Towards a compilation of biological trait data for European macroalgae

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Elucidating the mechanisms that shape large-scale patterns of diversity requires not only a good estimate of the taxonomic diversity and parameters describing the physical environment, but also of biological data. The interactions of organisms with their environment and with other organisms are determined by biological traits rather than taxonomic nomenclature (Tyler *et al.*, 2012). The trait-based approach in community and macro-ecology has gained a lot of interest recently. However, even though many of these ecological important traits have been documented in the past, these are neither available in publically accessible databases nor linked to taxonomic and biogeographic databases. Collecting trait data therefore tends to be very time consuming. Here we aim to compile a matrix of traits relevant to macro-ecology and large-scale community ecology for the marine macroalgae in Europe. Traits include life history and reproductive characteristics, growth form, ecology, distribution and habitat. Because of uncertainty on species level diversity for most seaweeds, traits are documented on a genus level. The project is issued in the framework of the EMODnet Biology project to complete the biological trait information in the World Register of Marine species (WoRMS; Appeltans *et al.*, 2012) developed by the Flanders Marine Institute (VLIZ).

References

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