

Posidonia oceanica

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Neptune grass or Mediterranean tapeweed

Verena Pittl

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Scientific classification

Kingdom:	Plantae
Clade:	Angiosperms Monocots
Order:	Alismatales
Family:	Posidoniaceae
Genus:	Posidonia
Species:	<i>Posidonia oceanica</i>



<https://www.ilgiornaledicasoria.it/le-praterie-posidonia-oceanica-le-foreste-pluviali-del-mare-funzionano/>

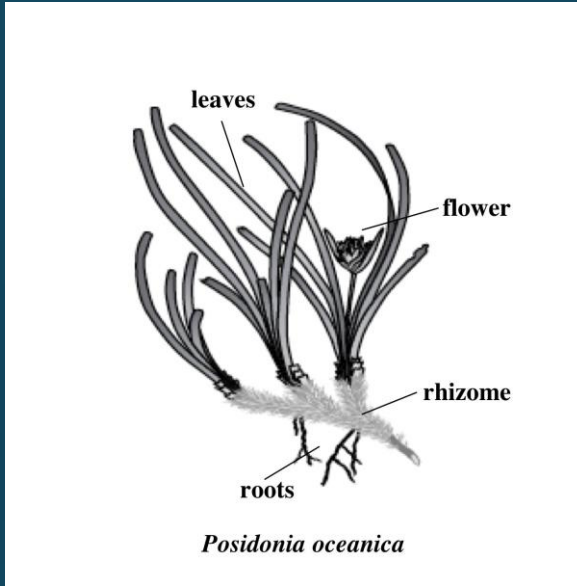
Occurrence



Description



https://www.researchgate.net/figure/Seagrass-Posidonia-oceanica_fig1_324585773



<http://crazycrishereandthere.blogspot.com/2010/06/seagrasses-much-more-than-ugly-weeds.html>



<https://medioambienteand.wordpress.com/2016/12/19/po-simed-florece-el-mediterraneo/olympus-digital-camera-25/>

