

istribution and Preliminary Evaluation of the State of the *Posidonia oceanica* Meadows on the Coasts of Alicante (Spain, Western Mediterranean)

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The studied area includes the coasts of Alicante between San Antonio Cape to south of Roig Cape.

The *P. oceanica* meadows are widely represented along this coast, and there are also several works about their distribution and state. Some of these works are focused on certain specific places (7) (8) and some others are more extensive (3). With this work we try to give more recent information about the meadows in this area, that can also be useful to show what the evolution is in the last few years.

The work in the sea was developed during last two years. It consisted of the allocation of perpendicular transects to the coast in scuba-diving with an open hydroplane from the level 0 to 20 m depth. In cliff areas, 27 m approximately can be sometimes reached.

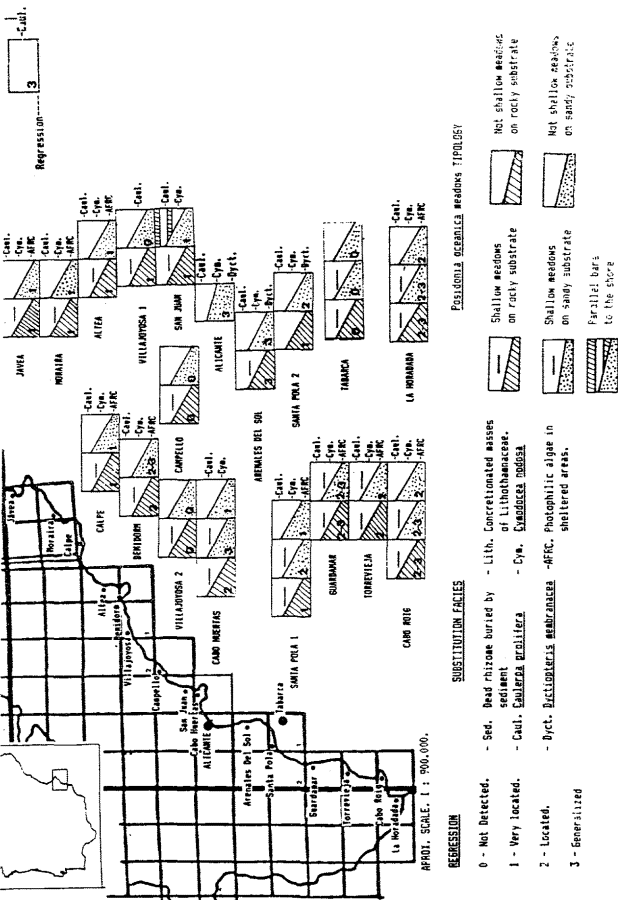
Along the coast of Alicante the meadows are broadly distributed and there are many places where this biocoenosis reaches its climax state. This agrees with localities that not only have less density of human population but also have a all industrial activity or even none. The Marine Reserve of Tabarca, Negrope-Calpe sector and south of Benidorm-Campello can be pointed out.

In general, the superior limits of the meadows start nearly in the shoreline. In this way, important *P. oceanica* recoverings can be already found in the first meters of the infralittoral zone on sandy and rocky coasts of a smooth type. These shallow zones of the meadows are the most degraded, and substitution facies corresponding to photophilic algae in sheltered areas, facies of *Ctiopteria membranacea* (4) (5), of *Caulerpa prolifera* and of *Cymodocea nodosa* are settled on them. *C. prolifera* and *P. membranacea* form very dense and large recoverings in Arenales del Sol and south of Santa Fola. Apart from these recoverings of the upper limits, these meadows are in very good conditions in deeper areas. In the plunging type cliffs this phanerogam grows from the bases of the rocky wall itself.

The places where the lower limits of the meadows are above 20 m depth are just a few. Although the coverings with mud from this depth is very common, and meadows are more deteriorated.

Except certain localities, several symptoms of alterations can be observed along the coast. Whereas in many places these alterations are local, in others they are getting quite generalized like in the Alicante-Arenales del Sol sector for example.

It is important to mention that meadows form barrier-reefs (5) in some places of this coast, although they all are in clear regression.



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