



## SOSTENIBILITA' ECOLOGICA - SESSIONE 6 (porter)

## Seagrass meadows in the brackish ecosystem of "Oriented Natural Reserve Laghetti di Marinello" (ME)

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The Oriented Natural Reserve "Laghetti di Marinello", located in the north-eastern coast of Sicily, southern Tyrrhenian Sea, includes a highly dynamic coastal brackish system, characterized by both rapid spit accretion and erosion processes. As coastal lagoon, it is a priority habitat of community interest (Directive 92/43/ECC; Annex I, code 1150\*), whose floristic characteristics have not been exhaustively investigated yet. In fact, although seagrass species have been reported in the past, nothing is known about their distribution and interaction.

Our investigation testified that meadows of *Cymodocea nodosa* (Ucria) Asch. and *Ruppia* spp. occur in all ponds but occupying two fairly distinct vegetation belts. Moreover, the occurrence of *Halophila stipulacea* (Forssk.) Asch. in Lago Porto Vecchio has been confirmed, associated with *Cymodocea nodosa* and *Caulerpa cylindracea* Sonder. Patches of *C. cylindracea* associated with seagrasses also widely occur, except for the Lago Mergolo, where *C. cylindracea* is absent.

In conclusion, the occurrence of well-established seagrass meadows in different species associations, despite the occurrence of non-indigenous seaweeds, notably implements the ecological value of this protected environment. The need of specific valorization actions is suggested.

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