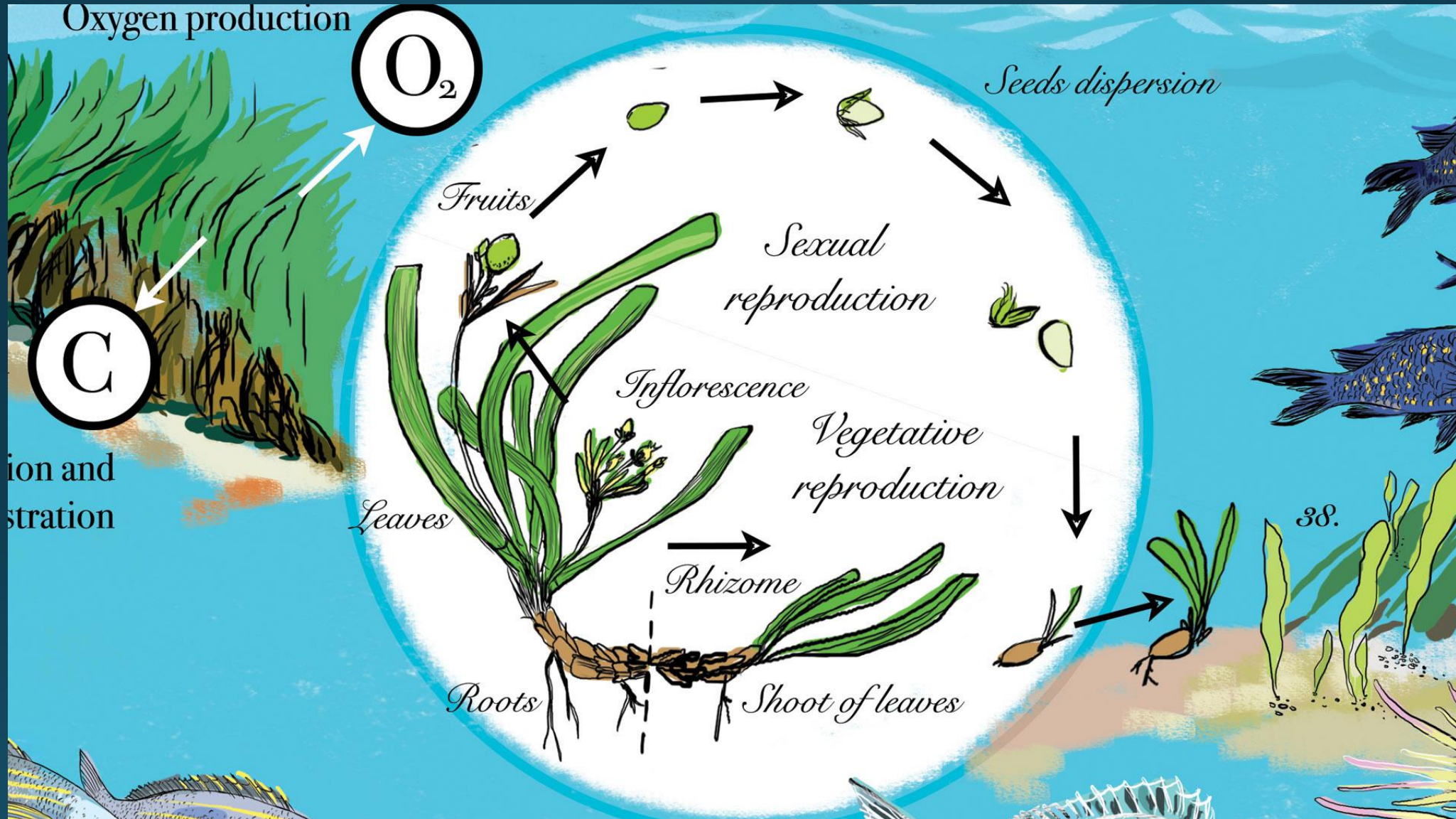


<http://www.murciaenclaveambiental.es/september-2005.html?idRe=51&iw4re=16>



https://de.m.wikipedia.org/wiki/Datei:Posidonia_oceanica_spheroid.jpg

Reproduction



Growth

- Slow growth rate
- new leaves in autumn or winter
- Covering with epiphytes

Red algae



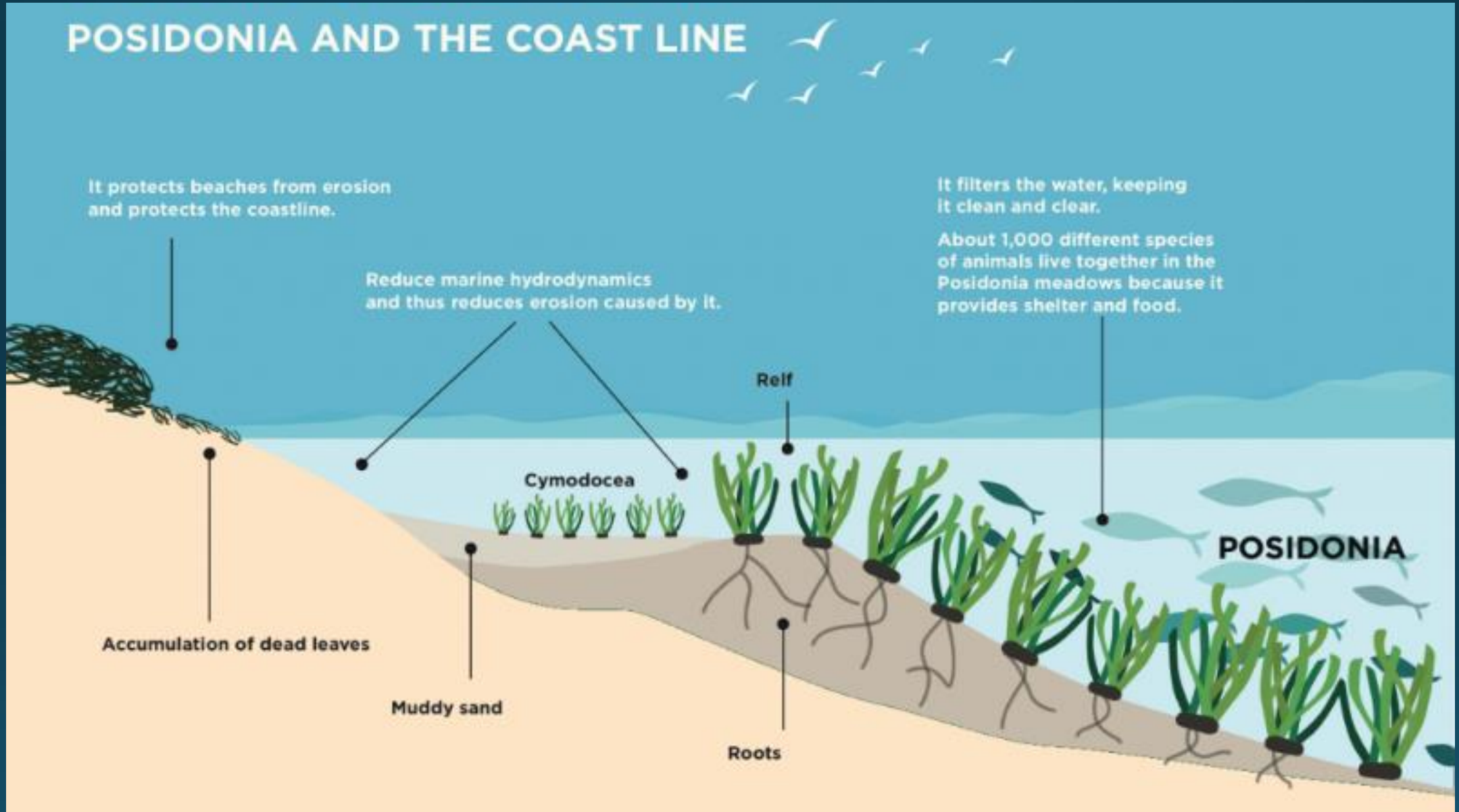
<http://www.marinespecies.org/introduced/wiki/File:Epiphytes.jpg>

