Journal of Marine Science: Research & Development

Canario, J Marine Sci Res Dev 2022, 12:5

Commentary Open Access

Brief Note on Sea Grasses

Adelino Canario*

Department of Zoology and physiology, University of Wyoming, USA

Commentary

Seagrasses are the only flowering shops which grow in marine surroundings. There are about 60 species of completely marine seagrasses which belong to four families (Posidoniaceae, Zosteraceae, Hydrocharitaceae and Cymodoceaceae), all in the order Alismatales (in the class of monocotyledons). Seagrasses evolved from terrestrial shops which recolonised the ocean 70 to 100 million times agone [1]. The name seagrass stems from the numerous species with long and narrow leaves, which grow by rhizome extension and frequently spread across large" meadows" suggesting champaign; numerous species superficially act terrestrial meadows of the family Poaceae. Like all autotrophic shops, seagrasses photosynthesize, in the submerged photic zone, and utmost do in shallow and retired littoral waters anchored in beach or slush bottoms. Utmost species suffer submarine pollination and complete their life cycle aquatic. While it was preliminarily believed this pollination was carried out without pollinators and purely by ocean current drift, this has been shown to be false for at least one species, Thalassia testudinum, which carries out a mixed biotic-abiotic strategy [2]. Crustaceans (similar as cranks, Majid zoae, Thalassinidea zoea) and syllid polychaete worm naiads have both been plant with pollen grains, the factory producing nutritional mucigenous clumps of pollen to attract and stick to them rather of quencher as terrestrial flowers do.

Seagrasses form thick aquatic seagrass meadows which are among the most productive ecosystems in the world. They serve as important carbon cesspools and give territories and food for a diversity of marine life like that of coral reefs. Seagrasses are a paraphyletic group of marine angiosperms which evolved in resemblant three to four times from land shops back to the ocean [3]. The ensuing characteristics can be used to define a seagrass species. It lives in an estuarine or in the marine terrain, and nowhere differently. The pollination takes place aquatic with technical pollen. The seeds which are dispersed by both biotic and abiotic agents are produced aquatic. The seagrass species have specialized leaves with a reduced cuticle, an epidermis which lacks stomata and is the main photosynthetic towel. The rhizome or underground stem is important in anchoring. The roots can live in an anoxic terrain and depend on oxygen transport from the leaves and rhizomes but are also important in the nutrient transfer processes.

Seagrasses profoundly impact the physical, chemical, and natural surroundings of littoral waters. Though seagrasses give inestimable ecosystem services by acting as parentage and nursery ground for a variety of organisms and promote marketable fisheries, numerous aspects of their physiology aren't well delved. Several studies have indicated that seagrass niche is declining worldwide [4]. Ten seagrass species are at elevated threat of extermination (14 of all seagrass species) with three species qualifying as risked. Seagrass loss and declination of seagrass biodiversity will have serious impacts for marine biodiversity and the mortal population that depends upon the coffers and ecosystem services that seagrasses give. Seagrasses form important littoral ecosystems. The worldwide venturing of these ocean meadows, which give food and niche for numerous marine species, prompts the need for protection and understanding of these precious coffers. Recent sequencing of the genomes of Zostera marina and Zostera muelleri has given a better understanding of angiosperm adaptation to the ocean [5]. During the evolutionary step back to the ocean, different genes have been lost(e.g., stomatal genes) or have been reduced(e.g., genes involved in the conflation of terpenoids) and others have been recaptured, similar as in genes involved in sulfation. Genome information has shown further that adaptation to the marine niche was fulfilled by radical changes in cell wall composition. However, the cell walls of seagrasses aren't well understood. In addition to the ancestral traits of land shops one would anticipate niche- driven adaptation process to the new terrain characterized by multiple abiotic (high quantities of swab) and biotic (different seagrass scrape and bacterial colonization) stressors. The cell walls of seagrasses feel intricate combinations of features known from both angiosperm land shops and marine macroalgae with new structural rudiments.

Acknowledgment

None

Conflict of Interest

None

References

1. Webster NS, Thomas T (2016). The Sponge Hologenome mBio 7:e00135-16.
2. Oliveira EC, Pirani JR, Giulietti AM (1983). The Brazilian Seagrasses. Aquat Bot 16:251-267.
3. Jones BL, Unsworth RKF (2016). The Perilous State of Seagrass in the British Isles. R Soc Open Sci 3:150596.
4. Baden S, Gullstrom M, Lunden B, Pihl L, Rosenberg R (2003) Vanishing Seagrass (*Zostera marina*, L.) in Swedish Coastal Waters. Ambio 32:374-377.
5. Orth RJ, Moore KA (1983). Chesapeake Bay: An Unprecedented Decline in Submerged Aquatic Vegetation. Science 222:51-53.

***Corresponding author:** Adelino Canario, Department of Zoology and physiology, University of Wyoming, USA, Tel: 45687126320; E-mail: CanarioA@gmail.com

Received: 03-May-2022, Manuscript No jmsrd-22-65410; **Editor assigned:** 05-May-2022, PreQC No. jmsrd-22-65410 (PQ); **Reviewed:** 12-May-2022, QC No. jmsrd-22-65410; **Revised:** 17-May-2022, Manuscript No. jmsrd-22-65410 (R); **Published:** 24-May-2022, DOI: 10.4172/2155-9910.1000343

Citation: Canario A (2022) Brief Note on Sea Grasses. J Marine Sci Res Dev 12: 343.