted from marine organisms"**
*Moderator:* Jean-Christophe Sergère, CEO Setubio, France

| | | |
|---|---|---|
| 16.00 to 17.00 | **Networking Coffee** | **CEO Interviews on BioMarineTV Studio** Kincannon Reed<br>16.00 SOPER<br>16.15 Research Council of Norway<br>16.30 Fermentalg<br>16.45 ID Mer |

17:00 to 18:00 Parallel Sessions

**Panel session : BioMarineTV Studio – Level 2**
**"Is vegetal diet the next generation of aquafeed?"**
*Moderator :* Pierre Erwes, Chairman BioMarine
*Experts:* Tiago Aires, Technical Manager, Soja de Portugal
Stefan Kraan, Founder, Scientific &Managing Director, Ocean Harvest Technology, Ireland
John Sweetman, Director EcoMarine Ltd, UK
Becky Timmons, Director Applications Research & Quality Assurance, Alltech, USA

**Round Table: Room A – Level 2**
**Marine Biotech: novel strategies for marine microbe cultivation**
*Moderator:* Marieke Reuver, Project Manager, AquaTT, Ireland

**Round Table : Room B – Level 2**
**"Marine Biotechnology: Start-up's strategy to attract the right investors"**
*Moderator :* Helena Vieira, Expert in Innovation and Tech Transfer in Marine Sciences, University of Lisbon

20:00 **BioMarine Gala Reception hosted by Cascais Municipality at Palacio Hotel, Estoril**
Welcome Words from Carlos Carreiras, President Cascais Municipality and
Assunção Cristas, Minister of Agriculture and the Sea, Portugal

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# Annex 2 – BioMarine 2014 Final Report

**> ROUND TABLE : MARINE BIOTECH - NOVEL STRATEGIES FOR MARINE MICROBE CULTIVATION**

*The objective of the MaCuMBA project is to uncover the untold diversity of marine microbes using cultivation-dependent strategies. Furthermore, MaCuMBA aims to improve the isolation rate and growth efficiency of marine microorganisms from conventional and extreme habitats by applying innovative methods and using automated high-throughput procedures. The session will present the industrial potential development of the project and will discuss practical development with participants.*

MaCuMBA

MODERATOR

**Marieke Reuver**
*Project Manager, AquaTT (Ireland)*

# Annex 3 – Signed Attendance List

MaCuMBA INDUSTRY SEMINAR
@ BIOMARINE2014
MaCuMBA

MARINE BIOTECH Round Table
Novel Strategies for Marine Microbe Cultivation

When: Thursday 30 October 2014, 17:00 - 18:00
Where: Room A, Level 2, Biomarine 2014

| Name | Organisation | E-mail | Do you want to stay informed of MaCuMBA outputs (Y/N) | Signature |
|---|---|---|---|---|
| HANS KLEINDAL | UNI RESEARCH | hans.kleindal@uni.no | Y | [signature] |
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| RUI PEDROSA | IPLeiria | ① RPEDROSA@IPLEIRIA.PT | Y | [signature] |

# Annex 4 – MaCuMBA advertisement