VARIETY CREATES WEALTH - (BIO)DIVERSITY AS A SOURCE OF HIGHER VALUE-ADDED PRODUCTS FROM MARINE LIVING RESOURCES

Levent Piker^{1,2}, Christian Koch^{1,2}, Peter Krost^{1,2} and Inez Linke²

- 1 CRM Coastal Research & Management, Tiessenkai 12, D-24159 Kiel, Germany
- ² oceanBASIS GmbH, Tiessenkai 12, D-24159 Kiel, Germany E-mail: lpiker@oceanbasis.de

Two decades of R&D activities in the field of marine ecology, sustainable aquaculture and marine biotechnology and one decade of marketing products originating from marine living resources have been accomplished by the sister companies CRM - Coastal Research & Management and oceanBASIS GmbH, located in Kiel, Northern Germany. This presentation gives an interim balance of these activities and what the future could hold for Marine Biotechnology in Europe from an entrepreneurial and societal perspective.

It will be discussed, how (bio-)diversity might play a key role for exploiting the potential of Marine Biotechnology on an entrepreneurial as well as on broader economic scale.

We will give some examples of own economic activities within or deriving from Marine Biotechnology. These examples include research activities in the fields of tissue engineering, wound-healing, and screening of antitumoral and anti-infectious properties, but also development, production and marketing of seaweed and shellfish from an Integrated Multitrophic Aquaculture (IMTA) facility, bioactives for the cosmetic industry, and the natural cosmetics brand 'Oceanwell'. A lot of people, mainly biologists, are propagating, that Marine Biotechnology as a concept will broadly contribute to overcome societal challenges, therefore raising high expectations. There are some supporting arguments for this point of view. However, whereas Marine Biotechnology is in a process of definition and stakeholders pave ways for it into research and policy, there is still no evidence for Marine Biotechnology becoming a relevant economic sector. Though great technological developments always comprise high risk, it would be responsible to scale down expectations a little bit and to face and to name also the risk of failure.

References

Krost P. and T. Staufenberger. 2012: Sustainable aquaculture and climate change (German), EUCC Deutschland. Küste und Meer 3:39.

Piker L. 2007. Mariculture - solution or meander (German)? EUCC Deutschland, Küste und Meer 2007: 28.

Piker L. 2010. Algae against cancer - New active components for oncology (German), GIT-Laborfachzeitschrift 9/2010, Marine Biotechnologie - Life Science: 678-680.