

fl Madeira Verde **2012**
floramac
Selvagens Açores CANARIAS

5 - 8 September Funchal | Portugal

Scientific Abstract book
program Excursion guide

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P05. New records of Macroalgae from Madeira Archipelago

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The last thorough review of marine plants of Madeira dates from 2001. Neto et al. listed a total of 359 species of algae: 64 Chlorophyta, 64 Phaeophyta and 231 Rhodophyta. The authors stated that this number was significantly lower than those recorded in the Canary Islands and slightly higher than in the Azores, concluding that the Madeira archipelago occupies an intermediate position between the Azores and the Canaries. More recent work emphasized that the seaweed species number should be somewhere in between that of the Azores and Canary Islands, pointing to a lack of consistent sampling in Madeira as a possible reason for the underestimation.

In the last decade during SCUBA diving and field trips several new records of algae could be added to the seaweed list of Madeira Archipelago and for others a range extension inside the archipelago could be established.

The newly reported species present a mixture of new arrivals and species that have previously gone unnoticed due to their morphological resemblance to other species. The latter is not surprising given the widespread mismatch between morphology and genetic diversity in organisms characterized by relatively simple morphologies. Some of the 'new arrivals' are cases of introduced species, establishing themselves in this area. Others might be expansions of distribution ranges, Madeira being now the northern limit, this potentially as a consequence of global warming.