Electra posidonia



http://www.portofinoamp.it/scheda-organismi/plomino_documents/7fcbc278cad244daa78c79e09180c097/getfile?filename=electra-posidoniae-foto-giorgio-massa-2.jpg

Why does *Posidonia oceanica* plays an important role in the ecosystem?



Examples of species observed in *Posidonia oceanica* meadows

Opeatogenys gracilis



<https://mare-mundi.eu/bedrohte-posidonia-wiesen-im-mittelmeer-projekt-an-der-mare-mundi-station-krk/>

Protoreaster nodosus



<https://www.newscientist.com/article/dn17412-meadows-of-the-sea-in-shocking-decline/>

Paracentrotus lividus



<http://www.institut-paul-ricard.org/?The-Sea-Urchin-management&lang=fr>

Lactoria cornuta



<https://www.newscientist.com/article/dn17412-meadows-of-the-sea-in-shocking-decline/>

Threats

affected by:

- global warming of the sea
- the level of transparency of the water
- boat anchoring
- invasive algae species (e.g. *Lophocladia lallemandii* or *Caulerpa racemosa*)

What can be done to protect seagrass meadows?

- improve water quality
- forbid certain types of fishing and aquaculture
- warn boaters about the risks when the anchor
- raise awareness of its importance to residence and tourists

By increased discharge of untreated sewage *Posidonia* meadow died within a few weeks and has turned into a stinking sewer full of bacteria and slime algae



Robert Hofrichter, mare-mundi.eu

Other representatives of seagrass in the Mediterranean sea

Zostera marina



http://greenc.sciencedesigners.com/wiki/Species:Zostera_marina

Zostera noltii



<https://www.estrategiasmarinas.info/blank?lightbox=dataItem-inrjnyjk>

Cymodocea nodosa



https://www.researchgate.net/figure/Seagrass-Cymodocea-nodosa_fig2_324585773

Ruppia maritima



<http://www.unterwasser-welt-ostsee.de/html/strand-salde.html>

References

- Fourqurean, J. W., Duarte, C. M., Kennedy, H., Marba, N., Holmer, M., Mateo, M. A., ... Serrano, O. (2012). Seagrass ecosystems as a globally significant carbon stock. *Nature Geoscience*, 5, 505-509. DOI: 10.1038/ngeo1477
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- <http://sciencev2.orf.at/stories/1694444/index.html>